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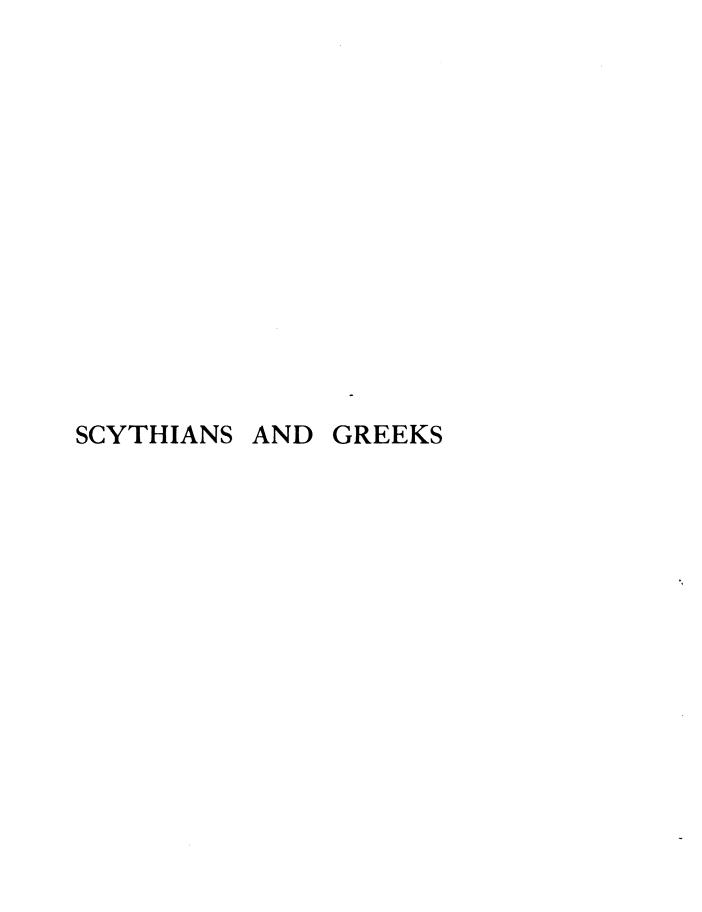
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SCYTHIANS AND GREEKS

A SURVEY OF ANCIENT HISTORY AND ARCHAEOLOGY ON THE NORTH COAST OF THE EUXINE FROM THE DANUBE TO THE CAUCASUS

by

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PREFACE

THIS book offers a summary of what is known as to the archaeology, ethnology and history of the region between the Carpathians and the Caucasus. The region is of varied importance for different branches of knowledge touching the ancient world, yet about it the scholars of Western Europe have had a certain difficulty in obtaining recent information, because each found it unprofitable to master Russian for the sake of pursuing his subject into an outlying corner. The language difficulty, therefore, first suggested this work, and my original intention was merely to supply a key to what has been written by Russian scholars, since they have been insisting upon the right of their language to scientific use. But such a fragmentary account of things would have been most unsatisfactory, and, though the time has not really come for a complete synthesis, enough advance has been made since the last attempt to review the subject, to justify a provisional summary.

Though the geographical limits to which I have confined myself have confessedly been dictated by considerations of language—i.e. I have, in principle, kept to the area within the Russian Empire which has naturally attracted the attention of scholars writing in Russian—yet the frontier of Russia towards the Carpathians and the Danube answers nearly to a real historico-geographical boundary, the western limit of the true steppe. The Caucasus, again, is a world in itself, having little in common with the steppe, nor has the time yet come to bring any sort of system into its archaeology; so I have reason enough for leaving it alone. On the other hand, the unity of the Asiatic and European steppe has led me on occasion right across to Siberia, Turkestan and China without any feeling that I was trespassing beyond my borders.

My limits in time are, I hope, equally intelligible: an attempt to begin at the beginning has resulted in Chapter vII, which, I trust, will not be useless: since it was printed off, more material has accumulated than I was able to cope with in the Addenda. The Great Migrations form a good lower limit, as they made a radical change in the population of the steppe and interrupted the continuous life of the Greek cities on the Euxine coast. In the case of Chersonese alone there was no such break and I have therefore followed its history to the end.

Just these same limits were contemplated by K. Neumann in his Die Hellenen im Skythenlande (Berlin, 1855), but he only lived to publish the first volume and that is nearly sixty years ago. In the first three parts of Kondakov and Tolstoi's Russian Antiquities in the Monuments of Art (St P. 1889—) reissued by Reinach as Antiquities de la Russie Méridionale (Paris 1892, henceforward cited as KTR.) is provided a more recent summary. This, intended as an introduction to à more or less popular account of Christian art in Russia, leaves something to be desired in arrangement and in bibliographical indications of the sources for the facts presented, but I have no idea of superseding it, as its limits in time and space are much wider than mine, and, though I have been allowed to reproduce a great many of its illustrations, it remains the most accessible book in which to find many more.

When the above work was compiled, the policy of publishing in Russian had just become dominant (from about 1889, v. p. xxv) and it was difficult for Europe to know of discoveries in Russia from then until 1904, when Pharmacovskij began contributing year by year to the Archäologischer Anzeiger his very full and well illustrated reports. It is just from the period before 1904 that the main bulk of my unfamiliar matter is taken, as the greater part of the illustrations (e.g. those borrowed from the Archaeological Commission) had been selected by then and the earlier part of the book drafted.

Other obligations and work having nothing in common with this have made the writing, and also the printing, of the book a very slow business, further delayed by the continual flow of fresh material, the incorporation of which, especially at the later stages, has presented some difficulty: there have also resulted certain unavoidable inconsistencies. Important facts which I have learnt since the earlier sheets were printed off are briefly indicated in the Addenda, to which I would ask the reader's attention, but these supplements, necessarily, have been kept down rather jealously.

A great cause of delay has been the miscellaneous content of the work: its unity being merely geographical, the composition of the different chapters has meant incursions into different branches of knowledge, in each of which the specialist will find me wanting. He also may say that what interests him has not received sufficient space, but there is no denying that the book is big enough already. The notes give him chapter and verse for every fact mentioned and indications as to where further information may be found on any particular point: I believe that even Russians may find these convenient. For readers requiring less detail, I have endeavoured to make such a representative selection of material as to supply a general account of each subject treated and thus to make the book intelligible without the necessity of

looking up any references. Accordingly I have shewn enough coins to give an idea of the whole series and have even taken up space with an Appendix of Inscriptions, though Latyshev's *Inscriptiones Orae Septentrionalis Ponti Euxini* is fairly accessible.

With regard to illustrations, I have deliberately sacrificed quality to quantity: I could not afford to reproduce photographically the hundreds of objects of which I have made rough and ready tracings for Chapters VIII—XII; the source of each being given, those who want finer detail will know where to find it. Illustrations of objects from a tomb will be found where the tomb is described.

Critics may point out books and articles that I have overlooked, and such indications will always be welcome. Omissions are inevitable in view of the wide survey necessary. I fear I have not extracted all I might have done from Serbian, Bulgarian, Polish, Rumanian and Hungarian authorities, but these lie somewhat on one side; even in Russian I have found it impossible to hope for completeness, while in the archaeological literature of Western Europe I must have missed endless articles which would have enriched my work; but had I waited to read them all, the book would never have been published.

I am very anxious to direct the attention of the reader to the table for transliterating Russian on p. xxi, in order that he may have all possible help in grasping the many unfamiliar names he will meet with in the text, and also to the Preliminary Bibliography and List of Abbreviations (pp. xxiv—xxxv) which explain such references in the notes as may not be clear at first sight.

A book like this is not written without incurring many obligations which can only be repaid by sincere thanks and a readiness to render service for service if opportunity arise.

Most of all I am indebted to the Imperial Archaeological Commission at St Petersburg: during my stay there, I was given a place of my own in its library and was presented with a complete set of its more recent publications, and these have been sent me regularly year by year ever since; full leave was granted me to reproduce any of its illustrations and over 130 blocks were sent to England for my use. Its individual Members have done all that could be done for me, especially the President, Count A. A. Bobrinskoj, who gave me his magnificent volumes on *Smêla* and his *History of Chersonese*; the Vice-President, Academician V. V. Latyshev, who by a long series of letters and articles has kept me informed of epigraphic progress; the Senior Member, Professor N. I. Veselovskij, Mr A. A. Spitsyn and Mr B. V. Pharmacovskij who by sending me his articles has kept me up to date in his own special studies.

At the Imperial Hermitage, I have pleasant recollections of the courtesy of the late Dr G. von Kieseritzky; Mr E. M. Pridik and Mr O. F. Retowski have rendered me valuable help and so has Mr J. I. Smirnov, whose most generous offer to read my proofs unfortunately came too late. Count I. I. Tolstoi and Academician N. P. Kondakov graciously agreed to my reproducing illustrations from KTR., and from the latter I have received kindnesses more than I can recount. I should also like to mention the names of Professor M. I. Rostovtsev and especially of the late Baron Victor R. Rosen, without whose kindness my stay in Petersburg would have been far less profitable.

In the Historical Museum at Moscow, Mr A. V. Orêshnikov made me very much at home, and ever since by most valuable letters, articles and casts of coins has been my chief help in numismatics; Mr V. A. Gorodtsov has supplied me with unpublished material for Chapters vii and viii. Professor Vs. Th. Miller, Director of the Lazarev Institute, has earned my gratitude both personally and by his books.

At Kazan, the late Professor I. N. Smirnov first made me acquainted with Volga-Kama antiquities.

From Kiev, Mr N. Th. Bêlashevskij of the Town Museum and especially Mr V. V. Chvojka have sent me books, letters and photographs of which I have made full use, and Professor J. A. Kulakovskij has been constant in help and encouragement.

At Odessa, the Imperial Historical and Antiquarian Society did me the honour to elect me a member: its Director, Dr E. R. von Stern, now Professor at Halle, put its coin collection at my disposal and its Secretary, Professor A. A. Pavlovskij, has supplied me with its *Transactions*. These two scholars have besides rendered me important private services.

At Nicolaev, Mr A. Vogell entertained me and shewed me his beautiful collection, now, alas, dispersed. At Kherson, Mr V. I. Goszkewicz has kept me abreast of the progress of archaeology in his district.

At Chersonese, the late Director of the Excavations, Mr K. K. Kosciuszko-Walużynicz, shewed me round the site and sent me photographs and reports from time to time: I am also under very definite obligations to his successor, Dr R. Ch. Löper, and his draughtsman Mr M. I. Skubetov. From General A. L. Bertier-de-La-Garde at Jalta, I have received books, articles, letters and other help on many points archaeological and numismatic: my constant references to his work are a measure of what I owe him. Dr K. E. Duhmberg, Director at Kerch, assisted me while I was there, and his successor, Mr V. V. Škorpil, has answered questions and sent me valuable articles, while Dr I. A. Terlecki gave me my first real introduction to Bosporan coins.

Preface xi

Outside Russia, I have found similar assistance: from Mr A. M. Tallgren at Helsingfors, from Professor A. von Lecoq and the authorities of the Antiquarium at Berlin, from Professor P. Bieńkowski at Cracow, Dr Vasić at Belgrad, and Professor M. Rosenberg at Karlsruhe. In Paris, my special gratitude is due to Professor Paul Boyer, Director of the School of Living Oriental Languages, my first guide in Russian studies, also to Mr E. Babelon at the Cabinet des Médailles, and to Mr S. Reinach, who helped me at the St Germain Museum, joined in allowing me to copy figures from KTR. and encouraged me in other ways.

In the British Museum, Mr O. M. Dalton of the Medieval Department, who has traversed much of the same ground in his *Treasure of the Oxus*, has been to me a constant moral support and has besides helped me in many ways; in the Coin Department, I have always been sure of assistance from the late Mr Warwick Wroth, from Mr G. F. Hill and from Mr H. Mattingly; I have been also specially beholden to Sir Cecil Smith and Mr F. H. Marshall, both formerly of the Greek and Roman Department. To Professor W. M. Flinders Petrie I am indebted for one of my most valuable illustrations. At Oxford, I have received help and encouragement from Sir A. J. Evans, Sir M. A. Stein and Professor J. L. Myres.

In Cambridge, my thanks are first due to the Managers of the Craven Fund, who enabled me to make my original archaeological visit to Russia, and to my College, which allowed my work upon this book to qualify me for holding my Fellowship. I cannot say how much I owe to my masters, the late Mr R. A. Neil who encouraged me at the beginning—I had hoped to talk over many a point with him—and Professor Ridgeway, who has ever been urging me forward. My thanks are also due to the Masters of St Catharine's and Emmanuel Colleges, to Sir Charles Waldstein, Professor J. B. Bury, Professor H. A. Giles, Professor A. A. Bevan, Professor E. J. Rapson, Miss Jane E. Harrison, Mr A. B. Cook, Mr S. A. Cook, Professor C. H. Hawes, now of Dartmouth College, U.S.A., and other scholars to whom I have had occasion to turn for information.

Much of the photographic work was done by the late Mr H. A. Chapman of the Fitzwilliam Museum, the staff of which has aided me in the matter of coins. The trouble that I have given to the staff of the University Library has amounted to something that deserves special recognition from me.

My very deepest gratitude is due to Mr A. J. B. Wace, who has read the proofs right through, successive batches coming to him at the most widely different places, and to Mr F. W. Green, who has made assurance more sure for the second half of the book by eliminating errors which had crept in after Mr Wace's reading.

If I have omitted to acknowledge either here or in the text any

obligations incurred within these thirteen years, may the lapse of time be some excuse for me.

The Syndics of the University Press I can but thank for undertaking a book by nature unremunerative and ask their pardon for having expanded it beyond reasonable convenience and delayed it almost beyond endurance: from the staff, especially from Mr Norman Mason, whom I have troubled with an endless series of petty details, I have received invaluable help given with unfailing patience, while the press-readers have saved me from many slips.

The work is dedicated to my Father, who has enabled me to devote myself to it, has very largely supplemented the liberal allowance for illustrations made by the Syndics, and has contributed to the expenses incidental to making the scale of the book less inadequate to its subject.

E. H. M.

24 April, 1913.

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All illustrations of objects from one find are grouped where that find is described, although any particular object may be treated of in some other part of the book and to this reference is, as

far as possible, given.

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TRANSLITERATIONS.

Greek.

Greek names and words appear in the traditional Latin transliteration much as is recommended to contributors to JHS., i.e. names that the Romans themselves did not fully Latinize, e.g. Delos, and certain words which are more familiar in the Greek form, e.g. Nike, Boule, are treated inconsistently. Greek words in the index mostly appear where they would if transliterated into Latin, but if actually next each other are put in the Greek order.

Russians transcribe Greek by tradition as if it were modern Greek (no h; ι , η , v = i etc.): a reform party represents the Erasmic view but has not attained to a consistent system: it is hampered by having no h for which Γ i.e. g is used.

Latin is pronounced after the German fashion and transliterated accordingly.

Russian.

The use of diacritical marks has been avoided for typographical reasons, and they only appear in Polish, Bohemian or Serbo-Croatian names of which they are an integral part. This has involved the frequent use of two letters in English for one in Russian which is apt to make the unfamiliar words very long and hard to grasp. To avoid this has seemed more important than to attempt to give the pronunciation exactly and I have aimed at using as few letters as are consistent with a fair rendering. The vowels are of course to be pronounced as in Italian except e and y (see below); the English mode of expressing consonants fits Russian better than does the German or French, but I have had to depart from it by using j for consonantal y as y is wanted for a special vowel: I have not ventured to use e for e (nor of course e e for e e e words short I have represented Russian e and e instead of e and e instead of e and e instead of e and e being nearly always present before an e sound in Russian: so when e or e (ordinarily e or e) follow an i I have omitted the e. The e1 looks unfamiliar and I have sometimes yielded to temptation and substituted e1 in diphthongs e1, e2, e3. Tolstoi.

When names of Russians are really French, German or Polish, I have restored to them their own spelling: when Greek or Latin enter into the composition of Russian words or names I have as far as possible written them as I write Greek or Latin (e.g. Pharmacovskij but Funduklej) so as to bring out their derivation, the terminations being transcribed normally. This has led me into many inconsistencies (e.g. two values of ch), but anything which makes Russian names less unfamiliar and so easier to distinguish is valuable, Westerners being inclined to confuse them. It has also enabled me to make a difference between Cherson the Byzantine form of Chersonese and Kherson the modern Russian town at the mouth of the Dnèpr.

The accent is not written in Russian, so I have not made a practice of indicating it, but I have occasionally (especially in the index) put it as a guide to pronunciation: unaccented vowels are much less clear in quality, e.g. o is indistinguishable from a; when, as often, \hat{c} has the tonic accent I have not put an extra mark; \hat{e} (=jo) only arises under the accent.

Transliterations

Latin letters.	Russian letters.	Pronunciation.
a	a	a as in father.
ai, aj	ลหิ	ai in aisle.
ь	б	b as in boy.
c		Not used alone except to represent κ or c in Greek or Latin.
ch	ч (х)	ch as church (but when representing χ it is to be pronounced kh).
d	д	d as in debt, or rather Fr. dette.
e	e	At the beginning of all but a few modern loan-words as ye
		in yet or ya in Yale: after a consonant the $j(y)$ is less distinct but always present except after sh, ch, zh and ts.
e	Э	e as in equator: confined to obvious modern loan-words.
ë	ë	Accented e in certain cases assumes the sound of jo, o, and so I have sometimes written.
ê	ቴ	A special letter now identical in sound with e but never turning to ē.
ej	eñ	ey in grey.
ŕ	ф	Only in foreign words; if the origin is Greek I use ph.
g	r	Hard as in get.
gh	r	r sounded as a spirant, at the end of words (e.g. Bugh) as ch in Loch.
h		Not in Russian. Latin &c. h is represented by r or sometimes x. Greek 'is sometimes rendered by r, more often left out.
i	и, і	i as in machine. (Sometimes = # in diphthongs, e.g. Ainalov, Tolstoi.)
	ь (ья, ье, ьё, ью)	b+a is almost identical with $i+a$ and I have made no distinction, so with other vowels except $bH=ji$.
ij	iñ	ee in free but after k as y in whisky.
j	й (ай, ей, ой)	y at the end of diphthongs as in ay, grey, boy.
j (ji)	Р (РИ)	y before i after a consonant, as in Goodyear.
ja, ju	(я, ю)	y before a, u, as in yarn, yule.
(e, ë, ê)	(e, ë, ቴ)	I do not write the j in these cases but it is to be pronounced.
k	К	k except in Greek or Latin words, in which where possible I write c.
kh	x	German ch in ach: but in Greek words I use ch for χ .
1	Л	1 "hard" between l and w as in people, "soft" between l and y as in Fr. ville.
m	M	m.
n	н	n.
o	0	o accented open as oa in broad: unaccented as ă in balloon.
. p	п	<i>p</i> .
ph	ф	I have written ph in words of Greek origin.
q		Not in Russian.
r	p	r, strongly trilled: when soft between r and y but not like ry .
s	\mathbf{c}	s as in size, case, never as in cheese (I have left it in words like Muséj, numismática, written with z in Russian).
sh	ш	sh in shut.
shch	щ	shch in Ashchurch.
t	T	t.

Latin letters.	Russian letters.	Pronunciation.
th	θ	f; I have written th, as e only occurs in words borrowed from the Greek, but the pronunciation in Russian is f.
ts	ц	ts as in its : u often represents a Latin c through German influence.
u	У	u in rule.
v	В	v, at the end of words pronounced as f, hence the common spelling -off.
w		Our w does not occur in Russian but Germans use the letter to render в.
x	кс	ξ , and also ψ , have been dropped from the Russian alphabet.
у	ы	A peculiar vowel between <i>i</i> and <i>u</i> not unlike its value in <i>rhythm</i> .
y	и	Representing Greek v as in Sympheropol.
z	3	English z. But Germans transliterating Russian use it for $u = ts$.
zh	ж	French j , English z in azure.
(')	ъ	Keeps preceding consonant "hard": I have only used it in the middle of words.
(′)	Ь	Makes preceding consonant "soft": when a vowel follows I write i.

Consonants before a, o, u, y, (') are mostly pronounced hard, i.e. more or less as in English: before i, o, j and (') soft, that is with a j sound, but this must not be overdone.

Russians writing their own names in Latin letters are generally quite inconsistent, mostly using a French or German system, often a mixture of the two or alternately one and the other: the only thing is to disregard their individual usage and reduce all names to one system.

Chinese, etc.

The forms in which Chinese names appear have been revised by Professor Giles, to whom my best thanks are due, in accordance with the Wade system. The transliteration does not attempt to restore lost final consonants but neither does it render some of the Pekinese innovations (e.g. Hsiung-nu, T'u-chiū for Hiung-nu, T'u-kūe): also zh is put for Wade's (French) j. A convenient table of transliterations from Chinese, including that used by Russians, is in TRAS. Oriental Sect. xVIII. i. p. 074.

Other Oriental names have been rendered rather haphazard, mostly as found in the books from which I took them.

Russian Weights.

Russian Measures.

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1 dólja = '675 gr. troy = '044 grm.
96 dóljas = 1 zolotník = 64'8 gr. troy = 4'265 grm.
3 zolotníks = 1 lot = { 194'4 gr. troy } -12'78 grm.
32 lots = 1 funt = '9 lb. avdp. = 490 grm.
40 funts = 1 pud = 36'11 lb. avdp. = 16'36 kgr.
(3 puds = 1 cwt.)

1 vershók = 1'75 inch = 4'445 cm.
16 vershóks = 1 arshín = 28 inches = 71'12 cm.
3 arshíns = 1 sazhén = 7 feet = 2'134 m.
500 sazhéns = 1 verst = 1166 yds, 2 ft = 1'067 km.
(3 versts = 2 miles : 15 versts = 16 km., cf. Scale on Map 1x.)
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I have avoided using these, but many of the books to which I refer do so, others use our feet and inches or of late years the Metric system.

PRELIMINARY BIBLIOGRAPHY OF RUSSIAN PUBLICATIONS.

In view of the mutual independence of various parts of the book sectional bibliographies have been appended to each of Chapters II—IV, XIII—XIX, although this has meant a certain amount of repetition: the notes throughout give much bibliographical information but they contain a certain number of abbreviations, some of these it has been thought better to expand in § C below even though they be fairly familiar to archaeological readers, but it is only a list of abbreviations, not a bibliography of periodical literature, and does not contain titles cited in a form about which there can be no mistake.

Titles of works in Russian appear in the notes in English Translations (not always, I fear, quite consistent), the Russian character has been avoided as generally unintelligible, and even transliterations are difficult for those unfamiliar with the language to grasp. The title of every Russian serial (A) and independent work (B) to which reference has been made, is here given both in the original Russian language and character and in a Latin transliteration. Articles published in serials of which the Russian title is given, can be readily identified by their English titles, and it has not been thought necessary to give the Russian. As the place of publication of every work or else that of the serial in which it is published has been given in every case, a reader may be expected to infer that a work published in Russia is written in Russian in spite of its being cited by an English title, and if he wishes to know the exact form of the Russian title he will find it in A or B. Certain Russian works, mostly official publications, have recognised French titles and are cited by these mostly in an abbreviated form, v. § C. The titles of the magazines Propylaca (Пропилен) and Hermes (Гермесъ, not to be confused with the German Hermes, Berlin, 1866—) have been distinguished by the warning (Russian). Latyshev's Ποντικά is a collection of articles in Russian, his Scythica et Caucasica has a Russian translation and notes and so has his Christian Inscriptions from S. Russia, which by an oversight I have cited as "Inscr. Chr." The titles of works in French, German, etc. are of course left unaltered; to those in Slavonic languages which use Latin letters a translation has been added. The citation of Russian authorities will enable anyone who can command the help of an interpreter to look up any particular point with as little difficulty as possible.

By far the greater part of work on the antiquities of S. Russia appears in the publications of some institution or society, nearly always a serial, and these may conveniently form one class (A) and the independent books another (B). I have not made any effort to include books older than 1860 and quite superseded, nor have I aimed at any completeness in this practical guide to a wide literature. I have inserted one or two books which have appeared since the printing of the section for which they would have been useful. A helpful book of reference is

Прозоровъ, П. (Ргоzогоv, Р.). Систематическій Указатель Книгь и Статей по Греческой Филологіи напечатанныхъ въ Россіи съ хуп стольтія по 1892 годь на русскомъ и иностранныхъ языкахъ, съ прибавленіемъ за 1893, 1894 и 1895 годы. Спб. 1898. (Sistematicheskij Ukazáteľ Knig i Statéj po Grécheskoj Philológii napechátannykh v Rossti s xvni stolétia po 1892 god na rússkom i inostránnykh jazykákh, s pribavléniem za 1893, 1894 i 1895 gódy = Systematic Index of Books and Articles on Greek Philology printed in Russia from the xvnith century to 1892 in Russian and other languages, with a Supplement for 1893, 1894 and 1895. St P. 1898.)

See also IosPE. 11. pp. 339—344, and the half-yearly Supplement to BCA. (v. inf. p. xxvi).

A. Official Publications and Serials issued in Russia.

The Імрекіal Асаdemy of Sciences (Императорская Академія Наукъ, Imperatorskaja Académia Naúk), St P., publishes the Записки (Zapiski, Mémoires) of the Historico-Philological Class, also a Bulletin from which were collected articles in Mélanges Gréco-Romains, 1855— (also Mélanges Asiatiques), a Сборникъ (Sbórnik, Miscellany) and Извъстія (Izvêstia, Bulletin) Отдъленія русскаго языка и словесности (Otdêlénia rússkago jazyká i slovésnosti, of the Department of Russian Language and Literature), 1900—, and the Византійскій Временникъ (Vizantijskij Vremenník, Виζаντινά Χρονικά), 1894— . Also Prozorov's book above mentioned, but I have not often had occasion to cite its publications.

The IMPERIAL ARCHAEOLOGICAL COMMISSION (ИМПЕРАТОРСКАЯ Археологическая Коммиссія, Imperátorskaja Archeologícheskaja Commíssia¹) is the central organ of Russian archaeology. The movement which led to its establishment produced two works which may be classed with its publications:

Antiquités du Bosphore Cimmérien [ABC.] conservées au Musée Impérial de l'Ermitage, large folio, St P. 1854, published in Russian and French facing each other. This rare book was reissued in large 8^{vo} by S. Reinach in his "Bibliothèque des Monuments Figurés," Paris, 1892, with new introduction and descriptions to the plates, which are reduced almost to half size. Except where fine detail or colour are important I have used this convenient edition instead of the cumbrous original.

Извлеченіе изъ всеподданнъй шаго отчета объ археологическихъ розысканіяхъ въ 1853 г. (Izvlechénie iz vsepóddannéjshago Otchěta ob Archeologicheskikh Rozyskániakh v 1853 godú = Extract from a most humble Report on the Archaeological Explorations in 1853), by Uvarov and Leontiev, 46, St P. 1855.

The Commission is constituted as a part of the Ministry of the Imperial Court, as is also the Hermitage Museum. Its most important publication is:—

Compte Rendu [CR.] (Отчетъ, Otchët) de la Commission Impériale Archéologique.

From 1859 to 1881 the text (4to) of this contained a Report (in French) of the excavations conducted in each year, and a Supplement by L. Stephani in German (1859 is in French) dealing with various objects either yielded by recent excavations or preserved in the Hermitage; there were occasional woodcuts (unnumbered) and very few plates except in the text for 1872, which has as a second supplement V. Stasov's French account of a catacomb illustrated with 18 plates; each part is accompanied by an atlas of six magnificent plates. Each part has a superficial index, and in Reinach's ABC there is a short summary of the contents of this series and a meagre index to the whole.

The Reports for 1882—1888 were all issued at once (sm. folio) with an atlas of the same type, a description of its six plates and an index; this volume appeared in a French and a Russian edition.

CR. from 1889 to 1898, henceforward in Russian (sm. folio without an atlas but with many cuts in the text), contained the Reports year by year, an appendix with fuller reports of particular excavations but no index: indices to the years 1882—1898 form a separate volume. From 1899 the fuller reports have been transferred to BCA. and each volume has been supplied with an index. CR. comes out four or five years after date.

¹ To be distinguished from the Imp. Archaeographic (Археографическая) Comm., which publishes documents dealing with Russian history, e.g.

versions of Ps. Nestor's *Chronicle*, and in its *Chronicle* (*Lêtopis*) articles upon such subjects.

The Imp. Archaeological Commission has also issued:-

Antiquités de la Scythie d'Hérodote [ASH.], two Parts, 1866, 1873, 4to, text (in French) and large atlas, forming the first two numbers of

Матеріалы по Археологін Россін [Mat.] (Materidly po Archeológii Rossii, Materials for the Archaeology of Russia), Nos. III.— (ASH. being reckoned as Nos. 1. and II.), 1888— (sm. folio), contain monographs with excellent plates, dealing with the following particular finds or classes of antiquities:—

South Russia: Nos. 1., 11. (= ASH.); v1., x1x. Kulakovskij, Catacombs at Kerch, v. p. 308 n. 4; v11., x11. Malmberg and Orêshnikov, Bertier-de-La-Garde, Chersonese Finds, v. pp. 363 n. 1, 553, 509 n. 1; v111. Strzygowski and Pokrovskij, Shield (?) from Kerch, v. p. 320 n. 3; 1x., xv11., xx111. Latyshev, Inscriptions; x111. Malmberg and Lappo-Danilevskij, Karagodeuashkh, v. p. 216; xx1v. Zhebelëv, Panticapaean Niobids, v. p. 370; xxx1. Pridik, Melgunov's Find, v. p. 172 n. 1; xxx11. Zhebelëv and Malmberg, Three Archaic Bronzes, v. p. 374 n. 4.

South-West Russia: xI. Antonovich, Excavations in the country of the Drevljane (all dates, Sc. to Slav).

North-West Russia: IV. Avenarius, Drogichin Cemetery (Govt. Grodno); xIV. Spítsyn and Romanov, Ljutsin Cemetery (Govt. Vitebsk); xxvIII. Sizóv, Gnêzdovo near Smolensk (Liv (?) and Slav graves x.—xI. cent. A.D.).

Novgorod Frescoes: xxi. Examination of Suslov's scheme for restoring Frescoes in S. Sophia; xxx. Pokryshkin, Report on restoration of S. Saviour's, Nereditsa.

North Russia: xvIII. Brandenbourg, Barrows S. of L. Ladoga (Finnish, vIII.—xI. A.D.); xx. Spitsyn and Ivanovskij, Barrows of St P. Govt.; xxIX. Glazov, Barrows at Gdov (Slav or Finnish, xI.—xv. A.D.).

East Russia: x. Cemeteries at Ljada and Tomnikovo (Tambov Govt.); xxv. Spitsyn, Antt. of the Kama and Oka (Finnish, x.—x1. A.D.); xxv1. Spitsyn, Antt. of the Chud' folk on the Kama (Finnish, 1.—x1v. A.D. v. p. 257 n. 3); xx11. Chwohlson, Pokrovskij and Smirnov, Syrian Dish from Perm (v1.—v11. A.D.).

Siberia: III., v., xv., xxvII. Radloff, Antiquities of Siberia, v. p. 241 n. 1.

Transcaspia: xvi. Zhukovskij, Ruins of Ancient Merv.

Herat: XXXIII. N. I. Veselovskij, Cauldron dated A.H. 559.

Извъстія Имп. Арх. Комм. [BCA.] (Izvėstia Imp. Arch. Comm. = Bulletin—Mitteilungen—de la Commission Imp. Archéologique), large 8vo, 1901— (45 Pts in Aug. 1912, indices in Nos. xx. and xl.), contains fuller reports of particular excavations, various articles not important enough for Mat., reports of decisions of the Commission with regard to proposed changes in churches and other ancient buildings (forming a special series called Voprósy restavrátsii, Questions of Restoration). Two numbers a year are furnished with a Прибавленіе (Pribavlénie = Supplement), in which are collected reprints of newspaper articles touching Archaeology and a list of Archaeological publications for the half-year.

Besides these the Commission has issued

Альбомъ рисунковъ помъщенныхъ въ Отчетахъ за 1882—1898 годы (Albóm risúnkov poméshchënnykh v Otchëtakh za 1882—1898 gódy = Album of Illustrations that appeared in CR. 1882—1898), St P. 1906.

Also Kondakov's Russian Hoards, Smirnov's Argenterie Orientale, Kulakovskij's Past of Taurida, Latyshev's Ποντικά, Rostovtsev's Decorative Painting and von Stern's Watercolour Vases, v. § B.

- The Imperial Russian Archaeological Society (Императорское Русское Археологическое Общество) of St P., founded in 1846, has issued several different series of publications (v. Polênov, D. V., Библіографическое Обозрѣніе Трудовъ И. Р. А. О., Bibliographical Survey of the Works of the I.R.A.S., St P. 1871, and N. I. Veselovskij, History of the I.R.A.S. 1846—1896, St P. 1900, pp. 97—142). Those touching the subject of this book are:—
- Mémoires de la Société d'Archéologie et de Numismatique de St P., Vols. 1.—VI. 1847—1852, French or German articles, sometimes identical with those appearing in
- Записки Санктнетербургскаго Археологическо-Нумизматическаго Общества, after Vol. 111. Имп. Археологическаго Общ. (Zapiski = Transactions—Sanctpeterbürgskago Archeologichesko-Numismaticheskago Óbshchestva, afterwards Imp. Archeologicheskago O.), 1.—хіv. 1847—1858.
- Извъстія И.А.О. (*Izvėstia I.A.O.* = Bulletin), 1.—х. 1857—1884, but little concerned with Prehistoric or Classical Antiquities, then took their place.
- Заниски (Zapiski [3.И.Р.А.О. = TRAS.], new series), revived by a resolution made in 1882 and coming out in three parallel sets, Oriental (1886—), General (Vols. 1.—vi. 1886—1895), Russian and Slavonic (Vols. 111. and 1v. 1882, 1887, Nos. 1. and 11. being in the old series). This last was united with the General, so that its Vols v11.—1x. 1896—1901 are each in two parts, i. Russo-Slavonic, ii. Classical and West European, but restored and the old numeration resumed with Vols. v.— 1903— , and the Classical, etc. started afresh with Vols. 1.— 1904— . A Numismatic section began to publish Zapiski in 1906.

The Society also published Koehne's Chersonese, Sabatier's Souvenirs de Kertsch, Latyshev's IosPE, Inscr. Christ., and Sc. et Cauc. v. § B.

It has a small Museum, Catalogue by A. A. Spitsyn, 1908.

- The Imperial Moscow Archaeological Society (Императорское Московское Археологическое Общество = Imp. Moskóvskoe Arch. Ob.) has not produced very much with which we are concerned in Древности (*Drévnosti = Antiquities*), as its Труды (*Trudy* or *Transactions*, lit. *Labours*) are called, Moscow, 1865— .
- Археологическія Изв'єстія и Зам'єтки (Archeologicheskia Izvêstia i Zamêtki = Arch. Bulletin and Notes), 1893— .
- Матеріалы по Археологіи Восточных Буберній (Materials for the Archaeology of the Eastern Governments), 1893— .
- Mateрiaлы по Археологін Кавказа (Mat. for the Arch. of the Caucasus), 1894— .
- Памятники Христіанскаго Херсонеса (Pámjatniki Christiánskago Chersonesa = Monuments of Christian Chersonese), Pts 1., 111. (1905—1911), however, promise to form a most important series, v. Ainalov, Lavrov, Shestakov in § В.
 - It has been chiefly instrumental in organizing the Archaeological Congresses (CTBALL, S'êzd), of which the Trudý (Trans.) in 4^{to} are most valuable. They were held 1. Moscow, 1869; II. St P. 1872; III. Kiev, 1875; IV. Kazan, 1878; V. Tiflis, 1881; VI. Odessa, 1884; VII. Jaroslav, 1887; VIII. Moscow, 1890; IX. Vilna, 1893; X. Riga, 1896; XI. Kiev, 1899; XII. Kharkov, 1902; XIII. Ekaterinoslav, 1905; XIV. Chernigov, 1908; XV. Novgorod, 1911. Preliminary reports of papers are published in the Izvêstia or Bulletin of the Congress.
- The Moscow Numismatic Society (Московское Нумизматическое Общество, Moskóvskoe Numismatícheskoe Óbshchestvo) publishes Труды (Trudý, Transactions), 1897—, and а Нумизматическій Сборникъ (Numismaticheskij Sbórnik = Numismatic Miscellany), 1908—.
- Moscow University published Miller's Ossetian Studies and Orêshnikov's Catalogue of its Coins, v. § B.

- The Imperial Alexander III. Historical Museum of Russia, Moscow (Имп. Россійскій Историческій Музей Имени Императора Александра III.) issues *Reports* (Отчеть, Otchet), 1899—.
- The Imperial Historical and Antiquarian Society of Odessa (Имп. Одесское Общество Исторіи и Древностей = Imp. Odésskoe Óbshchestvo Istórii i Drévnostej) published Vol. I. of its Записки [3.0.0. = Trans. Od. Soc.] (Zapíski = Transactions) in 1844; Vols. I.—xv. are 4¹⁰; Vols. xvi.—xxx. (1912) in 8^{vo} have separate paginations for: i. Investigations, ii. Materials, iii. Miscellanea, iv. Obituaries, v. Minutes (Протовозы) of Meetings.

It has also issued in sm. folio, text in German and Russian:-

- Das Museum der Kaiserlich Odessaer Gesellschaft für Geschichte und Alterthumskunde:
 - i. (1897), ii. (1898), Terracotten [Od. Mus. Terra-cottas], by A. A. Derevitskij, A. A. Pavlovskij and E. R. von Stern; iii. (1906), Theodosia und seine Keramik [Theodosia], by E. R. von Stern.
- Краткій Указатель Музея Имп. Од. Общ. Ист. п Др. [Od. Mus. Guide] (Krátkij Ukazátel' Muséa Imp. Od. Obshch. = A Short Guide to the Museum of the Imp. Od. Soc.), ed. 2, 1909, by von Stern, mentions some important objects not yet published.
- The Municipality of Kherson is issuing V. I. Goszkewicz's Херсонскій Городской Музей (Khersónskij Gorodskój Muséj = Kherson Town Museum), i. (Coins) 1910; ii. (Chronicle 1909–11) 1912.
- The Tauric Record Commission (Таврическая Ученая Архивная Коммиссія, Tavrícheskaja Uchënaja Archívnaja Commissia) publishes its Извъстія (*Izvêstia = Bulletin*) since 1887, 46 numbers, 8^{vo}.
- The Ministry of Public Instruction in St P. publishes its Журналь [Ж.М.Н.П. = Journ. Min. Pub. Instr.] monthly since 1834; it contains some articles concerning S. Russia in the body of the magazine and many in a special Classical Section with separate pagination.
- KIEV UNIVERSITY (the University of S. Vladimir) publishes Habberia (Izvėstia = Bulletin), 1861—, in which Antonovich's Description of its coins appeared.
- The Russian Archaeological Institute in Constantinople (Русскій Археологическій Институть въ Константинополь) publishes Извъстія (Izvêstia) but they are not concerned with our region.

Private Magazines in Russian.

- Пропилен (Propylaea), ed. P. Leontiev, v. vols. 8vo, Moscow, 1851—1856.
- Филологическое Обозрѣніе (Philologicheskoe Obozrênie = Philological Review), Moscow, 1891— , now defunct.
- Гермесъ, Научно-популярный Въстникъ Античнаго Mipa (Germes, i.e. Hermes, a Popular Scientific Messenger of the Ancient World), St P. 1907—, ed. A. I. Malein and S. O. Cybulski.
- Археологическая Лівтопись Южной Россіи (Archeologicheskaja Lêtopis' Jūzhnoj Rossti, Arch. Chronicle of S. Russia), published by N. Th. Bêlashevskij as a supplement to Kievskaja Starinā, 1899—1901, and then independently, Kiev, 1903—1905.

B. Full Titles of Books published in Russia, etc.

- AINÁLOV, D. V. (Айналовъ, Д. В.). Памятники Христіанскаго Херсонеса, І. Pasbaлины Храмовъ (Pámjatniki Christiánskago Chersonésa, 1. Razváliny Khrámov = Monuments of Christian Chersonese, 1. Ruins of Churches). Moscow, 1905.
- Antonovich, V. В. (Антоновичъ, В. Б.). Описаніе Монетъ и Медалей хранящихся въ нумизматическомъ музев Университета св. Владиміра (Opisánie Monét i Medálej khranjáshchikhsja v numismatícheskom Muséé Universitéta sv. Vladímira = Descr. of coins and medals preserved in the Numism. Museum of the Univ. of S. Vladimir). Kiev, 1896.
- ARKAS, Z. (Аркасъ, 3.). Описаніе Ираклійскаго Полуострова и Древностей его (Opisánie Iraklijskago Poluóstrova i Drévnostej egó = Descr. of the Heraclean Peninsula and its Antiquities). Trans. Od. Soc. Vol. 11. and Nicolaev, 1879.
- АSHIK, А. (Ашикъ, А.). Воспорское Царство (Vospórskoe Tsárstvo = The Bosporan Kingdom). 4to. Odessa, 1848—1849.
- Керченскія Древности. О Пантикапейской Катакомов украшенной фресками (Kérchenskia Drévnosti. O Pantikapėjskoj Catacómbé ukráshennoj fréscami = Antt. of Kerch. A Panticapaean Catacomb adorned with frescoes). Folio. Odessa, 1845.
- Bertier-de-La-Garde, A. I., (Бертье-Делагардъ, А. Л.). Поправки Общаго Каталога Монетъ П. О. Бурачкова (Poprávki Óbshchago Catáloga Monét P. O. Burachkóva = Corrections of P. O. B.'s General Coin Cat.). 410. Moscow, 1907.
- Bobrinskoj, Ct A. A. (Бобринской, Графъ А. А.). Смѣла (Smêla [Sm.], v. p. 175 n. 1), пп. vols. Folio. St P. 1887—1901.
- Херсонесъ Таврическій (Chersonesus Taurica). 8vo. St P. 1905.
- Сборникъ Археологическихъ Статей поднесенный Гр. А. А. Б. въ день 25 лътія Предсъдательства его въ Ими. Арх. Комм. 1886–1911 (Sbórnik Archeologicheskikh Statéj podnesčnnyj Gr. A. A. B. v den' 25 létia predsêdátel'stva egó v Imp. Arch. Comm. = Miscellany [Misc.] of Archaeological Articles presented to Ct A. A. B. on the 25th anniversary of his Presidency of the Imp. Arch. Commission, 1886—1911) [résumé, Arch. Anz. 1912, pp. 147—153]. 8^{vo}. St P. 1911.
- Bonnell, E. Beiträge zur Alterthumskunde Russlands. 8vo, 11. vols. St P. 1882, 1897.
- Braun, Fr. (Браунъ, Ө. А.). Разысканія въ области Гото-славянскихъ отношеній (Razyskánia v oblasti Goto-Slavjánskikh Otnoshénij = Investigations in the province of Gotho-Slavonic Relations), Pt 1. Sbórnik, Russian section of the Ac. of Sc. St P. Vol. LXIV. 12, 1899.
- Brockhaus-Jefron (Бровгаузъ-Ефронъ). Энциклопедическій Словарь (Entsiclopedicheskij Slovár' = Encyclopaedia). 8^{vo}. St P. c. 1900 and Supplements.
- Bruun, F. Черноморье (Chernomórje = The Black Sea Region). 2 Pts. From Записки Имп. Новороссійскаго Университета (Zapiski Imp. Novorossijskago Universiteta), Vols. xxvIII., xxx. Odessa, 1879, 1880.
- Викаснкоv, Р. О. [В. от Виг.] (Бурачковъ, П. О.). Общій Каталогъ Монетъ принадлежащихъ Эллинскимъ Колоніямъ...въ предълахъ нын-винней южной Россіи (Óbshchij Catálog Monét prinadlezháshchikh Ellinskim Colóniam...v predělakh nýnêshnej Júzhnoj Rossii = General Catalogue of Coins belonging to the Greek Colonies...within the bounds of what is now S. Russia). 4¹⁰, Pt 1. (all issued). Odessa, 1884.
- Funduklej, I. (Фундуклей, I.). Обозрѣніе Могиль, Валовъ и Городищъ Кіевской Губернін (Obozrênie Mogil, Valóv i Gorodíshch Klevskoj Gubérnii = Survey of Barrows, Banks and Camps in Kiev Govt). Kiev, 1848.

- GIEL, CHR. [G.]. Kleine Beiträge [Kl. B.] zur Antiken Numismatik Südrusslands. 410. Moscow, 1886.
- GOERTZ, K. K. (Гёрцъ, К. К.). Археологическая Топографія Таманскаго Полуострова (Archeologicheskaja Topográphia Tamánskago Polubstrova = Arch. Topogr. of the Taman Peninsula). Ed. 1. Dreunosti, 11. (1870). Ed. 11. 8°°, Acad. of Sc. St. P. 1898.
- Историческій Обзоръ Археологическихъ Изследованій и Открытій на Таманскомъ Полуостровъ... до 1859 г. (Istoricheskij Obzór Arch. Izslėdovanij i Otkrýtij na Tamánskom Poluóstrové...do 1859 g. = Hist. Conspectus of Arch. Invest. and Discoveries on Taman Pen. up to 1859). Ed. 1. Drevnosti, IV. (1876). Ed. 11. 8^{vo}, Acad. of Sc. St P. 1898.
- GOLUBÍNSKIJ, E. E. (Голубинскій, Е. Е.). Исторія Русской Церкви (Istória Rússkoj Tsérkvi = Hist. Russ. Ch.). Ed. 11. Moscow, 1901—1904.
- GORODTSÓV, V. A. (Городцовъ, В. А.). Первобытная Археологія (Pervobýtnaja Archeologia = Primitive Arch.). Moscow, 1908.
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- GRIGORIEV, V. V. (Григорьевъ, В. В.). Россія и Азіа (Rossía i Asia). St P. 1876.
- JAGIĆ, I. (Ягичъ, И. В.). Четыре Критико-Палеографическія Статьи (Chetýre Critico-Paleographicheskia Statji = Four Critico-palaeogr. Articles) in No. xxxIII. of the Sbornik of the Acad. of Sc. St P. 1884.
- KARAMZÍN, N. (Карамзинъ, Н.). Исторія Государства Россійскаго (Istória Gosudárstva Rosstjskago = Hist. of the Russian State). St P. 1816—1826.
- KHANÉNKO, B. I. and V. I. (Ханенко, Б. И. п В. И.). Собраніе Ханенко (Sobránie Khanenko = Collection Khanenko). Folio. Kiev, 1899— .
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- Kondakóv, N. P. (Кондаковъ, Н. П.), with Ct I. I. Tolstój (Гр. I. I. Толстой). Русскія Древности вя Памятникахъ Искусства (Rússkia Drevnosti v Pámjatnikakh Iskússtva = Russian Antt. in Monuments of Art). vi. Pts, 4¹⁰. St P. 1888—1899.
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- Kondakóv, N. P. Русскіе Клады, Изследованіе Древностей Великокняжескаго Періода (Rússkie Klády, Izslédovanie Drévnostej Velikoknjázheskago Períoda = Russian Hoards, an Investigation into the Antiquities of the Grand Ducal Period). Folio. Pt 1. (Pt 11. has not appeared). Issued by the Arch. Comm. St P. 1896.
- Kulakóvskij, J. A. (Кулаковскій, Ю. А.). Карта Европейской Сарматін по Птолемею (Kárta Evropéjskoj Sarmátii po Ptoleméju). Folio. Kiev, 1899.

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- —— Inscriptiones Antiquae Orae Septentrionalis Ponti Euxini [IosPE.]. 4^{to}. Vol. 1. 1885, Vol. 11. 1890, Vol. 1V. 1901. Vol. 111., which is to contain inscriptions on amphorae, graffiti and such like, is being prepared by E. M. Pridik. Vol. v., containing inscriptions found during this century and published in BCA., is said to be contemplated.
- Сборникъ Греческихъ Надинсей Христіанскихъ Временъ изъ Южной Россіи [Inscr. Christ.] (Sbórnik Grécheskikh Nádpisej Christiánskikh Vreměn iz Jázhnoj Rossíi = Collection of Greek Inscriptions of Christian Times from S. Russia). 8°°. 1896. More recent inscriptions are in IosPE. IV. or BCA. Both IosPE. and Inscr. Christ. are published by the Imp. Russ. Arch. Soc. St. P.
- Scythica et Caucasica [Sc. et Cauc.] e veteribus Scriptoribus Graecis et Latinis collegit et cum versione Rossica edidit B. Latyschev. Vol. 1. Greek, Vol. 11. Latin. Issued in parts, 1890—1906, as a Supplement to TRAS. or as Vols. XI. ii. and Vol. 11. of the Classical Series. No index.
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- NIEDERLE, DR L. Starověké Zprávy o zeměpisu východní Evropy se zřetelem na země Slovanské (Descriptio Europae Regionum quae ad orientem spectant veterum Scriptorum locis illustrata), Čech, from "Rozpravy české Akademie Císaře Františka Josefa pro vědy, slovesnost a umění" (Trans. Čech Acad. of Emp. Francis Joseph for Sc., Lit. and Art), VII. i. 1. Prag, 1899.
- Slovanské Starožitnosti (Slavonic Antiquities) [Slav. Ant.]. Prag, 1902— .
- ORÊSHNIKOV, A. V. (Орѣшниковъ, А. В.). Zur Münzkunde des Cimmerischen Bosporus. 8^{ro}. Moscow, 1883.
- Каталогъ Собранія Древностей Гр. А. С. Уварова; Вып. vii. Монеты Воспорскаго Царства и Древнегреческихъ Городовъ находившихся въ предълахъ нынѣшней Россіи (Catálog Sobránia Drévnostej Gr. A. S. Uvárova, Vyp. vii. Monéty Vospórskago Tsárstva i Drevnegrécheskikh Gorodóv nakhodívshikhsja v predělakh nynêshnej Rossíi = Cat. of the Coll. of Antt. of Ct A. S. Uvarov, Pt vii. Coins of the Bosporan Kingdom and of the ancient Greek cities within the limits of modern Russia) [Cat. Uvarov]. 4¹⁰. Moscow, 1887.
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C. Abbreviations.

Ordinary abbreviations of classical authors and their works, and titles which have not been cut down very short, have been left unexplained.

AA.SS.	Acta Sanctorum (Bollandi). Antwerp, 1643— .
ABC.	Antiquités du Bosphore Cimmérien. v. § A, p. xxv.
Anon.	Anonymi Periplus Ponti Euxini, in GGM. or Sc. et Cauc. v. p. 25.
Ant. Gem.	A. Furtwängler, Die Antiken Gemmen. Berlin, 1900.
Ant. Sib.	W. Radloff, "Antiquities of Siberia" in Mat., Nos. III., v., xv., xxvII.
Arch. Anz.	Archäologischer Anzeiger, Suppl. to Jahrb. d. k. deutschen Archäologischen Instituts. Berlin, 1886— .
Arch. Chron. of S	5. Russia. v. § A, p. xxviii.
Arch. Congress.	Russian Archaeological Congresses held in connexion with the Imp. Moscow Arch. Soc., q.v. in § A, p. xxvii.

ASH. Antiquités de la Scythie d'Hérodote. v. § A, p. xxvi.

Ath. Mitt. Mitteilungen des k. deutschen Arch. Instituts. Athens, 1876-

Aus Sib. W. Radloff, Aus Sibirien. Leipzig, 1884.

A.V. E. Gerhard, Auslesene Gr. Vasenbilder. Berlin, 1840.

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Burachkov. v. § B, p. xxix.
B., Bur. (coins).
                   Bulletin de la Commission Impériale Archéologique. v. § A, p. xxvi.
BCA.
BCH.
                   Bulletin de Correspondance Hellénique. Athens, 1877- .
B.de-La-G.
                   Bertier-de-La-Garde.
BG. (coins).
Beschr.
                   Beschreibung, e.g. Podshivalov, § B, p. xxxii, and Berlin Coin Cat.
                   British Museum: BMC. = Cat. of Greek Coins: BM. Jewellery, v. p. 386 n. 6.
B.M.
Bobrinskoj Misc.
                   v. § B, p. xxix, s.v. Bobrinskoj.
                   Annual of the British School at Athens. London, 1896.
BSA.
Bulletin of Kiev University. v. § A, p. xxviii, s.v. Kiev.
Bull. of x11. Arch. Congress. v. § A, p. xxvii, s.v. Imp. Moscow Arch. Soc.
Bull. of Russian Inst. in C-ple. v. § A, p. xxviii.
Bull. Taur. Rec. C.
Bull. Imp. Ac. Sc. St P. v. § A, p. xxv.
Cat. Moscow Univ. Coins. v. § B, p. xxxii, s.v. Orêshnikov.
Cher.
CIAtt.
                   Corpus Inscriptionum Atticarum (= IG. 1, 11).
CIG.
                   Corpus Inscriptionum Graecarum (Boeckh).
                   Corpus Inscriptionum Latinarum.
CIL.
                   Classical Review. London, 1887-
Cl. Rev.
Coll. Khanenko.
                   v. § B, p. xxx, s.v. Khanenko.
CR.
                   Compte Rendu de la Comm. Imp. Arch. v. § A, p. xxv.
                   K. Müllenhoff, Deutsche Altertumskunde. Berlin, 1870-1900.
DA.
Dar. et Saglio.
                   Daremberg et Saglio, Dictionnaire des Antiquités. Paris, 1877—
D.N. V.
                   Eckhel, Doctrina Numorum Veterum. Vienna, 1792-98.
Drevnosti.
                   v. § A, p. xxvii, s.v. Imp. Mosc. Arch. Soc.
Έφ. 'Αρχ.
                   Εφημερίς Αρχαιολογική. Athens, 1837—
                   Ephemeris Epigraphica. Rome, 1872- .
Eph. Epigr.
FHG.
                   C. Müller, Fragmenta Historicorum Graecorum. Paris, 1841-70.
                   A. Furtwängler, Vettersfelde. Berlin, 1883.
Furt.
FW. (coins).
                   Fitzwilliam Museum, Cambridge.
G. (coins).
GGM.
                   C. Müller, Geographi Graeci Minores. Paris, 1855-61.
                   Hudson.
H.
                   Hermitage.
H. (coins).
                   Herodotus.
Her.
HN.
                   B. V. Head, Historia Numorum. Oxford, 11887, 21911.
IG.
                   Inscriptiones Graecae.
Inscr. Chr.
                   Christian Inscriptions of S. Russia.
                                                                          ) v. § B, p. xxxi,
                   Inscriptiones Antiquae Orae Septentrionalis Ponti Euxini. s.v. Latyshev.
IosPE.
J. (coins).
                  Jurgiewicz, v. p. 449.
                  Journal of Hellenic Studies. London, 1881-
JHS.
Journ. Min. Publ. Instr. v. § A, p. xxviii.
                  Journal of the Royal Asiatic Society. London, 1834-
I(R)AS. Bengal. Journal of the Asiatic Society of Bengal. Calcutta, 1832-
Khan.
                   Khanenko. v. § B, p. xxx.
                   Ch. Giel, Kleine Beiträge. v. § B, p. xxx.
Kl. B.
                   N. P. Kondakov, I. I. Tolstoi, S. Reinach, Antiquités de la Russie Méridionale.
KTR.
                      Paris, 1891.
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KW.
                   G. von Kieseritzky, C. Watzinger, Griechische Grabreliefs aus Südrussland.
                       Berlin, 1909.
Lat.
                   V. V. Latyshev.
L.-D.
                   Lappo-Danilevskij. v. § B, p. xxxi.
M. (coins).
                   Minns.
M.
                   Moscow.
Mat.
                   Materials touching the Archaeology of Russia published by the Imp. Arch.
                       Com. St P. 1888-. v. § A, p. xxvi.
Mat. Arch. Cauc.
                   Materials touching the Archaeology of the Caucasus published by the Imp.
                       Mosc. Arch. Soc. v. § A, p. xxvii.
Mat. for Num.
                   Orêshnikov, Materials for the Numismatics of the Black Sea Coast. Moscow,
                       1892. v. § B, p. xxxii.
MK.
                   B. de Koehne, Musée Kotschoubey. v. § B, p. xxx.
Mon. Ined.
                   Monumenti Inediti dell' Instituto Archeologico. Paris, Rome, 1857-
Mon. Piot.
                   Monuments Piot. Paris, 1894- .
Mosc. Coin Cat.
                   v. § B, p. xxxii, s.v. Orêshnikov.
Mus. Borb.
                   Real Museo Borbonico. Naples, 1824.
NH.
                   Pliny, Naturalis Historia.
Num. Misc.
                   Numismatic Miscellany. v. § A, p. xxvii.
O. (coins).
                   Odessa.
Od. Mus. Guide.
Od. Mus. Terra-cottas. v. § A, p. xxviii.
Or. (coins).
                   Orêshnikov.
Os. Studies.
                   Vs. Th. Miller, Ossetian Studies. v. § B, p. xxxi.
P. (coins).
                   Pick. v. p. 449.
Per. P.E.
                   Periplus Ponti Euxini, after Latyshev, Sc. et Cauc. pp. 271-288, cf. inf. p. 25.
Ποντικά.
                   v. § B, p. xxxi, s.v. Latyshev.
                   L. Niederle, Prehistoric Man. v. § B, p. xxxi.
Preh. Man.
                   v. § A, p. xxviii.
Propylaea.
P.- W.
                   Pauly-Wissowa, Encyclopädie. Stuttgart, 1894- .
Rep. Hist. Mus. Mosc. Report of the Historical Museum at Moscow. v. § A, p. xxviii.
R.G.
                   Mommsen, Roemische Geschichte.
Rh. Mus.
                   Rheinisches Museum für Philologie. Bonn, 1827-41; Frankfurt-a.-M., 1842-
Röm. Mitt.
                   Mitteilungen d. deutschen Archäologischen Instituts. Rome, 1886- .
Samml.
                   J. Boehlau, Sammlung Vogell. v. p. 339 n. 6. Cassel, 1908.
SB.
                   Sitzungsberichte.
Sc. et Cauc.
                   V. V. Latyshev, Scythica et Caucasica. v. § B, p. xxxi. St P. 1890—1906.
                   A. S. Lappo-Danilevskij, Scythian Antiquities in TRAS. v. § B, p. xxxi.
Sc. Antt.
Sib. Ant.
Slav. Ant.
                   L. Niederle, Slavonic Antiquities. v. § B, p. xxxii.
Sm.
                   Ct A. A. Bobrinskoj, Smêla. v. § B, p. xxix, and p. 175 n. 1. St P. 1887—1902.
St. Byz.
                  Stephanus Byzantius.
St P.
                  St Petersburg.
Syll.
                  Sylloge, e.g. Dittenberger.
Trans. Mosc. Num. Soc. Transactions of the Moscow Numismatic Society. v. § A, p. xxvii.
                   Transactions of the Odessa Historical and Archaeological Society. v. § A, p. xxviii.
Trans. Od. Soc.
Trans. (Imp.) Russ. Arch. Soc.) Transactions of the Imp. Russian Archaeological Society. St P.
TRAS.
                                    v. § A, p. xxvii.
U. (coins).
                  Uvarov Coll. v. § B, p. xxxii, s.v. Orêshnikov.
ZMDG.
                  Zeitschrift der deutschen morgenländischen Gesellschaft. Leipzig, 1845-
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MUSEUMS

Objects (apart from coins for which see p. 661) from S. Russia are well represented in the following Museums:—

The Hermitage at St P. receives the best things from the excavations of the Archaeological Commission and largely from chance finds. Far the greater part of objects mentioned below are, unless it is otherwise indicated, in the Hermitage. Objects from South Russia are also represented in the Alexander III Museum.

The Historical Museum at Moscow has much Palaeolithic and Neolithic material and some Scythic, from the Greek Colonies the Burachkov Collection and many new acquisitions. Attached to the University is the Alexander III Museum of Fine Art.

The *Town Museum at Kiev* has received the results of Chvojka's excavations and has incorporated with it the Khanenko Collection and that of Count Bobrinskoj as published in their works, in fact nearly everything from the Kiev district except the Ryzhanovka find which went to the Academy of Science, Cracow.

The Museum of the Odessa Society is the best place for studying Petreny, Tyras, Theodosia, Berezan and perhaps Olbia as it has most of the material from those sites except Pharmacovskij's finds at Olbia: it has also a good deal from Bosporus. Things published in Trans. Od. Soc. are mostly in this Museum.

The Town Museum at Kherson is concentrating the finds from the lower Dnêpr.

Chersonese has two museums, one in the Monastery containing the finds made before the Archaeological Commission began digging, the other those made by it as far as they are not sent to the Hermitage.

Theodosia has a small Museum supported by the Odessa Society.

At Kerch there is the Museum of the Archaeological Commission and its collection of Inscriptions in the Royal Barrow; the Odessa Society has inscriptions in the Melek Chesme Barrow. But the best things go to the Hermitage.

At Kazan the Town Museum has objects illustrating the Volga-Kama culture.

At Minusinsk is the best collection of Siberian bronzes, etc.

The provincial Universities and the St P. and Moscow Archaeological Societies have small museums.

Private Collections of importance are Ct Uvarov's at Porêchje (everything), Ct Stroganov's at St P. (Permian Plates), Teploukhov's (Permian Culture) near Perm, Suruchan's (Greek) at Kishinëv, Terlecki's (Bosporus), Novikov's (Eltegen) at Kerch, Mavrogordato's, Konelski's (Olbia) at Odessa. Vogell's at Nicolaev (Olbia) was mostly dispersed at Cassel in 1908 (v. p. 339 n. 6), the things chiefly went to German museums. The first museum in S. Russia was established at Nicolaev by the Scottish Admiral Greig.

On the whole things from our area have not found their way outside Russia to any great extent, they are best represented at Berlin, there is little at the Louvre but much from the Caucasus at St Germain.

The British Museum has MacPherson's and Westmacott's finds made during the Crimean War and a few purchases: the Ashmolean, Oxford, the things published by E. A. Gardner (JHS. 1884, Pl. XLVI, XLVII) and others since given by Mr Wardrop: the Fitzwilliam, Cambridge, three inscriptions (v. App. 67, 68, 69) and one or two stelae brought back by Dr E. D. Clarke.

ADDENDA AND CORRIGENDA

p. 5 l. 27, nn. 6, 7, otters and watersnakes, v. p. 105 n. 5.

p. 7 l. 32, gold from Urals and Altai, v. p. 441.

p. 8 sqq. esp. p. 34 and Chapters 11.—vi. passim, v. How and Wells, A Commentary on

Herodotus, Oxford, 1912, 1. pp. 302-344, 424-434.
p. 41 n. 1. A. M. Tallgren, Zt d. Finn. Altertumsges. xxv1, thinks this stopped axe older than those from Hallstatt and all such, even in Britain and the Urals, Mediterranean in origin.

p. 44 sqq. That Greeks had met people with Mongolian blood is shewn by the caricatures on Fig. o. The cyrbasiae shew these figures to be Scythians, probably Sacae from the Persian forces quartered in Egypt. No. 1 has the sloping eyes, No. 2 the high cheek-bones, No. 3 the round face of the Mongol, but their beards shew them no longer as Hippocrates describes them (v. p. 46) but intermixed with other blood yet not more than the Hiung-nu on p. 96 f. 27. Nos. 4 and 5 shew the almost Iranian type of the Kul-Oba Vase p. 201 f. 94. For a brilliant account of Nomad life in general v. J. Peisker, Camb. Mod. Hist. 1.

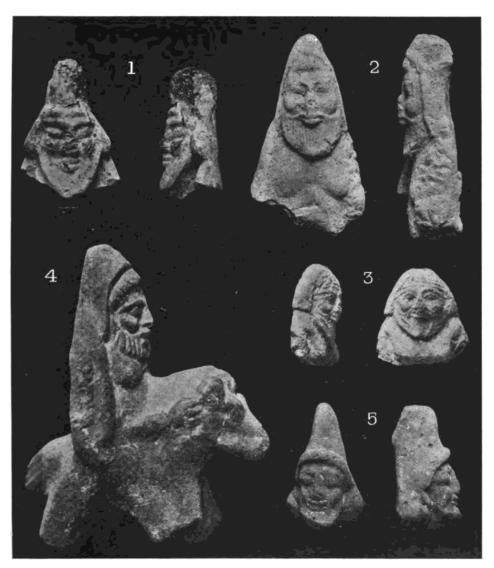


FIG. o. Caricatures of Scythians from Memphis, Vth century B.C. W. M. Flinders Petrie, Memphis, I. (1909), p. 17, Pl. XL. 42, 44 (3 and 4); II. (1909), p. 17, Pl. XXIX. 78, 79, 80 (1, 2, 5), cf. Meydum and Memphis, III. (1910), p. 46, Pl. XIII. 136—138. My very best thanks are due to Professor Flinders Petrie who sent me these photographs before his Vol. II. was published.

(Cambridge, 1911) pp. 323-359 and more fully Vierteljahrschr. f. Social- u. Wirtschaftsgesch. 111. (1904), "Die älteren Beziehungen der Slawen zu Turkotataren und Germanen und ihre sozialgeschichtliche Bedeutung," pp. 187-360; 465-533: most of his conclusions as to Sc. (pp. 187—240) are much the same as mine, i.e. that the true Sc. were Turkotartars imposed upon a more or less Aryan population represented by the Georgi, etc. and themselves strongly mixed with Aryans not only thereby but during the men's domination in Media, which he fully accepts, when they adopted Iranian speech from Median wives. These women as not nomads could not ride but had to be carted and also had different bathing customs from the men. A careful examination of the forms underlying the straight hair in the Greek portraits (l.c. pp. 216—224) shews them not Aryan but just like e.g. Kara-kirgiz. Hippocrates may have seen purer Turkotartars but the Greeks even in Upper Asia mostly came in contact only with a border of half-castes. Vegetarian Sc. in Ephorus ap. Strab. VII. iii. 9 are Aryans raided by Sc., cf. Tadzhiks.

p. 50 n. 4. Other carts, v. inf. p. 370 n. 3 and Addenda thereto.

p. 61 l. 43. Rostovtsev (v. Add. to p. 218) regards the "woman" on all these plaques as a goddess.

p. 66 n. 7. For stone read bezel, v. p. 427 f. 318 top.
p. 67 l. 16. Bow-cases. After "p. 284" add and Addenda to p. 287.

p. 70 n. 12. For D. A. Anuchin read D. N. Anuchin.

p. 71 n. 2. Add for this and two more sheaths v. p. 567 n. 3.

p. 74 l. 13. For Bezchastnaja read Bezschastnaja.

p. 78 n. 7. Add Ul, Arch. Anz. 1910, pp. 199-201 ff. 3, 4.

p. 80 n. 5 col. 2. For Zamazaevskoe read Zamaraevskoe, dist. of Shadrinsk.

p. 85. Mr A. B. Cook pointed out to me this sentence from the Etym. Mag. s.v. πόποι. οί γὰρ Σκύθαι, ἀγάλματα τινὰ ἔχοντες ὑπόγαια τῶν θεῶν, πόπους αὐτὰ καλοῦσι, but there is probably a confusion with the Dryopians who had gods called πόποι, Class. Rev. 1904, XVIII. pp. 83, 84, perhaps helped by the word Papaeus. For Argimpasa v. Add. to p. 218.

p. 100 l. 29. v. Addenda to p. 44.

" ll. 31, 37, 48. For Le Coq read Lecoq.

p. 123 l. 20. For these Getan (?) kings, v. p. 487.

p. 130 n. 1. Add V. A. Gorodtsov, Primitive Archaeology, Moscow, 1908: Cultural Archaeology, 1910.

p. 131 n. 4. For G. A. Skadovskij read G. L. Skadovskij.

p. 134 n. 1 col. 2. After civilization of Servia add and Glas Srpske Kraljevske Akademije (Voice of the Serbian Royal Acad.) LXXXVI., "Gradac," where he finds this culture surviving to La-Tène times.

At end add, cf. Wace and Thompson, Prehistoric Thessaly, pp. 231-234, and 256-259; Gorodtsov, Cultural Arch. pp. 133-151; E. Meyer, Gesch. d. Altert. 1. 2, pp. 734, 741, 742.

p. 142 l. 16; p. 143 n. 5. Veselovskij found on the Ul a model waggon and long-necked female statuettes of alabaster like Aegean types, BCA. xxxv. Pl. 1., 11., 1v., Arch. Anz. 1910, p. 195.

p. 144. Majkop. Pharmacovskij (Hist. Congr. London, 1913) shewed the bulls, etc. to belong to a portable canopy and the cups to exhibit the earliest (B.C. 1400-1000) East-Anatolian or Urartu style preceding ordinary Hittite. A. M. Tallgren, Zt d. Finn. Alt. Ges. xxv. 1, "Die Kupfer- u. Bronzezeit in Nord- u. Ostrussland," arrives at this date independently.

p. 148 n. 1. For VIII. 2 read VIII. 1.

p. 155 last line. Anuchin, Veselovskij and Pharmacovskij (Bobrinskoj Misc. p. 63 n. 2) agree that Zabêlin was wrong in thinking Chertomlyk barrow to have been plundered.

p. 165 l. 21. Pharmacovskij (l.c.) shews that this pottery points to about the middle of the

11nd cent. B.C., e.g. a cantharos like p. 349 f. 254.

p. 168 n. 1. Add cf. silver vessels from Chmyrëva, p. 383, Arch. Anz. 1910, pp. 215-226 ff., 12-25 and Vs. Sakhanev BCA. XLV. pp. 111-131, who refers their ornament to the 11nd cent. B.C.; he thinks the horses killed as usual, cf. Lemeshova Mogila, Arch. Anz. 1912, pp. 376, 377.

p. 173 n. 2. Martonosha crater. For IV read VI. Cup from Vorónezh v. Add. to p. 200.

p. 175 n. 1. Ct Bobrinskoj's excavations. After xx. p. 1 add xxxv. pp. 48-85; xL. pp. 43-61; Arch. Anz. 1912, pp. 378, 379.

p. 192 l. 3. For Pomashki read Romashki.

p. 200 f. 93. The Kul Oba vase has a close analogue in one of silver gilt found near Vorónezh in 1912. " n. 1. For v. p. 39 f. 3 bis read v. Addenda to p. 44 f. o for physical type of Scythians.

p. 210 n. 3. For Dionysius read Dionysus.

- pp. 218, 219. Karagodeuashkh. Rostovtsev, BCA. XLIX. "The Idea of Kingly Power in Scythia and on the Bosporus" (= "Iranism and Ionism," Hist. Congr. London, 1913), sees on the rhyton, f. 121, two horsemen face to face each above a prostrate foe but one holding a sceptre, the other adoring him, i.e. to judge by Sassanian investiture scenes, a mounted form of Mithras conferring divine right on a king: on f. 120 R. sees at the top the king's Tύχη or hvareno, then Mithras with a quadriga and below Aphrodite-Argimpasa-Anahita-Astarte (cf. pp. 85, 617—619 and Pl. vIII. 12, 14) receiving in communion the sacred rhyton and round-bottomed vase, cf. analogous scenes of communion and unveiling, pp. 158, 203 ff. 45, 98. On the Bosporus reiranized by the 11nd and 111rd centuries A.D. this conception of kingship is symbolized by sceptres and crowns, v. p. 434 and f. 325, and on coins like Pl. VIII. 10.
- p. 232 l. 36. For Parthlan read Parthian.
- p. 232 n. 4. Kuban Barrows. Add CR. 1906, pp. 91-95; Arch. Anz. 1909, p. 148 (cf. inf. p. 382); 1910, p. 197 (Ul); 1911, pp. 193, 194, ff. 1, 2 (Kasinskoe, Govt Stavropol).
- p. 235. Fig. 144, the Uvarov cup, ff. 140, 141 and the Ust-Labinskaja bottle are all figured in Smirnov, Arg. Orient. x. 25 (cf. 26), 27, x1. 29, 30 (cf. x11. 31-34), 1x. 280 (cf. 281).

- p. 254 n. 1. For JRAS. Bengal read JAS. Bengal.
 p. 257 n. 2. For Vol. xxvi. Helsingfors, 1910 read Vol. xxv. 1, Helsingfors, 1911.
 ,, n. 5. H. Appelgren-Kivalo, Zt d. Finn. Altertumsges. xxvi. "Die Grundzüge des Skythischpermischen Ornamentstyles," derives the eagle from a Ganymede subject by a jug from Nagy-sz.-Miklós and traces the further degeneration of the deer into a row of men.
- p. 266 l. 15. Add Beak heads are quite Greek, e.g. a girdle-mount from Olbia, Arch. Anz. 1911, p. 223, f. 30; so is a mirror like the Romny one, ib. p. 224, f. 31. Indeed nearly all Sc. motives are finding their source as we learn more of Ionian art with its Minoan survivals.
- p. 270 f. 186. This sheath is from Elizavetovskaja, v. p. 567.
- p. 271 sqq. Siberian plaques, v. G. Hirth, Formenschatz, 1909, No. 85 (cf. 40); 1910, No. 1.
- p. 273 n. 3. For f. 333 read p. 507, f. 339.
 p. 287 l. 35. Pharmacovskij, "The Gold Mountings of the Bow-cases from the Iljintsy and Chertomlyk Barrows," Bobrinskoj Misc. pp. 45—118, sets the whole matter on a fresh footing. The Iljintsy grave had the usual wooden chamber, which collapsed when being plundered: the chief object besides the sheath was a set of horse's gear like p. 185 f. 78 but ruder in workmanship. He says that the Iljintsy cover was made by preparing first the wooden foundation and carving the design upon it, then beating into the carving a plate of base gold with a pure gold face and finally touching up with a graver, whereas that from Chertomlyk was produced by laying a slightly inferior gold plate over the Iljintsy sheath and beating it into its lines: this is shewn by the traces of the Iljintsy engraving on the wrong side of the Chertomlyk cover and by the design not always having come out on the latter particularly where it is rather weak in the former. The finishing of the Iljintsy cover was the less elaborate (much of it pointillé) and pathetic, but the more intelligent. The plate from the butt end of the bow-case was found at Iljintsy (that from Chertomlyk is figured ASH. II. p. 118): each is rounded below and has a midrib flanked by affronted griffins rampant and acanthus-flowers above; so the thickness of the bow case, greatest 4 cm. from the bottom, was 6.5 cm. (2.6 in.) as against a breadth of 21-25 cm. (8.25-9.8 in.) and a length of 43 cm. (17 in.). The midrib answers to the division separating the bow (put in string upwards) from the arrows (said to be in bundles point upwards): at Iljintsy there were 142 bronze and 12 bone arrows.

The subject of the reliefs is the whole life of Achilles, not merely his time at Scyros, and so does not go back to one great composition e.g. of Polygnotus, but consists in Hellenistic wise of scenes divided by adjacent figures being set back to back: reckoning from left to right we have, above, 1, 2, Phoenix teaching Achilles to shoot; 3-8 Achilles (6) seizing arms from Odysseus (5), 3 being the Scyran queen with Neoptolemus, 7 a nurse and 8 Deidamia: the next scene is cut in two, 9 is Lycomedes (his right arm is clear upon the Iljintsy sheath) parting with Achilles (10) while the four women to the left below ought to be looking at them; they are the queen between two daughters and a nurse marked off as a group indoors by dotted curtains; in the following scene we have Agamemnon and Achilles now reconciled by Odysseus and Diomede; Achilles is putting on a greave before going out to avenge Patroclus; the last figure is Thetis bearing away her son's ashes.

The animals, especially the lank griffins, are in the Hellenistic manner while the ornament shews exactly the same elements as the base of a column at Didyma near Miletus (Pontremoli-Haussoullier, Didymes, p. 145): Lesbian cyma, acanthus, twist and palmette all

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in a late stage not before the middle of the 11nd century B.C. which agrees with the pottery
     (v. Add. to p. 165). So Pharmacovskij refers the gold work to Miletus in that century and
    the tombs themselves and with them most of the big Scythic tombs to a slightly later time.
pp. 293-435. Additions to almost every page of Chapters XI. and XII. might be made from
     Pharmacovskij, Arch. Anz. 1911, pp. 192-234; 1912, pp. 323-379.
p. 295 l. 18. For p. 566, f. 345 read p. 565.
p. 298 l. 31. A head of Egyptian work from Kerch, B. A. Turaev, "Objets egyptiens et égyptisants
     trouvés dans la Russie Méridionale," Revue Archéologique, 1911, 11. pp. 20-35.
p. 304 l. 7; p. 310 l. 30. Deified dead and chthonian divinities, v. p. 606 n. 10.
p. 320 l. 25. After Mat. vi. add and Röm. Quartalschr. viii. pp. 47-87; 309-327, Pl. II., III.
p. 338 n. 4. Egyptian Porcelain. Cf. Addenda to p. 298 l. 31.
      n. 5. Ionian Pottery. Cf. inf. p. 564 n. 3.
       n. 6. Add Naucratis, BCA. XL. pp. 142-158; XLV. p. 108, f. 5.
p. 339 nn. 7, 8. Ionian Pottery, Arch. Anz. 1911, pp. 223, 224, ff. 29, 32; 1912, pp. 354-371,
     ff. 41, 44, 46-51, 61. Early pottery inland; v. inf. p. 441 n. 1.
       n. 9. Add cf. Arch. Anz. 1912, p. 360, f. 51.
       n. 14. Add Milesian sherds from Chersonese itself, Arch. Anz. 1912, p. 349.
p. 340 n. 6. Substitute Mr J. D. Beazley refers it to Oltus.
               Panathenaic Amphorae, Kerch, Tanais, v. p. 626; Chersonese, Add. to p. 516.
p. 347 n. 5.
p. 348 l. 20. Von Stern's Watercolour Vases (v. p. xxxiii) will deal fully with the whole class.
p. 349 n. 1. Add BCA. xl. p. 430, bl. f. cotyle from Cherkassk.
      n. 3. For Reliefkeramite read Reliefkeramik.
p. 362 n. 4. Polychrome glass, cf. Arch. Anz. 1911, p. 199, f. 6.
p. 367 n. 14. Bes, cf. BCA. XLV. pp. 71—75, Pl. 11.—1V. and Add. to p. 298 l. 31. p. 370 n. 3. Add For toys see von Stern "From the Children's Life on the N. coast of the Euxine," Bobrinskoj Misc. pp. 13—30 = Arch. Anz. 1912, pp. 147—148, feeding-bottles, dolls,
     dolls' sets of furniture, etc., animals, waggons, an eicositetrahedron with the alphabet, some
     things Milesian ware.
p. 379 l. 3. Add a tortoise-shaped bronze lyre-body from Kerch deserves notice, Arch. Anz. 1911,
     p. 203, ff. 11, 12.
p. 383 n. 9. Chmyrëva vessels, v. Addenda to p. 168 n. 1.
p. 386 l. 11. For a large hoard of Byzantine and Sassanian plate (vi.—vii. cent.) from Malaja
     Pereshchépina near Poltava v. I. A. Zarêtskij, Trans. (Труды) of the Poltava Record Comm.
     IX. 1912, N. E. Makarenko, BCA. XLVI. and a future publication of the Imp. Archaeol. Comm.
p. 390 n. 7. These crowns support Rostovtsev's theory of Bosporan kingship, v. Add. to p. 218.
p. 395 n. 5. Add early earrings, Olbia, Arch. Anz. 1911, p. 222, f. 27; 1912, p. 355, ff. 42, 43;
     Bosporus, ib. pp. 333, 346, ff. 16-18, 31.
p. 412 n. 12. Scarabs from Berezan, cf. B. A. Turaev, BCA. XL. pp. 118—120 and Add. to p. 298.
p. 415 below cuts. Add Burial at Olbia came in about 550 B.C. before which burnt bones were put
    into amphorae in special pits among the houses, v. Arch. Anz. 1912, p. 351: an excellent
    early grave ensemble, ib. p. 354, f. 41 sqq.
p. 458 n. 1. Add A similar house just to the S. of this is described in Arch. Anz. 1912, p. 363 sqq.
                  IosPE. 1. 971 as supplemented in IV. p. 271, Trans. Od. Soc. XIV. p. 22, BCA.
p. 468 n. 4
                     XLV. p. 1 = Arch. Anz. 1912, p. 366, dedicates rovs movs (i.e. three cellae) ovr
p. 476 l. 26
p. 478 l. 20
                     τῆ στος on behalf of Alexander Severus, the Roman Senate and the prosperity of
p. 479 bottom
                     Olbia θεοῖς ἐπηκόοις Sarapis, Isis, Asclepius, Hygiea, Poseidon (and Amphitrite).
p. 471 l. 10. For φρατίραι read φρατρίαι.
              Add and BCA. XLV. p. 7, No. 2, Αυρ. Χρύσ[ιππος τοῦ δεῖνος?]/Μητρὶ θεῶν [ἀνεθήκεν?].
p. 479 l. 15.
p. 486 l. 16. Bertier-de-La-Garde casts doubts upon this Pallas type in silver.
p. 497 l. 7
                The foundation of Chersonese is put back to the vith century B.C. by Ionian
p. 515 l. 21
                   sherds and archaic terra-cottas found on its "New" site, Arch. Anz. 1912, p. 349.
p. 516 l. 9. After 380) add and a Panathenaic vase, Arch. Anz. 1912, p. 349.
p. 524 l. 28. After Dia... add and Thrasymedes, BCA. XLV. p. 40, No. 2, c. 100 A.D.
                BCA. XLV. p. 40, No. 2 shews that there were only three νομοφύλακες and that
p. 541 l. 23
                   ὁ ἐπὶ τᾶς διοικήσεος regularly acted with them and must be restored in BCA.
p. 542 l. 27
                   111. p. 21, No. 1; XIV. p. 104, No. 9.
p. 544 n. 11. After IV. 84 add BCA. XLV. p. 65, No. 12, a dedication to the Chersonesan Maiden.
p. 598 n. 7 l. 8. For βίνο read βίου.
p. 620 n. 4. Add cf. reprint of this defixio by R. Wünsch, Rhein. Mus. Lv. pp. 232-236.
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CHAPTER I.

PHYSICAL GEOGRAPHY AND NATURAL PRODUCTIONS.

The scope of the present work includes the History of the Greek Settlements on the north coast of the Euxine from the mouth of the Danube to that of the Kuban, and the Ethnology of the country at the back of that coastline from the slopes of the Carpathians to the lower course of the Volga and the foothills of the Caucasus.

This tract extending through twenty degrees of longitude is quite different from any other tract in Europe, wherein the only region at all similar is that of the Hungarian Puszta, which is in a sense its westerly continuation and has always been deeply influenced by the neighbourhood of the greater plain. But this greater plain is itself but a continuation, almost a dependency, of the still wider plains of Northern Asia, and this continuity is the governing condition of its historical development. It is only within the last hundred years or so that Southern Russia has been definitely added to Europe. Before that time Asiatic tribes have been more at home in it than European. In Europe and Asia it is one continuous belt of steppe or prairie. The most striking feature of this broad stretch of country is the absence of mountains; they only come in as forming its border on the west and on the southeast, where the coast range of the Crimea is a continuation of the Caucasus, just as the plain of its northern region is really one with the mainland plain beyond the Isthmus.

But though the whole region may be broadly regarded as a plain, this must not be taken to mean that it is one dead level. Right across from the Carpathians to the coast of the Sea of Azov near the Berda there runs a belt of granite, which crops out wherever it is crossed by one of the great rivers. To the north of the granite belt is a limestone formation. Where these rocks occur the plain attains a considerable elevation, to the west in Podolia it becomes diversified with hills, and again further east about the Donets, where are the chief coal-mines of Russia, there is hilly country that ends in steep cliffs about Taganrog. Even where the rise of the plain is gradual, it attains a height of

¹ Much the best survey of the Physical Geography of Scythia is to be found in K. Neumann's *Hellenen im Skythenlande*, pp. 14 to 99. He is inclined to exaggerate the former extent of the

woodlands. Cf. also Elisée Reclus, Nouvelle Géographie Universelle, Vol. v., and L. Bürchner, Die Besiedelung der Küsten des Pontos Euxeinos, Pt I. Introduction, pp. 5-22.

300 feet above the sea, as in Ekaterinoslav. In general it slopes gently towards the south-west: so that the cliffs which are a few feet high near the Danube are not less than a hundred and fifty at the mouth To the east of the Dnêpr the coast plain is very of the Dnêpr. low. Between the Crimea and the mainland the boundaries of land and water are so ill defined that a change of wind will make the sea encroach, but the steppe reaches the level of the western plain about the fortyseventh parallel, and further north it attains four hundred feet south of the Great Meadow¹.

In spite therefore of the general flatness the actual heights reached by some parts of the plain are far too great to allow any talk of serious changes in the course of the rivers during the last two thousand years. These have not been able to do more than deepen their beds and very slowly edge westwards. The outlines of their course have been fixed by the geological formation which has made the remarkable correspondence of the sudden bends from ESE. to wsw. round which Dnêpr, Donets and Don have to find their way to the sea. The plain and the rivers are the features of the country that specially struck the Greeks, they

had nothing of the sort in their own land.

It is the great rivers that shew up the heights to which the plain Each has a steep or "hilly" bank to the west and a flat or "meadow" bank to the east, and flows winding along a broad valley, which at the lower end has been cut down to below the level of the sea forming the liman' so characteristic of Russian rivers. If the river has to cross the granite belt it has there failed to make its course easy for itself and is broken by rapids, most important in the case of the Dnêpr. The lesser streams have made proportionate valleys and into these leads a whole system of ravines, which carry off the melting snow but are dry during most of the year. All these depressions make no difference to the view of the steppe, as they are not noticeable until the traveller comes to the edge of one of them, but they present considerable obstacles to anyone not acquainted with the precise places where they can be crossed conveniently. They provided much too complete a system of drainage and the now diminished rainfall is carried off at once from the surface of the steppe, compare the expression of Hippocrates, έξοχετεύουσι. For the inhabitants of the steppe they are of the utmost importance. In them the flocks can find shelter in the winter, and in them the first beginnings of agriculture can be made. There is little doubt that the agricultural tribes of which we read in Herodotus confined their attempts to these valleys, and it was not till the other day that the open steppe was cut up by the plough. Till then it had been merely pasture, but some of it pasture unsurpassed in the world, at any rate during its season.

¹ The marshy widening of the valley about

² Her. IV. 82, Θωυμάσια δὲ ἡ χώρη αῦτη οὐκ ἔχει χωρίς ή ότι ποταμούς τε πολλώ μεγίστους και αριθμών πλείστους. τὸ δὲ ἀποθωύμασαι ἄξιον καὶ πάρεξ τῶν ποταμών καὶ τοῦ μεγάθεος τοῦ πεδίου κ.τ.λ. So

Hippocrates, De aere, etc. 25, 'Η δέ Σκυθέων έρημίη καλευμένη πεδιάς έστι καὶ λειμακώδης καὶ ψιλή, καὶ ένυδρος μετρίως · ποταμοί γαρ είσι μεγάλοι, οι έξοχετεύουσι τὸ ὕδωρ ἐκ τῶν πεδίων.

³ An estuary or lagoon cut off from the sea by a strip of sand with or without openings.

From the time of the snow's melting to the middle of summer the growth of the grass in the richer regions seems by all accounts to have been marvellous: but even so the sun would scorch it up and animals had to come near the streams until the autumn rains: and again they had to find shelter in the valleys for the depth of the winter, so that the nomad life was not quite as free as is represented, for these wintering places are quite definitely the property of particular tribes. Throughout great areas of the steppe, especially towards the south and east, the rich pasture gives way to barren lands offering but wormwood and silk grass, or tussock grass that does not even cover the surface of the sand. Worse still in the government of Astrakhan, at the eastern boundary of our area, there is but unrelieved salt sand: here the only land of any value is that along the lower Volga. This is why the trade route of which Herodotus gives particulars goes so far to the north. Yet commentators gaily assign such a district as the only local habitation of more or less important tribes. A great characteristic of the whole region is lack of trees, but in the river valleys, besides the meadows which kept the cattle alive in the winter, there were some woods at any rate. Especially was this the case on the lower Dnêpr where much land, since invaded by sand-dunes, was formerly wooded. In the north also the forest belt seems to have come further south down to the edge of the glacial deposit, along the line shaded on the general map, and to have sent outliers into the open plain. The retreat of the woods is due partly to man and partly to the drying up of Eurasia1 to which it has itself contributed. This drying up of the interior has also had a strange effect even upon the coastline.

The shores of such a country as we have described do not naturally offer facilities for commerce. To begin with the gentle slope of the plains continues in some parts under the sea: hence the shore between the mouths of the Dnêpr and the Don, if we leave out of account the southern part of the Crimea, as ever a strong contrast to the rest of the region, is not to be approached by ships. This initial difficulty is increased by the deposits of the great rivers, deposits which are heaped up with the more ease in that there is no tide to carry them away. As soon as the stream meets the dead mass of motionless sea, still more some current of the sea or of another river, it drops its load of silt along gentle curves mathematically determined by the meeting places of the opposing currents. So the Sea of Azov acts as a kind of settling tank for collecting the silt of the Don. The coarsest falls to the bottom at once to add to the growth of the delta, the finer has to pass successively the dead points produced by the opposing currents of the various streams that fall in from each side: hence the spits running out between the river mouths and especially the strange Arabat spit that encloses the Putrid Sea² and makes an alternative entrance to the Crimea.

¹ Cf. Prince Kropotkin in Geographical Journal, ² Σαπρὰ λίμνη, Strabo, VII. iv. 1. London, Aug. 1904.

Hence too the fact that during certain winds vessels have to lie ten miles from the shore off Taganrog¹, and the complaints of the silting up of the Maeotis expressed by Polybius² who regarded the completion of the process as not very distant, and the recent Imperial commission on the subject³.

After all this the current that flows out of the Maeotis has left only

4.25 metres on the bar at Kerch.

The same process goes on at the mouth of the Dnêpr. There is the bar and delta below Kherson, another bar (6 metres) at Ochakov running across from Kinburn spit ("Aλσος Έκάτης), and a third, the Tendra, $\Delta \rho \dot{\rho} \mu o s$ 'Αχιλλέως, along the line where it meets a coast current from east to west.

The Dnêstr only just keeps open. Here the bar has long been dry land, save for two small openings of which that used by ships has a depth

of only five feet.

The small rivers such as the Kujalnik and Tiligul are entirely closed. Yet this process is quite modern. In 1823 the Tiligul was open, now the highroad runs along its bar. Within the bar in every case is an estuary (liman) which used once to be open. This inconvenient phenomenon of shut river mouths is due partly to the unequal flow of rivers which have to carry snow water; more however to their inability to keep a sufficient current in a channel that they had excavated in ages of more abundant rainfall. It is one more evidence of the drying up of the

country.

The Greek colonies of Tyras and Olbia were founded on the steep side of a liman where the current came near the coast, the position of Tanais was somewhat similar. All the other ports depended on the entirely exceptional formation of the Crimea: Chersonese had the use of the many harbours about Sevastopol, some of which are steep to. Theodosia had a small harbour and fine roads, and the towns on the Bosporus though troubled with shoals were not yet strangled by accumulating silt. Beyond the Bosporus Bata (Novorossijsk) and Pagrae (Gelendzhik) had clean harbours, but the former suffers from a unique disadvantage, the Bora, a wind which blowing from the mountains covers ships with such a coating of ice that they have been known to sink under the weight.

Of modern towns Odessa is comparatively free from silt, but its harbour is entirely artificial. In fact the headland that sheltered the roads is being washed away. But both Nicolaev and Kherson suffer from the shoals and bars encouraged by the drying up of their respective rivers.

This drying process has tended to make the climate of Scythia more extreme in character. Of course most of the ancients regarded only its cold, and regarded it as cold all the year round': just as it requires an effort

¹ Clarke's *Travels*, I. p. 428. ² IV. 40. So too Aristotle, *Meteorologica*, I.

xiv. 39.

The Don delta gains 6.70 metres yearly. The gulf below is 1 ft 6 in. less deep than 200 years ago. The sea should last another 56,500 years,

E. Reclus, op. cit. p. 789.

4 N. A. Korostelev, The Bora at Novorossijsk.

Mém. de l'Acad. Imp. des Sciences de St Pétersbourg,
Classe Physico-Mathématique, VIII° sér., T. xv.

No. 2, St P. 1904.

5 Her. IV. 28. Hippocrates, De aere, c. 26.

for most of us to think of Russia and Siberia as very hot in the summer. Strabo' even refuses to believe in the heat, arguing that those who found it hot did not know real heat?. A curious fact is that the Greeks undoubtedly looked on Scythia as damp and foggy, whereas it suffers from oft-recurring drought. Probably there was more wood and so there was more moisture, and probably also the Greeks connected the north with cold and wet and thought that further to the north there must be more cold and wet. Also there certainly were marshy foggy tracts at the mouths of the big rivers, the points where they had most commerce with Scythia, and the readiness with which people believe the worst of foreign climates accounts for the permanence of this idea.

One or two little points served to confirm this impression. A Greek felt a kind of horror of a country in which the myrtle and bay did not grow, and the attempts to make them grow at Panticapaeum were probably not very skilled, for the vine did not do well, and that succeeds there quite easily nowadays4.

So too the fact of the sea freezing struck them as evidence of an intolerable climate. Actually this tends to come about chiefly in places where the fresh water contributed by the rivers has made the sea hardly more than brackish. But this again was just in regions where the Greeks were most likely to see it. Also the uncertainty it introduced into commerce at certain times of the year would bring it home to the Greeks of Hellas, and every Greek had heard of the brazen pot split by the frost and dedicated by Stratius in the temple of Aesculapius at Panticapaeum and the epigram thereon.

The Fauna of the steppe region is not specially striking. It is on the whole poor. The ancients were interested in the accounts of the Tarandus, a beast with a square face and a power of changing colour, apparently the reindeer with its summer and winter coats: that no longer comes so far south. So too the otter and beaver have retreated with the forests though place-names shew the former extent of the latter.

The wild white horses about the source of the Hypanis may either have been the western extension of the grey pony of Upper Asia or they may have merely run wild.

Strabo (VII. iv. 8) mentions that in the marshes there were hunted deer and wild boar, and on the plains wild asses and goats. He also mentions the Colus, a kind of buffalo or bison.

On domesticated animals the climate was supposed to have such an effect that asses (in spite of Strabo's wild asses) and mules succumbed. and horned cattle lost their horns 10.

¹ vII. iii. 18.

² Aristotle, *Problem.* XXV. 6, recognises the hot

³ Theophr. Hist. Plant. IV. v. 3. Pliny, NH.

XVI. 137.

4 Until Byzantine times the Greeks never seem to have gained occupation of the mountains of the Crimea and their warm southern valleys with Mediterranean vegetation. Besides these were quite an exception on the north coast of the Euxine.

⁵ Strabo, 11. i. 16.

⁶ Arist. de Mirabilibus, c. 30. Theophr. Frag. 172; Her. IV. 109.

Her. l.c.; Strabo, III. iv. 15; Th. P. Köppen, On the Distribution of the Beaver in Russia, Journ. Min. Publ. Inst. St P., June, 1902.

⁸ Her. IV. 52.

⁹ Aristotle, de Animalibus, VIII. 25.

¹⁰ Arist. op. cit. VIII. 28. This circumstance was explained by the statement that the cold prevented

Very characteristic of the steppe are the various rodents, susliks and baibaks, relations of the jerboa, but regarded by the ancients as exaggerated mice: hence the story that skins of mice were used for clothing. Such creatures with their curious watchful attitude, along with Indian ants and Babylonish garments, may have their part in the origin of griffin legends.

We may also mention adders and snakes², bees³ and ephemera⁴. More important than the land animals were the fish that abounded in

the rivers and formed the main object of export⁵.

The most important species were the Pelamys, a kind of tunny, and the αντάκαιοι or sturgeons. Of the former Strabo (VII. vi. 2) has an idea that they were born in the Maeotis and made their way round and began to be worth catching when they got as far as Trapezus, and were of full size at The difficulty is that I am assured by Mr Zernov, Director of the Marine Biological Laboratory at Sevastopol, to whom I offer my best thanks, that no sort of tunny does this; that a kind of herring does so; but that the scumbria, which answers to the general description of the pelamys, and a mackarel now called *palamida*, do not go into the Sea of Azov at all. The palamida is quite rare in the Black Sea though common in the Mediterranean. Moreover the tendency is for the Mediterranean fauna gradually to conquer the Black Sea, so it is not likely that this particular species was commoner in ancient times. Yet Strabo from his birthplace ought to have known all about it.

The artakaioi or sturgeons are first mentioned by Herodotus (Iv. 53) at the mouth of the Dnêpr. This fishery does not seem very abundant now. The other great locality was in the Maeotis, both along the eastern shore at the mouths of the rivers Rhombites (this is now represented by fisheries at the same points and at Achuev which is just at the mouth of the Anticites) and at the Cimmerian Bosporus, where the Greeks were much struck by the fishing carried on through the ice and believed that fish as big as dolphins were dug out of the solid. As a matter of fact though ice is collected on the shore every year the strait does not freeze over very often: this happens more regularly in the upper part of the Maeotis

at the mouth of the Don.

There are three kinds of sturgeon. Accipenser Stellatus (sevrjúga) with a sharp nose forms the bulk of the catch in the Sea of Azov. A. Huso (Bélliga) has whiter flesh and used to be common at Kerch and at the delta of the Dnepr. This seems to be the one that Strabo means when he talks of its being as big as a dolphin. Finally we have A. Sturio (osjotr), our sturgeon, which is more characteristic of the Volga. It has a blunt nose, and so differs from the fish represented on the Greek coins (Pl. v. 18, 20).

The ancients thought that the fish went into the Pontus to escape the larger fish that preyed upon them outside and to spawn, as the

their growth. Yet we have Greek representations of the saiga with its splendid horns, and the tarandus or reindeer was known with its horned hind.

¹ Justin 11. 2, pellibus murinis utuntur, cf. Hipp.

de aere, c. 26.

* Arist, de Mirabilibus, c. 141; Her. IV. 105. 3 Her. V. 10. Arist. de Animalièns, V. xxii. 8.

b. v. xix. 14.
 Cf. especially M. Koehler, TAPIXOΣ in Mêm. de l'Acad, des Sciences de St Pétersbourg, VI = sér.

T. I. p. 347, St P. 1832. Strabo, XI. ii. 4.

⁷ Strabo, VII. iii. 18.

fresher water was more favourable to the young. That is true of the coastline, but the middle of the sea is full of bacteria which produce sulphuretted hydrogen, so that the fishes from the Mediterranean can only make their way round gradually and have not yet elbowed out of existence the archaic but excellent species proper to the Aralo-Caspian-Euxine basin.

As to the Flora of the northern coast of the Euxine, leaving aside the Crimean mountains, we have already spoken of the scarcity of wood, a scarcity which seems to have increased in modern times. What trees do grow are confined to the river valleys and include deciduous species only, as indeed is noticed by Theophrastus' who speaks of figs and pomegranates growing if earthed up, also excellent pears and apples, and among wild trees of oaks, limes and ashes; but no firs or pines. There is however a special Pinus Taurica. In the open country the ancients noticed the luxuriance of the grass or when they wished to find fault the stretches of wormwood, to which however they ascribed the good quality of the meat. They speak also of eatable roots and bulbs and of various drugs, also of hemp used both as a fibre and as a narcotic.

A special lack in Scythia was that of good stone. About Odessa and Kerch there is a soft local limestone easy to work but only durable if protected from the weather by a coat of plaster: in the Crimea, especially at Inkerman, there occurs a stone of higher quality: but in general stone is not to be found, and this has been one reason for the absence throughout the whole region of important architectural monuments.

Of other natural productions we need mention but amber, which is occasionally found near Kiev, but does not seem ever to have been systematically worked; salt', given as occurring at the mouth of the Dnêpr, and indeed spread over a whole section of the steppe (the carting of salt into the interior was a great industry until the railways came, and followed immemorial tracks, the Greeks must have profited by it in their time), and gold which does not occur in Scythia itself, but has been abundant to the west in Transylvania whence the Romans obtained much gold, and to the north-east in the Urals where the mines of the ancient inhabitants (Chúdskia kópi) have been worked by the Russians, and further towards the middle of Asia, in the Altai, where also the modern miner has come across traces of former exploitation. In ancient times there were no doubt placer workings that yielded gold more readily than it can be attained now. These regions also contained ancient copper mines: and the turquoise of the east country was not without influence on the development of decorative art in the whole region.

So we may conclude a very hasty survey of the natural conditions which the Greeks met on the north coast of the Euxine and which governed the evolution and history of the native tribes they found there.

Plant. 1X. xvii. 4.

⁴ Ib. VII. xiii. 8, 1X. xiii. 2.

Hist. Plant. IV. v. 3.
 Ovid, Epist. ex Ponto, III. 1. 23.
 Theophrastus, Hist
 Her. IV. 74.
 The P. Köppen, On the Finding of Amber in Russia, Journ. Min. Publ. Inst. St P., Aug. 1893.

⁷ Her. IV. 53. Dio Chrys. XXXVI.

CHAPTER II.

SEAS AND COASTLINE.

Before we even approach the coast of Scythia and discuss the know-ledge of it possessed by the ancients, something must be said of their ideas concerning the Euxine Sea and its subordinate the Palus Maeotis¹.

Herodotus, for instance, takes the former to be 11,100 stades in greatest length, measured from the mouth of the Thracian Bosporus to that of the Phasis, and in greatest breadth 3300 stades reckoned from Themiscyra at the mouth of the Thermodon to Sindica. Moreover he thought that the neck between the Halys and Cilicia was only five days' journey "for a well girt man's." That means that he imagined the Euxine as stretching too far to the south at the eastern end: naturally, for this part, protected by the Caucasus, has a much warmer climate than the western's. As a matter of fact the broadest part is from the mouth of the Dnêpr to Heraclea in Bithynia, but Herodotus was evidently ignorant of the great bay along the south side of his square Scythia, whereas we may put the Rugged Chersonese and Sindica opposite to it some way up the eastern coast of the same. In the figure he gives for the greatest breadth Herodotus is not very far out, it being (but in the western half) 325 geographical miles or 3250 stades; but between the points he mentions it is only 235 geographical miles or 2350 stades.

His error with regard to the length is more serious. The extreme E. and w. points are Batum and the bay south of Mesembria, but he neglects the westerly bight of Thrace and makes a straight line from the Thracian Bosporus to the Phasis 11,100 stades, about double the real distance. We may take it that in reckoning 70,000 fathoms for a ship's journey in a day and 60,000 for a night he was taking the utmost possible, wherein he made no allowance for contrary winds and other obstacles. The cross measurement is more correct, as a ship could often take a straight passage north to south. She would not go for long out of sight of land, for a little to the west at the narrowest part of the sea the highlands of the Crimea (Criu Metopon) and Cape Carambis may be seen at the same time.

This exaggerated idea of the size of the Pontus present to the mind of Herodotus must have reacted on his view of Scythia and induced him

¹ E. Bunbury, *History of Ancient Geography*, 1. pp. 175-636, 11. 261-282.
² IV. 85, 86.

³ 1. 72. ⁴ H. Berger, Gesch. d. wissenschaftlichen Erdkunde der Griechen, Leipzig, 1903, p. 103.

to lay it out on too large a scale, another reason for our not extending it very far into the interior. In later times after the publication of Peripli and the advance of geography the ancients had a very good practical knowledge of the shape of the Euxine, comparing it justly to the asymmetrical Scythian bow!

They naturally exaggerated its size, but their methods of calculation always produced this effect: yet they paid much attention to the subject. Pliny² gives five different reckonings of the circumference of the Pontus, they vary between 2000 and 2425 m.p. (=16,000 to 19,400 stades), the real amount is about 1914 geographical miles (=2392 m.p. or 19,136 stades). He also quotes Polybius for the distance of 500 m.p. across from one

Bosporus to the other, which is approximately correct.

One curious error persisted. Eratosthenes and Strabo's both regarded Dioscurias (Sukhum Kale) as the extreme point of the whole sea, lying in a corner ($\mu\nu\chi\delta$ s) 600 stades east of the mouth of the Phasis, which some old poet, Herodotus and Ptolemy make the extreme point. This should really be at Batum, which is still further south. The error seems to rest on a commercial superiority of Dioscurias which lasted during Hellenistic and early Roman times. It was the last point of the navigation of the right side of the Pontus: the mountainous coast between it and the Cimmerian Bosporus being dangerous and unprofitable.

For all their familiarity with it the Greeks never forgot that the Euxine's first name was Axenos and most of them regarded a journey across it with some trepidation. To this day it is not a favourite sea with sailors, who dislike its fogs, its sudden storms and the scarcity of good harbours along the greater part of its coast. These causes tended to isolate the Greeks of its northern shore; in spite of the close commercial connection with the homeland no one voyaged to Olbia or Panticapaeum except on business, and Herodotus and the exile Dio Chrysostom are the only extant ancient authors of whom we can say that they visited the north side of the Euxine.

Maeotis.

Wrong as was Herodotus with regard to the Euxine, his ideas of the Palus Maeotis were even more erroneous. He thought of it as not much smaller than the Pontus, whereas its real area is about one twelfth. He knew that it was nearly twenty days' journey to the Tanais, elsewhere he gives 4000 stades from the Bosporus, and this he seems to have imagined as its width rather than the longest line that could be drawn in a narrow triangle. Already Scylax was a little less wild and thought of it as half the size of the Euxine. The distance across to the Tanais was usually put at 2200 stades, not so very much more than the actual distance of 1700: but most authors continue to give its circumference as 9000 stades, a very strange exaggeration. Right on into mediaeval times

¹ Hecataeus, Eratosthenes and Ptolemy, ap. Amm. Marcell. XXII. viii. 10. Dion. Perieg. l. 157, and Eustathius ad loc., Pliny, NH. IV. 76.

² NH. IV. 77.

³ XI. ii. 16.

² NH. IV. 77. ³ XI. ii. II. 4 IV. 86. ⁵ § 68.

⁶ Strabo, VII. iv. 5, Agathemerus, 18.
⁷ Pliny, N.H. Iv. 78; Strabo, l.c.; Agathemerus, 10; Schol. in Dion. Perieg. GGM. II. p. 457; Peripl. Anon., 118 (92), etc.

the mouths of the Tanais were supposed to be exactly on the same meridian as the Bosporus, though Hippocrates speaks of the lake as stretching towards the summer rising of the sun. The ancients consistently regarded it as a lake or marsh and as the greatest lake they knew: hence perhaps their exaggerated idea of its size. Some even went so far as to regard the Cimmerian Bosporus as the true mouth of the Tanais. On the other hand, some authors could not disabuse themselves of the notion that the Maeotis was connected with the Northern Ocean or at any rate with the Caspian².

Caspian.

With regard to the Caspian Herodotus and Ptolemy agree in making it an inland sea, though the former shews a tendency to make it balance the "Red" sea or Indian ocean's. But Strabo', Mela's, Pliny's, and Plutarch', all going back to Eratosthenes and perhaps to the Ionian geographers, make it connected with the northern ocean. Considering how little they knew about it, it is remarkable that both Herodotus and Strabo had a very fair idea of its size. The latter's information came from Patrocles, who was sent exploring by Seleucus. The idea of a passage from the northern ocean was due to the Greek belief in the symmetry of the world, and the existence of an arm of the sea running not so much north as east. Of this Patrocles seems to have been aware, but no one ever got near the Volga mouth, which indeed with its seventy channels is singularly unlike a sea strait. Herodotus seems to have thought of the Caspian as having its greatest length from north to south, but later authors put it from east to west10.

Survey of Coastline.

The ancients never had a settled idea of the shape of the Scythian coast. The inaccuracy of the outline given by Ptolemy is a measure of the difficulty they found in getting their bearings. The requirements of their navigation demanded no more than a rough knowledge of the distances separating the cities, harbours and chief headlands as measured across the openings of unimportant or unnavigable inlets. Such knowledge they pos-The accuracy of the figures given by sessed in a very fair degree. Ps.-Arrian and the anonymous compiler of the Periplus Ponti Euxini is remarkable when we consider the chances of corruption arising from the Greek methods of writing numbers. Of the inside of the country the Greeks knew hardly anything. They knew the appearance of the steppe and that great rivers made their way through it to disembogue in broad

¹ e.g. Ps.-Arrian, Per. P. E., 29 (19 H.).
² Plutarch, Alexander, XLIV. For the silting up of the Maeotis, v. supra, p. 4.

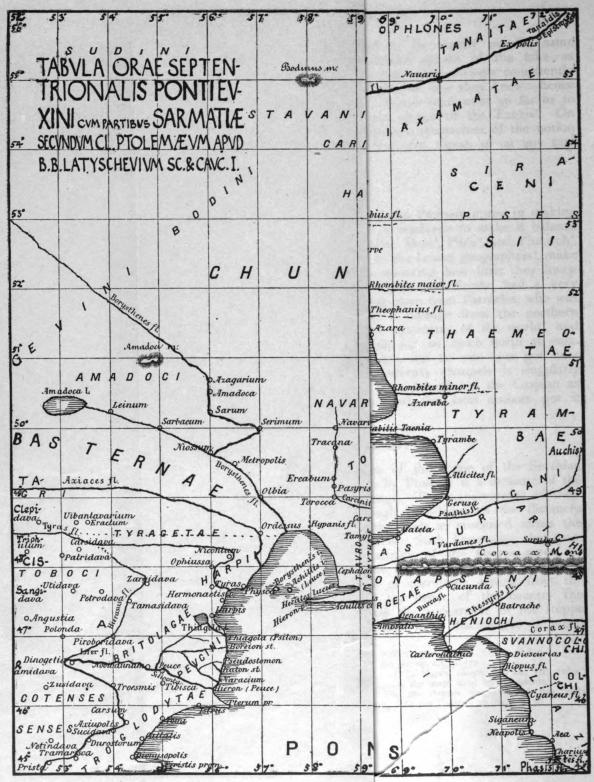
3 Her. I. 202, 203; IV. 40. Arist. Meteorologica, II. i. 10. 4 XI. vi. 1; vii. 1.

⁵ I. 9.

⁶ *NH*. vi. 36. ⁷ l. c.

⁸ Berger, op. cit., p. 57.
9 v. J. L. Myres, Geogr. Journal, vIII. (1896)
p. 605, On the maps used by Herodotus.
10 For the Araxes question and the rivers running into the Caspian v. infra, p. 30.

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shallow estuaries, but of the real direction of these streams' flow they had They imagined a symmetrical scheme of rivers coming down at right angles to the coast. The supposed flatness of the steppe would of course offer no obstacle to channels running from one stream to another, a hypothesis representing trade routes connecting the lower course of one river with the upper part of another. Such portages have always been in S. Russia. The granite ridge that runs from Podolia to Taganrog causes the well-known rapids of the Dnêpr and bends that stream into such an elbow that its upper waters are more conveniently approached either from one of the lesser rivers that fall into the Maeotis, or from the Ingul or Hence the confusion between Hypanis and Borysthenes, the difficulties with the Panticapes and Gerrhus. But it is better to discuss the position of rivers with that of the tribes so intimately bound up with them in the description given by Herodotus. Till the time of Ptolemy we have no details of the Hinterland save the schematic picture of the river system and the names of innumerable tribes, whether assigned to localities or indeterminate. Herodotus just mentions the point Exampaeus and the city of the Geloni, but these would be fixed by the river and tribe scheme, if any determination of their place could be reached. Before adventuring ourselves in the boundless interior let us see how much the ancients knew of the coast between the mouths of the Danube and the steep slopes of the Caucasus where they overhang the sea!.

Different accounts of the Danube mouths' are given by different authors', and none of them agree with the present state of things, but a comparison between the actual lie of the country and the various descriptions of its ancient condition renders it possible to account for the apparent contradictions of our authors and to trace the history of geologic change since the time of Herodotus.

The delta begins between Isakcha and Tulcha, where the Kilia and St George arms separate, and forms a triangle with two sides of 46 miles and a base of 33 miles long, to which is added a four-sided piece enclosed by lake Rasim, the Dunavets, the sea, and the St George arm. All this space is marsh, subject to floods except for five sandbanks upon which

1 For the sake of convenience in handling, I have reproduced the central part only of Latyshev's combination of Ptolemy's maps of European and Asiatic Sarmatia, Dacia and the Caucasus. With the outlying parts from the Baltic shore to the NW. round by W. and S. to Transcaucasia on the SE. we are not concerned. To the N. are very few names which represent living information, but mostly they are the Herodotean tribes which obviously could not be accommodated in the comparatively well-known central regions. I here give some interesting points to the N. and E. as placed by Lat.; Ptol. does not locate tribes exactly. Borusci long. 63°, lat. 56°; Rhipaei Montes 63°, 57°; Fontes Tanaidis 64°, 58°; Modocae 67°, 60° 30′; Alexandri Arae 63°, 57°; Nasci 63°, 57°; Fontes Tanaidis 64°, 58°; Modocae 67°, 60° 30′; Asaei 68° 50′, 59° 30′; Caesaris Arae 68°, 56° 30′; Asaei 68° 50′, 59° 40′; Perierbidi 68° 30′, 58° 50′; Fontes Rha Occidentales et Finis Montium Hyperboreorum 70°, 61°; Svardeni 71°

30', 59° 30'; Chaenides 74°, 59°; Epistrophe Rha 74°, 56°; Confluentes Rha 79°, 58° 30'; Zinchi 74°, 48° 30'; Montes Hippici 74°, 54°—81°, 52°; Finis M. Coracis 75°, 48°; Caucasus M. 75°, 47°—85°, 48°; Alexandri Columnae 77°, 51° 30'; Fontes Vardanis 78°, 48° 30'; Portae Sarmaticae 78°, 47° 30'; Alterae P. Sarm. 81°, 48° 30'; Sacani 82°, 51°; Ceraunii M. 82°, 49° 30'—84° 52'; Epistrophe Rha 85°, 54°; Ostium Rha 87° 30', 48° 40'; Fontes Rha Orientales 90°, 61°.

90°, 61°.

2 Braun, Investigations, pp. 182 sqq.

3 Herodotus IV. 47, Ps.-Arrian Peripl. 35 (24 H.), Ephorus ap. Strab. VII. iii. 15, Dionysius Perieg. l. 301, and Anon. 93 (67) give five mouths; Pliny, NH. IV. 79, Ptolemy III. x. 2, who has a completely wrong idea of the Delta's shape, six; Strabo VII. iii. 15, Pomponius Mela II. 8, seven. Nowadays we have but three; Kilia Mouth, Sulina Mouth, and St George's Mouth.

poor villages are built. This tract cannot correspond to the ancient delta, which included the island Peuce whereon the Triballi with their wives and children took refuge from Alexander when he drove them from their country'. For the banks of this island were steep and the current, confined by the high banks, swift. Alexander only prevailed by crossing the main stream and discomfiting the Getae on the left bank.

Peuce then was an island with high banks: and therefore outside the present delta. Still most of our authorities say that it was between two arms of the river and the sea. Some put it between the St George mouth (Ostium Peuces, Ίερον στόμα) and the next to the N. (Naracu stoma, Ναράκιον στόμα), on what is now called St George's Island: and Dionysius has much the same idea (l. 301). But Strabo (vii. iii. 15) says merely that it lies near the mouths and that there are other islands above and below it, i.e. it is not directly on the sea, but even 120 stades = 15 miles up stream. We have no data for exactly determining the amount the delta has grown in the last 2000 years, except that according to the Peutinger Table Noviodunum (Isakcha) is 65 Roman miles = 520 stades from the Sacred mouth along the course of the river; Ptolemy makes it about 477 stades or 60 miles in a direct line. This brings us to just about a line of sandbanks reaching from Vilkov by Ivancha to Teretsa, and representing an old coastline which we may take as the coastline at the beginning of our era. This line gives about the right amount, 47 versts (31 miles = 279 stades), which we get as the distance between the old mouths from N. to S. in Arrian (280 stades) and Strabo (300 stades). If now we measure our 15 miles up stream from our ancient Sacred mouth we come upon rising ground which takes up the rest of the Dobrudzha up to Tulcha.

Braun supposes that formerly an actual branch of the Danube cut off this triangle from the main land and fell into the sea somewhere opposite the channel Portitsa, within twelve miles or so of Istropolis (? Karanasup), having sent off an arm into a marsh, now represented by lake Babadagh, and having formed lake Rasim. Bruun³ anticipates Braun and says there exist traces of such a channel. This state of things is represented by Pliny's confused account⁴. When this branch got silted up confusion arose in the mind of Ptolemy, who found the southernmost mouth given variously as the Peuce mouth and the Sacred mouth, and he identified them and so was brought to seek the island Peuce in the modern delta and to throw out all the measurements and distort the shape of the whole delta to try and reconcile different accounts both founded on fact but referring to different times.

Without detailed investigation of the actual lie of the land between the main course of the Danube and Babadagh it is impossible to say whether Dr Braun has really disentangled the labyrinth of the Danube mouths. If it is at all possible, such a solution would best fit the case.

¹ Arrian Anab. I. 2-4.

² Scymnus, l. 787, Anon. 94 (68), Pliny and Ptolemy. Under the name of Ptolemy we may quote data due to Marinus of Tyre whose work formed the basis of Ptolemy's. For our purposes no distinction can be made between them.

³ Chernomorje, I. pp. 48—59.

⁴ l. c. Primum ostium Peuces, mox ipsa Peuce insula in qua proximus alveus [nomen deest] appellatus xix m. p. magna palude sorbetur: ex eodem alveo et supra Histropolin lacus gignitur lxiii m. p. ambitu, Halmyrin vocant.

It is just conceivable that within historic time Peuce never was a real island or Portitsa a real mouth of the Danube, but that the first was defensible across a short isthmus and along the course of a minor stream flowing into Babadagh lake, and so gained the name of island, to be a refuge for the Triballi and later (when it almost certainly was no longer separate) for the division of the Bastarnae hence called Peucini. So there may have been a false mouth to the south of the delta as there was to the N. or ships may once have gone in by Portitsa and across lake Rasim to ascend the stream now represented by the Dunavets. We can see by the varying accounts of authors that the real mouths of the river closed and shifted, as has happened with all the Black Sea rivers, but that old names and old descriptions lived on in Geography books and led compilers astray. Only Strabo who prided himself on direct up-to-date information and avoided padding copied from other books, gives an intelligible account of the district as it was in his time. The question of the number of mouths is never settled, to-day one may count anything from three to twelve and no doubt it was the same in ancient times. We may take it then that while it is hopeless to identify the lesser mouths (we have ten different names preserved in various authors) Peuces ostium was originally what is now Portitsa, Ostium Sacrum (later also called Peuce) corresponded to St George's mouth, Naracu stoma was half-way between that and Calon stoma, the Sulina mouth (lately canalised and made really navigable); that Pseudostoma, Boreon stoma, Spireon stoma corresponded to branches of the Kilia mouth, and Psilon stoma was a still more northerly channel running out through the marshes (Thiagola) at Zhebriany.

The stretch from the Ister to the Tyras is not important. Strabo tells us of two lakes, one open and one shut, corresponding to Sasyk and probably Alibey, two limans now communicating with the sea by narrow channels.

Between them came the place $\tau \grave{\alpha}$ 'Aντιφίλου of Peripl. Anon. and next his Cremnisci, which Pliny also gives with Aepolium and Montes Macrocremni, which seems a very grand name for the low cliffs of this coast. Near the corner of the Dnêstr Liman we have Hermonactis vicus (Strabo and Ptol.) and Turris Neoptolemi (Strabo and Anon.). Of this latter there seem some traces left in the foundations of a tower. It is ascribed to Neoptolemus the Admiral of Mithridates, and appears to have been a lighthouse.

A difficulty is in the distance given by our authorities for the space between Danube mouth and Dnêstr mouth. Strabo and Anon. make it 900 stades. Really it comes to about 600. Ps.-Arrian obviously left the coast at Portus Isiacorum (Odessa) and cut straight across to the Danube mouth, making it 1200 stades, probably by adding on half the distance for possible curves of the coast. He says that there were no settlements in that space ἔρημα καὶ ἀνώνυμα, whereby he did an injustice to Tyras, which was still coining in Arrian's time. Anon. filled in the gap with names gleaned we

¹ Becker, Trans. Odessa Soc. 111. p. 151, On the coast of the Euxine between the Ister and the Borysthenes with reference to ancient settlements.

² An argument for its not being the real Arrian, v. p. 24, n. 3.

know not whence, and made the total distance agree with Ps.-Arrian. But why Strabo should be 300 stades out it is hard to say, unless he applied a measurement stretching to the southern and most used Danube mouth to the northern nearest one. Pliny gives 130 m.p., that is 1040 stades, from Tyras to Pseudostoma. The ancients all seem to have overestimated this unattractive piece of coast. Ptolemy on the other hand makes too little of this very distance. From Thiagola (Zhebriany) to the Dnêstr mouth he gives what represents 390 stades, while further to the E., e.g. between Dnêstr and Dnêpr, he is substantially correct. Dr Braun has well shewn that just here comes the break in his bearings, due to his having Byzantium two degrees too far to the N., in the same latitude as Marseilles. Harpis, the other point he gives, is still orientated from the s., and represents Eskypolos, the town at the end of the Roman wall that guarded the lower Danube.

Strabo says that 140 stades up the river Tyras are the towns of Niconia on the right and Ophiussa on the left. Pliny says that the town Tyras was formerly called Ophiussa. We need have no doubt that it is the present Akkerman, mediaeval Moncastro or Belgorod. What we know of its history and coinage will be found further on (ch. xiv.). Niconia would be Otarik, where some antiquities have been found. Strabo adds another datum, 120 stades, for the distance between Tyras town and the mouth of the river, more close than the figure he has first given and agreeing with Anon., who says that τὰ Νεοπτολέμου was 120 stades from Tyras river, surely a mistake for Tyras town.

The position of the island Leuce, now Phidonisi, is accurately defined by Strabo, who says it lies 500 stades from the mouth of the Tyras, and Demetrius (ap. Anon. 91 (65)), who gives 400 stades as its distance from the mainland at the Danube mouth. This is fairly correct. Other authors confuse it with the Δρόμος 'Αχιλλέως, or the nameless island near the mouth of the Borysthenes, now called Berezan. First mentioned by Arctinus, Leuce is spoken of by Stesichorus in his Palinode, by Pindar (Nem. IV. 49), Euripides (Androm. 1259), Lycophron (Alexandra 186), and gradually the romantic legend grew that we find in its fullest form in Philostratus lunior².

To the E. of the Tyras the next place mentioned is Physice in Ptolemy, probably at the mouth of the Baraboi, and Ps.-Arrian's Portus Isiacorum, interesting as being the forerunner of modern Odessa, and 50 stades (Anon. 87 (61)) further on Istrianorum Portus, probably by the mouth of the Kujalnik or Hadzhi Bey limans, once estuaries navigable from the sea.

The cliffs gradually rise along this coast, and the name Scopuli (Anon. 87 (61)) may be justified. The next point is Ordessus (Ptol.) or Odessus (Ps.-Arr. and Anon.), probably at the mouth of the Axiaces or Asiaces (Mela), now the Tiligul, cut right off by a bar, but once open. Here, near Koblevka, Uvarov found traces of ancient habitation.

¹ Vide E. von Stern, On the latest excavations at

Akkerman, Trans. Od. Soc. XXIII. p. 58.

² Heroicus XIX. 16 (pp. 327—331). Latyshev,
Seyth. et Cauc. 1. p. 637. V. account of Leuce
in Ukert and Trans. Od. Soc. 1. p. 549, II. p. 413,

and a discussion of the whole question and of the worship there paid to Achilles by the Olbiopolites, in Latyshev, Olbia, pp. 55-61 and inf. chap. Xv. ³ C^t A. S. Ouvarov, Recherches sur les Antiquités

de la Russie Méridionale, Pl. XXVI. and XXVII.

Opposite the liman Berezan is the island of the same name referred to by Strabo and Ps.-Arrian. This island was early settled by the Greeks, as upon it have been found vases of Milesian type and archaic asses of Olbia'. It is constantly confused with Leuce. From here it is just 60 stades (Anon.) on to the mouth of the great liman in which the Bugh and Dnêpr join. Altogether the distances along this coast are very much what Ps.-Arrian and Anon. make them.

The common estuary of the Bugh and Dnêpr is one of the finest in Europe, its very size prevented casual observers understanding how the land lies. Dio Chrysostom (Or. xxxvi.) gives us the best description. Herodotus and Dio alone grasped the fact that the city which its citizens called Olbia, and strangers Borysthenes, lay upon the Hypanis, the Bugh, not upon the Borysthenes river, the Dnêpr. The confusion was natural, but the site of Olbia could never have been determined from the texts. The mounds, coins and inscriptions dug up at Sto Mohil (the hundred Barrows), a mile to the south of the village of Iljinskoe or Parutino, have settled the matter. Alector mentioned by Dio must be Ochakov opposite the long spit of Kinburn, well known in the Crimean war. Between them is a bar with a very narrow channel under the guns of the fort. When you have passed the fort the great liman is spread before you and even at Olbia the opposite side of the Bugh is so far distant that the impression produced is that of a lake rather than a river. Hence the variations of distance given by the authorities, Scymnus and Anon. making it 240 stades up from the mouth of the river, Strabo (who says Borysthenes) and Dio 200 stades. Pliny with his 15 m.p. must have measured from the point where a ship leaves the Dnepr channel and begins to ascend the Bugh. On the Borysthenes itself there seems to have been no important settlement. On its left bank and on the islands of the river still survived into last century remains of the woods which gained the district the name of Hylaea, of which Herodotus, and after him Mela and Pliny, speak. It hardly required many trees to attract attention in the bare steppe land. We need not suppose that Valerius Flaccus meant anything when he wrote (Arg. vi. 76):

> Densior haud usquam nec celsior extulit ulla Silva trabes: fessaeque prius rediere sagittae Arboris ad summum quam pervenere cacumen.

He had read in his Mela:

Silvae deinde sunt quas maximas hae terrae ferunt².

The position of the Hylaea is a favourite subject for discussion, but the difficulty only arises if we put the Panticapes' (which flows into the Hylaea) to the west of the Borysthenes and identify it with the Ingulets, so as to give room for the Georgi between it and the Dnêpr. But if

river valleys, but is inclined to make too much of it, and W. W. Dokoutchaiev, Les Steppes russes autrefois et aujourd'hui, Congrès International d'Archéologie préhistorique et d'Anthropologie, 11. Session à Moscou, Vol. 1. 1892.

⁸ Her. IV. 54. Vide infra, p. 29.

¹ V. chapters XI. XII. and XV.

² For the former extension of trees where now there are none, see Burachkov (who spoke from personal knowledge); On the position of Carcinitis, Trans. Od. Soc. IX. p. 3; K. Neumann, op. cit. pp. 31 and 74 sqq., who has collected various testimony to shew that trees did really exist along the

we suppose that it was the Konka across the Dnêpr valley it would flow precisely into the wooded region to the south of the estuary'.

Ptolemy puts Olbia on the Borysthenes. In face of such a mistake it seems risky to assign positions to the other cities he mentions. But near Great Znamenka and Little Znamenka overlooking the well-watered flats of the so-called "great meadow" we find the remains of fortified settlements with Greek pottery², which may mark his Amadoca and Azagarion.

At the mouth of the Dnêpr liman we have Kinburn spit, which is probably the site of Ptolemy's Aλσος Έκάτης, which Anon. puts on the next spit, the west end of the Tendra or Δρόμος 'Αχιλλέως, whereupon there seems to have been a sanctuary of the hero mentioned by Strabo. A stone with a dedication to Achilles was dredged up off Kinburn', and others with his name were found on the Tendra. The formation of Kinburn spit and the Tendra is unstable and channels in them open and shut so that what has been an island becomes joined to the mainland and again becomes an island according to the caprice of the currents. The Island of Achilles mentioned by Pliny hereabouts may well be of such formation. Some authors, e.g. Ps.-Arrian, have hence confused the Δρόμος with Leuce. But in the main the descriptions are accurate, telling of the sword-like stretch of sand curving at each end and serving as the racecourse of the fleet-footed hero. Dzharylgach, the other end, seems to be what we must understand by Tamyrace. Between it and the place where the Tendra joins the mainland Ps.-Arrian gives ἐκρόα λίμνης, probably a temporary gap in the continuity of the beach. Behind Tamyrace spit was some sort of shelter for the few ships that came that way. Between Tamyrace and the opposite coast of the Crimea is the gulf called the gulf of Tamyrace or Carcinitis running up to Taphrae on the Isthmus of Perekop. How little the ancients visited these parts is shewn by the vagueness of the measurements given. Tendra is about 80 m. long or 750 stades, but Strabo calls it 1000, Ps.-Arrian 980, Anon. 1200, Agrippa 80 m.p. = 640 stades. The 60 stades given as the distance from the shore is not far out.

So with the gulf called Carcinites or Tamyrace the 300 stades is not far out for the distance across the mouth, but the ancients had the most exaggerated idea of its extent to the eastward. Strabo puts this at 1000 stades and says some multiplied this amount by three.

On the other hand, Pliny and Strabo both give the breadth of the Isthmus of Perekop, Taphrae, at 40 stades (5 miles) which is very near. Strabo adds that others reckoned it at 360 stades, which is about the distance from the gulf of Perekop on the w. to Geníchesk on the sea of Azov. Again they give a very good description of the Putrid Sea (Sivash), but make it very much too big. This is one of the most unmistakeable

¹ Cf. Niederle, Starověké Zprávy o zeměpisu východní Evropy (Ancient Information as to the Geography of Eastern Europe), p. 35 sq. ² CR. 1899, p. 28, and Braun, op. cit. p. 211 sqq.,

^{371-3,} also Ouvarov, op. cit. Pl. D.

3 Later called ἄλσος alone and afterwards the

Island of S. Aetherius, upon which the Russians refitted their dug-outs [Const. Porph. de adm. Imp.

c. IX., cf. Latyshev, 'Island of S. Aeth.' in Journ. Min. Pub. Instr. St P., May 1899, p. 73].

4 IosPE. 1v. 63. V. ch. xv.

^b IosPE. 1. 179—183.

⁶ This is probably the site of Asander's wall, v. ch. XIX., no doubt on the site of a former ditch that gave its name to the place.

features of the whole coast line and naturally impressed those who came near1. At this point Pliny2 gets hopelessly confused. He mixes up the Putrid Sea, the liman of the Utljuk or Molochnaja and the Hypanis (Bugh) with one of the limans about the Peninsula of Taman at the opposite corner of the Sea of Azov and the Hypanis (Kuban), and one can make no sense out of his jumble of names. Lacus Buces...Coretus Maeotis lacus sinus...amnes Buces, Gerrhus... hardly tally with regio Scythia Sindica nominatur. One cannot help thinking that as now, so formerly, the same geographical names were repeated along this coast. Every other salt lake is called Sasyk, the cutting through a spit of sand is called Bugas, there are two Kujalnik rivers, an Ingul and an Inguléts (a diminutive though it is the bigger river), a Don and Donéts, two sandspits called Dzharylgach, two places called Ak Mechet, two Sivash lakes, two rivers Salgir, and two Karasu, so in old days there were two rivers Hypanis, Bugh and Kuban, perhaps two Gerrhus, more than one Panticapes and several Eiones, Insulae Achillis and so forth. Just as the Russians have adopted Tartar words as names, so the Greeks took native words meaning river or salt lake or channel. Hence the confusion produced by the attempts of Ptolemy or Pliny to distinguish these names without local knowledge.

In the Gulf of Carcinites Pliny's mentions the islands Cephalonnesus, Spodusa and Macra, and Ptolemy gives position to the first of these. Mela, Pliny and Ptolemy also mention a town, Carcine, which is merely the Carcinitis of Herodotus (1v. 99) and Hecataeus (fr. 153). Herodotus says that the Hypacyris here falls into the sea and Mela (11. 4) copies him inaccurately, sinus Carcinites, in eo urbs Carcine, quam duo flumina Gerrhos et Ypacares uno ostio effluentia adtingunt. Pliny is still further removed and speaks of the Pacyris (sic). The only stream that runs into the gulf is the Kalanchák, now quite unimportant, but from its mouth hollows and what were once water-courses may be traced far inland almost to the Dnêpr about the land called Gerrhus. This may have been a way of getting quickly up to that district, but it must have been early abandoned owing to the failure in water of which we can trace the effect all over the steppe region.

The position of Carcinitis town has been a great bone of contention because it has been assumed that it must have been situated on the gulf Carcinites, whereas the town Cercinitis is plainly put in the western Crimea by Ps.-Arrian and Anon. (who adds a name Coronitis). Across the gulf 300 stades from Tamyrace we find mentioned Calos Limen, 700 stades further on Cercinitis, and 600 stades beyond Chersonese. Reckoning back exactly from the well-known site of the latter we get Cercinitis at the mouth of the closed estuary Donguslav, the position approved by Bruun and Burachkov. Another 700 stades brings us too far round the corner to give the required 300 more to Tamyrace. If we take all the distances to be as usual somewhat exaggerated we may put Cercinitis just to the west of the modern Eupatoria on a spot where there are traces of a Greek town (v. Chapter xvi.). Coins occur marked KEPKI and KAPK, similar in

¹ Strabo VII. iv. 1. ² NH. IV. 84.

³ NH. IV. 93.

⁴ NH. IV. 84.

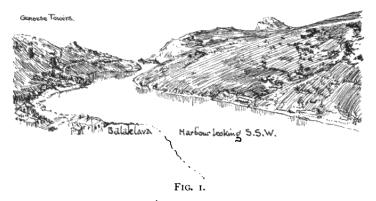
⁵ Excavations of N. Ph. Romanchenko, TRAS. VIII. pp. 219-236.

type to the coins of Chersonese (Pl. IV. 1, 2, 3, cf. IV. 17), and even an inscription has been found; and we can put Calos Limen at Ak Mechet or at the next little bay along the coast. So Cercinitis is another example of the curiously inaccurate naming of places along this coast by which the town Borysthenes (Olbia) was not upon the Borysthenes and Istrus not actually upon the Ister. The gulf Carcinites was the gulf just beyond Carcinitis, up which the men of that town traded by way of the Hypacyris until the latter dried up, and so it was thought of as standing at the mouth of that river. Later Ptolemy calls Carcinites itself a river. If this was the view of Herodotus we can see why he had no idea how much the Crimea is divided from the mainland, and a river being provided we need not trouble about Donguslav lake.

At Chersonese we again reach a definite point. A discussion of the topography of the district lying immediately about it will best go with the sketch of its history and remains that will be given in Chapter xvII.

Strabo (vii. iv. 2) gives 4400 stades as the distance we have come from the Tyras. But with moderate allowance for the curves of the coast the distance can hardly come to more than 3000 stades. Strabo must have reckoned in the circumference of the Carcinites gulf and made his ship go right up to Olbia and other places of call on the way. Anonymus (83 (57)—87 (61)) adds up to 3810 but gives 4110 (89 (63)), having missed 300 stades somewhere about Tamyrace. He says that Artemidorus gives 4220, but that is going round Carcinites gulf.

Beyond Chersonese Strabo (l.c.) rightly mentions the three deep bays and the headland now C. Chersonese. C. Fiolente is much more picturesque, but not so important geographically as C. Chersonese, and is not likely to be meant by Strabo. Portus Symbolon is clearly Balaklava, and by it was Palacion or Placia, built by the natives as a menace to the whole



Minor Peninsula. The fancy that this narrow inlet is the harbour of the Laestrygones has nothing for it but the names of Dubois de Montpéreux, after Pallas the first scientific explorer of these parts, and K. E. von Baer² who was rather a scientist than a historian.

¹ BCA, X. 20. ² Ueber die homer ische Localitäten in der Odyssee, Brunswick, 1878, v. inf. Ch. XIII.

The southernmost cape of the Crimea was called by the ancients Criu Metopon and was very well known. It was supposed to be just opposite to Carambis on the coast of Asia Minor and they could both be seen from a ship in mid sea. The high land behind the capes can really be seen. This comparatively narrow part was reckoned to divide the Euxine into two basins, but it is hard to settle what particular headland was the actual Ram's Head. Pliny gives it as 165 m.p., i.e. 1320 stades from Chersonese town, which would bring it to Theodosia; and 125 m.p. = 1000 stades on to Theodosia, which would bring it back to C. Sarych. Anon. (81 (53)) makes it 300 stades from Symbolon Portus. That would be about Aju Dagh. But he also makes it 220 stades from Lampas (Lambat), which would bring it again to near Aj Todor, not in itself a very prominent cape, chiefly interesting for a Roman station of which M. I. Rostovtsev has given an account. But above it Aj Petri rises high and can be seen further than Aju Dagh, and the latter is considerably to the north, so that perhaps it is best to call Aj Todor Criu Metopon. The most southerly point is actually Kikeneis or Sarych, still further to the west.

The position given by Ptolemy also leans in favour of Aj Todor. Ptolemy's Charax—Pliny³ mentions Characeni—may well have been the settlement on Aj Todor. In the interior Strabo mentions Mount Trapezus, Chatyr Dagh (VII. iv. 3), and it is at least as much like a table as a tent.



FIG. 2.

The modern place-name Partenit near Aju Dagh suggests that here may have been a sanctuary of the virgin goddess to whom all the Tauric mountains were holy. Lampat, the next village, has also preserved its Greek name mentioned by Ps.-Arrian (30 (19 H.)) and Anon., and Alushta is the Aλοῦστον of Procopius Beyond Lampas 600 stades further east we have what Ps.-Arrian calls $\lambda \iota \mu \dot{\eta} \nu \Sigma \kappa \upsilon \theta$ οταύρων ξρημος, 200 stades short of Theodosia. Anon. (78 (52)) calls it also Aθηναίων. These 200 stades bring us to Otüz, the most probable site, for 600 stades from Lampas makes the site too close to Theodosia. The name of Sugdaea, Sudak, so important in mediaeval times, does not occur before Procopius (l. c.).

Theodosia is again a certain site, and has recovered its old name (v. Ch. xvIII.).

From near Theodosia an earthwork goes across to the beginning of the Arabat Spit on the Maeotis. This seems to represent the boundary of

¹ NH. 1v. 86. ² Journ. Min. Pub. Instr. St P., May 1900, v. inf. Ch. xVII.

the kingdom of Leucon as against the Scyths and Tauri of the peninsula rather than the Wall of Asander¹.

At 280 stades from Theodosia Ps.-Arrian (30 (19 H.)) and Anon. (77 (51)) give Cazeca, clearly Kachik the eastern headland of the bay of Theodosia, about 30 miles from that city following the coast round; 180 stades further east, according to Anon., was Cimmericum, evidently Opuk, where Dubrux' discovered traces of a fortified town with a harbour. This is rendered quite certain by the existence opposite here of two skerries mentioned by Anon. (76 (50)). From the head of Lake Uzunlar, once an arm of the sea, goes another embankment to Hadzhibey on the Sea of Azov. At a distance of 60 stades Anon. gives Cytae, also mentioned by Pliny and called Cytaea by Scylax (68). The 60 stades would bring it to Kaz Aul. Acra' or Acrae (Pliny) would come at Takil Burun, 30 stades from Cytae on the headland marking the entrance of the Cimmerian Bosporus. The site of Hermisium is uncertain. After another 65 stades we reach Nymphaeum, undoubtedly Eltegen, where there are evident remains of a city and harbour (v. Chapter xvIII.). Tyritace seems to have been at the head of Churubash Lake, once an arm of the sea. Dia of Pliny is uncertain, but must have been between Tyritace and Panticapaeum. This latter was more than the 85 stades from Nymphaeum by Tyritace, given by Anon., but there seems no reason to question these identifications. As to Panticapaeum, there can be no doubt that its Acropolis was the hill now called Mount Mithridates (v. Chapter XIX.).

The identification of the several small settlements about the Cimmerian Bosporus, and on the Peninsula of Taman, is rendered difficult by the uncertainty as to changes in the one case in the position of sandbanks and spits which would necessarily modify the distances reckoned from one place to another, in the other to still more considerable changes in the water-courses which intersect the peninsula, deriving from the Hypanis or Kuban, and subject not only to ordinary silting up, but to the more unusual action of the mud volcanoes that abound in the district.

Next to Panticapaeum, on the west side of the strait, we have Myrmecium, mentioned by most of the authorities as being 25 (Anon.) or 20' stades away. This would fairly bring us to the place called the Old Quarantine, just the other side of the bay. Somewhere near must have been the town which early issued coins marked APOA and AP (Pl. IX. 10), and which seems to have been absorbed in Panticapaeum, unless Apollonia was indeed the Greek name for that city. Forty stades further on (Strabo) we have Parthenium, while Anon. makes it 60 from Myrmecium to Porthmium. Probably these both represent the site of Jenikale lighthouse at the narrowest point of the channel, whose breadth is regularly given as 20 stades, which is about right. It is really about 90 stades from Panticapaeum.

Ps.-Arrian and Anon. reckon the strait to be the mouth of the Tanais, and this is not unreasonable according to the view that makes the Maeotis a mere marsh and no sea.

¹ Strabo VII. iv. 6, cf. supra, p. 16, n. 6.

² Trans. Od. Soc. IV. p. 69 and Pl. 1.

³ NH. IV. 86.

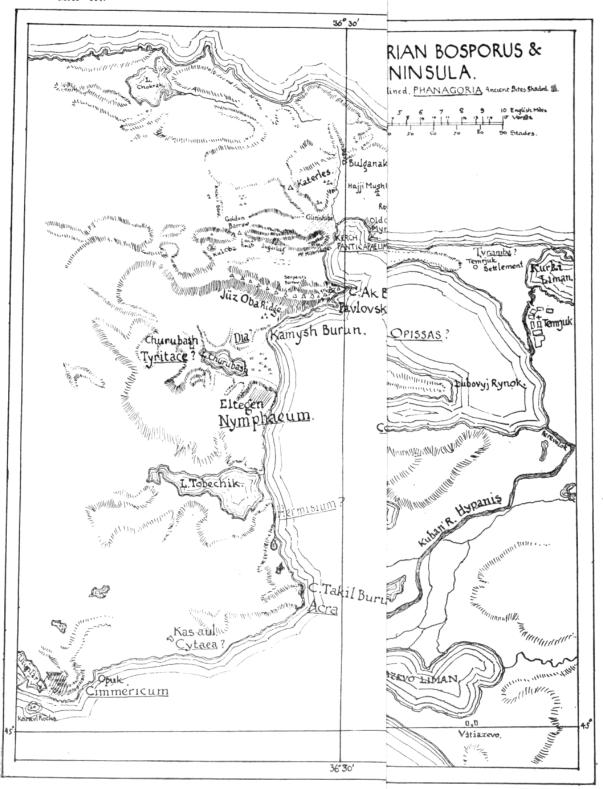
⁴ Anon. and Strabo XI. ii. 8.

⁶ Pliny, NH. IV. 87, Mela II. 3.

⁶ Steph. Byz. s.v.; Ptol. Τυρικτάκη; Anon. 76 (50) Τυριστάκη.

⁷ Strabo VII. iv. 5.

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On the west of the Maeotis, between the Bosporus and the Don, except for Herodotus and his Cremni (IV. 20, IIO, perhaps near Genichesk), Ptolemy is the only authority, and the names he gives are mere names not to be identified, for he has a wrong idea of the lie of the land, and in any case there seems to have been no important settlement on this coast. Only at the headland Zjuk, about 40 miles to the west of the entrance to the straits, we have remains of a Greek village¹, which may have been Heracleum or Zenonis Chersonesus. So too no purpose can be served by endeavouring to identify the rivers of this coast.

The mouth of the Don is a more interesting point. Of Tanais town and its inscriptions we will treat later (Ch. xix.). Its site in the second and third centuries A.D. was clearly near Nedvígovka on the Dead Donets, but it is quite probable that the original Tanais town destroyed by Polemo was on the site of Azov, or in the delta at Elizavetovskaja Stanitsa. We cannot identify the island Alopecia, mentioned by Strabo (xi. ii. 3), Pliny and Ptolemy. It has probably been joined to the delta, which is growing very fast. In any case it is hard to see how it can have been 100 stades below the town.

The east coast is more important because of its fisheries, which supplied much of the τάριχος exported from the Pontus'. 800 stades from the Tanais, was at the Great Rhombites, probably the Jeja. At Jeisk, at its mouth, is still a great fishery. After another 800 stades came the Little Rhombites by Jasenskaja Kosa, where there once flowed into the sea the Chelbasi and Beisug rivers which now reach it only during the spring floods; 600 stades more past the northern delta of the Kuban brings us to Tyrambe, possibly Temrjuk or Temrjuk Settlement, between which an important branch of that river (the Anticites or Hypanis) reaches the Maeotis. At a distance of 120 stades was Cimmerice or Cimmeris village, probably the NW. point of the island Fontan. This was the point from which vessels reckoned their course across the Maeotis. 20 stades beyond was Achillis vicus, at the narrowest point of the strait, opposite Parthenium. These figures all seem put too low by Strabo (x1. ii. 4—6). Perhaps the current that flows down the Sea of Azov helped the vessels along and led the navigators to underestimate the distance. The natural course would be for ships to go right straight across to Tanais and come down the east coast to take in their cargoes of fish. Ptolemy mentions these same points as Strabo, but his authority is not to be preferred.

The topography of the Taman Peninsula is, as we have said, particularly difficult. The interweaving of land and water made it hard for Strabo (xI. ii. 6—10) to describe, and the changes since his time, both in his text and in the land surface, make it still harder to apply his description. In general the very greatest caution should be used in explaining difficulties of ancient topography by geological changes, but here three powerful

¹ A. A. Dirin, *Trans. Od. Soc.* XIX. ii. p. 121. ² Strabo XI. ii. 3. ³ NH. IV. 87.

⁴ Strabo XI. ii. 4. ⁵ The best account is in Goertz, Archaeological Topography of the Taman Peninsula, Moscow,

^{1870,} and History of Archaeological Investigations in the Taman Peninsula, M. 1876, both repr. St P. 1898; but cf. I. E. Zabélin, Trans. Third Arch. Congr. (Kiev) 1874, II., Explanation of Strabo's Topography of Bosp. Cim.

agencies have been at work. Something has been done by the mudvolcanoes found on both sides of the strait, but most active to the east of it. Their activity is not mentioned by the ancients, they may have been quiescent during classical times: since then there have been thrown up the cone of Kuku Oba, which is the most striking object of the Bosporus, and some of the cones just south of Sennája, the site of Phanagoria. One of these it was that cast up, in 1818, a Greek inscription, referring to the construction of a temple of Artemis Agrotera².

Another agency in changing the face of the land is the action of the Kuban. Whereas the northern branch, the Protoka, has formed an ordinary delta in what was once a bay of the Maeotis, the southern branch flowed into what must have been a group of islands and found its way to the sea through channels and sounds which itself it has done much

towards silting up.

Lantly the sea itself has encroached on the side towards the Bosporus. Here the shifting currents have alternately washed the shore away and deposited new sandbanks, there is even reason to suppose that the level of the land is sinking. Columns, the remains of a temple, are seen in the sea along the northerly spit opposite Jenikale, and again off the site of the ancient Phanagoria.

Along the coast from Tuzla to C. Panagia barrows are seen in section upon the cliff. The latter cape takes its name from a church now swallowed up by the waves. At Taman itself the cliff, with remains of an ancient town, is being washed away. The statues from the monument of Comosarye" were found in the sea, because the headland of SS. Boris

and Gleb on which it was built had been encroached upon.

In the district, then, there are three main bodies of water, the Gulf of Taman, Akdengis (or Akhtaniz) Liman, and Kizil Tash Liman. Branches of the Kuban flow into the two limans, but the Gulf of Taman is at present cut off from it. But there can be little doubt that a depression running east from the cove Shimardan by Lake Janovskij to the Akdengis liman represents an old channel.

The only certain points in the whole peninsula are Phanagoria, the great masses of débris and rows of barrows about Sennája leave no doubt where we must seek the capital of the Asiatic half of the Bosporus kingdom, and Gorgippia, long supposed to be Anapa and recently proved

to be so by inscriptions.

If we take the Gulf of Taman to be Strabo's Lake of Corocondame. the village of that name must have stood at the base of the southern sandspit that partly cuts the gulf off from the Bosporus'. But Strabo says (xi, ii, 14) that Corocondame is the point from which begins the eastward sail to Portus Sindicus, and marks the beginning of the Bosporus strait, corresponding to Acra.

If then we suppose that C. Tuzla extended a little further west and

¹ App. 20 - horPh. 11, 344.

* Goette, PolygropArt, p. 45.

* App. 30 - horPh. 11, 340.

* v. Map in ABC - KTR. p. 108, f. 141, after Dubois de Montpéreux.

^a Suvórov's Fort Phanagoria by Taman was named according to the view current in his time,

cf. Clarke's Travels, 11. pp. 81-83.

* losPE. IV. 434. BCA. XXIII. 32. 1 Anon. 64 (23).

from it ran out a spit like the southern spit for a little over a mile (xi. ii. 9), we get about 80 stades across to Acra instead of 70 (§ 8), 130 stades bring us to Patraeus and the monument of Satyrus (Ruban's Farm and perhaps Kuku Oba); 90 stades from there would be Achillis vicus, on the northern spit, where columns are seen in the sea, just opposite Jenikale'. Cimmeris would be 20 stades further, at the base of the northern spit, just at the point where the navigation of the Maeotis begins. Only the distance to Tyrambe is much more than 120 stades, but this seems wrong in any case.

The actual site of Corocondame seems to have been washed away. It has been usually placed at Taman, inasmuch as that was the site of a very ancient Greek settlement, and some have seen in Tmutarokan, the mediaeval Russian name of Taman, an echo of the ancient Corocondame, but Taman does not lie on the Bosporus itself. It is impossible to say that from it one sails eastward to Sindicus Portus, and it is much more than 10 stades from any possible entrance to the gulf.

"Above Corocondame," says Strabo (xI. ii. 9), "is a fair-sized lake" (or liman), "which is called after it, Corocondamitis. It debouches into the sea 10 stades from the village. Into this lake flows a channel of the Anticites river, and makes an island surrounded by the lake, the Maeotis and the river...."

§ 10. "When one has sailed into Lake Corocondamitis one has Phanagoria, an important city, and Cepi, and Hermonassa, and the Apaturum, the temple of Aphrodite. Of which Phanagoria and Cepi are built on the said island on the left as one sails in, the rest of the cities are on the right beyond the Hypanis" (= Anticites), "in the land of the Sindi. In the land of the Sindi is also Gorgippia, the royal city of the Sindi, and Aborace."

§ 14. "From Corocondame you sail straight off to the east 180 stades to Portus Sindicus" (probably at the entrance to Lake Kizil Tash (170 stades)). "It is 400 stades further to what is called Bata, a harbour and village" (now Novorossijsk (500 stades)).

From this it is clear that Phanagoria being at the bottom of the Gulf of Taman, the channel of the Kuban came just south of it, and somewhere on the same island was Cepi, usually put at Artjukhov's farm. But there is no way of identifying Hermonassa, Apaturon, or Pliny's Stratoclia, nor of giving names to the large number of sites of ancient settlements. The district was very thickly populated in antiquity and is covered with villages, forts, earthworks and barrows, from which latter some of the most beautiful objects have been recovered.

Anon. (62 (21) sqq.) gives us more details of this part. He gives the distance from Hieros Limen (another name for Bata or Patus) to what he calls Sindica or Sindicus Portus as 290 stades (it is rather more than 300 to Anapa), and says it is 540 on to Panticapaeum, which is about right. Next he speaks of Corocondame and its liman, which he says is also called Opissas: and the circumference he gives at 630 stades; this is about right if we reckon in the shores of Lake Akdengis. It is hard not to wonder whether Opissas was not the name of this liman—"the

¹ On the Euxine coast such spots were connected with the name of Achilles.

² Cf. Bruun, *Chernomorje*, 11. 242—270.

backwater." He adds that Hermonassa is 440 stades from the entrance of the lake and 515 by it to the entrance of the Maeotis. It seems as if he measured by Lakes Corocondame and Akdengis and some passage of the Kuban into Lake Kizil Tash, so that Hermonassa would be one of the sites on the north shore of that liman.

Of the Greek settlements in this peninsula Phanagoria (Ch. xix.) was a colony of Teios, Cepi of Miletus, and Stephanus Byzantius calls Hermonassa a settlement of Ionians, repeating what Dionysius (l. 553)

says of all these places, ένθα τε ναετάουσιν Ίωνιδος έκγονοι αίης.

The coast east of Anapa hardly comes into our province. The ridge of the Caucasus leaves such a small distance between itself and the sea that there is no space for rivers or harbours or anything but a narrow tract of steep ground inhabited by tribes which have always been well known for savagery. The piratical row-boats that Strabo (x1. ii. 12) calls camarae were still in use in the last century, according to Taitbout de Marigny', and the coast always had a bad reputation until the Russians were forced almost to clear it of inhabitants. About 300 stades from Gorgippia (Anapa), the last city of the Bosporan kingdom, Strabo gives Bata, called by Scylax Patūs, and later by Ps.-Arrian and Anon. Hieron, now Novorossijsk²; 180 stades further they give Pagrae, Gelendzhik. This whole coast is described in detail by Ps.-Arrian (26-28 (18 H.)), but it was never occupied by the Romans, who left the country between the Bosporus and Dioscurias untouched. Probably there was something of the nature of a sphere of influence. Arrian's jurisdiction as legate of Cappadocia only extended as far as Dioscurias. He could not have interfered with the Bosporus, which was in relation with Lower Moesia. The periplus that bears his name has been unskilfully tacked on to the account of his real expedition: a reference to the death of King Cotys does not come in at all well. The addition seems to date from Byzantine times, and to have used sources open to Anon., who did not, however, copy Ps.-Arrian.

Strabo (x1. ii. 12—16) gives all detail necessary for this coast. According to Artemidorus first came the Cercetae for 850 stades after Bata. Then the Achaei for 500 stades, the Heniochi for 1000 stades, as far as Pityūs, now Pitsunda, and 360 stades further on was Dioscurias, Sukhum Kale. But the writers on the wars of Mithridates gave the order Achaei, Zygi, Heniochi, Cercetae, Moschi, Colchi, with Phthirophagi and Soanes further inland.

There seems to have been some shifting of population, for Arrian and Anon. give also Macrones, Zydritae, Lazi, Apsilae, Abasgi and Sannigae, and speak of an old Achaea and an old Lazice west of the later positions of those tribes. Some of these peoples certainly still remain. Cercetae may very well be the Circassians (Cherkes). The Lazi are the Lesghians; the Soanes the inhabitants of Svanetia; the Abasgi, the Abkhazes. Strabo says that at Dioscurias were kept seventy interpreters, each for a different tribe of the interior with which business was done, and others raised the

¹ For the pirates of this coast see de Peyssonel, *Traité sur le commerce de la Mer Noire*, Vol. 11. p. 10. Paris, 1787.

<sup>For its harbour, v. supra, p. 4.
v. C. G. Brandis, in</sup> *Rheinisches Museum*, Ll.
p. 109. C. Patsch in *Klio*, Vol. IV. (1904), disagrees.

number to three hundred. It would scarcely be impossible to come up to the former number nowadays by taking all the dialects of the Caucasus, and in Kerch, for instance, twenty different tongues are in quite common employ at the present time.

For the racial affinities of the tribes East of the Sea of Azov, v. p. 127.

LOCI CLASSICI.

Hecataeus, Phanagoria, Apaturum, ap. Steph. Byz. s.vv.

Herodotus, IV. passim.

Ps.-Scylax, *Periplus Maris Interni*, 68-81 (second half of 19th c. BC. GGM. I. pp. xxxiii-li, 57-61).

Aristotle, De Animalibus V. xix. 14.

Polybius, IV. 38-42.

Ps.-Scymnus, Periegesis, Il. 767-957 (c. 90 BC. GGM. I. pp. lxxiv-lxxx, 227-234).

Strabo, Geogr. VII. iii. 1-19, iv. 1-7 (pp. 295-312 C.), XI. i. 5-7, ii. 1-16, 19 (490-507 C.).

Dio Chrysostomus, XXXVI.

Dionysius Periegetes, Il. 142-168, 541-553, 652-732, and Eustathius in Il.

Ps.-Arrian, Periplus P. Euxini 1-16 (1-11 H.), 25-37 (19-25 H.) (v. p. 24 n. 3; GGM. 1. pp. 370-401).

Ptolemy, Geogr. III. v. vi. x., V. viii., VIII. x., xviii.

Stephanus Byzantius, sub nominibus urbium, etc.

Anonymi Periplus Ponti Euxini, 47 (6)—118 (92). (Vth c. AD. GGM. I. pp. cxv—cxxii, 402—423, also FHG. V. pp. 174—187.)

Pomponius Mela, I. 110-115, II. 1-15.

Pliny, NH. IV. §§ 75-93, VI. 15-22.

Solinus, XIII. 1-3, XIV. 1, 2, XV. 1-29, XIX. 1-19.

Ammianus Marcellinus, XXII. viii. 10-26.

Avienus, Descr. Orbis, Il. 214-254, 720-733, 852-891.

Priscian, Periegesis, Il. 138-158, 557-566, 644-721.

Jordanes, Getica, v. (30-46).

Anonymus Ravennas, I. 17, II. 12, 20, IV. 1-5, V. 10, 11.

CHAPTER III.

GEOGRAPHY OF SCYTHIA ACCORDING TO HERODOTUS.

In the preceding survey of the coasts of Scythia we have had many tangible points by which to test the accounts of the ancients and have been able to fix the position of most important names occurring in the authorities. But it is far otherwise with regard to the interior. A whole series of ingenious investigators has endeavoured for instance to draw a map of Scythia according to Herodotus, and the different results to which they have come prove that in this it is hopeless to seek more than the establishment of a few main facts. Well has Pliny said "Neque in alia parte maior auctorum inconstantia, credo propter innumeras uagasque gentes'," and he proceeds to give whole lists of names derived from all kinds of authors from Hecataeus to Agrippa. Herodotus is the main authority, and no lover of Herodotus can deny that he might have used more system and consistency in his account without interfering with the charm of the narrative. The mistake made by most writers is in striving to wrest the different geographical sections of Book IV., composed at various times from various sources and introduced in various connections, into a seeming consistency with each other and with the modern map—generally to the unfair treatment of the modern map. It is useless to attempt to give any résumé of the views which have prevailed from time to time as to the geography of Scythia. As any particular problem is treated the views of different writers may be quoted, but a systematic setting forth of all the theories that have been advanced would take up a great deal of space without much helping matters. Some idea of the variety of the solutions may be gained from the Bibliography to this chapter; it does not claim to be complete, for no useful purpose would be served by seeking out all the obscure or aberrant authors who have dealt with the subject.

In Chapters VII. and VIII. I shall enumerate the various civilisations that have left traces or rather tombs on the soil of S. Russia, but so far no one has succeeded in establishing any close link between the series of names or groups of names furnished by history and the remains which archaeology has unearthed in the steppe region. As will be pointed out there are correspondences between the culture revealed by tombs of the so-called Scythic type and the culture ascribed by Herodotus to the Scyths; but this culture certainly belonged also to other tribes, particularly the Sarmatians. No one has applied so much common sense to the examination of Herodotus as Mr Macan, and I am deeply indebted to his masterly excursus on the geography of Scythia.

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Most writers take the passage cc. 99—101 as their main guide in setting out their map. But this passage rests on the radical error that the line of the coast from the Don mouth to Perekop is about at right angles to that from Perekop to the Danube mouth. This latter line is one side of a square including all Scythia, and the former is another; each side being reckoned at 20 days journey = 4000 st., about the actual length of the s. side, but a square with two of its sides almost in the same straight line makes an awkward foundation for any further construction. Indeed this square Scythia is merely a chess-board for the game of Darius and the Scythians, on which they can make their moves untroubled by any of the real features of the country, notably the rivers (Map IV.).

A much more satisfactory account is furnished by cc. 16—20, starting characteristically from Olbia and giving an intelligible survey of the inhabitants, the western half going from s. to N., Callippidae, Alazones, Aroteres, the eastern half from w. to E., Georgi who may well be the same as Aroteres, Nomades and Royal Scyths; above them from w. to E. the same row of non-Scythian tribes that we get in 99 sq., Agathyrsi, Neuri, Androphagi, Melanchlaeni, with the Sauromatae beyond the Tanais and the Budini, etc. further to the NE. No geometrical boundaries are mentioned,

only a rather doubtful desert (Map v. p. 34).

The real boundary of Scythia was no desert but the edge of the forest'. As far as the open steppe, whether cultivated or no, extended, so far were the nomads masters, so far went the boundaries of Scythia. The same line which bounded the dominions of the Khazars, the Pechenêgs, the Cumans, and the constant incursions of the Tartars, formed the real limit of Scythia. Time may have pushed northwards the forest zone as he has destroyed the Hylaea on the lower Dnêpr, but a line running ENE. from Podolia to the Kama must be just about the upper limit of the steppe. If there was a desert, it was one made by the incursions of the steppe men, like the desert belt to the s. of Muscovy in the xvth century, kept clear of settled habitations by the menace of the Golden Horde.

The excursus on the rivers does very little to clear up our ideas of Scythia². Of the eight main rivers, five, the Ister, Tyras, Hypanis, Borysthenes and Tanais, can be identified with certainty as the Danube, Dnêstr, Bugh, Dnêpr and Don, but one can by no means say the same of the Panticapes, the Hypacyris and the Gerrhus nor of the numerous tributaries of the Danube.

The whole question of the Danube has been complicated by the attempt to take square Scythia (IV. 99—101) as the base for the descriptions of tribes

and rivers given in chapters 17 to 20 and 47 to 57.

Since the time of Niebuhr it has been generally received that because the tributaries Porata, Tiarantus etc. flowed into the Ister out of Scythia, therefore the Ister formed the boundary of Scythia: which is no doubt true if interpreted in the sense that the nomad Scyths lorded it over the Rumanian steppes as well as over the Russian: but it does not follow that the boundary of this Scythia ran more or less north and south, and so Herodotus conceived

of the Danube as taking a great bend to the south: for he says consistently that it flows from w. to E., and the boundary running N. and S. belongs only to square Scythia which is erected from the coast and is not concerned with anything more than the mouth of the Danube, there rightly regarded as making a bend to the SE. and so entering Scythia. Once the idea of a great southern bend had been formulated it was confirmed by elaborate theories of symmetry' and accepted even by Macan and Niederle who know so well the impossibility of reconciling all the geographical data.

Given that the Ister of Herodotus flowed more or less west to east the identification of the tributaries is a mere matter of detail. The Pyretus-Porata is evidently the Prut; the survival of this name justifies us in calling the Ordessus Ardzhish: it is impossible to say which of the many left bank tributaries correspond to the Tiarantus, Naparis and Ararus. The Maris among the Agathyrsi is certainly the Maros which reaches the Danube by way of the Theiss. This settles the Agathyrsi in Transylvania, and not so far

north as they are put in square Scythia.

The Tyras is quite clearly the Dnêstr but equally clear is it that Herodotus did not know anything about its upper course. As soon as it reaches the woods of Podolia it is lost sight of and a lake is invented for its The Greek feeling was that a great river must rise either from a high mountain or from a great lake. Herodotus knew that there were no mountains to the N. of Scythia, accordingly he has provided most of the rivers with suitable lakes. True to his wrong bearings he makes the Dnêstr come down from the N. instead of the NW.

The Hypanis or Bugh⁵ is set E. of the Borysthenes by Strabo, Pliny, Vitruvius (VIII. ii. 6), and Ptolemy. This mistake is owing to the confusion of the town Borysthenes or Olbia on the Hypanis with the river Borysthenes. Also if the mouth of the common liman be regarded as the mouth of the Borysthenes it actually is to the w. of the Hypanis. Further trouble is caused in Pliny by the existence of the other Hypanis, also called Anticites, now the Kuban. As to Exampaeus and the bitter spring supposed to spoil the river water for four days journey seawards it must have been some stream impregnated with salt from the steppe. Both the Sinjukha and the Mertvyavody (or dead waters) have this quality and either would suit fairly well: but if Exampaeus is about the point where the Tyras and Hypanis are nearest each other it must be far inland in Podolia.

In his description of the Borysthenes (Dnêpr) the chief difficulty is that Herodotus omits to mention the well-known cataracts which would have come in so well in comparing it to the Nile. Constantine Porphyrogenitus first mentions them'. It seems as if the old routes had left the main river before

¹ Her. IV. 99 ὁ "Ιστρος ἐκδιδοῖ ἐς αὐτὴν (sc.

Σκυθικήν) πρὸς εὖρον ἀνεμον τὸ στόμα τετραμμένος.

J. L. Myres, op. cit. p. 614.

In the geographical introduction to his article on the European expedition of Darius (Cl. Rev. XI. July 1897, p. 277), Prof. Bury makes Oarus = Ararus = Buzeo and so keeps Darius in the west of Scythia, v. inf. p. 117.

⁴ Δάναστρις, Const. Porph. De Adm. Imp. 42.

⁽For the bearings of these river names see inf.

p. 38.)

⁶ Boyoù, Const. Porph. l.c. ⁶ Δάναπρις, Anon. 84 (58).

⁷ De Adm. Imp. c. 9 gives a lively account of the difficulties offered by them, more than they would seem to present nowadays: in ancient times perhaps they were quite impassable.

arriving at them, going perhaps up the Ingulets, and as if the water route which followed the Dnêpr was due to the Variags, who would be the first to draw attention to the Rapids.

The land Gerrhus must have been at the bend of the stream about Nicopol. In this district were the tombs of the Scythian kings and here the finest barrows have been opened. The Gerrhus river was fourteen days up stream from the Hylaea, the extent of the country of the Nomads (c. 19) on the E. side of the Borysthenes, while on the west for 10 or 11 days stretched the country of the Georgi and above them was a desert. Moreover the Borysthenes was supposed to flow from the N. as far as the land of Gerrhus, to which was forty days sail. Its source like the Nile's was unknown.

The description of the Borysthenes is true to this day. The Hylaea indeed has almost disappeared, but the rich pastures are still there; the fisheries and the salt trade survived till the other day. It is curious that there has never been a great port at the mouth of the Dnêpr. Olbia and Nicolaev are both on the Bugh, and Kherson was one of Potemkin's mistakes both in name and in site. The channel is too shoaly for a satisfactory harbour, whereas of late years Nicolaev has begun to rival Odessa.

The Panticapes is a puzzle. The natural meaning of the words of Herodotus suggests a river flowing s. and running into the Dnepr towards its lowest reaches on the E. side, but such a river does not exist. Some see in it the Konka a kind of alternative channel of the Dnêpr which it accompanies for the last 150 miles of its course, others maintain that it is the Ingulets, which would answer very well except that it is on the right bank of the The question is bound up with the position of the Scythae Georgi. If the Ingulets is the Panticapes, the natural meaning of c. 18 is that they lived to the w. of it, but in that case they would hardly touch the Borysthenes and would not have been called Borysthenitae by the Olbian Also Herodotus says distinctly that they lived between the Panticapes and the Borysthenes. But between the Konka and the Dnepr there is scarcely any space at all, certainly not three days journey. However this small space, the valley of the Dnêpr, would be singularly suited for agriculture, and the statement does not preclude their occupying an expanse of steppe to the west. Anyone ascending the Borysthenes might well think on seeing its confluence that the Konka was an independent stream. On the whole we may suppose that the informants of Herodotus knew but the mouth of the Konka, and its course was purely hypothetical; if ground be sought for its mother-lake, it might be the marshes of the Great Meadow.

The sixth river, the Hypacyris, also does not occur on the modern map. Either there once was a considerable river represented by the Kalanchák and the dried watercourses which formerly fed it, over one of these there used to be a large stone bridge: or Herodotus regarded the gulf of Perekop as the estuary of a river and deduced the river therefrom. So too with the Gerrhus the seventh river. It separated from the Borysthenes in the land called Gerrhus and flowed into the Hypacyris, according to c. 56 dividing the Scythian Nomads from the Royal Scyths. This gives no space for the fourteen

¹ So apparently c. 53. It would be easier to reconcile the Greek with actuality could we read the distance up to Gerrhus.

days journey which they are supposed to stretch from w. to E. (c. 19). These fourteen days may perhaps be reckoned up the stream of the Dnêpr and Konka, but Herodotus would regard this as s. to N. So that either the Gerrhus does not really flow into the gulf of Perekop and join the Hypacyris at all, but flows into the sea of Azov as the Molochnaja, Berda or Kal'mius all of which come close to tributaries of the Dnêpr that join it above Nicopol (e.g. the Samára), or else there is no real distinction between Nomads and Royal Scyths, which may well be the same tribe under different names. Perhaps the easiest solution is that the Panticapes is the Konka more or less where Herodotus puts it. This agrees with the natural position of the Hylaea. The Gerrhus as the Molochnaja flowed into the sea of Azov as Pliny and Ptolemy (but not Mela) believed and formed a short cut from the sea to the upper Dnêpr and the land Gerrhus. Another such short cut was furnished by the Hypacyris now the Kalanchak. Such short cuts reached by portage were actually used by the Cossacks in their raids against the Turks and must have been still more convenient when there was a greater extent of forest and consequently more water in the rivers.

No one but Bruun¹ has doubted that the Tanais was always the Don or at any rate the Donets, and the Hyrgis would be the other branch now regarded as the true Don. Or this may well be represented by the Oarus which is almost certainly the Volga' in the upper part of its course: I mean that merchants following the trade route towards the NE. might well understand that the river they crossed above Tsaritsyn flowed into the Azov sea instead of making its sudden bend s.E. to the Caspian. The Tsaritsyn portage must have always been a place where trade was transferred from one river to the other. As to the Lycus and the Syrgis, which may or may not be the same as the Hyrgis, no one has given names to them so as to carry conviction; the former may perhaps be the Ural. In later times there was such confusion' that the Caspian was represented to Alexander as being the same as the Maeotis'.

The question of the other rivers running into the Caspian is very difficult. On the west we have the Kur and the Aras now joining at their mouths, these are clearly the Cyrus and the Araxes properly speaking.

In the mind of Herodotus there seems some confusion because the Armenian Araxes answers in direction (IV. 40), but neither in importance nor in position, to another Araxes upon which he puts (I. 201) the Massagetae; especially does it come short in the matter of its delta in which there should be islands the size of Lesbos (1. 202). This greater Araxes seems to be the Oxus or a running-into-one of the Oxus and Jaxartes'. The latest

Grynaeus, Basileae, 1537.) Strabo, XI. vii. 4.

¹ Chernomorje II. i. 104 and Appendix to Antiquités de la Scythie d'Hérodote.

² Cf. Ptolemy, v. viii. 12, 13. 'Pâs, Raw in the language of the Finnish Mordva.

³ De Plano Carpini (ap. Rockhill, Rubruck, p. 8, c. ix.) thinks the Volga finds its way into the Black Sea, and even in the 16th century Mathias a Michov, a Pole who knew most of Russia well and has no mercy on those who believed in the Rhipaean Mountains, repeats several times that the Volga falls into the Euxine. (Mathiae a Michov de Sarmatia, Lib. I. c. vii. p. 493 in Nouus Orbis of Simon

⁵ Stein will have but one Araxes, thought of by H. as running out of Armenia past the south coast of the Caspian into which it sends an arm, to marshes far to the E. The Scyths forced over the river would be Sacae invading Persia (cf. J. L. Myres op. cit.). Westberg (Klio, Beitr. z. alten Gesch. Bd IV. H. 2, pp. 182-192, Zur Topographie des Herodots) makes the Araxes of I. 202 the Volga and puts the Massagetae upon that, v. inf. pp. 111,

investigations seem to shew that two thousand years ago the Caspian ran up a valley (the Uzboi) in the direction of the Aral sea and communicated with it by means of a lake or depression Sary Kamysh into which an arm of the Oxus flowed. Between this arm and the main stream going into the Aral sea there would be room for large islands. Further it is a question whether the Araxes mentioned (IV. II) as having been crossed by the Scyths may not be the lower Volga, as it seems hard to think of them as ever having been south of the Oxus and displaced northwards by tribes coming from the east. If the Jaxartes were meant it would be just conceivable. They would find no satisfactory abiding place between the Jaxartes and the Don. We can never tell whether Herodotus be using Europe in the ordinary sense of the NW. quadrant of the old world or in his own special sense of the whole northern half.

Seeing there are such difficulties in identifying the rivers, which must have remained substantially the same, we cannot hope to fix the place of the various Scythian tribes (cc. 17—20) with any accuracy: we can determine their relative positions but we have no idea of the relative extent of the lands they occupied and only one or two definite statements. We cannot even say whether the Georgi and Aroteres may not be the same people traversed and described by different travellers, and so too with the Nomad and Royal Scyths. On the modern map we may put the Callippidae quite close to Olbia: the Alazones have no boundaries that we can fix, we may place them in the central part of the Government of Kherson, while the northern part of the same and some of Ekaterinoslav and perhaps some of Kiev were occupied by the Aroteres. These three tribes lay on one route from Olbia towards the north. To the west we only know of the Greek Tyritae about the mouth of the Dnestr: whether the same native tribes occupied the Hinterland and Rumania we cannot tell. Travellers towards the ENE. from Olbia passed the Scythae Georgi occupying the valley of the lower Dnêpr included in a belt three days journey wide and extending ten or eleven days upstream to about the borders of Ekaterinoslav. Hence they would seem to have been continuous with the Aroteres and very likely identical. That is to say the two names between them represent a congeries of tribes in the same more or less agricultural stage.

The centre of Ekaterinoslav, by the great bend of the river, is the land Gerrhus which marches with the country of the Georgi and the Nomad Scyths. These with the Royal Scyths from which they cannot be clearly distinguished held the mainland part of Taurida, the western part of the land of the Don Cossacks, and probably also Kharkov and Vorónezh.

The flat northern part of the Tauric peninsula, which Herodotus thought continuous with the mainland, also belonged to them as far as the slaves' ditch, wherever that may have been. These eastern tribes lay

on the route which led into Central Asia, and information about their

² We cannot reconcile the statement that they

lived where the Tyras and Hypanis come close together, which would be somewhere in Podolia, with the position of Exampaeus on their northern boundary, as this must have been further down stream (c. 52).

¹ Cf. P. Kropotkin, *Geogr. Journal* XII. (1898), p. 306, The old beds of the Amu Daria; and W. W. Tarn in *JHS*. XXI. (1901) p. 10, Patrocles and the Oxo-Caspian trade route.

position was hardly as definite as that about the central region north of Olbia. Indeed their position was perhaps indefinable; where the grass grew for their cattle, there was the land of the Nomad Scyths; as the most numerous and powerful tribe they did not need to respect their neighbours' boundaries.

BIBLIOGRAPHICAL SKETCH.

Our ideas of the Geography of Scythia have gradually grown clearer. Thus we have slowly eliminated the views which brought the boundaries of Scythia well up into central Russia far beyond the limits of the Steppe, we have given up the attempt to bring Herodotus into agreement with the present condition of things by allowing great changes in the courses of the rivers and a former eastern extension of the Maeotis—our countrymen Rennell and Rawlinson were most ready for such explanations: we have forgotten such extravagancies as Lindner's view that the Scyths proper were to the west of the Dnêpr, or Kolster's that Herodotus did



not clearly distinguish between the Don and the Danube¹, or even more pardonable eccentricities such as Bruun's, that the Tanais was not the Don, but the Molochnaja,

¹ Both writers I judge by Neumann's statement of their views (op. cit. pp. 96 n. 2 and 204).

Most writers now agree as to the general orientation of the Scythia of Herodotus, but mention must be made of Krechetov's ingenious view, which figures the Scythian Square as washed by the sea along the halves of two adjacent sides only: the remaining halves of those sides running inland along the lower Ister and the coast of the Maeotis, which he reckons a mere marsh and no sea¹ (fig. 3).

The square thus obtained with its corner at Cercinitis, placed by Krechetov at Donguslav lake in the Crimea, would be inclined slightly so as to have the E. sides facing ESE., so the sea along the south coast of the Crimea would be the eastern sea of c. 100. But when translated into the terms of the correct modern map, it works out to have much the same real meaning as the more usual interpretations which count the Maeotis as a sea for the nonce. And after all, what is important to us is not the shadowy idea of Scythia that floated in the mind of Herodotus, incapable of being consistently represented on our map, but the real state of affairs of which Herodotus and Hippocrates give so interesting but so tantalizing accounts.

Who wishes to follow the various attempts at drawing a map of Scythia ad mentem Herodoti, or at disposing the ancient names about the modern map, may consult the following books as I have done. I omit the eighteenth century attempts as being controlled by too slight a regard for the geography of the regions concerned.

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 1 This is a fresh interpretation of τῶν δύο μερέων μεσόγαιαν φέρον καὶ τὸ παρὰ τὴν θάλασσαν, Ηετ. κατηκόντων ἐς θάλασσαν, πάντη ἴσον τό τε ἐς τὴν 1 IV. 101.

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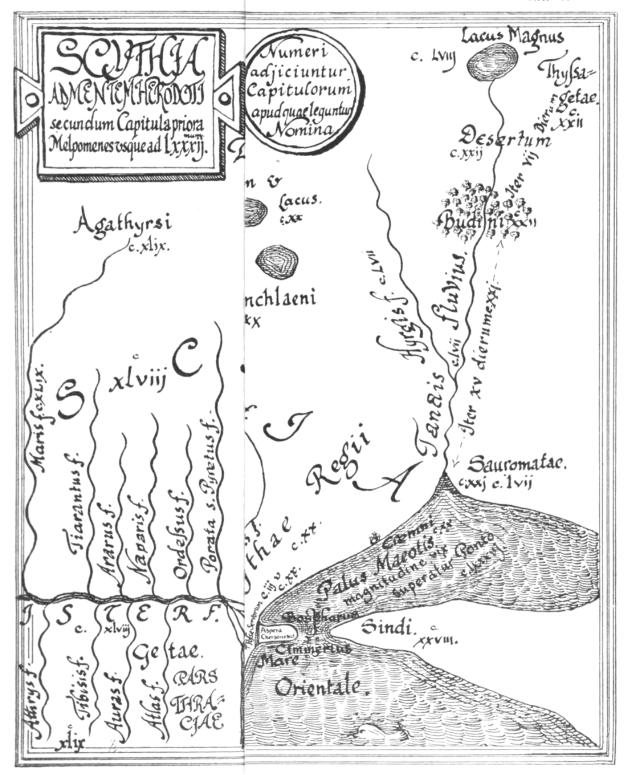
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CHAPTER IV.

THE SCYTHIANS, THEIR CUSTOMS AND RACIAL AFFINITIES.

PERHAPS no question touching the ethnography of the ancient world has been more disputed than that of the affinities of the Scythians'. It would seem at first sight that with the mass of details supplied by Herodotus and Hippocrates and the evidence derived from archaeological investigation of their country we ought to be able to arrive at a definite conclusion, but so far no perfectly satisfactory reconciliation of the various views has Perhaps the first doubt that arises is whether such a been reached. reconciliation is to be sought for; whether the mistake common to almost all writers on the subject may not be that they have rashly attempted to find one answer to the riddle, have said that the Scythians were Mongols or Slavs or Iranians, whereas the truth seems to be that the word Scythian had no ethnological meaning even in the mouth of Herodotus. With him, as I take it, it had a political meaning, whereas with the other authors who make use of the term it is merely geographical.

For most Greeks a Scythian, Σκύθης, was any northern barbarian from the east of Europe, just as Γαλάτης was any such from the west.

Herodotus wishing to give a more exact account of the peoples to the N. of the Black Sea tried to draw a line between Scyths and non-Scyths, but he found it hard to make his line consistent. For instance in IV. 81, when he tries to give us some idea of the numbers of the Scythians, he has in his mind two conceptions of the meaning of the term, for he says that he heard that they were exceeding many and also that they were few in number, that is to say the real Scyths (ὀλίγους ώς Σκύθας εἶναι). At other times he makes careful distinctions between the peoples he calls Scythians and those to whom he denies the name, even when they have Scythian customs and Scythian dress; yet some of these tribes are called Scythian by other authors. We may take it that Herodotus used the word in a narrow sense to include only the Royal Scyths, possibly together with the Nomads, for it seems hard to establish any clear distinction between them; and in a wide sense to denote all those tribes, whatever their affinities or state of civilisation, that were under the political domination of the Royal Scyths. Each of these uses is more definite than the ordinary Greek use against which there is an under-current of protest in the repeated asseverations of Herodotus that such and such a tribe is not Scythian: perhaps he is contradicting Heca-After the time of Herodotus the vague use returns. Thucydides²

¹ For a short history of the Scythian question, and the chief solutions that have been proposed,

² II. 96, 97.

for instance must mean all the people of Scythia together when he says that, uncivilised though the Scythians were, no single nation of Europe or Asia could stand against them in war, if but they were all of one mind.

In late writers such as Trogus Pompeius¹ and Diodorus Siculus (i. 55, ii. 43) we have what purports to be very early history of the Scythians, who according to Trogus always claimed to be the most ancient of races. These authors speak of conquests pushed by the Scythians to the borders of Egypt and of an empire of Asia lasting fifteen hundred years and ending with the rise of Ninus. Fr. Hommel (v. inf. p. 99 n. 10) thinks that this is an echo of the Hittite rule, but it would be rash to conjecture what may be the foundation for these stories, which come in a suspicious company of Amazons and Hyperboreans. They look like the reflex of the Egyptian stories in Herodotus (11. 103 and 110) who speaks of Sesostris having conquered the Scythians and Thracians. These are mere exaggerations of the real campaigns of Rameses pushed to the limits of the world and slenderly supported by mysterious rock carvings and such facts as the resemblance between the Colchians and the Egyptians. Pompeius idealizing the Scythians has made their exploits balance and surpass those of the nation whose claim to greater antiquity he dismisses.

The greater part of the information as to manners and customs given by Herodotus and the physical details in Hippocrates evidently refer to the Royal Scyths. On the other hand some statements seem quite inconsistent with their manner of life, and we are in our rights in supposing that such details apply to the settled tribes in Western Scythia about whom information would be easily available at Olbia. Less information is given about them because they did not offer so much novelty to interest the Greeks and also they do not play a prominent part in the story of the expedition of Darius, wherein ex hypothesi nomads and nomads only could be the protagonists.

Are we then to take the Scythians settled and nomad to be one race in two states of culture, or have we to do with the subjection of a peaceful agricultural people established in an open country and the domination of an intrusive horde of alien nomads?

If the wider sense of Scythian in Herodotus is taken to be political, the sharp line drawn by Herodotus between the agricultural Scythians and the Neuri, Agathyrsi and Getae need not have any ethnological significance, that is that even if we suppose the Neuri to be Slavonic and the latter two Thracian, there is no reason against taking these "Scythians" to belong to either of these races. The general view is that both agricultural and nomad Scythians were Iranian². There can be no doubt that up to the coming of the Goths and later the Huns, the Euxine steppes were chiefly inhabited by an Iranian population, and even in the steppes population does not change as easily as it used to be thought. It took the long continued storms of the great migrations from the coming of the Huns to that of the Tartars to sweep away this Iranian population and pen its survivors into the high valleys of Ossetia.

¹ ap. Justin, I. i., II. i. sqq.

² For other possibilities v. pp. 97—100.

Professor Vsevolod Miller' has given the clearest demonstration of the process by which this retrenchment of the Pontic Iranians came about. He shews that the place-names about the Ossetes in countries now peopled by Tartar-speaking tribes prove that they formerly extended over a greater area. Next he shews their identity with the Jasy of Russian chronicles, the Ossi of the Georgians.

Klaproth first proved in 1822 that the Ossetes are the same as the Caucasian Alans, and this is supported by the testimony of chroniclers Russian, Georgian, Greek and Arab². From Ammianus Marcellinus (xxxI. ii. 16-25) we know that at the time of the Huns' invasion these Alans pastured their herds over the plains to the N. of the Caucasus and made raids upon the coast of the Maeotis and the peninsula of Taman. The Huns passed through their land, plundering them, but afterwards made alliance with them against Ermanrich the king of the Goths. Ammianus means by Alans all the nomadic tribes about the Tanais and gives a description of their habits borrowed from the account of the Scythians in Herodotus. For the first three centuries of our era we find these Alans mentioned's as neighbours of the Sarmatians on this side or the other of the Don, living the same life and counting as one of their tribes. That is that Ossetes, Jasy, Alans, Sarmatians, are all of one stock, once nomad now confined to the valleys of the central chain of the Caucasus. Ossetes are tall, well made, and inclined to be fair, corresponding to the description of the Alans in Ammianus (XXXI. ii. 21), and their Iranian language answers to the accounts of the Sarmatians whom Pliny calls "Medorum ut ferunt soboles"."

In a large number of inscriptions from the Greek cities along the Euxine shore we meet with several hundred barbarian names, and these give more or less trustworthy material for investigation. The first to examine them scientifically was K. Müllenhoff. He compared the names with the Old Persian and arrived at satisfactory results, but Vs. Miller has been more successful through taking Ossetian as the basis of comparison. On comparing the number of names which offer easy derivations from the Ossetian we may get some clue to the distribution of Iranian population along the coast. At Tyras we have no certain Iranian name among the five barbarian names we know: in Olbia out of about a hundred names half can be explained (App. Nos. 11-13 give samples): in Tanais out of 160 names a hundred are intelligible (cf. App. 56): in Panticapaeum out of 110 only 15 give ready meanings and these are mostly also found at Tanais, so from near Taman only two names out of thirteen, from Gorgippia only seven or eight out of forty (v. App. 69) are demonstratively Iranian, and these mostly occur at Tanais. Furthermore we must make a distinction between

Ossetian Studies III., Moscow, 1887.
 Cf. Josafa Barbaro, Viaggio alla Tana ap. Ramusio, Navigationi, Venice, 1559, vol. II. p. 92, = f. M. iiij, "Alani li quali nella lor lingua si chiamano As."

³ Pliny, NH. IV. 80, Dionysius Periegetes 305, 306, Fl. Josephus, Bell. Jud. VII. vii. 4, Ptolemy etc.

^{6 &}quot;Ueber die Herkunft und Sprache der ponti-

schen Scythen und Sarmaten," Monatsbericht der k. Preuss. Akad. d. W. 1866 p. 549 sqq., reprinted in DA. 111. p. 101 sqq., 1892. Cf. Sir H. Howorth, Journal of Anthrop. Inst. VI. 1877, p. 41 sqq.

* First in an article in Journ. Min. Publ. Instr.

St P. Oct. 1886, p. 232, entitled "Epigraphic Traces of Iranian Population on the North Coast of the Euxine," and again in the third volume of his Ossetian Studies.

names shewing Old Persian forms and those which resemble Ossetian. The former are mostly names very familiar to the Greek world and in common use in the Hellenised provinces of the Persian Empire, especially Asia Minor: they are many of them royal names and testify to the political and general influence of the Persian Empire rather than to an Iranian population. Such would be Ariarathes, Ariaramnes, Arsaces, Achaemenes, Orontes, Pharnaces, Mithradates, Ariobarzanes, Machares and many more. The true native Iranian names are almost confined to Olbia and Tanais, others in the Bosporan kingdom may well have found their way in through Tanais. New Inscriptions (e.g. in *IosPE*. Vol. IV) supply more barbarian names but do not materially alter the results attained by Vs. Miller except that we find in them several more names certainly Thracian both at Olbia and on the Bosporus. The unintelligible names at Gorgippia seem to recall

Caucasian languages rather than Indo-European.

All these names are late in date, mostly of the II. and III. centuries A.D., the time when the Sarmatians spread from Hungary to the Caspian. At that time no doubt there was a broad band of Iranians right across, but it looks as if along the coast there long remained representatives of some other population, Getae in the west about the Ister and Tyras, and perhaps in the Olbia district, Tauri in the Crimean mountains, and tribes of the Caucasus stock to the south-east of the sea of Azov. From the western aboriginal tribes the Greeks may have heard the names of the rivers Borysthenes, Hypanis, Tyras, and Ister, names for which no satisfactory explanation has been suggested, and once sanctioned by classical usage these names continued to be used by the Greeks as long as they were in continuous occupation of this coast. But this tradition was broken by the destruction of the colonies Tyras and Olbia, and when the Greeks again had dealings with this coast they learnt other native names which only appear in authors who preferred actuality to classical correctness— $\Delta \acute{a} \nu \alpha \pi \rho \iota s$ in Periplus anonymi (86 (60)), Βογοῦ and Δάναστρις in Constantine Porphyrogenitus (de adm. Imp. 42). Now these names seem to contain the Ossetian Don a river, at least they have never been satisfactorily explained from the Slavonic; and the occurrence of Dan in river names just coincides with the extension of the Iranians in South Russia. The mouth of the Tanais being already in Iranian hands the Greeks at once adopted its Iranian name. The Iranian names for the western streams may be just as old, but they were not current on the seaboard and only found their way into Greek speech when the Greeks had, as it were, to rediscover the region after considerable changes of population. Maybe by then they learnt them not from the Iranians, but from Slavs who had borrowed them. The name of the Bugh has its counterpart in the Northern Bugh, also a Slavonic river, but it may be the same as Bogh = God, which is regarded as a loan-word from the Iranian Baga. I have never seen any other explanation of the curious fact that the present names for these rivers being apparently Iranian are first recorded just about the time that the Iranian population was succumbing to Slavonic and other invaders. later times we get a fresh set of river names of Turkish origin.

Only in the east part of the Crimea the Iranians seem to have touched the

Black Sea coast, for "Αρδαβδα = Έπτάθεος (Anon. 77 (51)), "Tauric" or Alan for Theodosia, seems clearly to contain Ossetian avd = seven, and ard may be according to Müllenhoff eredhwa high, Lat. arduus. Vs. Miller says sevensided, but that does not seem a near translation. So Σουγδαία, Sudak is no doubt Os. suydäg holy, cf. Sogdiana.

Whereas the Iranian character of the Sarmatian language and even a numerically preponderant Iranian element in the population has been generally accepted, the case of the Scyths is by no means as clear. What reliance can be put on the statement of Herodotus (IV. 117) that the Sarmatians speak the same language as the Scyths, but speak it incorrectly? While Herodotus is not altogether to be trusted in his statements about language, still he occasionally notices points bearing upon it, for instance when he mentions the seven languages required along the trade route to the NE. up to the Arimaspians. And the fact of the resemblance and the difference between the Scythian and Sarmatian dialects is the only explanation for the invention of the aetiological myth about the Sarmatians being descended from young Scyths and Amazons The other main difference between the two peoples, (1V. 110-7).the free position of women among the Sarmatians, is also accounted for by the myth. Curiously enough the Ossetes still have legends of warlike women, and such stories are abroad throughout the Caucasus: among the Circassians is a literal reproduction of this tale in Herodotus.

When we come to examine the Scythian names and words in the Greek texts it is disappointing to find how few are readily to be explained Some words are quite clear, e.g. Ἐνάρεες = ᾿Ανδρόγυνοι (Hippocrates, De aere, 29, speaks of the ἀνανδρείη of his ἀνάριες) from a privative and Sk. Zd. nar, nara man. So Έξαμπαῖος = 1ραὶ ὁδοί from Zd. asha, ashavan pure, pathi path. Arimaspi may be connected with Zd. airima loneliness, oneness, and spu may be from the root cpac, Lat. specio. Müllenhoff objects to these and wants e.g. to translate Arimaspi "having obedient horses," saying that the others would be *Arimaspui, but it seems more likely that a Greek would make a mistake in dropping a termination and yet get the meaning right, than that he should invent an entirely wrong meaning which should still yield a form so near to what he reported. In οἰόρπατα = ἀνδρόκτονοι there seems to be possibly a misunderstanding. The first part is clearly Zd. Sk. vîra man: the second half is rather paiti lord than from pât to fell, causative of pat to fall. Some of the Sarmatians were regularly called Γυναικοκρατούμενοι. The fact that Herodotus has in these cases furnished a translation is decisive. Also one or two of the proper names are evidently Iranian, e.g. Ariapithes, Spargapithes. So most of the names in the "Scythian" legend of their own origin (IV. 5, 7) have quite an Iranian look. Targitaos (?Tirgataos, cf. Τιργαταώ, queen of the Maeotae) may well be Tighra tava sharp and strong: and the names of the three brothers in - fais recall Avestic xshaya lord; so Colaxais would equal Archistratus².

Whereas no satisfactory Iranian explanation of the names of deities

¹ Poliaenus, VIII. 55. ² Vs. Miller, op. cit. p. 126 and Müllenhoff op. cit., v. inf. p. 43.

has been put forward, on the other hand Schiefner absolutely annihilated K. Neumann's attempts to derive any Scythian words from Mongolian'.

Making all allowances for the inaccuracy with which Herodotus represented Scythian sounds, the corruption of the forms in our MSS. and the fact that we have to place beside these forms languages considerably removed either in time or collaterally from what Scythian may have been, we must allow that the comparative success attained with Sarmatian forms suggests that there were foreign elements in Scythian which exercised much influence on the stock of names in use or in tradition. Founding any argument on personal names is singularly unsatisfactory. All history tells us that easily as nations change their language, they change their names still more easily. There are hardly a dozen English personal names in use or a dozen Russian, we must not therefore infer that Russians or English are descended from Greeks and Romans and Jews. So Persian names were common all over the East far beyond the extension of the Persian nationality, and it is hard to say whether the Persian names that we find in Herodotus as borne by Scythians are due to an original community of origin, or a borrowing at a time when the Scyths had warlike dealings with Persia either in Europe or Asia, or whether they are not merely given to personages in the same way as figures are given names on Greek vases. The Darius vase would be a peculiarly apt example, for on it Greek and Persian names are given indifferently to the barbarians hunting griffins and other monsters, just to lend them more individual interest. Such must almost certainly be the case with Spargapithes the Agathyrse'.

Knowledge of the nationality of the Cimmerians whom the Scyths dispossessed would throw some light on the affinities if not of the Scyths themselves at least of the steppe population they found at their coming. The resemblance of the name Cimmerius with Cimber already made Poseidonius' imagine that there was some connection between them and the barbarians from the far north-west, and modern writers have further compared the name of the Cymry and supposed that these were one and the same people, Kelts'. There is no impossibility in a migration from Central Europe to the steppes of the Black Sea in times before history, just as in historic times Central Europe has sent out conquerors to every corner of the continent, and Kelts actually did reach the neighbourhood of Olbia in the time of Protogenes, not to speak of their raids upon Delphi and Asia Minor. Further the bronze civilisation of the Koban necropolis certainly offers such analogies with that of Hallstadt that it is hard to believe that they are not connected. If only there were any finds of Hallstadt types between Hungary and the Caucasus offering evidence that the people who owned the Koban bronzes had settled in the steppes, the Cimmerians might have been thought of, but people who settled long enough to leave the earthworks of which

¹ "Sprachliche Bedenken gegen das Mongolenthum der Skythen," *Mélanges Asiatiques*, t. 11. p. 531, St Petersburg, 1856, but see inf. pp. 85, 100. ² Her. IV. 78.

 ³ ap. Str. VII. ii. 2.
 4 Cf. Aristophanes, Lysistrata l. 45 Κιμβερικά,
 but this is an easy corruption palaeographically.
 6 Ridgeway, Early Age I. p. 387 sqq.

Herodotus makes mention (IV. 12) must have left weapons by which their course could be traced. And save for a single stopped axe-head from Kerch figured by its owner Canon Greenwell¹ no Koban or Hallstadt implements seem to have been found in South Russia. The flat-ended hair-pins found by Count Bobrinskoj at Gulaj Gorod², and the spirals found by him at Teklino³, seem to be rather eastern outliers from Central Europe than links between it and the Caucasus.

H. Schmidt has the same difficulty to face in maintaining that the makers of the late bronze things from Hungary were Thracians and that these Thracians were the Koban people in the Caucasus (v. inf. p. 259) and that the Cimmerians of the plains between were Thracians as well. It is true that the Cimmerian raids were made in common with the Thracians, but we have to account for the Iranians north of the Euxine.

Müllenhoff⁶ supposes that there never were any Cimmerians at all north of the Euxine, that they are only known in Asia Minor, that their name was traditionally assigned to the earthworks and settlements about the Bosporus, just as now earthworks in eastern Europe are assigned to Trajan far beyond the limits of the Roman Empire, and that they were really invaders from Thrace or the parts beyond, men of darkness who joined with Treres and other Thracian tribes in invading Asia Minor. It is hard to think that Herodotus simply invented all the story of the Cimmerians coming from the N. side of the Pontus, though even so it is at first sight difficult to see precisely how things happened; how if the Cimmerians fled se, there should have been their kings' tomb on the Tyras; and how they should have formed their connection with the Treres. But that invaders from the east should have cut them into two is not inconceivable. Part went into Thrace, produced a turmoil there and finally, with Thracian tribes they had disturbed, entered Asia Minor by the Nw.; part were pressed towards the Caucasus and passed it, not as Herodotus says along the coast of the Black Sea, for no army has ever passed that way (Mithridates in his famous flight was accompanied only by a small guard), but by the central pass of Darial, through which, as the Georgian annals shew, the northern peoples have often forced their way. Though the idea of the Cimmerians being cut in two seems hard to accept, the analogy offered by the fate of the Alans shews that it is not without the bounds of possibility. On the coming of the Huns part of these was forced westward, joined the Germans against whom they were thrown and ended as the inseparable companions of the Vandals in North Africa. Part of them was, as we have seen, pressed up against the Caucasus and remains there to this day: and about them are the Tartar tribes that penned them in. So likewise the Magyars were driven by the Pechenêgs partly w. across the Dnêpr, partly through the Caucasus, where they were called Sevordik's. So the Scyths drove

4 Zt. f. Ethnologie, XXXVI. (1904), p. 630.

³ Sm. III. CCCI.XVII. pp. 19 and 23 and pl. II. 4 Streifzüge, p. and 9.

¹ Archaeologia, Vol. LVIII. Pt I. p. 12. ² Govt of Kiev, Sm. 1. No. XLI. p. 102 and 115 and pl. 1X. 7, 8.

DÅ. III., p. 19 sqq.
 J. Marquart, Osteuropäische und Ostasiatische Streifzüge, p. 36.

the Cimmerians through the Caucasus and followed them. Then both peoples came within the sweep of Assyrian policy.

Here we get another view of them. We find the Cimmerians, Gimirrai, first N. of Urarțu (Ararat). Hence they are driven out by אל-gu-za-ai (Asarhaddon) or Iš-ku-za-ai (Sun Oracle). These names are גמר and now of Genesis x., where the latter form is miswritten for now. The first syllable is added as usual in Semitic languages to help out such a combination as sk at the beginning of a word, so that the identity with the Greek Κιμμέριος and Σκύθης is almost complete. too the leader of the Ašguzai Bartatua is Protothyes father of Madyes in Herodotus (1. 103) and Tugdammi the Cimmerian is Λύγδαμις in Strabo (1. iii. 21) for Δύγδαμις. Lygdamis was a familiar name and the copyist was misled. The Cimmerians driven s. from Urartu attacked Man a kingdom under Assyrian suzerainty. The Assyrians supported their vassals and found allies in the Scythians who were already enemies of the Cimmerians. This hostility turned the Cimmerians westward against Gugu, Gyges of Lydia (Herodotus says Ardys 1. 15), and one horde was destroyed by Madys (Strabo) in Cilicia, whereas Lydia was under their dominion till the time of Sadyattes, and Sinope and Antandrus were long occupied by Cimmerians. Meanwhile the Scythians as allies of the Assyrians tried to raise the siege of Nineveh which was being prosecuted by the Medes; hence a conflict between Scythians and Medes and apparently an overrunning of Media by the Scythians?. Scyths also made their appearance further to the sw., apparently being sent by Assyria against Egypt, but bought off by Psammetichus. Thus they are referred to by the Hebrew Prophets' and engaged in the sack of Ascalon where some contracted a disease ascribed by Herodotus (1. 105) to the hostility of Aphrodite. A colony of them is said to have settled at Beth-shean hence called Scythopolist. Evidence of intercourse between Assyria and the Souths may be seen in the gold dagger sheaths from the Oxus (p. 255, f. 173), from Melgunov's Barrow (p. 171, ff. 65-67) and from Kelermes, and also the unique axe from the latter (p. 222; cf. p. 263).

It has been supposed that the Scythians that overran western Asia were Sacae from the E. of the Caspian, and that such incursions were always possible we learn from subsequent history, but the Assyrian evidence goes to shew that Scythians had penetrated through the Caucasus. A curious point is that the son of Tugdammi, Sandakhšathra', has a name clearly Iranian, and it is hard to suppose that the Cimmerians had yet come under Median influence. Does it mean that the Cimmerians had Iranian affinities? It looks as if the "Royal" Scyths, whoever they may have been, were invaders from the far North-east who found in the steppes a population of Iranian stock whom they called men of darkness, i.e. Westerners (cp. p. 100), partly nomad and partly settled, drove some of this population out, and established a dominion over the remainder.

Minckler, H., Allambatallacke Forschungen, t. p. 484 sqq., "Kimmerier, Alguzaer, Skythen, f.v. N. Schmidt, s.v. Seythian in Francisco, S. P. S. Vol. IV, Londo 1883.

A Ct. For in 3. An EX. Of Driver, Period to The 2000 Top 237, who suggests that a description

originally meant for the Scythians was worked over to make it do for the Chaldaeans. Ez. xxxviii. and xxxx. to 10 is even less exact.

Josephus, 4-n. Jud. XII. viii. 5.
Sa-an-dak-sat-ru, Justi, Iranisches Namenbuch, p. 283.

By the time of Herodotus they may have become almost blended with their nomad underlings; such blending takes place far more easily with nomads than with agricultural populations: they may have even adopted their language, retaining the names of persons and gods which are so difficult of interpretation in the light of Iranian vocabularies. conception of displacements of whole populations is being superseded by the recognition of the fact that in most countries the mass of the people has remained much the same as far back as we can trace its characteristics. The general type of skull and build in any given locality does not easily alter. From time to time conquests change the national name, the language talked by all, the ethnological character of the upper classes or even of all the warrior caste: to outside observers it seems as if a new race had been substituted for a former one, but in a few generations the aborigines again come to the top and in time the physical type of the invaders becomes almost extinct. Only a long succession of conquests of a country peculiarly open to attack can really sweep away a whole population, where that has been at all thick and where the disparity of development is not too great. We are so used to the cases of the North American Indians, the Tasmanians, and other instances of utterly barbarous tribes really disappearing before the invader, that we do not realize that such conditions rarely obtained in the old world. north of the Euxine it took the successive hordes of the Huns, Avars, Khazars, Pechenêgs, Polovtses and Tartars, to say nothing of less important tribes, to sweep the Iranian folk clean off the plains over which they had wandered; and they only succumbed to this fate because they were living in perfectly open country upon a highway of nations.

Four legends as to the origin of the Scythians.

In the first, which is told by the Scythians of themselves¹, they say that they are the newest of races and spring from Targitaus son of Zeus and a daughter of the Borysthenes. Targitaus had three sons, Lipoxais, Harpoxais and Colaxais, of whom the youngest obtained the kingdom by the ordeal of approaching four sacred gold objects that fell burning from heaven. These sacred gold objects were a plough and a yoke and an axe and a cup. From these three sons three tribes, Catiari, Traspies and Paralatae, are descended, and the whole nation is called Scoloti; Scythae being the Greek name: and the gold objects are kept sacred until this day. The next story (c. 8 sqq.) is told by the Pontic Greeks. In it Heracles plays the part of Zeus; Echidna, half woman, half serpent, bears three sons to him. The ordeal is the stringing of the bow left by the hero and the knotting of the belt with its cup attached. The two elder sons, Gelonus and Agathyrsus, fail and become fathers of peoples outside Scythia, the third Scythes remaining in the land.

These two stories are substantially the same. Only the second has been even more Hellenised than the first. The Scythians are represented as autochthonous even though Targitaus only dates back a thousand years before Darius. Three sons in each case submit to an ordeal in

which, as usual in folk tales, the youngest is successful. From the sons tribes are descended; in the one case well-known neighbouring nations whose names the Greeks knew, in the other obscure septs among the Scythians, to whom as a whole is given the native name Scoloti. None of these names meet us elsewhere except a bare mention in Pliny taken The scene of both stories is laid in West Scythia: from Herodotus. in both there comes a mention of a golden cup-now no representation of a Scythian with a cup at his belt has been found—and more remarkable still a golden plough is one of the holy objects. The man who keeps them is given land for his very own, as much as he can ride round in This legend in two forms can only apply to the agricultural Hitherto writers who wished to be more than usually West-Scythians. exact have called the Royal Scyths Scoloti, but this legend would suggest that just these did not call themselves Scoloti, which was really the native name for the royal clan among some tribe of the western Scythians about Olbia². Mishchenko^{*} examining these legends thinks they apply to the reigning clan of the Royal Scyths, but that perhaps their real scene is central Asia. He takes Pliny as a serious witness to the survival of these clans. I cannot follow him in this, though I have come to much the same conclusions in most things.

Another account in Herodotus (IV. 11), to which he himself chiefly inclines, definitely names the nomad Scyths and brings them out of Asia (that is to say Asia in the ordinary sense, not according to the Herodotean definition of it), across the Araxes (apparently the Volga), into the land of the Cimmerians; and then follows the story of how the latter fled into Asia across the Caucasus and the Scythians pursued them. This account represents the Massagetae as responsible for the first impulse, but Aristeas says that it was the Arimaspians that fell upon the Issedones and that these fell upon the Scyths and drove them against the Cimmerians. At any rate it is clearly stated that the Scyths came from the East. Diodorus Siculus has made a contamination of these accounts and while letting the Scythians come from Western Asia has brought in the Echidna of the Greek legend (11. 43 sqq.). His story with its explanation of the history of Sarmatians and Amazons reads plausibly, being eked out with details which apply to the rise of every tribe that ever rose to power in Asia; compare the accounts of how Chingiz Khan became great and spread abroad the dominion of the Mongols; but his anachronisms enable his reader to estimate his account at its real worth. Of course the Asiatic origin of the nomad Scyths is no bar to their Iranian affinity, but it makes a non-Aryan derivation conceivable.

Physical characteristics.

The supporters of the Mongol theory of the Scyths rely chiefly on the evidence of Hippocrates in his treatise on Airs, Waters and Places. The evidence of the first of Greek physicians ought to be conclusive, but

¹ Cotieri, NH. VI. 50. ² For Iranian tales in which the youngest of three brothers succeeds cf. Spiegel, Eran. Alter-

³ Journ. Min. Pub. Instr. St P., 1886, Jan. 1 cc. 24-30. There is a translation by F. Adams in Transactions of the Sydenham Society, Vol. 1. tumsk. 1. 544, who compares Echidna and Dahâk. pp. 187-8, 207-218.

unfortunately, in spite of much medical detail, it does not give us a clear idea of Scythian characteristics. The fact is that he was trying to prove a theory, emphasizing the effect of the environment upon a race, and it is a question whether he does not rather twist his facts to meet his theory. And inasmuch as his notion of the environment is faulty—he takes Scythia to have a climate almost uniformly cold throughout the year—the facts that suit his

theory are rather open to doubt. Hippocrates begins by describing the Sauromatae whom he calls a Scythian tribe living about the Maeotis and differing from the other tribes. He goes on to tell of their women's taking part in war—the usual story. He draws a very clear line between them and the rest of the Scyths of whom he says that they are as different from all other men as are the Egyptians. But this difference which he ascribes to their monotonous mode of life, the men riding on horseback and the women on waggons, and to the continuous cold and fog of their country, he hardly defines in a convincing way. It amounts to a tendency to fatness, slackness and excess of humours, and a singular mutual resemblance due to all living under the same conditions. This slackness they counteract by a custom of branding themselves on various parts of the body'. Further he says that the cold makes their colouring πυρρός, which seems to mean a reddish brown, the colour that fair people get from being much in the open. It cannot be any kind of yellow. The colour of the Tartars was not far from reddish. Kublai Khan had a white and red complexion, yet Chingiz Khan was surprised at his being so brown, as most of his family had blue eyes and reddish hairs. So too Batu is described by Rubruck as perfusus gutta rosea which du Cange takes = rubidus in facie; so Hakluyt and Bergeron, but Rockhill is probably right in translating "his face was all covered with red spots." The Chinese describe one of the five tribes of Hiung-nu as fair. Lastly Hippocrates observes in both men and women a sexual indifference that amounts in some of the men to actual impotence; these are the Anaries of whom Herodotus also speaks, ascribing their disease to the wrath of the goddess at Ascalon whose temple they had plundered at the time of their invasion of Asia. But Hippocrates will have none of this, and says this is a disease just like any other disease and due to excessive

¹ Cf. J. G. Frazer, Golden Bough², 111., p. 217. The Indians of St Juan Capistrano in California used to be branded in certain parts of their bodies ...because they believed that the custom added greater strength to their nerves and gave a better

pulse for the management of the bow.

² H. Kiepert, Manual of Ancient Geography,
Eng. ed., London, 1881, p. 196, translates "dusky
yellow." He takes the Royal Scyths to be Turkic

in spite of the philologists.

Rashid-ed-Din ap. Yule³, Marco Polo, I., p. 358 n. 1, cf. inf. p. 100.

Rubruck, p. 124.

⁶ Her. I. 105.

⁶ Cf. Reineggs (Jacob), Allgemeine historisch-topographische Beschreibung des Caucasus, Bd I.,

p. 270.
"Der Mann (der Nogajen) hat ein fleischiges aufgetriebenes aber breites Gesicht, mit sehr hervorstehenden Backenknochen, kleine tiefliegende

Augen und keine fünfzig bis achtzig Barthaare. Wenn nun nach Krankheiten eine unheilbare Entkräftung folgt oder das Alter zunimmt, so wird die Haut des ganzen Körpers auserordentlich runzlich und die wenigen Barthaare fallen aus und der Mann bekommt ein ganz weibliches Ansehen. Er wird zum Beischlaf untüchtig und seine Em-pfindungen und Handlungen haben allen Männlichen entsagt. In diesem Zustande muss er der Männer Gesellschaft fliehen: er bleibt unter der Weiben, kleidet sich wie ein Weib, und man könnte tausend gegen eins wetten dass dieser Mann würklich ein altes Weib und zwar ein recht hässliches altes Weib sei."

Neumann, p. 164, quotes curiously enough from an English translation which I have not seen, and translates back into German.

The disease described by Pallas (Voyages en plusieurs provinces, Paris, II. 8°, II., p. 135 sqq.) does not appear cognate with this, though some riding. But all this, he says definitely, applies only to the most noble and rich among them. With the common folk it is entirely otherwise. This whole description seems to suggest the condition of an Asiatic race in the last stage of degeneration, when the descendants of a small band of conquerors have reached a state of effete sloth and are ready to make way for a more vigorous stock.

The chief question that is raised by this description is as to the amount of trust that can be put in the statement that the ruling caste of Scyths is quite unlike any other kind of man. In the representations on works of art (v. p. 57 n.) the nomads do not appear so very unlike any other northern people, their resemblance to modern Russian peasants has often been pointed out; though this resemblance is superficial, due rather to certain similarities of costume and to the way in which an abundant growth of hair disguises the individuality of a type, than to a deep-seated likeness. The similarities of costume are due to the fact that the Russians have borrowed many details of their dress from nomad tribes through the intervention of the Cossacks, whose mode of life had much in common with that of their hereditary foes. The words for clothes in Russian are mostly of Tartar origin'. Still the bearded warriors on the vase from Kul Oba could not possibly be described as εὐνουχοειδέστατοι ἀνθρώπων. If these are in any sense Scythian they must belong to a later time when the N. Asiatic blood had become completely mixed in. The Tartars of Kazan and the Uzbegs of Turkestan, races in which Altaic blood has been much diluted with Finnish or Iranian, are fully bearded. The Chinese drawings of Kara Kitans (p. 96, f. 27) shew them with full beards. The representations of nomads from Kul Oba seem to belong to about the middle of the fourth century B.C. and by then the peculiar type described by Hippocrates might well have become almost obliterated by intermarriage with earlier inhabitants. Ammianus Marcellinus (XXXI. 11) uses a similar expression of the Huns "spadonibus similes," and he is not likely to be copying Hippocrates in the same way that he applies to the Alans the description Herodotus gives of the Scythians. It seems as if the Huns, almost undoubted Altaic, produced the same impression on Ammianus as the Scyths on Hippocrates.

The osteological characteristics of the skeletons found in Scythic graves throw very little light on the questions at issue. Had the skulls discovered been uniformly short or long, such uniformity would have been a weighty argument for assigning them to Tartars or Europeans respectively. But the rather scanty observations made hitherto tend to shew that there was considerable variety among individuals who used objects of defined Scythic type. The best known case is that of the five skulls found in Chertomlyk and discussed by K. E. von Baer in ASH. Of these two were short and two were long and one was intermediate, and the data were not sufficiently exact to shew that either lords or servants were one or the other. And even had there been such data they would not have cleared up the question, as it would

symptoms are alike. My friend Dr L. Bousfield suggests that it was very bad orchitis and that Hippocrates may have been right in putting it down to constant riding.

² For the types of variously proportioned mixtures of Iranian and Turko-Tartar blood v. Ch. de Ujfalvy, Les Aryens au Nord et au Sud de l'Hindou Kouch, Paris, 1896. An Uzbeg with a beard is illustrated in Keane's Ethnology, p. 312.

down to constant riding.

1 V. V. Stasov in his review of Maskell's Russian Art, Works, Vol. II. iii., p. 823.

be possible to argue the greater purity of blood of either rulers or servants; a priori the latter might be supposed to be imported slaves, but Herodotus distinctly says that they were native Scyths, and he tells of the marriage of Scythian kings with various foreign women. So too some of the skulls illustrated by Count Bobrinskoj in Smêla slightly suggest Mongolian forms, others are purely European¹. To this same conclusion came Professor Anatole Bogdanov², who says that in Scythic tombs the skulls are mostly long though occasionally Mongoloid and notes a general tendency towards brachycephaly during the Scythic period. For strangely enough although Slavs and Finns are now short-headed they seem to have become so only during the last few centuries³. In Hungary e.g. at Keszthely the cemeteries which are referred to the Sarmatians are full of bow-legged skeletons, a characteristic which may be accounted for either by their horsemanship or by a mixture of Altaic blood⁴.

The process of gradual amalgamation of Central-Asian rulers with an alien subject population under very similar circumstances may be observed in the case of the coins of the Kushanas. Not that a change of racial type can be followed unless Miaus represents the purer blood, but the Indian name Vāsudeva, along with the Kushana Vasushka, succeeds to Kujula and Hima Kadphises, Kanishka and Huvishka, without a break to mark a change of dynasty. Their successors the Ephthalite Huns answer decidedly to the type described by Hippocrates but in their case the evolution was cut short by the Turks.

Manner of Life.

If we consider the customs which Herodotus ascribes to the Scythians it becomes evident that they form no coherent whole. Although it is hard to say what various usages may coexist in any given nation, what survivals from an earlier state may continue into a high civilisation, the parts of the picture drawn by Herodotus do not fit together. We see that he has mixed together information drawn from different sources and applying to different tribes. When it comes to endeavouring to determine according to these various customs the affinities of their users we are on very uncertain ground. Analogues for every detail can be found among various nations and as readily among Aryans as among non-Aryans. Most of the usages mentioned are inseparable from a nomadic life and throw no light on the affinities of the people among whom they obtain. The characteristic dress of the Scyths which struck the Greeks so much, is almost the only possible one for a nation of riders living in a cold climate, so too the use of various preparations of mare's milk, butter, kumys and cheese, the felt tents, bows and

¹ Sm. II., pl. xxvii.—xxx. Dr W. H. Duckworth, of Jesus College, kindly examined these for me.
² Congrès International d'Archéologie Préhistorique et d'Anthropologie, II^{me} Session à Moscou, T. I., Moscow, 1892, p. 5. "Quelle est la race la plus ancienne de la Russie Centrale?"

³ Niederle, Slavonic Antiquities, I. pp. 89 sqq.
4 G. Nagy, The Nationality of the Scyths, p. 31.
Cf. L. Fligier, Archiv f. Anthropologie, XVII. (1888), p. 302. For the Macrocephali with their artificially elongated skulls v. D. Anuchin, Sur les crânes anciens artificiellement déformés de la Russie, Moscow Congress, p. 263; BCA. XX. p. 85, f. 41;

for a shortened skull 16. XXV. p. 126 f. 18, both from Chersonese.

⁶ B. M. Coin Cat., Greek and Scythic Kings of Bactria and India, by P. Gardner, XXIV. 7, XXV. 1—9, XXIX. 10. E. J. Rapson, Grundr. d. Indo-Arischen Phil. u. Altertumsk., Bd II. Heft 3B, Pl. II. 1, 8—12, IV. 18. I am very grateful to Professor Rapson for indicating this series to me, but cf. O. Franke, "Zur Kenntnis d. Türkvölker u. Sk. Zentral-Asiens," p. 79 in Abhandl. d. k. pr. Akad. Berlin 1904. The Ephthalites' coins have tamgi very like those that occur in the Crimea, v. inf. ch. XI. § 4.

arrows, curious methods of cooking owing to the absence of proper fuel, and so on, were conditioned by their general mode of life and could be nearly paralleled among any nomad tribe. As a matter of fact the medieval travellers found all these things in use among the Mongols, and some of the coincidences with facts recorded by Marco Polo, de Plano Carpini, de Rubruck and others are striking. These agreements are not restricted to such necessary similarities; the accounts of cemeteries and funeral customs, of the religion of the Mongols, of their personal appearance, of the polyandry of the Tibetans, of their way of disposing of the aged, suggest that though it may be going too far to declare positively that the Scyths were Mongolian, we must admit that the Mongols before their conversion whether to Islam or Buddhism were their closest possible analogues. And their fate in western Asia and eastern Europe has been analogous. Already the hordes that Batu led against the West had very few pure Mongols save among the chief leaders, and this strain soon merged in the mixed multitude that it ruled, so that the later khans of the Golden Horde were just like any other west Asiatic monarchs, a mixture of the Turk and the Circassian¹.

This seems the place to give a summary of what our authorities tell us as to the life of the Scythians, especially the Nomads. The main bulk of information is contained in Herodotus (IV. 59-75), and the reader is prayed to have him at hand: some details are filled in from other passages and other authors (especially Hippocrates, De Aere, etc.). In order to give as complete a picture of nomad life as is possible within narrow limits I have anticipated the archaeological results set forth in the later chapter which describes the tombs found in the Scythic area. Professor Lappo-Danilevskij' has arranged the accessible material under convenient headings. In preparing the following summary I have everywhere been indebted to him, though much has been discovered since his book was written. Count Bobrinskoj (Smêla passim) also gives a convenient view of what is known of various classes of objects.

In spite of the well-known existence of tribes of agricultural Scythians, Scythian always suggested to the Greek the idea of nomadic life. The governing condition of the nomads' existence was the necessity of finding natural pasture for their cattle, hence their moving from place to place, and this necessitated everything from the form of their dwellings to the cut of their clothes, from their tactics in warfare to their method of cookery.

Their chief occupation was looking after their many horses, and of this we have a splendid illustration on the famous Chertomlyk vase (v. pp. 159—162, ff. 46—49), on which we see pourtrayed in greatest detail the process of catching

mentality of the western section. Hence from our point of view Hunnish or Turkish comes to the same thing as Mongolian, though a confusing of them may seem to Turcologues unpardonable. But the nature of the material does not allow of greater accuracy seeing that we have an actual case of 100,000 Huns who took the name of the Sien-pieastern Mongols-when defeated by them. For sqq.), Turks into Ugrians and Ugrians into Finns, and the various crossings of all these races with the "Caucasic" stock, see A. H. Keane, Ethnology, p. 295 sqq., also Franke, loc. cit.

² Scythian Antiquities, pp. 383 sqq.

¹ In the confusion of nomenclature used for the races of northern Asia it seems impossible to arrive at a satisfactory terminology. By Mongolian in the broader sense is meant belonging to the eastern branch of the Uralo-Altaic peoples as opposed to the Finno-Ugrian branch. This eastern branch can be further divided into a western section to which belonged the Hiung-nu or Huns and the Turks, and an eastern section of whom the best known representatives are the Mongol tribe and the Manchus. But in dealing with western Asia and Europe the two sections are indistinguishable, as any movement of the eastern section produced its chief effect upon the West through the instru-

the wild horse of the steppes or breaking him in. Others have been reminded by it of the story in Aristotle' of the Scythian king's practice of horse-breeding. On the vase we have two breeds represented; the tame horse which is being hobbled and the wild ones with hog manes. Professor Anuchin' thinks the former is like the Kalmuck breed and the latter the half-wild horses of the royal stud. Professor Ridgeway compares with the former the shaggy horses of the ancient Sigynnae and those of the modern Kirgiz, descendants of the "Mongolian" pony. The indocility of this race made the practice of gelding necessary, otherwise it was unknown in the ancient world. Horses were also used for food. Scythians were supposed to like them very high. Next in importance to their horses came the cattle used for drawing their great waggons. Both Hippocrates and Herodotus say that they were hornless. The latter ascribes this to the cold (IV. 29). They had sheep as well, for mutton bones are found in cauldrons in the tombs, as for example at Kul Oba. They made no use of pigs either in sacrifice or in any other way. So the early Turks regarded swine as tabu.

Besides looking after their cattle the Scyths of course engaged in hunting, and we have gold plaques^e with representations of a Scyth throwing a dart at a hare, reminding us of the story of how the Scyths when drawn up in battle array over against Darius set off after a hare. As hunters they had a taste for representations of animals, especially in combat, and these are very characteristic of objects made for their use. Representations such as those on the Xenophantus vase (ch. x1. § 7) are purely fantastic: more realistic is a hunting scene that appears on the wonderful fragments of ivory with Greek

drawing found at Kul Oba (p. 204^D: ABC. LXXIX. 10).

Hunting supplied some of their food, more was produced by their cattle especially by their horses. Most characteristic were the products of mare's milk especially kumys ὀξύγαλα, the cheese called ἱππάκη, butter and buttermilk*, also horse-flesh and other meat. Their methods of cooking were conditioned by the scarcity of fuel. Very characteristic are the roundfooted cauldrons in which have been found horse (e.g. Chertomlyk, p. 162, f. 50) and mutton bones (e.g. Kul Oba). They also used some vegetable food such as onions, garlic, and beans' as well as grain, and the people about the Maeotis dug up a sweet bulb i just as the Siberian tribes do with the Martagon lily". Besides kumys they drank wine readily enough, and Greek amphorae penetrated far into the country: such jars were part of the provision put in a dead man's tomb: few of the amphorae found far from the coast bear stamps (ch. xi. § 7): it would seem as if the commoner sorts did for the barbarians. Their habit of drinking it neat especially excited the contempt of the Greeks.

9 Her. IV. 17.

⁷ Her. IV. c. 134.

8 Cf. Hippocrates, De Morbis, IV. c. v. § 20, and

10 Theophrastus, Hist. Plantarum VII. xiii. 8

Strabo VII. iv. 6, hence the Homeric epithets Ἰππημόλγοι and γλακτοφάγοι, //. XIII. l. 5, 6. Cf.

Rubruquis c. 6, ap. Hakluyt p. 97, Rockhill p. 62.

¹ Hist. Anim. 1X. 47.

² On the question of wild white horses (Her.

IV. 52), St P. 1896.

3 Thoroughbred Horse, p. 130.

⁴ Strabo, VII. iv. 8; use of mares, Pliny, NH.

viii. 165.

6 Her. IV. 63. Vambéry, Die primitive Kultur

8 100 but cf. inf. p. 182. der Turko-Talaren, p. 38, 199, but cf. inf. p. 182.

⁶ p. 197, f. 90, KTR. f. 162, p. 154, ABC. XX. 1, silver ASH. XIII. 10.

and IX. xiii. 2.

¹¹ For the eating of bulbs among the Turks v. A. Vambéry, op. cit., p. 220.

Waggons.

As everybody knows, the home of the Scyth was on his cart. Already Hesiod¹ speaks of the waggon-dwellers. Hippocrates² gives the fullest description, saying that the smaller ones had four wheels, the larger six, that they were covered with felt and arranged like houses divided into two or three compartments and drawn by two or three yoke of hornless oxen. In these the women lived, whereas the men accompanied them on horseback. Aeschylus sums up their whole life in three lines³:

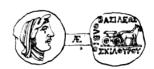
Σκύθας δ' ἀφίξη νομάδας, οι πλεκτὰς στέγας πεδάρσιοι ναίουσ' ἐπ' εὐκύκλοις ὅχοις ἐκηβόλοις τόξοισιν ἐξηρτυμένοι.

"And thou shalt come to the Scyths, nomads who dwell in wattled huts

high in the air upon their fair-wheeled wains,

equipped with far-shooting bows."

We have remains of waggons in various Scythic tombs but they seem perhaps rather open funeral cars than the wheeled dwelling (p. 75). It is an open car also that we see on the coin of Scilurus struck at Olbia.



Coin of Scilurus Mus. Kotschp.28.

FIG. 4.

Some light may be thrown by the toy carts found in Greek graves at Kerch treated of by Professor P. Bieńkowski of Cracow⁴. Some are clearly

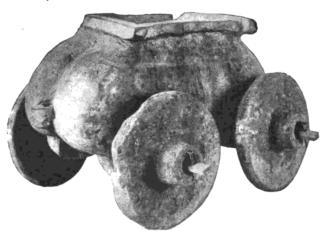


FIG. 5. BCA. IX. Pl. Vd. Kerch. Toy model cart.

mere country carts, not unlike those still in use in the Crimea, a body of wicker or skin with wooden framing set upon a pair of axles. Others

¹ ap. Str. VII. iii. 9 Γλακτοφάγων ἐς γαΐαν, ἀπήναις οἰκί ἐχώντων. Cf. Hor. Carm. III. xxiv. 10 "Scythae, Quorum plaustra vagas rite trahunt domos."

De Aere c. 25.
 Prom. Vinc. 1. 735.

⁴ Wiener Studien, XXIV., p. 394, and BCA. IX., pp. 63—72 and pl. IV.—VIII. I have much pleasure in thanking him for allowing me to copy his pictures in the former paper and for sending me an off-print of the latter. Of course the wooden axles have been supplied.

are more like our idea of waggon dwellings, being not merely tilt carts as No. 2 in Fig. 6, but remarkable structures such as No. 1 b, with a kind of tower in which were windows before and behind set upon a body which itself had windows in the sides between the wheels and also behind. The pyramidal tower may be a tent whether fixed or moveable like those of modern nomads. Or this may have been an arrangement for defence; for the method of making a lager of waggons has always been a resource of

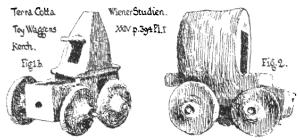


FIG. 6.

the nomads. The waggons always had a hole in front for the dissel-boom, and in one case were furnished with a pair of oxen also on wheels. They seem rather late in date, but the types are probably old.

If we may judge by the analogy of other Asiatic nomads it is at least a question whether the Scyths were always on wheels, like the gipsies in England. We have no artistic representation of any vehicle quite suitable for such a life. It seems more likely that they carried their tents all standing upon their carts and set them down upon the ground when they came to a halt. The Sarmatian tent represented on the walls of the catacomb of Anthesterius² is set upon the ground, and this is the arrangement described by Rubruquis'. "Their houses wherein they sleepe they ground upon a round foundation of wickers artificially wrought and compacted together: the roofe whereof consisteth (in like sorte) of wickers meeting above into one little roundell, out of which roundell ascendeth vpward a necke like vnto a Chimney, which they couer with white felte....The sayd houses they make so large that they conteine thirtie foote in breadth. For measuring once the breadthe betweene the wheele ruts of one of their cartes, I found it to be twenty feete over: and when the house was upon the carte it stretched over the wheeles at each side fiue feete at the least: I told 22 oxen in one teame drawing an house upon a cart....And a fellow stood in the doore of the house, vpon the forestall of the carte driving forth the oxen....When they take down their dwelling houses, they turne the doores alwayes to the South." Evidently everything was on a much larger scale than with the Scyths, but probably the principle was the same. There were also small permanently covered carts. In later times the clumsy

¹ Compare Mr Hill's cart, which is Greek or Oriental, coming from Alexandria, JHS. XVII., p. 132.

² ch. XI. § 2

² ch. XI. § 2

³ op. cit. c.

² ch. xi. § 4, *CR*. 1878, pl. 1. 1. ³ op. cit. c. 2, Hakluyt p. 95, Rockhill p. 54 sqq.

52 Scythian Manner of Life

standing tent lifted down bodily from the cart has given place to the folding Jurta of the Kirgiz. The transition is shown in the annexed picture. It gives a view of a body of Kundure Tartars who in Pallas's time were just adopting the Kirgiz dwelling such as is shown on the extreme left, whereas they had used small white tents which were put bodily on to bullock carts and could be taken off again and set down on the ground. They also had Arbas or two-wheeled waggons with wooden sides and a rounded top, and similar ones are described among the medieval Tartars.

The picture gives as good an idea as may be of what must have been the general appearance of a body of Scyths.

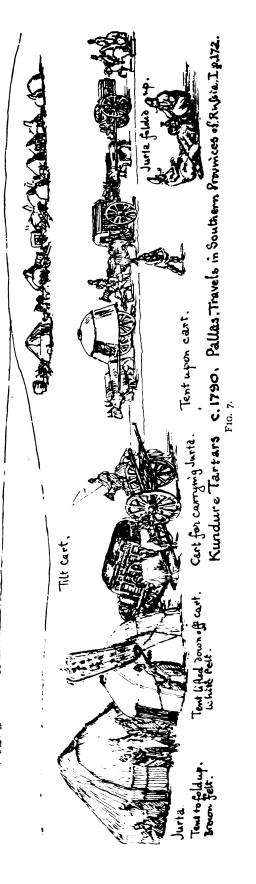
Towns.

Of the towns mentioned by Greek authors as being in Scythia we know neither where they were nor what. The agricultural Scythians may well have had settlements worthy of the name, and even nomads have always had some kind of capital (e.g. Karakorum) and places for trading. In any case they mostly seem to have been either on the coast as Cremni', or in the western half of Scythia3.

1 P. S. Pallas, Travels in the Southern Proviness of the Russian Empire in the years 1793 4. Eng. Trans. London, 1802, vol. 1, pl. 6, p. 172. Cf. K. D. Clarke, Proceeds, London, 1817, vol. 1., p. 304. The covered carts are well described by Josafa Barbaro in his Praggio alla Pana, ff. 03 sqq., in Ramusio, Novigation of Vitegi, vol. II., Venice, 1553. Marvo Polo, I. hi., Vule i. p. 252, 254, n. 2. Westberg, Le., puts Cremni at Eskykrym, the

old capital of the Crimea, to which it has given its name. It seems better to take the name as Greek and the place as a trading station. Besides Herodotus certainly thought of it as on the coast of the Macses for the shipload of Amazons landed there in the Sunomatae legend (tv. 110). Even so it is hard to imagine how they should have found their was through the Bospoins, still St Ursula sailing from Boriam to Rome was wrecked at Cologne.

3 About Smold are many goroxide, on entreuchments serving as retige camps, and some have worlded So objects, e.g. Sm. tt. pp. 52 or V. A. Gorestison's excavation of one at Bolish is not yet published but a mit ppolitical fac-



The ancients tell us nothing of the dress of the Scythians except that they were belts and trousers and pointed caps. We must therefore rely on representations which may be more or less certainly regarded as intended for Scythians. These fall into two classes, those presumably executed north of the Euxine—they are mostly in repoussé gold or silver and give us genre scenes—and those, very nearly all vase-paintings, due to Greeks in less close contact with the Scythians. The latter class is thoroughly untrustworthy, as might be expected, and chiefly depicts battle scenes.

Among the various barbarians which appear on Greek vases of only two can it be said on the artist's own authority that he was thinking of northern nomads. On the well-known François vase' we have three archers (p. 54, fig. 8), one labelled Euthymachos, one Toxamis and one Kimerios. Toxamis, whose name according to one authority "klingt echt skythisch," perhaps on the analogy of Lucian's very suspicious Toxaris, wears a patterned tunic, a quiver and a high pointed headdress. He is shooting with a bow whereon seems to be shewn the lacing which is essential in a composite bow though in its more developed forms it is usually concealed. Kimerios, about whose name there can be no doubt, is similarly equipped but has a bow-case instead of a quiver. But Euthymachos, who may well be a Greek archer, is dressed just the same, and in later vases archers, even though probably Greek, wear barbarian costume?

In the case of another painting of barbarians attempts have been made to identify them as Cimmerians. Dr A. S. Murray sees them in a horde of cavalry who are slashing down Greeks on a sarcophagus from Clazomenae³.

But these people are using great swords such as were not developed in S. Russia until after the Christian era. It is true that they have bow-cases, but these again seem not quite like the gorytus, the combination of bow-case and quiver which is peculiar to the Scythic area. It is hard to judge by mere silhouettes, but the swords and the caps seem much more like those of Central Europe; may not we call these folk Treres, the Thracian allies of the Cimmerians?

There is another vase (p. 55, fig. 9) which might conceivably represent Cimmerians rather than Scythians as they have hitherto been called by F. Dümmler who published it and others like it which form his class of "Pontic" vases. It is certainly tempting to see in these wearers of peaked hoods some East European Nomads. But all these vases are found in Italy and it would be rash to decide where they were made.

Another case of referring to our region unidentified barbarians is seen

¹ Mon. Ined. IV. 54, Wiener Vorlegeblätter VI. 1888, pl. 1.—V.

² e.g. Hartwig, Die Griechischen Meisterschalen, pl. XIV., Gerhard, Auserlesene Vasenbilder III. 264.

³ Terra-cotta Sarcophagi in Brit. Mus. pl. 1.
⁴ Rön. Mitth. 11. p. 171, pl. 1X. I am indebted to Mrs H. F. Stewart, of Newnham College, for calling my attention to this and to the Agathyrsi

vase. She has even been good enough to allow me to reproduce her drawing. Miss Jane Harrison has also helped me very much in this question of vasepaintings. To both I wish to offer my best thanks.

⁵ Prof. Furtwängler, Ant. Gemmen, 111. p. 88, would assign them to a local Italian make, and Mr H. B. Walters, Hist. of Anc. Pottery 1. p. 359, will not decide between Kyme and Italy.

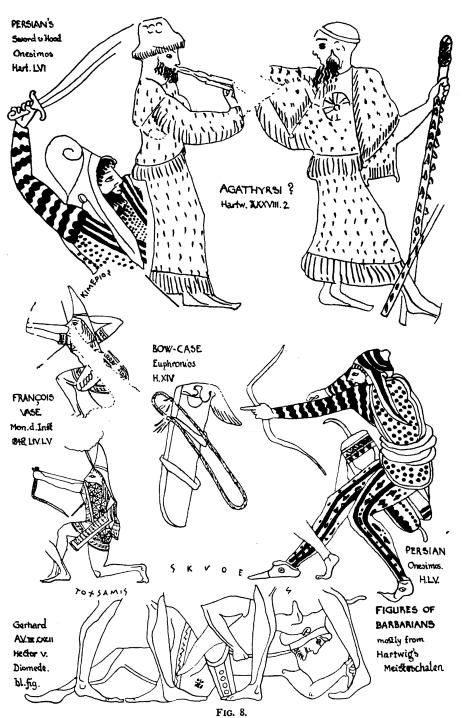




FIG. 9. "Pontic" Vase with Cimmerians (?).

in the case of a cylix (Fig. 8, top) figured by Hartwig¹. He guesses that these strange people are Agathyrsi, but he does not adduce any evidence: in his discussion he treats Herodotus in the most cavalier fashion and entirely ignores his distinctions between the various neighbours of the Scythians. He thinks the knowledge of detail points to the master having been a Scythian. That there was such an one we know² from a signature. One of the supposed Agathyrsi is wearing on his chest just such a rayed plate as was found at Nymphaeum (v. p. 213, f. 114).

We have a tangible reason for referring to a Scyth the fallen figure labelled (KVOE) that occurs in a black-figured vase (Fig. 8, below) with the combat of Hector and Diomede3. His hood with a high point behind and perhaps his bow-case, seem accurately remembered, but inasmuch as he wears a sleeveless tunic adorned with crosses and no trousers but greaves, he does not agree with more exact pictures. This freedom of treatment shews that we are not to expect accuracy in cases defined by no inscription, and therefore we cannot deny that a barbarian is meant for a Scythian just because his clothes do not exactly tally. On the other hand figures are much too often described as Scythians. I know of no figure upon a red-figured vase which I could be sure was meant for a Scythian. Phrygians, Persians, Greek archers equipped in Asiatic guise, most frequent of all, Amazons have a common dress which is not so far removed from that of the Scythians but that a Greek might apply it to the latter. These people all have a headdress with more or less of a point, but there are nearly always lappets which could be tied about the chin (Fig. 8, top). Their clothes seem made of a thin material, the trousers (or perhaps stockings) usually fitting quite close to the legs and the jersey having sleeves often of the same striking pattern. The close-fitting tunic over these is usually plain and sleeveless, sometimes patterned and sleeved (Fig. 8, below). Another form of tunic is rather flowing and then is generally sleeved or its place is taken by a cloak with sleeves that wave empty behindperhaps this is the candys. The wearers mostly have axes as well as bows. Their bow-cases have no place for arrows (v. p. 67, f. 17) and their

¹ op. cit. pl. XXXVIII., XXXIX. I, p. 421.
² Jahrb. d. k. deutschen arch. Inst. 1887, p. 144.
³ Gerhard, A.V. III. 192.

swords are not at all like any Scythic type. Only when they are labelled or when they are hunting griffins or engaging in any other distinctive occupation can we say who they may be. There is no doubting the

Persians on Hartwig's plates Lv., Lvi., nor the young Athenians on his plate xiv., so on the well-known vase with a δοκιμασία of horsemen the central figure is surely not an outer barbarian. Likewise the Amazons are often clear enough, in other cases, e.g. Hartwig's II. 2 and XIII., they are only to be distinguished by the inscriptions. The list of Scythians in Walters (p. 179) contains the examples which I have discussed and others which all appear to me Persian as far as I have been able to see them; so too with Reinach. It is much safer to call such figures oriental archers. An Arimasp such as we find on the calathos from the Great Blíznitsa (ch. XII.) is no doubt an Arimasp, but his dress is purely fantastic. The crowning example of the decorative use of barbarian costume is on the Xenophantus vase, and here we know that all are Persian. Yet Clytios would pass for an Amazon (ch. xi. § 7).

So likewise with engraved stones. There is one which represents a barbarian with a long cloak and a tunic leaning on a spear, and there is that signed by Athenades with a man sitting on a folding stool and trying the point of an arrow⁶. Both come from Kerch, yet neither is specifically Scythian but rather Persian: the latter is even closely paralleled by a coin of Datames satrap of Tarsus⁷. Terra-cottas found in the Crimea give us very generalised figures wearing it would seem the native hood and trousers



FIG. 10. Terra-cotta Barbarian or Greek in local costume, Kerch. KTR. p. 204, f. 188; CR. 1876, VI. 8.

and the Greek chiton: much what we should expect from Dio Chrysostom's account of the Olbiopolites⁸. But again this is very like Phrygian dress and may be merely another example of influence from Asia Minor, always strong on the northern Euxine. The last classical representation of conventional Scythic dress is on an ivory diptych of the 6th century A.D.9

Jahrb. 1889, pl. 4.
 v. Reinach, Répertoire de Vases, sub v.

³ So too Walters, op. cit. II. p. 176, f. 137. ⁴ e.g. Walters, pl. XXXVII. 2; Ashmolean 310, pl. 13; Louvre, Pottier, II. F. 126. K. Wernicke, "Die Polizeiwache auf der Burg von Athen" (Hermes, XXVI. 1891, f. 51-75) points out that the policemen in the fifth century were ever-present

models of Scythic dress.

⁵ ch. XI. § 13: KTR. p. 207, f. 190=ABC. XVII. 9.

6 KTR. p. 188, f. 178 = CR. 1861, pl. VI. 11.

7 KTR. f. 179.

⁹ Mon. Piot, VII., p. 79, pl. x.: Dar. et Saglio s.v. Diptychon.

Even in the other class of monuments apparently made by Pontic Greeks although they bear every appearance of accuracy we cannot be sure of every detail. Also we must remember that none of the folk represented need necessarily be Scyths in the narrower sense of the word, they are most of them in all probability Sarmatians. They are almost always shewn with beards. They wore close-fitting coats with narrow sleeves, cut rather short behind, but in front coming down much lower to a point. The flaps folded over so that the coat was in some sort double breasted without coming up to the chin. It was apparently trimmed and probably lined with fur.

It was adorned with, as it were, orphreys or bands of either embroidery or gold plates following the seams at the inset of the sleeves, down the middle of the back and at the sides. At the sides were little slits to allow free movement as in some modern coats. on the Kul Oba coats seem rather ornaments than actual buttons in both The belts kept them to. The coat was apparently the only upper garment, for the man facing on the Chertomlyk vase has for some reason freed his right shoulder of his coat and this leaves it bare. The under side of the coat is of different texture from the upper. The belt is apparently of leather and a strap run through a slit in it carries the bow-case. Trousers are either full enough to hang in folds and adorned just with a stripe down the seam, or tighter and covered with stripes round or lengthwise (Kul Oba). They were tucked into soft boots which were tied round the ankle and sometimes the instep as well. The fuller variety were so tucked in as to come down and partly conceal the boot'.

Such clothes had no need for fibulae, but we find pins with ornamental heads in Scythic graves.

Headdress.

We find these men with long hair and considerable beards. They either went bare headed or wore hoods more or less like the Russian bashlyk. It is difficult to tell which forms belong to the nomads and which to the Persians. The Asiatic nomads had very high pointed headgear, according to Herodotus and the Bisutun bas relief of Sakunka the Saka (p. 59, f. 12). But in other cases the apex of the hood is allowed to hang down, and that this is intended is shewn by the pattern on a band round the end of the chief's hood found at Karagodeuashkh. It contains griffins whose heads are towards the longer side of the band'. A somewhat similar band from Kul Oba goes the other way up and is adorned with figures and foliage's. A very remarkable object, which seems to be a

¹ These details can be best seen on the Kul Oba Vase (pp. 200, 201, ff. 93, 94), the Chertomlyk Vase (pp. 159–162, ff. 46–49), and the Kul Oba Necklet (p. 202, f. 97). Other representations are added from Kul Oba plaques bearing a man shooting a hare (p. 197), two men shooting in opposite directions (p. 197), man and woman with mirror (p. 158, f. 43), man with gorytus (p. 197), two men drinking out of one rhyton (p. 203). Also two men one with a severed head and one with a sword from

Kurdzhips (p. 223, f. 126, *CR*. 1895, p. 62, f. 140), the seated man from Axjutintsy (p. 182 f. 75 bis) and two wrestlers from Chmyrev barrow (p. 169, f. 62, CR. 1898, p. 27, f. 24); l.c. f. 26 is an obscure figure which seems to have on a sleeved coat without putting its arms into the sleeves; this seems a Persian fashion. Cf. Persepolitan sculptures, the "Alexander" sarcophagus, etc. Pins, p. 191, f. 83.

² p. 219, f. 122 = Mat. XIII. viii. 1, 2.

³ p. 202, f. 96 = ABC. II. 1.

headgear, is a golden truncated cone about 10 in. high made of four hoops separating three bands of pierced ornament, two of griffins and one between of palmettes set with garnets. This alone shews that its date is comparatively late. It was found by Prof. N. I. Veselovskij at Beslenêevskaja Stanitsa on the Kuban. Another strange head ornament, which may be put down to native influence, though found in a grave near Panticapaeum, is the heavy gold pilos¹ ornamented with volutes. But these stiff metallic headgears must have been rare. More commonly the stuff head covering is adorned with gold plaques, as we see on the Kul Oba vase and find in actual fact. For instance, a man's skull covered with gold plates of two patterns in situ, which must have been sewn on to a stuff cap. It was found at Sinjavka on the Rossava (Kiev Government)2.

Asiatic Nomads.

Almost as instructive as the accurate Greek representations of European Scythians are those of Asiatic nomads: perhaps the best of these is on a large gold plate from the Oxus Treasure³. Although the man who made it could draw, the style of execution is curiously

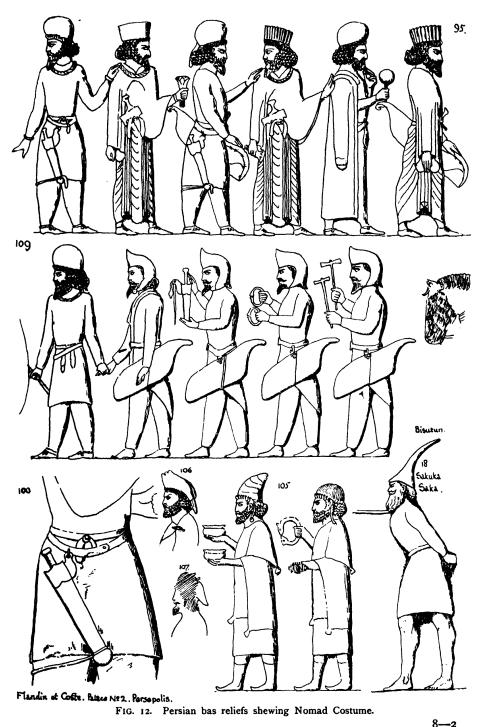


Fig. 11. Gold Tiara with Garnets. Beslenêevskaja Stanitsa. CR. 1895, p. 28, f. 43.

lacking in character; we cannot call it Persian or Scythic, though other plates of the treasure shewing more or less similar figures, women's as well as men's, do appear quite barbarous: also the distinctions of texture which would make the dress more intelligible are not rendered. The costume is almost identical with that we have been examining, save for a difference of cut in the lower border of the coat and the arrangement of the bashlyk which has The man carries a bundle of rods in his bands covering the mouth. These last details recall the regulations of the Avesta for right hand. preventing the breath from defiling the sacred flame and the barsom carried by the Mage. Therefore the presumption is that we have before us a Persian: but he is wearing a nomad's clothes, and his dagger makes clear for us the arrangement of the typical Scythic daggers with their side projections.

¹ ch. XI. § 12; KTR. p. 49, f. 56=CR. 1876, ² p. 192, f. 84; Sm. 111. p. 139, f. 71, and pl. XVIII. 2.

 ³ p. 255, f. 174, Dalton, No. 48.
 ⁴ Cf. the "Alexander" sarcophagus and the Pompeii Mosaic of Issus (Mus. Borb. VIII. pl. XXXVI. sqq.).



Bisutun and Persetolis.

On the bas relief of Bisutun we have a Saka labelled as such in the inscription of Darius: unfortunately being a prisoner he is without his weapons and his national dress. The only thing distinctive about him is the very tall cyrbasia upon his head. He is fully bearded.

The bas reliefs of Persepolis representing court ceremonies shew rows of figures' wearing flowing robes with full sleeves and skirts, high head-dresses, daggers with curious broad guards stuck into their belts, and laced shoes, alternating with men wearing the nomad costume, close-fitting coat and trousers, round-topped bashlyk without lappets, the Scythic dagger with its complicated attachment to the belt and shoes tied with a thong round the ankle. Both have the same way of wearing their hair, the same torques, and the same bow-cases decidedly unlike the Scythic gorytus. They are taking the same part in guarding the king, introducing persons to whom audience was to be granted. The difference of costume must go back to an original difference of race, but what relation they bear to each other we cannot say. It has been suggested that we have Medes and Persians, or that one sort are nomads hired to be a palace guard like the Turks at the court of the Caliphs.

At Persepolis, besides the men in nomad costume that appear to be palace guards, we have on the same platform which supported the Great Hall of Xerxes representations of strange peoples bringing tribute. Those for instance on No. 105 have pointed caps, and are carrying cups such as are used for kumys: also they have rings or bracelets quite similar to Scythic types (cf. p. 257, f. 178, No. 140 of the Oxus Treasure) and lead a cart with them. On No. 109 we have bowmen with metal objects, hammers and rings and daggers of the Scythic form. They are clothed in a kind of coat cut away in front and long behind, which irresistibly recalls Radloff's description of the curious garment in the big tomb on the Katanda (v. inf., p. 248). It just answers to his comparison of a dress-coat.

On the staircase of the Palace No. 3, or dwelling palace of Darius or Artaxerxes, we have similar people, but this time they are leading a sheep. When the great king is represented on a throne supported by various peoples, such figures occur again, so on the king's tomb to the S.E. of the platform called No. 10.

The peoples on these monuments are unfortunately only to be distinguished by their attributes, by the animals that accompany them, and by what we already know of Asiatic dress. The inscriptions do not help us to put names to them, but in some of these tribes we can surely see the Sacae, whom Herodotus puts among the subjects of the great king, and other northern tribes who were tributary or represented as such by the Persian court. Herodotus (VII. 60—66), in his review of the army of Xerxes, gives most of the tribes of Iran and its northern borders much the same clothes, that he says the Persians borrowed of the Medes;

¹ p. 59, f. 12=Flandin et Coste, Voyage en

1 p. 59, f. 12=Flandin et Coste, Voyage en

2 p. 59, f. 12=Flandin et Coste, Voyage en

3 op. cit. III. pl. 119.

4 op. cit. III. pl. 155.

5 op. cit. III. pl. 164.

the differences seem mainly in the headdresses, tiaras among Medes, Persians and Hyrcanians, Cissii with mitrae, Bactrians and Arii much like the Medes, so too Parthians, Chorasmians, Sogdi, Gandarii and Dadicae, while Sacae had tall-pointed caps.

Another picture of Persians and nomads is on a cylinder and represents a Persian king stabbing a nomad whom he holds by the top

of his hood. The attitude is exactly the familiar one of the king slaving a lion or other beast. The barbarian is trying to hit the king with a battle axe. He is bearded, wears a short sleeved coat, trousers and a gorytus just like the men on the Kul Oba vase. Behind each protagonist is an archer shooting. The bows are the typical Asiatic, sigma-shaped, asymmetrical bow suitable for use on horseback. Above all the symbol of the deity lends its countenance to the king's victory.

With all their differences these costumes are essentially the same, the costume which climate and custom force on the nomad, and it is probable that the Persians borrowed it from their nomad neighbours or kept it from the time that they were nomads themselves.

A later form of the same costume and especially of the headdress as worn by the Parthians, descendants of conquering Nomads, is shewn on the annexed coin.



Persian Cylinder. Combat between Persians and Sacae. Rawlinson, Five Great Monarchies, 1V. p. 321.



FIG. 14. Coin of Tiridates II. of Parthia B.C. 248-210, shewing pointed bashlyk encircled by diadem and with lappets below. R. Arsaces as Apollo on the Omphalos with hood, trousers and asymmetrical bow. Dalton, Treasure of the

Oxus, p. 48, f. 32 b.

Women's Dress.

Of the women's dress we have only a vague idea. In Kul Oba and Chertomlyk were found identical plaques with the figure of a woman seated holding a handled mirror and a nomad standing before her and drinking out of a horn. Over her dress she wears a cloak with hanging sleeves and her head is covered with a kerchief.

The dancers figured on a plaque from Kul Oba² are Greek and go back to Scopas (compare the dancers on the tiara from Ryzhanovka*) though their kerchiefs rather recall the Scythic fashion.

The best view of women's dress is that furnished by the three-cornered gold plaque from the headdress of the queen at Karagodeuashkh. On this we see the queen herself sitting as it were in state with a woman attendant on

² p. 197, f. 90 = ABC. XX. 5.

¹ p. 158, f. 45 = ABC. XX. 11. Front view, indistinct. Ib. = ASH. XXX. 20.

Sm. II. pl. XVI. 3.
 p. 218, f. 120=Mat. XIII. iii. 1.

each side behind her and a man on each side in front. Unluckily the plaque has suffered much from the falling in of the tomb's roof, but we can still make out that the lady wore a tall conical headdress such as that to which this very plaque belonged. From it a kind of veil fell down behind; the whole effect being like that of the medieval headdress in which fairies are often represented. Her dress can hardly be seen as she is almost shrouded in a great mantle adorned with dots, which may well represent gold plaques. Some such headdress belonged to the woman in Kul Oba, and about the woman's head at Chertomlyk could be traced a line of gold plaques (pp. 161 and 158, f. 45 = ASH. xxx. 16) forming a triangle with a rounded top and lines going down thence to the hands, the vestiges of a kind of mitre with long lappets'. She was covered with a purple veil of which traces were found.

Gold Plaques and Jewelry.

Both men and women among the Scythians adorned their clothes with the gold plaques so often referred to. Poorer people wore bronze instead (e.g. the grooms at Chertomlyk), but gold is the characteristic material. Hermitage is said to possess over 10,000 specimens. The plaques were sewn on to the clothes chiefly along borders and seams, more rarely as it were scattered over the field. They were of every shape and size, and bore figures of men, animals, and conventional patterns, such as palmettes, rosettes, and the pyramids of grains, called wolf's teeth. Enough specimens to shew their extraordinary variety are illustrated below (e.g. pp. 158, 178, 184, 192, 197, 208, etc., cf. p. 157). Of a special character are the strips which seem to have chiefly adorned headgear. They seem rather of barbarian work, being less adaptable than the plaques, and therefore made on the spot². The plaques are mostly found on the floors of tombs, not in situ but fallen from clothes that have rotted away hanging on pegs in the walls.

Solid gold also the nomads, both men and women, wore in every conceivable ornament. Herodotus mentions this of the Massagetae (1. 215), and Strabo of the Aorsi (x1. v. 8). Besides the high headgear of which we have already spoken, the women wore frontlets of gold mostly of Greek workmanship, and these were used also to support temple ornaments which took the place of earrings. This fashion is best illustrated by the finds at Kul Oba³. So at Ryzhanovka⁴ and Darievka⁵.

Earrings were also largely worn. Men it seems only wore one women had sometimes several pairs buried with them, at Kul Oba for instance, where the finest pair may be either true earrings or temple ornaments, Ryzhanovka*, Karagodeuashkh*, Chertomlyk, Zvenigorodka*.

This magnificence is still more marked in the torques and necklaces. The latter, as indeed most of the women's adornments, are chiefly of Greek

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<sup>5</sup> Sm. 11. x. 3.
                <sup>1</sup> Cf. ASH. 11. p. 107, KTR. p. 263.
<sup>2</sup> e.g. p. 157, f. 44. Alexandropol, KTR. p. 252, f. 231 = ASH. XV. 3. Chertomlyk, KTR. pp. 309, 310, ff. 269—271 = CR. 1864, V. 3—5. Darievka, Sm. 11. pl. X. XI. Axjutintsy, inf. p. 182.

<sup>3</sup> p. 195, f. 88 = ABC. II. 3, XIX. 1, 4, 5, including the well-known Athena heads.

<sup>4</sup> Sm. II. xvi. 3, xvii. 1, xviii. 14.
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 $^{^{6}}$ p. 237, f. 147 = *Vettersfelde*, I. 5, e.g. Chertomlyk, *KTR*. p. 264. p. 195, f. 88 = ABC. xix. 5. p. 178 = Sm. II. xvi. 4 and 5. ⁹ p. 217, f. 119=Mat. XIII. pl. III. 6 and 7, ¹⁰ KTR. p. 290.

work, or imitations of it, and present some of the most wonderful examples of goldsmith's skill that exist. The simplest are such plain circlets as that from Axjutintsy', just a thick gold wire, or with nothing more than simple grooves or other mouldings, as at Karagodeuashkh2: or a wire adorned at the end with rude animals' heads, such as one found in Stavropol government', at Akhtanizovka on the Taman Peninsula where the wire went round the neck several times and made a kind of collar opening by hinges', and at Volkovtsy'. At Chertomlyk were gold, silver-gilt and bronze torques, the latter for grooms and servants, the former with lions at the ends or all along the hoop for the king and queen. At Alexandropol a servant had a bronze hoop'. Better work, purely Greek, we find on the Salgir in the Crimea', and at Karagodeuashkh'; here the ends represent a lion fighting a The best known specimens are those from Kul Oba 10. Of these, the first, belonging to the king, ended in the excellent representations of nomad horsemen, to which we have already referred. The second belonged to the queen, and ends in lionesses. Of the third only the ends remain, adorned with a lion's head and bands of enamelled palmettes. So the warrior at Vettersfelde had a gold neck-ring (111. 3). The composition of these rings ending in lions' heads seems to be a Greek execution of the Iranian design exemplified in the collar and bracelets found at Susa by J. de Morgan¹¹. In feeling near akin to the Iranian, are two neck-hoops from Salamatino (Sarátov)12, in style they are almost identical with the Oxus Treasure.

Besides the solid gold hoops we have wonderful gold plaits and chains and necklaces, as at Karagodeuashkh and Ryzhanovka the but they do not equal those found in purely Greek graves as the Great Bliznitsa on the Taman Peninsula and at Theodosia.

Even more varied than the neck rings are the bracelets. At Kul Oba the king had in the sphinx bracelets on his wrists a pair of the most beautiful personal ornaments existing 16. But even here under the Greek execution lies an Iranian base; they recall the armilla published by Mr Dalton 17. More purely Greek are his queen's armlets with griffins and deer, and that with Peleus and Thetis from above his right elbow 18.

Very pleasing are those from Karagodeuashkh bending in sea horses. A pair found near the station Golubínskaja in the country of the Cossacks of the Don, just where it approaches the Volga, is interesting as offering a close analogy both in design and colouring of enamel to armlets from the Oxus Treasure. Simplest of all are mere wire circlets, such as those from Ryzhanovka, in bronze and in silver. Unusual in type are the ribbon-like

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<sup>1</sup> Sm. II. xxii. I.

<sup>2</sup> Mat. XIII. v. I and viii. 3.

<sup>3</sup> CR. 1897, p. 72, f. 167.

<sup>4</sup> p. 215, f. 118 = CR. 1900, p. 107, f. 210.

<sup>5</sup> p. 184, f. 77 = Sm. III. p. 83, f. 23.

<sup>6</sup> p. 158, f. 45 = ASH. XXXVII. 2, 7; cf. pp. 157, 161.

<sup>7</sup> KTR. p. 246.

<sup>8</sup> CR. 1891, p. 78, f. 58.

<sup>9</sup> p. 217, f. 119 = Mat. XIII. pl. II. 7—9.

<sup>10</sup> p. 202, f. 97, p. 197, f. 90 = ABC. VIII. 1, 2, 3.

<sup>11</sup> p. 271, f. 187. Cf. La Délégation en Perse du Ministère de l'Instruction Publique 1897 à 1902, Paris, 1902, pp. 95 and 97, Mémoires, T. VIII. (1905),
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Pl. IV. V., and E. Pottier, Gazette des Beaux Arts, 1902, p. 32.

12 CR. 1902, p. 139, ff. 246, 247.

13 p. 217, f. 119 = Mat. XIII. iv. 4, 3 and 1.

14 p. 179, f. 74, ib. p. 37, f. 7 = Sm. II. xvi. 9.

15 ch.XI.§ 12,XII. = CR. 1869, I. 13; ABC. XII^a. 3, 4.

16 p. 199, f. 92 = ABC. XIII. 1.

17 Archaeologia, vol. LVIII. (Oxus Treasure, No. 116).

18 p. 199, f. 92 = ABC. XIII. 2 and 3.

19 p. 217, f. 119 = Mat. XIII. iii. 8 and 9.

20 Sm. II. xvii. 5 and 6.

11 ib. xviii. 8 and 12.

armlets found in situ at Volkovtsy and Axjutintsy'. The Vettersfelde warrior had his arm ring?.

As well as his Greek armlets the Kul Oba king had almost plain native ones in pale gold or electrum, one large pair worn upon his upper arm and four as a defence below the elbow.

Finger rings were also much worn. For instance at Chertomlyk the queen wore ten rings in all, one on each finger; the king seems to have



FIG. 15. CR. 1890, p. 118, f. 71. Golubinskaja Stanitsa. Golden bracelet with enamel inlay.

had two, and the servants mostly one each. They occur of all materials, gold, silver, glass, iron, copper, even stone. Good specimens were found Three of these are specially at Karagodeuashkh and Ryzhanovka . interesting as having bezels set with Greek coins whose aesthetic beauty was appreciated in this way (Pl. v. 16).

Besides these regular species of adornments, the nomads had a taste for amulets or charms as we call them. Besides various pendants there have occurred animals' teeth, a natural gold nugget, a flint implement at Vettersfelde (1. 3), an Assyrian engraved cylinder, even a rough stone (Ryzhanovka).

Those who could not afford the precious metals used beads, either home-made of clay or stone, or of glass imported from the Mediterranean area; even cowrie shells found their way so far north. The best coloured plate shewing the variety of beads found in S. Russia is given by Count Bobrinskoj. As materials, he enumerates paste, rock crystal, shells, stones, carnelians, gold, silver, amber, birds' and beasts' claws and teeth¹⁰, and there seems to be also Egyptian porcelain. The glass beads comprise most of

¹ v. p. 184, f. 77, No. 425 = Sm. 111, p. 85, f. 24; Rep. Hist. Mus. Mescere, 1906. I. 17.

Furtwängler, I. 4.

y, p. 197, f. 90=ABC, XXVI. 3.

⁴ Lappo-Danilevskij, Sc. Antiquities, p. 420. ⁵ Mat. XIII. iii, 10 and 11.

⁶ Sm. 11. xviii. 5, 9, 10, 11, 13. p. 193, f. 85 = Sm. I. p. 77.

⁸ Sm. II. v. I.

⁹ Sm. 111. pl. xiii. 10 p. 208, f. 106 below = CR. 1877, ii. 13, No. iv. of VII Brothers.

the ordinary types. Further south corals have been found. The annexed cuts offer as good a representation as can be given without colour.



Pro. 44. 1/1. Pro. 45. 1/1. Pro. 46. 1/1. Pro. 47. 1/1. Pro. 48. 1/1. Pro. 49. 1/1. Pro. 50. 1/1. Pro. 51. 1/1. p29. Glas and Agree Beads from near Bealeneevskaja Stanitsa (Kuban') CR. 1895.



PRC. 52.⁴/1. PRC. 53. ¹/1. PRC. 54³/1. PRC. 55. ¹/1. PRC. 56.³/1. PRC. 56.³/1. PRC. 58.³/1. PRC. 59.⁴/1. PRC. 59.⁴/1. PRC. 61.³/1. FIG. 16.

Mirrors.

To admire themselves in all this finery the Scythian women had metal mirrors. These were of three types, that of the ordinary Greek mirror with handle in the same plane; that with merely a loop behind; and that in which the loop has been exaggerated to make a kind of handle at right angles to the plane of the back of the mirror 1.

In almost every rich tomb in which a woman was buried, there has been found a mirror. The first type is far the most frequent and corresponds to the common Greek type (there are none like the round handleless Greek mirrors in boxes), and many are of actual Greek work or direct imitations of it: we even get, as in Kul Oba, Scythian patching of Greek objects. It is a mirror of this type that is held by the woman on the plaque already mentioned (p. 158, f. 45). Three very simple examples are figured by Count Bobrinskoj², one has a bone, and one a bronze³ handle nailed on to the bronze disk. Equally clumsy in a different material is that from Kul Oba, on which a gold handle of native work has been added to the Greek disk of bronze⁴.

Greek mirrors of this type early found their way into Scythia, for some specimens (ch. xi. § 10) belong to the archaic period. Those of which the execution is purely Scythic, shew a reminiscence of Greek models, not merely in the general shape, but in the division of the handles into panels that were filled with characteristically Scythic beast forms. More often there has been worked out an arrangement thoroughly in the spirit of Minusinsk art, the end of the handle being adorned by an animal in the

skythisch-sibirischen Völkerkreises, Zt. f. Ethn. XXIX. (1897), p. 141.

¹ Cf. Bobrinskoj, Smêla, III. p. 67, and K. Schumacher, Barbarische und Griechische Spiegel, Zeitschrift für Ethnologie, XXIII. (1891), p. 81 sqq.; J. Hampel, Skythische Denkmäler aus Ungarn in Ethnologische Mittheilungen aus Ungarn, Bd IV. (1895), Heft I; P. Reinecke, Die skythischen Alterthümer im mittleren Europa, Zeitschrift für Ethnologie, XXVIII. (1896), p. 1, and Ueber einige Beziehungen der Alterthümer China's zu denen des

² Sm. II. xiv. 5, and I. x. 2.

³ Sm. III. p. 95, f. 44. ⁴ p. 201, f. 95=ABC. XXXI. 7.

⁵ Cf. Arch. Anz. 1904, p. 22, f. 1; Khanenko, op. cit. XLVI. 351 b, and those from Hungary, Pokafalva, and Transylvania, Olach Zsakoda, Hampel, l.c. ff. 25—29.

round (bear or wolf, v. p. 178, f. 73) or two beak-heads facing (p. 191, f. 83, No. 351, cf. daggers, p. 249, ff. 169—171, v. p. 266). Thoroughly Scythic are the mirrors with a loop at the back (v. p. 190, f. 82, No. 237). These are mostly smaller and may have developed from the phalerae, from which it is hard to distinguish them. In Siberia and in China, to which this type penetrated, the loop is sometimes in the shape of an animal, and this form was exaggerated in the west, so that the animal is disproportionately raised', or the loop develops into a handle at right angles to the plane of the mirror?

Bows, Bow-cases and Arrows.

The most characteristic weapon of the nomads was the bow. Owing to its material we cannot depend on actual remains for exact knowledge Two bows have been found in S. Russia, one at Michen near Elisavetgrad, the other near Nymphaeum, but they were not in such perfect preservation as to give us an exact idea of the shape. But we have many representations and descriptions by ancient authors. The Scythic bow is compared by Agathon to the letter sigma, probably the four stroke one, not the C, which is suggested by Ammianus Marcellinus (XXII. viii. 37) who likens it to the waning moon. The shape of the Black Sea is continually compared to that of a Scythic bow, the Crimea representing the handle with unequal curves on each side bending round to the string represented by Asia Minor'. This agrees fairly well with the bows on the Kul Oba vase (p. 200, f. 93), especially that which the archer is stringing, and with those on the coins of Olbia and Cercinitis (Pl. 111. 4, 1x. 1), and of Leucon of Panticapaeum (Pl. vi. 16). Compare the bow held by Arsaces, who on the Parthian coins takes the place of the Seleucid Apollo on the Omphalos. The asymmetry is best seen in a bow wielded by an Amazon, and quite possibly copied from a Scythian bow'. It is harder to judge of its shape when it is represented at the moment of aim being taken, as on the handle of the sword from Chertomlyk (p. 163, f. 51), and on the plaque with two nomads shooting in opposite directions. More often we see it represented in the gorytus or combined bow-case and quiver as on the Kul Oba vase, and the coins of Olbia.

This complicated curve of the bow made it more convenient to use on horseback (the Scyths are called ἱπποτοξόται, yet we have no view of one; on pp. 278, 279, ff. 201, 203 we have Siberians), and allowed it to be carried comfortably in the gorytus. The modern Tartar bow seems the very counterpart of the Scythic, and the bows pictured by Chinese artists in the hands of the Hiung-nu are also similar. These latter had bow-case and quiver separate, and the Manchu bow-cases in the British Museum are quite unlike the Scythic ones in all details of their construction 10.

v. p. 193, f. 85 top = Sm. III. xii. 3. ² Cf. p. 193, f. 85 bottom, Sm. 111. p. 113, f. 62 = Khanenko, op. cit. LVII. o.

3 Lappo-Danilevskij, Sc. Antiqq., p. 434.

⁴ ap. Athenaeum, p. 454 d.

⁵ Strabo, 11. v. 22. ⁶ p. 61, f. 14. BM. Cat. Parthia, Artabanus I., pl. v. 4-7; Mithradates II., pl. vi. 1, etc.
Gerhard, Auserlesene Vasenbilder, 11. ccxxii.

Cf. snake drawing bow on ring stone, ch. XII. = CR.

^{1861,} VI. 8, and the Persian's bow on p. 54, f. 8.

8 p. 197, f. 90. KTR. p. 135, f. 150 = ABC. xx. 6.

9 Cf. a little model of a bow and bow-case, p. 244, f. 152 = F. R. Martin, L'âge du bronze au Musée de Minoussinsk, XXX. 15, where the asymmetry is well shewn.

¹⁰ p. 96, f. 27. Certainly the Scythic bow was not a simple or "self" bow, but composite. For

These combined quivers and bow-cases ($\gamma\omega\rho\nu\tau\delta$ s) were peculiar to the Scythic culture, except in so far as they were borrowed by neighbouring nations. They were worn on the left side. The wooden model from a tomb at Kerch supplements the numerous representations on vases (Kul Oba, p. 201, f. 94) and gold plates (Kul Oba, p. 197, f. 90, Axjutintsy, small

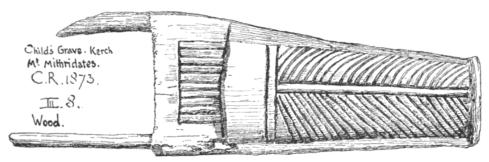


FIG. 17.

barrow, p. 182, f. 75 bis), on the coins of Olbia (Pl. 111. 4), a Greek grave-stone from Chersonese (ch. xvii.), and frescoes from Kerch (ch. xi. § 4), also on a cylinder representing the Great King fighting Sacae (p. 61, f. 13), whereupon the latter only have them. The Persians, as shewn on the bas reliefs (p. 59, f. 12), seem to have had simple bow-cases, and of such we have a model in bronze from Minusinsk (p. 244, f. 152). All these enable us to recognise as gorytus-covers three richly repoussé gold plates (from Chertomlyk p. 164, f. 53, Karagodeuashkh p. 221, f. 125, in very bad preservation, and from Iljintsy', district of Lipovets, government of Kiev, a replica of that from Chertomlyk), upon which the adaptation of Greek ornament to Scythic form is specially remarkable (v. p. 284). Less rich was the specimen from Volkovtsy (v. p. 183) of leather with five small gold plates instead of one complete cover. Such plates are the dots in the pictures named above. The quivers were likewise made of leather and adorned with gold plates, but we have none completely covered: at Axjutintsy, large barrow, the deer took up most of the surface (p. 181, f. 75). The three-cornered gold plates found in the VII. Brothers (pp. 209, 211, 213, ff. 108, 111, 114), and one of similar shape

this type see H. Balfour, Journal of Anthrop. Inst. XIX. (1890), p. 220 ff., XXVI. (1896), p. 210 ff. The Chinese character Kung (inf. l.c.)=bow suggests the four-stroke sigma. An unsymmetrical Manchu bullet-bow from Mukden in the Pitt-Rivers Museum at Oxford exactly resembles the pictures of the Scythic bows.

As an indication of the range of such a bow we have an inscription from Olbia, published and discussed by von Stern (App. 6= Trans. Od. Soc. XXIII. p. 12= Ios PE. IV. 460), making a prize shot to be 282 fathoms, about 660 yards, according to von Luschan (ibid.) too far for a self-bow but not unprecedented with a Turkish bow. Mr C. J. Longman gives 360 yards as the utmost for an English bow, and for a Turkish mentions 482 yards attained by Mahmud Effendi in London in 1795, and 972 yards shot by Sultan Selim in 1798 in the

presence of the British Ambassador to the Porte. Selim could shoot farther than any of his subjects (Badminton Archery, pp. 103 and 427). Major Heathcote, a practical archer, suggests to me that for use in war where only point blank shots could be effective, our self-bow would not be as inferior as appears from the above figures: also it did not require such careful protection from damp. Cf. also F. von Luschan, "Über den antiken Bogen," in Festschrift für Otto Benndorf, 1898, pp. 189—197; and Zusammengesetzte und verstärkte Bogen in Verhdl. d. Berlin. Anthrop. Ges. XXXI., 1899, p. 221, as noticed in Centralbatt für Anthropologie, Ethnologie und Urgeschichte, V. (1900), p. 84.

Ethnologie und Urgeschichte, v. (1900), p. 84.
The Persian bows were long (μεγάλα), Her. VII.
61, probably self-bows, the Sc. having their local (ἐπιχώρια) bows, c. 64.

1 Arch. Anz. 1903, p. 83; BCA. III. App. p. 51.

from Karagodeuashkh (p. 219, f. 123), are usually explained as the ends of quivers. Their number need not surprise us, seeing that a common man-atarms among the Mongols was required to have three quivers. In each quiver were very many arrows. At Volkovtsy there were about 300, and similar numbers in those found in other tombs. Each Scyth could well spare an arrow-head for the king's monumental cauldron. The arrows were made usually of reed, sometimes of wood, and were about 30 in. long (e.g. at Chertomlyk). The bow was about the same length. The gorytus is 49\frac{1}{2} cm. and about a quarter of the bow sticks out beyond in the illustrations, so the whole would come to 60 or 70 cm., say 2 ft. 6 in. The fragments of the Nymphaeum bow made up about that amount. The breadth would be about 30 cm., say a foot3.

The arrow-heads are of stone, bone, iron, and especially of bronze. A few are the shape of small spear-heads with two cutting edges, but the typical shape is of triangular section. Count Bobrinskoj discusses the various types and illustrates a very varied series. The triangular ones seem the latest, being furthest from the stone forms. Some have a small socket, others also a kind of barb or thorn on one side. Many a head has a hole for a sinew to bind it to the shaft. Doubtful traces of feathers have been found by Count Bobrinskoj. In general arrow-heads are far commoner in Scythic graves than in those of any other people. Of the 200 found in Kul Oba' most were gilt, and the bronze is perhaps the

hardest known⁸.

Spear-heads were found in most of the well-known tombs, copper in the Round Barrow at Geremes, in Tsymbalka bronze, most often iron, e.g. the Stone Tomb at Krasnokutsk, Chertomlyk and Tomakovka. So, too, many in Count Bobrinskoj's district about Smêla. The shape is that of a leaf with a socket running up into a kind of midrib. In the frescoes of the tomb of Anthesterius (ch. xi. § 4) the spears are painted of enormous length, 15 or 20 feet apparently, but at Chertomlyk was found one about 7 feet which is much more reasonable. They also used shorter darts, which are mentioned by the ancients, and are represented in the hand of the hare hunter and on the Kul Oba vase. Apparently the weapons grew longer with time, for Tacitus" speaks of the great Sarmatian spears (conti).

Swords, Daggers and Sheaths.

At close quarters the Scythians used swords or daggers, less characteristic than the bows, but in themselves interesting for their form. Hardly any of them are worthy to be called swords. The longest specimen of the type comes from outside the ordinary region for Scythic It is 113 cm. long, and its haft is 18 cm. It was found at

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<sup>1</sup> De Plano Carpini ap. Rockhill, p. 261, n. 3.
<sup>2</sup> Her. IV. 81.
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³ Lappo-Danilevskij, Sc. Antt., p. 434.

⁴ p. 158, f. 45; p. 190, f. 82 = Sm. II. xiv. I.
⁵ p. 190, f. 82 and Sm. III. p. 9 sqq. and pl. xvI.

Cf E. Lenz, BCA. xiv. p. 63 sqq.
⁶ BCA. xiv. p. 31.

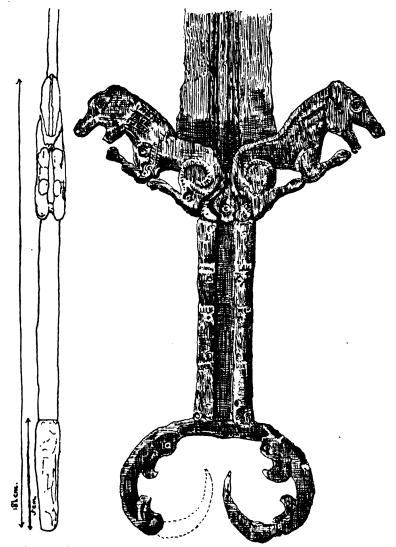
⁷ ABC. xxvII. 11.

⁸ ib. 20 gives an arrow nock. The shaft was

⁹ v. p. 190, f. 82 and Sm. 11. xxv. 6 and 7; 111. ii. 8; Collection Khanenko, vol. II., pt 3, xxxviii.

^{164, 165.} 10 p. 197 = ABC. XX. 9. 11 *Hist*. 1. 79.

Aldoboly, in the county of Háromszék, Hungary¹. To judge by their sheaths those from Kul Oba, Chertomlyk and the Don had blades about



J. Hampel. Skytnische Denum. 2115 Ungarn, p. 19. £. 22. Iron Sword from.
Aldaboly (Ce Három Szék) Total Length 1832cm.

FIG. 18.

54 cm. long, and most specimens of daggers are shorter than this. Almost every Scythic grave has yielded one or more such daggers. The pommels

¹ J. Hampel, Ethnologische Mittheilungen aus mäler aus Ungarn, f. 22 a, b, c. Ungarn, Bd Iv. (1895), Heft I; Skythische Denk-

are usually plain knobs, sometimes they have a pair of beak-heads or beasts curled round towards each other; these curls degenerating in the later and longer specimens into a likeness of the antennae of Hallstadt swords; but the make of the weapon is quite different'. The guard is narrow and heartshaped, rarely projecting enough to be any protection. The hilts are often overlaid with gold as at Vettersfelde², Chertomlyk (both the king's great sword and three others, p. 163, ff. 51, 52), Kul Oba' and Karagodeuashkh where the blade was rusted right away. In western Scythia about Kiev these swords have occurred very often, e.g. at Darievka, Axjutintsy, several at Volkovtsy and Prussy near Cherkassk⁷, and one in the district of Dubno in Volhynia⁸.

As we go west swords of this type grow steadily longer. The Siberian dagger is the short sword of Chertomlyk and the long sword of Aldoboly, which would almost merit the description in Tacitus of the swords of the Sarmatae³. This seems to correspond to an evolutionary progress, the Minusinsk daggers are certainly early compared with the Hungarian swords¹⁰: in between come one from Ekaterinenburg (54 cm.), from Izmailovo (Samara, 63 cm.) and another from near Samara (83 cm.)". Such swords also made their way to the north to Ananjino and the basin of the Kama¹². The above examples all have iron blades and hilts of iron, gold or bronze: a whole bronze dagger was found by chance at Kamenka, district of Chigirin¹³. The all bronze dagger is rare in Europe though common in Siberia".

This type of sword had a special sheath to suit it, marked in the older examples by special adaptation to receive the heart-shaped guard, in others by a special tip or chape made separately and often lost (it was this separate tip (μύκης) that caused the death of Cambyses, by coming off as he jumped on his horse and allowing his dagger to run into his thigh 16) and a projection on one side by which it was hung to the belt16 in the manner shewn by the Oxus plaque (p. 255, f. 174), and the Persepolitan reliefs (p. 59, Nos. 95, 100). The sheaths have of course perished, but they were often covered with gold plates which enable us to judge of their shape. An early plate of this type forms part of the Oxus Treasure (p. 255, f. 174). It is in very bad preservation, having been snipped up into small pieces, some of which as well as its tip are lost. It is decorated with hunting scenes in which the king appears under the familiar winged disk, all in a rather mechanical style, bearing the same relation to Assyrian bas reliefs that the Chertomlyk bow-case bears to Greek marbles. The costume of the figures is rather

¹ p. 189, f. 81 = Sm. 1. vii. 2 and 5; but cf. E. Lenz, BCA. XIV. p. 62.

² Furtwängler, III. 5.

³ ABC. XXVII. 10. Cf. ibid. 9 from the otherwise Greek tomb of Mirza Kekuvatskij.

⁴ Mat. XIII. v. 4.

⁵ Sm. 11. xv. 7.

⁶ Sm. 11. xxii. 4.

⁷ Coll. Khanenko, Vol. II. Part 2, pl. II., III.; Part 3, pl. XXXVIII. 166.

8 ib. 167.

⁹ praclongos, Hist. I. 79.
10 e.g. others from Pilín, Berey and Neograd.
Hampel, op. cit. ff. 16—18.

¹¹ Béla Pósta in Gr. Eugen Zichy, Dritte Asiatische Forschungsreise, Bd III., Budapest,

^{1905,} p. 102, f. 57.

12 v. p. 258, f. 179. D. A. Anuchin, On certain forms of the oldest Russian swords, *Trans. VI. Russian Arch. Congress*, Odessa, 1886, Vol. 1, p. 100, p 235 sqq.; very late one 3 ft long from Koshibeevo, Tambov Government, A. A. Spitsyn, Antt. of Kama and Oka, Mat. XXV. pp. 11, 59, pl. XII. 3.

¹³ p. 189, f. 81, Sm. III. xi. 5.

¹⁴ p. 243, f. 150=Mat. III. vii. 10; p. 249, f. 169.

¹⁵ Her. III. 64.

¹⁶ The bow-case being worn on the left side, the sword was on the right, not a common practice.

Scytho-Persian than Assyrian, and the patterns which mark the structure of the sheath are distinctly queer, suggesting a barbarization of Greek models. Doubts have been cast on its authenticity, but it shews a combination of motives upon which a forger would hardly hit, and which may be explained by our supposing its maker to have been a craftsman trained in the Assyrian traditions and working for a nomad.

This view is supported by the analogies presented by the Melgunov dagger and sheath (pp. 171, 172, ff. 65—67) which, being of the same Scythic shape, is regarded as being a product of Assyrian work of the early vith century B.C. The blade was 43 cm. long. The illustrations make a long description unnecessary. At the tip were two lions rampant facing each other, along the sheath eight monsters with fishes for wings shooting towards the hilt. The fifth from the tip is lost on both sides, but his tail appears on that not shewn. At the hilt end is the familiar composition of two figures and the tree of life. The projection for hanging has a typical Scythic deer, otherwise the workmanship seems purely Assyrian.

In 1903 a very close parallel to this hitherto unparalleled decoration was found by Mr D. Schulz at Kelermes near Majkop. The description of the sheath sounds identical, but the motive of two beardless winged genii adoring a tree at the upper end is repeated upon the guard, while the grip is adorned with a geometrical design. The work is finer than in Melgunov's example.

Another sheath, important for its forming a link between these and the later Siberian style, was found in 1901 near the Don².

Of Greek work we have such plates from Vettersfelde (p. 237, f. 146), Kul Oba (p. 203, f. 98) and Chertomlyk (p. 164, f. 53). For the same kind of dagger quite a different sheath, without the side projection, is one from Romny (government of Poltava, p. 186, f. 79, No. 461).

Another type of smaller dagger and sheath, apparently of Greek work, occurs at Tomakovka³ and Vettersfelde⁴.

As to the custom of setting up a sword and worshipping it, the attendant circumstances seem rather to suggest its belonging to some Thracian tribe in western Scythia within reach of trees. The ascription of the same custom to the Alans by Ammianus Marcellinus (xxxi. c. ii. 23) is of a piece with his wholesale borrowing of details from Herodotus to adorn his account of Sarmatia. That Attila regarded the finding of a sword as a good omen of his warlike might does not prove that the Huns actually worshipped a sword as the incarnation of the god of war. However, Geza Nagy cites something of the sort among the Bolgars, the Voguls, the Tunguz and the ancestors of the Magyars. Elsewhere (vii. 64) Herodotus says of the Sacae, whom he identifies with the Scyths, that they had daggers ἐγχειρίδια, though in iv. c. 70 he speaks of their putting an acinaces into the bowl from which they are to drink for the ceremony of blood brotherhood. But even acinaces need not mean a very long sword, it is usually applied to the Persian sword, which is represented as short

v. p. 222 and B. V. Pharmacovskij in Arch.
 Ans. 1904, p. 100. This find is not yet illustrated.
 v. p. 270, f. 186, Kieseritsky, Arch. Ans. 1902, p. 45 f.

p. 45 f. 3 p. 158, f. 45 = ASH. XXVI. 16.

⁴ Furt. III. 2. ⁶ Her. IV. 62.

<sup>Jordanes, Get. c. xxxv., quoting Priscus, fr. 8,
Müller, FHG. 1v. p. 91.
op. cit. p. 49 sqq.</sup>

on the reliefs of Persepolis. Had he meant an ordinary sword he would have said ξίφος. The archaeological evidence therefore exactly bears out the natural inference that the Scyths used short swords, hardly more than daggers, and similar to those of the Persians.

Besides swords or daggers we find knives in Scythic tombs, seemingly knives for general use rather than weapons. The best example of the type is that from Kul Oba', which has an ornamented gold handle and a steel blade. The whole is not unlike a modern table-knife. Usually, as in the country about Kiev, they have plain bone handles'. Two similar ones were found at Chertomlyk. Near Zhurovka was found an iron knife, quite recalling the Minusinsk "cash" knife'.

Axes.

Herodotus further speaks of the Scyths as having axes, sagaris; they formed part of the equipment of the Sacae of the Persian host (vII. 64)* and were used with the sword in the ceremony of blood brotherhood. The Greeks mostly thought of these as double axes, and it is such that we find in the hands of Amazons and of barbarians, vaguely meant for Scythians, on fantastic works of art. On the coins of Olbia (Pl. III. 4) we find weapons with one cutting edge, and on the other side of the handle a curious projection whose nature it is somewhat hard to make out. On coins of Cercinitis and on the plate from Axjutintsy (p. 182, f. 75 bis) a seated figure holds such an axe. Moreover, actual finds do not help us much to determine the real shape of Scythian axes. It may be noted that most of these finds and the coins likewise come from western Scythia, and it is in the western legend that special mention is made of axes.

Earliest in type are axe heads from west Russia about Smêla, all unfortunately chance finds. They include a very simple one with the beginnings of flanges, and three socketed specimens, distinguished from the ordinary European types by a double loop. Such an one was also found at Olgenfeld' (Don Cossacks). Much the same types extend across to Siberia (p. 243, f. 151). A single-looped axe occurred at Pavlovka in Bessarabia. Very modern looking iron axe-heads found by Mazaraki at Popovka (Romny, government Poltava) seem to belong to late Sarmatian times. More characteristic is a bronze model axe-head from Jarmolintsy; it is not known from what particular barrow. The wrong end is in the form of an animal's head. Another such model¹⁰ has the haft preserved. These objects seem to have been symbolic and call to mind the model picks from Siberiaⁿ. The real axes most like those on the coins are an iron specimen from near Romny¹², and one in bad preservation from the banks of the Salgir¹⁸. It is certainly remarkable that the axe is so rare in characteristically Scythic graves, seeing that the Greeks evidently associated

10 Sm. 11. xxiv. 20; 111. xi. 1, both on p. 179,

¹ v. p. 197=ABC. XXX. 10.

² v. p. 190, f. 82, Sm. 11. xv. 4 and 6. Cf. 1.

iv. 11. Lappo-Danilevskij, Sc. Antt., p. 425.

³ BCA, XIV. p. 21, f. 52. Cf. infra, p. 246.

⁴ Her. IV. 5.

⁶ ib. Nos. 3, 17, 18=p. 190, f. 82.

⁷ CR. 1891, p. 80, f. 59.

⁸ Ib., p. 85, f. 64.

⁹ Sm. 11. xxv. 1, 8, 14.

f. 73. A model axe to serve as check-piece of a bit, ib. = Sm. II. iv. 12, and p. 214, f. 115 top.

11 p. 242, f. 150; Radloff, Sib. Ant. 1., pl. XVI. and XVII.

Khanenko, op. cit. II. Pt 3, pl. XXXVIII. 170.
 CR. 1891, p. 78, f. 56. V. A. Gorodtsov gives a survey of all types of axes found in Russia in Rep. Hist. Mus. Moscow, 1906, pp. 94—135.

the Scyths with axes. At last in 1903 a really fine axe, overlaid with gold work in the Assyrian style, has been found at Kelermes'.

Besides axes the Scyths may well have used maces, for instance that figured by Count Bobrinskoj², but as this was a chance find it cannot be certainly referred to the Scythic period³. The use of lassos by the Sauromatae is mentioned by Pausanias (1. 21. 5). Also sling stones have

been found, but to whom they belonged is not clear.

To keep his weapons sharp the Scyth always carried with him a perforated whetstone, and no object is so characteristic of the Scythic graves. So de Plano Carpini (c. 17 § 6) says of the Tartars that they always carry a file in their quivers to sharpen their arrow-heads. Often the hone is set in gold, plain as at Karagodeuashkh* and Vettersfelde*, more usually adorned with palmettes and other Greek patterns, as at Kul Oba*, Chertomlyk, Salgir*, and Zubov's barrows*. At Kostromskaja*o and Grushevka (p. 177, f. 72) were found large slabs of stone which had served as whetstones.

Shields and Armour.

On the Kul Oba vase (pp. 200, 201, ff. 93, 94) we find long-shaped shields, oblongs with rounded corners. Hence Furtwängler has supposed that the Kul Oba deer and the Vettersfelde fish adorned shields of this shape. But at Kostromskaja, a deer very similar in outline to the Kul Oba deer was found attached to a thin round iron shield, 33 cm. across", and it is quite probable that this gives the size and form of the Kul Oba and Vettersfelde shields. Iron scales were found round the gold panther at Kelermes. In any case the shields were quite small and suitable for use on horseback. The oblong gold plate with a deer from Axjutintsy' may have been a shield ornament or may have decorated a quiver, inasmuch as there was a heap of arrows below it. The round gold saucer from Kul Oba was certainly a drinking cup, not a shield boss. Stephani calls it The oval shields with a lozenge boss borne by combatants on catacomb paintings and shewn on gravestones can hardly be called Scythic. (Ch. xi. §§ 3, 4.) Aelian¹⁴ says that the Scythians covered their shields with Tarandus (reindeer) skin.

The only certain breast-plate which appears to have been made for a Scythian is that from Vettersfelde. Another possible breast-piece is the silver relief of a golden-horned hind with her fawn and an eagle below found in the second of the Seven Brothers. This seems to have belonged to a coat of scale armour from the same tumulus and it is clear that scale armour was characteristic of the nomads. Pausanias gives an interesting description of the Sarmatian armour, which seems to have struck him by its ingenuity (I. 21. 6). He and Ammianus Marcellinus (XVII. xii. 1) say

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^{10} p. 225, f. 128 = CR. 1897, p. 12, f. 44. ^{11} Ibid. and p. 226, f. 129 = CR. 1897, p. 13,
    <sup>1</sup> Cf. p. 222 and Arch. Anz. 1904, II. p. 100.
    <sup>2</sup> Sm. 111. xii. 1.
    <sup>3</sup> Cf. a statuette at Odessa. Lappo-Danilevskij,
op. cit. p. 432.

L.-D. loc. cit.
                                                                                     p. 181, f. 75 = Sm. 11. xxi. 3 and p. 163.

    13 p. 204, f. 99 = ABC, XXV., KTR. p. 85, f. 114.
    14 De Animal. 11. 16. Thoraces, Pliny, NH.

    <sup>5</sup> Mat. XIII. vii. 7.
     6 p. 237, f. 145 = Furt. 11. 2.
                                                                             VIII. 124.
       p. 197, f. 90 = ABC. XXX. 7.
                                                                                  16 p. 237, f. 145 = Furt. 11. 1.
     8 CR. 1891, p. 78, f. 57.
                                                                                  <sup>16</sup> v. p. 207, f. 105 = KTR. p. 195, f. 183 = CR.
     <sup>9</sup> BCA. 1902, I. p. 103, f. 31.
                                                                             1876, IV. I.
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that it was of horn or horses' hoofs. Of this material we have no specimens, but iron¹, bronze and bone are common enough. The 'scales were sewn on to a leathern or stuff backing, being arranged like feathers or "like the scales of a dragon. And if any one may not have seen a dragon he must have seen a green fircone." Apparently the backing was always present, the arrangement of the holes does not permit the scales being held in place by a system of thongs plaited and intertwined as in Japanese and Tibetan scale armour. But in the specimens at Oxford the scales are held so well by interlaced thongs that the backing might have been left out.

Examples in iron and bronze have been found in almost all the tombs of Scythic type, Kul Oba², Alexandropol³, Seven Brothers⁴, Krasnokutsk and Tsymbalka⁸, Bezchastnaja⁸. From Popovka come scales of bone polished on one side. There are other such in the Historical Museum at Moscow. Bronze (Kul Oba) and iron (Alexandropol) scales were sometimes gilt.

Further defensive armour consisted in greaves which are always of purely Greek form and work; such were found at Chertomlyk. Unique are a cuirass and a pair of brassarts of vth century Greek workmanship found near Nicopol in 1902: at Kul Oba were sollerets for the king's feet.

A helmet of pure Greek work from Galushchino (Kiev) is figured by

Khanenko⁸, and another Greek helmet was found at Volkovtsy.

The native helmet seems to have been covered with scales. Lenz (l.c. p. 61) figures what may be part of one, and they are well shewn on the frescoes of the catacombs at Kerch, whereon the people wear scale helmets and coats of scale armour. The latter were so long and awkward that the wearers had to sit their horses sideways. The Greeks wear shorter mail covered with some kind of surcoat. The pictures are an instructive commentary on the remarks of Tacitus (l.c.) on the clumsy arms and mail of the Sarmatians, which rendered them helpless against the handy weapons of the Roman legionaries. The resemblance of this kind of mail to that worn by the Tartars and to that ascribed by the Chinese to the Hiung-nu need not be insisted upon.

Horse trappings.

The horse trappings of the Scythians are perhaps the most characteristic of their belongings. In some cases the horse must have been most richly caparisoned, in a style that recalls the magnificence of Oriental equipment from the time of the Assyrians to the present day; especially the fashions of the Sassanian kings as pourtrayed on dishes and bas reliefs.

When Scythian horsemen are represented by the Greeks they seem Those on the Kul Oba torque¹¹ and the Hare equipped quite simply.

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1 Cf. Tacitus, Hist. 1. 79.
<sup>2</sup> ABC. XXVII. 3—6.
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XXXIX.; Sm. III. viii. 15—21, cf. II. p. 173; v. inf. p. 188, f. 80. The subject is discussed by E. Lenz, publishing scales from Zhurovka, BCA. XIV. p. 54. ⁷ Archaeol. Chron. of S. Russia, No. 1, 1903, p. 36, pl. v.; ABC. xxvIII. 9.

8 op. cit. II. 2, pl. IX. 218.

9 v. ch. XI. § 4 = CR. 1872, text pl. IX.; and = KTR. p. 211, f. 193.

10 Cf. KTR. pp. 414, 416, ff. 372, 373.

11 p. 202, f. 97 = ABC. VIII. 1.

⁵ p. 158, f. 45 = ASH. XI. 13.

⁴ KTR. pp. 273, 276, 277.

⁵ ib. pp. 268, 270.

⁶ ib. p. 278. Illustrations shewing the construction may be found in ABC., l.c., JHS. 1884, XLVI. (from Kerch, now in the Ashmolean); inf. p. 231, f. 134 (Zubov's Farm); CR. 1897, p. 13, f. 45; Khanenko, op. cit. 11., Part 2, pl. VII, Part 3, pl.

hunter' seem even to be riding bareback; the very spirited sketch of a Scythian being dragged by the reins shews a saddle with some kind of saddle cloth cut into vandykes, but is very vague about the girths and so is no evidence as to stirrups. On the Chertomlyk vase (p. 161, f. 48) we have a man hobbling a hog-maned pony with a simple saddle, with a girth and martingale but no crupper, and as it seems no stirrups, though a thong hanging from the girth looks rather like a stirrup leather. So on the Kerch frescoes there seem to be no stirrups. The bridles look much like modern ones, except that the cheek pieces are usually longer than nowadays and generally have three loops in them, probably for two pairs of reins and something answering to a curb. The actual bit is made in two pieces like a modern snaffle. They were sometimes made more effective with ports (έχινοι). The types of bits and cheek pieces (Psalia) are the same right across to the upper Jenisei. Horses slain to accompany their owner into the next world are mostly provided duly with all necessary harness, though in some cases the front row of a number of horses is so equipped, but not the back row, or there is a regular gradation from harness elaborately adorned with gold, to silver, bronze and iron bits. There is said to be a Scythian saddle in the Hermitage, but its provenance does not seem clear.

When driven in carts, horses seem to have had much the same bridle, but no saddle. There must have been some kind of collar, but our only view of a Scythian cart, that on the coin of Scilurus, shews neither this nor shafts.

Of the carts, especially the funeral cars, we have considerable remains, in the Alexandropol barrow a space seven feet long was covered with fragments of the car, at Krasnokutsk and Chertomlyk the pieces were piled in a heap about four feet long by three feet broad and two feet high. Here were found fragments of tires, naves of wheels, nails and bolts, rivets and various strips of metal. At Krasnokutsk there seem to have been eight wheels, but perhaps here were two cars, or else one so great as to compare with those described by Hippocrates or even Rubruquis, as used for carrying the dwelling houses. In most cases the car had been broken up on the site of the tomb, at Karagodeuashkh so effectually that hardly anything was left. Harness and cars were decorated with all imaginable metal plates of gold or bronze. Especially important were the frontlets and cheek ornaments on the horses' heads. The finest specimens of all are perhaps those found in Chmyreva barrow .

¹ p. 197, f. 90 = ABC. XX. 9.

p. 204 D, f. 103 = ABC. LXXIX. 9.

³ v. p. 214, f. 115 = CR. 1876, p. 133, VII. Brothers, No. vI.; Voronezhskaja, CR. 1903, p. 71, f. 152.

⁴ Stephani calls them ψάλια, and this term is usual in Russian archaeological literature. But E. Pernice (LVI. Winckelmann's Programm, Berlin, 1896, Griechisches Pferdegeschirr, p. 34, note 30) shews reason to believe that the cheek pieces (Seitenknebel) were called λύκοι, whereas ψάλιον was a vague word for a bit as a whole. From the cheek pieces I would distinguish the cheek ornaments something in the shape of a lop-sided leaf, which with the long frontlets and round phalerae served merely for adornment (cf. the specimens

from Volkovtsy, p. 185, f. 78, and others). The elaboration of the bit and bridle was occasioned by the indocility of the northern horse. Hence it is that much the same devices were needed over the whole of his area-whereas the thoroughbred was docile and obeyed a mere halter. (Cf. W. Ridgeway, The Origin of the Thoroughbred Horse, passim.) So too the Scythians alone among the ancients rode geldings: a practice which is described as originally Turkish. (Vámbéry, op. cit. p. 195.)

6 v. Lappo-Danilevskij, op. cit. p. 456.

6 p. 50, f. 4 = KTR. p. 175, f. 170.

⁷ *Mat.* XIII. p. 50. 8 p. 166, ff. 54, 55 = *KTR*. pp. 269—272, ff. 241—243, from Tsymbalka; *Sm.* III. p. 83 sqq., ff. 32,

Harness was also adorned by phalerae, chiefly at points where strap met strap. These may be plain or be decorated, sometimes with the most exquisite Greek work, as in those from Chmyreva. The plain phalerae are hardly to be distinguished from the looped mirrors, and may well have given rise to the type. Many of the plates of bronze and gold found in various graves seem to have decorated straps rather than garments; and the whole class of so-called Siberian gold plaques seems to have adorned horse trappings. The nomads have always loved to decorate these as well as themselves. As Herodotus says of the Massagetae (I. 215), they adorn their bits and bridles with gold phalerae.

Most interesting for their purely Scythic style are the cheek pieces. Something of the sort was necessary if only to prevent the bit being dragged sideways out of the horse's mouth: specimens which occur without trace of cheek pieces? may have had them of bone, or possibly some more effective arrangement of straps. They can be well seen in place in the specimens from Bobritsa near Kanëv's, and others from the district of Verkhne-dnêprovsk'. At Bobritsa there were three bits, and the bridle of one was adorned with four big round silver plaques which came on the horse's neck, two smaller ones from above his mouth, two long-shaped ones for cheek ornaments and a frontlet 24 cm. long and more or less triangular, adorned with a gold crescent'. At Axjutintsy' the cheek pieces were still

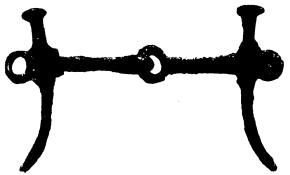


FIG. 19. BCA. IV. p. 33, f. 7. Bronze bit from Constantinovo (Kiev Government).

attached to the bit itself, so at Constantinovo⁷ and Zubov's Farm⁸. Separate cheek pieces of interesting style were found in most of the Seven Brothers', and at Nymphaeum in what seemed otherwise a Greek grave. The silver trappings from Krasnokutsk are specially remarkableⁿ.

^{33, 35, 41,} or better Khanenko, 11. 2, pl. XXI.-35, 35, 401—403 = p. 185, f. 78 from Volkovtsy; Sm. III. p. 99, f. 56 = Khanenko, II. Pt 3, pl. LVI. from Berestnjagi; from Chmyreva, p. 169, ff. 60, 61, CR. 1898, pp. 27, 28, ff. 27, 30, 31, 37; a frontlet of the same type, but native style, from Alexandropol,

p. 158, f. 45 = ASH. XIII. 6.

Chmyreva, p. 168, ff. 58, 59. Bagaevskaja, CR. 1904, p. 125, ff. 217, 218. Janchekrak, Rep. Hist. Mus. Moscow, 1907, p. 13, pl. 1.

² e.g. Sm. 1. v. 10 and 12. ³ Sm. 111. xix. 4, and p. 128.

⁴ p. 191, f. 83 = Khanenko, op. cit. Vol. 11. Pt 3, pl. XLI. 334.

⁶ Sm. III. pp. 127, 128, ff. 64-67.

⁶ Sm. 11. xxiii. 9 and 17.

⁷ BCA. IV. 1902, p. 39, f. 1 and p. 33, f. 7.

8 p. 231, f. 135, BCA. 1. 1901, p. 98, f. 16.

9 p. 214, f. 115, KTR. p. 50, ff. 57—62, p. 517, f. 476, p. 532, f. 478 = CR. 1876, pp. 124—126, 132—137, and 1877, p. 14.

10 v. p. 215, f. 116, KTR. p. 52, ff. 63—65 = CR.

^{1877,} pp. 230—2. 11 pp. 167, 168, ff. 56, 57.

In the western district we find cheek pieces made of bone and various other patterned bone ornaments. These give us specimens of the Scythic beast style executed in a fresh material. The most common pattern which has parallels in bronze has a horse's head at one end and a hoof at the other. Others have drawings of horses, deer, or beaky birds, the flat shape necessitated by the weaker material giving a good space for a repeated pattern. There are also bone plaques in the same style. The varieties of metal cheek pieces are more numerous as the material allowed more license. Besides the horse-head and hoof pattern we get model axes, pick-axes, various monstrous creatures, and merely ornamental shapes'.

For pictures of cheek pieces in use see the Issus Mosaic at Pompeii⁵, giving a view of the general arrangement of the bridle, and the plaque of the Hare hunter from Kul Oba (v. p. 197, f. 90).

In the central tomb and in Chamber III. of Chertomlyk were found what appear to have been whip handles, and in Kul Oba there was one decorated with a gold band twisted round it spirally. Herodotus speaks

of the Scyths' whips in the legend of the slaves' trench (IV. 3). They were like the nagajkas the Cossacks have adopted from the Tartars.

"Standards."

With the horse trappings seem to go various ornaments whose exact use is not clear. They all agree in having sockets for mounting them upon staves, and it has been suggested that they are all ornaments for elaborate funeral cars. Others have seen in some of them standards, in some maces or staves of office.

For instance, at Alexandropol there were found bronze sockets like those of spear heads crowned two of them with a kind of three-pronged fork with birds on the top of each



F1G. 20. CR. 1898, p. 80, f. 143. Bronze Standard from Bêlozérka.

prong and bells in the birds' mouths7, two pair with an oblong plate of pierced work with a griffin and a row of oves8, also with pendant bells; others with simple birds, five with a kind of tree of life and little silver roundels hanging from each branch¹⁰; others had a winged female figure very rude in styleⁿ. Such are winged monsters from Krasnokutsk¹², birds, griffins

¹ pp. 188, 189, ff. 80, 81. *Sm.* I. xi., III. p. 76, vii., viii.; Khanenko, op. cit. Vol. II. Pt 3, XLVIII.— LI., LXI. Bone knops from the Kuban (Kelermes); CR. 1904, p. 91, ff. 145—150, p. 94, ff. 155—160.

2 KTR. p. 50, f. 57, from the Seven Brothers.

3 p. 178, f. 73 = Sm. II. iv. 12, xxiv. 20.

4 Sm. III. x. 11—14; Khan. II. 3, XLII.

⁵ Mus. Borb. VIII. pl. XLII.

Lappo-Danilevskij, op. cit. p. 459.
 p. 154, f. 41=ASH. II. 1—3; KTR. p. 241,

⁸ KTR. p. 243, f. 220=ASH. III. 1—4, IV. 1—4, ⁹ ASH. II. 6—8.

 $^{^{10}}$ KTR. p. 243, f. 221=ASH. v. 2. 11 p. 154, f. 40=KTR. p. 241, f. 217. 12 ASH. XXIV. 1, 2, XXVI. 1—4.

from Slonovskaja Bliznitsa¹. At Chertomlyk were four standards with lions', four with very much degraded deer', and some with birds like those from Alexandropol'. Pierced figures of a deer in a like style even more characteristically Scythic were found at Bêlozérka near Chmyreva barrow. Arrian speaks of the dragon standards of the Scythians, but these he describes as being of stuff, and they need bear no relation to the bronze griffins. Still these socketed figures may have crowned the standard staves, as we read of the T'u-küe, that a young wolf was upon the top of their standard, because they traced their descent from a wolf. Conceivably deer or griffins held the same place in the estimation of various Scythian tribes as the wolf among the early Turks. Certainly the re-occurrence of representations of these beasts, almost always in much the same attitude, seems due to something more definite than mere decorative fitness. The explanation that in the combats of griffins and deer it is a case of Panticapaeum versus Chersonese cannot of course commend itself in spite of the occurrence of these animals on the coins of the two cities (e.g. Pl. v. 13).

On the other hand these ornaments were found by the heap of fragments of the Alexandropol chariot, and with them were other pieces that could only have been nailed on to something, possibly the sides of the chariot. Most of them have something jingling about them, and this is a further point of resemblance to the other class of so-called maces of office. (In Russian Bunchukí or Bulávy, from the word for a Cossack Hetman's mace.) The general disposition of these is a socket merging into a kind of hollow bulb pierced by three-cornered openings and containing a metal ball which rattles:

above all is the figure of an animal.

These Bunchuki occur chiefly in West Russia, but some come from the Kuban, from Majkop and Kelermes'. The best account of them is given by Count Bobrinskoj*. They have been found in Bessarabia, Rumania and

Hungary as well as in Russia?

Hampel, following J. Smirnov, thinks that from their occurring in pairs or in sets of four these objects cannot be signs of rank, but that they probably adorned the tent upon the waggon, A pair found near Zhurovka shewed no signs of staves but were apparently riveted together in the middle like scissors 10. Reinecke in a second paper 11 suggests a likeness to a kind of rattle figured in Kin-shih-so (Vol. II.), but there seems a want of intermediate links, and as no one knows what the Chinese object was for, it does not help matters much. The characteristic animal top is also lacking. the Scythic examples this is always some sort of deer or bird of prey.

Here may be mentioned two bone or ivory knobs of Ionic work, both representing lions' heads 12. The style is orientalising, the amber eyes being

typical, and the date about the viith century B.C.

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<sup>1</sup> ASH. XXIV. 3-5; XXVI. 1, 2.
2 ib. XXVIII. 3 and 4.
3 ASH. XXVIII. 1 and 2.
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347. v. inf. p. 186, f. 79, also p. 183, f. 76.

⁹ Cf. J. Hampel, Skythische Denkmäler aus Ungarn in *Ethnol. Mittheil. aus Ung.*, Bd IV. 1895, ff. 1, 2, 3, 5, 6, 7, 8, and P. Reinecke, Die Skythischen Alterthümer im Mittleren Europa in

21. f. Ethn. XXVIII. (1896).

10 BCA. XIV. p. 34, f. 78.

11 Ueber Einige Beziehungen u. s. w., Zt. f. Ethn. XXIX. 1897.

12 Sm. I. and II. frontispieces, for latter v. inf. p. 193, f. 85. Bobrinskoj calls them staff-heads.

⁴ ib. 11. 6-8. ⁶ p. 77, f. 20= CR. 1898, p. 80, ff. 143, 144. ⁶ Tactica, 35. 3. They seem really to have been Dacian (v. Pauly-Wissowa s.v. Draco) and appear on

M. Antonine's Column, Petersen, p. 71, pl. LXIV., LXV. ⁷ Sm. 111. p. 66, f. 20. CR. 1900, p. 37, ff. 96,

^{97: 1904,} pp. 88, 89, ff. 139, 140.

8 Sm. 111. p. 63. Cf. pl. IX. and XVII. 5, also Khanenko, op. cit. II. 2, pl. XI. 224, and 3, pl. XLIII.

Cauldrons.

Of other gear beside what we have named the Scythians possessed

but various kettles or cauldrons or pots. Of these the bronze or copper cauldrons are the most characteristic in form, being with the special daggers and horse trappings the particular marks of Scythic culture. They are found from Krasnojarsk to Budapest, and the type is constant though the workmanship is sometimes native, sometimes quite Greek. Their distinguishing feature is that the body of the cauldron is roughly speaking hemispherical and is supported upon a truncated cone which forms a foot or stand. The handles project upwards from the upper rim. The whole stands from 1 to 3 feet high, and is 2 ft. 6 in. across. Evidently the people who devised this base had not thought either of suspending the cauldron from a tripod



FIG. 21. CR. 1897, p. 82, f. 200. Raskópana Mogila near Mikhailovo-Apostolovo. Kherson Government. Bronze cauldron. 1/8.

or making it stand on three legs of its own. Therefore it is hard to believe



FIG. 22. CR. 1899, p. 50, f. 96. Khatazhukaevskij Aul. Bronze cauldron. 4.

in Reinecke's idea that this form is derived from that of the Chinese sacrificial

three-footed cauldrons figured in Po-ku-t'u-lu, Kin-shih-so, and the like1. True, the handles are set on in much the same way, but the difference in the supports seems decisive. These cauldrons are regularly put in tombs and contain mutton or horse bones, shewing that once there was in them food for the use of the dead. An interesting specimen is that from Chertomlyk², which has six goats round its rim instead of handles; in the same tomb was found a kind of open work saucepan, which may have been used for fishing meat out of the water in which it had been boiled, or for grilling it over the fire's: another curious example coming from Mikhailovo-Apostolovo in Kherson government and district has pure Greek palmettes decorating its surface.

This type is also common in Siberia, and it is there only that the same form occurs in earthenware. Herodotus speaks of the Scythian cauldrons (IV. 61) and compares them to the Lesbian ones. But this does not help us much. And again (IV. 81) he speaks of the monumental one at Exampaeus as containing 600 amphorae, and being six fingers thick, but such dimensions

would make it perfectly useless.

Herodotus goes on to say that when they had no cauldron the Scyths boiled the animal in his own skin, making a kind of haggis, as is done by sundry savage nations. He seems scarcely right when he speaks of the bones burning excellently and taking the place of wood. Nowadays the steppe dwellers use kirpich, bricks of dried cow dung, and that answers the purpose, but is ill spared from the enrichment of the fields. But Gmelin

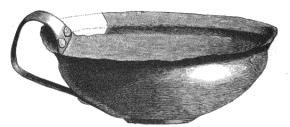


FIG. 23. CR. 1891, p. 85, f. 63. Cup from Pavlovka. 12.

describes ceremonies of burning a victim's bones and of cooking in skins by means of heated stones as practised by the Buriats in his day.

¹ Zt. f. Ethnol. XXIX. (1897), Ueber einige Beziehungen u.s.w.

² p. 162, f. 50=KTR. p. 262, f. 238.

5 KTR. p. 259, f. 236 = ASH. XXVII. 1.

4 p. 79, f. 21 = CR. 1897, p. 82, f. 200.

5 Further examples: Kul Oba, ABC, XLIV. 11, 13; Axjutintsy, Sm. 11. p. 163, f. 19; Volkovtsy, Sm. III. p. 84, f. 30; Hungary, Ó Szöny, J. Hampel, Ethn. Mittheil. aus Ungarn, Bd IV. f. 11 (other cauldrons called Scythic by Hampel do not seem to deserve the name); Alexandria (Kherson govt), CR. 1899, p. 101, f. 197; even as far as Perm at

Zamazaevskoe, CR. 1889, p. 93, f. 45; see also Sm. III. p. 72. Béla Pósta ap. Zichy, Dritte Asiatische Forschungsreise, Bd IV. p. 514 sqq. f. 287 sqq. figures many and works out a theory of their development, which appears to apply mostly to the later specimens. Vol. III., p. 69 he says that they occur up to the Xth century A.D. and still survive among the Kirgiz about Turuchansk.

6 inf. p. 246, f. 159, Klements, Antiquities of the Minusinsk Museum, Tomsk, 1886, pl. XIX. 14 and 19. There also we find an improved form with a spout, op. cit. pl. XIII. I. Cf. Zichy, op. cit.

IV. p. 398, f. 230.

*Reise in Sibirien, 111. pp. 22—25, 74—76, ap. K. Neumann, p. 264 sqq. De Plano Carpini says that the Mongols never break an animal's bones but burn them (§ iii. Bergeron, Hague, 1735, p. 30, Rockhill, p. 81, n.).

Most of the drinking vessels found in Scythic graves whether they be of metal or of fine pottery are of Greek workmanship and Greek shape. However, the Kul Oba vase (p. 200, f. 93) seems of native shape, at least it has no counterpart in pure Greek design, save in the companion vases found with it, in one from Katerles¹ and one from Ryzhanovka². It is from such a cup that a nomad is drinking. From Volkovtsy (p. 186, f. 79, No. 451) came two such cups of native work and from Galushchino a similar one but shallower (ib. No. 450); the form is common in clay in the Kiev district (p. 82, f. 25). The Scyths also seem to have liked shallow bowls or cylices, and saucers with a boss in the centre. These were all of pure Greek design '.

At Pavlovka in Bessarabia was found a shallow cup or saucer of bronze, with a handle riveted on to one side. This and another more or less like it are the only cups that could be carried at the belt according to the

legend in Herodotus.

Very common in Scythic tombs are the so-called rhyta or drinking They are mostly not the true Greek rhyta, which had a hole in the pointed end from which a stream was let flow into the mouth, as may be seen represented on Greek vases, but horns from the broad ends of which the liquor was drunk. On gold plaques we see pictures of Scythians drinking from such horns, e.g. the man standing before the lady with a mirror, and the group of two Scythians apparently drinking blood brotherhood. Actual specimens were found, two at Kul Oba⁸, three at Seven Brothers¹⁰ and at Karagodeuashkhⁿ. Others have been found in a less perfect condition or of a less characteristic form, e.g. one from Kerch shaped as a calf's head with scenes in relief on the neck of the vase 12. It is remarkable for its extraordinary resemblance to a small bronze vessel figured in Po-ku-t'u-lu. This has been noticed by P. Reinecke¹¹, but the objects are not really comparable, as the exceedingly small size of the Chinese specimen makes it quite a different sort of thing. Moreover that from Kerch does not seem to have occurred in a Scythic grave (v. ch. xi. § 11).

Unique in its way is the famous Chertomlyk vase (pp. 159-161, ff. 46-48 and pp. 288, 9) evidently meant for kumys, as it has a sieve in its neck and at each of the three spouts, shaped two of them as lions' heads and one as a winged horse. Besides these we have various ladles, colanders, pails, bowls, and other vessels of Greek make. But the most famous Scythian drinking vessels were not made of gold or silver, but of the skulls of their enemies. Something of this sort has been found in Siberia in the government of Tomsk,

a human skull adapted to form part of a cup ".

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1 inf. p. 198, f. 91 and ABC. XXXIV. and XXXV.
<sup>2</sup> Sm. 11. xvi. 7.
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anciens Scythes. A saucer with a loop from near

Mariupol.

⁷ p. 158, f. 45 = ABC. XX. 11.

⁸ Kul Oba, p. 203, f. 98 = ABC. XXXII. 10.

⁹ p. 197, f. 90; ABC. XXXVI. 4 and 5.

¹⁰ pp. 211, 213, ff. 110, 114 and CR. 1876, IV. 8, 1877, I. 5, 6, 7; KTR. p. 318 f. 286.

¹¹ p. 219, f. 121, Mat. XIII. p. 140 sqq., ff. 16—23.

¹² ABC. XXXVI. 1 and 2 = KTR. p. 87, f. 116.

¹³ Finite Waishungen u. s. w. p. 161 in Zt f. 13 Einige Beziehungen u. s. w. p. 161 in Zt. f.

Ethn. XXIX. (1897). ¹⁴ Her. IV. 65, v. inf. p. 83, f. 26 = CR. 1898, p. 83, f. 154.

³ p. 97, f. 90, middle = ABC. XXXII. I. ⁴ Kul Oba, p. 204, f. 99 = ABC. XXV.; Seven Brothers, p. 209, f. 107 = CR. 1876, p. 157, and IV. 9 and 10; Zubov's Farm, p. 231, f. 136 = BCA. I. p. 99, f. 18; Karagodeuashkh, Mat. XIII. p. 153 and

VI. 4.

5 CR. 1891, p. 85, f. 63.

6 IV. 10. Cf. Congrès International d'Archéologie Préhistorique et d'Anthropologie, XI^{me}
Session à Moscou, M. 1892, Vol. 1. p. 108;
N. Brandenbourg, Sur la coupe des ceintures des

Scythic pottery has not received much attention. It is always handmade and mostly very rough both in fabric and material. Only in the west, where it really belongs to the native inhabitants, not to the Scythic elements, we find considerable variety of form, and even decoration applied by incising a pattern and filling up the lines with white. The most interesting products



FIG. 24. BCA. IV. p. 33, f. 4. Constantinovo. Scythic cup.



BCA. IV. p. 31, f. 3. Constantinovo. Scythic pottery.

are cups with high handles which have analogies to the south-west, and others of the same shape as the Kul Oba vase. They also used dishes made of stone³. But the best pottery they imported from the Greeks. Besides the amphorae which were brought merely for the sake of their contents, we have more artistic products occurring far inland (ch. x1. § 7): that they were highly valued we can judge from their having been mended after ancient breakages. Large vases are comparatively rare, but smaller specimens are not uncommon. They are some help in dating the tombs in which they occur, but not much, as it is hard to say how long they had been in use before being buried. They are mostly of the last period of red-figured ware. Some are evidently manufactured in the Pontic colonies, and not sent from Greece'. There is, for instance, a kind of small ugly cantharos with inferior glaze that is peculiar to the Euxine coast and its sphere of trade influence (figured in ch. x_I. § 7). Except in beads, glass does not occur until quite late, probably Roman, times. Vessels were also made of wood; to this day the Kalmucks value old wooden saucers, something like mediaeval mazers, extravagantly highly, especially if they are well coloured. Herodotus mentions that milk was kept in wooden vessels.

¹ BCA. IV. 1902, p. 33, ff. 4—6; Sm. I. xiii.—xv., II. vi. and vii., III. p. 37, f. 6; Khanenko, op. cit. II. 3, liii., liv., lxii., lxiii. Bobrinskoj, BCA. IV. p. 32 and Sm. 11. p. xvii., says that this pottery belongs to the earlier Scythic period when iron was still rare: same form at Ladozhskaja on the Kuban, CR. 1902, p. 75, f. 160. ² Niederle, Slav. Ant. 1. p. 498.

³ Sm. II. p. 136, f. 21, and III. p. 141, f. 78.

⁴ Trans. Od. Soc., Vol. XXII, 1900; E. R. von Stern, On the importance of Ceramic finds in the South of Russia, p. 10; Sm. II. viii. (Axjutintsy), and xix. (Ryzhanovka), and III. xx. (Bobritsa); cf. II.

p. 126.

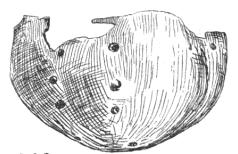
5 IV. 2. The particular ferment which made kumys would be better communicated by wooden or leather vessels than by clean metal or earthen-

Of the ways of the Scyths in war Herodotus tells us in chapters 64 to 66. A Scyth who has slain an enemy drinks his blood, and cuts off his head, which acts as a voucher in the allotment of booty¹; then he takes the scalp, scrapes it with the rib of an ox and wears it at his bridle, or even, when he has taken many scalps, and is hence accounted a great warrior, makes a cloak of them. Others use the skins of their enemies' hands to cover their quivers, or stretch whole skins upon wooden frames and carry them about. Furthermore, they take the skulls of their very greatest enemies or of their own people with whom they have been at feud and whom they have vanquished before the king, saw them off above the eyebrows, clean them out and mount them in ox leather, or if

they are rich enough, in gold, and use them as cups. Furthermore, once a year, the headman of each pasture land (may we not say *ulus*?) mixes a bowl of wine and there drink of it all who have slain a man. But those who have not are kept away and disgraced accordingly. And those who have slain very many men drink from two cups at a time.

More important information as to how Herodotus imagined the Scyths waging war we can gather from the accounts of the contest with Darius,

and can supplement by the general



CR. 1898. p.83 f. 1844 Government of Tomak. Part of skull cup withholes for leather lining

FIG. 26.

testimony of antiquity and Oriental history as to the tactics of the nomads. There is no need to enlarge upon the policy of retirement before the regular troops of the invader, of harassing his rear, cutting his communications and enticing pursuit by pretended flights. In defence, the strength of the nomads lies in the fact that there is nothing for the invader to destroy and no source from which he can get supplies, and he is helpless in the face of the superior mobility of his opponent: for the offensive the nomads are powerful because their whole population can take part in battle, no one is left on the land, as with settled peoples, for there is nothing to defend in detail, also the host carries its own provision with it, and is very mobile. Still the nomads have rarely been successful against settled states in a sound condition. Their inroads have been irresistible only when internal division or decay laid the civilised countries open to them. They are at a great disadvantage when it is a question of walled towns, forests or mountains, and only by becoming settled have they been able to keep moderately permanent dominion over agricultural countries: though they have often exacted blackmail or tribute from powerful states on the borders of their natural sphere of influence, the Euro-Asiatic plain⁴. Thucydides (v. sup. p. 35) exaggerates their power.

¹ Cf. Kurdzhips, inf. p. 223, f. 126, also p. 173, n. 6.
2 σύνδυο κύλικας ἔχοντες πίνουσιν όμοῦ. Looking at p. 203, f. 98 inclines one to translate "drink in twos, sharing their cups together."

 ³ Arrian, Tact. 16, 6 ascribes to the Scythians attacks in wedge-shaped (ἐμβολοειδέσι) columns.
 4 H. C. Mackinder, The Geographical Pivot of History, Geogr. Journal, XXIII. (1904) p. 421.

Their raids brought the Scyths slaves, employed in herding the cattle and making kumys, but among nomads master is not far above man, and so thought the mistress when the master was away. Upon the kings only native Scyths attended.

In Chapters 73 to 75 Herodotus seems to describe three different customs as one: a ceremonial purification from the taint of a corpse; this may not have been separate from the second, the usual vapour bath enjoyed much as it still is in Russia, in spite of the ridicule of St Andrew. Thirdly, a custom of intoxicating themselves with the vapour of hemp. He adds that the women whitened their skins with a paste of pounded cypress, cedar and frankincense wood; something very like the Russians' lye.

Position of Women.

Herodotus goes on to say that the Scyths were very much averse from adopting foreign customs: and quotes the lamentable ends of Anacharsis and Scyles. But one might take this rather as evidence of the attraction the higher Greek civilisation exercised over some of them. Incidentally we learn that the Scythian kings were polygamous, that a son succeeded to his father's wives, and that some had married Greek women.

We have already noticed that the chief difference between the Scyths and the Sarmatians was in the position of the women. Among the former they were apparently entirely subject to the men and were kept in the waggons to such an extent that, as Hippocrates says, their health suffered from want of exercise. Whereas among the Sarmatians they took part in war, rode about freely and held a position which earned for some tribes the epithet of women-ruled, and gave rise to the legend of the Amazons. This is in some degree the natural position of women among nomads, they have to take charge of the Jurtas when the men are absent rounding up strayed cattle, and are quite capable of looking after everything at home, entertaining a stranger and even beating off an attack by robbers. does not argue primitive community of women or Tibetan polyandry, such as the Greeks attributed to the Scyths and Herodotus to the Massagetae (v. p. 111). The queens who are so prominent in Greek stories about nomads, Tomyris, Zarinaea⁴, Tirgatao, can hardly be quoted as historical proofs of woman rule, though they might be paralleled in Tartar history. We must regard the confined condition of women among the Scyths as exceptional, due to the position of all women being assimilated to that of those captured from conquered tribes, this being possible because the exceptional wealth of the leading men among the Scyths enabled them as members of a dominant aristocracy to afford the luxury of exempting their women from work, and so to establish a kind of purdah system even in the face of nomad conditions, which are naturally unfavourable to seclusion.

¹ Her. IV. 1—3, 72.

² Laurentian Chronicle (so-called Nestor) ed. 3, St P., 1897, p. 7. "I saw wooden baths, and they heat them exceeding hot, and gather together and are naked and pour lye (kras usnianyi) over themselves and beat themselves... And this they do every day, not tortured by any man, but they torture themselves."

³ E. Huntington, The Mountains of Turkestan,

in Geographical Journal, Vol. XXV. 2, Feb. 1905, p. 154 sqq.; de Plano Carpini ap. Bergeron (Hague), § IV. p. 39, Rockhill, p. 75, n. 3. The maids and women ride and race upon horseback as skilfully as the men.... They drive the carts and load them...and they are most active and strong. All wear trousers, and some of them shoot with the bow like men.

⁴ Ctesias, fr. 25 ap. Diod. Sic. II. xxxiv. v. Müller, pp. 42, 44.

Religion.

All that we know of the Scythian's religion is contained in three chapters of Herodotus (IV. 59, 60, 62). The following deities were common to all, Tabiti—Hestia who was the principal object of their veneration, next to her Papaeus—Zeus with Apia—Ge, husband and wife, after them Goetosyrus—Apollo, Argimpasa—Aphrodite Urania, and Ares. masadas—Poseidon was peculiar to the Royal Scyths. They raised no statues, altars or temples to their gods, save to Ares alone. They sacrificed all sorts of animals after the same manner, but horses were the most usual The beast took his stand with his fore feet tied together and the sacrificer pulling the end of the rope from behind brought him down. Then he called upon the name of the god to whom the sacrifice was offered, slipped a noose over the victim's head, twisted it up with a stick and so garrotted him: then he turned to flaying and cooking. Sacrifices were made to Ares after another ritual described below.

The catalogue of gods hardly tells us more than that the Scyths were no monotheists. The forms of the names are very uncertain, being variously read in different MSS. of Herodotus and in Origen, who quotes them from Celsus¹. Also as Origen says, we cannot tell what meaning we are to attach to the Greek translations; e.g. Apollo or Poseidon. For instance, the latter

may have been either the horse-god or the sea-god.

However, Zeuss and his followers find that a list including Hestia, Zeus and Earth, Apollo and the Heavenly Aphrodite, and further Poseidon, has an Aryan, even a distinctly Iranian look. So when Theophylactus (vii. 8) says of the Turks "they excessively reverence and honour fire, also the air and the water: they sing hymns to the earth, but they adore and call god (i.e. the heaven, tängri) only him who created the heaven and the earth: their priests are those who seem to them to have the foretelling of the future—" Zeuss' has to explain that these Turks were really only Tadzhiks—Iranians under Turkish rule. But this can hardly be said of the Tartars of whom de Plano Carpini says "Les Tartares adorent donc le soleil, la lumière et le feu comme ainsi l'eau et la terre, leur offrant les prémices de leur manger et boire3."

G. Nagy, besides pointing out the general analogy between Scythic and Uralo-Altaic religious conceptions, even makes an attempt to explain the actual god-names and succeeds better than those who have sought Iranian derivations: he suggests, for instance, as analogies for Tabiti = Hestia, the Vogul taût, toat, fire: for Papaeus = Zeus, baba = father in most Uralo-Altaic languages, but of course in most other tongues there is something similar; for Thamimasadas or Thagimasadas (Origen) = Poseidon, the Turkish tengiz, Magyar tenger = sea, and Turkish ata, Magyar atya = father; the word for sea also occurring in Temarinda (= mater maris* with Turkish ana, Ostjak anka, mother) and Tamyrace (sup. p. 16). The phonetic change is similar to that in cannabis, probably a loan word from the Scythic, and Magyar kender hemp. Less convincing than these but more plausible than the Iranian comparisons are Apia = Ge, cf. Mongolian Abija, fruitful, and Artimpasa = Aphrodite Urania,

¹ c. Celsum, V. 41, 46, VI. 39, Γογγόσυρος, 'Αρ-γίμπασα, Θαγιμασάδα, for MSS. Οἰτόσυρος, 'Αρίππασα, Θαμιμασάδας, Hesych. Γοιτόσυρος, 'Αρτιμήασα.

op. cit. p. 285 sqq. (v. inf. p. 98, n. 8).
 Bergeron (Hague), § III. p. 31.
 Pliny, NH. VI. 20, native name for Maeotis.

cf. Cuman erdeng = maiden, and Mordva paz = god. (G)oetosyrus = Apollo is so uncertain in form that it is useless to propose etymologies for it. Certain it is that the Scythic pantheon offers nothing like the complete series of analogies

which may be established between the other Aryan pantheons.

The method of sacrifice by hobbling the victim, throwing him down and throttling him may be compared with the Buriat ritual with its precautions against the blood falling upon the earth. The favourite sacrifice was a horse, so also it was a horse that the Massagetae offered to the sun'. For similar ritual at sacrifices of reindeer, horses and cattle among the Voguls, Ostjaks, Votjaks and Altai Turks, compare Nagy³.

Herodotus goes on to say that Ares was worshipped in the form of an acinaces set up on a platform of bundles of brushwood, three furlongs square, heaped up one in each district. Besides horses and sheep they sacrificed to him one man out of every hundred prisoners, pouring his blood upon the sword on the top of the mound, and below cutting off the victim's

right arm and throwing it into the air.

This worship of Ares seems to stand apart from the other cults. most probable derivation for it is Thrace: it was most likely commonest among the western Scythians who had close relations with Thrace, e.g. Ariapithes had to wife a daughter of the Thracian Teres, father of Sitalces. In the treeless steppes of Eastern Scythia it would have been impossible to make mounds of brushwood of anything like the size described by Herodotus (IV. 62), whence were the 150 loads of brushwood to come every year when the people had not even the wood for cooking-fires? Each mention of Ares and his worship has the appearance of a later insertion added by Herodotus from some fresh source. He does not give the Scythian word for Ares. Heracles also, for whom likewise no Scythian name is given, is not so well attested as the other gods. He may well have been put in because of the "Greek" legend which made him the ancestor of the race. Nagy, however (p. 45), finds a similar figure in Finno-Ugrian mythology, e.g. in the Magyar Menrot or Nimrod.

Witchcraft.

Herodotus (IV. 67—69) gives a fuller account of the witchcraft of the Scyths than of their religion, and the account seems to apply to the Royal Scyths. He says that their wizards prophesied with bundles of rods which they took apart, divined upon separately, and bound up again. It is remarkable that the man represented on the plaque from the Oxus Treasure (p. 255, f. 174) carries a bundle of rods: and hence Cunningham' calls him a mage, for he says the mages had sacred bundles of rods (barsom). This would suggest that the wizards came from the Iranian population, that the invaders left this department in the hands of the people of the country, as so often happened. The Enarees also claimed power of divination by plaiting strips of bast. But something similar was practised by Nestorian priests among the Mongols.

Characteristic of the low state of culture is the belief that if the king fall sick it must be by the fault of some man of the tribe who has sworn

¹ Neumann, op. cit. p. 262.

² Her. 1. 216.

³ op. cit. p. 47.

Her. IV. 76 sqq.
 JRAS. Bengal, Vol. L.
 Yule³, I. pp. 241, 242, n. 2, Rubruck, p. 195.

by the king's hearth, and forsworn himself, bringing down on the king the vengeance of the offended deity. A man whom the wizards definitely accused of this according to the results of their divinations could only hope to escape if other and yet other wizards declared their colleagues' accusation false. We can hardly doubt that the decision was generally upheld, and the accused beheaded, and his property distributed among his destroyers. The horror of the punishment meted out to wizards whom their colleagues did not support, makes us think that it could not have been inflicted often. Bound hand and foot and gagged they were set in a pyre of brushwood upon a cart, and oxen dragged them until themselves set free by their traces burning. It looks like a kind of scapegoat ceremony by which the guilt of dishonest wizardry was purified by fire and scattered over the face of the earth.

With their witchcraft goes their rite for taking oaths, and swearing blood brotherhood. They pour wine into great earthenware cups and mix with it blood drawn from the parties to the oath; then they dip therein a sword, arrows, an axe and a dart, and after praying long over it the contracting

parties drink it off together with the chief of their followers.

Parallels for the divination ceremonies and the mode of discovering the man responsible for any disease of the king's, also for the oath ceremony, may be found in almost any race from Kamchatka to the Cape of Good Hope, and such parallels prove nothing but that the human mind works on similar lines in different countries. We may, however, mention divination by sticks among the early Turks2. So the ceremonies of blood brotherhood may be also paralleled among the Parthians, also apparently an Uralo-Altaic tribe, the Magyars and the Cumans or Polovtses, whose prince made such a covenant with Philip, son of Nariot de Toucy, and Andronicus the Greek Emperor. But it is in their burials that the Scyths and the Hunnish nations most resemble each other.

Funeral Customs.

The account of Scythic funerals given by Herodotus (IV. 71-73) agrees so well with the archaeological data, as summarised below in the survey of the principal Scythic tombs of South Russia (ch. VIII. p. 149 sqq.), that the two sources of information may be used to supplement one another.

As to the burials of the kings, Herodotus says that they take place in the land of the Gerrhi (v. p. 29). Here when their king dies they dig a great square pit. When this is ready they take up the corpse, stuff it full of chopped cypress, frankincense, parsley-seed and anise, and put it on a waggon. Their own ears they crop, shear their hair, cut round their arms, slit their foreheads and noses, and run arrows through their Thus they bring their king, to the next tribe on the way to the Gerrhi and make them mutilate themselves in the same way and follow with them, and so with the next tribe until at last they come to the Gerrhi. There in the place prepared they lay the body upon a mattress, and drive in spears on each side of it in line, and rafters across and make a roof of mats (or wicker work). They strangle and lay in the

¹ For a remarkably exact parallel among the

Hiung-nu, see infra, p. 93.

Nagy, op. cit. p. 51.

Tacitus, Annals, XII. 47.
 Nagy, op. cit. pp. 53, 54; Rockhill, Rubruck, p. xxxiii, quoting from Joinville, Histoire de S. Louys.

vacant room within the tomb one of the dead man's concubines, and his cupbearer, his cook, his groom, and his messenger and horses, and cups of gold (they use none of silver or copper), and firstlings of all his other possessions. When they have done this they make a great mound, vying

with each other to make it as great as possible.

After the lapse of a year they take fifty of the king's best attendants (and these are Scyths born, whomsoever he commands to serve him: no bought slaves serve the king), and fifty of the finest horses, slay them, and stuff them with chaff. Next they fix the felloes of wheels on posts, with the concave side uppermost in pairs, run a stake through each horse lengthwise, and set him on each pair of felloes, so that one supports the shoulders of the horse, the other the hind-quarters, and the legs hang down freely. Bits are put in the horses' mouths and the reins taken forward, and fastened to a peg. One of the fifty strangled youths is then put astride of each horse, a stake being run up his spine and fixed in a socket in that which runs horizontally through the horse. So these horses are set in a circle about the tomb.

Thus are the kings buried. Ordinary Scyths are carried about on a waggon for forty days by their nearest kin and brought to their friends in turn. These feast the bringers and set his share before the dead man (who presumably has been embalmed), and so at last they bury him.

It is by the general correspondence of funeral customs that we are enabled to say that certain of the barrows opened in South Russia belonged most probably to the people whom Herodotus and Hippocrates describe. Much has been made of small differences of detail and of the decidedly later date of the works of Greek art found in the tombs of which we have good accounts, but that substantially the very people, of whose funeral ceremonies Herodotus gives so full an account, raised the mounds of Kul Oba, Chertomlyk and Karagodeuashkh, is not open to reasonable doubt.

When Herodotus uses the present and speaks as if each of the details he describes were repeated at every king's funeral there is no need to believe anything but that he has generalised from the current account of the last great royal burial. If we have not yet found remains of a circle of fifty impaled young men upon impaled horses standing on ghastly guard about a Prince's tomb, it does not mean that the tombs opened so far belong to a different nation, but that we have not come on that in which was laid Octamasades, or whoever it may have been, whose funeral was narrated to Herodotus. Even did we find it we might well discover that rumour had exaggerated the number of sacrifices.

Burial Customs of Mongols and Turks.

Yet even such wholesale slaughter can be paralleled from Marco Polo'.

"All the great Kaans and all the descendants of Chingis their first lord are carried to the mountain that is called Altay to be interred. Wheresoever the Sovereign may die he is carried to his burial in that mountain with his predecessors no matter an the place of his death were an hundred days' journey distant, thither must he be carried to his burial. Let me tell you a strange thing too. When they are carrying the body

of any Emperor to be buried with the others, the convoy that goes with the body doth put to the sword all whom they fall in with on the road saying 'Go and wait upon your Lord in the other world.'...They do the same too with the horses: for when the emperor dies they kill all his best horses in order that he may have the use of them in the other world as they believe. And I tell you as a certain truth that when Mangou Kaan died more than 20,000 persons who chanced to meet the body were slain in the manner I have told." Mangu died in the heart of China. So Rashid-ud-din (ap. Yule, l.c.) says forty beautiful girls were slain for Chingiz.

William de Rubruck' says of the Comanians or Polovtses, "They build a great toomb ouer their dead and erect the image of the dead party thereupon with his face towards the East, holding a drinking cup in his hand before his nauel. They erect also vpon the monuments of rich men Pyramides, that is to say, litle sharpe houses or pinacles.... I saw one newly buried on whose behalfe they hanged up 16 horse hides; vnto each quarter of the world 4, betweene certain high posts; and they set besides his grave Cosmos for him to drink and flesh to eat; and yet they said that he was

baptized."

So Ibn Batuta², who travelled in China in the middle of the fourteenth century, thus describes the funeral of a Khan slain in battle. "The Khan who had been killed, with about a hundred of his relations was then brought and a large sepulcre was dug for him under the earth, in which a most beautiful couch was spread, and the Khan was with his weapons laid upon it. With him they placed all the gold and silver vessels he had in his house, together with four female slaves and six of his favourite Mamluks with a few vessels of drink. They were then all closed up, and the earth heaped upon them to the height of a large hill. Then they brought four horses which they pierced through at the hill until all motion ceased; they then forced a piece of wood into the hinder part of the animal until it came out at his neck and this they fixed in the earth leaving the horse thus impaled upon the hill. The relatives of the Khan they buried in the same manner putting all their vessels of gold and silver in the grave with them. At the doors of the sepulcres of ten of these they impaled three horses in the manner thus mentioned. At the graves of each of the rest only one horse was impaled." This was all at El Khansā—Shen-si.

And de Plano Carpini3, of the Mongols, says in Bergeron's words:

"Quand le capitaine est mort on l'enterre secretement en la campagne auec sa loge. Il est assis au milieu d'icelle auec vne table deuant luy et un bassin plein de chair et vne tasse de lait de jument. On enterre aussi auec lui vne jument auec son poulain & vn cheual sellé & bridé et mangent vn autre cheual dont ils remplissent la peau de paille puis l'esleuent en haut sur quatre bastons....Ils enterrent de mesme auec luy son or & son argent. Ils rompent le chariot qui le portait et sa maison est abattue et personne n'ose proferer son nom iusqu'à la troisième generation.

¹ Cap. 10, p. 100 in Hakluyt's translation, 2nd ed., London, 1598, Rockhill, p. 81, v. inf. p. 239, f. 149.

² Trans. S. Lee, London, 1829, p. 220, quoted by Blakesley and Macan on Her. 1V. 72.

³ Paris, 1634, c. iii. The reader will lose nothing by the French translation, though I have learnt since this was in type that it was made from Hakluyt's English. Cf. Rockhill, p. 81.

"Ils ont vne autre façon d'enterrer les Grands. C'est qu'ils vont secrettement en la campagne et la ostent toutes les herbes iusqu'aux racines puis font vne grande fosse: à costé ils en font vne autre comme vne caue sous terre: puis le seruiteur qui aura esté le plus chéry du mort est mis sous le corps....Pour le mort ils le mettent dans cette fosse qui est à costé auec toutes les autres choses que nous auons dites cy dessus, puy remplissent ceste autre fosse qui est deuant celle la et mettent de l'herbe par dessus.

"Et en leur pays ils ont deux lieux de sepulture, l'un auquel ils enterrent les Empereurs, Princes, Capitaines et autres de leur noblesse seulement & en quelque lieu qu'ils viennent à mourir on les apporte la tant qu'il est possible et on enterre auec eux force or et argent. L'autre lieu est pour l'enterrement de ceux qui sont morts en Hongrie. Personne n'ose s'approcher de ces cemetieres là. Si non ceux qui en ont la charge et qui sont establis pour les garder. Et si quelqu'autre en approche il est aussitost pris battu fouetté et fort mal traitté."

Nearly every detail of these passages can be paralleled from Herodotus or the excavations. Only the Mongols could do things on a more magnificent scale than the Scyths, who could not rival the horrors of Mangu Khan's funeral. The mutilation of those who met the funeral car of a Scythian king is mild compared to the wholesale slaughter we find in Asia fifteen hundred years later.

Such customs we can trace 800 years earlier among the T'u-küe or

Turks as reported by the Chinese.

In the second of the inscriptions of the Orkhon, the earliest monuments of Turkish speech, erected by Jolygh Tigin in memory of Bilgä or Pitkia, the Khan of the Turks, brother of Kül Tigin, the Khan says "My Father the Khan died in the year of the dog in the 10th month the 36th day. In the year of the pig in the fifth month the 37th day I made the funeral. Lisün (or Li-hiong) tai sängün (a Chinese ambassador) came to me at the head of 500 men. They brought an infinity of perfumes, gold and silver. They brought musk for the funeral and placed it and sandalwood. All these peoples cut their hair and cropped their ears (and cheeks?): they brought their own good horses, their black sables and blue squirrels without number and put them down's."

This inscription is dated A.D. 732, Aug. 1st. It recalls Herodotus also in a passage in which the Khan warns the Turks against the charm of the Chinese and their insinuation, and blames the Turkish nobles who had abandoned their Turkish titles and bore the Chinese titles of dignitaries of China. That is, that the Turks had their Anacharsis and Scyles attracted by the civilisation of the South. And the warning of the Khan was too late, for ten years afterwards the Turkish empire was conquered by the Uigurs, their western neighbours and former subjects.

Nagy supplies further parallels from among Uralo-Altaic tribes. For

Documents Historiques sur les Tou-kiue extraits du Pien-i-tien, Journal Asiatique, VI.e série, T. III. et IV., Paris, 1864.

3 Thomsen, op. cit., p. 130.

¹ For the stuffing and impalement of horses among men of the Altai, cf. Witsen, Noord en Oost Tartarye, and W. Radloff, Aus Sibirien, 11. p. 26

and pl. 1; v. inf. p. 251, bottom.

² Cf. Vilh. Thomsen, Inscriptions d'Orkhon déchiffrées, No. v. of Mémoires de la Société Finno-Ougrienne, Helsingfors, 1896; Stanislas-Julien,

⁴ Cf. E. Blochet, Les inscriptions Turques de l'Orkhon, Revue Archéologique, 1898, p. 357, 382. ⁶ op. cit. pp. 54—57.

self-mutilation he instances the Huns at the death of Attila', and says that it is still practised among the Turks of Central Asia, who also set up spears in the grave, a custom of which traces survive in Hungary. The horseburial as practised among Indo-Europeans he ascribes entirely to nomads' influence, and quotes examples among the Avars, Magyars, Old Bolgars and Cumans in Europe. The funeral of a Cuman as described by Joinville, A.D. 1241, very closely recalls the Scythic custom, as with the dead man were buried eight pages and twenty-six horses; upon them were put planed boards and a great mound quickly heaped up by the assembly. The horses are still stuffed and set over the grave among the Jakuts, Voguls, Ostjaks, and Chuvashes: while among the Kirgiz a horse is devoted to the dead at the funeral and sacrificed on the first anniversary. The interval of forty days before the funeral recalls the identical interval which comes between the death and the wake among the Chuvashes, and the fact that the Voguls believe that the soul does not go to its home in the other world until forty days have elapsed.

Nomads of Eastern Asia.

Since it is a question of the Scyths coming out of Asia it is worth while to see what the Chinese have to say as to their north-western neighbours. The accounts they give resemble wonderfully the accounts of the Scyths given by the Greeks, but inasmuch as integral parts of China, not mere outlying colonies, were always exposed to serious inroads of the nomads, the latter's doings were observed and chronicled with far more attention, so that we can watch the process by which the name of one empire succeeds the name of another, while the characters of all are precisely similar. If it be allowed to say so "Plus ça change, plus c'est la même chose." The most convenient account of the series is that given by Professor E. H. Parker in A Thousand Years of the Tartars, 1895. The same writer has given literal translations of the original texts in the China Review².

In the earliest times we have mention of raids which plagued the Chinese as far back as their traditions went. They say, for instance, that in the time of Yao and Shun, and later under the dynasties T'ang and Yü, B.C. 2356—2208, there were nomads to the north with the same customs as the later Hiung-nu—Hien-yün and Hün-küh (or Hun-yŏk) to the west, and Shan Zhung to the east. The Emperor Mu of the Chou dynasty, 1001—946 B.C., received as tribute or present from the Si Zhung or western nomads, a sword of K'un-wu or steel, which is said to have cut jade like mud³. The Hiung-nu, who are perfectly historic, were supposed to trace their descent from Great Yü the founder of the Hia dynasty, B.C. 2205—1766. At this time one Duke Liu took to the nomads' life and drove them back with their own tactics.

They made fresh encroachments, but were once more driven out by Süan, 827—781. Just before the ascent of the Ts'in dynasty c. 255 B.C.

Jordanes, Get. XLIX.
 Vols. XXI. sqq. The latest account is O. Franke,
 Zur Kenntnis der Türkvölker und Skythen Zentral-

asiens in Abhandl. d. k. pr. Akad. d. W. Berlin, 1904.

³ F. Hirth, China and the Roman Orient, p. 250, according to Lieh Tsê, ap. Yüan-chien-lei-han.

the nomads were decoyed into an ambush and defeated. Several times the Chinese have treated them just as the Medes treated the Scyths.

During the troubles arising on the fall of the short-lived dynasty of Ts'in, T'ouman, the head or Zenghi (Shan-yü) of the Hiung-nu, raised their power very high and was succeeded by his son Mao-tun¹, who extended their empire to Kalgan and the borders of Corea.

East of the Hiung-nu were the Tung-hu (Tunguz) or eastern nomads, who have produced the ruling tribes of the Wu-huan or Sien-pi, the Kitans or Cathayans and the Manchus. These were reduced to subjection, and Mao-tun also extended his dominions over the tribes represented by the Kao-ch'ê or High Carts, later called Uigurs and the Kirgiz. He also conquered the Yüe-chih between K'i-lien and Tun-huang (Western Kan-su) and the Wu-sun by Lop-nor and drove them westward. So he could boast that he was lord of all that use the bow from the horse. By the next Zenghi Kayuk (or Ki-yük), now allied with the Wu-sun, the Yüe-chih were driven part into Tibet, part yet further, out of the Tarim basin to the west of Sogdiana, whence they extended southwards to the Oxus. From Oxiana they moved on and established a lasting kingdom just north of the Hindu Kush. From the chief of their five tribes they took the name of Kushanas. In their advance to the south they drove before them the Sai (Sek, i.e. Saka). Between them they crushed the Graeco-Bactrian state and finally advanced their dominion to India, wherefore they were known to the west as the Indo-Scyths'. In all this the settled Iranians were not displaced. The movement is singularly like that to which Herodotus ascribes the coming of the Scyths into Europe, only the line of least resistance led south and not north from the Oxus. Kayuk made a cup of the skull of the Yüechih king, and it became an heirloom in his dynasty. He died in B.C. 160.

The Chinese sent an ambassador Chang K'ien to the west, 136—126 B.C., to try and make an alliance with the Yüe-chih against the Hiung-nu and the Tibetans. They did not succeed but they established intercourse with the west, and at this time various Greek products first found their way to China. About 110 B.C. the Hiung-nu were defeated, and in B.C. 90 the eastern nomads, who had recovered their independence, invaded the Hiung-nu territory and desecrated the tombs of former Zenghis: that being the worst injury that could be done, as in the case of the Scyths. Forty years later it looked as if the Hiung-nu dominion was just about to fall, as there was a quarrel between Chih-chih and Hu-han-ya, two heirs to the throne, but Hu-han-ya established his position by a treaty with China in 49 B.C. The Emperor Yüan-Ti's ambassadors were Ch'ang and Mêng. They went up a hill east of the Onon and killed a white

¹ Written variously Mê-t'ê, Mo-t'ê, Bagator, Meghder and Moduk! Franke, op. c. p. 10, n. 3. Not knowing Chinese I cannot answer for correct or even consistent transliteration. Thanks to Professor Giles I have been saved many mistakes, but he is not responsible for such as may be left.

² Journal Asiatique, VIII.º série, T. II., 1883, p. 317; E. Specht, "Études sur l'Asie Centrale d'après les historiens chinois." His sources are Ma Tuan-

lin's Encyclopaedia and that called Pien-i-tien. See Skrine and Ross, *The Heart of Asia*, p. 14 sqq.; E. J. Rapson op. cit. (v. p. 47), p. 7; v. inf. pp. 100, 110, 121.

<sup>110, 121.

3</sup> Cf. H. A. Giles, China and the Chinese, New York, 1902, p. 130; and F. Hirth, Ueber fremde Einflüsse in der chinesischen Kunst, München and Leipsig, 1896, p. 2 sqq.

Her. IV. 127.

horse. The Zenghi took a king-lu knife, some gold and a rice spoon, made with them a mixture of wine and blood, and drank of it with the envoys, himself using the skull of the Yüe-chih king who was killed by Kayuk Zenghi. Soon after this the Hiung-nu divided into a northern and a southern state; in 87 A.D. the Sien-pi of the eastern nomads attacked the northern horde and took the Zenghi, and skinned him to make a trophy. About 196 A.D. the last remnants of Hiung-nu power were swept away and the people are said to have been driven west, to reappear as the Huns we know in eastern Europe two generations later (inf. p. 122). In the east they were ousted by the Sien-pi; it is said that when these conquered the northern Hiung-nu 100,000 of the latter submitted and called themselves Sien-pi, though these being eastern nomads differed from them more than any of the western tribes².

The eastern tribes were more democratic than the westerners, also dirtier, and they disposed of their dead on platforms instead of burying them. They held their power till about 400 A.D. when they gave way in exactly the same manner to the Zhu-zhu or Zhuan-zhuan, a mixed multitude of western nomads, known to Europe as Avars, but not the false Avars who once ruled Hungary: they held under them an obscure tribe called T'u-kue or Turks, who did metal work for them. They were a clan of Hiung-nu called A-she-na: and took the title Turk from a mountain near. T'u-mên, their Khagan or Khan, having defeated a neighbouring tribe, asked the daughter of the Khan of the Zhuan-zhuan in marriage. He replied, "You are common slaves whom we employ to work us metal, how dare you ask to wed a princess?" But T'u-mên married a Chinese princess and rose against the Zhuan-zhuan power and destroyed it in A.D. 546. Se-kin his successor is described as having a very broad dark red face, and eyes like green glass or lapis lazuli. He defeated the Yi-ta and extended Turkish sway from the Liao Sea to within measurable distance of the Caspian. These Yi-ta, more fully Yen-tai-i-li-to, were formerly called Hua; in the west they are known as the Ephthalite Huns; a very mixed race, they probably had something in common with the true Huns. They had supplanted the Yüe-chih, and destroyed the kingdom of the Kushanas. We hear of their polyandry, a primitive Malthusianism which seems to have been endemic in their country, as it is ascribed to the Massagetae, to the Yue-chih and T'u-huo-lo or Tochari, and to the Yi-ta3.

So to the Turks succeeded the Uigurs, whose ancestors are called Kao-ch'ê, High Carts, 'Αμαξόβιοι: after them came Kitans from the east. They in turn gave way to the Mongols, and the Manchus have been the last of the nomad tribes to establish an empire.

The process is always the same, the great bulk of the conquered horde amalgamates quite readily with the victors, the ruling class and their dependants, if not caught and skinned by their enemies, retire towards China

¹ Cf. Her. IV. 70.

² Cf. the description of nomad life and the history of the Huns given by Gibbon at the beginning of Chap. XXVI. of the *Decline and Fall*. His authority for the identification of the Hiung-nu is de Guignes, and it is upheld by modern writers,

in spite of the attacks made upon it by certain later critics. The modern Peking pronunciation

Hsiung-nu has no bearing on the question.

³ Franke, op. c. p. 45, n. 2, thinks the Ephthalites were true Huns, much mixed. In Sanskrit they were called Huna.

or to the West, where they often retrieve their fortunes. invasions of Huns and Avars and Turks: it was only the Mongols that themselves extended their empire so far. To the north also this influence reached so that most of the Jenisei tribes and most of the Finno-Ugrians have been so much Tartarised that it is hard to reconstitute their original mutual relations. We have only to take the series back one more term and the movement which brought the Scyths into Europe and all the

effects of their coming fall perfectly into line.

The foregoing sketch of Central Asia from the Chinese standpoint recalls many details in Herodotus, and the complete picture as drawn by the Chinese agrees precisely with his. Take for instance the accounts of the T'u-küe (c. 550 A.D.). They begin by saying that these are descended from the Hiung-nu and have exactly the same mode of life: that is that details which do not happen to be given as to one tribe may be inferred from their applying to the other. The various Tung-hu or eastern nomads differ considerably. The T'u-küe were then a tribe of the Hiung-nu and traced their descent from a she-wolf, hence they had a she-wolf on their standards. (We can imagine them to have been like the animals on sockets found at Alexandropol.) Their habits are thus described. They wear their hair long, and throw on their clothes to the left: they live in felt tents and move about according to the abundance of water and grass. They make little of old men and only consider such as are in the prime of life. They have little honesty or proper shame; no rites or justice, like the Hiung-nu. Perhaps this is only one point of view; another passage says that they are just in their dealings, suggesting the Greek view of nomads, δικαιότατοι ἀνθρώπων (v. p. 109).

Their arms are bow, arrows, sounding arrows (used for signals), cuirass, lance, dagger and sword. On their standards is a golden she-wolf. Their belts have ornaments engraved and in relief. This reminds us of the universal Scythic gold plates. So Zemarchus at the Turkish court remarked on the profusion of gold'. They use notches in wood for counting: elsewhere

it says they have an alphabet like other Hu or barbarians.

When a man dies he is put dead in his tent. His sons, nephews and relations kill each a sheep or horse and stretch them before the tent as an offering. They cut their faces with a knife. On a favourable day they burn his horse and all his gear3. They collect the ashes and bury the dead at particular periods. If a man die in spring or summer they wait for the leaves to fall, if in autumn or winter they wait for leaves and flowers to come out. Then they dig a ditch and bury him. On the day of the funeral they cut their cheeks, and so forth as on the first day. On the tomb they put a tablet and as many stones as the dead man has killed enemies. They sacrifice a horse and a sheep and hang their heads over the tablet. That day the men and women meet at the tomb clothed in their best and feast. These feasts seem to be the occasions when the young men see girls to fall in love with them and ask their hands of their fathers. This whole account seems rather to describe a funeral in two parts or funeral

³ Radloff says this must be a mistake, as he has

Menander, f. 20; FHG. IV. p. 227.
 Cf. Menander, f. 43; FHG. IV. p. 247. Siberia and in Russia have the wooden erection partly burnt, cf. A. Heikel, Antiquités de la Sibérie occidentale in Mem. Soc. Finno-Ougrienne VI. (1894), and Radloff, Aus Sibirien, 11. chap. vii. found no traces of cremation. Some tombs both in

and after-funeral than really to imply that the dead were kept according to the time of the year. It corresponds generally with what is found in Scythic tombs and with the account in Herodotus. Hieh-li, the last Khan, was buried under a mound, and an attendant willingly sacrificed himself to serve him in the next world1. When a man dies his son, younger brother or nephew takes his wives and their sisters to wife. This was the case with the Scyths, e.g. Scyles married Opoea, wife of his father Ariapithes'.

Although the Tu-küe change places, yet they have special land for each family. Agriculture is not unknown to them. The Khan lives at Tu-kin Shan. They revere demons and spirits and believe in magicians. Their food of milk and cheese and kumys is just what Herodotus describes.

A curious point of likeness already referred to is the attraction civilisation exercised upon them, so that individuals were continually trying to imitate Chinese ways, they married Chinese wives, and some could even talk Chinese, and occasionally it required the good sense of Chinese deserters to prevent the nomads giving up their ways and so rendering themselves open to attack. On the other hand, when the Chinese tried to make them adopt small details, Sha-poh-lioh the Khan, 581-587, replied, "We have had our habits for a long time and cannot change them." Just the same opposition is characteristic of the Scyths, some of whom were always hankering after Greek ways, in spite of the disapproval of their fellows. So Marco Polo' speaks of the degeneracy of the Tartars, who by his time had adopted the customs of the idolaters in Cathay and of the Saracens in the Levant.

Géza Nagy ⁶ remarks on another point of resemblance between the Scyths and the Turks, their very concrete metaphors. Just as the Scyths replied to the Persians' defiance by sending the Great King a bird, a mouse, a frog and five arrows, which is rightly interpreted by Gobryas to mean that they will fall by the arrows, unless like birds they can fly into the air, or like mice burrow underground, or like frogs jump into the waters, so the Turks threatened the Avars that, flee as they might, they would find them upon the face of the ground, for they were not birds to fly up into the air nor fishes to hide themselves in the sea.

In just the same way, in A.D. 1303, Toktai sends to Nogai as a declaration of war a hoe, an arrow and a handful of earth; which being interpreted is, "I dig you out, I shoot you, better choose the battlefield'."

So the familiar story of Scilurus and his counsel to his sons, illustrated by a bundle of faggots, is told by Hayton the Armenian of Chingiz Khan*.

Pictures of Hiung-nu.

Not only the verbal accounts agree but also the pictures. Pien-i-tien and I-yü-kuo-chih we have pictures of Hiung-nu. They have more

¹ China Review, XXV. p. 242. ² Her. IV. 79. Cf. de Plano Carpini of the Mongols, c. 6, ap. Hakluyt, Rockhill, p. 78, Yule³, 1. p. 253.

3 China Review, XXV. p. 11.

⁴ Yule3, Vol. 1. c. liv. p. 263.

⁶ op. cit. p. 58.

⁶ Her. IV. 130—132.

⁷ Yule, Marco Polo³, Vol. 11. p. 498, quoting Hammer von Purgstall.

Haithoni Armeni de Tartaris Liber in Novus Orbis of Grynaeus, Basel, 1537, c. xvii.



FIG. 27.

beard than we might expect. Their tunics lined with fur are not unlike the Scythic tunics on the Kul Oba vase, their soft boots tied about the ankle with a string are very similar, and the bow and bow-case are very much like the western representations. Scyths are always bare-headed or wear a hood, but the Hiung-nu have conical fur-lined caps. The Kara Kitan in the latter book, sitting between the hoofs of his horse who is lying down, reminds us of some of the Siberian gold plates. The bowcase is well shewn on the Pa-li-fêng, a kind of Tartar. The horns on the head of the women of the T'u-huo-lo and their neighbours, adorned as they were with gold and silver, resemble the headdress of the Queen at Karagodeuashkh. But these resemblances do not go deep and many of the coincidences in customs may be merely due to like circumstances, still the likenesses are so great and the barriers between South Russia and Central Asia so often traversed, that it is harder to believe that entirely separate races developed such a similarity of culture than that a horde driven west by some disturbance early in the last millennium B.C. finally found its way to the Euxine steppes. And the character of the objects they had buried with them on their way from the Altai to the Carpathians sets the matter almost beyond doubt.

So far we have used no more evidence than was before K. Neumann, the champion of the Mongolian theory, the strength of whose case rests upon coincidences of custom, very close indeed but not sufficient to prove that the Scythians had any real connection with upper Asia, for his philological comparisons have been rejected by serious students of Mongolian, or was before Müllenhoff, chief defender of the dominant Iranian theory, who supported it on philological grounds, stronger indeed than Neumann's, but affording too narrow a basis for the weight it has to bear. Neither of these writers has given due weight to the analogies between the remains found in the tombs of Scythia and those that occur in southern Siberia, in the basin of the Jenisei, far beyond the limits of Aryan population. Until the affinities of that civilisation and of the tribes that were influenced by it have been cleared up, the final word cannot be said on the position of the Scythians¹.

SCYTHIAN PROBLEM.

BIBLIOGRAPHICAL SUMMARY.

So many different views as to the affinities of the Scythians have been propounded that their enumeration seemed too much of a burden for the text of Chapter IV. At the same time their succession has a certain historical interest and space had to be found for a short account of the more important theories. The older writers are more fully dealt with by Dr L. Niederle², but one or two useful books have escaped even his marvellously wide reading.

The traditional view regarded the Sarmatians, and the Scythians naturally went

¹ However Neumann, op. cit. p. 236, quotes Gmelin's account of the graves on the Abakan.

² Slovanské Starožitnosti (Slavonic Antiquities), Prag, 1902—, Vol. I., Appendix p. 512.

with them, as the ancestors of the Slavs. For one thing the Byzantine writers applied to the latter these classical names which had already served for the Goths: for another there was no more obvious ancestry for the Slavs to be discerned among nations mentioned by ancient writers, and the Scythians and Sarmatians, though great nations, did not seem to have left any other descendants. This theory naturally appealed to the tendency of chroniclers to push the ancestry of their own nation as far back as possible, and accordingly it is accepted by most of the Slavonic historiographers. Since the appearance of later hypotheses it has been almost dropped in Germany, Cuno, with his fanciful Slavonic etymologies, being a solitary exception in later times. In Russia, however, national feeling has kept it still alive. It gained support from the undoubted superficial resemblance of the Russian muzhlk and the figures on the Kul Oba and Chertomlyk vases. The chief exponent of it has been Zabêlin².

During the eighteenth century there appeared one or two dissentients, but the first to gain general approval with a new theory was B. G. Niebuhr*. He made a careful examination of Herodotean geography and referred the Scyths to a stock akin to the Tartars and Mongols. His main arguments were based upon similarity of customs. Grote gives a good statement of this view. Boeckh, in the introduction to Inscriptiones Sarmatiae, etc.5, regards the Scyths as Mongolian and the Sarmatae as Slavs with Mongolian mixture, but admits the Iranian element. Niebuhr's line of proof was carried further by K. Neumann', who also adduced etymologies from the Mongolian which were promptly demolished by the great Turcologue Schiefner.

Meanwhile Kaspar Zeuss' had advanced the view that all the steppe peoples as far as the Argippaei were Iranian. His main argument was the similarity of Scythian and Iranian religion, but he also proposed Iranian etymologies for a certain number of Scythian words. This view gained general favour when supported by K. Müllenhoff, who supplied a large number of Iranian etymologies. Duncker states Müllenhoff's view without reservation as fact. W. Tomaschekii accepted this theory and developed the geography of the subject. Much the same general position was taken by A. von Gutschmidi², and Th. G. Braun¹⁸ follows Tomaschek closely. So, too, Dr Niederle (op. cit.) seems to have not a doubt of the broad truth of Müllenhoff's view on this matter, though generally inclined to disagree with him14. L. Wilser116 takes the Iranian character of the Scythian language as proven and tries to prove in his turn that it has also special affinities with German. In fact he regards Germans, Scyths, Parthians, Persians and Medes as a series without very considerable gaps between the neighbouring terms,

1 J. G. Cuno, Forschungen im Gebiete der alten Völkerkunde. I. Theil, Die Skythen, Berlin, 1871, described by Gutschmid in his review of it as the worst book he had met for fifteen years (Kl. Schr. III., p. 446-452). He had never met Scythia Biformis das Urreich der Asen by Wajtes Prusisk,

Breslau, n. d.

2 I. E. Zabêlin, History of Russian Life, 1. 243 sqq.; also D. J. Samokvásov, History of Russian

Law, Pt 11. 1-69, Warsaw, 1884.

3 Kl. Schriften, 1828, I. p. 352 sqq., in English, A Dissertation on the Geography of Herodotus and Researches into the History of the Scythians, Getae and Sarmatians, Oxford, 1830.

4 History of Greece, ed. 3, 1851, Vol. 111. p. 216

CIG. Vol. 11., Pt XI. p. 81.

Die Hellenen im Skythenlande, Berlin, 1855. 7 "Sprachliche Bedenken gegen das Mongolenthum der Skythen," Mélanges Asiatiques, T. 11. p. 531, St Petersburg, 1856.

8 Die Deutschen und die Nachbarstämme, Mün-

chen, 1837.

9 "Ueber die Herkunft und Sprache der Pontischen Scythen und Sarmaten." Monatsber. d. k.

Preuss. Akad. d. W. 1866, p. 549, reprinted in Deutsche Altertumskunde, Berlin, 1870-1900, III.

p. 101 sqq.

10 History of Antiquity, Eng. Trans. 1879, Vol.

III. pp. 228—246.

11 "Kritik der ältesten Nachrichten über den Skythischen Norden. I. Ueber das Arimaspische Gedicht des Aristeas," Sitzungsber. d. kk. Akad. zu Wien, 1888, CXVI. pp. 715-780. II. "Die Nachrichten Herodot's über den Skythischen Karawanenenweg nach Innerasien." 16. CXVII.,

pp. 1-70.

12 "Die Skythen," in Kl. Schriften III., p. 421,

the article in the ninth Leipzig, 1892, from this the article in the ninth edition of Encyclopaedia Britannica is shortened.

13 Investigations in the province of Gotho-

Slavonic Relations, St Petersburg, 1899.

14 See also Sir H. Howorth, Journ. of Anthrop.
Inst. VI. (1877), pp. 41 sqq.; H. d'Arbois de
Jubainville, Les premiers habitants de l'Europe,

Paris, 1889, II. pp. 223-264; F. W. Thomas, "Sakastana," JRAS. 1906, p. 204 regards "Scythic" as an E. Iranian dialect, but he mostly means Indo-Scythic.

16 Cf. Internationales Centralblatt für Anthropologie u. s. w. VII. (1902), Heft 6, p. 353, review of L. Wilser; "Skythen und Perser," in Asien— Organ der Deutschen Asiatischen Gesellschaft, 1902.

whereas he entirely denies the close connection between the speakers of Sanskrit and the speakers of Zend. Unfortunately, not having seen his paper, I cannot give his arguments for this novel position. Something similar is J. Fressl's view, and E. Bonnell seems to waver between assigning Germans, Lithuanians, Slavs, and Kelts as descendants of the Scythians, whom yet he calls Iranian?. Likewise Fr. Spiegel3 thinks the bulk of Scythians Indo-European, but will not decide between Iranians and Slavs; still he admits a possibility of Uralo-Altaic Royal Scyths. So, too, Professor Lappo-Danilevskij, in his convenient collection of material concerning Scyths, gives rather an uncertain sound as to their ethnological affinities.

Meanwhile Niebuhr's theory lived on in spite of the Iranian hypothesis of the philologists, especially in Hungary, where A. Csengery referred the Scyths to the Uralo-Altaic folks, perhaps to the Sumer-Akkadians, and Count Géza Kuun⁷ to the Turco-Tartars on the ground of the god-names, and A. Vámbéry on the ground of customs. This view finds its most complete expression in a monograph by Geza Nagy.

A Magyar has a hereditary right to speak on any question concerning Finno-Ugrians, but he is apt to have his racial prejudices, which act as a corrective to those of the German or the Slav. Accordingly Mr Nagy maintains that the Scyths were Uralo-Altaic, and thinks that an Uralo-Altaic language has always been dominant in the Steppes, save for the comparatively short interval during which the Aryan branch of the Indo-Europeans was making its way from its European home towards Iran and the Panjáb. This view he supports by destructive criticism of the etymologies proposed by Müllenhoff and other advocates of the pure Iranian view, criticism that in truth shews up their mutual disagreement and the arbitrary character of their comparisons. But he in turn advances Uralo-Altaic etymologies equally arbitrary, and in them has recourse to Sumer-Akkadian, a language whose existence is hardly so strongly established as to allow it to lend support to further fabrics of theory10.

There follow further arguments drawn from physical type, manner of life, custom and religion, much the same as those advanced above, with the general result that although the author does not deny the existence among the steppe-dwellers of a strong Iranian influence and of a certain Iranian element supplied by the leavings of the great Aryan migration, he takes their main mass to have been Uralo-Altaic in speech, and even distinguishes among them different layers, Finno-Ugrian and Turco-Tartar, and different stages of social development, matriarchal and patriarchal.

1 Die Skytho-Saken die Urväter der Germanen, München, 1886.

² Beiträge zur Alterthumskunde Russlands, St Petersburg, I. 1882, II. 1897: a book of useful material used uncritically. Rawlinson *Herodotus*, III. p. 158 makes Sc. a special branch of Indo-European.

³ Érânische Alterthumskunde, II. p. 333 sqq. ⁴ Trans. Imp. Russ. Arch. Soc., Slavonic Section, Vol. IV. (1887), p. 352 sqq. ⁶ e.g. E. Bunbury, Hist. of Ancient Geography,

1. 215; H. Stein, Herodotus, Vol. II. p. 13; Fligier,

Archiv f. Anthropologie XVII. p. 302.

6 A Szkithák Nemzetisége (The Scyths' Nation-

ality), Budapest, 1859. Codex Cumanicus, Budapest, 1880.

8 A Magyarok Eredete (The Origin of the Magyars) (Chap. i.), Budapest, 1882: for these references to Magyar books I am indebted to G. Nagy. Cf. also Vambéry's Die primitive Kultur

der Turko-Talaren, Leipsig, 1879.

9 Archaeologiai Erlesilö for 1895, reprinted as
No. 3 of Néprajzi Füzetek, Budapest, 1895. "A Szkithák Nemzetisége" (The Scyths' Nationality). Without the aid of Mr S. Schiller-Szinessy, of Cambridge, I could not have learnt to read this

10 With regard to affinities with the early popu-

lation of sw. Asia various writers have already pointed out resemblances between the Hittite and the Scythian dress. Some have brought in the Etruscans too, hoping to solve the three chief problems of the ancient world under one. But there is no physical impossibility about North Asiatics in Asia Minor, as is shewn by the incursions spoken of by the Hebrew prophets and supposed to have changed Beth-shean to Scythopolis. Fr. Hommel (" Hethiter und Skythen und das erste Auftreten der Iranier in der Geschichte," in Sitzungsber. d. k. Böhm. Ges. d. Wiss. Phil.-Hist. Classe, Prag, 1898, VI.) proposes Iranian derivations for the Hittite names on Egyptian and Assyrian monuments, and on this basis goes on to identify Hittites and Scythians, taking the Iranian character of the latter for granted, arguing from the late Greek inscriptions with barbarian names. In support of this surprising hypothesis he quotes the mythical accounts of combats between Sesostris and the Scythians, Herodotus, 11. 103, 110; Justin, 1. 1 and 11. 3; Diodorus, 1. 55, 11. 43, 46, and says that these Scythians were really Hittites (v. p. 36). Karolides, Die sogenannten Assyrochaldäer und Hittiten, Athen, 1898, suggests something of the same sort, to judge by Jensen's review in Berl. Phil. Wochenschr. 1899, p. 1034.

Even in etymology he makes out a very good case for the Uralo-Altaic origin of some of the Scythic god-names (v. supra, p. 85). Other words with a likely Uralo-Altaic origin are the Greek τυρός, cf. Magy. turό, "curd," and Κιμμέριοι, the men of the darkness, cf. Magy. komor, "dark," Zyrjan kimör. On the other hand some of the etymologies proposed by the Iranian party are reasonable and G. Nagy's substitutes very far-fetched. As he applies all the stories of origins to the Altaic tribes and makes even the Cimmerians and agricultural Scythians Altaic, he has to find suitable meanings for Colaxais and his brothers, which leads him very far afield. So too with Oiorpata, Arimaspi, Enarees, Exampaeus, all of which are either obviously or very

probably Iranian.

The upshot of all this is to prove from the other side that no one etymological key will open all the locks that bar the way to a full understanding of the Scythian problem. This Jurgewicz1 saw, but endeavoured to explain too much from Mongolian, even those names in the Greek inscriptions that most easily yield Iranian meanings. These have been most satisfactorily interpreted from the Ossetian by Professor Vs. Th. Miller². But his successful use of Iranian has not blinded him to the presence of other elements and he takes an eclectic view, allowing a strong influence and possibly rule exercised upon the Iranians by Uralo-Altaic folk. Professor Th. I. Mishchenko, the Russian translator of Herodotus, sets forth a similar theory in various articles3, and with these authors' general views I am in very close agreement. However they have mostly regarded the Sarmatians as an Iranian tribe that has swept away the supposed domination of the Uralo-Altaic horde: but I find it hard to draw any real line of demarcation. Many of the archaeological finds on which I have largely relied for evidence of Uralo-Altaic influence undoubtedly belong to the Sarmatian period. Each people probably consisted of an Iranian-speaking mixed multitude, dominated by a clan of "Turks" whose language died out but supplied many loan-words, particularly special terms touching the official religion and the necessities of Nomad life. The Iranians who took to that life had no such words of their own and had to borrow them of the real steppe folk, together with their customs, dress and art.

New possibilities are opened by the surprising discovery made by Dr E. Sieg and Dr W. Siegling that among the MSS, brought by Dr A, von Le Coq from near Turfan in Eastern Turkestan are fragments of an Indo-European language which as a "centum" language, and, so far as deciphered, in vocabulary, is rather European than Asiatic, but which in its case-formation seems to follow Altaic models. The decipherers call it "Tocharian, the language of the Indo-Scyths," i.e. of the Yüe-chih, on the ground of the colophon of an Uigur MS. noting a translation made from Indian through "Toxrit." In view of the numerous languages represented in the Le Coq, Grünwedel and Stein MSS. from E. Turkestan, there is not evidence enough for putting a name to the new language (the more that the Uigur for Yüe-chih is Kitsi, v. p. 111, n. 2), but its existence and perhaps also the pictures of a blonde race formerly in these parts make us ready to believe that migrations from Europe, subsequent to those of the Indo-Iranians, penetrated the heart of Asia. Any of the peoples of whom we know neither the physical characteristics nor the languages, but only the names upon the map of Scythia in the widest sense, may have been Indo-Europeans of this or some other new branch. One thinks at once of the Wu-sun with red hair and blue eyes set deep in the face, who made the same impression on the Chinese as do Europeans, and of the fair Budini among whom were the Geloni talking something like Greek. We may hope any day for specimens of Saka speech as Dr Le Coq tells me, but I still hold the above view of the Scyths in Europe.



¹ Trans. Odessa Soc. VIII., 1872, pp. 4—38. ² Journ. Min. Publ. Instr., St P., Oct. 1886, p. 232, "Epigraphic traces of Iranian population on the North Coast of the Euxine"; and again in his Ossetian Studies, Vol. 111., Moscow, 1887.

³ Bulletin of Kiev University, 1882, No. 11; 1883, No. 9, "On the question of the Ethnography and Geography of Herodotean Scythia"; Journ. Min. Publ. Inst., St P., Classical Section, 1888,

January, pp. 39—47, "Legends of the Royal Scyths in Herodotus"; 1896, May, pp. 69—89, "Ethnography of Russia according to Herodotus," November, pp. 103—124, "The Information of Herodotus as to the lands in Russia outside Scythia."

^{.4} SB. d. k. pr. Akad. d. W. Berlin, 1908, p. 915. b Zt. f. Ethnologie, 1907, p. 509. f F. K. W. Müller in SB. d. k. pr. Akad. d. W.

Berlin, 1907, p. 958.

CHAPTER V.

TRIBES ADJOINING SCYTHIA ACCORDING TO HERODOTUS AND ARISTEAS.

On the South, Tauri and Getae.

Before treating in detail of the archaeological evidence as to the population of the Euxine steppes, it seems suitable to consider the statements of Herodotus and other ancient authors as to the different peoples that surrounded those whom he called Scythian. In spite of the confusion in the account of the rivers, they are our best guide in locating the various tribes both within and without the ill-defined outlines of Scythia proper. (Maps I., IV., V.)

On the mountainous south coast of the Crimea lived the Tauri, some have called them Kelts, comparing the name of the Taurisci: but some theorists find Kelts everywhere. We have no data whatsoever for giving relations to the Tauri. They probably represent the earliest inhabitants of S. Russia, perhaps akin to the aborigines of the Caucasus; possibly they would be Iranians if $^{1}A\rho\delta\acute{a}\beta\delta a$ was their name for Theodosia, which lay on their borders. Then we could understand their later mixing with the Scythians, when in the latter the Iranian element had again come to the top. Otherwise we must take the Scytho-Tauri to be like the Celto-Scythae and the Celtiberians, products of the Greek belief that a race of which not much was known was best named by combining the names of its neighbours.

The Tauri were chiefly famous for their maiden goddess, to whom they sacrificed shipwrecked sailors. They seem always to have been pirates and wreckers. In the second century B.C. they were the dependent allies of Scilurus, and though their name survives on the maps their nationality

seems to have merged in the surrounding tribes.

Along the lower Danube the western Scythians marched with the Getae[‡], a tribe of whom Herodotus and Strabo have much to say. Our authorities generally agree in making them a branch of the Thracians, though it is doubtful how far Thracian is more than a geographical expression. There seem to have been two races there with different customs and different beliefs as to a future life[‡]. The Getae would be akin to those whom Professor Ridgeway regards as invaders from Central Europe, with light complexions, and a religion shewing decided resemblances to Druidism. But they do not come into our subject except in connection with the history of Olbia, which they destroyed about 50 B.C. The Kelts on the lower Danube and also the Bastarnae belong to a later distribution of races.

¹ Anon. Peripl., § 77 (51), it is more probably Alan.

² Her. IV. 103, v. inf. Chapter XVII.

³ For Getae v. Müllenhoff, DA. III. pp. 125 – 163;
W. Tomaschek, "Die Alten Thraker," I. p. 92 sqq.,
in Sitzungsber. d. kk. Akad. zu Wien, CXXVIII.,

^{1893,} and P. Kretschmer, Einleitung in die Geschichte der griechischen Sprache, Göttingen, 1806, p. 212; Niederle, Slav. Ant. 1. p. 318, 11. p. 62, v. inf. p. 122, for their invasions of Scythia.

4 W. Ridgeway, Early Age, 1. p. 351 sqq.

On the West, Agathyrsi and Sigynnae.

The Agathyrsi', the westerly neighbours of the Scythians, are said by Herodotus (IV. 104) to resemble the Thracians in most of their customs, and are taken by all writers to be closely connected with them in race, as later the Getae and the Dacians, whose names we afterwards find in the same region, the modern Transylvania, out of which flows the Maros $(M\acute{a}\rho\iota s)^3$ to join the Danube. It is just conceivable that they were Iranian, at least the name Spargapithes has such a look's. The effeminacy of the nation does not agree with the general character of the Thracians, but the weight of opinion assigns them to that stock's. F. Hartwig's seeks to identify the Agathyrsi with people in curious fringed gowns on a cylix from Orvieto.

The Sigynnae whom Herodotus (v. 9) mentions quite in another connection as living beyond the Danube and stretching westward to the land of the Enetae, would be more likely to be Iranian, for he says that they called themselves colonists of the Medes and that they wore Median dress. He says he cannot tell how Median colonists should come there, but that anything may happen, given sufficient time. This expression certainly suggests that Herodotus had no idea that from the Carpathians to the confines of Media there stretched a whole row of nations, more or less akin to the Medes, for, as I take it, the Iranian character was disguised by the Scythic element which gave the tone to the whole. Strabo (x1. x. 8) puts the Sigynni (sic) on the Caspian, and Niederle seems inclined to think him right, supposing a confusion to have arisen through the use of the word Sigynna in Ligurian in the sense of pedlar: but Herodotus, by mentioning this fact, makes it unlikely that he should have been led astray by it; a national name may well gain such a meaning. A point about the Sigynnae which is mentioned by both Herodotus and Strabo is their use of small shaggy ponies for driving. The Median dress may mean no more than that they wore trousers. It seems as if trousers were introduced to Europeans by immigrants from the The form of the word "braccae" suggests that they steppes to the east. were adopted first by the Germans and then by some of the Kelts.

Northern Border.

The Neuri' marched with the Agathyrsi. Their position would be about the head waters of the Dnêstr and Bugh and the central basin of the Dnêpr. The Neuri are perhaps the most interesting of the Scythians' neighbours, for we can hardly fail to see in them the forefathers of the modern Slavs. This is just the district that satisfies the conditions for the place from which the Slavonic race spread in various directions. The one distinguishing trait that Herodotus gives us, that each man became a wolf

¹ In treating the neighbours of the Scyths I have mostly followed Tomaschek, "Kritik" II. v. supra, p. 98, n. 11.

² Her. IV. 48.

³ Her. IV. 78, cf. the Scythian S. IV. 76, and Spargapises, king of the Massagetae, I. 211: but it may have been supplied to give individual circumstance to the story of Scyles. Their community of wives also recalls the Massagetae.

⁴ Niederle, Slav. Ant. I. p. 263. ⁶ Die Griechischen Meisterschalen, p. 421, Pl. XXXVIII., XXXIX., v. supra, pp. 54, 55.

⁶ op. cit., I. p. 238.

e.g. Lithuanian Szatas, i.e. Scot = pedlar.
 v. d'Arbois de Jubainville, op. cit. II. p. 264;
 Sophus Müller, Urgeschichte Europas, Strassburg,
 1905, p. 161 sqq.
 Her. IV. 105.

for a few days every year (IV. 105), recalls the werewolf story that has always been current among the Slavs; even now the word for werewolf is one of the very few Slavonic loan-words in Modern Greek. Everything points to this identification. Braun (op. cit. p. 79 sqq.) puts the case very well. Valerius Flaccus (Argon. vi. 122) speaks of "raptor amorum Neurus," which calls to mind the account of the Drevlians and other Slavonic tribes of this region who carried off their wives at water¹, but we do not know if he had any foundation for the expression. When Herodotus says that the Neuri had Scythian customs, it might well describe the frontiersmen on whom the Scythic culture had evident influence (v. p. 175). The geographical names of the district are purely Slavonic, whereas immediately further east the occurrence of Finnish words for rivers shews that we are no longer in territory originally Slavonic'. Tomaschek suggests that the invasion of snakes which drove the Neuri eastward to the Budini, said by Herodotus to have happened one generation before the campaign of Darius, an invasion usually taken to mean an attack from a hostile tribe3, was really a movement of the East Germans, and Braun' goes so far as to say that it was a movement of the Bastarnae, forced down between them and the Carpathians by the expansion of the Kelts at their time of greatest power for aggression. He sees in the occupation of the Desná the first movement of Slavonic conquest. For here we have a river bearing a Slavonic name, the Righthand river, clearly approached by the Slavs from the south and flowing through a country of which the other river-names are Finnish. Slavs came to know the Kelts through the Germans is clear from loan-words, especially Russian volokh, O. Slav. vlakh, from Gothic * walhoz, our "Welsh," the German name for Kelts and later for Romance speakers.

Eastward of the Neuri in the general description of Scythia⁶ and in the other passages where they are referred to, come the Androphagi. But in the account of the Neuri, c. 105, it is said that the latter, when invaded by snakes, migrated to the Budini, that is past Androphagi and Melanchlaeni. Either then the Budini changed their abode, perhaps in consequence of this invasion, or there were two tribes of Budini, eastward and westward. This might help to account for the genesis of the story about the march of Darius across Scythia. If the tale went that Darius marched to the land of the Budini, it would be readily thought to speak of the eastern Budini, well known because of the town Gelonus and its connection with Greek trade. We must then allow a probability of a second tribe of Budini near the Neuri'.

name to mean Waterfolk, from vodů. Gelonus reminds him of the typical spread-out Slav settlement. His tradition is carried on by Niederle, Slav. Ant. I. p. 266.

⁶ Her. IV. c. 102, 106.

¹ Ps.-Nestor, Laurentian MS., ed.³, p. 12, умыкиваху у воды девица.

² N. P. Barsov, Outlines of Russian Historical

Geography, Warsaw, 1885, p. 75.

Niederle, Slav. Ant. I. p. 295, vehemently protests against this interpretation, and takes the account literally.

op. cit. p. 247. ⁶ The identification of Neuri and Slavs, seems first to have been well established by P. J. Safařík (Slovanské Starožitnosti), Slavonic Antiquities, Prag, 1862—63, I. p. 224 sqq. He regards their land as the very kernel or heart of the region originally settled by the Wends. He takes the Budini (ibid. p. 215) to be Slavs also, and their

⁷ This expedient of supposing doubled tribes is excused by many instances of tribes with similar names, especially in Eastern Europe, under conditions which make it easy for part of a nation to split off, e.g. Royal Scyths and colonist Scyths in Herodotus, three or four tribes called Huns, so too with Alans, Turks, Bolgars, Tartars, Kalmucks, Nogai, all of which have had subdivisions living at one time far apart from each other. This list might be almost indefinitely extended.

The Androphagi were probably Finns, and the most barbarous of them, as no trade route passed through their land. Theirs would be central Muscovy and southwards towards Chernigov. Hence, too, the most exaggerated stories would be told of them. But we need not believe that they were cannibals any more than the Samoyeds, Finns also, whose name means the same. Tomaschek ingeniously suggests that the Amadoci of Pseudo-Hellanicus¹ and of Ptolemy are the same as the Androphagi, āmâdaka, cf. Skr. āmâd, eater of raw meat. He would propose to identify them with the Mordva of the present day, which is very possible, for there is no doubt that all the Finnish tribes now found on the middle Volga and on the Kama once lived far to the west or south. But when Tomaschek (II. p. 10) sees in Mordva another Iranian nickname meaning cannibal, he hardly carries conviction. The necessary sound changes are as unlikely as that a nation would take such a nickname to itself. Still Mordva is a loanword from the Iranian (=Mensch), and many other words shew that these Finnish tribes, now so far separated from any Iranian nationality, once had close dealings with some such. That the Mordva once marched with speakers of the Baltic group far to the west of their present place is shewn by loans from an early stage of Slavonic and from Lithuanian.

If the Androphagi are Finns, Mordva, the Melanchlaeni are Finns also, Merja and Cheremis. The former were early absorbed by the advance of the Slavs, and the latter have been so strongly subjected to Turkish influence that all earlier traces have been wiped out. But archaeological evidence proves that some such tribe occupied the region corresponding to that assigned by Herodotus to the Melanchlaeni about Riazan and Tambov². It may be a coincidence that the Cheremis wore black till a hundred years ago. Dark felt is the natural product of the coarse dark-woolled sheep of the country. So we need not see any connection with the Σαυδαράται of the Protogenes inscription (Ossete sau black, daras garment) who were almost certainly a Sarmatian tribe. For the kind of name compare the Caucasian Melanchlaeni, who have tended to the confusion of later writers, and in modern times the Kara Kalpaks, White Russians, and such like.

Next to the Melanchlaeni and now above the Sarmatians, well to the east of Scythia, lived the Budini, fifteen days' journey from the corner of the Maeotis. The Oarus seems to have flowed through their country, coming from that of the Thyssagetae. If then we measure fifteen days' journey up the Don to the portage by Tsaritsyn and then up the Volga, we come to the lower part of the governments of Sarátov and Samára, and not far to the north begins the forest region. The territory of the Budini probably included the lower courses of the Bêlaja, Vjátka and Káma. The inhabitants are most likely represented by the Permiaks, driven north and east by the spread of the Slavs and the irruptions of the Tartars.

Near the junction of the Kama and Volga there has always been an important trading post, Kazan since the coming of the Mongols, in early mediaeval times Bolgary. Gelonus seems to have been the first of the

¹ Steph. Byz. ad voc.

² Count Uvarov, Les Mériens, St P., 1875; however A. A. Spitsyn, BCA. XV. 164, urges that the

We have the name of another town among the Budini, Καρίσκος¹. Tomaschek compares Permian karysok, little fortress. The wide commercial relations of this district are shewn by the wonderful silver plates found in the government of Perm, splendid specimens of Graeco-Roman, Syrian, Byzantine, Sassanian and even Indian work being dug up in these remote forests, as well as coins of Indo-Scythian kings', evidence of connection with Central Asia. All these precious wares must have been paid for with furs. may well have been a sufficiently lively trade to tempt the Greeks to establish a factory in the interior of the country, even as far from the coast as the land of the Budini. Herodotus probably exaggerated the number of the Greek population, as he has most clearly exaggerated the extent of the town of Gelonus. Three miles and a half square is an impossible size, three miles and a half about would be plenty for warehouses and temples and gardens and space for folding the local sheep of which Aristotle speaks. The establishment must have been like one of the forts in Canada, inhabited by a mixed population of traders and trappers, or the Ostrogi in Siberia, round which towns like Tomsk and Tobolsk have grown. The description of the Budini themselves tallies with that of the Permiaks, grey-eyed and reddish-haired: $\phi\theta\epsilon\iota\rho\sigma\tau\rho\alpha\gamma\epsilon$ ov $\sigma\iota$ —compare what Ibn Fadhlān says of the Bashkirs, "Pediculos comedunt." The otters and beavers of Herodotus have become rarer with assiduous hunting, but they were common when the Russians first came, and found a home by the many rivers of the country's. His lake may be the marshes on the course of these, for instance about the lower Kama.

It is barely conceivable that the Neuri should have come so far for refuge as to the middle Volga, hence the probability of there having been other Budini near the Dnêpr. These Darius may perhaps have reached;

Ptolemy's Bodini seem the mere survival of an empty name.

Niederle, while admitting that the Androphagi and Melanchlaeni are Finns, is inclined to think the Budini Slavonic. He regards them as stretching from the Dnêpr to the Don behind the Androphagi, although Herodotus says distinctly that beyond these is a real desert and no men at all. Budini looks certainly very like a Slavonic tribe-name with the common suffix -in-, and there are plenty of Slavonic names from the root bud. But they certainly stretched further east than Niederle allows, for they lived fifteen days up the Don above the Sauromatae. By bringing them west he puts Gelonus on the site of Kiev.

¹ Aristotle, ap. Aelian de Nat. Anim. XVI. 33.
² e.g. Kadphises I., CR. 1896, p. 132; KTR. p.
411—436; Arch. Anz. 1908, p. 150 sqq.
³ J. Abercromby, The Pre- and Proto-historic

4 For a view of such a wooden-walled town in

Europe in mediaeval times, v. Nuremberg Chronicle (1493), fol. CCLIII., "Sabatz in Hungaria." The gorodishche or camp at Bêlsk (v. p. 147) excavated by Gorodtsov is 20 miles round, much larger than Gelonus.

s J. Abercromby, The Pre- and Proto-historic Finns, Vol. 1. p. 124, describes the trade routes followed by the mediaeval Arabs, both directly up the Volga to Bolgary, and, when the Khazars hindered, across the Kirgiz steppe from the Amu-Daria, and so to the west of the Urals: he suggests that the Persian plate found the same way, and in yet earlier times the foreign imports found at Ananjino, v. inf. p. 257. If the Geloni spoke something like "Tocharian," a Greek hearing the numerals might think them bastard Greek.

⁶ Her. speaks of a marsh in which are taken ἐνύδριες καὶ κάστορες καὶ ἄλλα θηρία τετραγωνοπρόσωπα. The last I wrongly identified with the Tarandus or reindeer, v. sup. p. 5 and nn. 6, 7, but the marsh and Theophrastus l.c. rule this out. The ἐνύδριες usually translated otters are watersnakes, v. Pliny, NH. XXX. § 21, XXXII. § 82, and the square faced beasts are the otters; a gloss to this effect has been misapplied.

The late Professor I. N. Smirnov of Kazan, the chief authority on the Volga Finns, directly denies that the ancestors of the Cheremis and Mordva were the Melanchlaeni and Androphagi. But he does not advance any very valid objections, and admits a contact with Iranians which argues a seat further to the south. He denies any contact with Greeks such as we must suppose in the case of the Budini. Incidentally he describes many customs among the Finns that recall Scythian usages: among the Cheremis the sacrifice of a horse forty days after death and the stretching of its skin over the tomb: the soul does not really leave the body for forty days and even later comes back to it by a hole left for the purpose. On this fortieth day is the wake, at which the dead man assists, and is taken back to the grave on a cart with bells: among the Mordva again, after forty days there is a wake and a horse sacrifice and a washing of the funeral car. In both cases many things are put in the grave, or the dead will come and fetch away both things and people. This is all in favour of the existence of an Uralo-Altaic element among the Scyths, although there was a clear line of distinction drawn between them and these Finns: for the Finns lived in the forest and the mixed multitude of Scythians in the steppe.

South of the eastern Budini were the Sauromatae, stretching east and north from a point three days' journey to the east of the Tanais (which Herodotus takes to run southwards), and the same distance north of the corner of the Maeotis. Hippocrates says they are a special tribe of Scythian, and Herodotus, deriving them from a marriage of Amazons and Scyths, shews that they spoke a language akin to that spoken by the Scyths but gave their womenfolk more freedom².

North-Easterly Trade Route.

Herodotus derived his account of these nations, Agathyrsi, Neuri, Androphagi, Melanchlaeni, Budini and Sauromatae, from two sources and gives particulars of them in two places. In the one (cc. 100—109, Map IV. p. 27) he is keeping in view the story of Darius and his expedition, but these tribes, although set out according to the scheme of the square, are not wrested far from their places as given by the less detailed account which goes with the less schematic description of the lie of the land (cc. 16—26, Map v. p. 34). This he supplements with much information, partly due to Aristeas, as to tribes living in a north-easterly direction far into Central Asia (Map 1.). Due north of the European tribes Herodotus imagines a continuous desert, occasionally diversified with the lakes necessary for the southward-flowing rivers: this desert is a real desert as opposed to the patches of thinly peopled land separating hostile tribes. Probably this real desert was actually uninhabited, as the forests of the far north were only peopled comparatively lately, when these very tribes were driven up by new comers from Asia, or the Lapps and Samoyeds crossed from the far NE.

^{1 &}quot;Les Populations Finnoises du Bassin de la Volga et de la Kama, 1 to Partie, Les Tchérémisses, Les Mordves," Paris, 1898, tr. by P. Boyer in *Publications de l'École des Langues Orientales Vivantes*, 1vº Série, T. VIII. I should like to express my gratitude to the author of this book for his kindness to

me at Kazan, and especially to the translator, to whom I am indebted for my knowledge of Russian and for many favours, including the loan of this very book. Abercromby, op. cit., mostly follows Smirnov.

² Her. IV. 21, 110—117, also infra, p. 119, for their migration west of the Tanais.

The land of the next tribe, Thyssagetae, is beyond a desert seven days' journey across, lying to the N. or rather E. of the Budini'. From their country run the four rivers Lycus, Oarus, Tanais and Syrgis into the Maeotis. This last detail is not to be reconciled with geography (cf. p. 30). We can only think that it was a country with several rivers running sw., down which people got to the Maeotis across the Tsaritsyn portage. would give us the western slope of the Ural from Ufa to Orenburg. Herodotus says nothing of the Urals. Their incline is so gentle that they do not strike a traveller as mountains. Here is a river, Chussovaja, which may have the same root as Thyssagetae. The termination of this latter form is Scythian or Sarmatian, cf. Tyragetae, Massagetae. In Ossetian, -gäis an adjectival affix and -tä the plural termination. Tomaschek identifies the Thyssagetae with the Voguls.

The trade route described by Herodotus passed far to the north and crossed the Urals, avoiding the barren Caspian steppe. Herodotus knew that hereabouts was no channel leading to the Northern Ocean, and in this he was in advance of the more scientific geographers down to Marinus of Tyre.

To the south lived tribes of more or less Iranian affinities, Sauromatae, later Aorsi and Alans, marching with the Finnish and Ugrian tribes above them and with the Caucasians to the south. They carried on a profitable trade between the mines of the Ural and Iran, and also between the Mediterranean world and the Far East. In the Chinese annals the Yen-ts'ai or Aorsi, afterwards called A-lan-na, held the country from the Aral sea to the borders of Ta-Ts'in (Roman empire), and their traders even reached China.

With the next tribe, the Iyrcae (IV. 22), we get beyond the stage for the wanderings of Darius. They are interesting for their name, which can hardly be other than the Sarmatian form of Jugra², the word whence we have Hungarian. The ancestors of the Magyars were a tribe between the Voguls and the Ostjaks, swept from their place by the Turkish invasions and now a racial erratic block in the middle of the Slavs. Here we have the first notice of them3. Their peculiar method of hunting, represented on a gold plaque in the Hermitage', required a country full of trees but not a thick forest: such would be the basins of the Tobol, the Ishim, and the Irtysh, just to the E. of the southern Ural and the land of the Thyssagetae'.

As neighbours of the Lyrcae, Herodotus speaks of a tribe of Scyths that had separated from the Royal Scyths of the Euxine Steppes. Considering the ease with which a nomadic nation divides and sends off one part to a surprising distance (e.g. the Kalmucks, the majority of whom in the reign of Catherine II. of Russia left the lower Volga for the frontiers of China®, it is impossible to say that a part of the Royal Scyths could not have migrated

¹ Her. IV. 22, 123; Tomaschek, II. p. 32.
² Such a transposition of mute and liquid is

vs. Miller, Os. Studies, III. p. 83.

3 Cf. also Dr Bernhard Munkacsy, "Die älteste historische Erwähnung der Ugrier," in Ethnol. Milth. aus Ungarn, Bd Iv., Heft 4-6, p. 152, and Bd v., Heft 1—3, p. 7. 4 p. 278, f. 201 = KTR. p. 395, f. 358. 5 The conjecture $T \dot{\nu} \rho \kappa \alpha \iota$ is an anachronism.

The name Turk had not yet come into existence, though it would be no proved anachronism to say that races kindred to the Turks had passed this way. "Turcae" in the MSS. of Mela, 1. 116, and Pliny, NH. VI. 19, may well be due to intelligent

copyists.

6 De Quincey's account is mostly fancy, but vividly presents the possible circumstances of the great migration. Corrections are made in vol. VII. of Masson's Edinburgh edition.

north-eastwards. That there is a connection between inhabitants of these mutually remote regions is rendered probable by the similarity of many objects found here on the upper waters of the Jenisei and in the Scythian graves. Perhaps an easier way of supposing the conditions is to imagine that here again travellers found a subject population ruled over by a tribe with customs and language similar to those of the original royal caste of the Scyths. It is hard to imagine Iranians so far to the north beyond the utmost bounds of the Aryan world. If the Scyths were Ugrian rather than Turko-Tartar, this would be just the place from which they should come. The Scythian traders finding these Scyths far in upper Asia recalls how the mediaeval Magyar missionaries found again their kin the Voguls and Ostjaks.

Argippaei.

As far as these Scyths, says Herodotus, all the land is flat and deep-soiled; henceforward it is stony and rugged. That is, we are coming to the outliers of the Altai mountains. On the upper Irtysh the steppe ceases about Bukhtarminsk. The trade route from the Ural came down from almost a north-westerly direction, and continuing the line we should be brought to Dzungaria and the country about Kuldzha well described as lying beneath lofty mountains, the Altai on one side and the T'ien Shan on the other. Here we meet with the Argippaei (c. 23), (the exact form of the name is uncertain: Argimpaei, Arimphaei, Orgiempaei, etc.). To the E. of them again, or rather to the SE. following the same general line, come the Issedones¹. The position of the Issedones can be approximately fixed from Ptolemy's account which has been well interpreted by Tomaschek² as placing them in the Tarim basin. That is that the northern route followed by the informants of Herodotus, and a more direct way by which went Maës Titianus, the Syrian merchant, bring us to the same region.

In the Argippaei we have undoubtedly pure Mongols. Herodotus says of them that they are bald from their birth both men and women, have flat noses and large $\gamma \acute{\epsilon} \nu \epsilon \iota a$, translated by Tomaschek cheek-bones, and speak a language of their own, but wear the dress of the Scythians. The baldness may well be a misunderstanding of the custom of shaving the head, or an exaggeration of the scantiness of hair which distinguishes the Mongolian race: the other details point clearly to Mongols and are borne out by what is told us of their food and manner of life.

They live off a tree called *Ponticum* about the size of a fig tree, bearing a fruit like a bean but with a stone. When this is ripe they rub it through a cloth and a thick black juice runs off from it. This juice is called *Aschy*. This they use as it is or mix it with milk, and of the pulp of the fruit they make cakes and eat them. For they have not much cattle as their pastures are not excellent. This ponticum seems to

¹ Tomaschek, 11. p. 54.

² I. p. 734, see infra, pp. 110 and 114 n. 3. ³ Γένεια might be taken to mean chins, cf. in the letter of Yvo of Narbonne to Giraldus, Abp

of Bordeaux, Matthew Paris, 1243, "menta prominentia et acuta" of the Tartars (Keane, *Ethnology*, p. 350, Note 2); Hakluyt, p. 21, "long and sharpe chinnes." Mongol as defined sup. p. 48 n. 1.

be an Iranian word meaning the way-tree, "travellers' joy" as it were: but "aschy" is Turkish and seems closest to áci, sour. It appears to be the Bird Cherry, *Prunus Padus*, which is treated in exactly this way by the Bashkirs. But many other steppe berries are similarly used by various tribes.

The tree covered with felt in the winter is a picturesque account of the felt tent supported by a light and portable framework now universal among the nomads of Asia. It has entirely superseded the waggons in which the Scyths lived, being more roomy, more adaptable and in every way superior, except that it has to be taken up and down, and affords no shelter during the actual journey (v. supra p. 32 and f. 7).

The most remarkable point about the Argippaei is the respect in which they were held by their neighbours. Says Herodotus, "No man at all wrongs these men. For they are said to be sacred. Nor have they any weapon of war. And they both act as adjusters of differences among their neighbours, and if any man take refuge from pursuit with them he can be touched by no one." Tomaschek supposes that these were the frontier officials of a well-organised Turkish kingdom, set to prevent the interruption of commerce by the quarrels of the various tribes upon its borders.

In general, however, the Greeks had a tendency to idealize the life of nomads. One might almost say they found in them the noble savage. Hence Homer speaks of the Mare-milkers as the most just of men², and Strabo (xI. viii. 7), speaking in particular of the Massagetae, but in general of all who live in Scythic wise, says, "Such have a manner of life common to them all, which I have often spoken of, and their burials are much the same, and their customs and all their life together, independent but rude, wild and warlike, however as to contracts they are straightforward and honest." So the Chinese speak alternately of the treachery and honesty of their nomad neighbours.

Herodotus (IV. 24) says that all is perfectly clear and definite as far as the bald people, that Scyths and Greeks from the Pontic trading towns can tell about them; further that these Scyths use seven interpreters to make their way through seven tongues. It is not quite clear how the number seven is made up. The tribes that may come in are Scyths, Sarmatae, Budini, Geloni, Thyssagetae, Iyrcae, other Scyths, Argippaei and perhaps Issedones. In such a tale there is a great temptation to bring in as many tongues as possible, and the informants may well have reckoned in the Scyths themselves, or made Sarmatian into a separate language, or likewise Eastern Scythian, or counted in the Geloni, whatever their jargon may have been: in any case seven is a fair total, though five would probably have done.

Beyond the Argippaei (c. 25) to the north as it seems are indeed great and high mountains, the main ranges of the Altai: the goat-footed men need not be snow-shoe men, as Tomaschek suggests, but any active mountaineers, and the folk who sleep six months in the year always mark the bounds of knowledge or rather inference towards the north.

Issedones.

To the East, or rather se. of the Argippaei, are the Issedones (c. 26)¹,

apparently Tibetan tribes in the Tarim and Bulunggir basin.

The customs of these people as related by Aristeas exactly recall those ascribed by mediaeval and modern travellers to the Tibetans. As Zenobius sums it up (v. 25) the Issedones eat their parents except their heads: their heads they cover with gold. Compare Rubruck translated by Hakluyt (p. 116):

"Next vnto them" (i.e. the men of Tangut) "are the people of Tebet men which were wont to eat the carkases of their deceased parents: that for pities sake they might make no other sepulchre for them but their owne bowels. Howbeit of late they have left off this custome, because that thereby they became abominable and odious vnto all other nations. Notwithstanding vnto this day they make fine cups of the skuls of their parents, to the ende that when they drink out of them they may amidst all their iollities and delights call their dead parents to remembrance. This was told mee by one that saw it. The sayd people of Tebet haue great plentie of golde in their land." In the British Museum may be seen skull cups richly mounted such as are used in Tibet in the Lamaist ceremonies.

Further ισοκράτεες δε όμοίως αι γυναίκες τοισιν ανδράσιν. Not so much as it seems from their taking part in war and chase like the Sarmatian women, as from the importance naturally gained by the one woman of a polyandrous household. The Chinese even speak of states in this region

in which the women held all the political authority.

If the testimony of Ptolemy according to all interpreters could not be adduced for putting the Issedones on the Tarim the positions of all the tribes along the trade route would lose a very important confirmation. The chief difficulty is that the Chinese describe wholesale changes of population as occurring between the times of Aristeas and of Ptolemy: the encroachments of the Hiung-nu (v. pp. 92 and 121) had in the second century B.C. driven the Yüe-chih from the Bulunggir basin into that of the Tarim. The Yüe-chih are said to have customs similar to those of the Hiung-nu, but polyandry is ascribed to them and they appear rather to have been nomad Tibetans, perhaps with Hunnish chiefs, at least they use the Turkish title jabgu. To the west of Lop-nor they found a town-dwelling population called T'u-huo-lo (Tochari)². Later we meet with both peoples in Trans-Oxiana and Bactria (hence the name Tokharistan) and they apparently leave the Tarim basin to the Hiung-nu's. Had not the Yüe-chih been driven out of the country long before Ptolemy's time their identification with his Issedones would be

^{1 &#}x27;Ισσηδοί ap. Tz., v. p. 112, n. 4; Alcman ap.

St. Byz. Έσσηδόνες.
² Of them the Wei- and Sui-shu say, "Brothers have one wife in common; she wears on her cap so many horns...as there are brothers; when one brother enters her chamber he puts his shoes before the door as a token. The children belong to the eldest brother." This likewise sounds Tibetan and we can never clearly distinguish between the Yüechih and the T'u-huo-lo, but it is written of them in Bactria when they had long ago coalesced

³ They cannot have been cleared out com-tely. We know that some, the Little Yüe-chih, remained behind among the Tibetan Kiang. The inaccessible oases of the Tarim basin have harboured the relics of many races. From his last journey Dr M. A. Stein brought back MSS. in twelve languages (Times, Mar. 8, 1909), but the Tibetan element seems the oldest at least along the South, having been present in Khotan before the historic invasion (Stein, Ancient Khotan, I. p. 147).

obvious: perhaps the name had clung to two settlements Issedon Scythica (Ak-su?) and Issedon Serica (Lou-lan near Lop-nor?), reason enough for him to put the well known tribe on to his map. This is not on a par with his haphazard insertion of antiquated names towards the edges of Sarmatia: he had, as I shew below, a very good knowledge of the Tarim basin.

So Ptolemy's Issedones represent the Yüe-chih in their second position on the Tarim, but Aristeas knew them on the Bulunggir and probably included the Tochari under them. So his Issedones might extend to the Pamir, where they would be opposite to the Massagetae just over the pass into the Jaxartes basin?

Massagetae.

Like tales are told of the Massagetae N. of the Oxus, of their way of eating their parents, not even having left them to die a natural death, and of their marriage customs. They are described as living opposite the Issedones. that is, just across the mountains to the west of them, and are often coupled or even confounded with them. In IV. 13 Herodotus says, when speaking of the movement that drove the Scyths out of Asia, that according to Aristeas the Arimaspi attacked their neighbours the Issedones, and these drove out the Scyths: whereas in c. 11 he says that the Scyths were pressed by the Massagetae. The Massagetae are evidently a mixed collection of tribes without an ethnic unity, the variety of their customs and states of culture shews this, and Herodotus does not seem to suggest that they are all one people. They are generally reckoned to be Iranian. But it is probable that at any rate part of them were practically identical with the Issedones: that just as the Yue-chih were driven by pressure from the Huns over the mountains into Bactria, so before them another Tibetan tribe had trodden the same path under the same pressure and gained the country of the two rivers: perhaps this was the very movement of which Herodotus and Aristeas speak. Other Massagetae may well have been Iranian, or as some thought', much the same as the Scythians; whereas the inhabitants of the islands of the Araxes (Oxus or Jaxartes, v. sup. p. 30) were aboriginals connected perhaps with the tribes of the Caucasus. The picture drawn of the nomad Massagetae seems very like that of Scythians in a rather ruder stage of development. The tale of Tomyris may bring to mind either the Tibetan gynaecocracy or that of the Sarmatians. Certainly it appears more closely linked with the latter. The name Massagetae seems to mean belonging to the great (horde), and probably just as all the tribes north of

¹ p. 114, n. 3. In the same way the name Tochari survived in Ptolemy's Thaguri, Thagurus Mons and the town Thagura (v. l. Θόγαρα, cf. Justin's Thogari and Tib. Thogar), and still later attached to the ruined towns ascribed by Hüan Tsang to the vanished T'u-huo-lo.

² Even phonetically the identification, hinted at

² Even phonetically the identification, hinted at by Tomaschek, is not impossible. Iranians and Greeks might make Issedi out of Ngüt-shi, the oldest form of Yüe-chih, cf. Canton. yüt, Jap. getsu, Franke, op. cit. p. 23; Uigur, Kitsi, Mong. Gači, F. K. W. Müller, "Uigurica," p. 15, n. 1, in Abh. d. k. pr. Ak. d. W., Berlin, 1908.

3 Compare Her. 1. 215, 216, γυναϊκα μὲν γαμέει ἔκαστος, ταύτησι δὲ ἐπίκοινα χρέωνται. ὁ γὰρ Σκύθας φασὶ Ἑλληνες ποιέειν, οὐ Σκύθαι εἰσὶν οἱ ποιέοντες ἀλλὰ Μασσαγέται· τῆς γὰρ ἐπιθυμήση γυναικὸς Μασσαγέτης ἀνήρ, τὸν φαρετρεῶνα ἀποκρεμάσας πρὸ τῆς ἀμάξης μίσγεται ἀδεῶς, p. 110, n. 2, and Marco Polo, Yule³, Vol. II. Bk II. c. xlvii. p. 54. G. Nagy, op. cit. p. 7 sqq., takes the Massagetae to be essentially the same as the Scyths, but the latter having attained to the idea of exclusive property in women who had been seized in war, had passed out of the stage of community of women. ⁴ Her. I. 201.

the Pontus were for the Greeks more or less Scythians, all the tribes that were under the "great horde" were regarded by the Persians, from whom the Greeks mostly got their ideas of the peoples on the northern border of Iran, as all more or less Massagetae; again it may have been the Scyths' name for them.

Sacae.

For we must confess that no word like Massagetae occurs in the Old Persian inscriptions in which as we should expect from Herodotus (VII. 64) we find Saka. In the epitaph of Darius at Naksh-i-Rustam (a) we have Saka Tigrakhauda, Saka Humavarka, and Saka [t]yai[y ta]radaraya (transmarini)¹. Oppert explains Tigrakhauda as "cunning with arrows." It is usually taken to mean "with pointed caps," and Humavarka has been compared with Σκύθαι 'Αμύργιοι; the transmarine Sacae may be beyond either the Aral or the Caspian or even, as F. W. Thomas' suggests, Lake Hamun, as well as the Euxine, so that we are not much helped.

On the rock of Bisutun's Darius says himself (v. 22) "I went against the land of the Saka...Tigris...to the sea: I crossed it on a bridge, I slew the enemy, I seized...by name Sakunka...I seized also other rulers"; but the lacunae make it impossible to know to what expedition this refers. Saka are also mentioned as having revolted. At Persepolis (1. 18) Saka are named as bringing tribute. But which of these may be among the varied nations sculptured we cannot say. Those whose clothes have any resemblance to Scythic dress have been reproduced (p. 59, f. 12). Most interesting is the figure at Bisutun inscribed Iyam Sakūnka hya Saka; "this is Sakunka the Saka." But of his national costume only the cyrbasia is left him.

Arimaspians and Hyperboreans.

As far as the Issedones reached there was a quite practicable trade route, and as it seems nearly allied Iranian tongues served as a medium of intercommunication beside the native idioms. As far as the Issedones it is quite possible that Aristeas of Proconnesus penetrated. From them he heard of other men living yet further east, but what he tells of these shews that we are coming to the lands where travellers' tales flourish with most luxuriance. In the quotation from the Arimaspea preserved by Tzetzes, the Issedones say, "Above us' to the north dwell men whose borders march with ours, many are they and mighty warriors indeed, rich in horses, wealthy in sheep, wealthy in cattle, shaggy of hair, sturdiest of all men; and each has but one eye in his fair forehead—the Arimaspi." Whatever the word

¹ Spiegel, Érânische Altertumskunde, Leipzig, 1871, I. p. 223 and *Die altpersischen Keilinschriften*, Leipzig, 1881, p. 54 and Glossary, s.vv. He takes Sk'udra = Σκολοτοί.

² JRAS. 1906, p. 181. He thinks that from early times the Sacae reached down into Sistan. Spiegel, op. cit. p. 41. The third column at Bisutun is only called Scythic on the general principle "Omne ignotum pro Scythico."
 So Tomaschek, I. p. 758, combines the lines

and translates, putting all into nominatives which do not seem to me to scan. Latyshev (Sc. et Cauc. I. p. 322 = Tzetz. Chil. VII. 686) gives them thus:

^{&#}x27;Ισσηδοί χαίτησιν ἀγαλλόμενοι ταναῆσι.... καί σφεας ανθρώπους είναι καθύπερθεν όμούρους πρὸς Βορέω, πολλούς τε καὶ ἐσθλοὺς κάρτα μαχητάς, άφνείους ΐπποισι, πολύρρηνας, πολυβούτας... 'Οφθαλμον δ' εν εκαστος έχει χαρίεντι μετώπφ. χαίτησιν λάσιοι πάντων στιβαρώτατοι ανδρών.

means, whether or no it be a folk-etymology, we cannot go behind the statement of Herodotus that the Scythians took it to mean one-eyed. Chinese still say of the Khalkas, these people have but one eye, one hand', thus describing their awkwardness, and some such metaphor probably lies at the bottom of this tale. Beyond the Tarim basin to the north, we come precisely to the cradle of the Mongolian race. In this region the Chinese annalists of the Chou (B.C. 1155-255) and Han dynasties put the Hien-yün or Hiung-nu stretching from Shan-si across the Sha-mo far to the north of the T'ien Shan range. These are they whom we know in Europe as the Huns. Shorn of the poetic epithets, the description of Aristeas applies to them. They often joined into a well-organised state as often destroyed by the dissensions of the tribes. When united they controlled the commerce between China and the west and regulated it. The Bald-heads of Herodotus (IV. 23) would be their outpost to the west. True, Aristeas calls the Arimaspi vaiτησιν λάσιοι, but the warriors may well have been unkempt, while the custom officials would be shaved and smooth. Also in that western part in the gate of Dzungaria there would not be the abundance of flocks and herds that marked them on their native plains. Whether the Issedones received of them gold from the eastern Altai, or whether it did not rather come from the south from the mountains above India, and whether the griffins are not the ants or baibaks, that according to the story threw the gold out of their burrows, is more than can be said. Certainly the representations of Arimaspians and griffins in art belong to Western Asia. The griffins come from eastern stuffs (=cherub), and their name is Semitic; the Arimaspians are dressed in barbarian costume, as conceived by the Greeks, on the model of the barbarians most familiar to them, Phrygians and Persians. Still the subject was felt to belong to Scythia, and was used to adorn goods destined for the Scythian market.

Beyond the griffins, says Aristeas², live the Hyperboreans, reaching down to the other sea. Herodotus doubts this, for he says he heard nothing about them from the Scyths². The Hyperboreans are always the people beyond knowledge towards the north. They must always figure as the last term of any series that stretches in that direction. Still, as Tomaschek suggests,

later migration of Turko-Tartaric peoples. The names due to Aristeas he regards as mere alternatives of other tribal names known to Herodotus, so he identifies the Massagetae, whom he puts N. of the Jaxartes, with the Arimaspi, and opposite them the Issedones, whose women were so independent, with the Sarmatians. The Araxes of Herodotus I. 201 is for him the Jaxartes, but in c. 202, the Volga with its delta among the islands of which the fisheaters live, and the Rhoxolani, whom we meet in later times, are *Araxalani, called after the river. Such a scheme seems to me to wrest the data given by Aristeas and Herodotus from their natural meaning, whereas something like Tomaschek's view is far less arbitrary. Most original is d'Arbois de Jubainville (op. cit. 1. p. 241 note); he supposes that the Arimaspi migrated from upper Asia to the Alps or Rhipaean mountains above Friuli. His object is to identify the Kelts with the Hyperboreans.

¹ Cf. the Hou-yen-kuo, lit. Back-eye-people.

² Her. IV. 13, 32; Damastes ap. St. Byz. s.v.
3 By ignoring Ptolemy (v. p. 114, n. 3) F. W. Thomas (op. cit. p. 197) puts the Issedones in Farghana and the Arimaspi (=Ariaspi) in Sistan, which hardly suits Her. and his κατύπερθε. F. Westberg, Klio (Bd IV., 1904, pp. 182—192, "Zur Topographie des Herodots"), by giving up the same point a'appui and restricting the area under consideration, has to use excessive ingenuity in fitting in the various tribes. He puts the Budini about Saratov on the steep or right bank of the Volga, and identifies them with the Burdas of Ibn Rusta; further he believes that Darius reached the Volga in this region. The desert above them is the high ground of the Zhigulóv Hills, and the Thyssagetae are on the Samara bend of the Volga and about the lower Kama with the Iyrcae on the Bêlaja and in the southern Urals. The Bashkirs are the Argippaei, although they would appear to have reached their present position only in some

some faint account of the civilised empire of China may have penetrated to Aristeas or his Issedon informants.

Aristeas also mentions the Rhipaean mountains, but again Herodotus does not believe in these. He is right in rejecting them to the north of the Euxine, but in upper Asia the difficulty is rather that among so many ranges we cannot tell which was intended by the name.

Always it has been at the apogee of the dominion of some Turko-Tartaric tribe that it has been possible for westerners to traverse central Asia. The voyage of Aristeas (c. 650 B.C.) comes at the time of the early nomad power which troubled the Chinese under the Chou dynasty. Those of Zemarchus and the Nestorian Alopen coincide with the greatest extent of the early empire of the western Turks which likewise gave Hüan Tsang his opportunity to journey westwards. De Plano Carpini, Rubruck and Marco Polo were enabled to travel by the organization of the great Mongol Empire³, and since its fall, till the other day, no European had followed in all their footsteps, just as for seven hundred years no Greek followed Aristeas³.

Chavannes, E., "Documents sur les Tou-kiue (Turcs) occidentaux recueillis et commentés," in Results of the Orkhon Expedition, St P., 1903.
 v. Heyd, Hist. du Commerce du Levant au

Moyen Âge, Paris-Leipzig, 1886, Vol. 11. p. 215 sqq. ³ PTOLEMY'S SERICA. As it is physically possible for Aristeas to have penetrated as far as the Tarim, the question whether Ptolemy's Issedones can guide us in locating his, is a question of how much real knowledge of Central Asia Ptolemy shews, and requires a brief examination of his map of Serica &c. in the light of recent travel (Ptol. Geogr. I. xi. xii., VI. xiii.—xvi., cf. Maps I. and VI.; see Yule, Cathay and the Way Thither, pp. xxxix. and cxlvii.; Richthofen, China, 1. p. 477-500 and Map 8; Bunbury, Hist. Anc. Geogr., 11. p. 529 sqq.; Tomaschek, op. cit. 1. p. 736; Marquart, "Erān-sahr" (Abh. d. k. Ges. d. Wiss. zu Göttingen, Bd III. No. 3, Berlin, 1901), p. 154, and lastly for one or two new points M. A. Stein, Ancient Khotan, I. p. 54). Richthofen seems most nearly right, Tomaschek gets everything too far to the E., Marquart hopes too much for a mechanical formula for reducing Pt.'s degrees to modern measurements. This is a fundamental mistake. In these regions all his knowledge is derived through Marinus of Tyre from Maës Titianus (60-80 A.D.) a Syrian merchant, who himself appears to have reached the "Stone Tower" and to have sent agents on to Sera Metropolis seven months' journey: this distance Marinus naively reckons at 36,200 stades, which Pt. is about right in halving, but this he does on general grounds, not on definite information. Hence we cannot take figures beyond the "Stone Tower" seriously. The more important is it that his map gives the general shape of the Tarim basin very fairly. The Imaus is clearly the Pamir, the only cross range in Central Asia, though of course it does not stretch indefinitely northwards. On it is set δρμητήριον των ές την Σήραν έμπορευομένων, and Irkeshtam the Russian Custom-station commanding the passes both towards Farghana and towards the Alai plateau (Stein, p. 55) suits very well; the "Stone Tower" 5° W. must be on the Alai road. The Abjana opp are the Tien Shan and the 'Aouipaia to the S.E. of them the Kurruk

Tagh: the Κάσια ὄρη are not about Kashgar but the W. K'un-lun from which comes jade (Turk. kash); Thagurus Mons to the E. is Altyn Tagh or perhaps Nan Shan. Between the two mountain lines flows the Oechardes or Tarini with its important source (Ak-su?) in the T'ien Shan, its sudden turn S. towards Lop-nor (ή ως επὶ τὰ Κάσια ορη εκτροπή, v. S. Hedin's Map in Through Asia 11.), and its tributary from the K'un-lun, the Charchan Darya; the eastern part of it with its source in long. 174°, lat. 47° 30′, would perhaps be the Bulunggir which Stein says once joined the Tarim in Lop-nor (*Geogr. Journ.* XXX. 1907, p. 503: Dr Hedin tells me he doubts this). Outside the Tarim basin the physical features are not so clear, but we may recognise the "Αννιβα-δρη as the Altai, Emodus and Ottorocorrhas* as the Himalaya and North Tibetan ranges, the Bautisus being the Upper Brahmaputra, but information as to this Southern side came from India, and Pt. not realising Tibet has made this river one with the Huang-ho crossed by the agents of Maës towards their journey's end. The limit between Scythia extra Imaum and Serica represents if anything the extent of Chinese power in the 1st cent. A.D.: Αὐζακία πόλις may be Kashgar and Issedon Scythica, Ak-su; Issedon Serica, Lou-lan by Lop-nor (Tomaschek brings it within the old western extension of the Chinese wall, Stein, l.c.); the Issedones between, the memory of the Yüe-chih: it is tempting to see in Xaupava, Khotan and in 'Αχάσα χώρα the Khasas, confusion being produced by the combination of Indian and Seric information: the Thaguri though far to the E. may represent the Tochari (v. supr. p. 111, n. 1): Aspacarae would be an Iranian term for nomads pro-bably Tibetan; Bautae, the Indian for Tibetans, cf. Bhotan, Sera Metropolis is more likely Ch'ang-'an the capital of the Elder Han near Si-'an-fu, than Lo-yang in Ho-nan Pt.'s Sinae Metropolis (long, 180°). The Annibi, Garinaei (Mountaineers) and Rhabbanae would be Huns and perhaps Sienpi; the Σίζυγες, Kao-ch'ê. It is noticeable that fancy names like Abii and Anthropophagi are confined to the N. border of the map, so Issedon is not of that class.

^{*} Please correct Otto(ro)corrhas, etc. on Map VI.

MAP VI.

CHAPTER VI.

HISTORY OF SCYTHIA, LATER MIGRATIONS.

In the preceding pages has been given a sketch of the position, and as far as possible ethnology, of the inhabitants of the great steppes and their neighbours, according to Herodotus and his informants, especially Aristeas, who enables us to extend our knowledge as far as the borders of China. Aristeas gives us the first recorded example of one of those movements which have altered the names on the map of Asia from that day to the day of Tamerlane. The fate of the Greek settlements on the north coast of the Euxine is so intimately bound up with these changes of population that a brief survey of them is indispensable.

The Chinese chronicles of the Chou dynasty speak of the restlessness of the Hiung-nu interfering with communications with the west in the VIII. century B.C.: and Aristeas says that the incursions of the same people whom he calls Arimaspi drove the Issedones to fall upon the Scyths and make them enter Europe. We have supposed this in conjunction with Herodotus (IV. 11) to mean that Issedones forced themselves into the country to the west of the Tarim basin and joined with the Massagetae or impelled them against the Scyths. These latter, crossing the Volga and Don, pressed the inhabitants of the land, probably Iranians, towards the west, where they joined Thracian tribes, Treres, and invaded Asia Minor, and towards the SE. where they passed the Caucasus and attacked vassals of the Assyrians. These called them Gimirrai, in Greek Cimmerians. The eastern horde was followed by Scyths, Ašguzai, who appeared as allies of the Assyrians, effected a diversion of the siege of Nineveh and made a raid over a great part of western Asia. It seems impossible to get a more detailed view of the movements of these various northern invaders from the accounts in Herodotus (I. 103-6), the Assyrian monuments, and the Hebrew Prophets (v. pp. 41, 42).

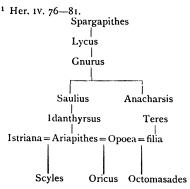
In sw. Asia the Scyths, broken by the Median Vespers still commemorated in Strabo's Sacaea (x1. viii. 4, 5), disappeared without leaving any traces, the Cimmerians finally vanished after having held their ground for many years at various points such as Sinope and Antandrus, but to the north of the Euxine the Scyths established themselves as the ruling caste of nomads in the eastern part of the plain, exacting tribute from various tribes in the western half. Above the steppe belt, the row of forest tribes, Slavonic Neuri, Finnish Androphagi, Melanchlaeni and Budini, Ugrian Thyssagetae and Iyrcae, take no part in the changes which swept the open steppe. In the time of Herodotus and Hippocrates the Scyths seem on the down grade, on their eastern frontier appear the Sarmatae, nomads from the Caspian steppes, pressing the Maeotae and allied, probably Caucasian, tribes towards the mountains, and threatening their neighbours across the Tanais.

Though we have so full an account of the customs of the Pontic Scyths we know few events in their history; still from Herodotus we can construct a kind of genealogy of their reigning house. We cannot tell whether this was in any way related to Madyes and his father Protothyes (Bartatua), whose exploits were in Asia. But we have the succession Spargapithes, Lycus, Gnurus, Saulius (with his brother Anacharsis), Idanthyrsus, who was probably father to Ariapithes. This latter had three wives, the Istrian woman by whom he had Scyles his immediate successor, the Scythian Opoea, who bore him Oricus, and the daughter of the Thracian Teres, mother to Octomasades, who eventually slew Scyles and reigned in his stead. We have no means of placing Ariantas, who made the cauldron out of arrow-heads, or Scopasis and Taxacis, who were kings under Idanthyrsus at the time of Darius '.

Invasion of Darius.

Except for one incident we know nothing of the reigns of these kings, save the stories of Anacharsis and Scyles, shewing the attraction exercised by Greek life on the more advanced Scyths and the tragic result. But to that incident, the famous invasion of Scythia by Darius about 512 B.C.², we are indebted for the introduction of the Scythian episode into the history of Herodotus.

After what has been said of the geography of Scythia there is no need to insist on the impossibility of the story as related to us. Its whole basis is inconceivable and the tale is adorned with improbabilities of every kind. We may take it as true that Darius crossed the Danube and disappeared for a time into the steppes. It may well be that he was severely harassed by his mobile enemy; but it cannot be believed that he went further than the Dnêstr, the crossing of which would have involved a bridge and dangerous operations in face of an active foe. Strabo's indeed says (VII. iii. 14) that the desert of the Getae was the scene of the expedition, but this may be only the outcome of his own reasoning, not independent historical evidence. However, he must be substantially right: Darius can hardly have done more than make a demonstration against the northern barbarians, with a view to securing his frontier on the Danube. It may well be that the ruling race gathered the western tribes to oppose him, so he may have come in contact with the western Budini (if as is suggested above there were two



That Scyles took his father's wife Opoea (c. 78) is in accordance with the almost universal custom of polygamous countries. Still we may remark that this custom shocked de Plano Carpini, Rubruck (c. 6) and Hayton (op. cit. c. xlviii.) among the Tartars, and is noticed by the Chinese.

2 v. Macan, *Herodotus*, Books IV.—VI. Vol. II.

App. 3.

3 Ctesias, Frag. 29, §§ 16, 17 (Müller) says
Darius advanced 15 days' march, and returned on
finding the Scyth's bow stronger than the Persian,
cf. the tale of the Khazar and Russian swords in
Ps.-Nestor.

divisions of these), and this may have brought into the narrative a confusion which Herodotus turned to account to enforce several of his favourite notions, the condign punishment of the Great King's overweening pride, the servility of the Ionians, and the solitary merit of Miltiades. In this latter Mr Macan, as Thirlwall before him, sees the chief motive of the whole tale. He thinks it an echo of the defence made when he was on his trial for tyranny in 493 B.C.

Darius can never have meant to reduce all European Scythia. The device of keeping his communications open sixty days and no more, if it meant anything, would mean that Darius intended to return by the Caucasus, if he found the path open. But with his experience of nomads on his north Asiatic frontiers, to say nothing of the fate of Cyrus (the common story may well be unhistorical), he would never have trusted himself unsupported in an unknown country, even supposing that he was absolutely ignorant as to the extent and character of the countries he must traverse. He reduced Thrace, received the submission of Macedonia, and made a demonstration, perhaps not entirely successful, against the northern neighbours of his new territories; that is sufficient justification for his European expedition, and we need not regard this as part of a scheme to gain profit from the gold of the griffins, and round off his empire by making the Euxine a Persian lake.

A most original view is that advanced by Professor Bury¹. According to him the real objective was the gold of Transylvania, afterwards worked so profitably by the Romans. Had Darius meant to go east he would never have left his fleet at the Danube, but it could support him no further in a north-westerly direction. His idea then would seem to have been to build a line of forts along the Oarus = Ararus = Buzeo to keep his communications open, but upon realising the difficulty of permanently defending such a line, he abandoned his plan and returned. Confusion of the Ararus and the Oarus would then be the foundation of the story bringing Darius all across Scythia: also a more definite object for his expedition would be furnished, and an explanation of his attempted fort-building. One only wonders if the Great King in Susa had heard of the gold mines in the land of the Agathyrsi.

Duncker² rationalises the story and suggests that the sixty days was merely an arbitrary limit given out by the Ionians to prevent daily discussion of the question whether Darius should not be abandoned. He does not think Darius went far. It is surprising what a good defence of the traditional account is made by Rawlinson (ad loc.) who strongly urges the independence of commissariat shewn by an Asiatic army, and its power of crossing rivers without difficulty. But in this case it is too much to believe.

Herodotus (vi. 40, 84) tells us that in revenge the Scyths made a raid which reached the Thracian Chersonese and drove out Miltiades, and even proposed to Cleomenes a joint invasion of Asia.

Decline of Scyths. Advance of Sarmatae.

After the time of Octomasades, who may be reckoned a contemporary of Herodotus, we can trace the Royal Scyths no farther with any certainty. The name Scyth seems to move westward giving place to those of eastern

¹ Classical Review, XI. (1897), July, p. 277, "The European Expedition of Darius."

² History of Antiquity, Eng. ed., 1879, Vol. VI. p. 272 sqq.

tribes, but then it spreads again over all the steppe countries, and embraces all the nomad peoples. These changes of connotation make it hazardous to make any statement as to the fate of the true owners of the name, save that they moved west and were absorbed between the Getae and Sarmatians.

When exactly these latter crossed the Don is not quite clear. As Niederle¹ says, it was probably a gradual process. In § 68 of the Periplus ascribed to Scylax, dated by K. Müller about 338 B.C., a tribe of Syrmatae is given in Europe close to the Tanais, but in § 70 Sauromatae are in Asia, just over the river. Stephanus Byzantius cites this rare form Syrmatae from Eudoxus of Cnidus, and gives it as the same as Sauromatae, Sarmatae. Braun's wishes to make these Syrmatae Finns, and to distinguish them from the Iranian-speaking Sauromatae. But it seems more probable to suppose the mention of "Syrmatae" west of the river to be put in by a later hand than that of the compiler of the periplus. In the second half of the fourth century the Sarmatae are still east of the Don or just crossing, for the next century and a half we have very scanty knowledge of what was happening in the steppes. Probably an era of mutual strife had broken out which made impossible, not merely journeys into upper Asia such as Aristeas had accomplished, but even regular communication with the hinterland of the Euxine. The Scyths had shewn readiness to trade and an appreciation of Hellenic culture, in spite of the statement of Herodotus (IV. 76) that they were hostile to foreign influences, for no nation ever thinks another sufficiently ready to adopt its customs. But now they were fighting a losing conflict with the ruder Sarmatae, and the latter were not to be such good neighbours to the Pontic Greeks.

The first definite mention of Sarmatae in Europe is in Polybius (xxv. ii. (xxvi. vi.) 12). Gatalus ὁ Σαρμάτης is one of the rulers in Europe who joined a great league of states in Asia Minor and on the coast of the Euxine, B.C. 179. This is the first occurrence of the form Σαρμάτης in place of the earlier Σαυρομάτης which continues to be used as a proper name.

The centre of gravity of the Scyths' power, and it may well be the representatives of the Royal Scyths, shifted westward for a while under the pressure from the east. They even extended their borders in this direction, and crossed the Danube, so that the Dobrudzha gained the name of Little Scythia , which was also applied to all West Scythia as far as the Borysthenes. Demetrius of Callatis early in the second century B.C. speaks of Scythians near Tomi'. They may have appeared here when their king Atheas*, after successful struggles with the Triballi and with Istrus, concentrated his power on this side, only to be defeated by Philip of Macedon, 339 B.C. (v. p. 123). We find Scythians also mentioned in the decree in honour of Protogenes at Olbias, in such a fashion as to shew that their power was no longer what it was. There it is a case of their seeking protection from other invaders. The names of tribes mentioned with them,

¹ Slav. Ant. 1. p. 322.

GGM. I. p. xxxviii sq., 15 sq.
 op. cit. p. 87. He gives a good sketch of these changes of population.

4 Diod. Sic. 11. xliii. 7.

⁵ Sarmata is the Latin save in poetry.

⁶ Strabo, VII. iv. 5.

⁷ Quoted in *DA*. 111. p. 36.

⁸ Justin IX. 2, Frontinus, Strateg. II. 4, cf. Polyaenus, V. 44; Ateas, Str. VII. iii. 18. They may have crossed earlier, Scythic tombs occur in Bulgaria, v. inf. p. 150, n. 1. 9 App. 7 = IosPE. 1. 16.

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Saii, Thisamatae and Saudaratae, recall the forms of Sarmatian names. From this time forward the word Scythian becomes a purely geographical designation for any northern nation, Sarmatae, Goths, Huns, Russians all have

applied to them the name sanctioned by classical usage.

For instance, it is hard to define the Scythians ruled over by Scilurus and his son Palacus. Strabo (VII. iv. 3) and the Diophantus inscription call them Scythians, and they are in close alliance with the Sarmatians and with the Tauri; they may perhaps be the people loosely termed Tauroscythae or Scythotauri; they were scarcely a homogeneous tribe, but more likely a casual aggregation of the dwellers along the coast between the Dobrudzha and the Crimean mountains. Scilurus struck coins in Olbia, and the other barbarian kings, whose names we find on coins struck in that city, were probably lords of the same power, but whether before or after Scilurus we cannot say, the style is all we have to go by, and this is so barbarous that it can be no sure guide as to date. A reasonable view is that of A. V. Orêshnikov', according to which there were kings of the Scythians about the Danubemouth Canites', Cau-, Sarias and Aelis', who had not full control over Olbia. Later, about 110 B.C., Scilurus, who must have organised a considerable power sufficient to give much trouble to Chersonese and Mithridates, and appears to have had something of a capital at Kermenchik by Sympheropol*, became suzerain of Olbia, and put his name upon its coins. Pharzoeus and Inismeus (Ininsimeus) also struck coins with the name Olbia, but style and lettering appear considerably later, and these kings seem to belong to the time when the city arose from the Getic devastation, and existed under the tutelage of the natives who had missed its commercial services. After a period of hostility towards the natives, as described by Dio Chrysostom, who calls them vaguely Scythians, this tutelage was exchanged for Roman protection. Latyshev is inclined to put Pharzoeus and Inismeus before Scilurus. If the coins are genuine which are figured by P. Vacquier, Scilurus and his dynasty ruled at Cercinitis also, as is in itself very probable.

This disappearance of the true Herodotean Scyths does not denote any great destruction of population, merely that the ruling caste lost its vitality and merged in the mass of the people, and another tribe having defeated it assumed its place and spread its power over much the same group of tribes as had owned the sway of the Scyths. The difference cannot have been great. Objects found in tombs which must be referred to the Sarmatian period are often preeminently Scytho-Siberian. The leaders of the Sarmatae were again probably Uralo-Altaic, though it is just possible that they represent an Iranian reaction. We are unable to make any distinction between

¹ App. 18 = IosPE. 1. 185.

² Trans. Russ. Arch. Soc., New Series, Vol. IV.

pp. 14-24.

3 Cf. βασιλεί Σκυθών ΓΚΑΝΙΤΑ on Varna
1 ctushov. Olbia. pp. 129-135, v. inf. ch. xv.

⁴ v. ch. xv. end, Coin Pl. III. 20—25. Orêshnikov, Materials touching the ancient Numismatics of the Black Sea Coast, Moscow, 1892, p. 29.

⁵ Neapolis? cf. IosPE. 1. 241-244, IV. 191, 192. The two inscriptions with kings' names are unfortunately very imperfect. *IosPE*. I. 241,

ΒΑΣΙΛΕΥΣ ΣΚΙΛΟΥΡΟΣ ΒΑΣ Ε Δ . Σ | AEAY.... / BAZIAIZ.A... N. P.... looks as if Scilurus were dedicating a statue of his queen, evidently we have only just missed the name of the king his father. IV. 191,

Βασ]ιλεὐς Χώδ[αρζος?

^{&#}x27;Ομ]ψαλάκου

is not sufficiently certain to warrant our adding these names to history.

⁶ Numismatique des Scythes et des Sarmates, Kerkinitis et Tannais (sic), Paris, 1881.

the various tribes of Sarmatae, two or three names occur frequently and probably denote conglomerations of tribes upon which the name of a successful tribe has been imposed; the names of the lesser tribes, of which Pliny and Ptolemy have preserved many, can never mean anything to us.

Scythia according to Strabo.

The superficial accounts of these countries that we find from the time of Herodotus to that of Strabo offer compromises between the state of things learnt from the former and the actual state of things in the author's own day. Strabo found this so changed that he dismissed all the information given by Herodotus as pure invention, and has given us a fresh description of the population to the north of the Euxine. But his information only embraces the belt of open steppe, and he knows nothing of

the northern peoples beyond. He says (VII. iii. 17):

"Of all the country lying above the said interval between the Ister and the Borysthenes the first part is the desert of the Getae, next come the Tyregetae, after them the lazyges-Sarmatae, and those called Royal and Urgi, the greater part nomads, but some engaged in agriculture. They say these also live along the Ister, often on one side and on the other. In the back country are the Bastarnae marching with the Tyregetae and with the Germans, and indeed themselves having something of German race about them; they are divided into several tribes, some are called Atmoni and Sidones, and those that hold the island Peuce in the Ister, Peucini. But the Rhoxolani are furthest to the north and hold the plains between the Tanais and the Borysthenes....But we do not know if any one lives above the Rhoxolani.'

He goes on to give the stock description of nomad arms and mode of life, adding that the Rhoxolani winter in the marshes by the Maeotis and spend the summer on the plains. Still further E. beyond the Tanais, between it, the Caspian and the Caucasus, Strabo places the Aorsi and Siraci¹, the Sirachi of an inscription at Tanais (193 A.D.) in which Sauromates II. claims to have conquered them². These people are also rich in horses and mostly nomadic though not quite without agriculture. They were just then specially prosperous owing to the overland trade with India. The Aorsi seem to be mentioned as Yen-ts'ai by the Chinese historians and to have later been known as A-lan-na'. Whereby we may identify them with the Alans or Alanorsi in Ptolemy. Pliny is the first writer in the west to speak of Alans, and the Rhoxolani themselves are interpreted as Blond Alans. The personal names of Aorsi and Siraci preserved by Strabo bear an Iranian stamp. Strabo does not mention the name of the Iazamatae, the first tribe of the Sarmatae, which we meet as their extreme western out-post towards the Tanais; the name occurs in various forms, Hecataeus calls them Ixibatae; Ephorus who distinctly refers them to the Sarmatae, Iazabatae ; Polyaenus

¹ XI. ii. 1; BCA. X. no. 69, Siraces Str. XI. ii. 8, Siraceni, Ptol. v. viii. 17; v. Introd. to IosPE. 11.

p. xiv. ² App. 52 = los PE. 11, 423,

³ Tomaschek II. 37 and Hirth, op. cit. inf. p. 122,

n. 6.

4 NH. IV. 80, Braun, p. 95. ⁵ Both ap. Steph. Byz. s. vv.

(VIII. 55) makes them Ixomatae and by mistake Maeotian, he speaks of a time when they were living to the E. of the Maeotis. But Müllenhoff is probably right in regarding Iazyges as a later form of the same word.

So the chain of Sarmatian tribes according to Strabo is Iazyges, Royal Sarmatians, Urgi of which we know nothing more, and chief of all Rhoxolani² with the Aorsi and Siraci beyond the Tanais. These nations gradually pass westwards. Ovid still knows the Iazyges in W. Sarmatia³, but in Tacitus⁴ they appear as allies of the Suevic king Vannius, that is they are already on the middle Danube in A.D. 50. Ptolemy has them in two places, along by the coast of the Maeotis and Iazyges Metanastae, between the Theiss and the Danube, the result of combining information of different dates⁵.

In Western Sarmatia the Iazyges are succeeded by the Rhoxolani. Tacitus tells how they made an unsuccessful raid into Moesia, A.D. 70, and clearly shews the inferiority of their long swords or spears and heavy coats of mail to the handy equipment of the legionaries. Later they fought Hadrian on the Danube and their land extended to the borders of Dacia.

East of the Rhoxolani came the Alans who crossed the Tanais and finally found themselves neighbours of the Goths and Vandals, with whom the name of their western division becomes so closely linked.

Westward Movement of the Huns.

All these movements from the East, like that which brought in the Scyths, seem to have had their origin in Mongolia. Towards the end of the Chou dynasty (c. 1155-255 B.C.) the Hiung-nu were pressing both upon China and south-westwards upon the Yüe-chih (Issedones? v. p. 110) and Wu-sun. The Ts'in dynasty (255-209) resisted the Nomads and secured China against them by building the Great Wall. Hence the Hiung-nu turned westwards and c. 176 B.C. drove the Wu-sun into the mountains about Ili and the Great Yüe-chih into the Tarim basin. Here the latter seem to have amalgamated with the earlier population, the T'u-huo-lo (Tochari). After their defeat by Kayuk c. 160 B.c. we find the Yüe-chih probably including the Tu-huo-lo 2-3000 li w. of Ta-Yuan (Farghana), N. of the Kuei (Oxus); w. of them is 'An-si(k) (Arsaces, i.e. Parthia), N. the nomadic K'ang-kü and again N. of these the Yen-ts'ai (Aorsi). To the s. of the Kuei, 2000 li sw. of Ta-Yuan, is Ta-Hia, and se. of this again Yen-tu (Panjáb), so Ta-Hia must be Bactria (v. inf. p. 129, n. 4). The appearance of the Yue-chih in Trans-Oxiana displaced the Sai (Sek = Sacae) southwards, but may also have exercised pressure northwards, as in the following century we find the Aorsi on the borders of Europe. Next we hear in the Han Annals that the Yüe-chih have moved south of the Kuei and conquered

DA. 111. 39, cf. Ukert, Skythien, p. 546.
 Cf. Appian, Mithr. 69, Σαυροματών οι τε Βασίλειοι και Ιάζυγες και Κόραλλοι, and Diophantus

inscr. (App. 18) 'Ρευξιναλών.

3 Tr. 11. 191, ubi codd. Zaziges: Owen pessime Sidones.

⁴ Ann. XII. 29, 30.

⁵ For the later history of these Sarmatae on the Theiss v. Niederle, Slav. Ant. 11. 127.

⁶ Hist. I. 79.

⁷ For pictures of Sarmatians on the walls of the vaults of Anthesterius and others near Kerch, CR. 1872: KTR. p. 203 sqq., v. inf. ch. XI. § 4.

CR. 1872; KTR. p. 203 sqq., v. inf. ch. XI. § 4.

8 Chang K'ien, c. 126 B.C., ap. Shih-ki c. 123.
The first character of Yen-tu (= India) is commonly read Shén, body, hence the identification Sindhu, but here we are specially directed to pronounce it Yen or Yüan (H. A. Giles).

Ta-Hia. This would be soon after the unsuccessful attack of Artabanus on the Tochari (c. 124 B.C., Justin XLI. 2), as it seems to be the movement Strabo (x1. viii. 2) records, whereby the Asii, Pasiani (in these names lie hid Yüechih and Wu-sun), Tochari and Sacarauli (v.l. Saracauli) from over the Jaxartes drove the Greeks out of Bactria'. Of the five Yue-chih tribes the Kushanas eventually came to the front and their power also gravitated towards India, replacing the Greek dominion in Afghanistan. Hence in western usage they shared the name of Indo-Scyth with the Saka states on each side. Meanwhile we catch glimpses of the westward movement of the Hiung-nu² due to pressure from the Sien-pi, their eastern neighbours, who finally absorbed part, penned part in the Altai to reappear as the Turks, and drove the main body to the far west. About 200 B.c. the Phauni are coupled with the Seres as the limits of Graeco-Bactrian ambition, that is the Huns were in their original position. Amometus puts them to the N. of the Indians by the Tochari: Ptolemy or rather Marinus of Tyre places them as Chuni on the borders of Europe, and gives the Ural river its Turkish name Δάϊξ', now Jajyk. So from the other side the Hou-han-shu tells of the Huns spreading westward, c. 100 A.D., and subduing the A-lan-na, c. 250 A.D., and the Wei-shu of their taking the land of the Yen-ts'ai'.

Finally, in 375 A.D., the storm of the Huns' invasion fell upon the Alans and afterwards on the Goths, and all the peoples of Eastern Europe were involved in confusion. It is beyond my purpose to follow their fate.

Invasions of Scythia from the West. Getae.

But not only from the east did peoples enter the steppe land. The force of the backwash of the Iranians and advance of Huns was not sufficient entirely to prevent the western peoples from moving down towards their

end of the great plain.

The Getae may almost count as original inhabitants. Certainly we have very early traces of their presence to the N. of the Danube. Whenever their nation was strong and united they seem to have extended their sway to the Dnêstr, in times of decadence their borders would fall back to the Danube, and as we have seen, sometimes the Scythians crossed even this. To the Getae belonged very likely the Tyragetae, not from the similarity of name which seems to be but Sarmatian for men of the Tyras, but

¹ Tr. Pomp. Prol. XLI. "Saraucae et Asiani" attack Diodotus of Bactria; XLII. "reges Thogarorum Asiani interitusque Saraucarum."

² All the Chinese forms, v. sup. p. 91, including Hua the older name for the Yi-ta or Ephthalites, the Yüe-chih's successors, called in Sanskrit Hūṇa but generally regarded as no true Huns, go back to an original Hun. In western authors we have Chuni, Phuni, Χοῦνοι, Φοῦνοι and Οὖννοι; the interchange of βh, kh, and h is found in Turkish dialects and Tomaschek (1. p. 759) may be right in identifying all these forms.

ing all these forms.

³ Strabo XI. xi. 1, on authority of Apollodorus. Codd. Φαυνῶν, Müller Φρυνῶν. H. Brunnhofer, Iran und Turan, p. 204, sees in Dribhîka, Cumuri and Dhuni, beggar folk of the Veda, nomad tribes

Derbiccae and Θοῦννοι, the form preferred (he says) by Eust. ad v. 730 of Dion. Perieg., but this is but to strengthen his view of the late invasion of the Panjàb by the Âryas, Eust. really rejects the Θ.

4 ap. Pliny, NH. VI. 55; Detlefsen reads "Thuni et Focari," adding "al. Chuni, Phuni vel Phruri, et Tochari"; similar var. Il. in Dion. Perieg. v. 752; so much for arguments founded on the supposed etymology of tribal names.

^δ Γεήχ in Constant. Porph. de adm. imp. 37.
^δ See F. Hirth, "Ueber Wolga-Hunnen und Hiung-nu," in Sitzungsber. d. phil.-hist. Classe der k. bayer. Akad. d. Wiss. 1899, Bd 11, Heft 11, pp. 245—278, Munich, 1900, and review of same by Prof. K. Inostrantsev in TRAS. Oriental Section, Vol. XIII. p. 068, St Pb., 1900.

from there being no other stock to whom the Tyragetae can be referred. They seem clearly distinguished from any variety of Scythian'.

In the time of Philip of Macedon we read that Atheas had spread the power of the Scythians to the south of the Danube, but this power was, it seems, destroyed by the defeat inflicted by Philip, B.C. 339. For in 336 Alexander, having driven the Triballi to take refuge in the island of Peuce, crossed the Ister, defeated the Getae on the north bank to the number of 10,000 foot and 4000 horse, and took their town. It seems hardly possible that in three years' space the Scythians should have thus disappeared and left in their place another nation with a town and large forces, and that this nation should continue the war with Macedon. The question arises, was not Atheas a Getan, called a Scythian just because he lived N. of the Danube? Alexander's attack was merely a demonstration, and later the Getae gave much trouble to the rulers of Macedon. While Alexander was conquering the east his lieutenant in Thrace, Zopyrion, made an expedition against the Scythians and was annihilated. This again suggests that the authorities did not clearly distinguish Scythians and Getans in this region. About 291 B.C. Lysimachus undertook an expedition against Dromichaetes, king of the Getae, was defeated and taken prisoner with his whole force in the space between the Ister and the Tyras in which, according to Strabo, Darius had suffered defeat (vii. iii. 8 and 14). Tacchella refers to successors of Dromichaetes coins bearing the names of Acrosandrus, Canites, Adraspus and Sarias, also perhaps Scostoces. We hear little of the Getae for the next two hundred years, for the Galatian invasions weakened all the Thracian and neighbouring Then about the time of Sulla there arose a vigorous king among the Getae, as Latyshev thinks, or according to others among the Daci. The fact is that these were two closely connected peoples, and the Romans were apt to apply the name Daci to both because they approached the pair of them from the west, whereas the Greeks called both Getae, having come in closest contact with these. It is with this king Byrebista that Strabo (VII. iii. 11) begins his account of the Getae. He found his people oppressed and weakened by continuous wars but united them and trained them till he had subdued the greater part of their neighbours. He harried the Roman provinces and Thrace, destroyed the Keltic Boii and Taurisci, and took Olbia and the other Greek towns along the coast as far as Apollonia'. At least the time given by Dio for this destruction, 150 years before the delivery of his speech, between 67 B.C. and 50 B.C., agrees with the time of Byrebista's power which ended with his death about 44 B.C. Caesar intended an expedition against him, but when Augustus sent one, the king

p. 119, n. 3.

6 Jordanes, Get. c. XI.

7 Cf. Dio Cassius, RH. LXVII. 6.

Dio Chrysostom, Or. XXXVI. p. 49. He seems to have had a peaceful suzerainty over Dionyso-

polis, Ditt.² I. 342.

¹ For a good account of the Getae see Müllenhoff, DA. 111. pp. 125—163; also Kretschmer, Einl. in d. Geschichte d. Gr. Spr., p. 213, and Tomaschek, Thraker, 1. p. 93; Latyshev, Olbia, p. 72, note 12, and p. 149 sqq.

Justin, IX. ii.
 Arrian, Anab. I. iii. 1, 2; Str., vII. iii. 3—8.
 Justin, II. iii. 4; XII. i. 4; ii. 16; cp. XXXVII.
 iii. 2. Getae in Q. Curtius, X. i. 43. Thucydides,
 II. 96, already classes both together as ὁμόσκευοι,

πάντες ἱπποτοξόται.

⁶ Revue Numismal. 1900, p. 397; 1903, p. 30, but Canites is king of the Scythians in CIG. 2056, v. sup.

⁸ This form Βυρεβίστα indecl. is used in a contemporary inscr. from Dionysopolis, N. of Varna, Latyshev, Journ. Min. Publ. Inst. 1896; Ditt. 1. 342. Strabo has Βοιρεβίστας, VII. iii. 11; Trogus Pomp. Prol. XXXII. 10 Burobustes, or something like it; Jordanes, Get. XI., Burvista.

had been murdered and the country was divided into four or five warring states, so that the power of the Getae sank as quickly as it had risen.

To the Getae belong the Carpi, Carpiani (Ptol. III. v. 10), Harpii (ib. III. x. 7) between the Tyras and Ister, with the town Harpis on the coast. Niederle¹ puts them further inland and connects their name with Carpathian, and suggests that they were Slavs, the same as the enigmatical Khorvate or Croats. They are not mentioned by Strabo, whereas they were known to Marinus of Tyre. They could hardly have come in after the annexation of Bessarabia to the Roman Empire under Nero (v. chap. xiv.), so that their appearance coincides in time with the migration of the Iazyges into the basin of the Theiss, and there may well have been causal connection between the two events². Geographus Ravennas (I. 12) speaks of Sarmatum Patria which may be either the Theiss valley or Sarmatia E. of the Carpathians, and adds, gens Carporum quae fuit ex praedicta in bello egressa est. That the Carpi were Dacians is shewn not so much by the form Kapπόδακαι³ as by the characteristic place-names in -daua given by Ptolemy in their country. The forms with H came through the mouths of Germans, Bastarnae¹.

Bastarnae and Sciri.

These Bastarnae's are the next invaders from the w. who came to join the mixed population of this part of Scythia. They were the easternmost outpost of the Germanic world, the first Germans to come in contact with the Greeks. These latter at first regarded them as a variety of Kelt and the earlier authors speak of them as $\Gamma a \lambda \acute{a} \tau a \iota$, but the clear statements of Strabo and others' who had learnt the difference between Kelt and German have given Müllenhoff and Braun good grounds for confidently affirming their German blood. They are also interesting as having stood between the Keltic and Slavonic worlds in the place afterwards occupied by the Goths.

Whether or no they were the serpents who drove the Neuri from their country (p. 103), the first position in which we can clearly trace them is on the E. slopes of the Carpathians, which they must have reached before the first great sound-shift, for from them must have come the form Harfaða in which the word Carpathians occurs in Norse epics. At the beginning of the second century B.C. they moved down to the Danube and were employed by Philip of Macedon against the Thracians. Being defeated the greater part returned home, but a part settled in the island Peuce, near the mouth of the Danube (p. 12), and never rejoined their fellow tribesmen, though consciousness of their affinity continued for centuries, and geographers, mistakenly identifying Peucini and Bastarnae, placed the former in the interior in the places occupied by the latter. Strabo is the first to say where the main body of the Bastarnae lived after leaving the Carpathians. He locates them in the interior bordering on the Tyragetae and the Germans,

¹ Slav. Ant. 1. p. 424 sqq., 11. 107, 122.

² Braun, p. 174 sq. ³ Zosimus, IV. xxxiv. 6.

⁴ Carpidae, given by Ephorus ap. Scymnum 841 in *Peripl. Anonymi* § 75 (49), is probably a mistaken correction of Callippidae, for F. follows Herodotus, and the change might be made by Anon. or one of his authorities who knew the late Carpi.

<sup>Braun, p. 99 sqq. Cf. Niederle, op. cit. I.
p. 289 sqq.; Müllenhoff, DA. II. 104 sq.
Str. VII. iii. 17; Pliny IV. 100; Tac. Germ. 46.</sup>

⁷ Niederle takes the snakes literally, and will not allow the Bastarnae on the Carpathians before 250 B.C. Trogus Pomp. XXVIII. mentions them about 240. N. will not grant any defined date to the sound-shifting.

that is in Galicia and upper Bessarabia. In this position, though they retained their German speech, manner of life and houses, living a settled life and going afoot as opposed to the Sarmatians who spent their time in waggons or on horseback, still by mixed marriages they took on something of the dirty ways of the Sarmatians. In spite of the words mixed marriages, we must beware of thinking of the Bastarnae as bastard Germans, as Braun has shewn that this use of the root bast is only mediaeval. Also they are not to be identified with the Galatae of the Protogenes inscription. If Γαλάται there meant Germans, we should not have Γαλάται καὶ Σκίροι, as these latter would be included in the greater denomination.

These Sciri offer no great difficulty, although they are not mentioned again until the time of Pliny', who puts them on the Vistula to the s. of the Goths, between them and the Bastarnae: we may suppose that they, with their companion Kelts, were partakers in the movement which brought the Bastarnae into Thrace, but instead of continuing as far as that more distant objective they turned aside to plunder Olbia. Being foiled in their attempt the Sciri probably returned to the Vistula with the chief mass of the Bastarnae, whereas the Kelts who came from Northern Hungary remained on the Danube together with the Peucini. It seemed as if the Sciri remained among the most remote Germanic tribes, until these at last moved south in the wake of their more advanced countrymen. But some Sciri are found among the tribes subject to the Huns about 381 A.D., and again in 409, when they were caught in a flight and destroyed or sold as slaves. The Huns could scarcely have reached the Sciri on the Vistula; perhaps some of them had settled further south. Ptolemy does not mention any Sciris.

Kelts and Goths.

Finally, beside the Germanic Bastarnae and Sciri there were Kelts on the lower Danube. Ptolemy puts them above the Peucini, between them and the Harpii, calling them Britolagae, v.l. Βριτογάλλοι. Their towns were Noviodunum and Aliobrix, names whose Keltic character is evident. Various views have been taken as to how Kelts came there, and whence and when, and with these questions is bound up that of the date of the Protogenes inscription². The eastern movements of the Kelts had brought them to three positions from which a detachment might have moved down to the lower Danube. From the Eastern Alps, occupied about 400 B.C., they spread further, and in 281 attacked Thrace along the western border, and in 279 made their great descent upon Delphi. On their way back the remnants occupied se. Thrace, and founded a kingdom under Comontorius with a capital Τύλη or Τύλις, near Mount Haemus. This kingdom continued till 213 B.c. when a rising of the Thracians utterly destroyed them. These are the Kelts who are supposed by W. A. S. Schmidt, and after him Latyshev,

¹ Connubiis mixtis nonnihil in Sarmatarum habitum foedantur, Tac. Germ. 46.

² App. 7 = IosPE. 1. 16, cf. ch. xv.

³ A. Spitsyn refers to the Bastarnae the stray objects of La Tène style found in Russia, BCA. XII. p. 78, but it is as likely that they are due to Kelts.

NH. IV. 97.

⁵ Zosimus, IV. xxxiv. 6: Sozomen, IX. 5.

⁶ Braun, p. 117 sqq.; Niederle, op. cit. 1. p.

³⁰² sqq.

7 Polybius IV. xlv. 10; xlvi. I.

8 "Das olbische Psephisma zu Ehren des Protogenes," Rheinisches Museum für Philologie IV.,

227 6 p. 227 sqq., 571 sqq. Bonn, 1835-6, p. 357 sqq., 571 sqq.

9 Olbia, p. 66 sqq.

to have extended their devastations as far as Olbia. Boeckh thought that the assailants were Scordisci from Pannonia. In each of these cases the incursion must have been pushed very far from the base of the people making it, and they must have returned to their own place again. Moreover it is hard to see how they should have come into combination with the Germanic Sciri. Whereas if we suppose that there was a general southward movement of Keltic tribes settled in northern Hungary, and Germanic tribes from over the mountains in Galicia, Britolagae, Bastarnae and Sciri, this combination could be well understood and the assailants would be found again in the Britolagae on the Danube. That would put the Protogenes inscription in the second century B.C., not in the third, and this agrees best with the general character of the lettering which still does not preclude its belonging to the third century according to Latyshev's view'.

To Keltic influence we may attribute the presence in S. Russia of fibulae derived from the La Tène type², but Spitsyn (l.c.) puts them down to the Bastarnae. Keltic too, if we may trust the engraving, is a coin from

the Crimea figured by Waxel³.

Yet one more nation entered Sarmatia from the west, the nation which brought about the fall if not the absolute annihilation of the Greek colonies The Goths appear in the steppes early in the third on the mainland. century A.D., and by 238 already receive a stipend from the empire. This aroused the envy of the Carpi, who claimed to be as good as they, and on being treated by the Romans with contempt they crossed the Danube and destroyed Istropolis, A.D. 241. Under Philip the Arabian the stipend to the Goths was unpaid and they in their turn invaded the empire and laid siege to Marcianopolis. After defeating the Gepidae who had tried to follow them into the rich plain, but were forced to return to their seat in Galicia, the Goths under Cniva again invaded the empire in 249, took Philippopolis in 250, and the following year defeated and killed the emperor Decius. In the war which followed the Goths, whom the historians with characteristic pedantry call Scythians, used boats to harry the coasts not merely of the Euxine from Pityus to Byzantium, as the Russians were to do after them, but also those of the Aegean, sacking even such towns as Ephesus and Athens, as well as "Trojam Iliumque vix a bello illo Agamemnoniaco quantulum se reparantes"! But a great combined invasion, rather a migration by land and sea with women and children, was destroyed by Claudius, who well earned the title Gothicus. Aurelian ceded Dacia to the Goths and peace was made in 270, a peace which lasted with slight interruptions till the eve of the Hunnish invasion. But before crossing the Danube the Goths had worked their will upon Olbia and Tyras. Coining comes to an end with the first half of the reign of Alexander Severus, and the latest inscription (App. 14) is of the time of Philip the Arabian: Olbia was not quite deserted, for later coins, even Byzantine ones, have been found on the site, but it ceased to be a Hellenic

v. Braun, p. 126 sqq.; Niederle, I. p. 303 sqq.
 B. Salin, Die Altgermanische Thier-Ornamentik, p. 5 sqq. R. Hausmann, "Einige Bemerkungen über neuere Fibelforschung und über die Fibeln im Odessäer Museum," Trans. Od. Soc.

XXI. p. 255; Sm. III. i. 1—7.

³ Suite du Recueil d'Antiquités, f. 57.

⁴ Cf. Hodgkin, Italy and her Invaders², Vol. 1.
p. 46.

⁵ Jord. Get. XX., cf. Zosimus, I. xxxv. sqq.

city'. The Goths probably obtained from it, as from Panticapaeum, some of the ships they used in their distant sea expeditions'. But from the time of the coming of the Goths the history of the Pontic Greek states is at an end, save only for Chersonese on its well-defended peninsula. For her these new tribes mostly meant new markets for her commerce.

Crimea and Caucasus.

At the other end of the region whose history we are considering, about the west end of the Caucasus, we find another group of tribes whose position it is again very hard to determine. Here the causes are just the opposite to those which produce difficulty in the great plain. The mountainous country has cut up the inhabitants into tribes so small that the number of names furnished by the ancient authors conveys no idea to our minds. for instance (NH. iv. 85), speaks of thirty tribes in the Crimea, and hardly any of his names occur in any other author, they seem to be the designations of the inhabitants of particular valleys and villages. This region appears to have preserved some relics of the Scyths, possibly joined with the Tauri. Scythotauri may mean but the Scyths living in or near the Tauric Chersonese, or it may be just the Tauric natives, loosely called Scythians. It is hard to see how the Scyths could have really amalgamated with the mountain people. However, Scilurus as ruler of the western steppes in the time of Mithridates made his power felt against Chersonese, and had occupied Balaklava, so that he had penetrated to some extent into the Tauric territory. The Scythae Satarchae in the Crimean steppe may be either relics of Scyths or a Sarmatian tribe.

Our written authorities draw no clear line of distinction between Sarmatae and Maeotae on the one hand, and on the other between the Sindi, who were almost certainly Maeotae, and their se. neighbours. But the barbarian names found in the inscriptions at Phanagoria and Gorgippia shew a much smaller proportion of Iranian derivatives than those of Tanais, and these few are either widely distributed Persian names or names of particularly common occurrence at Tanais that seem to have spread about the Bosporan kingdom. This would seem to point to the indigenes of the Euxine coast being of a different stock from the Sarmatian natives surrounding Tanais, This is Müllenhoff's view. and so presumably Caucasian. other hand, Professor Lappo-Danilevskij' points out the substantial identity of customs and civilisation of the people who heaped up barrows along the Kuban and along the Dnêpr and, assigning his Karagodeuashkh barrow to the Sindi, refers these to the same stock as the Sarmatians. Possibly a ruling tribe, nearly related to the Scyths, played the same part to the east of the Maeotis that their cousins played to the west, and dominated many tribes of various origin, some Iranian and some Caucasian. This would account for the similar customs used at the burial of kings in two regions so widely separated.

3 Mat. XIII. St P. 1894, pp. 96-111, v. inf.

Latyshev, Olbia, p. 210.
 Zosimus, I. xxxi. For remains of the Crimean Goths v. MacPherson's Kertch, pl. v., and BCA. XIX.
 p. 1—80, N. Répnikov's excavations near Gurzuf.

p. 206 sqq.

4 Strabo, XI. ii. 16, says of the people above
Dioscurias that the greater part are Sarmatae

East of the Sea of Azov the tribes along the coast where the Caucasus comes close to the Black Sea were certainly the ancestors of the people that inhabited the district till the other day. The best account of these, and of the Maeotae too, is in the first chapter of Latyshev's introduction to the Inscriptions of the Bosporus¹. But he only takes notice of the tribes mentioned in his inscriptions.

As we have seen, the Sarmatae really included the Iazamatae, whom some authorities give as Maeotae: Iranian too were the Aorsi and Siraci, of whom Strabo says that they came down from the north (x1. v. 8). They seem to have encroached upon the Maeotae, who appear once to have reached as far as the Tanais along the Palus that bore their name.

Earlier (XI. ii. II) Strabo gives a list of tribes among the Maeotae, Sindi, Dandarii, Toreatae, Agri, Arrhechi, Tarpetes, Obidiaceni, Sittaceni, Dosci, and the people called Aspurgiani. Of these the Sindi are much the most interesting. They first fell under Greek influence, their territory, the Taman peninsula and a little to the E. of it by the southern mouth of the Kuban, being full of Greek towns, hence they alone have left us coins (Pl. IX. 25-27) and they are first mentioned in the inscriptions of the Bosporan kings apart from the other "Maitae²," that is they became so Hellenized that they hardly counted as Maitae (*IosPE*. 11. 6—8, 10, 11, 15, 36, 344-347, IV. 418)3. After the Sindi the Maeotae are taken together, e.g. Σινδῶν καὶ Μαιτῶν πάντων. Next are mentioned Toretae, Dandarii, Tarpetes⁷, Doschi⁸, Sirachi⁹. Strabo omits to mention the Thateis¹⁰, and the name is found in the text of no author, but Boeckh restored it for Θρακῶν Diodorus xx. 22 and in Ptolemy for MSS. Θερμαιώται, Θετμώνται put Θατ(είς) Maιωται. The inscriptions give also the name Pses[s]in. Of these tribes the Toretae seem to have lived on the coast just E. of the Sindi, the Dandarii N. of them near the upper branch of the Kuban, the others cannot be well located except the Aspurgiani between Gorgippia and Phanagoria, and these appear to have been not a tribe but rather a political party or a military colony founded by Aspurgus¹².

Along the coast next to the Toretae (at Bata) came the Cercetae, says Artemidorus, then the Achaei, Zygi and Heniochi; but the authors who treated of the wars of Mithridates put the Cercetae to the east of these latter, between them and the Moschi. Last of the coast series come the Colchi". The Cercetae may well be the Circassians. There may have been a change of population here in spite of the natural difficulties, or Artemidorus may have confused the Cercetae and Toretae, whom Anon. Periplus (63 (22)) makes the same. Further up in the mountains Strabo (x1. ii. 1, 19; v. 7, 8) tells of Macropogones, Phthiro-

and all Caucasian. So even in his time some Sarmatian tribes had taken to the mountains like their last representatives the Ossetes. Tirgatao, queen of the Maeotae, had an Iranian name, v.

supra p. 39.

1 IosPE. Vol. 11. p. ix, as usual amplifying the work of Boeckh, CIG. 11. p. 100.

² Her. IV. 123, Μαιῆται.

³ Cf. App. 27, 29, 29, 30, 31, 35, 42. ⁴ App. 29 = IosPE. II. 11. ⁵ App. 27 = IosPE. II. 6; App. 29 = IosPE. II. 344; App. 42 = IosPE. II. 36, ib. IV. 419.

⁶ App. 27, 29.

⁷ Τάρπειτες. App. 42. ⁸ Last in IosPE. II. 347, ll. 4, 5, [κ]αὶ βασιλεύοντος Σινδών, Μαιτῶν,/[Θ]ατέων, Δόσχων.

 τος Σινδων, Μαιτων, / (Θ ματεων, Δου χων.
 Not Maeotae, v. sup. p. 121.
 App. 30 = JosPE. 11. 346; App. 31 = JosPE. 11.
 ξ; App. 35, JosPE. 11. 15; ib. 347.
 App. 27 and 42; cf. St. Byz. s.v.
 Latyshev, JosPE. 11. introd. p. xxxix, and
 Rostovtsev in BCA. X. p. 15. Ptolemy's Asturical supervision by conventible the same v. ch. XIX. cani are very likely the same, v. ch. XIX.

13 Strabo, XI. ii. 14.

phagi, Melanchlaeni, Soanes above Dioscurias, in what is now Svanetia, and barbarous Troglodytes (in the Caucasus there are great cave cities of unknown date¹), Chamae-coetae, Polyphagi, Isadici, and to the north of the chain Nabiani and Panxani; other authors add many names in their lists, but they cannot be identified. The Melanchlaeni and Phthirophagi occurring here have been identified with the Melanchlaeni and Budini² in the interior beyond Scythia, and have accordingly added to the confusion. The descendants of these tribes have not moved or have only been moved of late years by the Russian administration, which found the Circassians too little amenable to its rule. The survival of the names Cherkess, Svan, Abkhaz (the Abasgi)³ shews that there has been no great change of population, although most of the modern tribal names are not to be identified with those mentioned by the ancients.

This completes a general view of the peoples of the north coast of the Euxine and their chief movements down to the period of great migrations.

¹ e.g. Uplostsikhe, Dubois de Montpéreux, Vol. IV. pl. I. sqq., and Haxthausen, *Transcaucasia*, London, 1854, p. 424.

² Her. IV. 109, sup. p. 105.

³ Anon. 51 (10).

whatever the former differences between them, became politically one, then together they were forced through Farghana (rather than Dzungaria, v. Shih-ki l.c.) to Trans-Oxiana and later moved s. to Bactria. The Chinese went on using the name Yüe-chih for the combination, among the Westerners (and Southerners, Skt Tukhāra) the word Tochari was the more familiar (cf. Getae and Daci, p. 123), so that it clung to their new country and so got into later Chinese. As to the name Ta-Hia, we have T'u-huo-lo already as the Chinese transcription of Tukhāra and Ta = great was, as I understand from Professor Giles, too familiar an ideogram often to be used as a mere phonogram (Ta-shih = Tadzhik used for Arabs being understood as Polyphagi), so that Hia is all we have to deal with, and by its tone there is no reason to suppose any lost final consonant. It would therefore do for the first syllable of Yavana (Gr. 'láFoves, Pers. Yauna, cf. Ar. Ach. 104) the name by which the Pactrian Greeks were known in India. The Ta would distinguish these Hia from the Hia nearer home, cf. Ta-Ts'in=the Roman empire and Ta-Yüan = Farghana. This latter might seem more like Yavana, but F. Hirth, Ueber fremde Einflüsse in der chinesischen Kunst, München, 1896, p. 24, gives good reasons against this interpretation.

⁴ TA-HIA, v. p. 121. Marquart (Erānšahr, p. 199 sqq. Exc. III. Toxaristan) tries to shew that Ta-hia is an attempt of the Chinese to write Tukhāra, the form T'u-huo-lo (in Hüan Tsang, A.D. 629-645, and Wei- and Sui-shu) belonging to a later date when they were rather more successful in expressing foreign sounds. The old equation Ta-hia = Dahae (A. Rémusat and others) had been disproved by Gutschmid (Gesch. Irans, p. 62, n. 2), for the Dahae were far to the NW. near the Caspian (Str. XI. vii. 1 et al.) whereas the data (supra, p. 121) make it clear that geographically Ta-Hia = Bactria. Marquart explains his own identification by supposing that the Tochari left the Tarim basin in a migration earlier than that of the Yue-chih, and that these caught them up and conquered them in Bactria; but we have no Chinese account of such a separate movement of the Tochari, nor does Strabo or Justin support it (v. p. 122). I have supposed (mainly following Franke, op. cit. p. 30) that the Yue-chih when driven w. by the Huns conquered the Tochari in the Tarim basin, and the two tribes,

CHAPTER VII.

PRE-SCYTHIC REMAINS IN SOUTH RUSSIA.

I ought perhaps to ask forgiveness for mentioning remains that have no direct connection with Greeks or even with Scythians, but these paragraphs make accessible to English readers what it is difficult for them to read for themselves, and give a certain completeness to this hasty survey of Russian archaeology. Also the interest of the Tripolje culture soon to be described is so general that exception can hardly be taken to some

account of it being given.

No satisfactory attempt can yet be made to sum up the prehistoric antiquities of Russia. The time has not come. As compared with Western Europe the series still has many gaps that will be filled up in due course: we cannot yet tell whether the absence of certain stages be due to their never having existed in Eastern Europe, or to the fact that it is only within the last thirty years that this vast area has been seriously investigated. Even now for the Stone Age we are chiefly dependent on chance finds, and very little has been done towards examining the remains of these early periods in situ¹.

Palaeolithic Remains.

The first finds of palaeolithic weapons were made in 1873 near Gontsy (district of Lubny, government of Poltava). They were followed by others in the same part of the country. The remains were associated with the bones of mammoths². Next Count Uvarov³ found others near Murom (government of Vladimir) by the village of Karacharovo and along the course of the Oká. Further, a station has been discovered on the Don, near Kostenki (government of Vorónezh), and another not far off at Borshev'. Bone implements of the same periods have occurred in caves near Kalisz in Poland.

1 See Archaeological Chronicle of S. Russia, no. 1. 1903, p. 6, N. Th. Bélashevskij, "Current Problems of S. Russian Archaeology"; also Dr Niederle, Lidstvo v době předhistorické, Prag, 1893 ("Man in Prehistoric Time"), or better its Russian translation by Th. K. Volkov, ed. by Prof. D. N. Anuchin, Moscow, 1898, pp. 53 sqq. (quoted as Niederle, Preh. Man) and CR. du Congrès Intern. d'Archéol. preh. et d'Anthrop. XI^{me} Session à Moscou, Vols. 1. II. (1892-3). Professor Anuchin's résumé made for Brockhaus & Ephron's Encyclopaedia has been

published in German in the Internationales Central-blatt für Anthropologie u.s.w. 1903, pp. 65 sqq., 129 sqq. For Western Russia and its connection with Western Europe see Niederle, Slavonic An-tiquities, Part 1. Prag, 1904, pp. 435 sqq. ² Count A. S. Uvarov, Archaeology of Russia, Stone Age, Moscow, 1881, Vol. 1. pp. 104. For similar finds made by Kan'shin at Umrikhino near Kursk v. BCA. XXI. suppl. p. 10. ³ op. cit. Vol. 1. p. 112.

³ op. cit. Vol. I. p. 112. ⁴ CR. 1905, p. 84.

But by far the most trustworthy information as to the Early Stone Age in Russia is due to the careful investigation by Mr V. V. Chvojka of a station on the very site of Kiev, known as the Cyril Street Settlement'.

At a depth of 19 metres from the top of a steep slope forming the S. side of the Dnêpr valley, underneath layers of black mould, löss, clay, streaky sand and sand with boulders and above a tertiary stiff blue clay, were found very many mammoth tusks, bones of mammoths, and in a less quantity of other animals contemporary with them, mostly broken and shewing traces of fire, places where fires had been made, that is patches of mixed earth and charcoal often several yards each way and two or three feet thick, and finally mammoth tusks with traces of definite handiwork, even a rude attempt

at a drawing², together with flint implements of the earliest type.

The conditions under which the finds were made are best satisfied by the supposition that here was a settlement of man living in the interglacial age a little to the south of the great glacier that covered all N. Russia: the original limits of steppe and forest seem to answer to the line reached by the said glacier. Man settled in the valley of the Dnêpr and hunted the mammoth who furnished the chief means of his subsistence, The great amount of the remains shews that he must have lived on this spot for many years. It was probably sheltered from the cold winds and convenient for hunting purposes. Occasional floods marked by layers of sand drove him from his place, but he returned again and again. In the streaky sand above the main layer of remains we find a few patches of charcoal with bones of lesser animals, no longer the mammoth; no doubt a change of climate or of physical conditions made this spot uninhabitable and drove away the earlier fauna, so that man could no longer occupy the site permanently. Th. K. Volkov's has endeavoured to prove that these remains belong to the period called by French archaeologists La Madeleine, the latest palaeolithic period, but Chvojka, in an article in the same journal, makes out a good case for an earlier date. Flint implements of a similar type to those found in Cyril Street have been picked up in various parts of Russia, but this is the only palaeolithic settlement that has been excavated, at any rate in the south of Russia'.

Finds of the very latest palaeolithic period, possibly indicating a transition to the neolithic, have been more frequent and extend much further north as the retreating ice-sheet allowed man to occupy more country. Such have been made on the banks of Lake Ládoga by Prof. Inostrántsev and about the Oká by Count Uvarov. Cave dwellings with chipped flints have been investigated along the Dnêpr near Kiev by Prof. V. B. Antonóvich

and by K. S. Merezhkovskij in various parts of the Crimea.

Chron. S. Russia, I. pl. 1-4.

3 Vol. XLVI. Transactions of the Shevchenko Scientific Society, Lemberg, in Little Russian, trans. into Russian in Arch. Chron. of S. Russia, no. I.

¹ Transactions of the XIth Russian Archaeological Congress at Kiev, Vol. 1. Moscow, 1902, "The Stone Age on the middle course of the Dnêpr."

2 Trans. Od. Soc. Vol. XXIII. p. 203, and Arch.

⁴ Transactions of VIIIth Russian Archaeological Congress, Moscow, Vol. III. p. 88 sqq. Mr G. A. Skadovskij's finds of palaeolithic implements in Kherson govt quoted by Bobrinskoj, Sm. III. p. iii. Niederle, Preh. Man, pp. 53—57. The scarcity of Palaeolithic finds in Russia is exemplified by the

fact that V. A. Gorodtsov enumerating all the types of axes in the Moscow Hist. Mus. (Report for 1906, p. 97) gives none of this period.

Early neolithic stations are also found in all parts of Russia from the so-called Winter Shore (Zimnij Béreg) on the White Sea and the borders of Lake Onéga to Kazan on the Volga, and to Júrjeva Gorá near Smêla, with many other points in the basin of the Dnêpr about Kiev. The pottery is very rude and shews no special points of contact with other cultures.

In the far west of Russia, between the Carpathians and Kiev, we find in the neolithic period distinct traces of connection with the coasts of the Baltic, pottery with string patterns (*Schnurkeramik*), northern types of axe and amber, but such finds are few and poor. This gives way in transitional times to banded ware, which seems to have come in from the south

and has analogies in central Europe².

Close by the palaeolithic station at Cyril Street, Kiev, Chvojka investigated the most important neolithic site in S. Russia. Whereas palaeolithic man preferred the lower slopes of the valley, neolithic man chose the plateaus above. Here were found the remains of a village which must have existed long. The more primitive dwellings were as it were caves cut in from the edge of the slope; the great majority was formed by digging out a shallow pit oblong or round from three to five and a half yards across and about a foot or eighteen inches deep3. In the middle of this they dug a hole from 2 ft. 6 in. to 5 ft. deep, 6 ft. 6 in. to 8 ft. across, with a way down into it made with steps, and at the other end a niche in the face of the inner pit with a hearth and a hole for smoke to escape. outer shallow pit were walls of wattle and daub, and over all a roof. The inhabitants threw all the remains of their food into the central pit, shellfish, bones of deer of various kinds, wild boar and beaver, and to some extent horses and cows. But they were also acquainted with agriculture, for we find several examples of hand-mills and lumps, which Chvojka supposes to be cakes. Also they seem to have kept tortoises as pets. Spindle whorls shew that spinning, and probably weaving in some simple form, were known. Most weapons and tools are made of stone or horn of deer or elk. The latter are well made, but the flint implements are very slightly ground. There is a remarkable absence of arrow-heads. Most characteristic is the pottery, in which is to be traced progress from very ill-baked, formless, cracked vessels, made of the first earth that came to hand, such as are found in the cave dwellings, to fairly graceful pots of considerable size, adorned with dots and lines and made of a careful mixture of clayey sand and pounded shells. Some few pieces approach to the finer kinds found on the "areas" next described.

On this same site between two of the huts was found an early mould for casting copper or bronze axes, and near it was a horn axe of exactly the same type, but inasmuch as no metal was found in the houses themselves we may be allowed to class them as neolithic.

¹ Niederle, *Preh. Man*, p. 78; *Slav. Ant.* I. 445; Bobrinskoj, *Sm.* I. pl. 1, 2; III. p. 49 sqq.; Spitsyn, "Stone Age Station at Bologoe," *TRAS*. Russo-Slav. Section, v. Pt 1 (1903) p. 239; at Balakhny on the Oka, Spitsyn and Kamenskij, ib. p. 94, VII. Pt 1 (1905) pp. 1—72; Abercromby, *Finns*, pp. 58 sqq.

² Niederle, Slav. Ant. I. p. 452. ³ Inf. p. 137, f. 31 = Chvojka, Stone Age, p. 24,

⁴ Spitsyn gives a Map of the stations of the earliest copper age in Central and North Russia, TRAS. Russo-Slav. Section, VII. Pt 1, p. 73.

The next class of remains distinguished by the "areas" hereafter to be described with their remarkable pottery and figurines is of very special interest because of the wide range of its affinities, considering its rather special character.

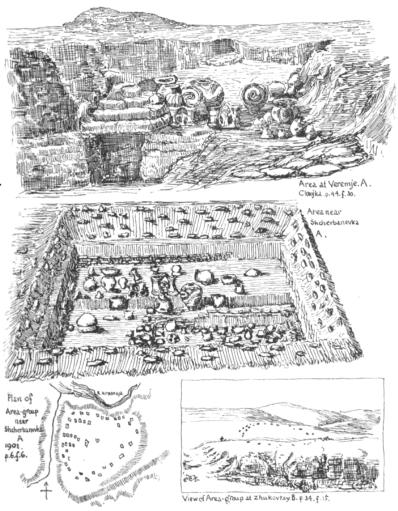


FIG. 28.
Tripolje Culture. Areas.

The actual "areas" are about Kiev but the culture occurs in Russia in the governments of Chernigov, Kiev, Poltava and Kherson, in Podolia and in Bessarabia. Pottery of the same type has been found long since in Galicia at Wygnanka and Złote Biłcze, in Bukovina, in Moravia, in Transylvania

and in northern Moldavia near Cucuteni. Something similar occurs in Serbia and at Butmir in Herzegovina. A southern extension has been traced through Thrace to Thessaly and across the Dardanelles to Hissarlik and Yortan on the Caicus¹. The first finds were made about the village of Tripolie on the Dnêpr forty miles below Kiev, whence this is called the Tripolje culture. The remains consist of so-called "areas" (ploshchádka). These are arranged in groups of a circular form, sometimes the circle is double or triple for part of its circumference, in any case the areas are closer together on s. and se. than on the N. and W.; in the middle of the circles are usually two or three areas of larger size than the rest. The group is always on high ground dipping down to water on the south side. Each "area" is a space from 5 to 10 yards long or even, if it be in the centre, more than 20 yards long by 6 or 8 or even 12 broad. The distinguishing mark is found in one or more layers of clay lumps spread over its surface and mixed therewith a surprising number of pots of various sizes and shapes. Also there appear pedestals like inverted cones or pyramids, sometimes shewing traces of having been coloured red or white several times, axes of deer's horn and of flint, sling stones, corn-grinders, shells, bones of animals among others of horses and tortoise shells, and little figures in clay that distantly recall those from Hissarlik.

The construction of an area seems to have been as follows. The space to be occupied was marked and dug out to the depth required from two feet to about four, then walls were built of wattle and covered with clay which was fired when dry. Sometimes we seem to have a lean-to with only one wall and a roof; others had walls on two, three or four sides. In some cases the walls were whitewashed or coloured red or bear layers of alternate colour, and there

¹ Niederle, Preh. Man, pp. 154—167; Slav. Ant. I. pp. 455—466; Chvojka, Stone Age., and TRAS. Russian Section, Vol. V. pt 2, p. 1, St P. 1904; also Archaeol. Chron. S. Russia, 1904, pp. 116, 221; Khanenko, Antiquités de la Région du Dnièpre, Part I. Kiev, 1899; Th. Volkov, "With regard to our neolithic finds with pottery of pre-Mycenaean type," Arch. Chron. S. Russia, 1900, 131; I. A. Linnichenko, "On the latest excavations of Mr Chvojka," Trans. Od. Soc. XXIII. Minutes, p. 75; "On a pot from Tripolje with signs upon it," ib. text, p. 199; E. von Stern, "Excavations in N. Bessarabia in connection with the question of Neolithic settlements with pottery of a pre-Mycenaean type," Bulletin of XIIth Russian Archaeolog. Congress (Kharkov, 1902), p. 87; A. A. Skrylenko, "On Clay statuettes from Tripolje," ib. p. 223; A. Spitsyn, "Report of V. N. Domanitskij's Excavations of Clay Areas near Kolodistoe, Govt of Kiev," BCA. XII. p. 87; CR. 1906, pp. 106—108, ff. 141—151, M. K. Jakimovich, Staraja Buda near Zvenigorodka. Von Stern has published and illustrated with excellent plates the results of his excavations at Petrény (district of Bêltsy in Bessarabia) and has given his general views at length in his article "Die prämykenische Kultur in Süd-Russian" (Russian and German) in Vol. I. of Transactions of the XIIth (Kharkov) Congress of Russian Archaeologists, Moscow, 1906. His finds are in the Society's Museum at Odessa, Chvojka's in the town Museum at Kiev. The central European finds are discussed by H. Schmidt

in Zt. f. Ethnologie, XXXV. (1903), pp. 438—469, "Tordos"; XXXVI. (1904), 608—656, "Troja, Mykene, Ungarn"; XXXVII. (1905), 91—113, "Keramik der makedonischen Tumuli"; the Transylvanian (Priesterhügel) by J. Teutsch, Mitth. d. Anthrop. Ges. in Wien, 1900, pp. 193—202; the Rumanian by M. Hoernes, Urgeschichte d. bild. Kunst, p. 210; the Serbian by M. Vasić, Starinar, I. ii. (1907) "Žuto Brdo," and BSA. XIV. pp. 319—342 "The South-Eastern Elements in the Prehistoric Civilization of Servia." The whole question is well set forth by R. M. Burrows, The Discoveries in Crete (London, 1907), pp. 184—202, and his résumé gives all that the English reader requires but wants illustrations; see too D. G. Hogarth, Ionia and the East (Oxford, 1909), p. 113; and Peet, Wace and Thompson in Classical Rev. 1908, pp. 232—238 for further literature. For Thrace (Tell Racheff near Jamboli, see Fr. Jérôme, "L'Époque Néolithique dans la Vallée du Tonsus" in Revue Archéologique 3, XXXIX. (1901), pp. 328—349, and CR. du Congrès International d'Archéologie, 1905, Athens, p. 207), also Seure-Degrand, BCH. 1906, pp. 359 sqq. Tsountas and Stais have found neolithic stations near Volo, Ai προυστορικαὶ ἀκροπόλεις Διμηνίον καὶ Σέσκλον, Athens, 1908, esp. pl. XI; and Wace and Droop at Zerélia in Thessaly, Annals of Archaeology and Anthropology (Liverpool), 1908, p. 116 sqq.; BSA. XIV. p. 197 sqq.; for imported ware at Matera, S. Italy, see T. E. Peet, The Stone and Bronze Ages in Italy, (Oxford, 1909), p. 108, f. 36.

is every trace of the structure existing a considerable period and being restored and beautified from time to time. Remains are also found of a kind of cornice to the walls. Sometimes there had been a floor of hardened clay. The layers of clay lumps seem to be the remains of the walls and perhaps the roof, and

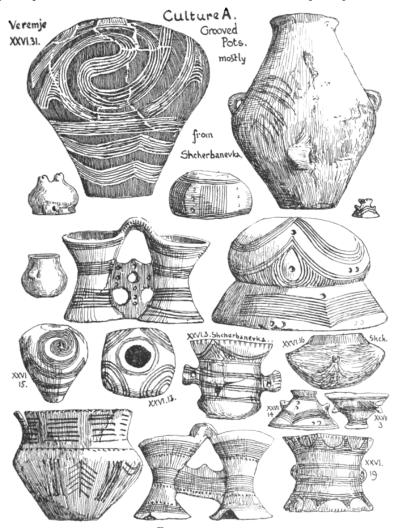
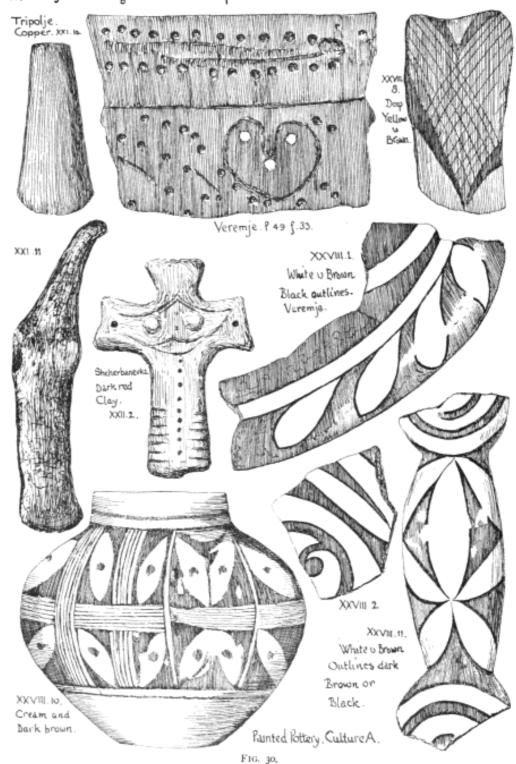


FIG. 29. v. p. 137.

where there are many layers it is probable that the structure has been destroyed and reedified. Occasionally there seem to have been interior walls. Amid the clay lumps, standing or lying or upside down on the original floor, are the remarkable vessels which give chief interest to the discovery, as in them and the figures some have seen an analogy to the early Aegean culture. As many as eighty have been found together. Chvojka divides the areas into two classes

V.V Chvojka. Stone Age on the Middle Dnêpr.

Culture A.



that he calls A and B, without wishing to prejudge the question which of them comes first in point of time.

A (ff. 28—30) is distinguished by pottery of very various shapes, e.g. a double jar-stand (?) like an opera-glass or twin bottomless dice-boxes, pyri-

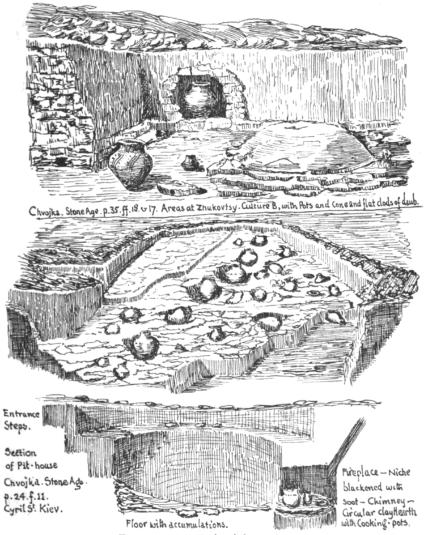
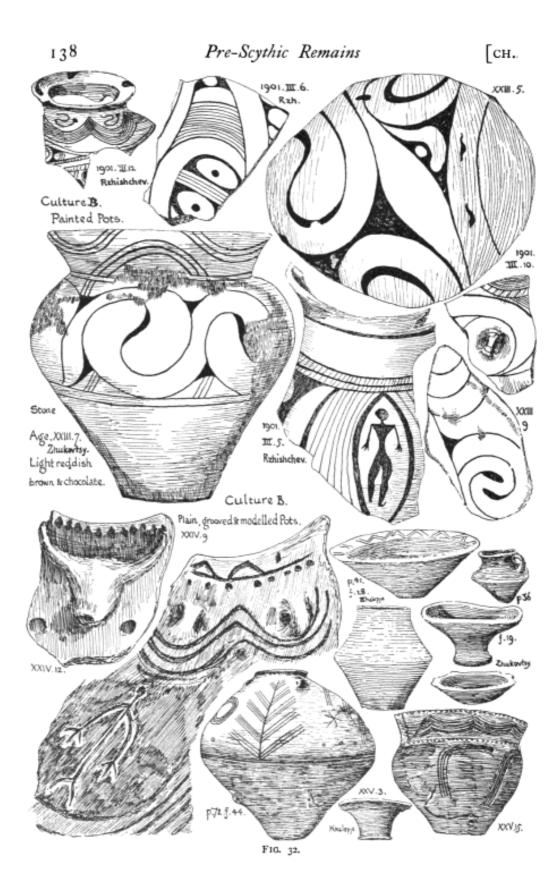


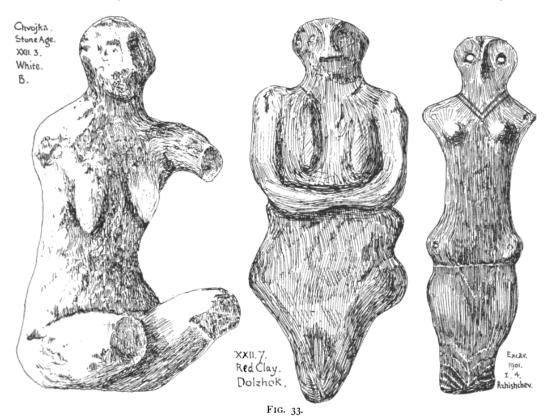
FIG. 31. v. p. 139: for pit-house p. 132.

form pots with small openings above, conical pots on little rims to support them, rude faces made by a pinch of the fingers and three dots on a round or heart-shaped projection of clay, stone axes bored through and even one or two copper ones, most of all by the adornment of the pots either with graceful and



free spirals or wavy patterns made by four or five parallel grooves giving a ribbon-like effect, or with equally easy spirals painted on a yellow or reddish ground with reddish or brownish paint and polished to a smooth and pleasant surface. Also the idols are more like crosses than human beings.

In B (ff. 31-34) on the other hand the shapes of the pots are more angular, the ornament especially when incised is less free and chiefly confined to the upper half of the pot, the rim of which is sometimes adorned with heads of animals and birds in relief. There are no axes with holes bored in them and no metal whatsoever, by so much B seems inferior, but the statues of women are very



much better than the cruciform idols of A. Also B has curious pedestals of clay which have been painted several times, or stands of clay supporting a stone basin. In B also have been found remains of half-cooked corn hidden below the general level of the platform. Moreover in B have been found marks, some occurring singly upon vessels and perhaps denoting ownership as the Tamgi of the Caucasian tribes, in one case set in a row and presenting a remarkable resemblance to an inscription. It would seem as if A were superior to B and later than it, but the difference in the statuettes is most remarkable.

¹ Figured in the Trans. Od. Soc. Vol. XXIII. p. 202.

Chvojka thinks that the cultures A and B belonged to the same people but that A has mostly imported from the south the elements that distinguish it. Perhaps the occurrence of metal in A proves it to be the more modern.

As to the object of the areas, they cannot be dwellings, because about them are none of the traces of habitation, no remains of food or pottery thrown away, hardly any implements or signs of a perpetual hearth. Though no urns of ashes or interments were found in the earlier diggings Chvojka came to the conclusion that they must be tombs or chapels of the dead. It is a remarkable conception that on the highest suitable hill near the village there should have been the circle of little chapels dedicated to the departed of each family. Except in one case we have not happened upon the village. The culture of the pit houses on M. Sventoslavskij's ground near the site on Cyril Street, Kiev, of which we first spoke, seems to occupy a half-way position between the period of the earlier pit houses and that of the areas, having similar pottery and also arrow-heads which are not found in the earlier houses. The pottery rather resembles A than B. Later excavations about Rzhishchev and Kanëv¹ have shewn that the same people lived in the more advanced pit dwellings and built the areas. Better preserved specimens of these unspoilt by the plough have yielded urns full of human ashes and thereby placed their purpose beyond a doubt: bodies some scorched and some untouched by fire shew that cremation was not the exclusive custom, but it is not clear whether it was going out or coming in.

Superior especially in range of colour to anything from Tripolie is a pot



FIG. 34. Pot from Podolia from a drawing by Chvojka.

from Podolia of which Chvojka has recently sent me a photograph. This pot which he classes with B stands 2 ft. 6 in. high and its surface is covered with light brown slip. On the upper slope are two bands of ornament in dark red, the lower curvilinear, the upper having drawings of a he-goat, a nanny goat, a deer and a dog. It was full of scorched wheat grains. Other vases from Podolia have on a ground painted black, light brown, yellow or grey, spirals and curves in three colours, white, light or dark red, orange or brown according to the ground3.

Von Stern's finds at Petreny likewise surpass Tripolje ware in range of colour. There is little incised work and the figurines are few and very rude, one of them is striped: most of the attempts at modelling

in the round come from one single area. The shapes too of the vases are not so varied as further north. The painting however is very abundant and of a high order. In a few cases on the natural red or yellow surface of the clay the patterns have been painted directly in black or violet brown. More often the natural clay is covered by a slip, polished if it be red or brown, dull if it be white or yellowish: on this the painting is applied in black or violet brown (often with a greenish tinge to judge by the plates), rarely yellow or red. In a few cases

¹ TRAS. Russo-Slav. Section, Vol. v. Pt 2,

St P. 1904.

² Chvojka, Arch. Chron. S. Russia, 1904, p. 223.

Chroika, Ian 8 1907. ³ Private letter from Mr Chvojka, Jan. 8, 1907.

I take this opportunity of thanking him most deeply for sending me reprints of his articles, unpublished photographs and very kind letters to enable me to keep abreast of his researches.

both black and red are used together. The designs are mostly of much the same character as those here illustrated, especially those of culture B (p. 138, f. 32). They are founded on the spiral executed with wonderful skill, simpler curves also come in, arcs of circles and fairly straight lines. The attempts at the human figure scarcely come up to those illustrated above, and the animals including oxen, dogs and goats are not equal to those on the Podolian pot. There are the same knobs and tiny handles. The potter's wheel is strange to the whole culture.

Chvojka, the first discoverer, thought that this was an autochthonous civilisation developed by the Indo-Europeans before they differentiated, perhaps more particularly by that section of the race which was to become the Slavs. Those who studied the Western regions, where somewhat similar spirals occur, did not at first dare to think that northerners could have been so artistic without external influence, and ascribed the highly developed decoration to the influence of the Aegean exercised through traders and the importation of wares. Independently M. Much, H. Schmidt and von Stern advanced the view that the movement was the other way, that the northern finds are earlier in date than the similar objects in the Aegean region—in fact von Stern even entitles the Russian version of his paper "Pre-historic Greek Culture in the S. of Russia," and thinks that the artistic people who made the Petreny pots moved south and conquered even as far as Crete.

The difficulty here is that we can trace back continuous development on such sites as Cnossus to a neolithic stratum far inferior in artistic power to the pots at Petreny: that is, that the supposed northern immigrants must have gone back in their art on reaching new countries, and afterwards raised it again to the height of Kamares ware or ware from Phylakopi which according to von Stern recall Tripolje and Petreny. This is of course possible; the wars of conquest may have caused a setback in art. the fact is that we do not know enough yet to talk of movements or affinities of races. Still, having regard to the artistic gifts of the Mediterranean as opposed to the Northern race, it may be that the basis of the Tripolje population was a geographically northern outlier of the former subjected to the strong influence of its neighbours, the varying strength of this influence accounting for the differences presented by similar cultures to The inconsistency of funeral customs argues the same the westward. mixture. Cremation would seem to have come in from the north, but not yet to have put an end to the vivid consciousness of the dead man's continued presence and needs which goes with primitive interment. Hence the numerous offerings. Under their less favourable conditions pottery painting was the one art which the Tripolje folk brought to a high standard, that and the modelling of some B figurines'. Before they could advance further they seem to have come absolutely to an end. There is nothing in S. Russia which can claim to be in any sense a successor to the Tripolje-Petreny They may have moved south or they may have been overwhelmed by newcomers. They were agriculturists long before the date of the agricultural Scythians, but the next people to dwell in their land were thorough

¹ For a fuller statement of the various views of Wosinsky, Schmidt, and Hoernes, see Burrows, an outlier of the Mediterranean race.

Nomads. At Khalepje one area had been spoilt by its materials having been used to pile a barrow for a man of the nomad race buried doubled up according to custom with only one pot by him, but with his bones coloured with the characteristic red.

Niederle² reviewing the whole subject with very wide knowledge of the Central European finds comes to no very certain conclusions. He is disinclined to hold to the view at first current in Russia that the Tripolje culture evolved entirely on the spot. He takes it to be a special development of the South European band pottery (Bandkeramik) already approaching the Tripolje forms at Butmir and other sites across to Transylvania. This development may have been called forth by intercourse with the Aegean area and Asia Minor going by way of Rumania and Bessarabia, but the gap in our knowledge of these countries makes it so far impossible to trace its progress. A distant resemblance to forms from the Mediterranean region is undoubted, but investigators of Aegean styles seem to see it less clearly than those who have dealt with N. Europe³. The statuettes also recall Southern forms. The B culture moreover shews analogies with the Northern style before mentioned, especially in the wide open flower-pot shaped vases. A consideration of these relationships inclines Niederle to put the whole culture at about 2000 B.C., which would give time for the period of coloured skeletons to follow. But it seems premature to attempt to assign dates, only we must allow a long period for the red skeletons.

Coloured Skeletons.

Right across South Russia from Podolia and Kiev to the slopes of the Crimean mountains and the Caucasus, the most primitive type of grave commonly met with is distinguished by the fact that the skeletons are coloured bright red, mostly with ochre or some other earth containing iron. The colour is found in a thick layer most abundant upon the upper part of the body and head, and even occurs in lumps lying to one side. The body usually lies with the legs doubled up in a position "making our last bed like our first." The interment is in the untouched earth, not in the mass of the barrow. The size of the barrows raised over them shews that these men were great chieftains in their day, though they took so little with them into the tomb. Often later peoples have used their barrows, putting their own dead into a shallower grave in the heap. Also we find various interments of this type in one great mound, which suggests that within the limits of this period men had had time to forget the first owner of the barrow. Often, but not always, above the body there are the remains of a kind of wooden shelter, more rarely a stone cist. Few objects are found in the tomb, at most one or two round-bottomed pots8, more rarely chips of flint, still more rarely copper or bronze arrow-heads. This gives their

¹ Chvojka, Stone Age, p. 41.

² Slav. Ant. 1. p. 460.

³ Cf. however some of the vases from Cnossus illustrated by Mackenzie, *JHS*. 1903, 157 sqq. esp. 189, ff. 2 and 3.

⁴ Cf. p. 138, f. 32 (right hand bottom corner)

⁴ Cf. p. 138, f. 32 (right hand bottom corner) and the northern pots figured by Niederle, Slav. Ant. 1. p. 444, g and r.

⁵ Sir T. Browne, *Hydriotaphia*, chap. III.; shewn in side tomb, p. 177, f. 72, but no colour was found there.

⁶ e.g. Bezschastnaja Mogila 15 m. high and 230 round. KTR. p. 278, CR. 1883, p. xliv.

round. KTR. p. 278, CR. 1883. p. xliv. 7 e.g. Geremes Barrow, KTR. p. 253.

⁸ A good example, Mastjugino (Voronezh) CR. 1905, p. 97, f. 123.

date as belonging to the latest stone age, and the first beginnings of metal. But much more metal is found with the colouring of the skeleton in the south at the foot of the mountains.

There seems no doubt that the colouring matter was very thickly smeared on the body at burial, and that after the decay of the flesh it impregnated the bones when they had become porous with age. The colour is almost always red, sometimes whitey yellow. The circumstances of the finds preclude the idea that the flesh was taken off the bones and the latter stained on purpose, or that the colouring matter is the remains of paint on the coffin or dye in clothes or cere cloth. Probably these people painted themselves with ochre during life, and when they died they wished to enter the other world in full war paint, and even had a supply for future use put with them. Professor Kulakovskij compares the painting red of the face of Jupiter Capitolinus and of the hero of a Roman triumph, suggesting that this is an instance of Roman conservatism going back to the most primitive times; the practice was common in Neolithic Italy².

In the Kuban district richer tombs with the characteristic colouring accompanied by pottery and axes and spear heads of copper were found by N. I. Veselovskij at Kostromskaja, Kelermes, Kazanskaja, Tiflisskaja and Armavir'. Many have intruded Scythic interments as that at Vozdvizhenskaja (inf. p. 229, f. 131). Of unexampled richness was a tomb at Majkop⁶, so much so that one might doubt whether it have any connection with that of the typical coloured skeletons. Here we have associated with the colouring, in this case by means of red lead, gold vessels and other objects testifying to remarkable artistic progress. The style in some cases, e.g. the plates with lions and bulls, recalls the Scythic, in others rather the products of the Caucasus. Still the wooden covering and the characteristic doubled up position offer some resemblance to the simpler coloured burials. Archaic objects are a vessel made of stone, but mounted in gold and with a gold stopper, and implements of stone and copper, as well as bronze; also the pottery is not unlike that found in other graves. Quite unlike anything else, and so far unexplained, is a set of silver tubes about 40 in. long, four with golden end-pieces: upon these were threaded, through a hole in their backs, solid golden bulls (p. 144, f. 35). There were also fourteen silver vessels, of which two had engraved ornament, recalling faintly the compositions of Western Asia. One is shewn here (p. 144, f. 36), the other has a more conventional frieze and no landscape.

It is probable that we have here relics of a people which formerly stretched all over S. Russia, and buried its dead after daubing them with red colour. We have seen that many tribes were pressed towards the Caucasus when enemies entered their land, and this may have been the case with this Here they would be in contact with the Caucasian tribes, and

¹ J. A. Kulakovskij, "On the question of coloured skeletons," Trans. of the XIth Russian Archaeological Congress (Kiev), Vol. I.; Count A. A. Bobrinskoj, Sm. II. pp. 24-33, and III. p. iii. and for a very full list, A. A. Spitsyn, TRAS. XII. (1899), pp. 53-133.
² Pliny, NH. XXXIII. 111, 112; T. E. Peet, op.

cit. pp. 120, 168, but there the bones were stripped of flesh before the colour was applied.

³ CR. 1897, pp. 15-17, ff. 53-62.

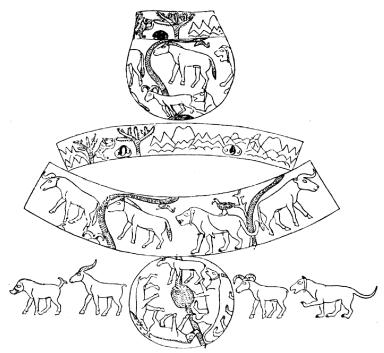
⁴ CR. 1904, p. 96, ff. 163, 164, one axe double looped, the other of Koban type.

⁵ CR. 1900, p. 45, f. 105; 1901, pp. 66—86; 1902, pp. 66—75, 86—89, ff. 193, 198; 1903, pp. 61—71; 1905, p. 69; the ff. noted shew the three-legged clay incense-burners (?) peculiar to these tombs.

⁶ CR. 1897, pp. 2—11.
7 ib. p. 3, ff. 1—3.
8 ib. p. 8, ff. 27—29.



FIG. 35. Golden Bull. Majkop. CR. 1897, p. 5, f. 14a. 1.



F1G. 36. Silver Cup from Majkop. CR. 1897, p. 7, f. 26. $\frac{1}{3}$.

through them with Western Asia, also sooner or later they would have to do with the "Scythic" culture, whether the Scyths were their immediate displacers, or whether other movements of population intervened. an intelligible mixture of original customs, Scythic dress shewn by the many gold plates in the form of lions, and Caucasian metal work shewn

in the gold and silver bulls and the engraved vessels.

We must beware of trying to give this race any historic name. Professor D. J. Samokvásov wishes to call it Cimmerian and date it up to the vith century B.C., but this is going further than is safe¹. Mr V. I. Goszkewicz of the Kherson museum unhesitatingly applies the name Cimmerian to graves of this class, which he enumerates fully as far as they occur in the government of Kherson. He says' that in particular cases the position of the bones makes it appear that the colour was applied after the flesh had been removed, and suggests that there existed some arrangement like the "Towers of Silence." But there are too many suppositions concerned for this to be an argument in favour of the Iranian affinities of the Cimmerians. I take it these are the people Professor J. L. Myres calls "the Kurgan people," and declares to have been blonde longheads. He gives a map shewing such burials right across from the upper waters of the Obj to the Elbe, and as far south as Thessaly and Anatolia. As kurgan is just the Russian for barrow, the name Kurgan people would suit any one between these early folk and the nomads of the xiiith century's.

In the neighbourhood of Kiev, according to Professor V. B. Antonovich, these people were dolichocephalic. He mentions two other types of very early burials that occur at any rate in his district, small barrows with the bodies lying straight and often wrapped in elm bark, no objects therewith; and graves without barrows but with stone cists, bodies burnt accompanied by rude pottery. Both these types are comparatively rare and do not seem to offer any data for putting them before or after the widely spread people with coloured skeletons. The early date of the latter is shewn

by the invariably bad preservation of the bones.

Megalithic Monuments.

The Dolmens' of Russia have not yet been duly investigated, but it seems probable that they are to be referred to a very remote date. offer close analogies to those in Western Europe, but any direct connection is hard to suppose, because there is a gap in their distribution. similar forms may arise independently is shewn by the occurrence of dolmens

¹ History of Russian Law, Warsaw, 1888, p. 134

sqq., cf. Bobrinskoj, Sm. 11. p. xiii.

**Treasure Trove and Antiquities, Bk 1. Kherson,

^{1902,} p. 12.

³ Geographical Journal, XXVIII. (1906) p. 551,

"The Abine Races in Europe." The geological changes described in this ingenious paper come before anything with which this book can deal.

⁴ Niederle, Slav. Ant. 1. p. 449. ⁵ Talko-Hrincewicz, J., Przyczynek do poznania świata Kurhanowego Ukrainy (A contribution to the knowledge of the barrow-world of the Ukraine), Cracow, 1899, says that the percentage of long heads in these graves is 71, in Scythic, 43, in early Slavonic, 96. v. Arch. Chron. S. Russia, 1900, p. 116.

in India, the Sudan, Algeria and Syria. It is with these last that O. Montelius' would connect those in the Crimea and the Caucasus. At Tsarskaja in the latter the further detail is found of a hole in one of the side slabs agreeing with a disposition remarked in Western Europe and also in India. To those who see Kelts in the Cimmerians the dolmens are a welcome confirmation, but in both ends of Europe these monuments probably precede any population to which we can put a name. In a barrow at Verbovka (Kiev government) was found a circle of twenty-nine stones about four feet high, with engravings something like those of Gavr'inis, but no objects².

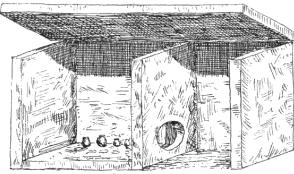


Diagram of Dolmen. Tsarskaja, CR. 1898. p. 36. f. 53.

FIG. 37. Total length 3.11 metres = 10 ft. $2\frac{1}{2}$ in. Dolmens with similar holes near Tuapse, BEA. XXXIII. pp. 83-86, ff. 14-16.

Earthworks.

Sheer want of stone might prevent the erection of dolmens on the steppes, but no country could better suit earthworks. Besides the innumerable funeral barrows which generally reveal their date on excavation, are many works meant either for look-out stations or for defence. These are of all dates, from the earliest times to the works thrown up by Charles XII of Sweden or the Russian expeditions against the Crimea under Münnich But merely defensive considerations will not explain the or Suvórov. singular forms of some of these great works; their extent suggests that they were the work rather of settled people than of nomads, moreover, they occur in the wooded country beyond the steppe.

The first account of them was that by A. Podberezskij³. \They occur about Kharkov, Poltava, and in the south of the government of Chernigov, but are specially common in that of Kiev's and so westwards into Podolia. Some seem to have been occupied in Scythian times from the pottery picked

¹ "Orienten och Europa" in Antigvarisk mostly near Romny. In BCA. v. pp. 1-95, A. Spitsyn gives short particulars of them in many governments.

⁵ 1. Funduklej's Survey of Barrows, Banks and Camps in the Government of Kiev, Kiev, 1848, is not quite superseded.

Tidskrift för Sverige, XIII. 1.

² BCA. XX. p. 12.

³ Trans. Od. Soc. Vol. VII. 1868, p. 256, mostly

reproduced by Count Bobrinskoj, Sm. II. p. iv.

⁴ In BCA. XXII. pp. 55–88, N. E. Makarenko gives plans and descriptions of eight such forts

up upon them, but of those that seem built for defence the lie of the land makes it probable that they were designed by people who had very feeble missile weapons. Matrónenskij Gorodíshche, the greatest of them, goes down into a ravine in such a way that part of the bank would be entirely commanded by good bowmen.

At Bêlsk (Poltava) is a camp of another type, the largest in Russia; it has been specially well excavated by Mr V. A. Gorodtsov?. It is six-sided, like a truncated octagon, one long side running N. and S. by the river Vorskla, which defended it from the E. whence attack was most to be feared. This side, which is seven miles long, is broken by a fort, a stronger fort is at the salient angle away from the river, the greatest breadth (four miles) being measured between them; there is a smaller fort to the N.E. The whole circumference is some 20 miles. The site had been inhabited in the Tripolie period and yielded the typical pottery and statuettes. With these came early Scythic things, pots with white incrustation (v. p. 82), bone and bronze psalia and a whole hoard of arrowheads, besides Ionian vases and beads of "Egyptian paste": from this we can distinguish a later Scythic period with black figured and later Greek vases and glass beads; to this the earthworks belong, for the older remains are used up as material in the banks; the whole comes under the special form of Scythic culture described on pp. 175 sqq. About were barrows of all sizes, most of them plundered. Some had the queerest resemblance to spiders or crabs, consisting of a small circle with one or more openings, on either side of which stretch out claw-shaped banks, sometimes two or three, one within the other. Such are found elsewhere and called Majdans, and were long unexplained. One of the first to be carefully excavated, that at Tsvêtno (Kiev government), was quite of a spider shape (see plan, p. 148, f. 38). Within the enclosure was found a typical grave of a Scythian woman, and near by other Scythic remains of the IV.—II. centuries B.C., but in connection was a barrow with a red skeleton. The combination offered no clue to date or purpose.

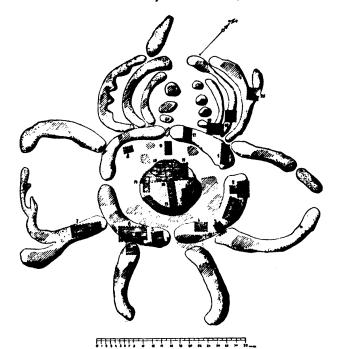
But Mr Gorodtsov³, after examining a considerable number of such earthworks, came to the conclusion that they were merely barrows which had been plundered for their contents, the peculiar form assumed by the earth that had to be moved being due to the conditions of working with volokushi, wheelless carts or sledges used by the Russians in the xviith century.

A. A. Spitsyn has cleared up the whole mystery. In the xvith and xviith centuries saltpetre was regularly extracted from the grave mounds: the earth was boiled on the spot and the liquor again boiled. The banks are merely spoil-heaps trending away from the barrow, so as not to get in the way of the operators. Spitsyn shews how a certain amount of system producing fair symmetry was rendered necessary, and describes exactly how the process was carried on. He supports his case by many extracts from contemporary authors and documents referring to it as quite a common

¹ Plan in Sm. 11. p. 52. ² He is to publish an account of it in the Transactions of the XIVth (1908) Russian Archaeological Congress (Chernigov), but he has been good enough to give me private information, for which my best thanks are due.

³ Drewnosti,= Trans. Mosc. Arch. Soc. XX. 2, pp. 29—39. L. V. Padalka, Archaeological Chronicle of S. Russia, 1904, pp. 128 sqq., dissents strongly, but by his article I have been made acquainted with Gorodtsov's view.

thing, and coins of the time are found in the banks, e.g. near Bêlsk. The centre of the mound was naturally the richest, and the flanks were left



Bobrinskoj's Trenches. Plunderers' Pits. Site of Grave.

Scale 128 ft. to the inch.

Fig. 38. CR. 1896, p. 213, f. 606. Majdan at Tsvêtno.

as not worth boiling. Hence the ring form. Most likely the application of the process to the Siberian barrows first shewed their richness in gold, of which the Siberian collection at the Hermitage is almost the sole relic¹.

 1 A. A. Spitsyn, TRAS. Russo-Slavonic Section, VIII. 2, pp. 1-28. He gives plans of about fifty majdans and a very good bibliography of the question, which can now be taken as settled.

CHAPTER VIII.

SCYTHIC TOMBS.

IF Herodotus is the main source of our information as to the population of the north shore of the Euxine during the flourishing time of its Greek Colonies we are hardly less indebted to the finds made in the barrows of the country, finds which on the whole bear out what Herodotus has said and supplement it with many details throwing much light upon the elements which went to make up the mixed culture of the inhabitants. From about the viith century B.c. to a little after our era is the period to which may be referred a series of tombs that seem to belong to peoples all closely connected with each other in funeral customs and general mode of life. To give any ethnic name to this class of grave is begging the question of their origin, yet it is impossible to habitually refer to them as "graves of nomadic tribes in contact with central Asian and Greek civilisations." They are generally called "Scythian" or "Scytho-Sarmatian," or those shewing Greek influence are called "Scythian," those with Roman manufactures or coins "Sarmatian." This latter distinction is certainly unsatisfactory, for the name of Sarmatian had spread over the European steppes certainly before Roman influence had been brought to bear on these countries. In fact as will be seen the greater part of the tombs usually called "Scythian" appears to belong to a time when the Scyths of Herodotus had disappeared. On the other hand the general agreement between the archaeological evidence and the information furnished by Herodotus argues the substantial identity of the cultures described in these different sources. all points to there being but little real difference between Scyth and Sarmate. The latter were apparently nearer the Iranians of Iran both in language and dress, but in both there seems to have been an Altaic element.

I propose then to call the class of tombs, which I shall now describe, "Scythic," not wishing to assert thereby that they belonged exclusively to Scyths, but suggesting that they are the most typical tombs of the inhabitants of Scythia, when that was the general name for the Euxine steppes; still there can be little doubt that the true royal Scyths of Herodotus were among the tribes that buried in this fashion, although no tomb has been found which could be referred to the particular generation observed by him.

Unfortunately in spite of the enlightened efforts made by the Russian government to protect these remains, and in turn to explore them with the best archaeological skill, we cannot point to any first-class normal Scythic tomb which fate has reserved for quite satisfactory exploration. The great majority was plundered long ago, as it seems in most cases, shortly after the very funeral, in other cases the discovery has been made by peasants searching for treasure, or amateurs who have neglected to keep a minute account of all details as to the position in which everything was found; finally it has happened that an excavation already almost brought to a successful conclusion has been ruined by the insufficiency of the guard set over it. Hence our picture of a Scythic interment must be pieced together from the best preserved

parts of many tombs. It is impossible to take one tomb, even Kul Oba or Karagodeuashkh, describe it fully, and make it a norm, treating all others as varieties. Besides, enough remains to shew that each great tomb had its own peculiar features which have their interest in filling in the general outlines of Scythic life.

In the following enumeration of the most important tombs the older finds, particulars of which are more accessible, will be treated as briefly as possible; further particulars can be found in books so easily obtainable as S. Reinach's reprints of the Antiquités du Bosphore Cimmérien (ABC.) and of Kondakov and Tolstoj's Antiquités de la Russie Méridionale (KTR.). Descriptions derived from the Antiquités de la Scythie d'Herodote (ASH.), from the Compte Rendu de la Commission Archéologique (CR.), especially since it has been published in Russian, from the Bulletin de la Commission Archéologique (BCA.) and from other Russian publications will be given more fully.

The distribution of these Scythic barrows reaches from Podolia and the Kiev government southwards to the Euxine and eastwards to the valley of the Kuban on the northern slopes of the Caucasus. The finest of them are about the bend of the Dnêpr, near Alexandropol, near where we should put the land of Gerrhus; a special character marks those in the governments of Kiev and Poltava; a few occur about the Greek towns of the Bosporus on each side of the strait, and the Kuban series is hardly second to the Dnêpr group. Isolated is the remarkable find of Vettersfelde in Lower Lusatia. Also a burial of somewhat similar type has been found in Thrace, Dukhova Mogila near Philippopolis¹. Further, as has been said, objects of a type resembling the barbarian element in Scythic tombs can be traced right across to Krasnojarsk beyond the Altai. To the west also, in Hungary, objects of Scythic type have been found?.

The question of dating and classifying these tombs is very difficult. Our only criteria are the objects of Greek art found in them. Yet these only give us the earliest date possible. And even as to this there is some doubt, for various judges make more or less allowance, for barbarous influence, for the difference between the best art and that of articles made for export, and for the time necessary for new fashions in art to penetrate to such remote regions.

Moreover, unfortunately none of the tombs with the most archaic Greek objects have been opened by skilled archaeologists. For instance, the tomb at Martonosha (p. 173) may well have belonged to a contemporary of Herodotus. The amphora handle seems to be vith century work, and the other objects are not definitely late in date; but we shall never know, for our account of the excavation is derived from peasants nearly twenty years after the event, and we know yet less of the circumstances under which were discovered the archaic "Cybele" or the mirror handle with almost the earliest nude female of archaic (rather than primitive) Greek art '.

In the account which follows the barrows are arranged rather geographically than chronologically, though in the first group their dates would seem to

¹ BCH. XXV. (1901), p. 168, G. Seure. ² Dr P. Reinecke, "Die skythischen Alter-thümer im mittleren Europa," Zt. für Ethnologie, xxvIII. 1896, pp. 1-42, and J. Hampel, "Skythische Denkmäler aus Ungarn," Ethnologische

Mittheilungen aus Ungarn, IV. 1895, pp. 1—26.

3 CR. 1896, p. 82, f. 337.

4 CR. 1897, p. 78, f. 186. All these three bronzes are illustrated in Chap. XI. § 10, ff. 278—281.

be in the order I have given. Each barrow described has its own features of interest, and from them all some idea of the Scythic type can be formed. Fewer descriptions would have left out interesting points, more would have wearied the reader without attaining completeness; many important excavations have for this cause been necessarily omitted, for them the reader must be referred to the CR., BCA., and other special publications.

Poor Class. Twins.

Professor A. Lappo-Danilevskij¹, in his review of the various types of Scythic graves, divides them into four classes. His first class seems not clearly to be distinguished from the class of coloured skeletons of which we have already treated, except that the colouring is not predominant. The bad preservation of the bones, the poverty of the objects found with them, the large number of burials in one mound, rank tombs like the Pointed Tomb on the Tomakovka, the Round Kurgan (= barrow) at Geremes (variously written Guérémesov, Hérémesse, Germesov), the Long Tomb near Alexandropol, all on the right bank of the Dnêpr near the great bend, with the Bezschástnaja (unlucky) Tomb on the opposite bank, which distinctly contained coloured bones2. It is remarkable that all these are near the land Gerrhus, it seems as if the Scyths had adopted the sacred burial district of earlier inhabitants. Lappo-Danilevskij takes these great barrows with as many as fourteen separate interments to have been burying places of comparatively obscure families which heaped up great mounds when enough dead had been accumulated: but more probably the distinction between these and the following graves is one not merely of social position, but of time and race. may put them down as of the last pre-Scythic phase, for the skeletons are not coloured, and are not all doubled up, and there are a few objects of copper or bronze; but there are no chambers hollowed out, no horse graves, and none of those mines by which the rich booty of the true Scythic type of graves was carried off by men who well knew what they were doing. In this class there was nothing to tempt them.

An isolated example recalling this type is the barrow called Perepjatikha, in the district of Vasilkóv (Kiev government), opened in 1845. It is far to the west of the central Scythic group, but cannot be classed with the generality of Scythic barrows in Kiev government. It contained fourteen skeletons under a wooden roof upon which stones had been piled; by four of them were lumps of paint, necklets, metal disks, one bronze arrow, two iron axes, an earthen vessel with a stone stand, and 24 gold plaques of griffins once sewn on to a whitey-yellow stuff. This is not a normal Scythic tomb, and the paint suggests an early date; perhaps the Scythic objects belong to an intruded interment.

A fairly simple example of a Scythic grave (Lappo-Danilevskij's second class) is the Stone Tomb (Kámennaja Mogila) near Krasnokutsk, between

4 op. cit. p. 470; KTR. p. 268; ASH. plan E.

¹ Scythian Antiquities, TRAS. Russo-Slav. Section, Vol. IV. (1887), pp. 352-543; p. 467 sqq.

² v. ASH. passim.

³ A. Kohn and C. Mehlis, Materialien zur Vorgeschichte des Menschen im Östlichen Europa, Vol. 1. pp. 367—375, Pl. III.—XI. Illustration also

in KTR. p. 289, f. 254, shewing a very steep barrow surrounded at some distance by a bank and a group of lesser mounds. Cf. too Lappo-Danilevskij, op. cit. p. 487 sqq., who classes it rather with the other west-Scythic barrows.

Nicopol and Ekaterinoslav. The tomb derives its name from the fact that all the skirts of the heap and the central portion above the actual grave consist of stone. The main grave contained a human skeleton and those of two horses, three spears, scales from armour, fragments of amphorae, and of an alabastron and a jug, but all was in confusion. In a separate grave was the skeleton of another horse with a bridle adorned with bronze plates and with an iron bit. This would appear to be the grave of an ordinary cavalier whose position did not allow him the elaborate funerals of greater men. Yet the barrow is a considerable size, 19 feet high and 200 in diameter.

The third class consists of so-called twins (Bliznitsy)¹. Best known are the Geremes, Tomakovka and Slonovskij twins, all in the same district. In these we have two mounds close to each other, one flat-topped with steep sides fortified with stone, containing one human grave, horse graves and various gear including Greek wares, the other round-topped with many poor graves. Moreover, only in the chief mound are there traces of thieves' mines; about the chief of the Geremes and Slonovskij twins is a ditch and bank: in these chief twins also there seem to have been one grave chamber and a side chamber for the horse grave. But as all have been plundered in ancient times we cannot be sure of their disposition or

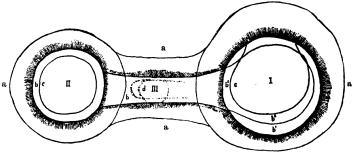


FIG. 39. CR. 1891, p. 161, f. 195. Double barrow at Pavlovka. I. Barrow with core c of rammed earth. Circumference 160 paces. Diameter about 36 m. Height 3.5 m. II. Barrow with core c of stones. Circumference 100 paces. Diameter 20 m. Height 2 m. III. Joining bank with small tumulus d, 30 paces long, 15 m. broad, 1.4 m. high. aaa. Extreme circumference. b, b' pits dug. The original interments were of red skeletons, others of later nomads, but none, it seems, Scythic.

contents. They offer close analogies to the next class, but are on a smaller scale; it is suggested that in them small tribal chieftains were buried, and that the ordinary folk of the tribe rest in the lesser twin alongside.

Big Barrows.

The fourth and chief class is that of the so-called Big Barrows (Tólstya Mogily)². Chief of these are that near Alexandropol, often called the Meadow Barrow (Lugovája Mogila), and the Chertomlýk or Nicópol Barrow. Others are that at Krasnokutsk, the Tsymbalka, the Orphan's Grave (Sirotína Mogila), Chmyreva barrow, Ogüz near Serogozy in the

Mogila for a grave, but in the language of Lit. Russia where all the Sc. tombs are, Mohila = barrow.

Lappo-Danilevskij, p. 471; ASH. plans E, D.
 Strictly speaking Kurgán (Turkish = OE. burh) is used in Great Russian for a barrow and

Melitopol district (Tauric govt), and Martonosha in that of Elisavetgrad (Kherson govt). In height they vary from 30 to 70 feet, and they may be from 400 to 1200 feet round at the base. On the top there is always a flat space some 50 feet or more across. Hence the sides are rather steep, especially on the north. The heap during its progress was rammed down hard and further fortified by a basement of stones; about the mound would be a ditch and bank with gaps for entrance. The grave chamber is from 9 ft. 6 in. to 15 ft. long by 7 or 7 ft. 6 in. broad and sunk into the earth itself to the level of a layer of clay that runs under the black soil at a depth of from 9 ft. 6 in. to 42 ft. (at Chertomlyk barrow). The sides of the grave chamber were sometimes smoothed and plastered with clay, in other cases traces may be seen of the narrow wooden spade with which they were dug out; such a spade was found near Smêla'. Beside the main chamber there are side chambers ("catacombs"), varying in number. In the Krasnokutsk barrow one only beside a horse grave, in Tsymbalka two, five each at Alexandropol and Chertomlyk. These chambers are generally on the north side of the main chamber. Beside these chambers for the burial of the king's servants and the storing of his gear were horse graves, always to the w. of the central grave, and in the Chertomlyk barrow two graves near them for the grooms. These chambers are roofed with unsquared tree trunks.

The king was brought to his tomb on a funeral car, of which the remains have been found, well bearing out the description of Herodotus. The car was left for the dead man to use, being broken up and buried in the heap or led down into the grave chamber. So too the horses, whose lives were even more prodigally wasted at these funerals than those of human beings. In the Ulskij barrow on the Kuban were found over four hundred horses (v. p. 227). At Krasnokutsk and Alexandropol the remains of a second car were found. On this probably the dead man's favourite wife rode to her fate.

None of the Big Barrows have been left unplundered, so we cannot know the exact disposition of the most precious objects about the principal bodies, but in chamber No. v of Chertomlyk king's and queen's things seem put apart from each other in niches. Amphorae and other vessels, mostly of Greek workmanship, were put on the floor and clothes hung on pegs in the wall. The body was usually laid on some kind of mattress which at Chertomlyk was covered with a pall adorned with gold plates. In the Alexandropol barrow there were only two servants buried with their master, in Chertomlyk five with their feet towards him ready to stand up and face him at his call. In the Krasnokutsk and Alexandropol tombs were also found heaps of human and horses' bones. When the way into the tomb had been filled up, upon the flat space where the barrow was soon to be raised was held the funeral feast, well marked at Chertomlyk and elsewhere by fragments of amphorae, horses' bones, and things lost by the revellers. After that the barrow was heaped up; but, as it seems, before all knowledge of plan and contents was lost, daring robbers sank mines into it from the north side, the side on which the heap was steepest, towards which there were always extra chambers, and braved not only the vengeance of the dead man and that of his successors (the Mongols had guards to watch their burial places), but the chance of a fall of those tunnels, that the secrecy of their operations made it impossible to support properly. Since then, Genoese on the coast and Cossacks on the plains, and in modern times the neighbouring peasants, have made a regular practice of seeking the dead men's gold. It is no wonder that the archaeologist often finds himself forestalled. His only comfort is that the bronzes are almost as interesting as the gold work, and that the thieves left everything but the precious metal. If only they had not thrown everything about in seeking for that', we should be better pleased.

Alexandropol Barrow.

Of the barrows about the Dnêpr, those most remarkable for the variety of their contents are that near Alexandropol and that at Chertomlyk, twelve miles N.W. of Nicopol.

The full report of the excavation of the former is given in ASH, with plan and sections and many plates, and a well illustrated summary in KTR.



FIG. 40. Alexandropol. Bronze standard? KTR. p. 241, f. 217 = ASH, I. 8.

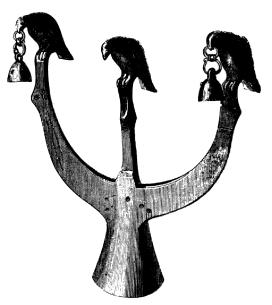


FIG. 41. Alexandropol. Bronze standard? *KTR*. p. 241, f. 218 = *ASH*. II. 1.

(pp. 238—251), but the exploration was so desultory and the sepulchre itself and all the objects belonging to it had been so thoroughly ransacked by thieves who, after an unsuccessful attempt, finally reached the central chamber, that it is hard to get a clear idea of the whole, and the main interest belongs

Barbaro alla Tana," in Ramusio, Navigationi et Viaggi, Vol. II. Venice, 1559, ff. 91 sqq.

¹ For a description of Italian (in this case Venetian) enterprise in robbing a barrow near the mouth of the Don in 1436, see "Viaggio di Josafa

to the accessories, the remains of two chariots, the horse tombs, and the bronze "standards" (ff. 40, 41), while little is left of the riches of the actual occupant but gold plates, many very similar to those of Kul Oba (f. 42, others on p. 158, f. 45, also a horse frontlet, an armour scale and a bone arrowhead). Clearly the plunderers had not time to seek trifles. For dating



FIG. 42. Gold plate from Alexandropol. KTR. p. 249, t. 228=ASH. XII. 6.

Scythic things, certain round and oblong silver plates that formed part of the harness are very important, as their style seems late Hellenistic. Other things in the tomb look at first sight almost archaic, but they are only degradations of the Ionian strain.

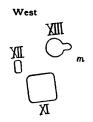
Chertomlyk.

At Chertomlyk the thieves were less fortunate, one of them was found crushed by a fall of earth at the mouth of his mine, but here again the central interment had been much disturbed. The objects worth carrying away seem to have been mostly heaped up in various corners of v (see plan), and by mere chance the king's things were still apart from the queen's.

century; F. H. Marshall, JHS. XXIX. (1909) p. 157 publishing some from Elis in the British Museum concurs, but their sets are better in style. For other Sc. phalerae v. Spitsyn BCA. XXIX. pp. 18—53.

¹ Unfortunately the figures of them in ASH. pl. XIV do not reproduce well; cf. KTR. p. 251, f. 230; TRAS. VII. pl. XIII, XV, XVI. Stephani, CR. 1865, p. 167 makes these and phalerae from the Great Bliznitsa (l.c. v, VI, cf. inf. ch. XII.) IVth

In looking at the annexed plan it must be remembered that only the central part of the tumulus is given; for a complete plan the reader is referred to ASH. plate F. Round the whole must be supplied the stone plinth, and it must be borne in mind that the plan is engraved so that the north comes to the right instead of being at the top.



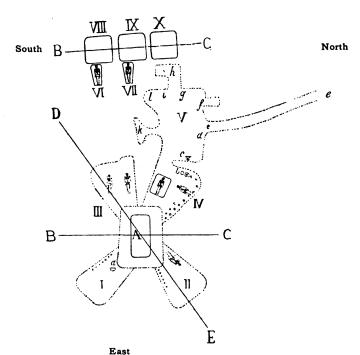


Fig. 43. Plan of centre of Chertomlyk barrow. KTR. p. 257, f. 235=ASH. Plan F.

The barrow was 60 feet high and 1100 feet round, surrounded by a stone plinth, and a kind of stone alley led up to it across the steppe.

A is the central shaft descending 35 ft. 6 in. below the original surface of the ground, 15 ft. × 7 ft. at the top and widening downwards. At the bottom opened out four lateral chambers, I, II, III, IV, one from each corner.

The N.W. chamber IV communicated with a large irregular chamber v into

which debouched a narrow passage *ee*, the mine of ancient plunderers. To the west of all this were three square pits in a line from s. to N., VIII, IX, X, and to the E. of VIII and IX two graves, VI and VII. Later graves, XI, XII, XIII, were sunk in the heap for persons who had

nothing to do with its original possessors.

In A everything had been thrown into disorder by the plunderers. There were only found traces of a coffin or bier painted red and bright blue. In 1 to the s.e. were a small cauldron, at a the remains of a skeleton converted into lime, by it remains of a quiver with arrows and five iron knives with bone handles, not unlike p. 190, f. 82 below; against the wall in a corner 150 more arrows with remains of their shafts, 28 inches long, and what once was a carpet; about the floor many gold plates and strips which had adorned clothes hung from iron hooks in wall and ceiling.

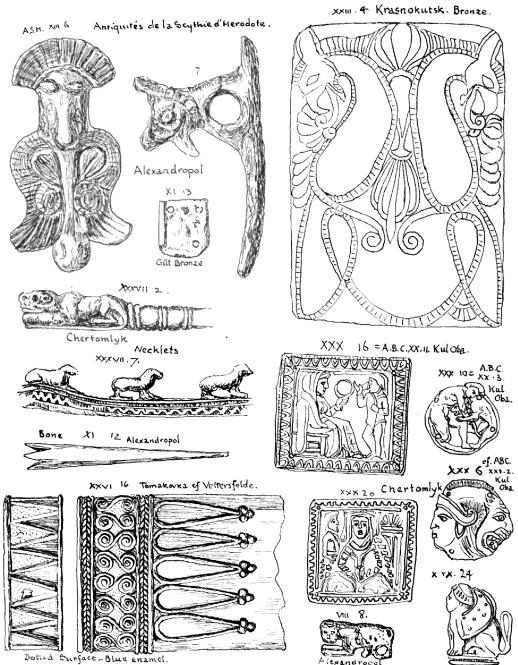
In No. 11 to the N.E. were six amphorae along the wall, in the middle a bronze mirror with an iron handle, by the door a skeleton with a bronze torque and a gold earring and finger ring, on his left an ivory handled knife and a leather quiver with 67 bronze arrow-heads, near his head ivory and gold remains of a whip handle, also a silver spoon and the fragments of an ivory box, besides innumerable plates and strips of thin gold for sewing on to clothes. The enumeration of the plates found in one side chamber of a single tomb will shew the variety of these plates and the prodigal use made of them. Figures of many of them are in KTR., still more in ASH. In 11 were found 25 plates with flowers, 64 with a fantastic animal, 7 with a lion tearing a stag, one with a calf lying down, 10 with a barbarian combating a griffin, 31 with a griffin alone, 12 with a rosette, 130 with a bearded man's head, 24 with a gorgon's head and 5 pendants, 27 with a plain gorgon's head, 6 with the heads of Athena and a lion back to back (p. 158, f. 45, xxx. 6), 33 of Heracles strangling a lion (ib. xxx. 10), one of a lion combating a sphinx, 24 triangles made up of grains (cf. p. 197, f. 90, ABC. XXII. 7). Besides these a great number of hollow pendants, tubes, beads, buttons, and other golden ornaments to be sewn on to clothes. These plates are very characteristic of Scythian dress, and occur in great numbers in all barrows; less wide-spread was the use of strips of gold repoussé or ajouré with plant patterns or combats of animals and monsters, sometimes as much as 14 inches long. these thin gold objects have little holes near the edges for sewing on to textiles.



Chertomlyk. KTR.

Gold band.

4



Objects from Scythic tombs on the Middle Dnepr. (Gerrhus)

FIG. 45. Gold: Horse's Frontlet (cf. Greek version of same type, p. 169, f. 61): Necklets (p. 63, 161): Plates (pp. 61, 155, 157, 161, 266): Dagger (p. 71, cf. 236). Bronze: Plate (p. 167, 282): Armour Scale (p. 74). Bone Arrow-head (p. 68).



FIG. 46. (v. pp. 161, 288), Chertomlyk Vase, silver, parcel gilt. Front view. KTR. p. 297, f. 257=CR. 1864, pl. 1. 70 cm. (263 in.) high.



FIG. 47. Chertomlyk Vase. Side view. KTR. p. 296, f. 256=CR. 1864, pl. 11.

In 111, the s.w. chamber, lay a skeleton wearing a golden torque with twelve lions upon it, shewing signs of long wear (ASH. xxxvII. 7 on p. 158). About the head could be traced the form of a hood outlined by 25 gold plates with griffins and fastened at a couple of smaller ones, a flower and a gorgoneion. He wore the usual bracelets and rings, and a belt with brass plates, and greaves (which are not so general); by his head were two vessels, a bronze cup, and a silver ewer with a string to hang it up by, and lower down the quiver with arrows, and a whip. By him lay another skeleton with much the same equipment. In the N.W. chamber (IV) were found remains of a bier painted dark and light blue, green and yellow. Upon it lay a woman's skeleton in rich attire. On each side of her head were heavy earrings, and upon it were 29 plates in the shape of flowers, twenty rosettes and seven buttons. The head and upper part of the body were covered by a purple veil with 57 square gold plates representing a seated woman with a mirror, and a Scyth standing before her (v. p. 158 = ASH. xxx. 16). The line of these plates made a kind

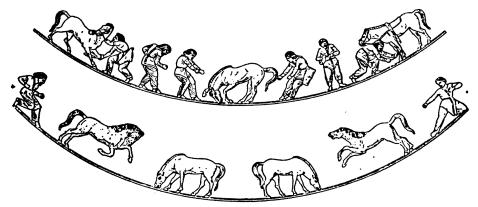


FIG. 48. Frieze of Chertomlyk vase. CR. 1864, pl. 111. 1.

of triangle reaching a foot above her head and descending to her breast, outlining a hood or pointed headdress with lappets falling down on each side of the face; such lappets seem shewn on a plaque of inferior execution figured on the same page (ASH. xxx. 20). Something of the same sort was worn by the queen at Kul Oba, and by that at Karagodeuashkh where the triangular gold plate which adorned it has a scene representing a queen wearing just such a one (p. 218, f. 120). The Chertomlyk lady also wore bracelets and a ring on each finger; by her hand was a bronze mirror with an ivory handle, with traces of some blue material. By the woman's skeleton was a man's with iron and bronze bracelets and an ivory-handled knife (the knives are always on the left hand side), a little further were the usual arrow-heads. Along the wall were ranged thirteen amphorae. In the west part of this chamber (b) was made the most precious find of the tomb, the famous Chertomlyk or Nicopol vase (ff. 46-49, cf. p. 288 sqq.). By it was a great silver dish with an elaborate pattern engraved within, and two handles formed by a kind of palmette of acanthus leaves with the figure of a woman wearing a











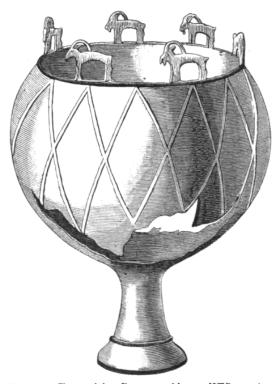


FIG. 50. Chertomlyk. Bronze cauldron. KTR. p. 262, f. 238 = ASH. Text, p. 112.

calathos in the middle. This chamber (IV) opened into another (V) to the west of it; V had suffered so much from the falling-in of the roof and

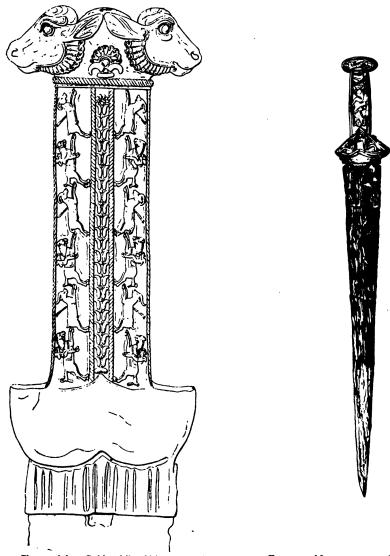


FIG. 51. Chertomlyk. Golden hilt of king's sword. KTR. p. 304, f. 264 = CR. 1864, v. 2, better Pridik, Melgunov, pl. v. 1, cf. p. 270. }

FIG. 52. Mat. XIII. p. 54, f. 30=ASH. XL. 12. Lesser sword from Chertomlyk found at k on plan. 1.

still more from the operations of the tomb-thieves, that it is impossible to say what may have been its original plan. It can hardly be entirely due to the thieves. The thieves' mine (ee) opened into it and all round were

1 KTR. pp. 263-4, ff. 239-40=ASH. XXIX. 5, 7.



niches (f, h, l, k) apparently due to them. If on their entrance they found the way into IV blocked up, they probably tried the walls in various directions and finally broke into IV and obtained access to the central tomb.

They seem to have begun to pile their booty in heaps in the corners of v ready to take it away, when the roof, disturbed by their operations, fell in and caught one of them, whose skeleton was found at e by the entrance of his mine; at c was a six-wicked lamp he may have been using: the plunderers at Alexandropol had only potsherds with rags in them. At d was a cauldron of the Scythic type 3 ft. high with goats as handles on the edge; the outside blackened with fire; within the head, ribs and leg-bones of a horse (f. 50). Near it was another, smaller, containing a foal's bones. At f was a niche in the wall with a heap of gold ornaments, at h another with a woman's things, as far as may be judged, at g and i were remains of boards, at l another heap of gold, at k the objects taken from the tomb of the king himself. Three swords had been stuck into the wall, where their blades remained while the handles had rusted off and fallen down (f. 52). Below were the great gold plate that adorned the king's gorytus, a strip of gold that went along the side of it, and the plate of gold which covered his sword sheath (f. 53); two more swords with gold hafts (f. 51), a hone with a gold mounting, and many other gold plates and a heap of arrow-heads. About the floor were fragments of Greek pottery.

Of the horse graves, in viii were three horses saddled and bridled, one with gold ornaments, the others with silver; in ix were four horses, two saddled and bridled with gold, two only bridled and with silver. In x were three horses saddled and bridled with gold, one without a saddle and bridled in silver. The grooms in vi and vii had each his torque, one of silver gilt and one of gold, and each his quiver with arrows.

In the heap itself, early in the excavations, was found an immense number of objects pertaining to harness. At the top of the barrow was a mass of such ornaments rusted together, silver had almost perished, bronze was in bad condition, of gold there was little but 29 pair of horse's cheek ornaments. In bronze there were animals upon sockets (the so-called standards), horse frontlets, buckles, buttons, bells, tubes, strips, crescent-shaped pendants, and about 250 iron bits, also a curious open-work saucepan, as it would appear for fishing meat out of one of the big cauldrons'. This description of the finds in the Chertomlyk barrow, though far from detailed, gives some idea of the barbarous prodigality with which the steppe folk buried their kings.

Krasnokutsk and Tsymbalka.

In the same neighbourhood as Chertomlyk is the Krasnokutsk barrow. In its mound Zabêlin found the fragments of a funeral car broken up and piled in two heaps, and the usual remains of harness and trappings: in a special tomb were four horses with frontlets (ff. 56, 57 and p. 158, f. 45; ASH. XXIII.

¹ KTR. p. 259, f. 236. ² Cf. ASH. plan C; KTR. p. 254 (not the same as the "Stone Tomb" there).



FIGS. 54, 55. Horse's frontlets, gold. Tsymbalka. KTR. p. 269, f. 241, p. 272, f. 243.

4). These ornaments are interesting because of their remarkable resemblance to the northern beast-style usually associated with the early middle ages. Other two tombs had been completely stripped by plunderers who only left enough to let us judge that the contents were of the usual Scythic type.

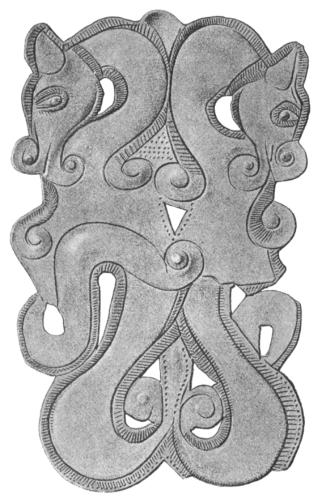


FIG. 56, cf. p. 267. Krasnokutsk. Horse's cheek ornament. Silver. KTR. p. 256, f. 234=ASH. XXIII. 5.

On the S. side of the river, in the district of Melitopol, government of Taurida, is the barrow Tsymbalka¹ near Bêlozérka. As usual the main tomb had been violated by a mine from the north, but in the side tomb were six horses, four with bronze trappings and silver frontlets, two with very interesting gold frontlets, one of fine late 1vth century Greek work with a *Schlangenweib*, the other barbaric with griffins (ff. 54, 55, cf. p. 269).

¹ CR. 1867, p. xxi; 1868, p. xix; KTR. p. 268.



FIG. 57. Krasnokutsk. Silver bridle ornament. KTR. p. 255, f. 233=ASH. XXIII. 7.

Chmyreva Mogila.

Chmyreva Mogila, two miles from Tsymbalka, was investigated in 1898 by Dr Th. G. Braun'. Here again the main tomb had been rifled, this time by



F1G. 58. *CR*. 1898, p. 28, f. 28. Chmyreva Mogila. Gold plate from harness, cf. p. 269.



FIG. 59. CR. 1898, p. 29, f. 32. Chmyreva Mogila. Gold plate from harness. 1.

means of a shaft sunk from the top of the mound, and a later burial for which the barrow had been used was also cleared, but the horse interment was the best met with. An inclined plane led to an oblong pit $7.10 \, \text{m.} \times 3 \, \text{m.} \times 2.15 \, \text{m.}$ Ten horses had been led into the pit which was then shut up with boards and

¹ CR. 1898, p. 26; BCA. XIX. p. 96.

heaped over. They had evidently struggled towards the outlet, and their skeletons lay one upon another. Their trappings were adorned with the usual metallic plates, but some were of the finest Greek workmanship of about



FIG. 60. *CR*. 1898, p. 28, f. 30. Chmyreva Mogila. Gold cheek ornament for a horse. 1.

FIG. 61. CR. 1898, p. 27, f. 27. Gold frontlet, side and front. Chmyreva Mogila. 1.

Fig. 62. *CR*. 1898, p. 27, f. 24. Gold plate. Chmyreva Mogila. 1.

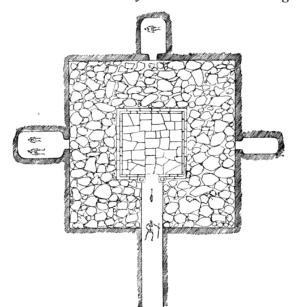
300 B.C. (ff. 58—60): there were also specimens of native attempts to imitate them. Very strange is a frontlet of a type which has occurred in several of the Gerrhus tombs , but this is the only one of skilful execution (f. 61). In the main tomb was picked up an interesting plate with two Scythians wrestling (f. 62).

Ogüz, Dêev and Janchekrak.

In the same district further to the south near Lower Serogozy, Ogüz, a very large barrow, has been investigated by Professor Veselovskij³. A plan and section of the stone corbelled vault are given overleaf. The interior is 21 ft. square, surrounded and upheld by a solid mass of stone work 50 feet square. The stones of the corbelled vault itself were bound by iron clamps of a hape. Unfortunately the tomb had been rifled three times. The first time the plunderers knew what they were doing, for they approached along the gallery from the s. instead of as usual from the n. The last plunderers came down from above and took off the top stone of the vault. Hence it all filled with earth. The plunderers could do their work much more effectually in the stone vault than in unlined earthen pits and left very little behind them, just a few gold plates, some from the same dies as at Chertomlyk, Kul Oba and Theodosia (e.g. ASH. xxx. 6 on p. 158 and ABC. xxii. 28), and other ornaments, also some horses' bones coloured green with copper, but no bronze objects with them.

At the sides of the great stone mass were small niches; in the eastern one nothing was found, in the northern one was a woman's skeleton with a mirror and one or two poor ornaments. In the niche to the west lay two

skeletons with no objects but a bronze earring.



At the entrance of the main vault lay a man's skeleton with a long spear, an iron knife and bronze and bone arrow-heads. He seems to have been as it were a sentry outside the tomb moved to one side by the thieves. This would shew that they had penetrated very soon after the heaping of the tomb. Veselovskij points out that such a work as the stone vault must have been built in the king's lifetime though the heap may have been raised after his death. In 1902 further excavations by N. W. Roth led to considerable discoveries in this same barrow, but the objects found are of the same types, save for some new forms of arrow-heads1.



FIGS. 63, 64. CR. 1894, p. 78, ff. 110, 111. Plan and section of vault in Ogüz barrow.

Near by was Dêev barrow², 500 ft. round but only 14 ft. high. The main tomb was empty, but a woman's (?) still untouched contained mostly poor copies of Hellenistic work, e.g. two diadems, one with a rich leaf pattern, the other with Neo-Attic maenads, also a frontlet with pendants and Sphinx earrings, all to be closely paralleled at Ryzhanovka (p. 179). There was a very fine gold and enamel necklace with alternate ducks and flowers and an armlet like that from Kul Oba on p. 197 (ABC. xxvi. 3).

¹ Arch. Anz. 1904, p. 106; CR. 1902, p. 63 sqq.; ² BCA. 1903, p. 166, f. 323; BCA. XIX. p. 157.

² BCA. XIX. p. 168, pl. XIII. XV.

VIII] Ogüz, Déev, Janchekrak, & Melgunov's Barrows 171

From Janchekrak in the N.E. of the district of Melitopol come phalerae of late Roman date, one with the type of winged figure which was adopted for the Christian angel: they were found with a hone and were probably from a late Scythic grave¹.

Melgunov's Barrow.

Of the barrows which have been excavated without proper account having been kept of the disposition of their contents we can regret none more than that called Litój Kurgan, opened in 1763 at Kucherovy Bueraki, about 20 miles from Elisavetgrad, by order of General A. P. Melgunóv, who sent the spoil up to Petersburg for Catherine II to view. Preserved with the Siberian antiquities in the Museum of the Academy of Science the objects have with them found their way to the Hermitage.



Fig. 65. Melgunov's barrow. Golden sheath and fragment of sword hilt. Pridik, pl. III. 3.4.

They included a very interesting dagger and sheath of Scythic forms, but Assyrian style; here is a view of one side of the sheath and a fragment of the

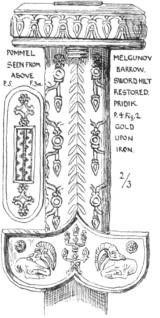
¹ Rep. Imp. Russ. Hist. Museum, Moscow, for 1907, p. 13, pl. I.; Arch. Anz. 1908, p. 190, ff. 21, 22.

much damaged dagger hilt (ff. 65—67¹, cf. p. 71) with a restoration (f. 68), parcel gilt feet and fittings of a couch, and one of 17 golden birds displayed (f. 69). There were also a golden diadem or necklet in the form of a triple chain





Figs. 66, 67. Details of Melgi nov sheath. Natural size. From S. Kensington electrotype. Dalton, Oxus Treasure, p. 56, f. 38, p. 38, f. 26.





Gold Bird from the same. Wrong side with Eyes Pridik PLIV

Fig. 68.

Fig. 69. Couch fittings, \(\frac{3}{7}\); Bird, \(\frac{1}{1}\).

¹ In *Mat.* XXXI. with Pharmacovskij's "Kelermes," E. M. Pridik will publish a complete account of the find with excellent plates. He has had the extreme kindness to send me a preliminary copy of his part (St P. 1906), from which the annexed illustrations are taken. Cf. also *Trans. Od. Soc.* VI. p. 601; *TRAS.* XII. Pt I. (1901), p. 270 sqq., A. A. Spitsyn. The sheath had previously only been published by Maskell, *Russian Art*, p. 112, from the S. Kensington electrotype, which lacks the side projection, a

separate piece, by its style a Scythic addition; for the use of Mr Dalton's blocks I gladly thank him and the authorities of the British Museum.

In order to try and obtain more light, V. N. Jastrebov undertook further explorations in 1894, but does not seem to have lit upon the right barrow.

A copper belt with a pattern very like that on the sword hilt was found at Zakim (Prov. of Kars) CR. 1904, p. 131, f. 239. For the couch foot v. Perrot and Chipiez, Chaldaea &-c., II. p. 315, f. 193.

with rosettes set with onyx; parts of silver disks with a pattern of roundels (they seem to have to do with the suspension of the dagger), 40 bronze arrow-heads of types more or less like Nos. 4, 29, 35, 36, on p. 190, f. 82, a golden strip with figures of an ape, two ostriches (?) and a goose in rather a naturalistic style, 23 gilt iron nails and a short gilt bronze bar ending in rude lions' heads¹, apparently like a hussar button. The style of all these things seems to go back to early in the vith century B.C., perhaps the chain and the repoussé strip are later, but this must have been a very early Scythic tomb.

Martonosha.

In 1870 at Martonosha in the district of Elisavetgrad on the borders of the governments of Kherson and Kiev some peasants excavated a barrow and found a man's skeleton, by his thigh a hone, about him spears and arrows, and in the heap various pots crushed by the earth, four whole amphorae buried standing up, an enormous cauldron full of cow's bones, and a bronze amphora with an archaic Greek running or flying Medusa in the pose of the Nike of Archermus. These particulars were collected in 1889 by Mr Jástrebov, who made a further exploration of the tumulus and found another grave plundered in antiquity. He gives the height of the barrow as 28 feet and the circumference of a high bank round it as more than 800 feet. It is clear that the interment was a Scythic one of the ordinary type though not very rich. The interesting point is the amphora handle which is Greek work of the vith cent. B.C., perhaps the most archaic piece found in the steppes².

Eastern Governments.

The governments to the east of Ekaterinoslav have been very imperfectly investigated. Still chance finds in those of Khárkov and Vorónezh and the land of the Don Cossacks, also beyond upon the Volga in the governments of Samara, Sarátov and Astrakhan, and further in Ekaterinenburg and Orenburg', shew that there is no serious gap in the continuity of Scythic occupation stretching to within a measurable distance of the West Siberian area (v. p. 252). This region supplies interesting terms in the series of swords7 and cauldrons8.

¹ Cf. Kelermes, Arch. Anz. 1905, p. 58.

² Ch. XI. § 10, f. 278, Gazette Archéologique, 1888, A. Podshivalov, p. 79, pl. 13; Trans. IVth Russ. Arch. Congress, Odessa, 1886, Vol. 1. pl. 1. p. lxxi; CR. 1889, p. 30, f. 12; Mat. XXXII. p. 37, pl. IV.

³ Fedulovo near Bagaevskaja (Cherkassk). CR.

of late Scythic type at Salamatino near Kamyshin,

Saratov. CR. 1902, p. 138 ff. 246-252.

5 Kishe, district of Chornyj Jar, CR. 1904,

p. 133, ff. 245, 246.

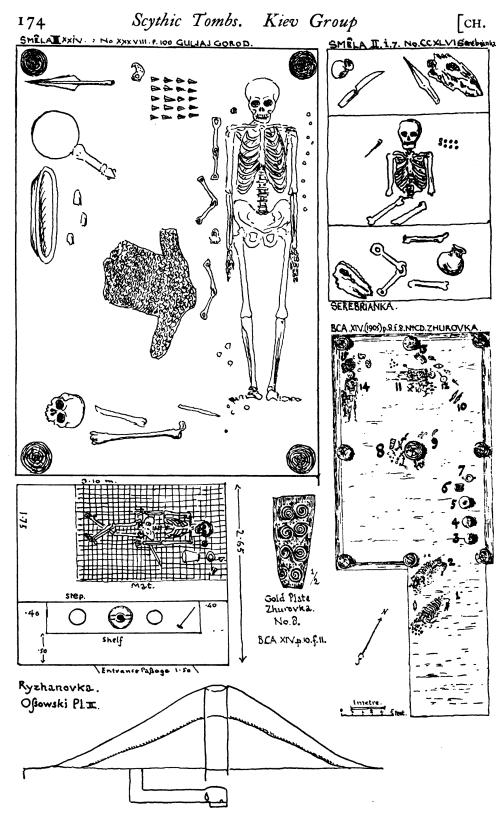
⁶ Krasnogorsk, *CR*. 1903, p. 126, ff. 256, 257. A special point was the absence of the dead man's

skull, suggesting Her. IV. 64 and p. 83 supra.

Graf Eugen Zichy, Dritte Asiatische Forschungs-Reise, Bd III. Budapest, 1905; Archaeologische Studien auf Russischen Boden, by Béla Posta, p. 102; CR. 1902, p. 142, f. 259. 8 Zichy, op. cit. Bd 1v. p. 514.

^{1904,} pp. 124—126, ff. 217—223, fine Hellenistic phalerae, cf. *BCA*. pp. 23, 24, 39—41, ff. 42—49. Taganrog, ib. pp. 27, 41, 42, ff. 51—57. Starobélsk (Kharkov), ib. pp. 27, 28, 43—45, ff. 58—69.

4 Spitsyn in *TRAS*. Vol. VIII. pp. 140 sqq., 154 sqq., 162 sqq. ff. 33—41. A complete interment



Tombs in the Southern Part of the Government of KIEV.

Much the same culture which we find in the tombs on the lower Dnêpr is brought to light higher up the river in the governments of Kiev and Poltava. This country is no longer pure steppe, here we have the beginnings of the forest and the people are not so exclusively nomadic as further south. There is no longer such waste of horses at a funeral, no longer indeed such richness in gold and metal work, whereas the bone objects so characteristic of Finnish remains in N. Russia occur here also. Moreover, this is the country of earthworks (gorodtshche), and in these earthworks are found things of Scythian type, and great barrows are often near them. This all points to there having long existed here a nation having much in common with the steppe folk, but with some progress towards agriculture, a condition like that ascribed by Herodotus to the agricultural Scythians, whom however he seems to put further south.

This country has been investigated by Count A. A. Bobrinskoj, whose volumes on excavations round about Smêla, his estate on the Tjasmin in the s. of Kiev government, have supplied me with particulars of the Scythic tombs of the district. Here also the greater part of the barrows has been plundered at some time or other. A typical simple grave unplundered is No. ccxlvi., near the River Serebrjanka. Under a mound 2.4 m. high and 97 m. round was a rectangular pit 4.1 m. long by 3.35 m. broad and 25 cm. deep. The pit had been floored, lined and covered with wood; at each end were as it were shelves. Upon one lay a horse's skull, on the other an earthen pot. In the upper part of the tomb was a rusted bit, some bones and a broken pot, further down a horse's lower jaw, fragments of an iron spear, a bone-handled knife, and an iron nail. Below all lay the skeleton and by it a bronze needle and sixty tiny yellow beads. The wooden floor was strewn with white sand and the hole filled in with black earth.

Such was a typical poor grave not far to the west of Smêla. The same type is rather more developed in another good example in this part of the country³ near Guljaj Gorod. Sufficient description is an explanation of the plan. The mound was 7 ft. high: in the midst was a pit 9 ft. 6 in. × 7 ft. and 7 ft. deep with the remains of a wooden erection supported on four posts and floored with wood. Along the E. wall lay a skeleton N. and S.; w. of it were bits and other remains of harness in bronze, iron and bone, and in the middle an iron coat of mail. In the N. part of the pit lay a small bronze brooch in the form of a boar and the remains of a leathern quiver with over 150 bronze arrow-heads. Along the w. wall going s. were, a long iron spear-head, a bronze mirror with a handle, and a long oblong stone dish and by it pieces of red and yellow colour. At the south end were the remains of another skeleton and an extra skull.

Essentially similar but more elaborate are the tombs near Zhurovka s. of Shpola. The example No. cd at Krivorukovo, two miles from Zhurovka,

¹ Count A. A. Bobrinskoj, Barrows and chance Archaeological finds about the Village of Smêla, I. St P. 1887, II. 1894, III. 1902 (cited as Sm. 1 gladly take this opportunity of thanking Count Borinskoj for his liberality in sending me his beautifully illustrated volumes). Continued in BCA. IV. p. 24, XIV. p. 1, XVII. p. 77, XX. p. 1: cf. Archiv f.

Anthrop. XIX. (1891), p. 110. B. Khanenko, Antiquities of the Region of the Dnepr Basin, Period before the great Migration, Vol. II. Pt II. and Pt III. Kiev, 1900. Bobrinskoj's finds are at Smėla, Khanenko's in the town Museum, Kiev.

² Sm. II. p. 2, pl. I. 7 on f. 70. ³ Sm. I. p. 100, No. XXXVIII. pl. xxiv. 22 on f. 70.

was chosen because of the special interest of a Greek cylix with a vth century inscription Δελφινίο ξυνή Ἰητρο. It was probably a little valued offering got rid of by an Olbian shrine of Apollo, just as is done at the present day; it is not likely to have been lost. We may allow some time for its coming into the possession of its Scythic owner and finding its way into a grave, so that the interment may be put in the 1vth century B.C. The annexed plan (f. 70) gives the general disposition, and the objects found are mostly figured by Count Bobrinskoj'. The barrow was 4 20 m. high and 164 m. round. Just above the natural surface of the ground were found the remains of a flat wooden roof reaching out far beyond the grave pit. The latter went down 2'22 metres. It was taken up by a wooden erection with nine posts supporting the roof. The sides of the pit were defined by ditches in which were fixed the lower boards of a wooden lining. The floor was of oak? At the SE. corner entered the approach in which were two horse skeletons with bits (1, 2) and other trappings. To the right of the entrance stood two big amphorae (3, 4) and a native vessel (5), beyond a gold plaque with a crouching deer (cf. p. 214, f. 115 = CR. 1876, p. 136) (6), and the cylix above mentioned (7). On the central post had hung two sets of horse trappings, including a gold plate (8) with interesting spirals and dots. By the post was a piece of meat (9) of which the bone had survived, and from near it there pointed a pair of spears (10) northwards towards the principal skeleton (11), which lay surrounded with the trappings of man and beast, including a mirror (12) and a quiver with 463 arrows (13). A second skeleton of a young man lay along the sw. wall (14). Close to his head was a shirt of iron mail (15), and by him bits and ornaments. The objects found in this tomb recall in style those from the VII Brothers (inf. p. 206), as well as those across the Dnêpr in Poltava (v. p. 180 sqq.).

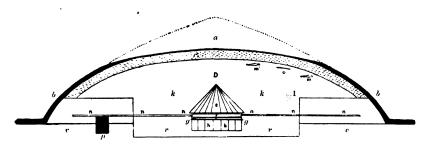


FIG. 71. CR. 1891, p. 169, f. 200. Scythic barrow near Kalnik, government of Kiev. Original height, 6 m. Circumference 193 paces. a. Top of barrow levelled for ploughing. b. Humus. c. Decayed turf. D. Black earth (Chernozëm) making the main mass of the heap. e. Wooden tabernacle partly burnt. f. Wooden flooring under e. g. Mass of yellow green clay with burial. h. Pit full of black earth and decayed oaken piles. k, k. Orange and black spots. l. Pocket of charcoal. m, m'. Human skeletons. n, n. Wooden floor extending over almost the whole area of barrow. o. Patch of red clay. p. Section of ditch. v. Subsoil of yellow clay.

¹ BCA. XIV. pp. 8—13, ff. 8—26. The cylix is treated by Ct. I. I. Tolstoj, ib. p. 44, v. inf. Ch. XV. ² On BCA. XIV. p. 14, ff. 28, 29, 30, we have section, plan, and conjectural elevation of such an

erection, but in this case the roof is slightly sloping.

³ Spirals are not common in Scythic ornament.

BCA. XIV. p. 20, f. 51; XVII. p. 98, f. 37. CR. 1904,
p. 89, ff. 142, 143.

The next two figures explain themselves. Kalnik was excavated by Professor Antonovich. The section gives a good idea of the elaborate wooden floors and tabernacles sometimes found in the midst of a Scythic barrow. The objects found were not of special interest.

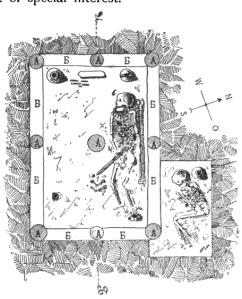
F1G. 72. BCA. IV. p. 42, f. 16. Grushevka, district of Chigirin, excavated by Ct. Bobrinskoj No. CCCLXXXIII.

A, wooden posts; B, ditches.

In the older tomb, that to the SE, lay a crouching skeleton, behind his head a single pot and below a beef bone, but there

was no red colouring.

In the later Scythic tomb the skeleton, which shewed signs of fire, lay extended. Above, between two pots, a grindstone and some bronze clamps: by the head, mutton and horse bones and an earring like No. 455 on p. 191, f. 83: round the neck an electrum hoop and beads of gold, silver and crystal. The spears had iron heads and spikes. The iron sword was 64 cm. long, by it was a pierced hone. At the knees, two iron psalia and bronze ornaments; at the feet, a clay pot and bronze clasp.



Darievka.

To the sw. of Smêla towards Zvenigorodka at a place called Darievka¹, near Shpola, Madame J. Th. Abaza excavated a large barrow and found a typical Scythic grave, with the usual gold plates to the number of 270, with griffins (f. 73), deer, lions, triangles with grains, palmettes, strips (ib.) etc.: the types are very similar to those found further south though the workmanship is not quite so fine: there was also found in bronze, a large mirror, 41 arrowheads (fewer than is usual in the south); in iron, a long spear-head, a javelinhead and knives in bone hafts; 38 bone arrow-heads, some glass beads and two black-glazed Greek vases. The excavation does not seem to have been conducted very scientifically, and it is not apparent whether there was a woman buried as well as a man, moreover there is a strange absence of all horse gear. At Vasilkov near by were found a dagger of the Scytho-Siberian type with heart-shaped guard and a wonderful lion's head in stained ivory apparently of Greek workmanship (p. 193, f. 95, cf. p. 266): also bone spoons and knobs with good specimens of the Scythic beast style.

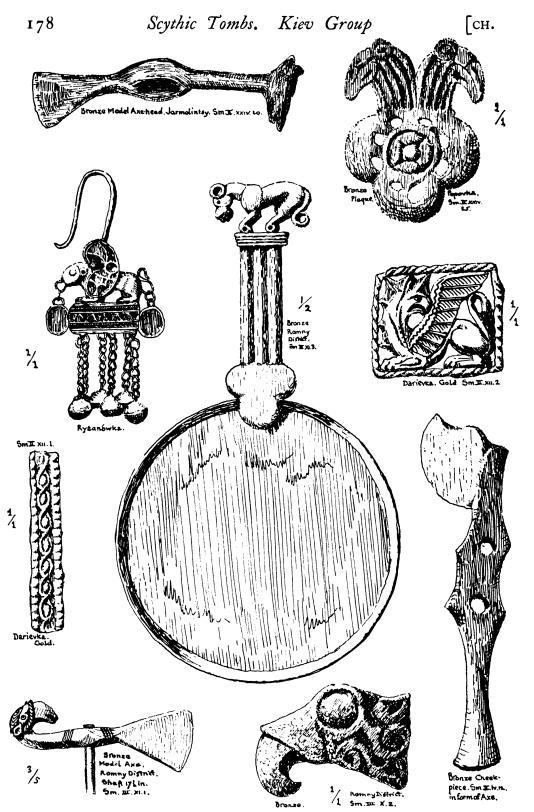
Ryzhanovka.

Still richer were the results attained by the Polish archaeologist Godfryd Ossowski in 1884 and 1887, at Ryzhanovka, to the w. of Zvenigorodka (f. 70,

dokonanych w latach 1884 i 1887" in Polish, French Abstract, Cracow, 1888 (The Great Ryzhanovka Kurgan according to investigations made in 1884 and 1887). Sm. II. p. 137 sqq., pl. XVI.—XIX.

¹ Sm. 11. p. 128 sq.

^{2 &}quot;Zbiór wiadomości do antropologii krajowej" (Collection of information touching the anthropology of the country) of the Cracow Academy, Vol. XII.; and "Wielki Kurhan Ryźanowski wedlug badań



F1G. 73. Mirror (p, 66), Model Axes (p. 72), Gold Plates (p. 177), Earring and Bronzes (p. 266 sqq.).

below). His accounts have been summarised by Count Bobrinskoj, without the plan and section. I have adopted the dimensions given on Ossowski's plan. The great kurgán (barrow) was explored in 1884 by a trench cut through the middle of it, but only horses' bones and amphora sherds were found. But in 1887 the side of the trench fell in, exposing the top of a complete amphora, a bronze vessel, a mirror, and some gold plates. The peasant who found all this then caught sight of a human skull, was frightened, gave up digging and handed over his finds to the lord of the manor, Mr Grincewicz. The latter gave them to Mr Ossowski for the Cracow Academy. Then happily a horse fell into the hole and died there, preventing any further attempts on the part of unauthorised plunderers. Ossowski proceeded to investigate the tomb systematically, and it proved one of the most perfect Scythic tombs known.

A passage led down to a depth of 3.1 m. and then continued horizontally for 6 m., being 1.50 m. broad and rather more than a metre high. It led into a rectangular chamber 3 10 m. long and 2 65 m. broad, high enough to stand up in. The chamber was divided into two unequal parts by a step 40 cm. high. In the northern part into which the passage led lay a narrow board 2 m. long with a hole to hold the bottom of the amphora discovered by the peasant. Along it were ranged the bronze vessel, the mirror and a bronze pin. In the w. corner of the southern division was the skeleton of a young woman of weak build in a half-sitting position, one leg bent under the other. She lay upon some kind of woollen stuff under which was a layer of moss. She wore upon her head a golden tiara, with a thrice repeated scene of maenads, well-known Neo-Attic types1 going back to Scopas, a golden frontlet with pendants², a long ribbon of gold with rude griffins and palmettes, three gold plates, a pair of gold earrings or temple ornaments shaped like griffins (f. 73) hung from the diadem, four little gold beads, and a big bead of carnelian.

Round her neck she had an elaborate gold necklace, upon her belt gold rosettes, on her arms two bracelets, one silver and one gold; she



FIG. 74. Mat. XIII. p. 37, f. 7=Sm. II. xvi. 9. Part of gold necklace. Ryzhanovka. wore eight rings, two seal rings, two set with gold staters of Panticapaeum (rather like Pl. v. 16), one set with an unworked piece of limestone, and three

¹ Rather like Nos. 25 and 27 or 32 in F. Hauser, Die Neo-Attischen Reliefs. ² Cf. ABC. pl. VI. 2.

quite plain. The seals are a winged quadruped and a dagger, and Hercules' club and bow, both of them suggest coins of Panticapaeum. Across between the shoulders were three rows of the triangles of grains (called wolf's teeth, as on p. 197, f. 90), points downwards. Upon the rest of her clothing space was found for three big flat rosettes, 44 big convex ones, 21 rayed ones, 47 small convex ones, two small flat ones, 230 large knots, three small ones, 20 silver tubes and two bronze rings.

By the skeleton were found in bronze a pail and plate, in silver an object that fell to pieces, a saucer and a fluted cup with three gilt rings and a frieze of dogs round it, a clay saucer, bottle and spinning whorl, a black-glazed cantharos (mended) and two bone bodkins. We have already mentioned the amphora, mirror, cup and pin found on a shelf by the entrance of the chamber.

I have enumerated all these things because there is no rich tomb whereof the disposition had remained untouched and was noted down with such exactness. It is not quite normal because it is the tomb of a woman only, but it gives a good idea of how the innumerable gold plates beloved

by the Scythians were applied.

To judge by Count Bobrinskoj's plates the greater part of the Ryzhanovka objects are imitations of Greek work made by native workmen or by inferior artizans in Panticapaeum; there is little distinctively Scythic about them, but it is noticeable in other tombs that the Scythic work is best represented on horse trappings and weapons, both of which are naturally absent in a woman's grave. In this and in detail, the earrings, the strips with leafwork and with griffins, and the frontlets with Maenads and with pendants, it agrees with the Dêev barrow (p. 170). The parcel gilt silver cup recalls by its shape and decoration the series of similar vessels from Kul Oba¹. The form seems native, though Greeks may have imitated it to order. The earrings have an archaic, almost oriental, touch about them; the two coins are put between 350 and 320 B.C. (v. Ch. XIX.); the bronze pail, though it has been rudely supplied with an iron handle, is a beautiful piece of Greek work, perhaps of the iiird century. The figures on the tiara, already degraded by repetition, and the cantharos (cf. Ch. xi. § 7, f. 254) might be later, so that the whole interment may be put in the 11nd century.

Government of Poltava. Axjutintsy.

On the left side of the Dnêpr near Romny (Poltava government) at Axjutintsy, S. A. Mazaraki dug up an interesting barrow about 1885. In this district the course of the Sula cuts off from the steppe a district rich in wood and water, and it seems as if any nomads that did cross the river tended to settle down to some degree, being protected by the river from other nomads, and henceforward finding no necessity to change their pastures at various seasons; hence the barrows thickly grouped along the river escaped speedy plunder and so their investigation promises well².

The spoils of the chief barrow (No. 2) at Axjutintsy (10 m. high, 156 m.

¹ pp. 198, 200, ff. 91, 93, cf. p. 287, ABC. XXXIV. XXXV. ² Zavitnevich ap. Bobrinskoj, Sm. 11. p. 101.



FIG. 75. 1.

about), found in a central pit 8.5 m. × 4.2 m. and 1 m. deep, offer a great contrast to those at Ryzhanovka, inasmuch as the tomb being that of a warrior, almost all the objects are arms or trappings, and all are most purely Scythic. There was a wooden erection over the burial place, under it lay the skeleton much decayed with its head to the south. By its left shoulder were two leathern quivers with 400 bronze arrow-heads, by its head on the right five iron spear-heads and a javelin, in the SE. corner of the grave three iron bits with bronze ψάλια (others were of bone, v. p. 189, f. 81), 18 bronze plates from horse trappings and some ornaments with fantastic beast heads. In the NW. corner was a bronze Scythic cauldron weighing 40 lbs., a perished bronze dish, a terra cotta cylix, an amphora with 15 gold faces in it, a small oblong gold plate with a deer on it, five stones for throwing and the remains of textile; in the NE. corner was a small urn. The skeleton wore bronze armour and a plain gold open neck hoop, I lb. in weight; by the pelvis were an iron sword of Scytho-Siberian type and a large gold oblong plate with a crouching deer (f. 75), the cover of a quiver or bow case, for under it lay a heap of bronze arrow-heads. There was another grave in the barrow lower down, the skeleton much decayed and by it only animals' bones, and 40 bronze arrow-heads. The only purely Greek object seems to be the cylix, which may be referred to



FIG. 75, bis. Axjutintsy, Gold Plate from Belt. Rep. Hist. Mus. Moscow, 1906, I. 3. 3

the vth cent. B.C. The same date may be given to the great plate with the deer, which recalls the Kul Oba deer (put by Furtwängler in the middle of that century²) and Minusinsk designs (p. 251, f. 172).

A barrow³ opened in 1905 had been robbed, but not till the wooden chamber had rotted, so only the servants' division suffered. The other held two skeletons and much the same set of grave goods as the chief barrow of Volkovtsy (v. inf.). Most noticeable were nine gold plates from a belt (f. 75 bis), a diadem strip, bronze greaves and the bones of swine as well as sheep (v. p. 49). A Greek cylix had vth century letters scratched upon it, but as the pattern on the strip goes back to Ivth century work, this smaller barrow cannot be older than

the HIIrd century.

Volkovtsy.

In 1897 and 1898 Mazaraki excavated at Volkovtsy, the next village to Axjutintsy, a rich tomb which Count Bobrinskoj has illustrated and described. The barrow was 13 m. high and some 150 m. round; about it was a bank. In the midst was an oaken chamber 5 m. × 3.5 m.

The plan (f. 76) gives a singularly complete view of the contents of a Scythic tomb in this part of the country. The skeleton lay with its head to the s. About its neck was a gold torque (p. 184, f. 77, No. 424), by its collar-bone a gold tube (No. 418), about its right arm a gold ribbon (No. 425), by its left forearm a quiver adorned with gold plates (Nos. 406, 410, 413, 417) and containing three hundred arrows. By its left

¹ Sm. 11. p. 163.

² p. 203, f. 98 = ABC. XXVI. 1, cf. p. 266. ³ For description, plan, section and illustrations of chief objects v. Report of Imp. Russ. Hist. Mus.

Moscow for 1906, pp. 14—17, ff. 1, 2, Pl. I. II. 4 *Sm.* 111. p. 82 sqq. ff. 22—42. See also B. Khanenko, op. cit., Vol. II. Pt II. p. 6.

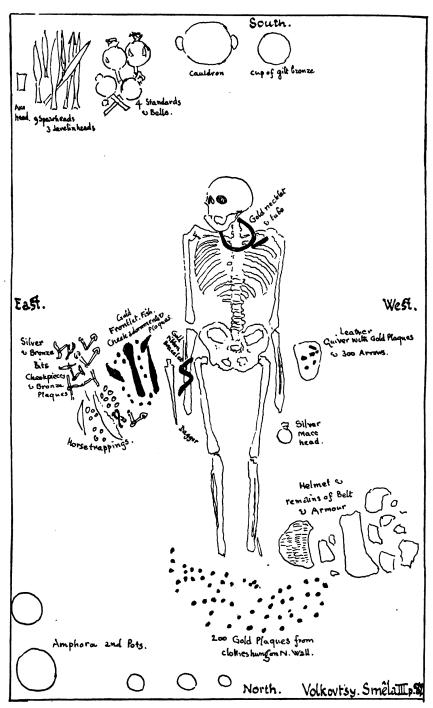


Fig. 76. Plan of tomb at Volkovtsy. N.B. The "Mace Head" is the cup f. 79, No. 451.

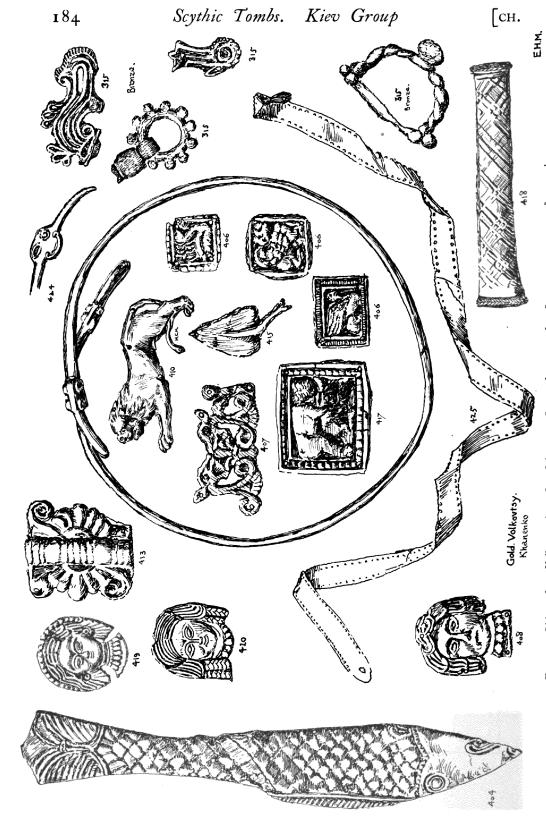
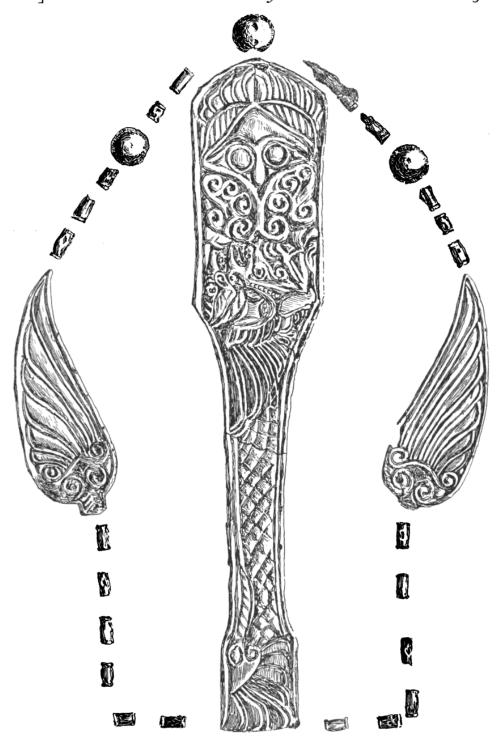


Fig. 77. Objects from Volkovtsy (pp. 182, 187), 413, 418, 425, ‡; 404, 406, 408, 410, 419, 420, 424, \$\frac{3}{4}\$; 315, \$\frac{3}{4}\$.



Gold. Volkovtsy. 403. Khanenko

FIG. 78. Horse's frontlet, cheek and bridle ornaments (v. p. 187, 283). 1.



FIG. 79. Cups (p. 81), Bunchuki (pp. 78, 187) and Dagger (p. 71) from Poltava government.

hand was a silver cup (f. 79, No. 451). The NE. corner of the tomb was given up to the remains of armour, bronze and bone, and a great bronze helmet. In the NW. corner stood an amphora, a black-glazed vessel and three other pots between, at the dead man's feet hung his clothes whose gold plates strewed the ground (f. 77, Nos. 408, 415, 419, 420). To his right were a dagger and a collection of horse trappings (No. 315), including six bits with bronze psalia, horses' cheek ornaments and frontlets of gold (f. 78), a large gold fish (f. 77, No. 404) and other fragments. In the sw. corner were nine iron spear-heads, three javelin-heads, and an iron battle-axe, and by them along the s. wall four maces or standards¹ (f. 79, No. 224), and further a big Scythic cauldron and a saucer of gilt bronze. The manner in which the Greek motives have been degraded is well exemplified by the horse's frontlet with a gorgoneion at the top end and two griffins which I did not distinguish until I came to draw them. Compare the pair of horse frontlets from Tsymbalka (p. 166, ff. 54, 55).

Popóvka. Later Tombs.

About Popóvka, also on the Sula, Mazaraki likewise carried on excavations in a large group of barrows2. These belong to a later period as is shewn by the abundance of iron used for arrow-heads as well as for swords and spears, which themselves differ somewhat in type from those found in more ancient graves. An interesting find was one of bone scale armour made of pieces of various sizes, sewn on much as were the common bronze scales. That the Sarmatians used such armour we know from Pausanias (I. 21. 5) who says that a Sarmatian hauberk of scales made of horses' hoofs was preserved as a curiosity in the Temple of Aesculapius at Athens. In one barrow there was also found a mirror with a loop in the middle of the back such as is common in tombs of the time of the great migrations. The figures of stone-bucks and birds of prey recall Siberian objects and the finds in NE. Russia. There seem no Greek objects but amphorae, and no objects of Roman manufacture. Still these graves may be probably assigned to the first two centuries A.D. just before the great apparent changes of population in these parts. Further Scythic finds from the Kiev and Poltava governments are published in the catalogue of B. I. Khanenko's collection now in the town Museum at Kiev. The interest of these is that they lead on to the mediaeval and northern beast style, which owes much, may be even its origin, to influence exerted through the Scythians.

The Scythic graves are succeeded in this region³ and to the north of it by graves containing very similar objects, but occurring in cemeteries without barrows over the interments. The imported objects become Roman and even include coins (e.g. of Faustina and Gordian), dating these burials as of the 11nd and 111rd centuries. Cremation is practised and skeletons are sometimes found in the early huddled position. The native pottery improves, but on the whole not much of value was buried with the dead; there is

¹ Supply on p. 78 references to Greek analogues to both bird and beast bunchuki like those on f. 79, Olympia, IV. xxiii. 410—417, Delphes, V. xv. 4.

 ² Sm. 11. p. 168 sqq.
 ³ We cannot yet speak of a La Tène period in Russia; for scattered objects in that style, v. p. 259.

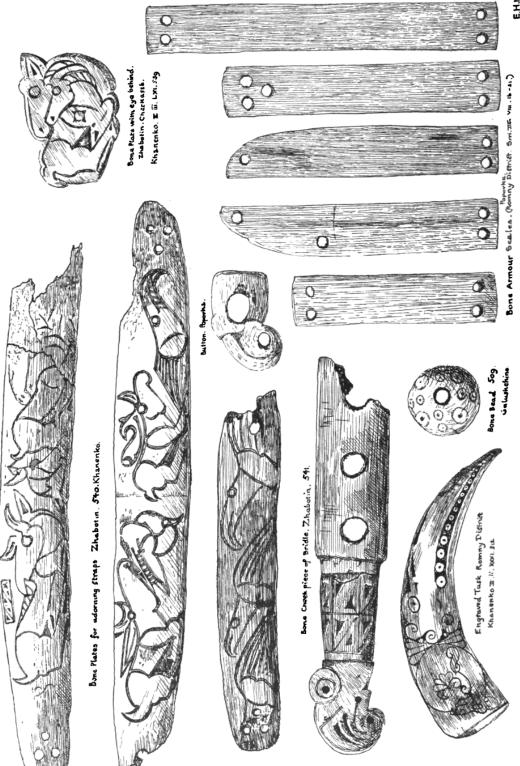


Fig. 8o. Bone Armour (p. 74), Cheek pieces and carvings (pp. 77, 260).

Bone & Iron 67, Humanko Galushchino.
FIG. 82. Arrow and Spear Heads (p. 68), Axe and Knife (p. 72), Mirrors (p. 66).

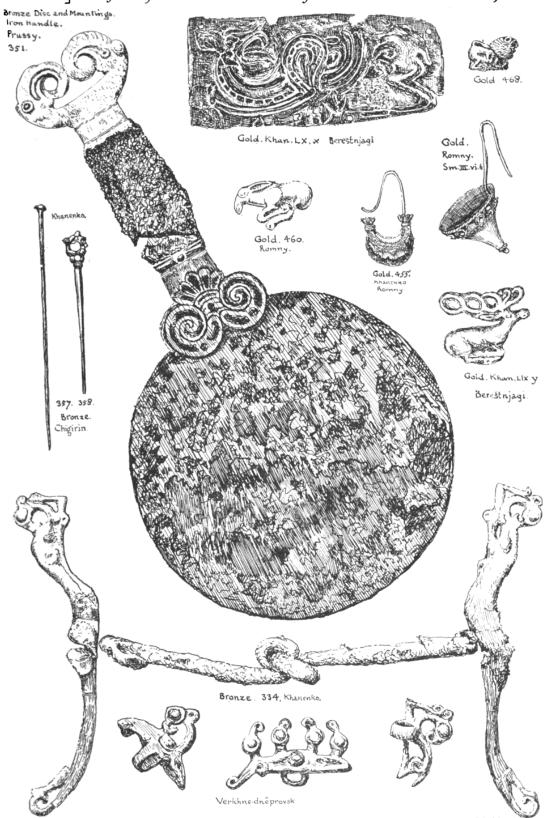


FIG. 83. Mirror (pp. 65, 266), Gold Plates and Earrings (pp. 62, 177, 269), Pins (p. 57, n. 1), Harness (p. 76).

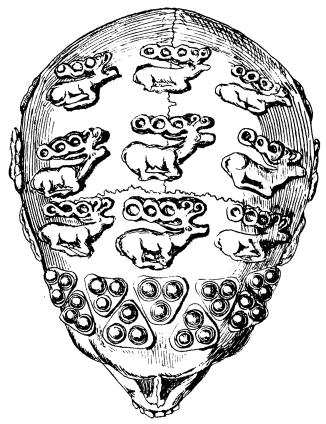


FIG. 84. Sinjavka No. 100. Gold plates on Skull (v. p. 58). Sm. 111, p. 139, f. 71. 3.

a remarkable absence of weapons, and of horses, the bones found being exclusively those of food animals. Thus the cemeteries of Zarubintsy, Cherniakhovo, and Pomashki¹, excavated by Mr V. V. Chvojka, form a bridge connecting the Scythic type of these regions with the Slavonic type of later times. There is much to be said for the view well put forward by Chvojka that the basis of the population was the same always, that we have in fact the Slavonic Neuri for a time under strong Scythian influence, even lordship possibly, at other times under Roman or Gothic attraction, but always reverting to their own ways. Certainly the inland NW. Scythic graves which occur north of the forest line are by no means so typical as those about the Dnêpr bend, and these are less characteristically nomadic than those on the Kuban; the number of horses sacrificed increases steadily as we go east. It seems rash to call the makers of the Neolithic "areas" Slavs, they might be yet undifferentiated from other kindred stocks, but there does not seem good evidence for any fundamental change of

¹ Cf. "Cemeteries of the mid Dnépr," by V. V. Slav. Section, pp. 172-190. Chvojka. TRAS. XII., Pt I., St P., 1901, Russo-

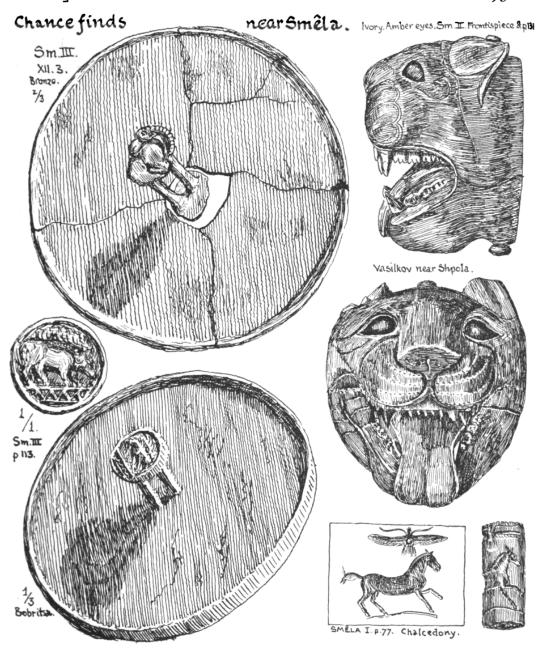


Fig. 85. Looped Mirrors (p. 66), Lion's Head (pp. 78, 266), Cylinder, Kholódnyj Jar No. XIX (p. 271). population. The agricultural folk remained on the land though they had to submit to aristocracies of warlike foreigners coming upon them alternately from the steppes to the SE. and from the forests and seas to the NW.

Royal and Golden Barrows.

Tombs of the Scythic type are also found where we should least expect them, in the immediate environs of Panticapaeum. But for the great finds of Kul Oba we should not ascribe the vaults of the Golden Barrow (Altyn Oba) or the Royal Barrow (Tsarskij Kurgan) to natives but they all belong to the same class and probably once hid similar contents, though the first alone preserved them to our day. The masonry of all is clearly Greek, though the plan rather suggests the Mycenaean period. Are we to see in it a survival of the old method of burial among the Milesian descendants of the ancient race? Are we to ascribe this way of building



tombs to the influence of Asia Minor, if this be not saying the same thing in other words, or should we not rather regard these as the translation into stone of the wooden roof and earthen pit with a gallery leading down to it which formed the typical Scythian grave? The Tsarskij Kurgan may be said to be the only impressive architectural monument left by Greek builders on the north coast of the Euxine, with the possible exception of the town walls of Chersonese. The great barrow is three miles to the NE. of Kerch, a little inland of the Quarantine, the site of Myrmecium. It has a circumference of 250 m. (820 ft.) and a height of 17 m. (55 ft.). A curious feature in the heap is the

layer of seaweed which occurs also in barrows near Taman¹. Into one side of it leads a gallery 116 ft. long, 11 ft. broad and 23 ft. high, the walls being for

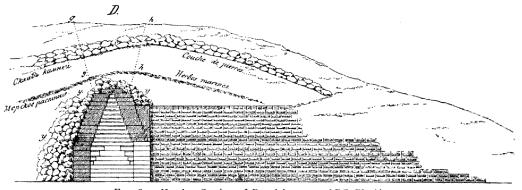


Fig. 87. Kerch. Section of Royal barrow. ABC. Pl. Ab, D.

six courses (10 ft.) perpendicular, and then for twelve corbelled out one above another until they meet at the top, all being of great stones hewn in the rustic manner. At the end of the gallery is a doorway 13 ft. high and 7 ft. broad, leading into a chamber 21 ft. square and 30 ft. high, roofed by a circular Egyptian vault ingeniously adapted to the square plan. But the whole has been plundered and has lain open from time immemorial.

Altyn Oba, or the Golden Barrow to the w. of Kerch along the line of Mount Mithridates, resembles the Tsarskij Kurgan, except that the gallery is much shorter and the vault is round on plan. It contained two subsidiary chambers and had a stone revetment. It also was plundered long ago and the masonry is in no way so well preserved as that of the former tomb¹.

Kul Oba.



Fig. 88. 3.

This is also true of the famous Kul Oba from which much stone has been taken to build an adjacent village, so that the balance of its Egyptian vault was disturbed, and the ransacking that its riches brought upon it has reduced it to utter ruin. For the circumstances of the opening of the tomb in 1830 the reader is referred to the account of Dubrux², but we here reproduce the plan and section on a larger scale.

¹ ABC. plan Aa, B, 1.

² ABC. pp. 4-16 of Reinach's reprint.

- a-e (not shewn here) refer to details of the exterior of the mound on ABC. Plan A, A, B.
- f. Are four amphorae, one with the stamp of Thasos.
- g. A Scythic cauldron containing mutton bones1.
- h. Two silver gilt basins (lost) containing three little round bottomed silver vessels2, two rhyta³ and a cup marked EPMEΩ⁴.
- i. Sunk space in which were the bones of a horse, a helmet and greaves.
- k. Skeleton of groom, (?) about him many gold plates.
- Woman's skeleton.
- m. Electrum vase with reliefs of Scythians5.
- n, n. Great coffin of cypress or juniper wood.
- King's skeleton.
- p. Board dividing off the compartment 5 in which were the king's arms.
- q. Bronze hydria. Bronze amphora. Lesser Scythic cauldron 6.
- Bronze dish about 9 inches across.
- Two iron spear-heads, 1 ft. 3 in. long.
- tt. (Not shewn here). Pegs in S. wall from which hung clothes, from which fell gold plates7.
- Wooden ceiling. V. Keystone of vault.
- x. Places where the walls had given.
- Hole above the door by which Dubrux entered.
- z. Beams which held the stones of the door and vestibule.
- aa. Under-tomb in which the deer was found 8.
- Dry stone wall closing entrance.
- cc. Rough stone exterior.
- Walls of tomb.
- Vestibule.
- 3. Door.
- Seven courses of vault closed
- Compartment in which lay the king's arms.

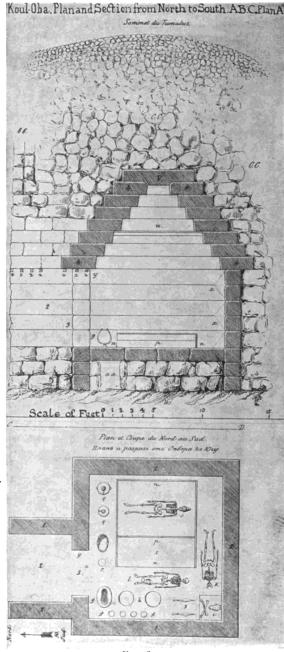


FIG. 89.

- ² ABC. XXXIV. 1, 2; 3, 4 [fig. 91], XXXV. 5, 6. ³ ABC. XXXV. 4 [on fig. 90], 5. ⁵ ABC. XXXIII. [figs. 93, 94]. ⁶ ABC. XLIV. 7, 12, 13.
- ¹ *ABC*. XLIV. 11. ⁴ *ABC*. XXXVII. 4.
- 7 ABC. XX. XXI. XXII. [fig. 90].

- 6 ABC. XLIV. 7, 12, 13. 8 ABC. XXVII. 1 [fig. 98].

FIG. 90. $\frac{1}{4}$ except XXX. 7 and 10, $\frac{1}{2}$; and XXXVI. 4, $\frac{2}{3}$. N.B. The figure in the middle with cup and quiver should be marked *ABC*. XXXII. 1, and the archers XX. 6.

ABC. xx.13. Gold Plate, Kul Oba.

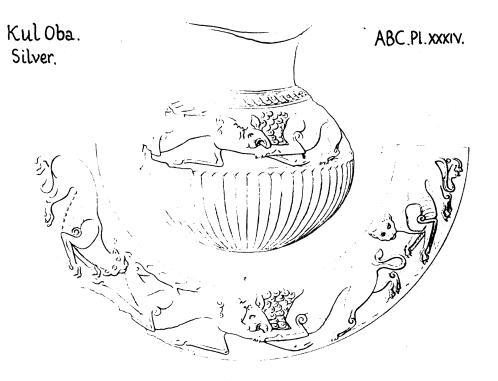
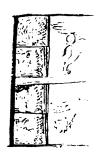




Fig. 91. 3.





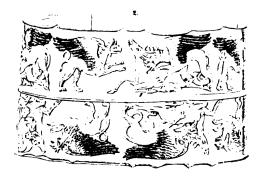






FIG. 92. Bracelets from Kul Oba. ABC. XIII. 1, 3, King. 2, Queen. 3.

Kul Oba, the mound of ashes, is about 4 miles w. of Kerch beyond Altyn Oba and with it was incorporated in ancient defences of the peninsula. It is long shaped, contains traces of several minor interments and at the east end had twin peaks. In one the chamber almost vanished long ago, in the other was a vault in construction similar to that of Altyn Oba, except that its plan was square, and it preserved its square section up to the summit. The vault was 15 ft. × 14 ft. and 17 ft. high, the gallery only 7 ft. long. The section (p. 196, f. 89) shews the construction and the plan gives the distribution of the objects as they were found, and



FIG. 93. Electrum vase from Kul Oba¹. ABC. XXXIII. I. 1.

should be compared with that of Chertomlyk (p. 156) and Karagodeuashkh. The system of construction, sumptuous though it was, did not allow of the

¹ These figures find new analogues in terra cottas of Scythians from Egypt c. 300 B.C. W. Flinders Petrie, *Memphis*, I. (1909), Pl. XL. and p. 17, v. supra p. 39 f. 3 bis.



F1G. 94. CR. 1864, p. 142. Kul Oba Vase. Two groups. 1.

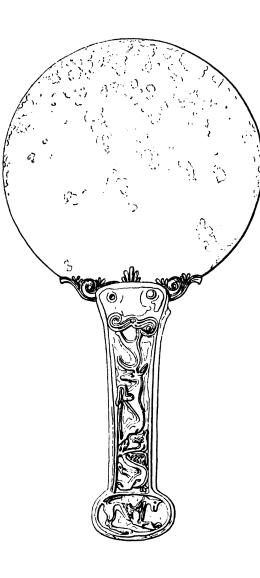


FIG. 95. Kul Oba. Bronze mirror with gold handle = ABC. XXXI. 7. $\frac{1}{2}$.

many side chambers or of space for horse graves and groom graves in the

true Scythic style.

Upon the woman's head was a diadem of electrum with a pattern of palmettes and hippocamps', and with enamelled rosettes. About her neck was a gold necklace finely braided, and a neck ring with lion ends'. Near the waist were two medallions of Athena with pendants and three smaller such decorated with flowers'. These are all earrings or temple ornaments hung from the ends of a diadem; why they occurred in this position does not appear. By her side were two bracelets with a pattern of griffins seizing deer many times repeated'; between her knees the vase with Scythians'. She was laid upon the floor and covered with five inches of black mould. Between her and the groom lay six knives with long handles of ivory, and a seventh with its haft plated with gold'. This is the only object near her of distinctly Scythic type. She had also a Greek mirror with a handle of Scythic work'. About her were fragments of turned wood and painted planks, probably part of her coffin's.

The king and his belongings lay in a great box 9 ft. 4 in. square and



FIG. 96. ABC. II. I. Kul Oba. Gold band round king's hood. \(\frac{1}{2}\).

was open. The king wore on his head a pointed felt cap adorned with two strips of embossed gold (ABC. II. 2 and f. 96). His neck ring ended in mounted Scythians (f. 97). On his right upper arm was a bracelet an inch broad with alternate scenes of Peleus and Thetis and Eos and Memnon, and blue forget-me-nots between. On each fore-arm were two electrum armlets on and on his wrists bracelets with sphinxes at the ends on. To the left of the king a narrow board cut off a compartment for his arms between him and the open side of the great box.

There was his sword of Scythic style with a blade nearly 2 ft. 6 in. long



Fig. 97. Kul Oba. Gold and enamel necklet=ABC. VIII. 1. $\frac{1}{3}$.

and $3\frac{1}{2}$ in. broad ¹²; his whip with gold thread plaited into the lash; a gold plate from the sword sheath ¹⁸; a greave, the other being on the king's

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<sup>1</sup> ABC. II. 3.

<sup>2</sup> ABC. VIII. 2 on fig. 90.

<sup>3</sup> ABC. XIX. 1 and 4 on fig. 88.

<sup>4</sup> ABC. XIII. 2 on fig. 92.

<sup>6</sup> ABC. XXXIII. figs. 93, 94.

<sup>6</sup> ABC. XXX. 9, 10 on fig. 90.

<sup>7</sup> ABC. XXXI. 7 fig. 95.
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⁸ ABC. LXXXIII. LXXXIV. 1, v. inf. Ch. XI. § 4.

 $^{^9}$ ABC. XIII. 3 on fig. 92. 10 ABC. XXVI. 3 on fig. 90, perhaps Dubrux means one on each: ten smaller ones (ib. 4) may have come down to the wrists. 11 ABC. XIII. 1 on fig. 92.

¹¹ ABC. XIII. I on fig. 92 ¹² Haft ABC. XXVII. 10. ¹³ ABC. XXVI. 2, fig. 98.



FIG. 98. Deer (ﷺ), inscribed □Al and Sheath (ﷺ), inscribed □OPNAX◊, ABC xxvi. 1, 2; Group (⁂), ib. xxxii. 10.

right, a hone pierced and mounted in gold', and a round drinking cup with a boss in the middle (f. 99). Under the king's head were four gold statuettes of a Scythian with a bow case, and one of two Scythians drinking out of the same horn. In the engravings it is hard to distinguish these from the ordinary stamped gold plates, but they are in the round. As usual the whole floor was strewn with these stamped plates', shewing all the types we have already met; sometimes it seems from the same dies as those found at Chertomlyk, Ogüz and VII Brothers. Also many bronze arrow-heads were

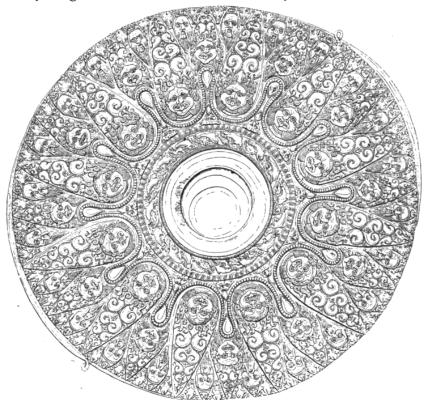


Fig. 99. Phiale Mesomphalos. Gold. Kul Oba=ABC. xxv. 11

found, too hard for a file to bite on them. In sifting the earth in the vault there were found the remains of the ivory veneer from an inner coffin with fragments of perhaps the most beautiful Greek drawings extant, representing the judgment of Paris (ff. 100, 101), the rape of the daughters of Leucippus (f. 102), preparations for the race between Pelops and Oenomaus⁶, and other pieces in a more sketchy style with a Scythian dragged by the reins', shewing that these bits at any rate were made for the Scythian market, if not in Panticapaeum itself (inf. Ch. xi. § 5); also pieces with quasi-architectural decoration,

⁵ p. 158, f. 45, ASH. XXX. 6, 10, 16; p. 208,

¹ ABC. XXX. 7 on fig. 90.
2 ABC. XXXII. 1, reference omitted on fig. 90.
5 chasian Saugenirs de Kertsch, V. 4.
6 ABC. LXXIX. 13, 14 on f. 103. Back view, Sabatier, Souvenirs de Kertsch, v. 4. ABC. XXXII. 10, fig. 98, cf. p. 83, n. 2. ⁷ ABC. LXXIX. 9 on f. 103. 4 ABC. XX. XXI. XXII. some on fig. 90.

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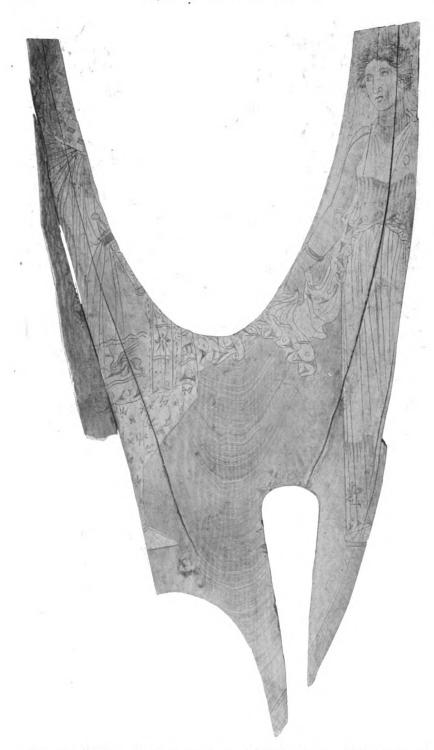




FIG. 101. Judgment of Paris. ABC. LXXIX. 2. $\frac{1}{1}$.



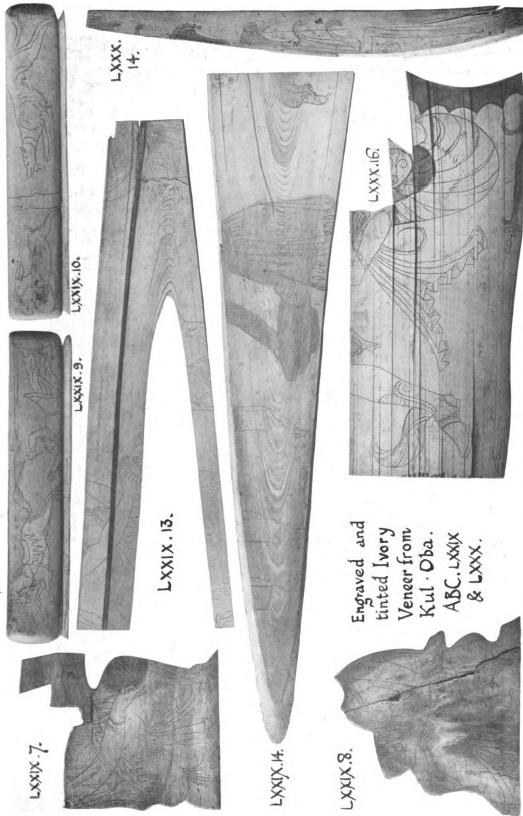


Fig. 103. Scated figures, ABC, LXXIX. 7, 8; Hunting scenes, ib. 9, 10; Preparations for race of Pelops and Oenomaus, ib. 13, 14; Candelabrum with Acanthus leaves, LXXX. 14; Hermes (?) and Archaistic Drapery, ib. 16. 4.

Hor M

including a kind of Ionic capital (f. 104). Before the careful examination and registration of the contents of the vault had been completed, this latter began to fall about the head of Dubrux to whom we owe the account. Unhappily during the third night the guards set over the chamber left their post, and Greeks and peasants of the neighbourhood risked entering into the danger and began to collect the remaining gold plates. This led them to dig up the floor, and under it they found another tomb in the

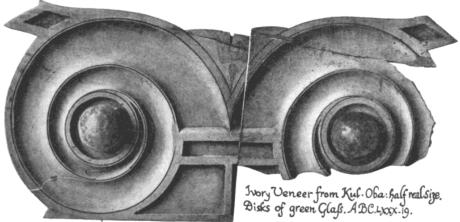


FIG. 104

earth itself and not lined in any way. The skeleton was almost decayed away. In this tomb there was much gold and electrum. The story goes that out of 120 lbs. of gold found the government only rescued 15 lbs., and that there was not a woman about Kerch but had ornaments of the spoil. Of the treasury in the undertomb there were recovered only the well-known deer¹, and two gold lions' heads² which formed the ends of a great neck ring of gilt copper. Next day the whole tomb was a wreck. In what relation the undertomb may have stood to the upper one no man can say. The dead man has been supposed to be an ancestor of the king that lay above, or conceivably it was a *cache* and the skeleton was a guard for it. The deer seems to have been the ornament of a shield; a very similar one has been found at Kostromskája near the Kuban with traces of a round shield about it (v. pp. 225, 226, ff. 128, 129).

The cauldrons, the queen's mirror handle, the sword hilt and some of the gold plates alone shew purely Scythic workmanship, but many of the things made by Greeks were clearly intended for the Scythian market, e.g. the deer, the sword-sheath (if indeed these be not of native work, v. p. 265 sqq.), the adornments of the king's pointed cap, the hone, the cups and some of the neck-rings, for the forms of the objects are Scythic, even though the style be Greek. Therefore we need hardly hesitate to believe that the man buried in Kul Oba was just as much a native chief as that in

¹ ABC. XXVI. 1 on fig. 98. ² ABC. VIII. 3 on fig. 90, coloured figure, Sabatier, op. cit. pl. IV.

Chertomlyk barrow. But he must have come within the attraction of Greek civilisation, just as Scyles did, or just as a Sultan of Johore or a Dhuleep Singh puts on the external trappings of another civilisation and buys its products. The house of Spartocus, the rulers of the Bosporus, though of barbarian origin, were if anything Thracian, and certainly far more truly Hellenized than the king of Kul Oba, with whom the veneer is very thin, as testify the slaughtered slave and wife and the very mutton bones in the cauldron.

Kuban Group. Seven Brothers.

To the east of the Bosporus the same culture prevailed and along the course of the Kuban many tombs have been opened. These tombs seem to have been less thoroughly ransacked in former times, so that they have now offered many interesting objects. The first group to be explored in this district was that called the Seven Brothers lying on the steep side of the Kuban 10 m. sse. of Temrjuk. These barrows were excavated by Baron B. G. von Tiesenhausen in 1875 and 18761. Of them No. 1 was almost a blank. No. II² contained a stone chamber with one corner set apart for the man, in the remainder 13 horses. The bits, psalia and trappings of three horses offer most remarkable forms, e.g. the fore part of a horse at one end and a hoof at the other, others are in the shape of axes or of beakheads (f. 109), some of the bits themselves have cruel έχινοι upon them with spikes to make them more effective. The man's skeleton was wearing a hauberk with scales, some of gilt iron, some of bronze⁵, and by him was a spare cuirass of iron, once adorned with a splendid pectoral in silver, a horned hind suckling a fawn with an eagle displayed beneath (f. 105). About his neck he wore a torque of gold and two necklaces6; upon his clothes innumerable various gold plates exemplifying the Scythic love of animal forms (f. 106). Some of these go back to the beginning of the vth cent. B.C., for there is the turn-up nose and the long eye of the archaic period (ib. No. 1). Some, e.g. No. 3, are identical with those at Kul Oba, but most are earlier in style, compare the winged boar on f. 106 with that on f. 90. By his side were the remains of a very long and heavy sword and of a lance, a rhyton ending in a lion's head', a φιάλη μεσόμφαλος (f. 107), other cups, spoons, colanders, vases and a silver gilt cylix with Bellerophon and the Chimaera"; also a gold plate in the shape of a triangle with rounded apex decorated in the middle with a winged panther devouring a goat, with nail-holes all about the edge (f. 108). Plates of a similar form were found in the other graves of the group, five in No. 1V, and it seems most likely that they adorned the ends of quivers, since no other trace of quivers has been found though arrow-heads occur, and we have other cases of a superfluity of some object being placed with the dead.

The third barrow had been plundered, but there were left gold plates; the style is decidedly later than in No. 11, a sword hilt¹⁰, some amber beads,

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1 CR. 1875—77.
2 Plan, CR. 1876, p. 117 on fig. 114.
3 ib. p. 124=KTR. p. 50, f. 57.
4 CR. 1876, p. 123—126, cf. those from No. IV. on f. 115.
5 ib. II. 15—18.
6 ib. IV. 6, 7 and III. 26 on f. 106.
7 ib. IV. 8.
8 ib. IV. 11, 12.
9 CR. 1881, I. 3, this exquisite Vth cent. engraving came to light on subsequent cleaning.
10 CR. 1877, p. 9 and I. 1, 2 on f. 105.
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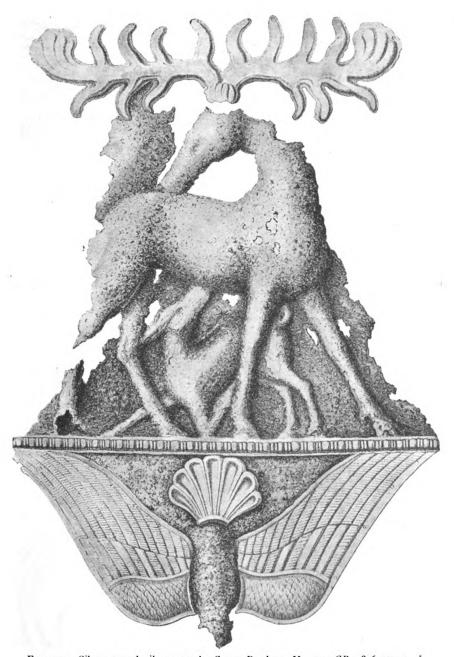


FIG. 105. Silver, parcel gilt, pectoral. Seven Brothers, No. 11. = CR. 1876, 1V. 1. $\frac{5}{6}$.



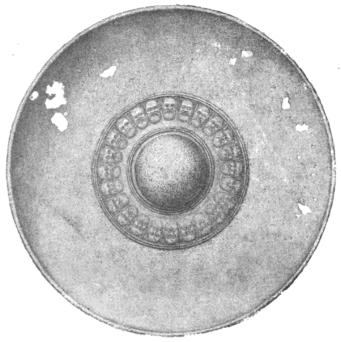


Fig. 107. CR. 1876, IV. 9. Seven Brothers, No. II. Silver phiale. $\frac{1}{2}$.



FIG. 108. CR. 1877, II. 3. Seven Brothers, Nos. 11 and IV. Golden quiver tip. 1.

FIG. 109. CR. 1876, p. 126. Bridle ornament. Seven Brothers, No. 11.

parts of a broken silver vessel, and to the east of the chief tomb was the tomb of five horses with bridles adorned with bronze.

The fourth barrow had a horse tomb yielding further varieties of bits and bronze plaques with fantastic animals contorted in the typical Scytho-Siberian taste (f. 115). The central vault had been pillaged partly, but not completely; by the head of the skeleton were found two gold rhyta, ending, one in a sheep's head, the other in the forepart of a dog¹, and a great silver one with winged ibex of Perso-Greek style²: five (ff. 108 same as one in No. 11, 111, 112, 114) triangular plates, a silver cylix engraved with Nike gilt³, three amulets mounted in gold and a gold bracelet⁴. In a compartment boarded off lay a leather jerkin with a crescent-shaped gorget and a gorgoneion on the breast (f. 114), and bronze scales sewn all over it, a candelabrum⁵, a bronze cauldron containing a sponge, some fur, a cloth and a stuff with a branching pattern upon it⁶, a bronze dish and a ladle handle in the form of Hermes Criophoros¹. This tomb and the second are the oldest of the group and may well belong to the vth century. The fifth barrow had untouched only the horse tomb with the usual bridles⁵.

The sixth tumulus had not been opened. The chamber was divided into four compartments by thin stone walls (f. 114). In No. 1 lay the dead man, in Nos. 2 and 3 his various gear, in No. 4 his seven horses. Over his coffin was stretched a woollen stuff roughly painted (not embroidered) after the fashion of black-figured vases. It had been in long use, for it was patched and mended (f. 113). There was very little upon the dead man, scale armour, remains of furs, perhaps boots and cap, some good beads, a pair of gold "twists" (v. Ch. XI. § 12), the usual gold plates and, most interesting, a crystal intaglio of a sow10. In the small compartment (No. 2) was a bronze mirror, some gold buttons, the sherds of two amphorae, a silver gilt cylix with a genre scene' and a red figured vase with ephebi; No. 3 held a chest with engraved ivory panels, some vases of bronze and pottery and pieces of a basket; in No. 4 the horses wore bits adorned with bronze cheek-pieces and phalerae. The seventh tumulus had but a horse-tomb, in it was picked up an early earring". In none were there any remains of women's burial.

The main interest in the Seven Brothers is in their undoubtedly early date (v. inf. p. 265) and in the beast style, which is applied to the adornment of the horse trappings. At Eltegen (Nymphaeum) about the same year Professor Kondakov found similar pieces in two tombs, which must be classed with the Seven Brothers owing to the surprising identity of both gold and bronze objects yielded by them. It looks, however, as if in this case we had rather Greeks with Scythic horse gear, than Scythians with Greek tastes (ff. 106, 114—116)¹². The pattern on the coffin sunk for inlay (f. 115,

¹ CR. 1877, 1. 6, 7; KTR. p. 318, f. 286. ² CR. 1877, 1. 5; one end fig. 111, the other on fig. 114: cf. Furtwängler in Arch. Anz. 1892, p. 115. ⁵ CR. 1881, 1. 12; cf. p. 206 n. 9: similar cylices, 1. 4 from No. VI. and I. 5 (Dionysius and Maenads) from a group near are of unsurpassed 1Vth cent. work. ⁴ CR. 1877, 11. 13 (tusk on f. 106), 14, 15; ib. II. 10.

⁶ ib. II. 7, 8. ⁶ CR. 1878-9, pl. V. I. ⁷ CR. 1877, I. 9. ⁸ CR. 1876, pp. 136-7. ⁹ Or rather transitional red-figured of the class treated of by Six, Gaz. Arch. 1888, p. 193; H. B. Walters, Hist. Anc. Pottery, I. p. 393; Rhomaios, Ath. Mitt. 1906, p. 186; JHS. XXIX. (1909), p. 333-10 CR. 1876, III. 28—33 on f. 106. ¹¹ ib. III. 42. ¹² CR. 1876, pp. 220-40; KTR. p. 52.

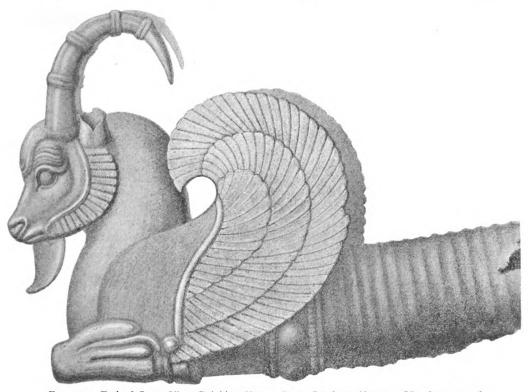
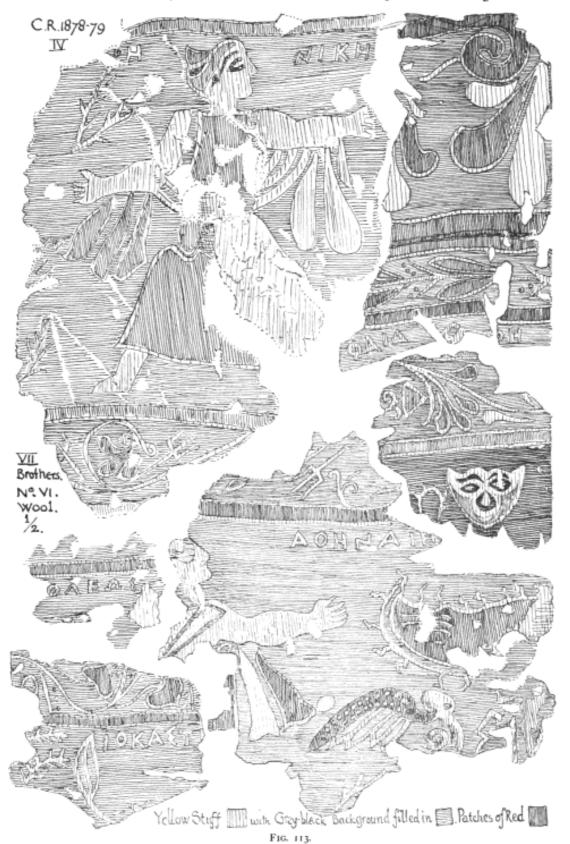


FIG. 110. End of Great Silver Drinking Horn. Seven Brothers, No. IV. CR. 1877, I. 5. 1.



FIG. 111. Gold Plate. Seven Brothers, No. IV. FIG. 112. Gold Plate from Seven Brothers, CR. 1877, I. 8. \(\frac{1}{1}\). No. IV. CR. 1877, II. 5. \(\frac{1}{1}\).





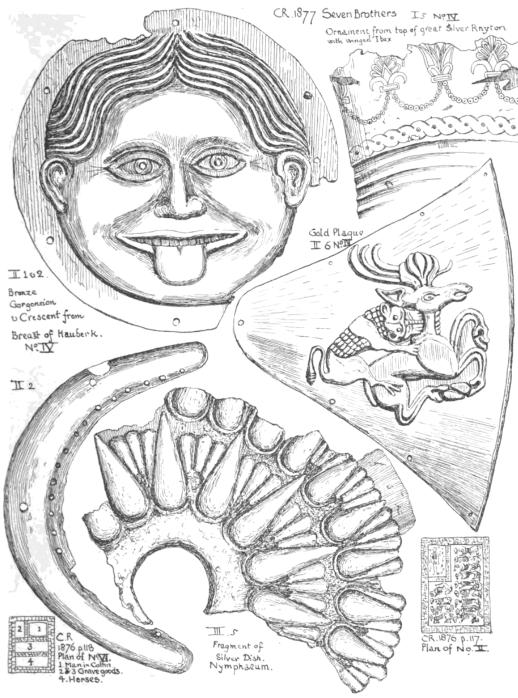
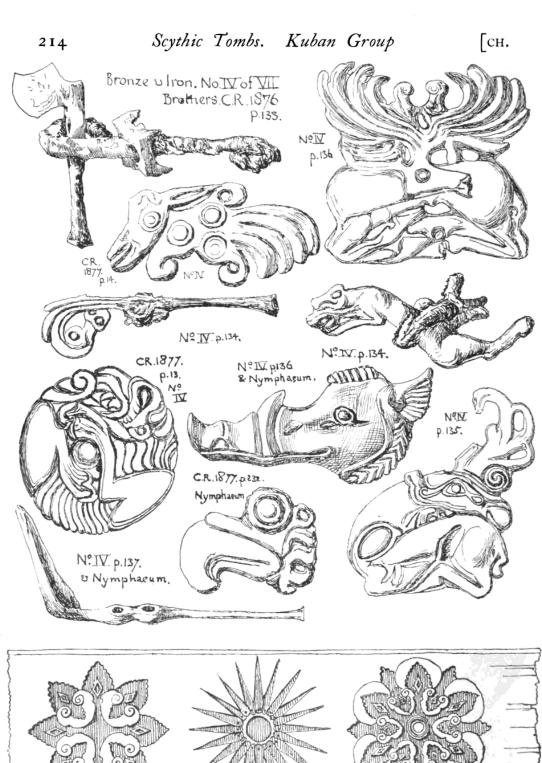
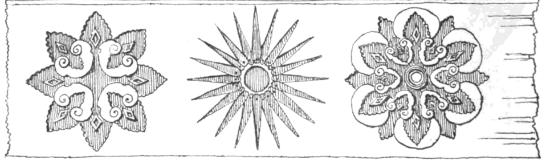


FIG. 114. 2.







CR.1877.pp.222.223. Wooden Coffin from Nymphaeum.

FIG. 115.

cf. Ch. x1. § 5), and the gold plates are Greek. The rayed silver dish (f. 114)2, the engraved ring and the plate with a winged being on f. 106 (Nos. 8 and 30 below), shew Iranian affinities.

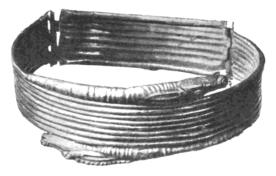
A most remarkable mixture of Scythic and Greek grave-goods was that found by a peasant in 1900 at Akhtanizovka³, NE. of Phanagoria. A brooch (f. 117) and still more a big intaglio shew that we have to do with the first centuries A.D. Quite Greek are a conical helmet with a gold wreath and cheek-pieces, phalerae and glass vessels. But the necklets, one of five turns, one of three, and one of nine (f. 118), are quite Siberian in character, and the hone is perhaps the latest example of a Scythic hone. So in place and in contents this tomb came between the Bosporus and the Kuban.

At Siverskaja⁴, Kuban district, Cossacks found a similar mixture, glass vessels mounted above and below in gold and garnets—from the upper rim carnelians and gold beads hung by chains—a roundel in technique like Fig. 117, one with a curled-up griffin, a large phalera with rude figures and coins of the last Paerisades.



FIG. 116. CR. 1877, p. 231. Cheekpiece. Nymphaeum.





FIGS. 117, 118. Akhtanizovka. Brooch with stone (1), and Gold Necklet (1). CR. 1900, p. 107, ff. 210, 211.

¹ Even the lion with serpent-headed tail, f. 106, cf. Spartan bronze fibula, BSA. XIII. p. 114, f. 4.
² Cf. that found at Susa by de Morgan, Mém. de la Délégation en Perse du Min. de l'Instr. Pub., T. VIII. (Paris, 1905), Pl. III.

³ CR. 1900, pp. 104—108, ff. 190—219, cf. Spitsyn, BCA. XXIX. pp. 19—23, 30—36, ff. 1—35. 4 ib. pp. 24—26, 37, 38, ff. 36—41; KTR. 448—451, f. 394, the phalera.

Karagodeuashkh.

Of late years excavations have been carried on with much success on the E. side of the Bosporus higher up the Kuban than the Seven Brothers. The most important find is perhaps that made in the barrow Karagodeuashkh, and it has been particularly well treated from the general point of view by Professor A. S. Lappo-Danilevskij, and from the point of view of art criticism by Professor W. Malmberg¹. This is perhaps the most important contribution to the question of Scythian ethnology for the last fifteen years, and I am much indebted to it.

Karagodeuashkh barrow is near the post and railway station Krýmskaja about 20 miles NE. of Novorossíjsk, just at the point where the Adagum, a tributary of the Kuban, flows into the plain. The valley of the Adagum is the pass by which the railway to Novorossijsk crosses the ridge of the Caucasus, here not much more than 1500 feet high. The barrow was about 33 ft. high and 672 ft. round. In 1888 a hole appeared in one E. D. Felitsyn, a local archaeologist, side of it disclosing stonework. informed the Archaeological Commission and proceeded to excavate the barrow. There appeared a row of four chambers leading one into the others, built of squared stones, of varying heights. The first was 11 ft. 6 in. by 9 ft. 9 in. and 6 ft. 6 in. high, the next 14 ft. long by 11 ft. broad. Both these chambers were plastered: the next room was 21 ft. long and 7 ft. broad, plastered and frescoed. The last chamber was about 10 ft. 6 in. square and 8 ft. high; between the chambers were doorways with stone lintels.

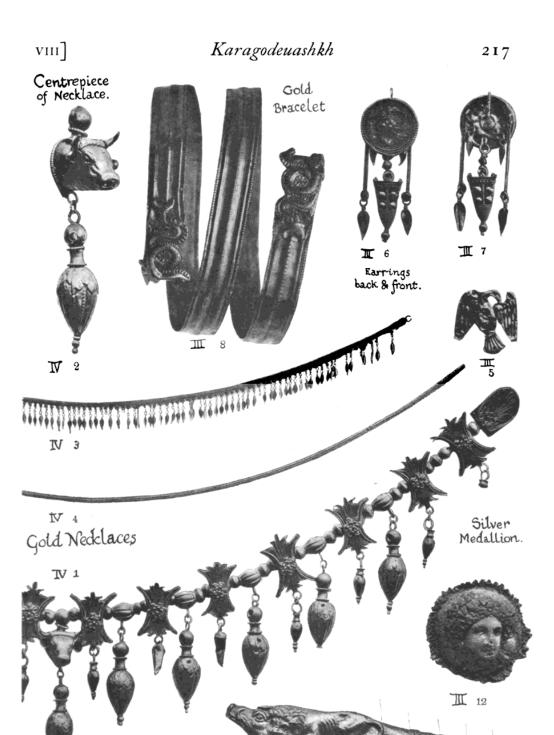
In the first room by the door were the remains of a funeral car, in the middle of the chamber were two or three horse skeletons, one with a bit in its mouth; the bones shewed signs of fire. In the right-hand half of the chamber were a heap of ashes and some bones of a domestic animal, and in the corner a big amphora, 46 cm. high; by it a silver vessel, a copper spoon and some pottery, also 150 various beads and three engraved pastes set in silver. Along the left-hand wall lay the skeleton of a young woman in full array. By her head was a thin gold plate (f. 120) roughly cut into a triangle so as to mutilate the subjects on it, Tyche or Nike, a biga, and a queen surrounded by attendants and wearing just such a headdress. About it 16 ajouré plates in the shape of a dove (III. 5 on fig. 119) and 50 round Medusa heads, by her temples beautiful Greek earrings (ib. 111. 6, 7), on her neck a golden hoop and a necklace (ib. 1v. 1, 2). Upon her wrists were spiral bracelets ending in hippocamps (ib. III. 8), and on her right hand a ring with a woman playing the lyre engraved upon the bezel*. Beside her lay a golden chain ending in a lion's head, a second plaited gold necklace (ib. IV. 3), and the silver roundel with Aphrodite's head (ib. III. 12). About her were the remains of a coffin. The second chamber was absolutely empty.

¹ No. XIII. of Materials for the Archaeology of Russia, published by the Imp. Archaeological Commission, St P. 1894.

² CR. 1882-1888, pp. ccxvi-ccxx.

³ Mat. XIII. iv. 6, 8, 9.

⁴ ib. iii. 10.



Jewelry from the Barrow Karagodeuashkh.

Mat.XIII.

Ends of Gold Torque II 8



FIG. 120. Karagodeuashkh. Gold plate from headdress. Mat. XIII. iii. 1. 120.

In the third long and narrow chamber were frescoes that crumbled away upon discovery. A pasturing deer was distinguishable. In the further corner were the bones of a horse with iron and bronze trappings.

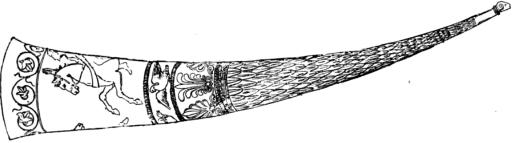


FIG. 121. Mat. XIII. p. 150, f. 23. Karagodeuashkh. Silver Rhyton, restored. 1.

In the fourth or square chamber, also frescoed, were the fragments of several big amphorae and one whole one; along the right wall various broken vessels, a great copper jug, a smaller one, two copper cauldrons,





FIG. 122. Mat. XIII. p. 29, f. 1. Gold strip round hood. Karagodeuashkh.

Fig. 123. Karagodeuashkh. Gold plate from quiver. Mat. XIII. Pl. viii. 9, pp. 56, 134. 1. 28—2

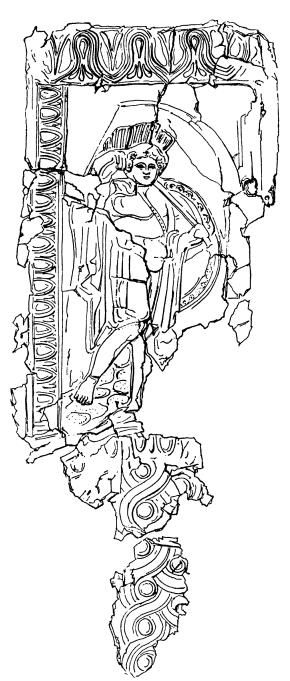


FIG. 124. Mat. XIII. p. 125, f. 2. Karagodeuashkh. Part of bow-case. 10.

and a clay lamp. Near it a great copper dish with two crossed rhyta upon it, and by them a silver cylix and scyphus¹, and further on a great bronze plate (possibly a shield; it fell to pieces in being brought out) with two more crossed rhyta upon it (f. 121), a silver colander and a silver ladle². Along the left wall lay a man's skeleton, by his head gold rosettes and faces and a strip from his hood (f. 122), about his neck a gold hoop with ends in the form of lions devouring boars (Fig. 119, 11. 8, 9). At his side an iron sword with a gold haft of the Scythic type and a cylindrical hone in a plain gold mount³. On the right of his head lay a bow-case adorned with a plate of silver covered with gold and ornamented with figures in relief of the same disposition as the Chertomlyk plate (ff. 124, 125). In the quiver part 50 copper (?) arrow-heads. On the left side was another quiver, adorned with little gold plates, and containing 100 arrow-heads (f. 123). Above the head by the wall lay twelve iron spear-heads. About were the remains of a coffin, but it cannot be said whether the arms lay within it or without.

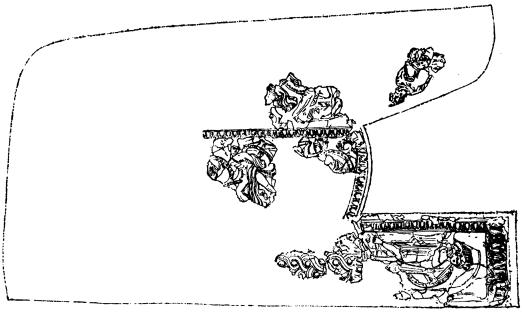


FIG. 125. Mat. XIII. p. 57, f. 34. Karagodeuashkh. Bow-case. 1/3.

The stone roof of all the chambers had fallen in and filled them up with earth and stones, severely damaging many objects. Also the objects found were not registered as carefully as might be, so that the details of their original disposition are no longer to be restored. For instance there is an interesting fragment of a phiale mesomphalos with concentric patterns round the perished boss4.

On comparing this with the other rich Scythic tombs we may notice the absence of armour scales and of a gold plated dagger-sheath.

¹ Mat. XIII. v. 2 and p. 151, f. 24.

² ib. vi. 2, 3.

Kelermes.

A little further to the east about Majkop are many barrows just where various tributaries of the Kuban enter the plain. The oldest in date, near the Kelermes, was excavated by D. Schulz in 1903: no details or illustrations are to hand, and the novel character of the objects makes it hard to picture them to oneself even by the careful description².

The horse grave in this case had been plundered, but the man's body was untouched. He wore a bronze helmet, surrounded by a broad gold band as a diadem with rosettes, flowers and falcons soldered on to it; in the middle was a stone apparently amber; above and below ajouré rosettes and falcons. There was a second diadem with repoussé flowers. At the skeleton's right hand lay a short dagger of the usual Scythic type with a gold haft and a gold sheath with a row of monsters and genii, and on the usual side-projection a crouching stag, the whole much like Melgunov's sheath (pp. 71, 172), but of a more purely Assyrian style. The haft had similar decoration. There was also found an iron axe, which is unique, enriched on haft and head with elaborate decoration of genii and beasts, wrought in gold; into this the Scythic elements seem to have entered more than into that of the sheath. About a yard to the left was a panther of cast gold surrounded by iron scales, corresponding exactly to the shield ornaments of Kul Oba and Kostromskaja. The eyes and nostrils were filled with glass pastes which had themselves stones let into them; the ears had pastes of different colours, separated by gold cloisons, a very important instance of this interesting technique. Near the feet were arrow-heads of bronze. There were also gold buttons, bronze bridles and big iron lanceheads. The chief pieces are referred to Mesopotamian art of the viith or vith century, fresh evidence of direct contact between Scyth and Assyrian.

In 1904 Mr Schulz opened another barrow in which lay a man and a woman3. With the former were found a gorytus cover in gold, adorned with crouching stags in squares, and two rows of panthers, a silver rhyton with centaurs and Artemis, the Lady of the Beasts. The woman had a most remarkable belt with gold adornments set with amber, a diadem with a griffin head in front, recalling very closely the griffin from the Oxus treasure (v. p. 256)—from the diadem's hoop hung by chains rams' heads and flowers enamelled blue—and a silver gilt mirror bearing various groups of animals, monsters and centaurs, together with a similar Artemis. In neither tomb had there been a wooden tabernacle. The two silver pieces belong to Ionian art when it was chiefly occupied with beasts and still had much in common with non-Hellenic art in Asia, and the diadem belongs to the Perso-Greek style. The belt and gorytus are more like the Scythic work, and the former strangely anticipates some details of the so-called Gothic jewelry, although it must be several centuries older.

¹ The usual modern settlement in this district is the Cossack post or Stanitsa, mostly named either after some Russian town, e.g. Jaroslávskaja or Kostromskája, or from the river upon which it lies, as Kelermesskaja or Kurdzhipskaja (sc. Stanitsa).

In the names derived from rivers I have dropped the Russian adjectival ending -skaja.

² Arch. Anz. 1904, p. 100 sqq. Pharmacovskij is to treat of these finds in Mat. XXXI.

³ Arch. Anz. 1905, p. 57 sqq. figs. 1—4.

In two other barrows opened by Veselovskij¹ standards and bone work recall W. Scythia. Phalerae with cold inlay and with spirals are also interesting², but wooden tabernacles had made plunder easy and only horses were left, 24 in one, 16 in the other, arranged in ___ shape. Other barrows held coloured skeletons. At Voronezhskaja the 30 horses were set as a horseshoe and had trappings recalling the VII Brothers³.

Kurdzhips.

On the Kurdzhips, a tributary of the Bêlaja, another affluent of the Kuban, in the Majkop district, again just where the river reaches the plain, are many barrows. One was opened without authorization in 1895, but most of the objects found were secured for the Archaeological Commission. They comprised the usual selection of gold plates, mostly of rather rude



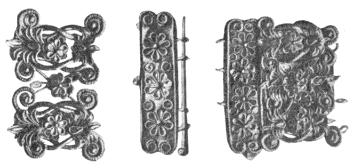
FIG. 126. Cap, §. Roundels, §.

work, but worthy of note are a gold nugget pierced for suspension as an amulet, some round carnelians slung round with gold wire, and especially a kind of cap with a rosette pierced with a hole above, and on each side a group of two men in Scythian dress, each holding one spear set up between them; in the free hand of one is a sword, of the other a human head cut off (f. 126). It might almost illustrate what Herodotus (IV. 64) says of Scyths bringing scalps to their king to claim their share of the booty. This find moved the commission to send Mr V. M. Sysoev to investigate the barrows thoroughly. This one proved to be 9 ft. 6 in.

¹ *CR*. 1904, pp. 85—95. ² ib. pp. 88, 89, ff. 138, 142. ³ *CR*. 1903, pp. 73, 75, ff. 139—153.

⁴ *CR*. 1895, pp. 62, 63, figs. 140—153. ⁵ *CR*. 1896, pp. 60 and 149.

high and about 84 ft. from E. to W. and 70 ft. from N. to S. A curious feature was that the heap was half and half of stone and earth. Nothing in the way of a definite burial was found, but many objects occurred in a thin layer going under the greater part of the area of the tumulus. The bronze and iron objects were in too bad a state to preserve, and the clay vessels were all broken. The Greek objects, e.g. a little glass amphora of variegated streaks, and bronze reliefs under the handles of a deep bronze dish, would make the date of the deposit about the last century B.C. No objects suggested Roman times. The most beautiful thing was an elaborate buckle in three parts, adorned with knots and enamelled rosettes (f. 127). There were more gold plates, and imitations of them in the shape of Medusa heads of gilt plaster. But the most interesting detail was the



F16. 127. Buckle from Kurdzhips. CR. 1896, p. 62, f. 295. 1.

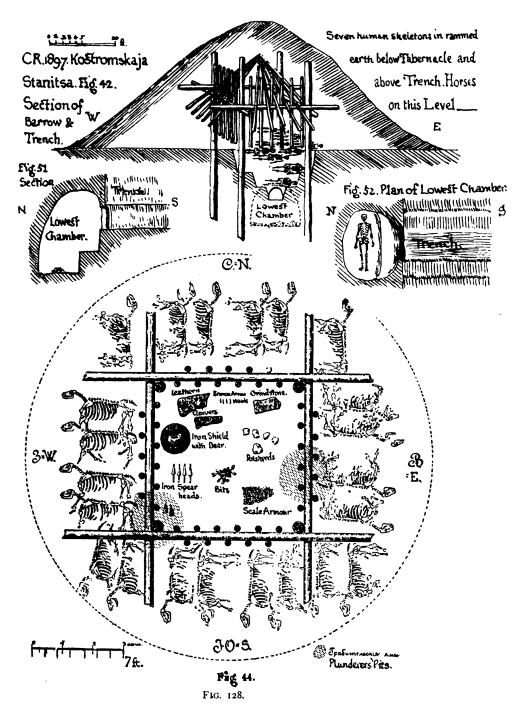
occurrence of two round repoussé gold plates, fixed to large bronze roundlets. On one was a lion curled up, on the other a tiger or lioness (f. 126). In the former were two turquoises set and holes for them in the latter. The workmanship, and especially the manner of treating turquoise, recalls the plates from Siberia, whose affinities with the Scythic are undoubted but difficult to define. This was the first appearance of such work so far sw. but it has again been found at Zubov's Barrow, and elsewhere in the district'.

Kostromskája.

In the same country, at Kostromskaja, Veselovskij excavated a very interesting barrow², see plan and section (f. 128). In the centre of the barrow was erected a kind of tabernacle as follows. Four thickish posts were driven into the ground. Four great beams were laid about them so as to form a square of 3.20 m. = 10 ft. 6 in.; within these, along each side, were put six vertical posts of less thickness; and outside, opposite to the spaces between these last, five such sloping up so as to meet high above the middle. In the square thus formed were found the dead man's belongings about 7 ft. from the original surface. In the s. part was an iron scale hauberk with copper scales on the shoulders and along the lower margin.

¹ v. p. 230, f. 132 and p. 232 n. 6.

² CR. 1897, p. 11.



To the w. lay four iron spear-heads; N. of these a thin round iron shield, adorned in the centre with a cast deer, like the Kul Oba deer (f. 129). In



FIG. 129. Golden deer from Kostromskaja. CR. 1897, p. 13, f. 46. §.

the NW. corner two leather quivers, one worked with beads, and by them bronze arrow-heads. In the NE. corner lay a big sharpening stone broken into two pieces, all about pottery purposely broken, and in one place several copper and iron bits. Outside the square were 22 horse skeletons arranged in pairs, with the legs of one under the body of the next, except that at the two outside angles to the north there was only one horse each. Some of the horses had bits in their mouths. The tabernacle seems to have been daubed over with clay and the whole structure set on fire and then the earth heaped upon it. The square space had been dug out to 7 ft. below the surface and then filled in with earth rolled hard. In this earth were found 13 skeletons, but nothing with them. The pit ended in two steps on each side going longways N. and S., so that the bottom of all was a ditch a couple of feet wide. On each step lay a skeleton. At the N. end of the ditch stood two small slabs of stone that closed the way into a small chamber going down with two steps again, this time E. and W. In the chamber there was just room for a skeleton lying at full length. Nothing was found with it.

No doubt this burial is very unlike most of the Scythic type, but the deer is a distinct link and the ideas expressed by this ritual are very similar to those expressed by that we have found in Scythic graves. The principle of breaking objects or burning them so as to despatch then to the other world is more logically carried out than usual. The slaughful of men and horses is greater than any we have met, though we sl

meet a worse horse sacrifice in the next tomb dealt with. The bareness of all the human remains and the ingenious arrangement of the dead man's grave-chamber almost suggest that an attempt was made to secure a quiet resting place by withdrawing the body from the valuables which experience had found to tempt the sacrilegious.

Ulskij Barrow.

A barrow excavated by Professor Veselovskij in the same district of Majkop, where the Ul runs into the Laba, yielded a yet more astonishing

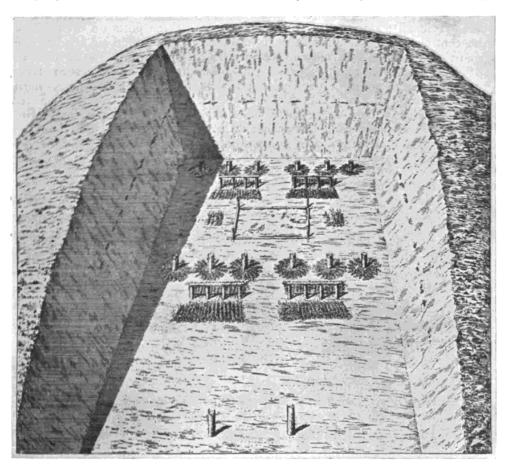


FIG. 130. Diagram of Ulskij barrow. CR. 1898, p. 30.

example of sacrificing horses¹. The barrow was 15 m. high and had a long south slope, but its shape had been disfigured by a battery erected upon it ¹ CR. 1898, p. 29.

during the Russian conquest. A trench 25 m. by 60 m. was cut through it (v. f. 130). This shewed that the barrow had been partly heaped up and then more than fifty horses laid upon its surface, and these had been covered with another mass of earth. The barrow had been plundered, but in the plunderers' hole were found a gold plaque of Scythic style with griffins and deer', fragments of copper cauldrons, Greek vases and scale armour very similar to that found at Kostromskája. But the plunderers had not destroyed the general disposition of the grave; first two thick stakes had been driven in 5.35 m. (17 ft. 6 in.) apart, making as it were an entrance gate, 15 m. (49 ft.) beyond were two rows of posts in one line, each row joined by bars across, leaving the 5.35 m. avenue in the middle. On each side of each of these fences lay 18 horses with their tails to the bars (72 in all); 4.25 m. (15 ft.) further on were three posts on each side of the central avenue, and about each post, radiating with their heads away from the posts, again 18 horses (108 in all); 4.25 m. beyond was an oblong, set crosswise (7.45 m. \times 5.70 m. = 24 ft. 6 in. \times 18 ft. 6 in.). As at Kostromskaja there were perpendicular posts at the corners and four horizontal beams, and along the sides holes (4 and 6 respectively) for smaller rods. Evidently here was such a tabernacle as in the former case. But this had been plundered. At each side of the oblong were the skeletons of two bulls and some horse bones lying in confusion. Beyond in the same order were the fences with horses and the posts with them radiating therefrom. The horses near the oblong had bits in their mouths.

Thus we arrive at something over four hundred horses sacrificed at this one burial. The plundering of the grave prevents us knowing how many human beings shared the same fate. The distances given above appear to have been set out on a standard of 1'07 m., a little over 43 in. This was divided into three parts of about 1 ft. $2\frac{1}{2}$ in. The measurements are all nearly divisible by these amounts. Another barrow close by had also been plundered, there too were horses' skeletons arranged in rows 2'15 m. apart shewing the same unit. In this tomb were found fragments of a black figured vase giving a presumption of an early date, making it the more regrettable that the grave had been ransacked'.

Vozdvízhenskaja.

Among various other interesting barrows in this district should be mentioned that at Vozdvizhenskaja dug up by Veselovskij in 18993. Here the original interment was that of a single skeleton doubled up and stained dark red; he was buried without any objects. Above him lay four skeletons also stained and doubled up, one of them apart, the others on a space paved with cobbles. By these were an earthen pot and a spear, palstaff, axe, chisel and pin, all of copper. In the upper part of the barrow was another stained skeleton and not far from it a complete Scythic interment.

¹ CR. 1898, p. 301, f. 42. ² CR. 1898, p. 32, ff. 47 a and b; another blackfigured vase in a plundered tomb at Voronezhskaja,

CR. 1903, p. 73, f. 138.

8 CR. 1899, p. 44, ff. 67—72 and pl. 2.

Under a wooden tabernacle once supported by four posts at the corners, covered by a pall with stamped gold plates, lay a man's skeleton. By his head was the usual iron and copper scale hauberk and iron arrow-heads, on his breast a golden brooch with a large carnelian and other adornments;

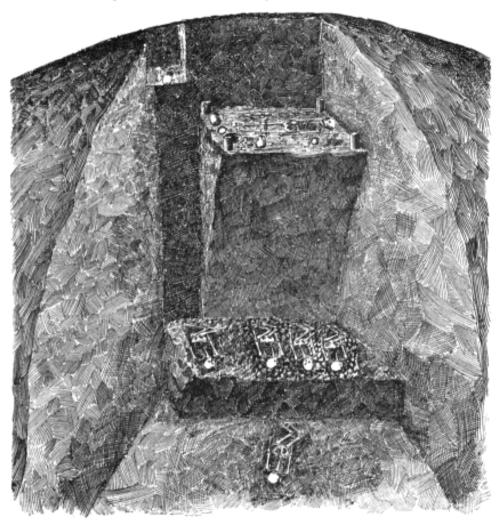


FIG. 131. Diagram of Vozdvizhenskaja barrow. CR. 1899, p. 44, Pl. 2.

under his heels two plaques with a six-headed snake attacking a wild goat, on his right two iron swords, a hone, a mirror, an alabastron, at his belt a dagger of the type suggesting the Siberian. By his knees were found tinsel threads, perhaps a fringe. On his left one or two vessels of silver and clay and glass, further down two pair of iron bits with wheel- and S-shaped psalia adorned with gold and an iron brooch with a gold plate in

the form of a curled up animal with settings for turquoises. Along one side stood three copper vessels, a big cauldron upside down so that the handles had got bent in, another such, smaller and right way up, and a large copper basin. The glass shews their burial not to be very early. The whole barrow is interesting as an example of the same tumulus being used several times.

Zubov's Barrows.

The last find of this type in this district that need be described is that made in 1899 by the peasants of Zubov's farm¹ 14 m. E. of Tenginskaja between the Kuban and the Zelenchuk. Two barrows were excavated. A large proportion of the booty was secured for the Hermitage. In Barrow No. 1 by the skeleton there lay seven roundels of gold with a large circle of many coloured glass in the centre in a border set with small coloured stones and pastes and adorned with gold wire soldered in patterns on the surface, rather like that from Akhtanizovka (p. 215, f. 117) but better. These were ornaments of a strap or belt as is shewn by a flat loop at the back. They were of Greek work and would seem to belong to the time about the



Fig. 132. BCA. I. p. 95, f. 2. Gold Roundel. Zubov's Farm. 1.

FIG. 133. BCA. I. p. 96, f. 10. Zubov's Farm. Bronze cauldron. $\frac{1}{6}$.

Christian era when such many coloured jewels had become fashionable. Five other roundels were of pure Siberian type with monsters and characteristic incrustations: they too adorned a strap (f. 132). There were also the end pieces of the strap and buttons belonging. On the arms were two open gold bracelets, on the breast a hemispherical cup of glass, by the

¹ BCA. I. pp. 94—103, ff. 1—31 and pl. II.

feet a Scythic cauldron (f. 133), by the head a copper jug (to look at it might be English xvIIth century work), along the side an iron sword with a gold hilt, on the left a scale hauberk (f. 134), silver plaques, iron bits with curious psalia overlaid with gold (f. 135), a large stone hone, an earthen jug and iron



FIG. 134. BCA. I. p. 97, f. 15. Zubov's Farm. Bronze armour. $\frac{1}{1}$.



FIG. 135. BCA. I. p. 98, f. 16. Zubov's Farm. Iron bit with gold mounts. $\frac{1}{3}$.



FIG. 136.



FIG. 137. BCA. I. p. 99, f. 18. Phiale from Zubov's Farm. 4.

arrow-heads. The most interesting object was a silver φιάλη μεσόμφαλος about 8 in. across (ff. 136, 137). Upon the boss is a coiled serpent, about it "stabornament," round the hollow thirteen deer heads facing in relief, about the edge the inscription

A \square O \wedge \wedge \wedge \wedge O \wedge O \wedge H \square E M O N O \wedge E I M I T O M ϕ A \wedge I

'Απόλλωνος 'Ηγέμονος εἰμὶ τὀμ Φάσι. ''Apollo the Leader's am I who is at Phasis¹." The work of the bowl is very similar to that found in the second of the Seven Brothers (p. 209, f. 107), and referred by Stephani to the early vth century. The inscription belongs to the end of the century or the beginning of the 1vth. What was the temple of Apollo the Leader at Phasis we know not, but how a bowl belonging to it came into this tomb is no mystery, when we think that this Kuban district is the hinterland of that very coast whose piratical inhabitants are described by Strabo (x1. ii. 12).

In the second barrow the tomb was covered with wood: the earrings, pendants, bracelets, beads, mirror and especially three small jugs, two adorned with a little animal crawling up the side by way of a handle, and containing rouge and white paint, make it appear that it was a woman's though she had a miniature copper-headed spear. Besides there were glass and earthen vessels and gold plates for sewing on to dresses.

It is a pity that the excavation was not made by an expert. For Kieseritzky² wishes to use the phiale to date the roundels as of the vith century B.C. and supposes that an early barrow and one of Roman date have had their contents mixed, but the phiale is a chance survival and nothing else in the find is contemporaneous with it. The cases of the archaic lamp, tripod and stand from Ust-Labinskaja and perhaps of the black-figured vases (p. 228 n. 2) seem similar.

In this Kuban district a more or less Scythic culture seems to have continued later than in the west of what is now South Russia. This is what we might expect if the Alans are indeed much the same as the Sarmatians of whom we hear in earlier times and the Ossetes of our own day. The tombs of the first three centuries A.D.4 often introduced into the barrows of red skeletons (p. 143) are characterised by the substitution of Hellenistic or Roman industrial products for the more artistic Greek work; at the same time communication with Central Asia was kept up and we find specimens of the Siberian style, with its beasts and turquoise or garnet incrustations also a Parthlan coin c. 43 A.D.7, so that the mixture of things at Zubov's barrows need not awake suspicion.

¹ The inscription can hardly be meant for an iambic trimeter as the writer in BCA. suggests, the trochee in the second foot, the dactyl in the third, and the spondee at the end make it intolerable.

² Arch. Anz. 1901, p. 55.
³ CR. 1902, p. 79, ff. 166–168; Arch. Anz. 1903, p. 82, ff. 1, 2.
⁴ N. I. Veselovskij, "Barrows of the Kuban district in the time of Roman dominion in the Northern Caucasus," Bulletin of the XIIth Archaeoforical Courtees, Kharlow, 1002; and the according to the courtees of logical Congress, Kharkov, 1902; and the accounts of his excavations at Kazanskaja, Tiflisskaja, Ust-Labinskaja, Armavir and Nekrasovskaja in

CR. 1901, pp. 66-86; 1902, pp. 65-91; 1903, pp. 61-70; 1905, pp. 73-75: Arch. Anz. l. c.; 1906, p. 109; 1907, p. 126.

^b e.g. silver cups, CR. 1902, pp. 70, 78, ff. 143, 165; white bronze basin with copper emblema, CR. 1905, p. 74, f. 95; Arch. Anz. 1906, p. 111, f. 1; vessel in form of ram such as is common at Olbia, CR. 1902, p. 67, f. 136, of a duck (?), p. 72, f. 152; Arch. Anz. 1902, p. 83, f. 3. 6 e.g. roundels, CR. 1902, pp. 67, 77, 78, 82,

ff. 139, 140, 161, 164, 177; figures of rams, p. 87, f. 196; 1903, p. 62, f. 96; v. inf. pp. 277, 279, f. 205.
7 BCA. XXXII. App. p. 99, Stavropol.

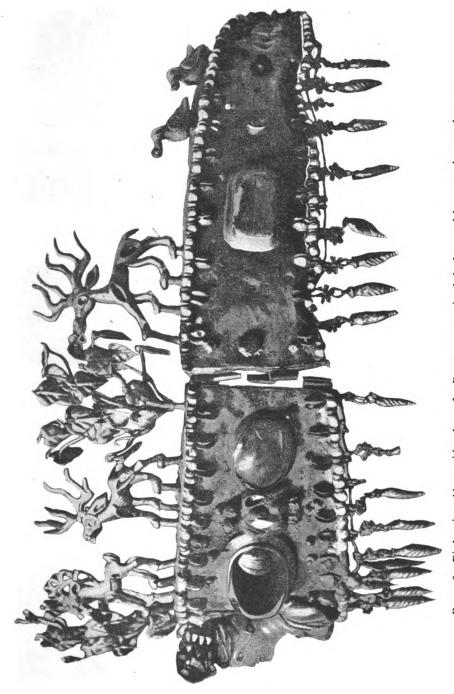


FIG. 138. Diadem in gold set with a bust of a Roman empress in chalcedony and large amethysts and garnets. Novocherkassk. KTR. p. 489, f. 441.

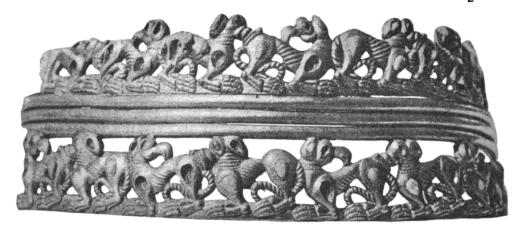


FIG. 139. Collar in gold encrusted with coral and topaz from Novocherkassk. KTR. p. 491, f. 443. \$.



FIGS. 141, 142. Gold bottle from Novocherkassk, side and top. KTR. p. 493, ff. 447, 448. $\frac{7}{9}$.



FIG. 143. Gold strip encrusted with light and dark blue and green. Treasure of Novocherkassk. KTR. p. 494, f. 450.

These objects were not merely imported as is shewn by the well-known Novocherkassk treasure. The main bulk of this find is in the Siberian style, but in the front of the principal piece, a crown (f. 138), is the bust of a Roman empress in chalcedony of the IIII or IIII century A.D. and attached to its lower rim are pendants after the fashion of those found in Panticapaean work of about that time. Also the work cannot very well be much later because in the following centuries the so-called Gothic jewelry was dominant in these regions (v. pp. 280—282).

This treasure was found in 1864 near Novocherkassk on the lower Don and included the crown mentioned above, a collar (or diadem, f. 139) even more Siberian in style, a spiral bracelet ending in animals, two little boxes (f. 140) and a scent bottle (ff. 141, 142, of the same shape as that found in a tomb of a Bosporan queen at Glinishche near Kerch¹) adorned with beasts, another in the shape of a feline with a body of agate, a statuette of Eros (IInd cent. A.D.), some little gold plates recalling typical Scythic fashions, a slip of gold attached to a chain and encrusted with bright blue, turquoise and pink, recalling Central Asia in colouring and the "Gothic" style in make (f. 143), some gold vases, one with a handle formed of an animal (f. 144) and an object like a spectacle-case attached to a chain and adorned with animals' heads². The circumstances of this find render it



FIG. 144. Golden cup from Novocherkassk. KTR. p. 495, f. 452. 1.

doubtful whether these objects were buried with a dead man or were a cache.

Similar in shape and style to the cup here figured and found in the same neighbourhood is a cup in the Uvarov Collection inscribed

EHBANOKOYTAPOYΛΑC€ΠΟΙ€Ι ∦MH

in dotted letters: Xebanocus is the name of the owner rather than that of

 1 ABC. XXIV. 25, v. inf. Ch. XII. end, f. 326; cf. a plainer example in CR. 1902, p. 83, f. 184, from Ust-Labinskaja. 2 KTR. pp. 488—496, ff. 441—454 gives all these except the Eros and the vases. Maskell, Russian Art, p. 83 sqq.

the maker's father: MH is more probably 48 than a misspelling of $\mu\epsilon$ and so * would seem to stand for χρυσοῦ. It is all very obscure, but we learn from it that a thing of this style was made for a Sarmate or Alan (cf. some seventy Sarmatian names in -akos in *IosPE*.) by a man who wrote Greek.

Vettersfelde.

There is one find which belongs to the class of Scythic antiquities but was made in a region so far distant from the localities where Scythic remains are usually to be looked for, that it naturally comes in at the end of this survey although in date it may be almost the earliest of the rich Scythic equipments¹. In October 1882 there were ploughed up near Vettersfelde in Lower Lusatia and acquired for the Antiquarium in Berlin the fragments of a great jar and the complete equipment of a Scythian chief. It included the centre ornament of his shield, a fish 41 cm. x 15 cm. made of pale gold repoussé and covered with animals in relief (f. 146), a gold breastplate 17 cm. square formed of four roundels each with a boss in the middle and animals in relief all round it, set about a fifth smaller roundel or boss (f. 145. 1), a gold plate to cover the sheath of a dagger of the typical Scythic shape with a projection on one side (f. 147), the handle of the said dagger as usual covered with a gold plate and shewing the characteristic Scytho-Siberian heartshaped guard, a golden pendant, earring (f. 148), arm-ring, neck-ring, chain, knife sheath with remains of the iron blade, gold ring, small stone wedge set in gold, a hone bored through and set in gold (f. 145. 2), and some fragments. Professor Furtwängler has treated these things in a masterly fashion and they are all duly illustrated by him. All of them have their analogues in the South Russian finds except the breastplate, but such an object is quite in keeping with the tastes of people who covered themselves with gold plates of various sizes. The earring is declared by Hadaczek to be of an Ionian type and earlier than any found in South Russia and the knife sheath is identical with the one from Tomakovka figured on p. 158.

The fish is the most remarkable of these things. It corresponds in style (v. p. 264) and destination to the Kul Oba deer, and Furtwängler's decision that they are both shield ornaments has been satisfactorily borne out by the finding of the Kostromskaja deer still in place upon remains of the shield, only this was round instead of long shaped as had been supposed

on the evidence of the Kul Oba vase².

The inventory of the find is typically that of the personal effects in the Scythic tombs of kings except that the horse trappings are absent, and of course the women's things. The whole may be dated rather earlier than the older objects from Kul Oba and put in the first decades of the vth century.

Dalton and the authorities of the British Museum. ² supra pp. 203, 226; CR. 1897, p. 12. V. Gardthausen's view that the fish was a Tessera Hospitalis is an extraordinary instance of the errors of even famous scholars, Rhein. Mus. XXXIX. p. 317

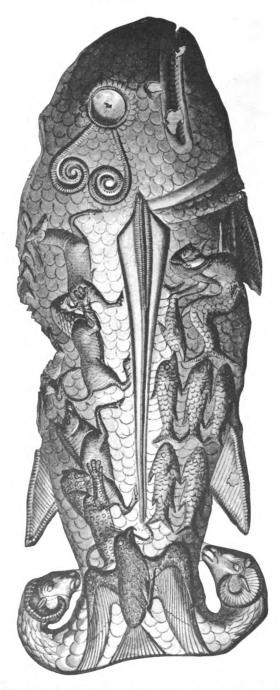
¹ XLIII^{us} Winckelmannsfestprogramm, A. Furtwängler, Der Goldfund von Vettersfelde, Berlin, 1883. I wish I could still express to Professor Furt-wängler my gratitude for his kind permission to reproduce his pictures. Fig. 147 I owe to Mr

How these things including the brittle whetstone found their way so far from home without loss is unexplained. Save for some little damage by



FIG. 145. 1. Gold breastplate (?) from Vettersfelde. 2. Hone set in gold. Furtwängler, pl. II. 4.

fire and rust they are as good as new. Furtwängler guesses that their coming may have to do with the Scythians' northward retreat before Darius.



F1G. 146. Gold fish from Vettersfelde. Furtwängler, pl. I. Rather less than half size.

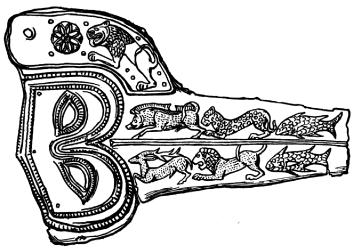


FIG. 147. Gold dagger sheath. Vettersfelde. Pl. III. 1. After Dalton, Oxus Treasure, p. 33, f. 22. ½.



Vettersfelde, I.s. Gold Earring.

Fig. 148. 11.

Kámennya Báby.

With the tombs of the Scythic type many investigators have been inclined to connect the mysterious stone figures known as Kámennya Báby—stone women—rude figures hewn out of blocks of stone and almost always representing women, rarely nude, more often wearing a short skirt and jacket and a kind of pointed hat with a veil or hood hanging from it and the hair hanging down in a thick plait behind. The dress is sometimes shewn in some detail and an elaborate necklace is a common feature¹. The face is round and rather Mongolian in aspect, but the execution is too rude to let this be any criterion. The men's dress sometimes distantly recalls that of a Roman Nearly all the figures agree in holding a cup rather like a dicebox before them. This does not seem to be for the receipt of the offerings of the living because often it is not made concave on the top. A very rare form belonging apparently to the same class is a statue in a lying posture as it were swathed in a winding sheet. These figures, which have been objects of a superstitious reverence till recent times, used to be common about the Steppes, frequently occurring upon Scythic barrows, for instance such famous ones as those at Alexandropol and Chertomlyk, Zubov's, Melgunov's and others. Further their limit of distribution is just that of the Scytho-Siberian culture from Galicia across South Russia to the basins of the Obj and the Jenisei, in the Crimea and on the Kuban.



F16. 149. *CR*. 1895, p. 76, f. 199. Murza Bek, Crimea. Kamennaja Baba. 6 ft. 8 in. high.

Provinces, I. p. 444.

² Zubov's Barrow, CR. 1900, p. 39, f. 100, cf.
N. I. Veselovskij, "A New Type of Kamennya

Báby" in Bulletin of XIIth Russian Arch. Congr. (Kharkov), 1902, p. 222, and "So-called Kámennya Báby" in Messenger (Vêstnik) of Archaeology ana History, Pt XVII. St P. 1905.

¹ M. Guthrie, A Tour through the Taurida, London, 1802, pl. 11. p. 406; P. S. Pallas, Southern Provinces, 1. p. 444.

Professor Lappo-Danilevskij¹ shews that they cluster most thickly just about the bend of the Dnêpr, just in the land Gerrhus. This would all suggest that there was a real connection between the Scythic tomb and the statue upon its summit.

It is not important that Herodotus does not mention the setting up of such figures; the golden statue erected to Zarinaea their queen by the Sacae' might be a glorified "baba" but is not enough to prove others having really been set up by Sacae. However Rubruck says distinctly (v. supra p. 89) that the Polovtsy or Cumans set up figures holding cups before them3, and cases occur of "báby" being found upon barrows of the mediaeval nomads, e.g. at Torskaja Sloboda, district of Kupjansk, government of Kharkov (Veselovskij, l.c.). Further in the Orkhon inscriptions very similar figures are designated as balbals, memorial statues.

It seems then clear that kámennya báby were set up by a mediaeval Turkic tribe, presumably the Cumans as Rubruck says so, and this is the opinion of Tiesenhausen and Veselovskij the best authorities on the relations of Russia with the Orient. Anyone setting up such a statue would naturally choose a commanding position such as is afforded by a high barrow. The coincidence in area of their distribution with that of Scythic remains is due to the fact that, as has been already remarked, the range of the Cumans was limited by the same physical conditions as that of the Scyths when they were the dominant nomad power. We cannot however assert that the Scyths set up no such figures, since a priori they might be expected to agree in this as in other customs with the later nomads, but there is no specimen to which we can point as probably being Scythic.

¹ Scythian Antt. p. 475 sqq. where he quotes the literature of the subject, esp. Piskarev's list in TRAS. (old series), Vol. III. pp. 205—220 (I have not seen this), and Burachkov's sensible account in Trans. Od. Soc. 1X. pp. 65--70.

2 Ctesias, fr. 25 (Müller, p. 43) ap. Diod. Sic. 11.

³ Spitsyn, TRAS. x. (Russo-Slav. section, 1898), 342, figures a male baba from Vêrnyj (Semirêchensk) bearing a cup of well-known mediaeval (XIIIth cent.) Mongol type.

CHAPTER IX.

SIBERIA AND SURROUNDING COUNTRIES.

In the foregoing pages mention has been made of the resemblances between the culture I have called Scythic and that of early inhabitants of Siberia. These resemblances are so great that it is impossible to treat the archaeology of South Russia without touching that of Siberia. This may be called a case of explaining ignotum per ignotius, but in a sense the ethnology of Siberia is less open to question than that of the Euxine steppes, inasmuch as the north of Asia is not exposed to invasions from so many quarters as Eastern Europe and is inhabited by peoples who, whatever their mutual differences, have more ethnological affinity than those we find side by side at the junction of the two continents.

The best account of the chief forms of tombs in Siberia and of the

civilisations to which they correspond is given by Dr W. Radloff'.

Radloff describes various types of graves in Siberia, of which the most important division is into graves marked by barrows and graves marked with stones mostly set in rectangles. In the basins of the Irtysh, Tobol and Obj and again in the Kirgiz steppe and in south-west Siberia we mostly have mounds larger or smaller. In the river valleys of the Altai, on the banks of the Jeniséi and in the Abakan steppe are found the stone graves, as well as over the Chinese border in Mongolia. In the Altai and on the Bukhtarma we find cairns of stone.

These graves may be referred to four epochs:

(i) All the stone graves in the vale of the Jenisei and the Altai and many of the mounds of the Kirgiz steppe belong to the Copper or Bronze age.

(ii) Most of the barrows and big cairns belong to the earlier Iron age.

(iii) The smaller barrows called Kirgiz graves are of the later Iron age.(iv) These shade into barrows which contain even xviith century coins

and modern Russian objects.

In graves of the first period are found many weapons and tools of cast copper and bronze, they have nearly all been plundered so that it is very rare to come upon gold. Similar tools are found in old gold and copper workings in the Altai mountains, and there is no doubt that these people worked the metals themselves and had attained very considerable

Vol. I., and Vol. II. begins with XXVII. See also D. Klements, Antiquities of the Minusinsk Museum, Objects of the Metal Ages, Tomsk, 1886: a catalogue with very good introduction and with illustrations. These latter are rather superseded by those in Martin, F. R., L'age du Bronze au Musée de Minoussinsk, Stockholm, 1892.

¹ Aus Sibirien, Leipzig, 1884, Vol. II. chap. VII. pp. 68—143; trans. into Russian and republished by Count A. Bobrinskoj in TRAS. VII. (1895) p. 147 sqq. Dr Radloff is now publishing for the Archaeological Commission a fully illustrated work on the Antiquities of Siberia. Materials for the Archaeology of Russia, Nos. III. v. xv., form

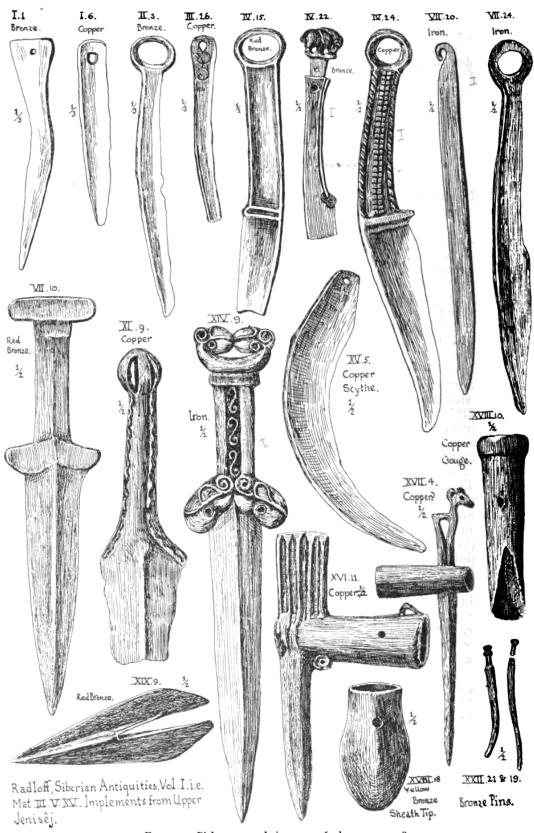


Fig. 150. Picks, p. 244, knives, p. 246, daggers, p. 248.

FIG. 151.

Axes, p. 244.

31—2

p. 246.

skill. The old workings consist of simple shafts not more than fifty feet deep and indifferently propped up. Working even to such a depth was dangerous and skeletons of miners have been found with pickaxes and sacks to hold the ore. Miners seem to have been in high regard, for Radloff figures a copper statuette of one and also wherever these people lived we find elegant models of pickaxes, too delicate for actual use and apparently serving as ornaments or insignia². Their tools are found in the gold washings as well as in the shafts (called Chud mines). Smelting furnaces have also been found in the Altai, and everywhere about the Abakan, Jenisei and upper Obj we have fragments of copper such as are trimmed off castings. Their bronze, when they made bronze, is of very great hardness, and their castings hardly ever have flaws in them, although they cast cauldrons up to 75 lb. in weight. Well finished and rough tools are found together in the same grave. The chief objects found comprise knives and daggers but few arrowheads or spear-heads. Axe-heads especially the double-looped type (f. 151, cf. p. 261) are common, and pickaxes both serviceable and ornamental. They

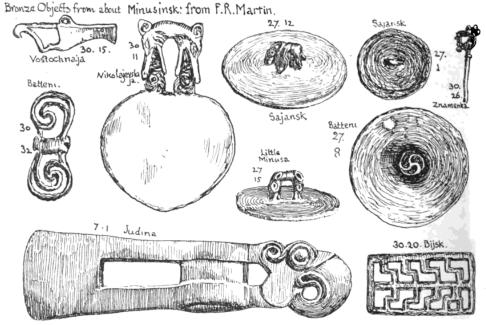


FIG. 152.

also made scythes and sickles and copper cauldrons. For their own adornment they had earrings of gold and copper, carnelian and metal beads, beastheaded pins, belt pieces, and disks with loops behind serving either for mirrors or for ornaments. The pottery is very rude and falls far below the skill shewn in metal work. They were acquainted with weaving, but

¹ Aus Sib. 11. pl. 1V. 1 and 2 on fig. 172, p. 251.
² Sib. Ant. I. xvi. 11, xvii. 4 on fig. 150.
³ v. Klements, op. cit. pl. XIX.



FIG. 153. Mat. III. = Sib. Ant. Vol. 1. p. 12, ii. 18. Yellow bronze knife. 1.



FIG. 154. Mat. III. = Sib. Ant. Vol. I. p. 10, ii. 10. Copper. 1.



FIG. 155. Mat. III. = Sib. Ant. Vol. II. p. 18, iii. 9. Golden bronze plated with tin. $\frac{1}{1}$.



FIG. 156. *CR*. 1900, p. 123, f. 275. Bronze axe-head. Angara. $\frac{1}{2}$.

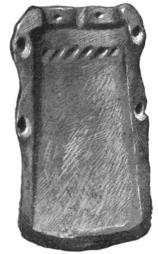


FIG. 157. Mat. XXVII. = Siberian Antiquities, Vol. II. p. 2, i. 3^a. Stone mould for axe. 3^a.

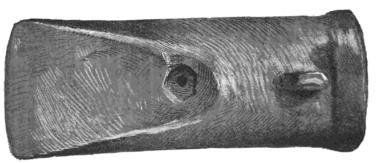


FIG. 158. Mat. XXVII. = Sib. Ant. Vol. II. p. 33. Bronze axe-head. 1.

their stuffs were also coarse. They do not appear to have kept cattle, but they do appear to have engaged in agriculture for they have left many copper sickles about the fields, and these fields often have traces of irrigation works. The bone arrow-heads found with their objects and their love of beasts in their ornament suggest that they were hunters as well. They do not seem to have been nomads in any sense. So they had few horse-trappings, and the rock carvings ascribed to them shew the men all on foot.

But it is their metal work which makes them interesting. They appear to have originated many types that were afterwards spread far and wide. Their knives (v. the series on f. 150), in their simplest form mere slips of copper, as it were long narrow triangles with a hole towards the base, were improved into excellent instruments with a well formed ring at one end, sometimes in the form of an animal, a firm handle separated from the blade by a well marked fillet and projection, and a blade bent forward so that the edge made an obtuse angle with the haft. Such a knife recalls irresistibly the Chinese knife which afterwards shortened down into the round cash¹; and so P. Reinecke² thinks it an imitation of the Chinese, but just as possibly it came into China by some early raid from the north (v. p. 91).

Then the bronze cauldron upon a conical base round which the fire

was built, a type characteristically Scythic, was made by these people; they alone made the same shape in pottery so they were probably the originators of it. They also seem to have invented the disc with a loop in the middle of the back, which grew, as it appears, into the mirror used over all northern Asia and in Scythia and the Caucasus. This mirror Reinecke (loc. cit.) also calls a Chinese invention, but it was only introduced into China about 140 B.C. along with other western products. Together with this new form of mirror the Chinese began to use a new name for mirrors with an



Klements, Minusinsk Museum Pl XIX. Clay Pots.

FIG. 159.

ideogram suggesting metal³. The Chinese even followed their models in decorating these mirrors, the loop being formed of the body of an animal just as with the mirrors and knife handles of the Jenisei people (v. f. 152).

Furthermore these early inhabitants of the Jenisei developed a dagger with a curious heart-shaped guard and a well defined knob at the end of the haft, which type is found in Scythic tombs and on the monuments of

¹ Cf. the specimen in the British Museum, on f. 151; Ridgeway, Metallic Currency, p. 157, f. 21. ² Zt. f. Ethnol., XXIX. 1897, pp. 140 sqq., "Ueber einige Beziehungen der Alterthümer Chinas zu denen des Skytho-Siberischen Völkerkreises." But cf. same shape arisen independently in Iseo lake-dwelling, T. E. Peet, Stone and Bronze Ages in Italy, v. 3, and a knife from Nordenford, Bavaria, in the Maximilian Museum, Augsburg, kindly brought

to my notice by Mr Reginald A. Smith of the British Museum.

³ Prof. H. A. Giles, China and the Chinese, New York, 1902, p. 132; cf. Po-ku-t'u-lu, in which such mirrors are figured; Hirth, Fremde Einflüsse, ff. 2—16. I am much indebted to Professor Giles for the information about mirrors and for help in consulting Chinese archaeological works.





FIG. 160. Mat. XXVII. = Sib. Ant. Vol. II. FIG. 161. CR. 1900, p. 123, f. 276. Bronze pick from Angara, Siberia. \(\frac{1}{2}\). p. 4, i. 6a. Copper Axe-head. \(\frac{1}{4}\).



FIG. 162. Mat. xv. = Sib. Ant. Vol. II. p. 82, xv. 3. Copper Siberian scythe. $\frac{1}{2}$.



FIG. 163. Mat. xv. Sib. Ant., Vol. I. p. 131. Bronze bit from Siberia. ½.

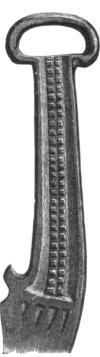


FIG. 164.

Mat. v. = Sib. Ant.

Vol. I. p. 31, v. 8.

Copper knife. 1.



FIG. 165.

Mat. III. = Sib. Ant.

Vol. I. p. 22, iii. 23.

Reddish bronze knife. 1.

Persepolis¹. But the interest of these objects is not merely in the types of their weapons but in the style of their ornament. Besides zigzags and simple patterns of straight lines they developed a beast style remarkable for its simplicity and naturalism. They pourtray chiefly bears (ff. 150, 152), deer (f. 165), and argali or ibex (ff. 166—168, 172) and have no tendency to the fantastic combinations of incongruities found in western Asiatic and also in Scythic work.

Early Iron Age. Katanda.

In the next class of graves, the barrows, we find a different culture belonging to the early iron age. The barrows as usual occur in groups. In such a group on the river Katanda not far from where it falls into the Katunja a tributary of the Obj, Radloff² came upon many tombs with interments of men, women and horses, and one in particular yielded very important remains.

The barrow was heaped up of stones and 7 ft. high by 100 ft. in diameter. Attempts had been made to plunder it and in the heap were found in disorder bones of at least six horses, human bones likewise, six iron bits, various iron and bone arrow-heads, an iron spade, an iron and a copper knife, an iron sabre, a mass of blue glass beads and two heart-shaped carnelians from earrings. In the midst of the heap was found the grave pit, 14 ft. long, filled up with big stones and earth; 2 ft. 6 in. below the original surface of the ground the excavators were stopped by coming to earth permanently frozen: water meanwhile trickled into the excavation from all sides and continuance of the work became very difficult: the earth had to be melted with fires and the water and mud baled out. Two fathoms deep they came upon bones of men and horses and also found an iron bit with large rings. Further down were the remains of an oblong erection of larch wood, of which the roof had been destroyed by former plunderers. Across this building went two thick beams and upon one of them was a big bundle of leather enclosed in a rind of ice six inches thick. The bundle turned out to be a kind of coat of silken stuff, much like a dress coat in shape, lined with sable and edged with leather and little gold plates. The first plunderer had not penetrated beyond this level, at which a layer of birch bark covered the whole tomb. In this was another garment of ermine dyed green and red and adorned with gold buttons and plates; this was likewise rolled up into a bundle and encased in ice. It had a high collar and very narrow sleeves. In it was an ermine gorget, a band of silk on which were fastened horses and monsters of wood, a carved wooden saucer and fantastic deer, bears, etc. Under the birch layer was reached the bottom of the pit whereupon were two low tables hewn out of wood and upon each table an unadorned skeleton. Some fragments of clothing and gold plates were picked up in the bottom of the grave. The skeletons were absolutely decayed. Although the state of the skeletons

v. pp. 59, f. 12, 61, 189, f. 81 and f. 150=Sib. Ant. I. vii. 10, xiv. 9; a variety with an open hollow knob (ib. xi. 9) has a close parallel in China, f. 151, and also suggests the Bunchuki on p. 186, f. 79.
 Aus Sib. II. p. 104 sqq.



FIGS. 166, 167. Mat. xv. = Sib. Ant. Vol. I.App. p. 126. Bronze Argalis. $\frac{1}{2}$.



FIG. 168. Mat. v. = Sib. Ant. Vol. I. p. 60, x. II. Bronze knob inset into haft. $\frac{1}{1}$.



FIG. 170. Mat. XV. = Sib. Ant. Vol. 1. p. 69, xii. 4. Iron handle. Copper or bronze blade. 1/4.

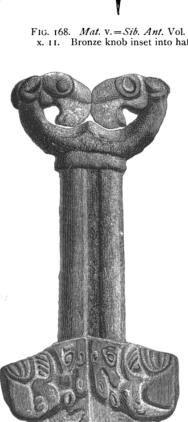


FIG. 171. *CR*. 1899, p. 136, f. 271. Siberia Iron dagger. ½.

FIG. 169. *Mat.* XV.=Sib. Ant. Vol. I. p. 68, xii. I. Reddish bronze. 1.

Μ.

shewed that the grave was of early date, the frozen condition of the ground had preserved the furs and textiles in a manner unparalleled in warmer countries. The same cause also prevented the complete plundering of the grave, although the thief found that which was in the upper layer and threw some of it aside.

Another field of barrows was explored on the river Berel, near the Bukhtarma, an affluent of the Irtysh. In the heap of stones composing one barrow, about 20 feet high and 100 feet across, was found the skeleton of a horse with an iron bit and two iron stirrups. In the natural earth was a great pit 20 x 24 ft., and the ground was frozen: when it was cleared there appeared a layer of wood at the s. end and of birch bark at the N. end. under this latter sixteen horse skeletons in four rows with their heads to the east. The two easternmost rows had iron bits, and were covered with wooden and birch bark ornaments mostly overlaid with gold. In the middle of the wooden platform at the s. end was a tree trunk hollowed out, adorned at each corner with four birds cast in copper. Under this was a gravepit with a horse's and a man's skeleton. By the latter were traces of copper and gold. To all appearance this part of the grave had been plundered in antiquity. Other graves about were found to be arranged like those on the Katanda, horse skeletons above and men's below, and objects of silver and iron, with well-made pottery. The iron knives and daggers were made after the exact fashion of the bronze ones, only the iron hafts were covered, each with a thin gold plate. In one case were found scales of iron armour for sewing on to a leathern jerkin.

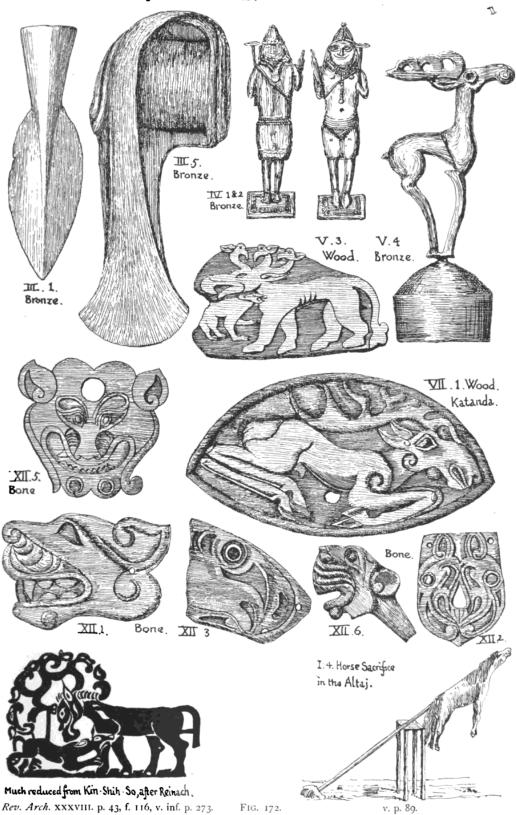
The earthen barrows about Barnaul agreed mostly with these, except that they were smaller and the horses were not always buried with the men. They contained similar layers of birch bark and wood. Most of these

graves had been plundered.

The graves of the later iron age are much smaller than those already described. They are called Kirgiz graves and may well belong to that people. They shade off into quite modern interments containing e.g. Russian xviith century coins.

The people of the early iron age are evidently quite different from those of the bronze age. Their burials are different and their manner of life likewise. Evidently the horse played a great part in their existence. Also they have many more weapons found with them. That is to say that they were a nation of warlike nomads. Still their civilisation had much in common with that of their predecessors. They adopted from these the characteristic dagger, the characteristic knife, the cauldron, the mirror; they seem even to have continued their agriculture to some extent, and they also engraved representations of themselves upon cliffs; this time we find the figures predominantly on horseback in place of going afoot. The new comers seem to have brought a knowledge of silver and of iron, and also a distinct taste for the monstrous. With them begins the liking for winged quadrupeds, for horns ending in birds, for inconsequent beak-heads, for conventionalised creatures quite unlike the naturalistic style of their predecessors. Yet the similarity in technique, the imitation of bronze forms in iron (ff. 169-171)—we find even such strange cases as bronze daggers with iron handles—the similar love

Aus Sibirien Vol. II. Objects from the Altai.



Rev. Arch. XXXVIII. p. 43, f. 116, v. inf. p. 273.

FIG. 172.

of gold plates as adornments, make it clear that the old tradition lived on. It seems as if this new warlike immigrant people conquered the old miners and metal workers, and used their inherited skill in the carrying out of its own taste and thereby formed a mongrel style which is indistinguishable from the Scythic.

Everything points to this immigrant population having been of what may be called Hunnic stock. Their mode of life, their burial customs, their type as seen in statues and rock carvings, correspond with what we know from Chinese sources of the Hiung-nu, the Tu-küe, the Tartars, and all other tribes of that stock (see p. 88 sqq.).

The burial customs do not correspond, inasmuch as the Chinese speak of them as burning their dead, whereas no cases of complete cremation have been found. Still near Tobolsk A. Heikel found in a tomb which had much in common with these middle Siberian barrows, that the wooden erection set over the body had been set on fire before the heap was raised.

It looks as if they had already learned something from their southern neighbours before they enslaved their northern ones. This would account for much that is in common between Scytho-Siberian art on the one hand and Iranian on the other, and likewise Chinese. This latter resemblance has already been dealt with by P. Reinecke², in the article already quoted, and by S. Reinach in the Revue Archéologique³. The former takes for granted that the northern barbarians were only passive, receptive. This may be true in a sense. But inasmuch as they received from all directions it is possible that they transmitted something to the Chinese, whether it was derived from the west or from the Altai miners to the north.

As to the affinities of these latter it is hard to give any opinion. It would be natural to refer them to the Uralo-Altaic tribes and argue that there is much in common between their civilisation and that of the tribes of that race all across from Finland, central Russia and Perm to the Altai, and that to this day most of those regions are peopled by that race where it has not been encroached upon by intrusive Turks. But Radloff is rather inclined to see in them the ancestors of what he calls the Jenisei tribes, who speak a language quite distinct from Uralo-Altaic and Turkish, and who have been mostly assimilated by one or other of the great tribes about them, yet still in some cases have preserved a hereditary skill in metal-working, for instance the Kuznetsy or Smith Tartars, who talk a Turkish tongue but belong to the older race. The Uralo-Altaic peoples never reached so high a state of civilisation. Moreover we know that the Tu-küe in the VITH century A.D. had long since held a metal-working race under subjection. This employment of alien craftsmen is characteristic of the nomads. For the T'u-küe there worked Chinese, for Chingiz Khan's successors Chinese, Persian, even German miners and armourers and a French jeweller'; for Timur were set up the most perfect productions of purely Persian architecture.

¹ Axel Heikel, "Antiquités de la Sibérie Occidentale" in *Mémoires de la Société Finno-Ougrienne*, No. vi. Helsingfors, 1894.

² Zt. f. Ethnolog. XXIX. 1897, p. 140 sq.

 ³ XXXVIII (1901), p. 27 sqq. La Représentation du Galop dans l'art ancien et moderne.
 4 Rockhill, Rubruck, pp. 137, 177.

Besides the few objects which have been recovered from tombs excavated by a competent archaeologist, there is a whole class of antiquities nearly all of gold, some set with stones, whose provenance is vaguely given as Siberia. Spitsyn refers them more particularly to the basins of the Ishim, the Irtysh and the upper Obj. They came to the Hermitage from the collection of the Academy of Sciences of St Petersburg, and they represent the first attempt at an Archaeological Museum, surviving from the Kunstkammer of Peter the Great. They were saved because the attention of his government was at last called to the great spoils collected by the bugrovshchiki, or mound-diggers, who went out in large parties and systematically robbed the ancient graves, which must have been astonishingly rich in gold. Nowadays no one has hit on such a rich grave still unrifled so as to describe its disposition. Radloff, in an appendix to his "Siberian Antiquities," gives extracts from the works of early European travellers in Siberia who tell of the work of spoliation.

The collection includes collars, frontlets, figures of birds, animals and men, buckles and plates of various shapes, some with loops behind for straps. The commonest forms are oblong and a kind of a shape which is made to suit the favourite subject of an attack by a carnivore on a pasturing animal very well. Plates of bronze, but exactly similar in shape and design, have been found still nailed symmetrically on to coffins, but they seem too solid for mere funeral furniture and had probably served some purpose in the life of their owner, most likely they had some part in the adornment of his horse or were nailed on to coffers in which he kept his goods. Some idea of date was furnished by their being found with coins of the Han dynasty which circulated from B.C. 118 to A.D. 5812. Witsen, to whom some specimens now lost found their way, figures them in company with coins of the Roman emperors, e.g. Gordian, and there is no reason against their belonging together: only his plates give a most miscellaneous lot of things, and we cannot be sure which was found with which. In accordance with these data M. Hoernes' thinks that the Siberian Iron Age came in with the Christian Era, but the South Russian analogies point to a much earlier time.

These Siberian gold objects have never been satisfactorily published; Dr Kieseritzky, the late curator, who referred them to the Massagetae, promised an illustrated Catalogue of all the Scythian and Siberian Antiquities: meanwhile the best pictures of them, some of which I have reproduced below (pp. 272—280), where I treat their style in detail, are in KTR.

¹ Witsen, Noord en Oost Tartarye, 3rd ed. Amsterdam, 1785; Messerschmidt, MSS. of Acad. Sc. St Pet.; P. J. von Strahlenberg, Description of Siberia and Great Tartary, London, 1736, p. 364; J. Bell of Antermony, Travels from St Petersburgh to various parts of Asia, Edinburgh, 1866, p. 154; Archaeologia, 11. p. 272, pl. XIV.—XVIII., "Some account of some Tartarian Antiquities in a letter from P. Demidoff, dated Sept. 17, 1764," pl. XIV. gives a prince buried with wife and horse quite in Scythic style, pl. XV. the eagle figured on p. 273. Pallas also treats of them and figures the commoner types, Voyages dans plusieurs Provinces de l'Empire

de Russie, Paris, l'an II. 8vo, Vol. v. p. 13, pl. 40; Vol. vI. p. 287, pl. 98. A. A. Spitsyn, TRAS. Russo-Slav. Section VIII. i. (1906), p. 227, reprints Witsen and Messerschmidt's accounts, and also inventories of such objects sent to the Tsar in 1716 and still to be recognised

and still to be recognised.

³ Excavations of J. D. Talko-Hryncewicz on R. Dzhida in the Transbaikal District, as sumarised by A. A. Spitsyn, TRAS. XII. (1901) p. 277.

³ Natur- und Urgeschichte des Menschen, Wien,

^{1909,} II p. 304. ⁴ pp. 3/9-400, ff. 332-365; cf. also Ch. de Linas, Origines de l'Orfèvrerie Cloisonnée.

Oxus Treasure.

From the southern borders of Siberia, where the steppe marches with Iran, comes a collection of objects in the British Museum. It claims to be one hoard discovered in 1877 near the middle Oxus either at Kabadian or between it and Khulm'. It includes a few pieces in style similar to the Siberian Plates, some objects whose artistic affinities are not yet cleared up, several examples of Persian jewelry, and some Greek work including coins. It is most unfortunate that this find was not made within reach of any trustworthy authority. We cannot even be sure that all the objects really belong to the same cache. They found their adventurous way down to India into the hands of ingenious native dealers, who added to their number by forgeries, and by duplicating real antiques in more precious materials. One thing is clear, that of the vast number of objects and coins purporting to be part of the treasure no specimen which belongs to a known art and can be dated approximately is later than about 200 B.C.: there are no Parthian coins and none of Eucratides, though they are common in those parts; the latest coin belongs to Euthydemus, whereas some of the things go back at least to the vth century B.C. The barbaric pieces recall the undoubted Iranian ones closely, and it is almost inconceivable that if they were imitations of Sassanian work and belonged to the 1vth century A.D., chance and the caprice of dealers should have associated just these and no others with this definable find.

Mr Dalton's identification of the purely Persian style of the griffins and other objects that he published in his preliminary article was afterwards triumphantly vindicated by Mr J. de Morgan's excavations at Susa. There, in a tomb proved by coins to belong to the early 1vth century B.C., were found armlets and other jewels precisely similar to some from the Oxus, save that their preservation is incomparably better. They are adorned with inlays of light and dark blue and red?.

For a catalogue of the treasure the reader is referred to Mr Dalton's work. Its chief glory, the pair of griffin armlets (No. 116), of exactly the same style as the collar from Siberia (p. 272, ff. 188, 189) and the best example of the kind of model which inspired later Siberian plates, has no Scythic character and so no place here. The sheath (No. 22) has already been discussed (p. 70, v. inf. pp. 263, 270). It is 10.9 in. = 27.6 cm. long.

The gold plaque (No. 48) with a figure of a man probably a Persian in a costume resembling the Scythian is very valuable as illustrating the latter, but its purpose is not quite evident and in spite of its clearness it lacks artistic style. The ring (No. 111), on the other hand, has very definite Siberian analogies in the manner in which the animal is bent round, and in the hollows left for precious inlays.

He and the Trustees of the British Museum have kindly allowed me to make use of the blocks of Nos. 23 and 111.

¹ O. M. Dalton, The Treasure of the Oxus, London, 1905 (cf. also Archaeologia, LVIII. (1902), p. 237, "On some points in the History of Inlaid Jewellery"), gives a full account of it with an illuminating discussion and excellent plates, quite super-seding General Cunningham's in JRAS. Bengal, L. (1881) p. 151, LII. (1883) pp. 64, 258, from which are taken KTR.'s drawings and some of mine prepared before the publication of Mr Dalton's book.

² inf. p. 271, f. 187, J. de Morgan, Délégation en Perse du Ministère de l'Instruction Publique, 1897— 1902, p. 93 sqq. and Mémoires T. VIII. pp. 29-58, pl. IV. V.; E. Pottier, Gazette des Beaux Arts, 1902, p. 17, "Les Fouilles de Suse."

³ v. coloured plate XVI. in Archaeologia, LVIII.



Fig. 173. Gold plate from sword sheath. Oxus Treasure. Dalton, no. 22. $\frac{1}{2}$.



FIG. 174. Gold plaque from Oxus Treasure. Dalton, no. 48. 1. v. p. 58.





FIG. 175. Gold ring. Oxus Treasure, no. 111. 1.

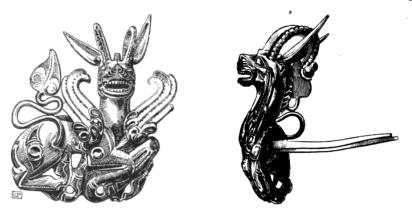


FIG. 176. Gold griffin (from Tiara?), front and side views. Oxus Treasure, no. 23. 1.

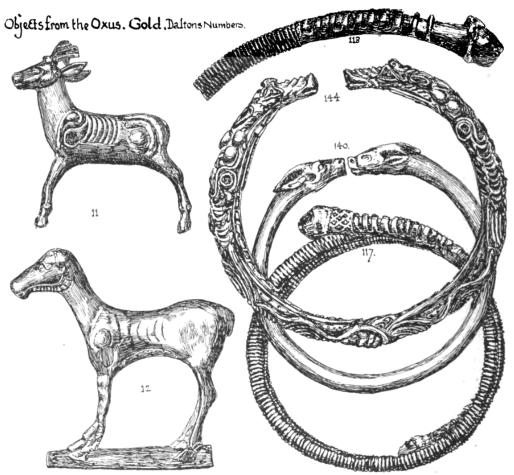


FIG. 177. Nos. 11, 12, 140, $\frac{1}{1}$; No. 117, $\frac{2}{3}$; Nos. 118, 144, slightly enlarged.

The same may be said of the griffin ornament (No. 23), though it is nearer to its Iranian originals. The armlet (No. 144) is again more barbaric. The beasts upon it are broken-down griffins with intertwined tails. Other armlets (Nos. 117 and 118) are, on the other hand, purely Persian. No. 140 has less definite style. It is singularly like those brought as tribute on Persepolitan sculptures (p. 59, f. 12). The two figures of deer (Nos. 11 and 12) are very like such figures from Siberia (inf. p. 272, f. 190). They are given to shew the muscle lines in an early stage before they had become exaggerated. Whatever doubt may be cast on the genuineness¹ of some of the Oxus treasure these pieces appear to me certain.

Anánjino, and Perm.

Besides the Altai region and western Siberia, finds of objects of the Scytho-Siberian type are made in the Urals and in the forest region to the west of them. Evidently there was intercourse but no regular domination, such as is suggested by the finds in Little Russia. The best example of a mixed Finno-Scythic culture (it may be premature to name it so, but all likelihood points to such a name being near the mark) is the cemetery of Anánjino, on the river Tojma near Elábuga, on the lower Kama². Anánjino belongs to the transition from bronze to iron: there are bronze axes and pick-axes, spear and arrow-heads, and iron daggers of Siberian type (f. 179) and some beast style ornaments recalling Siberian forms, for instance a twisted up beast (f. 180) whose analogues come from the Crimea (f. 181) and from Siberia (p. 274, f. 194). On the other hand some things recall the remains found further to the north about Perm and everything is rudely made. The costume on an incised tomb-stone is not unlike the Scythic (f. 178).

Further north and west the Siberian dagger penetrated among purely Finnish people such as dwelt in the upper basin of the Kama. This is the country in which are found the wonderful pieces of Graeco-Roman, Byzantine and Sassanian silver plate kept chiefly in the Hermitage and the Stroganov palace at St Petersburg. In this country are found bronze and copper "idols" which have some connection with things Scythic; they seem rather poor relations than imitations, but the outspread eagle with a human face upon its breast, the emblem of the God of heaven, certainly recalls a favourite Scythic motive, and the many-headed deer is, as it were, an exaggeration of the type best exemplified by that from Axjutintsy.

¹ M. Dieulafoy, *Journal des Savants* 1906, p. 302, condemns it, but cf. M. Rosenberg, *Monatshefte d. Kunstmissenschalltichen Literatur*. 1906, p. 229.

Kunstwissenschastlichen Literatur, 1906, p. 229.

² Baron J. de Baye, "La Nécropole d'Ananino,"

Mém. de la Société Nationale des Antiquaires de

France, Série VI. T. VI. 1897, pp. 1—26, and KTR.

p. 434 sqq.; also J. Aspelin, Antiquités du

Nord Finno-Ougrien, p. 105 sqq., Helsingfors,
1877. A. M. Tallgren promises a full account of
"Die Bronzeeit im ostlichen u. nördlichen Russland" in Finska Foruminnessöreningens Tidskrift
Vol. XXVI. Helsingfors, 1910.

³ Cf. "Antiquities of Chud folk on the Kama from the Collection of the Teploukhovs," published

by A. A. Spitsyn in Mat. XXVI. St P. 1902. Pl. XXVII. 8, a characteristic Scythic iron dagger; pl. XXXV. copper axe-heads. A. Likhachov in Trans. of VIth Russian Archaeological Congress (Odessa, 1886), I. p. 135.

⁽Odessa, 1886), I. p. 135.

4 KTR. pp. 408 sqq.; Arch. Anz. 1908, pp. 150—162, ff. 1—6. Mr J. I. Smirnóv of the Hermitage has made a complete publication of them in his Argenterie Orientale, St P. 1909.

⁶ J. Abercromby, Finns, Vol. I. p. 118 sqq., p. 240; A. A. Spitsyn, TRAS. Russo-Slav. Section, Vol. VIII. (1906), pp. 29–145, ff. 1–496, has given a full repertory of such Shaman objects.



Fig. 178.



FIG. 179.



Fig. 180. Bronze beast from Ananjino. KTR. p. 435, f. 390.

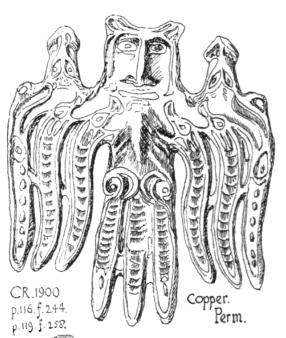




Fig 181. ½

FIG. 182. 3 and 2.

La Tène.

On its western border the Scytho-Siberian style met with the Hallstatt and later with the La Tène styles. There seems to have been no interaction, but Scythic objects spread into Hungary¹, perhaps in consequence of such movements as that of the lazyges Metanastae (v. p. 121). The La Tène objects found in Russia (hitherto very few) were brought by western invaders, whether German Bastarnae or real Kelts (v. pp. 125, 127). Their incursions were, as we have seen, less important than those from the east. So far we can speak of the La Tène culture as having been established in Poland and even in Galicia, but as merely sporadic in Podolia and on the lower Dnepr, where the Protogenes inscription is the only witness to the westerners' raids'. It must have been in S. Russia that the Scythic beaststyle, applied to types developed from La Tène, produced the style of the Migration period. Here too perhaps had arisen the fibula with its foot bent back that gave rise to the cross-bow shape. Salin supposes that different modifications of this form, e.g. the radiated and square-headed types, mark different streams of culture diverging from the Crimea as a centre, but he thinks that the Germans' beast-style was their own and not indebted to the Scythic's.

Caucasus.

Resemblances have been seen between the metal work of the Caucasus' and that of the Scytho-Siberian style, but they do not amount to much: they might be expected when we consider that Assyrian influence reached the Caucasus on one side and dominated Iran on the other, and also that some tribes of the northern plains undoubtedly passed through the mountains (v. supra p. 42). Most curious is a perfectly Minusinsk knife from Kortsa, a little west of Koban. At a comparatively late period the Caucasians seem to have borrowed the characteristic looped mirrors, and along the northern foot-hills finds of Scythic type are constant. Moreover Gothic jewels have

1 J. Hampel, "Skythische Denkmäler aus Un-1. Hampel, "Skytnische Denkhalter aus Ungarn, Bd IV. (1895); P. Reinecke, "Die skythischen Alterthümer im mittleren Europa," Zt. f. Ethnologie XXVIII. (1896), v. supr. pp. 65, 68, 78.

2 A. A. Spitsyn in BCA. XII. p. 78, "Monuments of La Tène Civilisation in Russia," speaks of La

Tène finds in Poland and also at Gromovka and Great Ternava in Podolia, Zalêsje near Kiev, and

Vodjanoe near Nicopol.

3 Bernhard Salin, Die Altgermanische Thierornamentik, üb. v. J. Mestorf, Stockholm u. Berlin, 1904, p. 12 sqq.; R. Hausman, "Ueber neuere Fibelforschung," Trans. Od. Soc. XXI. p. 255, quoting O. Almgren: cf. fibulae inf. Ch. XI. f. 284, XVII. f. 333; Sm. III. pl. i. and Baron J. de Baye, Industrial Arts of the Anglo-Saxons, p. 38 and

4 For the earlier Archaeology of the Caucasus see Materials touching the Archaeology of the Caucasus, published by the Moscow Archaeological

Society, Part I with several short articles, and esp. Part VIII, Moscow, 1900, which contains a very full summary and many excellent plates, edited by Tuli summary and many excenent plates, edited to Countess P. S. Uvarov; E. Chantre, Recherches Anthropologiques dans le Caucase, Paris, 1885-7; J. de Morgan, Mission Scientifique au Caucase, Paris, 1889; J. Mourier, L'Art au Caucase, Odessa, 1883; R. Virchow, Das Gräberfeld des Kobans, Berlin, 1884; "Ueber die Culturgeschichtliche Stellung des Kaukasus," Abhandl. d. kön. pr. Akader Wiss. zu Berlin, 1805. 1.; G. Radde. Museum der Wiss. zu Berlin, 1895, I.; G. Radde, Museum Caucasicum, Bd v, bearbeitet von Gräfin P. S. Uwarow, in Russian and German, Tiflis, 1902; see also KTR. p. 437 sqq. There is a good representative collection of objects from Koban and elsewhere in the Museum at St Germain-en-Laye, near Paris.

⁶ Countess P. S. Uvarov, Mat. Arch. Cauc. VIII. p. 180 and pl. LXXVI.

6 op. cit. pl. LIV., Dergavs.

occurred in a great find at Rutkha¹ on the Urukh well in the mountains, and typical fibulae and bird's head ornaments have been found in several localities. Sometimes types characteristic of the mountains are found sporadically in the plains, for instance the singularly elegant axes of the Koban^a recall one or two specimens from Perm, that backwater to which all kinds of flotsam drifteds: But it seems as if the Caucasus threw no light on the early population of the northern steppes. The objects of the Koban cemetery have their analogues in central Europe, whatever the connection may have been'; later sites shew products of Roman craftsmanship, but on the whole archaeology is even more at fault in the mountains than in the plains.

1 op. cit. pl. CI. CII.

² op. cit. pl. III.—VIII.; KTR. p. 462, f. 407. ³ Aspelin, p. 60, f. 237; J. Abercromby, Finns,

Vol. I. p. 240, regards these as evidence of the early existence of the Permian trade route.

4 H. Schmidt, Zt. f. Ethn. XXXVI. (1904), p. 620.





FIG. 182 bis. Ivory Ibex and Boar from Ephesus, v. p. 263. Constantinople Museum.

D. G. Hogarth, Excavations at Ephesus, London, 1908. Ch. 1X. "The Ivory Statuettes," by Sir Cecil Smith. Ibex, p. 163, No. 23, pl. XXI. 5, XXIII. 2. Boar, p. 164, No. 26, pl. XXVI. 3; cf. p. 177, f. 33, bronze ibex and boar from the Troad. My best thanks are due to the Trustees of the British Museum and to Sir Cecil Smith for leave to reproduce these objects, and to Mr Dalton who called them

to my notice. The pictures came too late to go into their right place in the text.

The resemblance of these animals to the Scythic is exceedingly close. In the Ibex the attitude of the feet and the way they are conventionalised is just that of the Scythic deer. The manner in which its head is turned round is a Mycenaean survival; Sir Cecil Smith compares the ibex on the Enkomi casket in the British Museum, but in the Scythic area it can be paralleled by a plaque from the Kuban (p. 279, f. 205), and a cheek-piece and a plaque from Zhabotin (p. 188, f. 80, Nos. 540, 539). On this last a mare with her foal bears upon her shoulder a star applied in the same way as the circles upon the ibex. Both star and circles may go back to a swirl of hair such as is just visible upon the shoulders of the lions flanking the tip of the Melgunov sheath (p. 171, f. 65, cf. a rosette in the same position, Layard, Monuments of Nineveh, I. 31). More probably it is due to the practice of adaptive the plaintenance of flavor with very transfer and practice. to the practice of adorning the plain surfaces of figures with various decorative motives, a practice common to the Ionian (Sir C. Smith, p. 156) and Stythic styles, and pushed to its furthest in the Kul Oba deer and Vettersfelde fish and in the Siberian plates (e.g. p. 273, f. 197). The boar is also very like Scythic work especially about the feet: it has some resemblance to a gold boar from Alexandropol (KTR. p. 244, f. 223=ASH. VI. 3). Gold work like some of that from Ephesus, particularly the repoussé plates (Hogarth op. cit. Pl. VIII. IX.), more especially a roundel with a griffin (VIII. 3) in which Hogarth sees a Central European look, may have served as a model for similar work in Scythia.

CHAPTER X.

SCYTHIC ART AND GREEK ART IN THE SERVICE OF SCYTHIANS.

Scythic art has a character of its own. When we have made all allowance for foreign influence there remains something unlike anything else, the basis of the whole development, that to which imported elements had to conform or else quickly degenerate beyond recognition. This native element is at its purest in the art of the basin of the upper Jenisei and its centre may be reckoned Minusinsk. Until the true date and affinities of Minusinsk art have been made clear the Scythic problem cannot be said to be solved.

Unhappily we are not yet in a position to frame even plausible theories on the subject. In the last chapter I have given the few data available: but they do not take us far. The objects there figured give a fairly representative collection of the different classes of Minusinsk work: sufficient to judge of its character, sufficient to let the reader see for himself affinities with the products of other lands. Mr Seebohm's Siberia in Asia is, I believe, the only English book in which any of them have been figured. The few specimens he brought home are in the British Museum. Otherwise these things are inaccessible to British archaeologists.

Almost all the types are peculiar. The knife seems to be a local development, at least we seem able to trace it through many stages: but this type was not spread over the Scythic area, and in China only, as has been said, seems to have its counterpart. The dagger does not seem to have attained its development at once. Its less perfect form also appears in China; but its fully developed type spread westwards as far as Hungary. The mirrors also spread to China and to S. Russia: likewise the cauldrons. The arrow-heads appear nearly all to be of the four faceted1 as against the later triangular shape. The axe heads seem a final improvement of the socketed celt, having a peculiar second loop (p. 243, f. 151). This also spread over the Scythic area (p. 190); later would be that with one loop in the middle of the broad side (p. 243, p. 245, f. 158). Finally we have the beautifully shaped head with a transverse hole for the haft (III. 5 on p. 251). All these types suggest that bronze casting was developed longer and further than in most countries: that an out-of-the-way district was left undisturbed to let its bronze craft evolve independently. Something similar seems true of Hungary.

But the ornament has the chief claim to interest and is the greatest puzzle. It is not quite clear which way it is going; whether animal forms are being degraded into easy curves or curves have suddenly been seen to have animal possibilities. To me this latter seems the case. The

¹ More or less similar to Nos. 203 to 18 on p. 190, f. 82, but without side spurs.

сн.

loops of a mirror (p. 244, f. 152) or the ring of a knife handle (ff. 150, 165) suggested, perhaps at first owing to the chances of casting, the shape of an animal with its head down, or of two heads neck to neck; the loop of an axe-head (f. 151) joined to another small ring looked like a beak and eye and was improved to bring out the resemblance. So the ends of pommel and guard struck the imagination as being ready to make beak-heads, and beak-heads became the regular decoration of the dagger (ff. 169-171). The wrong end of an axe became a beak-head or an argali schematically rendered (ff. 152, 150). Animals so derived from loops and knobs and handles remained simple and geometrical in their lines. The eyes remain ring-like; the beaks are always curved right round, the bodies lumpy and the limbs thick. Sometimes pure line was sufficient, zigzags in the knife handles (ff. 153, 155), even spirals as on the ornament and mirror from Batteni (f. 152). The ornament from Bijsk (ib.) shews a favourite pattern for incrusted jewelry. When this eye for chance resemblances was turned on to representations of animals it saw them also in antlers or tails in which it was ready to fancy a likeness to other creatures' heads; but this development seems subsequent to the introduction of iron and the conquest of the metal workers by nomads who exploited their skill. It is the distinguishing mark of the Scythic style.

There does not seem to me to be anything in the earlier Minusinsk art which need have come in from outside, except perhaps the socketed celt'. It was the nomads who brought beasts and monsters from sw. Asia, and perhaps from the coasts of the Euxine. M. Salomon Reinach has seen resemblances between Siberian art and certain points of Mycenaean. If there be such they are in the later Minusinsk, which is identical with Scythic. But this had received Mediterranean elements into itself; archaic Greek art as practised in Ionia had penetrated to it at an early period, and before that there may have been other influences from the Aegean region. These affected Scythic art from the first and would account for any resemblances. So that there may be truth in M. Reinach's fascinating theory that the representation of a flying gallop in which the animal sticks his legs out in all directions at once, spread from Mycenaean art to some lost Central Asian art and hence through Siberia as far as China, to return to the West and English sporting prints with the *Chinoiseries* of the xviiith century?.

Influence of Western Asia and Ionia.

Whatever the ultimate origin of the Minusinsk style, whatever influences it may have felt in spite of its remoteness, upon the coming of the iron people it became the foundation of their taste and was spread by them over all the steppes. Thereby it emerged from its isolation and

¹ Sophus Müller, Urgeschichte Europas, p. 161,

brings the style up from S. Russia.

2 S. Reinach, "La Représentation du Galop dans l'art ancien et moderne," Revue Archéologique,

XXXVI. (1900), pp. 216 and 440; XXXVII. p. 244; XXXVIII. (1901), pp. 27 (Scythic style) and 224; XXXIII. p. 1, and BCH. 1897, pp. 5—15, "Un Monument oublié de l'art Mycénéen."

x] Minusinsk Style. Assyrian, Iranian and Ionian Arts 263

became exposed to the influences of the arts of south-western Asia. But it is beyond us to disentangle these influences, because we are not yet able to clear up the mutual relations of these arts, Assyrian, perhaps N. Syrian and finally Iranian on the one hand, on the other Mycenaean (in survivals) and early Greek. If, for instance, we take the Ephesus' and the Nimrud' ivories referred to the viiith and ixth centuries, Sir Cecil Smith' is inclined to make both groups Greek: Mr Hogarth finds the former Greek under Assyrian influence exerted through the N. Syrians, the latter N. Syrian. Seeing that very similar ivories come from Sparta', perhaps rather too much has been made of the Orientalism in the Ionian finds, though the very material suggests the East: that Greeks should have had a hand in the Nimrud ivories seems thereby less probable. The difference touches the Scythic question nearly, inasmuch as one or two of the Ephesus beasts (v. p. 260) are in a style almost identical with the Scythic. With the Ephesus Lions may be classed the lion-head from Vasilkov (p. 193, f. 85). But it is precisely in the beasts that Assyrian influence appears most plausible at Ephesus; yet the features which recall the Scythic do not seem to extend to the basreliefs of N. Syria' and Assyria, though the small figures in the round are not so very unlike. It seems therefore justifiable to distinguish two quasi-independent strains that met in Scythic art, the Assyrian to which the Iranian succeeded and the Ionian which never quite gave way to the Attic.

The earliest objects from Scythia that we can date, the Melgunov and Kelermes sheaths, referred to the viith and vith centuries B.C., are under overwhelming Assyrian influence, yet their general forms are Scythic and the crouching deer upon the side projection is Ionian: in the sheath from the Don (p. 270, f. 186) the two strains are blended. In the Oxus sheath the Scythic element is weaker. Pieces of Iranian work are few in European Scythia, the hilt of the Chertomlyk sword is the best example*; further east we can name the better specimens from the Oxus and one piece of Siberian treasure (p. 272, ff. 188, 189), but its imitation is universal in the Asiatic steppes and is carried by tribal movements into Europe. In the viith and vith centuries B.C. Greek and Oriental art were still closely allied, and even later certain classes of objects seem to stand between the two, especially engraved cylinders and gems such as those from S. Russia illustrated in Ch. XI. § 13, f. 298, and others like them from western Asia, and certain silver work (v. p. 265).

In the Greek influence we must distinguish two periods, that of the Ionian archaic art and that of the fully developed Attic art afterwards practised throughout the Greek world. There is something almost barbaric about the Ionian art that makes us barbarians think of our own mediaeval

1 Hogarth, Excavations at Ephesus, pp. 155-

^{185,} pl. XXI.—XXVII.

² Cecil Smith, ib. p. 182, pl. XXVIII. XXIX.;
Perrot and Chipiez, Chaldaea, &c. I. pp. 212, 301, 363, ff. 80, 129, 130; II. pp. 119-122, ff. 56-59; Dalton, Archaeologia, LVIII. pp. 246, 247.

³ l.c. p. 184. Ionia and the East, Oxford, 1909, p. 59. ⁵ BSA. XII. pp. 320—328, XIII. pp. 70—107.

⁶ Exc. at Eph. XXI. 1, 3, XXIII. 3, XXV. 12.
⁷ e.g. the deer at Sindzherli, K. Humann u. O. Puchstein, Reisen in Kl. Asien, XLIV. 1, XLV. 3. ⁸ e.g. many with the Nimrud Ivories in the British Museum, cf. Perrot and Chipiez, op. cit.

II. p. 315, f. 193.

9 Yet cf. for the hilt Perrot and Chipiez, op. cit. I. p. 334, two calves' heads addorsed from Nineveh.

10 Furtwängler, Antike Gemmen, III. p. 116 sqq.

work, a decorative quaintness which does not demand for its appreciation so high a level of aesthetic development as that required by the perfect art of the vth century. Hence its easy adoption by neighbouring Asiatic nations and the employment of Greek craftsmen by the Achaemenians. Hence too its spreading among the Scythians. Prepared by the Minusinsk culture and perhaps by some contact with survivals of Mycenaean art, the Scythians made the Ionian archaic style as employed for the representation of beasts their own, and continued to practise it with much spirit, but too little restraint, incorporating into it Minusinsk feeling. The elements that they thus joined were not hopelessly incongruous, but combined to make a whole, with a distinct character of its own and no small decorative merit. Moreover, even when the Pontic Greeks had left it behind, the Scyths having made it their own kept to it fairly consistently: when their models were not beyond them they were capable of assimilating them. So this descendant of Ionian archaic art lived on until after the Christian era and spread from Siberia to Hungary.

The story of Aristeas and the account of the trade route running northeast from the Euxine shews us that there was every reason why products of Ionian art of the viith and vith centuries B.C. should quickly penetrate into the interior of northern Asia, and their style become the property of all the nomad tribes. Hence we can readily admit the possibility that objects of this date found as far north as Minusinsk should recall details of ivory carvings found at Ephesus, and that the Scythic crouching deer itself should be originally Greek. Accordingly in the older period it is very hard, strange as it may appear, to distinguish between Greek and Scythic.

Herodotus (IV. 79) bears witness to a Scyth's use of Greek style by mentioning the griffins and sphinxes in the palace of Scyles in Olbia; we may picture them as like the griffins from Olympia'.

Archaic Greek Objects in Scythia.

Specimens of this archaic Greek art which penetrated to the Scythians and called forth their imitation are not infrequent. They have with them only the Assyrian work at Kelermes and Melgunov's Barrow, in cases such as Vettersfelde and the Seven Brothers they make up the greater part of the find, though there are already some later things. Mostly the older pieces are few compared to the products of the later art. Their interest for the moment being the effect they exercised upon the native style we may leave aside such as produced no imitations; such are the Greek pots, technically as well as artistically inimitable (Ch. xi. § 7), and some of their bronzes (Ch. xi. § 10, ff. 278—281). Furtwängler long ago pointed out that the Vettersfelde objects (v. p. 237) were of pure Greek work, and shewed that the details, especially the Triton on the fish, the friezes of animals rather quietly attacking and flying, the convention by which quadrupeds seen from the side have only two legs, the use made of the graver to put in surface details, the eyes on the sheath so suggestive of Augenschalen, and

¹ Olympia IV. pl. XLIX., cf. Hogarth, Excav. at Ephesus, pl. XVI. 4; Delphes, V. pl. X.

the whole spirit of the three chief pieces, belong to Ionian work of the late archaic period. The earring is put down by Hadaczek to an earlier period and is purely Ionian: the dagger sheath just like the one from Tomakovka (p. 158 below) is perhaps later, but likewise entirely Greek. pieces, as shewn by the shape of the sheath and perhaps by the use of small animals to decorate the big fish, mark the interference of the Scythian The Kul Oba deer (p. 203) has only this last point to make it Scythic, its general character is just like the Ephesus ibex down to the details of the feet, which might strike one as barbarous. The Kostromskaja deer (p. 226) represents a decided conventionalising of the same type, and in spite of the grace of line and skill of execution must be native work. The Seven Brothers also yielded much archaic Greek work. Almost all the gold plates on p. 208 are of this class; such an array of animals would delight a Scythian, and the Asiatic element in Ionian allowed monstrous forms which were not less welcome. On two of the triangular plates, that with the eagle and hare (a well-known design, e.g. the coins of Agrigentum) and that with a lion and ibex, there is only just a touch of archaism (p. 211, f. 112 and p. 209, f. 108); whereas upon a third (p. 213, II. 6) we can see an archaic model through barbarous execution, and upon another (p. 211, f. 111) though the execution is skilful the incongruous monster suggests barbarism. The breastplate with a gorgoneion (p. 213, II. 1) offers a type which is very popular on the small plates of gold: the Scythians could attain to such a grotesque. The great silver rhyton (p. 211, f. 110) with a winged ibex from the same tomb, like the lesser golden dog1 rhyton and those from Kul Oba (p. 197), is a fine specimen of Graeco-Asiatic art, having decided Ionian affinities both in its main lines and in its decoration: compare that from Erzingan in Armenia figured by The figure of a sow engraved in rock crystal (p. 208, No. 33) is typically Ionian, as Furtwängler points out's. Altogether the Seven Brothers give us Greek things just as they best suited Scythic taste without going out of their way to meet it. The gold saucer (p. 204, f. 99) from Kul Oba appears to me Greek work almost as early, but calculated for a Scythian purchaser, witness the bearded heads. The general scheme of rays or petals recalls the dish from the tomb at Nymphaeum which agrees in so much with the VII Brothers (p. 213, III. 5), or a dish found with the Erzingan rhyton. The manner in which the rays are filled is ingenious: archaic Greek art shared with the barbarians a natural abhorrence of void: but the various elements are rather incongruous, and the leopard-heads upside down shew a disregard of the fitness of things which would hardly have pleased a Greek. Kul Oba had one or two early gold plates for sewing on to clothes, but these are hardly archaic: just these patterns occur also at Alexandropol

¹ KTR. p. 318 f. 286 = CR. 1877, I. 7. ² Oxus Treasure, No. 178. He calls it Perso-Greek. Much the same technique is exemplified by the great vessel of uncertain provenance with two handles, each a winged ibex or antelope, one of which is in the Berlin Antiquarium (Furtwängler, Arch. Anz. 1892, p. 115), the other in the Louvre (W. Froehner, La Collection Tysskiewicz, Munich, 1892, pl. 111.). This is referred by Furtwängler to

the Vth century, but a slightly inferior ibex (No. 10 in the Oxus Treasure) of the same style has a palmette on its lower attachment which Dalton puts in the IVth century. All these have the musclemarkings brought out in gold (v. p. 268).

³ Vettersfelde, p. 23 (v. inf. p. 270).

⁴ Dalton, Oxus Treasure, No. 180; cf. Les Arts, I. (1902), p. 18; cf. No. 18 of the treasure itself.

and the Seven Brothers; probably the dies were in use a long time. In general the Medusa-head plates were best imitated: others produced the poor result we see at Volkovtsy (p. 184). The Ryzhanovka earrings (p. 178) shaped like dumpy griffins with curled-up wings are called by Hadaczek' masterpieces of Graeco-Scythic work of the IIIrd century B.C.: they look to me earlier, and certainly go back to archaic originals. Sphinxes from Alexandropol (p. 158, xxx. 24) and from Dêev Barrow near Sêragozy' have similar wings. In the case of one or two types we have not found actual Greek originals in the Scythian district, though they are familiar enough elsewhere: such is the winged goddess from Alexandropol (p. 154, f. 40) and the animal on the mirror from Romny (p. 178, f. 73). The ivory lion heads from near Smêla' are, at any rate that shewn on p. 193, good examples of the orientalising Greek style. The mounting of the mirror from Prussy also looks quite Ionian, being identical with a mirror-mount from Olbia, though the beak-heads are very Scythic and perhaps not original'.

Scythic Beast-style.

When the Scythians set to work for themselves one way of attaining decorative effect was the reducing of organic curves to abstract ones as we see on such mirrors as that from Romny or on the Kostromskaja deer. Another was to imitate the practice of the makers of the Vettersfelde fish and the Kul Oba deer and cover the beasts with secondary ornament or turn extremities into heads of other creatures. This we see on the Axjutintsy deer (p. 181) on which the curve of the belly has afforded space for a bird's eye and beak, and the antlers end in griffins' heads. The extreme case is seen in the gold plate of another reindeer from Verkhne-udinsk (p. 275, f. 197) which is all over small animals fitted in to cover every space. And the addition of incongruous extremities, especially claws (which give such a good excuse for stone settings), has rendered it impossible for us to define the species of some of the Siberian beasts. However for sheer incongruity nothing can surpass the gryllus from the Seven Brothers (p. 211).

In the adorning of men's things, especially in horse trappings, this older naturalised style remained supreme. It seems as if the Greeks recognised its suitability, for in what was apparently a purely Greek grave at Nymphaeum there were many psalia quite similar to those from the Scythic Seven Brothers (v. p. 214). So too the hilts of the characteristic Scythic swords and knives are almost all worked in this style, and again are sometimes the only objects of the kind in the tomb, or else they are Assyrian, as in Melgunov's Barrow and Kelermes, or Iranian as at Chertomlyk, never as it seems Greek.

Besides the absolutely bizarre and apparently meaningless combinations which seem merely due to the desire for decorative detail or the impulse to complete the chance resemblance which an antler or tail of one animal may bear to the head of another, we also find the well-defined monsters which go back to the symbolic creations of western Asia, sphinxes, griffins

¹ Der Ohrschmuck der Griechen und Etrusker, Wien, 1903, p. 41, f. 16; Sm. 11. p. 143, xvi. 4.

BCA. XIX. p. 170, pl. xiii., v. p. 170.
 Frontispieces of Sm. 1. and 11.

p. 191, No. 351, cf. CR. 1905, p. 34, f. 32.
 e.g. Mirza Kekuvatskij, near Kerch, ABC.
 Reinach, p. 21, pl. XXVII. 9.

and such like. The Greeks were prepared to supply these, already themselves sharing them with the East, and they became the stock decoration of objects destined for the Scythian market, and were in high honour among the colonists themselves who put the griffin on the coins of Panticapaeum.

Besides going to the extreme of making an animal more decorative by adding to him the attributes of another, the Scyths were inclined to insist on surface details and use them to make a pleasing pattern. There is this element in one of the little silver gilt vessels from Kul Oba1, and on the dagger sheath from the same grave inscribed ΠΟΡΝΑΧΟ²; in spite of the Greek model, still archaic though already too far advanced in style for satisfactory imitation, the native taste comes out in the way that the line which indicates musculature on Ninevite sculptures is represented by a volute or





FIGS. 183, 184. Gold plates. Ak-Mechet. KTR. pp. 284, 285, ff. 249, 250.

S curve. We see the same thing on a gem from the Crimea. This tendency when carried further leads to designs like the plates from Karagodeuashkh (p. 219, f. 123) or Berestnjagi'; without looking into them one is not sure that animals are really intended, so far have they degenerated into mere decorative arrangements of curves. The deer from Ak-Mechet is tending this way, but on the other plate vegetable forms are taking the likeness of a snail. A more interesting example of this conventionalising of animal forms is shewn by certain horse trappings from Krasnokutsk⁸. Here the design most clearly foreshadows the northern European beast-style. Very similar are designs from Siberia⁶.

¹ ABC. XXXIV. 1 on p. 198. ² ABC. XXVI. 2 on p. 203. ³ Ch. XI. § 13, f. 298, Furtwängler, Ant. Gemmen, XI. 26.

⁴ Sm. III. xviii. 11, xix. 2 = Khanenko, II. 3, LX. XII. 1—6.

x. on p. 191; so Volkovtsy, p. 185, f. 78. ⁵ pp. 167, 168, ff. 56, 57 and ASH. XXIII. 4 on p. 158. ⁶ Radloff, Aus Sibirien, II. p. 128, v. on p. 251,

On statuettes in the Oxus treasure we have the muscle markings emphasized decoratively though without entire disregard of natural modelling (p. 256, Nos. 11 and 12). But when the beast came to be felt as merely part of the pattern, there was no reason why this line should not be brought out in colour as well as in form, and on the ibex (No. 10, v. p. 265, n. 2) gilt is used, and finally it became the custom among the Asiatic nomads to adorn the flanks of creatures with blue stone or coral inlaid, and the round or pearshaped forms suggested by the prominence of the muscle were combined into one motive of a dot between two triangles, which has suggested to some writers an eye, to others a beak-head doubled for symmetry 1. All these modifications and departures from naturalism were due to horror of empty space, which also led to the creatures being twisted about in every way so as exactly to fill the space available.

The species represented in Scythic art are many. The lions and other felidae preying upon deer are after Asiatic or Greek models. Their species are hard to define, because the artists did not care to be accurate as to spots and manes and tasselled tails, such details they delighted to add even to lionesses. Chief of the true Scythic beasts is the reindeer who is constantly occurring, mostly in a crouching position with his legs bent under his bodyhe figures upon quiver covers, breastplates, shields, standards, gold plates for sewing on to clothes, mirrors, bridle cheek-pieces and other trappings, and upon the one Scythic gem, and in Siberia upon a wood-carved saucer (v. p. 251) and another wooden fragment. So too a bird of prey is a favourite

subject, sometimes with wings deployed to form a gold plaque for sewing on to clothes, more often a mere head and beak, upon standards, horses' cheek-pieces, no more than beak and eye at Nymphaeum (p. 215, f. 116), ending the horns of the deer or the tail of a monster, the hilt of a sword or the handle of a mirror, second but to the deer. He even occurs double-headed (doubleheaded eagles seem natural in Russia) on a bronze plaque.



Besides these the ibex is common, especially on Siberian things, and mostly in the round, as an adornment to edges, as it were upon the sky line, e.g. on the Chertomlyk cauldron (p. 162, f. 50) and the Novocherkassk crown (p. 233, f. 138) side by side with the deer. Characteristic are the bell-like objects with an ibex perched upon them (p. 249, ff. 166, 167); such a one serves also as a mirror handle (p. 193). The horse is rare except on his own cheek-pieces, which so often end with a hoof at one end and an admirably conventionalised horse's head at the other (p. 189). The hare is not uncommon (p. 186). In the Siberian plaques the fauna is yet more varied, for we get many different beasts of prey, serpents, eagles, oxen and the vak, as well as horses, dogs and boars, and even human figures.

There is in the productions of this adopted style a unity in the design and execution, an adaptation of the ornament to the form of the object to be

countries where Scythic and Siberian art prevailed. ⁸ p. 178, cf. BSA. XIII. p. 85, f. 21, Spartan ivory.

¹ Cf. Dalton in Archaeologia, LVIII. p. 237; Oxus cloisonnée, Vol. II. p. 158, on the Fauna of the Treasure, p. 30 sq.
² Cf. Ch. de Linas, Origines de l'orfèvrerie

decorated, which makes quite rude things satisfactory. It shews that the style had become the natural expression of the people who had developed the characteristic forms of the objects themselves. It is far otherwise with the occasional attempts to apply the fully developed Greek style to these same objects. The things begin to lose their original shape, and at the same time violence is done to the Greek design which is being borrowed from elsewhere and applied to a new field; hence the shortcomings we shall have to notice in some of the more ambitious pieces of Greek work from S. Russia. When an actual Greek form suited their purposes the Scythians used it readily enough, as in the case of various pieces of armour and some decorations for horses (e.g. at Tsymbalka and Chmyreva barrows, pp. 166—169, ff. 54, 58—61). This was always the case with women's belongings which served for pure decoration, so that their forms were not conditioned by necessities of use. Hence we find plenty of later Greek work at the women's sides, e.g. at Kul Oba and Ryzhanovka. But at the latter we see the miserable attempts of the natives to imitate the higher style, corruptio optimi pessima. Other examples of the same failure are the second frontlet from Tsymbalka (f. 55), and that from Volkovtsy (p. 185), and the plate from Berestnjagi (p. 191, Khan. LXX. x.) in which one can just trace the elegant 1vth century griffins.

Especially in representations of the human form did the Scythians fail. They did not do so badly with masks because these derive from the gorgoneion which they received in the archaic phase (v. p. 208), but the Ionian decorative art was not specially fond of the human figure, and the attempts to imitate later models are grotesque without being spirited. Such are plates from Geremes' and Kurdzhips'. The badness of the figures on the Karagodeuashkh headdress (p. 218) may be due to the treatment the plate has received. Most of the thin gold figures in the Oxus treasure, though they are not exactly Scythic, are equally bad's, but one is fairly good (p. 255,

f. 174).

As with the early Turks so with the Scyths, gold is the favourite material. We know of hardly anything but their gold work. A certain number of similar objects in bronze, a few silver cups and horns, their iron sword blades, some bits of carved wood from Siberia, and the interesting carved bone work from the Kiev and Kuban districts, make up all that is left in any other material. We can well believe that their tents were spread with carpets of their own make, and their garments may have had other decoration more suitable than the innumerable gold plates: but of this we have no remains. In the western district, where pottery had been successfully practised before the Scythic period, some of their earthenware was pleasing in shape, with a dark ground and incised patterns filled in with white (p. 82, ff. 24, 25), but native work could not compete with Greek pottery; for a nomad with close communication with the Ural and the Altai gold was the special medium for artistic work, accessible, portable and instantly effective.

¹ KTR. p. 253, f. 232 = ASH. XXII. 9, and p. 33. ² p. 223 = CR. 1895, p. 62, f. 140. ³ Dalton, Nos. 49 to 100.

 ⁴ pp. 188, 189, ff. 80, 81, and p. 223.
 ⁵ Sm. I. p. 73, No. xxvi. A woollen garment embroidered in red, blue and yellow.

Scythic Style in Northern Asia.

In the borders of European Russia the place of discovery makes very little difference as to style. There may be a rather greater proportion of pure Greek things about the Bosporus, but as pure a Greek style occurs round Kiev or on the Dnêpr bend, and some objects even at Kul Oba are absolutely Scythic. As against the Asiatic steppes there is a difference: there the Iranian influence is much stronger, and objects made in Iran, so rare in the West, can be quoted from the Oxus treasure and the Siberian finds: whereas actual Greek work has not been found beyond the Oxus, though we have seen that Ionian art made its influence felt far to the North East.

Still the first art, to which we can point and say that we have actual examples which found their way into the possession of the Scyths and therefore could attract them, was the Assyrian. This contact must have taken place in Asia, and the Melgunov and Kelermes finds must have travelled westwards, the Oxus sheath, which may be Iranian, eastwards. The mixture of Assyrian and Scythic motives is much more intimate upon the sheath from the Don. As regards form it does not seem to have possessed the characteristic projection by the hilt, but agrees with the other early specimens in its shortness and broadness. Upon it are three beasts; a boar, whose muscles and ear are rendered in a way which will soon let them degenerate into merely decorative curls—his mane has not the gap seen upon the Vettersfelde hog—is pursued by a lion. The lion's mane is represented as though it were a separate cape put on; his tail looks like a string of vertebrae ending in a beak-head (on Melgunov's sheath we have cape-like manes and scorpion tails, pp. 171, 172, ff. 65, 67); his muscles have the S curve and similar mannerisms. The last beast is a lion, just like the other, save that his hindquarters are twisted round so as to bring the feet against the top margin—a most Siberian attitude—and M. Reinach would say most Mycenaean¹. In this sheath, which cannot be later than the vith century B.C. because of its closeness to Assyrian models,



FIG. 186. My thanks are due to Dr A. Conze for leave to copy this.

we see the Scythic style already sufficiently independent to introduce considerable modifications into the model provided by a higher art, modifications dictated by a spirit we can trace for another eight centuries.

The Iranian art was a more permanent neighbour than the Assyrian, just so much higher than the Scythic as to encourage imitation. In Europe its direct contributions are limited to the Chertomlyk hilt² and a seal cylinder

¹ Cf. inf. p. 276, f. 198=KTR. p. 391, f. 351; duction in Pridik, Melgunov, pl. V. I, and compare Reinach, Rev. Arch. xxxvIII. p. 39.

² p. 163, f. 51, but see the photographic repro
No. 24.

(p. 193, f. 85) found at Kholodnyj Jar near Smêla¹; but to the eastwards Iran is supreme. We can see what part it played by merely looking at the pictures

of the Oxus treasure. Here, discovered on the borders between Iran and the steppes, we have an ensemble of objects which includes, on the one hand, the most considerable, till de Morgan's find at Susa, almost the only collection of ancient Persian goldwork known: on the other, barbarous imitations of the Persian style strongly coloured by the Scythic character, shading off into the regular Scytho-Siberian work: the Greek things are as it were intrusive, isolated: other objects are unfamiliar in style, and cannot be referred to any known school, though there is no reason to doubt their genuineness. A comparison of these objects from Susa with Nos. 117 and 118 of the Oxus treasure shews their identity in general composition and even in style, allowing for the rough treatment suffered by the latter. Everything in the Oxus treasure has lost its stones. It almost looks as if the things had been prepared for melting down. The mutilated necklet



Fig. 187 from J. de Morgan's preliminary

publication (Paris, 1902), better in Ministère de l'Instruction publique, Délégation en Perse, Mémoires, T. VIII. (1905), p. 44, ff. 70, 71, pl. IV.; p. 48, f. 76, pl. v.

from Kul Oba (p. 197) with enamel in place of stone inlay shews the same scheme as treated by a Greek; the original model was Assyrian.

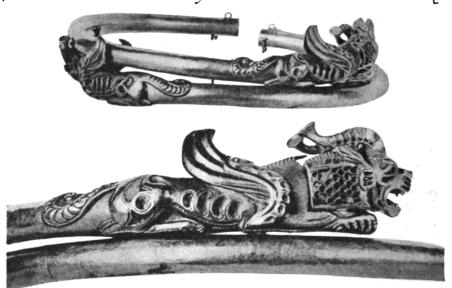
Siberian Goldwork.

Of purely Persian style, identical with that of the great Oxus griffinbracelet which Dalton puts in the vth century B.C., is one piece from Siberia acquired in the same way as the generality of Siberian plates (v. supra, p. 253). It is hardly needed to prove that Persian originals penetrated far northwards, we could deduce that from the imitations, but its presence makes quite certain. It is a necklet in the shape of an overlapping ring, 19 cm. across, made up of two hollow gold tubes, each of which ends in a winged lion. The picture shews the hollows prepared to receive precious stones, turquoise or lazulite; they mark the lines of the face, the ridges of the horns, the shaggy mane, to which is applied a scale ornament which is so effective in any cloisonné technique, the shorter feathers of the wings, the curves of the ribs and, specially typical, the muscles of the hindquarters. Here already the intelligible lines of such a figure as the Oxus deer have given rise to a roundel representing the projection of the hip bone, flanked by hollow triangles that only distantly recall muscle lines (v. above, p. 268). Perhaps the true origin of this pattern is in the purely inconsequent decoration

Perrot and Chipiez, Sardinia, etc., II. p. 243, f. 370, N. Syrian bracelet.

³ ff. 188, 189, cf. Oxus Treasure, p. 28, f. 18.

Perhaps it is rash to call this or Nos. 8 and 30 below on p. 208 specifically Iranian.
 Layard, Mon. of Nineveh, XXIV. LI. 11; cf.



FIGS. 188 (1/2), 189 (1/2). Golden necklet from Siberia. Hermitage. Pridik, Melgunov, V. 2 a, c.



FIG. 190. Gold figure of a reindeer from Siberia. Hermitage. KTR. p. 381, f. 335.



FIG. 191. Ends of a torque in gold from Siberia. Hermitage. KTR. p. 383, f. 339.

of the Zhabotin horse or the Ephesus ibex: but the deer here figured (f. 190) has markings which might well develope into such as adorn the lion.

Another torque is not far removed from the Persian style of the first, but in spite of their spirit the lions that form its ends are distinctly inferior to it, especially in fineness of execution (f. 191).

A similar falling off is noticeable in a great figure of an eagle¹ with a kind of reptile head devouring an ibex. Especially coarse are the *cloisons* on the neck, breast and upper wings. They were once filled with red stones. The tail feathers seem to have been supplemented by real feathers slipped in. The ibex has the ; ornament. His hindquarters are slewed round in a way that can be better seen on other examples (e.g. p. 276, f. 198).



Fig. 192. Gold Plate from Siberia, probably a crest. Hermitage. From an Electrotype in S. Kensington Museum.

Of unusual form is a buckle (p. 274, f. 193), of which the pierced work distinctly recalls the late Roman pierced work figured by Riegl², and a buckle from Chersonese³. This, with the Novocherkassk treasure and the coins of Gordian and the Younger Han, confirm the belief that this style lasted well on into the time of the Roman empire.

¹ First figured in *Archaeologia*, II. pl. XV., also Dalton, ib. LVIII. p. 255, f. 19. Î have to thank him and the Society of Antiquaries for an electrotype of his block. *KTR*. p. 379, ff. 332, 333; De Linas,

Origines, 11. p. 196.

² Die Spätrömische Kunstindustrie nach den Funden in Oesterreich-Ungarn, pl. XII.

³ Ch. XVII. f. 333 = CR. 1894, p. 74, f. 107.

Another curious form is a strap ornament formed of a lioness, bent right round until she has almost lost the shape of a beast. Yet exactly the same pattern in bronze and with less complete conventionalising comes from Sympheropol, and another example of still ruder workmanship from Ananjino (p. 258, ff. 180, 181), shewing how even the less important Scythic types spread just beyond the borders of the steppes.



FIG. 193. Gold buckle from Siberia. Hermitage. KTR. p. 385, f. 342. $\frac{2}{3}$.



FIG. 194. Gold beast from Siberia. Hermitage. KTR. p. 398, f. 362.

It has been remarked (p. 253) that the typical plates of this style are either in a kind of oblong frame or of a m shape. As a specimen of the former we have a combat between a boar (bear?) and a great serpent (f. 195). The boar has claws, but all animals in this style have claws, they give such a good excuse for inlaying. In this case there are comparatively few stones. The next (f. 196) is more typical; upon it a griffin and another monster, as it seems a carnivore with horns ending in beak-heads, attack a tiger whose stripes give excellent excuse for inlays.

Of the m shape a simple instance is a figure of a deer with antlers ending in beak-heads, a tail ending in the same and with the fore part of its body covered by a whole bird, and its hinder parts decorated with an entirely inconsequent head. Some sort of small carnivore is attacking it in front. Attention has already been called to the analogies offered by this to the Kul Oba and Axjutintsy deer. This particular example is interesting because its provenance is known; it was brought from Verkhne-udinsk A specimen much like it found its way to China and is figured in Kin-shih-so as a coin with the type of a hind suckling her fawn.

¹ p. 251, f. 172, cf. S. Reinach, "Représentation du galop," Rev. Archéol. 1900—1901, P. Reinecke, XXIX. (1897) p. 161; Odobesco, Petrossa, p. 512.

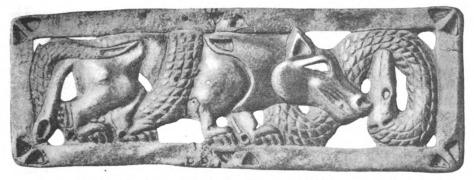


FIG. 195. Gold plate from Siberia. Hermitage. KTR. p. 386, f. 344.



FIG. 196. Gold plate from Siberia. Hermitage. KTR. p. 387, f. 345.



F1G. 197. Gold plate from Verkhne-udinsk. Hermitage. KTR. p. 389, f. 348.

In the combat of griffin and horse we have a good instance of the favourite mannerism, by which creatures' hindquarters are decorated with a pattern of a circle between two triangles, and of another by which an animal is represented as having twisted its hindquarters right round in the



Fig. 198. Gold plate from Siberia. Hermitage. KTR. p. 391, f. 351.



FIG. 199. Gold plate with coloured inlay from Siberia. Hermitage. KTR. p. 393, f. 354.

agony of combat. The ibex in the grasp of the eagle above exhibits both features. The griffin's wings are becoming rudimentary. Next we have an eagle and another creature attacking a yak whose presence shews that these plates must have originated in the higher parts of Asia.

Very decorative is another version of the combat between boar and serpent. The fellow to this was brought to Holland by Witsen, but is now lost.



FIG. 200. Gold plate with coloured inlay from Siberia. Hermitage. KTR. p. 394, f. 357.

Interesting for its subject is the following plaque (f. 201)—a boar hunt—a perfect illustration to Herodotus (IV. 22, V. p. 107) and his account of the Iyrcae. We have the man ambushed in the tree with his horse waiting quietly below him and the dog in the corner, and then later we see him pursuing his quarry at full gallop.

In the last (f. 202) we have a representation of the people for whom these were made and of their horses. They are not much like representations of Scyths. They had real saddles with hanging straps that might serve for stirrups. The bow-case is still much the same; the figure that may well be a woman wears a tall cap, like the Karagodeuashkh queen (p. 218, f. 120) or the Chinese pictures of Tu-huo-lo (v. p. 110, n. 2).

There is a small statuette (ff. 203, 204) of a mounted horseman of this race, but the only clear point about his dress is the heart-shaped panel on his back, shewn also on the boar hunt.

The style of these Siberian plates with coloured stones does not penetrate far into Europe. On the Kuban it occurs most generally on circular plates or bosses with an animal twisted round upon itself. On a larger scale we

¹ Figured in his *Noord en Oost Tartarye*, Amsterdam, 3rd ed. 1785, pp. 748 sqq., and copied by Radloff, *Siberian Antiquities*, Vol. 1. App. p. 130.

² Kurdzhips, v. p. 223, f. 126; Zubov's Barrows,

p. 230, f. 132; Kazanskaja, *CR*. 1901, p. 71, f. 137; Ladozhskaja, *CR*. 1902, p. 77, f. 161, and Ust-Labinskaja, ib. p. 78, f. 164, p. 82, f. 177; v. p. 232, nn. 4, 6.

see it on a plate of which the exact provenance is not given. It shews us a most typical Siberian griffin with rather ill-developed wings. To judge from the photograph the gold lacks the extravagant solidity of the Siberian work. The griffin is no longer upon his native gold mountains (f. 205).

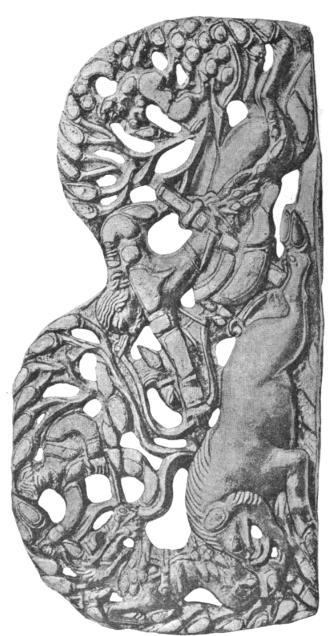


FIG. 201. Gold plate inlaid with blue and pink: eyes in black. KTR. p. 396, f. 359.



FIG. 202. Gold plate from Siberia. Hermitage. KTR. p. 397, f. 360.



FIGS. 203, 204. *Mat.* xv.=*Sib. Ant.* vol. I. p. 123, Appendix. Gold. Siberian Horseman. *KTR*. p. 383, f. 338.



FIG. 205. Gold plate from the Kuban district. KTR. p. 486, f. 440.

Finally we have the Novocherkassk treasure (v. p. 233). In this the great crown shews a strange mixture of elements. The animals along the upper edge and the birds between the great stones on the hoop are typically Siberian, even recalling early Minusinsk productions; the idea of the whole is perhaps Asiatic, the beading along each edge and the pendants below are debased Greek, and in the middle of the front is a Graeco-Roman bust of an empress, shewing that the whole must be of about the IIIrd century A.D. On the collar, shallow box (p. 234, ff. 139, 140) and bracelet we have the Siberian style, but it has not the expression of ill-regulated vigour that even the rudest of the former plates presented. The animals are rectilinear, and the settings for stones are nearly all of the simple pear shape. In spite of the complications there is no more the same play of fancy. The bottle (f. 141) is interesting because it also offers some indication of date, for a bottle of just the same shape and of similar technique, though not covered with animals, was found in the tomb of the queen with the gold mask. In it was also found a dish' inscribed with the name of Rhescuporis, and it is ascribed to the Rhescuporis who reigned from A.D. 212—229. This would agree with the date assigned to the Novocherkassk treasure, but it does not go for much as there were so many kings called Rhescuporis (v. Chapter XIX.). Among the Novocherkassk objects some (e.g. p. 235, f. 143) presented the usual technique of the well-known jewelry inlaid with garnets that has been called Gothic, before which the Siberian style gave place. This is the final stage of its development under predominant Iranian influence.

The remarkable art of which the examples have been discussed in the preceding pages evidently flourished in the Asiatic steppes. One specimen (p. 251), generally similar to the plate from Verkhne-udinsk, found its way to China and is figured in the Chinese archaeological work Kin-shih-so. There is some resemblance in character between Siberian and Chinese art; it may be due to some community of race, or perhaps one may have influenced the other; the connection may go back even to Minusinsk days. Or again, the resemblance may be due to both having borrowed from Iranian or some other central Asian art: in each case we seem to have an intrusion of monsters ultimately derived from Mesopotamia, the great breeding ground of monsters. And so they finally penetrated to the borders of China, just as the Aramaic scripts twice traversed the same stretch in the cases of the Turkish and Uigur alphabets. The early Chinese bronzes and jade earrings, figured in such books as Po-ku-tu-lu and Kin-shih-so, are very much conventionalised; we have the face T'ao-t'ieh, or else the patterns are for the most part merely geometrical. The Dragon, Tiger, and Phoenix only come in under the Han Dynasty and decidedly recall Persian types, e.g. the Simurg's, but the way in which their bodies are twisted about is rather in the Siberian spirit.

The westward movement of the central Asian tribes, described above. brought the users of this style into Europe, but here there were neither the gold nor the precious stones, nor perhaps the skill to make the things. For we

¹ KTR. p. 492, f. 444. ² Bottle and Dish, ABC. XXIV. 25, XXX. 11, see Ch. XII. ff. 325, 326.

³ Hirth, F., Ueber fremde Einflüsse in der

Chinesischen Kunst, p. 10. 4 e.g. Jade roundels figured 20 pp. from the end of Huang Hsiao-fêng's Kao-ku-t'u.

must suppose that the nomads employed some other race, either their original helots from Minusinsk or, very possibly, Tadzhiks, men of Iranian blood from the borders of Iran and Turan, if one may still speak of Turan. Through all their history the nomads have been ready to borrow or rather seize their neighbours' tastes. In Europe the objects are decidedly decadent both in material, size and style. For the evolution and decay of the art we have to allow many centuries. The description of the panther from Kelermes (p. 222) sounds as if it was either an early specimen or a direct model, and that is referred to the vith century B.C. The Novocherkassk treasure belongs to the HIrd century A.D. The names of the peoples in the steppes change many times during these eight centuries: it is clear that we cannot connect the style with any single historical name. Kieseritzky thought that the objects belonged to the Massagetae, of whom Herodotus says that they wear gold upon their belts and headdresses (1. 215): others have mentioned the gold ornaments of the Aorsi', and the gold ornaments of the Turks as seen by Zemarchus². The latter are of course too late in date, but both the former attributions may be right. A nomad has no other use for gold but to make of it personal adornments. The Scyths of Herodotus presumably used the Scythic style which shews traces of Ionian archaic art; in time they or the earlier Sarmatians imported much made in the fully developed or Hellenistic styles: but towards the end of the 11nd century B.C. the intercourse of coast and hinterland became less friendly, and the new tribes which arrived—lazyges or Alans—brought with them their own things and had less to do with the Greeks. These Alans came into close touch with the Teutonic tribes pressing down from the north-west: and the latter acquired from them a taste for gold and jewels, which they could not have developed in their own country, and some new elements of a beast-style. Hence a decided resemblance between the art of the Great Migration period and the Scytho-Siberian. Riegl (op. cit.) maintained that this art of the western barbarians was really an art of the Roman provinces developed according to a new "colouristic" principle. By this he meant that taste had shifted away from an appreciation of the delicate gradations of light and shade, the subtle modelling and the absolute disregard of the background which mark Classical art with its essentially plastic basis, towards strong contrasts either of light and shade (obtained by deep undercutting in plastic work) or of opposed colours, and towards a care for the shape of the background as well as for the subject or pattern, so that when the evolution is complete one cannot say which is background and which pattern. Modern decoration has shewn a very similar tendency. This is true of Roman art and to a much greater degree, especially as regards colour, of barbarian art of the period, so that the change of taste in the Graeco-Roman world prepared it to receive the foreign elements that came in from the east and north. But Riegl wanted to make out that the character of the barbarian things was the result of the Roman change of Hence he had to make the Siberian style, in which if anywhere the "colouristic" principle is predominant, late enough to be an effect of a process which began about the Christian era. How he would have done it we cannot

² Menander, Fr. 20 in Müller, FHG. 1y. p. 228.

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tell, for the volume in which he was to have treated of the barbarian arts has

never appeared: and now it never can.

This much seems clear: that the Siberian art as exemplified in the Novocherkassk treasure would naturally lead on to the "Gothic" style, the ornamental style of the barbarians that overran the Roman empire. Specimens of this work are distributed from Stockholm to Spain and from Ireland to the Caucasus, but there seems good reason to suppose that it arose in southern Russia, where alone could be a meeting point for the various influences of which it shews traces. The chief characteristics of the style are great love for beast-forms especially those of birds of prey, whose representations, reduced to a hooky beak and an eye, persist when all the other lines have become purely geometrical, and a way of incrusting the surface of an object with flat plates of stones or pastes, especially garnets or their equivalents, separated by *cloisons* of gold. The beast-style seems to derive from the Scytho-Siberian, the bright stones from the east, probably from Persia: but the mixing of these streams was not effected without Greek help, probably that of the goldsmiths of Panticapaeum who under oriental influence had long moved in the direction of a prodigal use of various coloured stones, especially almandines. That the origin of the style is to be sought in the east is shewn by the regular degradation of form, material and technique as we go westward, until in Anglo-Saxon graves we have stiff rectilinear designs, mere beak-heads, red glass and gilt bronze instead of conventional but spirited animals and garnets or emeralds upon gold.

The beast patterns already foreshadowed by the horse trappings from Krasnokutsk held their own longest as "Island varieties" in Ireland and Scandinavia, where they came to be thought autochthonous and characteristically Keltic or Northern. The way in which the handle of a bell from Llangwynodl Church, Carnarvonshire¹, is treated might be Scythic. It has a head at each attachment just like the mirror from Sajansk and the ornament from Nicolaevskaja on p. 244, whereas the ornament on the same page from Bijsk has a pattern of right angles which is a very favourite one

on the Teutonic cloisonné work2.

Scythic Copies of developed Greek Style.

Thus the Ionian style or an adaptation of it survived in Scythia for many centuries after giving place in its own country and among its own people to the style of the great Attic masters. The Greeks in S. Russia followed the fashions of Hellas, so the productions of the finest period and later of the Hellenistic found their way to the Scythians who evidently admired and valued them. But here was something too high for them to make their own,

¹ J. Romilly Allen, Celtic Art in Pagan and Christian Times, London, 1904, p. 210.

² Ch. de Linas, Origines de l'orfèvrerie cloisonnée, Paris, 1877, 8; A. Odobesco, Le Trésor de Petrossa, Paris, 1889-1900; N. P. Kondakov, Geschichte und Denkmäler des Byzantinischen Emails; Sammlung A. W. Swenigorodski, Frankfurt a/M. 1892 (also in Russian and French); J. Hampel, Der Goldfund von Nagy Szent Miklos,

Budapest, 1885; O. M. Dalton, "On some points in the History of Inlaid Jewellery," Archaeologia, LVIII. (1902), p. 237 (bibliography, p. 239, n. b.); Treasure of the Oxus, London, 1905, p. 24. Finds in S. Russia; E. R. von Stern, "On the question of the origin of the 'Gothic' Style of Jewelry," Trans. Od. Soc. XX. p. 1; D. MacPherson, Kertch, pl. ***—A. A. Spitsyn, BCA. XVII. p. 115; N. I. Répnikov, BCA. XIX. p. 1: Caucasus, supra, p. 260.

and when they tried imitation the result was, as we have observed, hopelessly barbarous and made no approach to style, even the Kul Oba sheath shews

something of this.

Fairly good specimens of the more advanced style in barbarous versions are the quiver-cover from Prussy', the Karagodeuashkh head-piece (p. 218), and many of the small gold plaques, e.g. the griffins from Darievka', others from Ogüz', also perhaps the gold band with dancers, a native interpretation of two of the Neo-Attic types, and the necklace from Ryzhanovka (p. 179,

f. 74), and the plaques from Dört Oba near Sympheropol.

The two horse frontlets from Tsymbalka (p. 166, ff. 54, 55), one of Greek work, the other an imitation of a very similar design, let us gauge the difference precisely. The Volkovtsy frontlet is another such curious perversion of the gorgoneion and two griffins (p. 185, f. 78). But mostly the Scythic interpretations of Greek motives are beyond words barbarous. Sometimes perhaps they were produced, like the indications from coins so common on Bosporan gold wreaths, by laying a slip of gold upon a relief, and so taking an Such very thin leaves are peculiarly liable to crumpling in the earth, and when they are crumpled photographs do them even less than justice, so that they may not have looked as bad as the pictures of them do now. Also such flimsy work may well have been done just for funeral purposes, yet, all allowance made, the later Scythian craftsman made astonishingly bad copies of Greek originals of the free style. Nothing could be worse than some of the gold strips from Chertomlyk, Kul Oba, or Ryzhanovka, and some of the plates for sewing on to clothes, more especially the masks¹³. So too nearly all other things from Volkovtsy (v. p. 183 sqq.) shew a singular miscopying of Greek originals. The wearers just wanted the sparkle of the gold and did not much care about the design. This rudeness makes it particularly difficult to detect forgeries of Graeco-Scythic work. The forger and the ancient barbarian copyist were so much in the same position towards their models that the results are much the same. All such work is infinitely inferior to the barbarous but spirited productions of the old native art, marked by a distinct and constant style, or its adaptation of archaic Greek work.

Greek Work for Scythian Market.

In sharp contrast with the Scythic attempts to copy Greek work come the objects which, be they never so Scythic in shape and purpose, were evidently executed by Greeks on purpose for the Scythian market. Though some of them are disappointing on closer examination, yet they bear witness to the facile skill of Greek craftsmen and the energy of the Greek trader who studied the necessities of his barbarian customer and secured for him what would be a delight to his eyes, and at the same time useful and fitted

Barrow, BCA. XIX. pl. xiii.

p. 203 = ABC. XXVI. 2.

² Khanenko, op. cit. 11. 2, viii. 217.

³ Sm. II. xii. 2, on p. 178. ⁴ CR. 1894, p. 80, ff. 114—124, v. p. 170. ⁵ Sm. II. xvi. 3, Hauser, Nos. 26, 29, from Dêev

⁶ CR. 1892, p. 9, ff. 4 and 5.

⁷ p. 157, f. 44 and KTR. p. 309, ff. 269, 270. ⁸ ABC. 11. 2.

⁹ Sm. 11. xviii. 14.

¹⁰ e.g. Sm. 11. pl. XI. and XXII.; ABC. XXII. etc.

for the necessities of his life. Some of the finer things may well have been presented by the Dynasts of the Bosporus or the governments of other Greek states to important chieftains among the natives, such presents as the tiara of Saitapharnes professed to be; some were probably executed on the spot by craftsmen who had tried their fortune in the service of native chiefs; but the greater part probably found their way through Bosporan middlemen from the workshops of Asia Minor or Panticapaeum to the treasures of Scythian chieftains. The details of such pieces as the Chertomlyk and Kul Oba vases and the Kul Oba necklet, as well as of several minor representations of Scyths, shew that some Greek artists must have been familiar with people and country, and the presence of Greek workmen in the interior of Scythia is evidenced by the existence of such tombs as Ogüz (p. 170, ff. 63, 64) with carefully fitted stones and characteristic Greek clamps. But that objects were exported from Greece itself on purpose for the Scythian market, is shewn by the occurrence far in the interior of the productions of Attic ceramics, and the disproportionate frequency upon them of griffins and such like subjects supposed to be specially suitable.

Chertomlyk Bow-case and Sheath.

The most famous object made by Greek workmen to a Scythic pattern is the gold plaque from Chertomlyk that once covered the king's Gorytus (v. p. 164, f. 53 for the style, ff. 206, 207, for the compositions). Stephani', who first wrote about it, took it to be Attic workmanship and interpreted the scene by the obscure Attic legend of Alope. This opinion was usually accepted, until Furtwängler, in treating of the Vettersfelde find (op. cit. p. 47), pointed out that its true affinities are rather with Ionian work than with Attic, previous critics having been led astray by the evident reminiscence of the Parthenon frieze seen on the left of the lower tier of figures. Furtwängler, and after him F. Hauser³, were unnecessarily hard upon the composition, the first accusing the maker of having merely filled up a given space with perfectly meaningless and unconnected figures from his sketch book; the latter making out that he did not even draw the figures himself, but that both they and the ornamental members were produced from ready made dies. A. N. Schwartz ' quotes Furtwängler and Hauser, and agrees with the latter, and at the same time points to the peculiar squat proportions of the figures, the prudish arrangement of the drapery, and the luxuriance of the ornament, all of which can be matched in later Ionian art, while the reminiscences of Attic compositions remodelled according to Ionian taste remind him of the treatment of Attic themes on the coinage of Cyzicus.

¹ CR. 1864, p. 144 sqq.
2 e.g. Beulé, Fouilles et Découvertes, Paris, 1873,
Vol. II. p. 378, makes all ABC. Attic, so Sir C. F.
Newton, Essays, p. 373 sqq.; cf. O. Rayet, Études,
p. 230 = Gaz, des Beaux Arts, Jan. 1882.

³ Die neo-attischen Relief:, p. 126. 4 Drevnosti (i.e. Trans. of the Moscow Archaeological Society), Moscow, 1894, Vol. xv. Pt 1, pp.

^{17-34, &}quot;On the History of ancient Greek reliefs on

gold objects found in S. Russia."

⁵ Cf. B. Graef, "Die Schamhaftigkeit der Skythen," in *Hermes*, XXXVI. (1901), pp. 86—94. Graef is very hard on the composition and even on the patterns, which he makes out to be very late.

6 He quotes Canon Greenwell, "Coinage of

Cyzicus," Numismatic Chronicle, 1887, p. 1.

More recently Prof. C. Robert¹ has, to some extent, restored the reputation of the artist by proposing a new interpretation of the subject. He suggests that it is the discovery of Achilles among the daughters of Lycomedes in Scyros, only that the scene has been snipped in half so that the figures of seated women ought to come on the right side of the girl rushing to the right. So we have Achilles, with his hair done like a woman's, seizing a dagger and restrained by Diomede, while an elderly nurse holds back Deidamia. This latter, her secret discovered, is rushing towards her mother who sits between her other daughters attended by another maid-servant. Further to the right we have Lycomedes in a chair and by him two other men of Scyros examining arms brought by Ulysses, who has disguised himself as a crutched pedlar. More arms are justifiably used to fill in vacant spaces. The corners of the design are taken up with a scene of teaching a boy to shoot, and with the nurse bearing away Neoptolemus. All this goes back, according to Robert, to a picture of Achilles in Scyros painted by Polygnotus²,

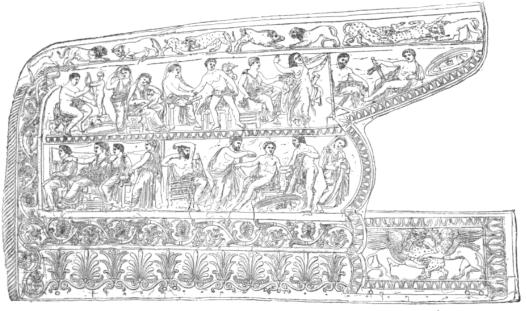


FIG. 206. Mat. XIII. p. 57, f. 35 = CR. 1864, pl. 1V. Chertomlyk bow-case.

and such episodes would be just in the manner of that artist. Hence coincidences with the Gjölbashi Heroum well known to reflect his school. But the craftsman who made the relief was singularly awkward in his manner of adapting the design to the space he had to fill. He did not use ready made dies, traces of their edges would have shewn on the plate, and the ornamental strips narrow towards the left side, so that no arrangement like a bookbinder's roll could be used. But he has cut the composition in half at

¹ Archäol. Anzeiger, 1889, p. 151.

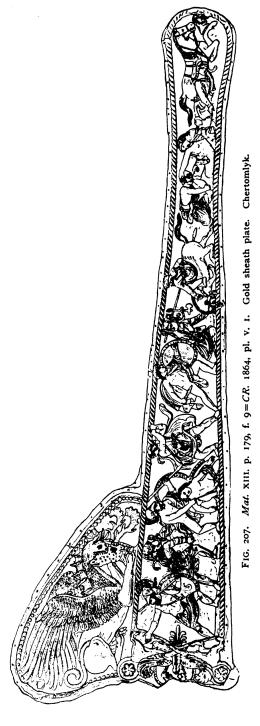
² Pausanias, I. xxii. 6.

a critical point, so that the women are looking at nothing at all; and he was quite at a loss to fill in the right hand acute angle. The best he could do was to repeat the reclining young Scyran from below and put in a perfectly inconsequent elderly man sitting on a camp-stool with a staff against his right shoulder, but no right arm whatsoever. So again the left end of the animal frieze is very clumsily managed; and yet through all the imperfections of the copy the grace of the single figures of the original shines clear.

Robert's interpretation is fully accepted by W. Malmberg¹, who shews also that enough of the Karagodeuashkh cover (pp. 220, 221, ff. 124, 125) is left to make us sure that it was identical in style and similar in disposition to the perfect Chertomlyk specimen. He suggests that it is derived from the Iliu Persis of the same master, but there is not enough left to judge by and certainly Robert's restoration of that picture does not endorse his view.

Malmberg takes the two as a text for a detailed study in the affinities of this whole class of objects and accordingly deals with the Chertomlyk sheath which is of much the same character. He begins by pointing out that the subject of the latter is not, as has been supposed, a combat of Greeks and Scyths, but of Greeks and Persians, and refers it likewise to the school of Polygnotus, to the Marathon painted in the Στοά ποικίλη at Athens by his pupils Micon and Panaenus. Here again the craftsman has not arranged his material with much skill. For instance the

¹ Mat. XIII. Karagodeuashkh, pp. 122 sqq.; cf. also Th. Reinach, "Le goryte de Nicopol et la Tiare d'Olbia," Revne Archéologique, XXIX. 1896, p. 144.



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two first figures on the left are known elsewhere, one at Gjölbashi, the other in the guise of an Amazon on a vase which he figures; but the Greek is calling forward his men, and his attitude has no meaning if there be no men on that side, whereas he pays no attention to the Persian who is about to cut him down, for he does not belong here but to a scene of single combat with an antagonist in a corresponding position. So too the Persian horseman farther along has no lower part to his body, his shoulders are immediately above the saddle. His horse can be paralleled from Gjölbashi. The horse at the end fills the space rather well but the helmet does not come in satisfactorily. The two griffins at the hilt are not very happy, and in the original, which must have been something like the group on the Chertomlyk vase, the griffin upon the characteristic projection could not have been occupied merely with the head of a deer².

In a review of Malmberg's essay S. A. Zhebelëv enters a protest against his tendency to assign everything to Polygnotus and warns us not to attribute everything to Ionia and nothing to Athens. He does not however offer any definite valid reasons against putting these pieces down as Asiatic.

The whole question receives fresh light from the discovery made by General Brandenbourg of an almost exact replica of the Chertomlyk cover in a Scythic grave near Iljintsy (government of Kiev). Kieseritzky says that the only differences are that the quality of the gold is much inferior and that there is different application of dotted work. He maintains that the two objects were made upon the same die, instead of being repoussé freely. This argues that the Scythian trade was important enough for it to be worth a Greek's while to make not merely isolated specimens of objects for specifically Scythian use, but to prepare for producing several replicas of one pattern. It emphasizes the distinction between the first-rate works of art destined for the Scythians, works which may be taken to be presents from Greek rulers, and the mere trade productions exported for barbarians whose critical faculty was not too highly developed. It does not touch the question whether the designer of the die had heaped together absolutely unmeaning figures or spoilt a ready-made composition in adapting it to fill a strange space. Kieseritzky rejects Robert's interpretation and regards the design as disjecta membra of various cycles of representations.

Kul Oba Vase.

Of quite another character is the work on the well-known electrum vase from Kul Oba (p. 200, f. 93). The form of the vessel is apparently Scythic. It can be paralleled by three others from the same tomb, two others from near Kerch⁵, one from Ryzhanovka⁶, and two from Volkovtsy⁷. It may well be developed from such round bottomed pots as are figured

¹ op. cit. p. 188, f. 30 and p. 185, f. 28 = Bau-

meister, p. 2000, f. 2151.

2 Yet cf. CR. 1898, p. 69, f. 117, carnivore and

ram's head on a copper plate from Jenisei.

3 TRAS. Vol. 1x. (1897) p. xlvii.; B. V. Pharmacovskij, "Vase-painting just before the Persian

Wars," ib. X. (1899), p. 114, supports Malmberg.

* Arch. Anz. 1903, p. 83; BCA. III. app. p. 51.

* p. 198, f. 91, ABC. XXXIV. and XXXV.

Sm. 11. xvi. 7.

⁷ Khanenko, II. 2, XXX. 451 and 452 on p. 186.

by Bobrinskoj'. An intermediate stage is furnished by a wide-mouthed silver vessel from Galushchino (p. 186, No. 450), resembling the rest of the silver ones in material, but decorated much in the same way as the clay pots. One scheme of ornament is common to almost the whole class, a simple fluting and a guilloche which may go back to Assyrian models: the more elaborate examples have a frieze with beasts, and this one specimen genre scenes from nomad life. There can be no question but that these were executed by a Greek in the 1vth century, when the tendency to realism had succeeded to the period of ideal art. The artist must have enjoyed pourtraying a subject so full of local colour, and he has taken pleasure in representing every detail. Characteristic of the stage of art is the accuracy with which the expressions of pain, care and effort are rendered on the faces. Of the other vases of the type, one with a beast frieze is of Scythic work as has been seen, the other Kerch examples seem rather Greek, those from Little Russia apparently of native execution. The technique is always the same, repoussé and parcel gilt.

Cheriomlyk Vase.

Not less than the artist of the Kul Oba vase, that of the Chertomlyk (often called Nicopol, pp. 159-161, ff. 46-492) vase must have studied the Scythians at first hand. But in this case there has been no native influence upon either form or design. Only the purpose is Scythic, for there can be little doubt that the vase was meant for kumys. It stands about 2 ft. 4 in. (70 cm.) high with a greatest breadth of about half as much and is in the form of an amphora with a base instead of a point below. In the neck is a fine strainer and there are strainers in the three outlets. Of these the principal in the midst of the main front of the vase is in the form of a horse's head, itself treated realistically but surrounded by a kind of frill taken from the rayed comb (Strahlenkamm) of griffins, flanked by great wings. The side outlets are rather conventional lion-heads. Each outlet was furnished with a plug attached by a chain. This arrangement suggests that the vase was meant for some liquid with scum or dregs, most probably kumys: strainers are common in rich Scythic graves. Below the neck, which is left plain, the shoulders of the vase are decorated by two bands of reliefs. The upper one, slightly repoussé and heightened with gilding, offers on each side a scene of two griffins attacking a stag. The band below this goes continuously round the vase and bears the well-known scene of breaking in a filly, or whatever it may be (v. p. 48); the technique is curious. figures have been separately cast solid, gilded and soldered on to the Lassos and reins were in silver wire now broken away but remaining in the grasp of some figures. It is not necessary to insist on

but for this we must await the Hermitage catalogue. This applies to most of the Scythic antiquities found about that period. Maskell's figure (Russian Art, London, 1884, p. 44) is independent but unsatisfactory, better in Rayet, op. cit. p. 225.

¹ p. 82, f. 25 = BCA. iv. p. 31, f. 3; Sm. ii. vii.

^{17—20.}The pictures of this vase (e.g. KTR. pp. 296—298, ff. 256—258) all go back to the same outline drawings in CR. 1864, pl. 1.—111. and ASH. It would be well if photographs could be reproduced,

the ethnographic importance of this scene, nor on its artistic perfection. Its exactness is shewn by the care with which two different breeds of horses are distinguished. These cast figures are in equally high relief on all sides, but the repoussé work is higher at the front and shades off so that behind forms are only indicated by engraving and gilding. Below the band of Scythians the whole surface of the vase is covered with arabesques made up of palmettes, flowers, tendrils and leaves of acanthus with storks and other birds about the branches. Some have found this a reminiscence of the luxuriant vegetation of the steppe!

The whole work is perhaps the finest extant example of toreutic at the moment of its most consummate mastery, when it was ministering to the suddenly blown luxury of the newly founded Hellenistic kingdoms. An artist of such skill could hardly have been under the necessity of seeking his fortune in the perilous chances of nomad life. Shall we not rather see in it a gift ordered of some Asiatic master by a ruler of the Bosporus or of Olbia, who gave him opportunities for studying the natives, whom he wished to delight with a suitable present? This is no mere botching for commercial purposes such as we have already discussed. This is a masterpiece produced when the very highest art was no longer flourishing, but such decorative work as this was at its very best. Prof. Furtwängler in an obiter dictum' assigns the vase to the end of the vth century, but he gives no grounds and it is hard to think that either figures or ornament can be anything like so early. It corresponds with the naturalistic treatment of barbarians characteristic of the Pergamene school, as in the statues set up by Attalus at Athens, e.g. the motive of the Scyth with one shoulder bared which recalls the Persian at Aix³.

Other ornaments made for Scythians.

We may say something similar of the Kul Oba king's necklet (p. 202, f. 97) that ends in Scythic horsemen. The artist had probably seen Scyths and worked in their country: also in his design he has probably but improved upon a native model. The ordinary ending is a lion's head as with the broken specimen'. This cannot fail to recall the disposition V of the inlaid Persian necklets and bracelets above illustrated (p. 271), and the resemblance is increased by the occurrence of colour, blue enamel in the palmettes, in the Kul Oba example, though enamel is not unknown in Greek work outside South Russia. The queen's necklet with a whole lion and the simple bead ornament also suggests native models4: and similar treatment occurs on the necklet from Karagodeuashkh⁵ with its particularly spirited treatment of a lion and boar. Very like the Kul Oba lion-head necklet is that from the Salgir. Identical design and execution are seen on the whetstone mountings, for instance one from that same tomb', from Kul Obas and others, all no doubt made for Scythian use (v. p. 73).

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¹ Arch. Ans. 1892, p. 115. ² Dr C. Waldstein and Mr A. J. B. Wace confirm me in this view. Mr A. B. Cook compares the patterns on Apulian vases, e.g. Furtwängler u. Reichhold, *Gr. Vasenmalerei*, Ser. II. f. 52, pl. 88—90; so too Riegl, *Stilfragen*, p. 235. For fresh

light on Chertomlyk, esp. the gorytus, v. Addenda.

 ³ ABC. VIII. 3 on p. 197; cf. p. 205, n. 2.
 4 ABC. VIII. 2 on p. 197.

⁶ II. 5, 8, 9 on p. 217. ⁶ CR. 1891, p. 78, f. 58. ⁸ ABC. XXX. 7 on p. 197. 7 l.c. f. 57.

Another ornament which could not very well have been made for any other than barbarian use is the curious three-storied tiara from Beslenêevskaja (p. 58, f. 11); its work is rather mechanical and the use of almandines suggests a late date: but only a Greek could have made it.

A Greek design, which may yet go back to underlying Scythic ideas, is that of the silver pectoral, or whatever it may be, from No. 11 of the VII Brothers (p. 207, f. 105). Above we have the hind with the golden horns, which must have come into Greek mythology from the North—for among deer only the reindeer female has horns—suckling her fawn, below an eagle displayed with gilt wings and tail. This latter is conventionalized in the archaic spirit which recalls the Scythic manner, and the horns are treated much in the same way; but we cannot be sure that it was definitely made for Scythians; the like is true of the rhyta from the same barrows (p. 211, f. 110, p. 210, n. 1, 2), from Kul Oba (p. 197, f. 90, p. 196 h) and from Tanais¹, all archaic in feeling.

The three rhyta from Karagodeuashkh are in the free style. They are not in very good preservation but appear to have been of excellent work. One of them bears figures of barbarian horsemen which would indicate special preparation for its destined owners. Malmberg makes a great point of the particular species of deer represented on one of them, a deer with palmate antlers $(\pi\rho\delta\xi)$ confined, he says, to Asia Minor and unknown to the European Greeks. Hence the artist must have come from Asia. This argument would apply to the Chertomlyk sheath and gorytus.

A curious example of Greek work made on a purely Scythic model is the unique cauldron found by Prof. D. I. Evarnitskij in a barrow called Raskopana Mogila (the dug-out tomb) near Mikhailovo-Apostolovo in the district of Kherson (p. 79, f. 21). It is more regular in shape than any other and has three bands of ornament produced by applying thick wire to the surface of the vessel. The upper band has conventionalized bucrania and roundels, the lower is a simple zigzag, between them runs a row of palmettes. The superior workmanship of the whole proves a Greek artificer. The palmettes and especially the bucrania suggest a comparatively late date. As it weighs more than forty pounds this can hardly have been an article for export. It may have been made in the country under the direction of a Greek adventurer.

As has been already remarked the Greek style influenced horses' gear least of all, but one horse's frontlet of Greek work from Tsymbalka has already been mentioned in connexion with a very similar design of Scythic execution from the same tomb, and it is accompanied by a cheek-piece also apparently Greek'. These are quite elegant, but are far surpassed by the set found in Chmyreva barrow in the same district by the bend of the Dnêpr'. Here we have a curious forehead ornament (purely Scythic examples of the same type were at Alexandropol, Krasnokutsk, Chertomlyk and Ogüz') that has a distinctly eastern look, and one or two pieces are barbarous imitations of Greek originals: but we have round and oval plates embossed

Arch. Anz. 1910, p. 204, f. 5, BCA. XXXV.
 86 sqq.
 p. 219, f. 121; Mat. XIII., Lappo-Danilevskij,
 p. 76, and Malmberg, p. 140.

p. 166, ff. 54, 55 and KTR. p. 270, f. 242.
 v. p. 168; CR. 1898, p. 27 sqq. ff. 27—34.
 p. 158, f. 45=ASH. XIII. 6, 7; ib. vii. 5; XXIII.
 3; XXVIII. 5, 6; BCA. XIX. p. 159, Nos. 9, 10.

and then finished with the burin, large ones representing the head of Hercules in his lion's skin, smaller ones with Medusa and cheek plates both of the common wing shape (as at Tsymbalka and Volkovtsy) and of a special singularly elegant pattern. All are executed in the manner of the best early Hellenistic style. Interesting is the treatment of the gorgoneion. As has been seen, the Scyths had long been accustomed to the archaic round-faced type with the tongue out, and here we have the same type translated into the less naive forms of later art without approaching the refined beauty of the Rondanini type¹. Finally one cannot but think that the great mass of gold embossed plates was consciously intended for the Scythian market: such a large proportion of them bear Scythian scenes (pp. 158, 197) or the monsters connected with Scythia in the popular mind, that it is fair to say that most of them were always destined thither. By these plates alone we could trace Greek art from the late archaic stage, to which belong some of the Medusa-heads' and others' recalling early vth century coin types down to the Hellenistic times. Those found in Scythic graves are of precisely the same style as most of the others and all were probably prepared by the same set of merchants trading with Scythia⁴.

Strips of gold⁵, popular as they were with the natives who largely imitated them (p. 157, f. 44), were also worn as head bands by the Greeks themselves and occur in purely Greek graves both in Kerch and near Olbia (p. 392,

ff. 288, 289). They did not require to be made specially.

A more difficult question is raised by some pieces that have nothing barbaric about them except that they were found in Scythic graves and shew a certain prodigality of gold that hardly agrees with our idea of Greek taste. But this taste for heavy ornaments, were it in its origin barbarous or no, was certainly shared by inhabitants of the Greek coast cities.

The weight of the Kul Oba temple-ornaments with the medallions of Athena does not far surpass those with Nereids carrying the arms of Achilles found in the Taman Bliznitsa, the tomb of a priestess of Demeter: and this lady's calathos and other head-gear were heavier than anything in Kul Oba (pp. 425, 426, ff. 315, 316). Other large ornaments have been found in un-Greek graves at Theodosia (p. 401, f. 294) and in the tomb under the town wall at Chersonese (pp. 397, 422). The Kul Oba Sphinx bracelet in spite of its massiveness seems too elegant to have been made for a barbarian king: much more the Peleus and Thetis bracelet with its reminiscence of archaic art, and perhaps the queen's bracelet of griffins in spite of its subject. The same is true of the more delicate jewelry from Karagodeuashkh and Ryzhanovka. Here a curious example of Greek art work, produced with no thought of Scythians' taste, yet appreciated by them, is afforded by the Panticapaean staters set in rings'. In general the Greek things found in Scythic tombs are just those which were in use among the Greek coast population and so were on the spot to be offered in barter to the natives and to attract their taste. Of such the next chapter treats.

¹ Yet this was not unknown, v. CR. 1892, p. 20, f. 9, Chersonese.

² e.g. ABC. XXI. 17; CR. 1877, III. 9, 10 on

p. 208. 3 ABC. xx. 1, 2, 3, on pp. 158, 197, 208.

⁴ The British Museum has plates from Kul Oba(?), Marshall, Cat. of fewellery (v. p. 386, n. 6), xt. 2104-7, and Ogüz (?), LXIX., LXX. 3073—3080, 3085. 6 e.g. ABC. 11. 3.

⁶ p. 180, cf. Pl. v. 16; Sm. II. xviii. 5, 11.

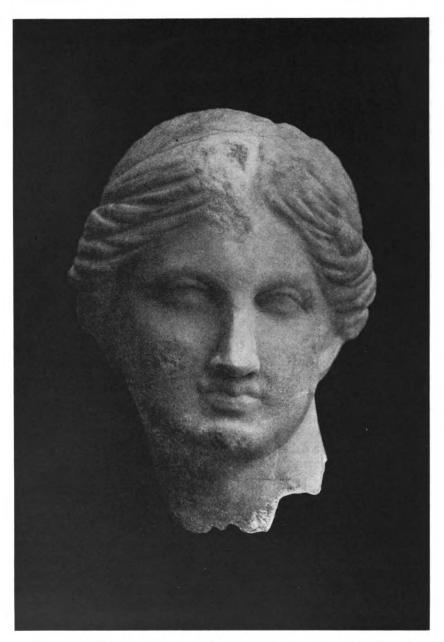


FIG. 208. Hygiea (?). Olbia. †. BCA. XIII. Pl. II. v. p. 297. Nose restored.

CHAPTER XI.

ART IN THE GREEK COLONIES.

§ 1. General Characteristics.

Scythic art has a special interest because it is one of the most important sources of information as to the origin of the nomads of South Russia, and its productions are all that is left us of a great nation: accordingly its remains have been examined in some detail. The specimens of Greek art found in Scythia or in the coast settlements are, on the contrary, but a small part of the total mass of Greek art-work known, this small part being selected from the greater whole by the taste and commercial connexions of the three or four chief colonies. Still, this comparatively small part has yielded what is absolutely an enormous number of works of art, and it will be impossible to treat these as fully as the Scythic objects. It might be thought safe entirely to ignore the finds made in such obscure towns as being unlikely to tell us anything which would not be more satisfactorily attained by investigations at the great centres of Greek art and civilization, but it just happens that certain crafts of the ancient world have left better specimens in this region than in any other. Whereas we shall find hardly any architecture or sculpture worth serious attention, decorative painting in its latest form is represented; almost the only Greek carpentry, inlaying and drawing on wood and almost the only textiles preserved have been saved for us in South Russian graves; the later styles of ceramics can be well studied, and some special developments observed, and terra-cottas without attaining to a high level shew how the Bosporan artists followed at a distance the movements of taste and fashion in the main centres of life. In bronze work also we have artistic specimens of mirrors and mirror cases, horsetrappings and various vessels with relief work dating from the early vth century onwards. But it is in the precious metals that the South Russian discoveries are richest. In silver, besides the peerless Chertomlyk vase, we have vessels of all kinds of shapes and very varied decoration dating from the late archaic to Roman times. In gold work not even Etruscan tombs have furnished such perfect specimens. In their own way the necklets from Kul Oba, from Theodosia and the Great Bliznitsa, the earrings from Theodosia and Chersonese, one or two of the gold wreaths, the calathi from the Bliznitsa, the Nereid temple-ornaments from the same tomb, and those with Athena Parthenos and the Sphinx bracelets from Kul Oba, have never been surpassed as triumphs of the goldsmith's art.

It is possible to guess at some of the causes that determined the character of the finds, at least that of those made about the Cimmerian Bosporus. Here we had Greeks living under strong barbarian influence, their archons were of barbarian extraction, and ruled as kings over neighbouring barbarous

tribes. The Milesians themselves were largely crossed with Asiatic blood: the barbarians both of Asia and of Scythia had very strong beliefs in the necessity of providing the dead with a permanent dwelling and with all that they could want in the next world. Hence the Ionian colonists in Scythia were especially likely to raise solid memorials to their dead and fill the well-built sepulchral chambers with precious things, more likely than the home Greeks, whose notions of the next world were more exposed to scepticism. The Bosporans, too, were rich with the riches of a commercial class and had a taste for ornaments of gold upon their apparel. Moreover, their land produced little fine stone (hence the wooden sarcophagi), but easily worked coarse stone (hence the vaults that often kept all these things in good preservation). Further, we must not forget that the most precious things of all come from frankly barbarian graves. The combination of circumstances is best paralleled by the state of Etruria, where the wealthy lucumones had a taste for Greek art, and fitted up their everlasting abodes with beautiful things of Greek, or imitation Greek, style. But the time of Etruscan wealth, though in all it lasted longer, came to an end sooner than Bosporan and Scythian prosperity, and the one region yields products of stiff archaic art, the other, mostly objects which shew the most delicate and fanciful, if rather overblown, art of the times succeeding Alexander. In this the resemblance is rather to Grecian Egypt, from which many parallels will be quoted.

§ 2. Architecture.

It is difficult completely to account for the lack of monumental art. No doubt it existed to some extent, but nothing like what there must have been in most Asiatic Greek towns. Had there been many great buildings adorned with sculpture they could not have perished entirely, troublous though the history of Panticapaeum and Olbia may have been. general results have in this respect been disappointing throughout the whole coast, but the new systematic excavations at Olbia give us hope. The Hellenistic house and Prytaneum (?) (pp. 455—457) do present considerable interest, and there is a good Hellenistic anta capital1: also one or two fragments, e.g. a marble cyma², date from quite early times. The city walls too are reported to be of impressive solidity, but city walls are rather engineering than architecture. So too the great tombs, whether ancient as the Royal Barrow' and others near Kerch, or of the Roman period like those at Olbia (inf. pp. 417-420, ff. 308, 309), are also rather engineering works, though some of them have architectural embellishments, e.g. the first tomb in the Great Bliznitsa near Taman had an elegant cornice, but painted only (v. p. 423, ff. 312, 313).

Chersonese stands on a different footing. As a Dorian city it has singularly little in common with the other Scythian colonies. Also the greater part of its site having rock just under the surface, buildings were more likely

¹ BCA. XXXIII. p. 127, ff. 47, 48=Arch. Ans. 1909, p. 174, f. 36.

² CR. 1905, pp. 14, 15, ff. 13, 14=Arch. Ans.
1906, p. 122, f. 7.

³ Supra p. 194, ff. 86, 87. On Mycenaean sur-

vivals in their disposition and the real place they take in the history of architecture, v. R. Durm in Jahresheste der k. Arch. Instituts su Wien, X. (1907), p. 230. He seems to put them too early, VI.—V. B.C., but Kul Oba cannot be so old.

to be cleared away and their materials worked up into new ones. The first attempt at a city wall is well preserved because it was treated as a mere retaining wall to support a road across a piece of swampy ground, and accordingly earthed up in Roman times. Now that it is uncovered it produces quite an imposing effect. Of strictly architectural work we have but fragments, a few bits of cornice (one in painted terra-cotta)¹ and architrave, an Ionic capital and some late poor pillars built into Uvarov's basilica2. The Byzantine remains are another matter, and because of their definite interest will be treated briefly in their place (inf. p. 508). The cave churches at Inkerman and other sites in the Crimea are beyond my scope.

From Panticapaeum we have a few pieces in the Hermitage, and some bits lying about Mount Mithridates or stored in Melek Chesme barrows. Ashik figures a few more, now lost. The temple of Artemis Agrotera has left no trace; the building in which the inscription was found at Akhtanizovka cannot have been a temple'. So too with the other temples of whose existence we know. At Anapa a coffer with a Medusa-head from the ceiling of a large building has been dug up. Baths have been excavated at Panticapaeum (v. inf. p. 566, f. 345) and Chersonese (v. inf. p. 506).

§ 3. Sculpture.

As with architecture so with sculpture. Not a single good life-size statue has ever been found in South Russia. No large bronzes are known at all, and the few marble statues are of very little value, so I have felt it my duty to enumerate fragments that would scarcely claim attention elsewhere. On the other hand, we have any quantity of funeral bas-reliefs varying in quality from bad to a badness such that there might be some doubt whether they represent the human form at all. Yet it is but just to say that comparatively few gravestones have survived from before the 1st century B.C., and hardly any of these bear figures.

We have evidence in a signature of Praxiteles¹⁰ that at any rate the Olbiopolites tried to secure good work, but of the work itself we have not a fragment. We know from Pliny that an Eros by the same hand existed as near as Parium on the Propontis". We have in an inscription from Chersonese the name of another well-known artist, Polycrates, who may well be the Athenian famous for representing athletes. We can better spare the various statues of whose former existence we know by the whole series of inscriptions from Panticapaeum and Phanagoria, though portraits of the

BCA. XX. p. 47, f. 23.
 Dubois de Montpéreux, Sér. III. Pl. xxxii. bis.
 ib. IV. vi.: Trans. Od. Soc. XIV. pp. 166— 279, A. L. Bertier-de-La-Garde, "Remains of ancient Erections in the neighbourhood of Sevastopol and the Cave-towns of the Crimea.'

ABC. Frontispiece; IosPE. IV. 202.

Bosporan Kingdom, III. p. 56, ff. cix.—cxvii.
 App. 29=IosPE. 11. 344.
 Ashik, op. cit. I. f. x. Goertz, Taman, p. 156.

⁸ CR. 1903, p. 78, f. 162.

⁹ G. von Kieseritzky und Carl Watzinger (KW.) Griechische Grabreliefs aus Südrussland, Berlin,

^{1909,} v. inf. p. 299.

10 IosPE. I. 145.

11 NH. XXXVI. 22 (4); Latyshev, TRAS. IV. p. 146; Loewy, Inschr. Gr. Bildhauer, p. 383, No. 76a.

12 IosPE. IV. 82, Pliny NH. XXXIV. 91 (19). Cephisodotus who made the statue of Ariston, App. 19 = IosPE. I. 199, is thought by Loewy, op. (if n. 27, No. 237, to have been an Athenian but cit. p. 237, No. 337, to have been an Athenian but only of the Roman period.

Spartocid kings would have been interesting, especially as the heads are gone from the bas-relief above the Athenian decree in honour of the sons of Leucon 1.

Of the figure subjects actually preserved, the oldest is a little bit of back hair from Olbia, Milesian work like the Croesus columns at Ephesus²; second seems to rank a piece of a sepulchral relief from Kerch with a youth's head and shoulders, Attic work of the early vth century. Next come more fragments from Olbia, a bit of hair and brow in the style of the Parthenon', a mutilated head of the end of the century, and a larger piece now in the Historical Museum at Moscow's, part of a 1vth century grave-relief in Pentelic marble with a mistress like the seated figure of Demetria and Pamphile' and a maid behind her chair, but the heads are gone and the stone split, after which the back was used for IosPE. 1. 64, a dedication to Apollo Prostates, with a figure of extraordinary barbarity; so that of the good work hardly anything Something similar happened to the stone of *IosPE*. IV. 36, also from Olbia, and bearing reliefs of young men.

To the 1vth century belonged the monument of Comosarye⁸, with its statue of Astara, which is figured by Ashik', but has since been lost. We still have from Chersonese a girl's torso at Odessa¹⁰, of which Zhebelëv says that after the manner in which the zone and diploidion are arranged and the folds treated, it would seem to go back to a good 1vth century original: he suggests as its nearest analogue a statue at Corfuⁿ, which recalls the middle period O. Waldhauer publishes a torso of a draped woman from Theodosia, which he dates between 470 and 460 B.C. (he means 370—360)11. In the same collection we have a female head from Olbia in very poor preservation, but also of 1vth century date13; and to the same period seems to go back a sleeping Eros with a torch, similar but inferior to one at Vienna¹⁴. A bearded male head from Olbia in the Historical Museum at Moscow, in type not unlike Asclepius, is referred by O. Waldhauer¹⁵ to Scopas himself, but it looks later in his picture, and is in any case very fragmentary. To the end of the 1vth century belongs the most interesting statue from South Russia, the replica of the Phidiac Athena Parthenos in Pentelic marble dug up at Olbia in 1903. Pharmacovskij is judges it Attic work, though rather careless and mechanical, placing it between the Somzée and Patras replicas. Another piece in Pentelic marble is a Hellenistic head from Kerch¹⁸.

From Olbia, from the Hellenistic house at IX on the plan (p. 450, f. 331), come the most attractive of sculptures from these parts, the three heads, of

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<sup>1</sup> BCH. v. Pl. v. p. 194, v. inf. App. 28.
                                                                                            Philologische Wochenschrift, 1888, p. 1516.
      <sup>2</sup> CR. 1906, p. 32, f. 24.

<sup>3</sup> ABC. Frontispiece, 15, Reinach, p. 40; KW.
                                                                                                 11 Arndt-Amelung, Photogr. Einzelaufn. Ant.
                                                                                           Sculpt. 11. 603.

18 Trans. Od. Soc. XXVI. p. 203, f. 1.
 441, pl. XXXI.
                                                                                           13 Zhebelëv, op. cit. p. 70, f. 4.
14 ib. p. 69, f. 3, cf. Sacken u. Kenner, Die antiken Sculpt. d. kk. Münz- u. Antiken-Cabinets
         BCA. XXXIII. p. 125, f. 45.
      <sup>5</sup> ib. p. 126, ff. 41-44=Arch. Anz. 1908, p. 183,
f. 17.

6 KW. 156, pl. XI.

7 Conze, Attische Grabreliefs, 109, pl. XL.

7 Conze, Attische 11. 346.
                                                                                            in Wien, 1866, Pl. v.

16 BCA. XXIII. pp. 76—102, Pl. 1.
                                                                                           <sup>16</sup> BCA. XIV. pp. 69–93, Pl. 1.—III.

<sup>17</sup> O. Waldhauer in BCA. XVII. p. 99 wishes to refer it to the school of Philiscus c. 250 B.C., but

    Bosporan Kingdom, I. f. ix.
    S. A. Zhebelëv, "Monuments of Classical

Sculpture preserved in the Museum of the Odessa Society," Trans. Od. Soc. XXII. p. 66, f. 1: for Furtwängler's account of the same collection, v.
                                                                                            Pharmacovskij, ib. p. 109, successfully defends his
                                                                                            own view.
                                                                                                  <sup>18</sup> Arch. Anz. 1910, p. 210, f. 8.
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about half life-size, dug up by Pharmacovskij in 1902. He has no difficulty in shewing the first to be that of Asclepius, and finally comes to the conclusion that it is Alexandrian work of the middle of the IIIrd century, recalling as it does the style of Bryaxis, e.g. his Serapis, but shewing some influence of Lysippus. The expression is mild and compassionate, without the exaggerated passion of Pergamum or Rhodes. The wonderfully beautiful





FIG. 209. CR. 1899, p. 23, f. 33. Kerch. Bearded Hermes.

FIG. 210. Mat. VII. p. 21. Marble Head of Archaistic Hermes. $\frac{2}{3}$. Chersonese.

female head (p. 292, f. 208) has less defined characteristics, but agrees with the first. The only reason for its being named Hygiea is that it was found with the Asclepius. The third head is that of a child, but shews only the beginning of that accurate study of infant forms which reached its perfection in Boethus: one hesitates to give it a name, but it may be an Eros.

To the 11nd century belongs a pair of Herms from Kerch, one headless, representing Heracles, another with the Bearded Hermes (f. 209). Another such Hermes (f. 210) in marble, of a more archaistic character, was found at

Chersonese in 1890, and is very closely related to the original from which the artificer whose moulds were found there that same year had taken his cast¹. It distinctly recalls the Hermes of Alcamenes from Pergamum².

To the class of the late Hellenistic genre subjects belongs a statuette from Akkerman, now at Odessa. It represents a hunter in a chlamys. The execution is rough, belonging to the last century B.C. To a model originating in the same sort of taste goes back a statue dedicated by the Olbian strategi to Apollo Prostates in the 11nd century A.D.—a boy with a wine-skin, from which the water of a fountain is to gush.

Of the Odessa collection perhaps the most pleasing specimen is a bas-relief from Kerch, with Artemis, Apollo Daphnephoros, Hermes and Peitho or Aphrodite⁵. Reinach sees in it Attico-Ionian sculpture of about 470 B.C. But the figure of Peitho in its transparent dress seems to betray the taste of a later time, and the relief would more likely belong to the archaistic class; its poor preservation makes it hard to be quite sure. It recalls the lost Corinth puteals, which was almost certainly Neo-Attic. So Hauser says, and Kondakov would seem to agree.

Of whole statues perhaps the best are those of a man and a woman of the ist century A.D. discovered at Glinishche, near Kerch'. They are rather over life-size and of regular Roman work. The woman generally resembles the well-known woman from Herculaneum; the type also occurs in terra-cotta. At Odessa is a female head from Theodosia bearing some relation to this group, but earlier in execution. From Kerch comes an elaborate sarcophagus on which recline the mutilated figures of a man and a woman'; the position is that so common on Etruscan sarcophagi; on the sides are interesting reliefs with scenes from the life of Achilles. There is also a statue of Cybele in poor preservation. Both these are also illustrated by Ashik, who gives some other fragments, but his drawings are so bad as to be almost worthless. A good Roman portrait head at Odessa comes from Olbia. It belongs to the HITT century A.D., and Zhebelëv's sees in it Paulina, and von Stern, in a note to Zhebelëv's article, Julia Maesa.

Animals have not fared better than men. There is a very stiff lifeless lion from Kerch in the Hermitage (f. 211), rather a better one from Chersonese", and a pair of rather worse ones from Olbia, chiefly interesting for the mysterious marks scratched upon them¹⁴. A griffin's body at Odessa might have once adorned the palace of Scyles¹⁵. In the little museum at Theodosia is an elegant bas-relief of a griffin, but it came from Kerch; a marble table-leg in the form of a lion from Chersonese is good as mere decoration 16. The British Museum has some specimens from Kerch, sent home by Colonel Westmacott in 1856; they include figures of a lion and lioness, a relief of Tritons and some typical grave stelae¹⁷.

¹ v. p. 367, f. 267, Mat. VII. p. 20. ² Sitzber. Berlin. Akad. 1904, p. 69: Ath. Mitt. 1904, W. Altmann, p. 179, Pl. xvIII.—xxI.

 ^{1904,} W. Aitmann, p. 179, rt. XVIII.—XXI.
 ³ Zhebelëv, op. cit. p. 68, f. 2.
 ⁴ CR. 1905, p. 15, f. 16=Arch. Anz. 1906, p. 119, ff. 5, 6. Inscr. App. 11=BCA. XVIII. p. 103, No. 5.
 ⁵ Kondakov, Trans. Od. Soc. X. p. 16 and Pl. I.
 3; S. Reinach, Monuments Piot, II. p. 57, Pl. VII.
 Y Stern Od. Mus. Guide. p. 102 makes it IVII cent

v. Stern, Od. Mus. Guide, p. 102, makes it 19th cent. 6 JHS. vi. (1885), p. 48, Pl. Lvi. Lvii.

⁷ ABC. Frontispiece 7, 8, Reinach, p. 39.

⁷ ABC. Frontispiece 7, 8, Reinach, p. 39.

8 O. Waldhauer, Trans. Od. Soc. XXVI. p. 191:
Reinach, Rep. de la Statuaire, II. p. 613. 4, 666. 8.

9 ABC. Frontispiece 9, Reinach, p. 38.

10 ib. 12.

11 Bosp. Kingdom III. ff. cxviii. xcix. c.—cviii.

12 op. cit. p. 71, f. 5.

13 CR. 1905, p. 46, f. 43.

14 v. p. 317, f. 227: CR. 1872, Text, Pl. xVII. 19.

15 Museum Guide, p. 17, No. 9, cf. Her. IV. 79.

16 CR. 1800. p. 31. f. 16.

¹⁶ CR. 1890, p. 31, f. 16.

¹⁷ MacPherson, Kertch, pp. 48-51.

These stelae have been comprehensively studied by Watzinger¹. His first class² consists of those without figures. Besides the plain stelae or those with a simple horizontal moulding along the top, referred to any century between VI B.C. and I A.D., -these may have the further adornment of two rosettes or weapons,—we have in the 1vth century B.C. a simplification of a cornice with eaves, and at all periods a pedimental top. A more interesting termination is the palmette in its varieties. Here belongs the oldest piece of carving from Kerch, not later than the vith century B.C., an arrangement



FIG. 211. CR. 1894, p. 5, f. 1. Marble Lion from Kerch.

of palmettes and volutes, recalling early Ionian pottery or even Cypro-Phoenician work³. More ordinary forms were at first probably painted: the favourite variety is a palmette rising from a pair of o volutes commonly not lying horizontally as in most Attic work, but set vertically back to back, an East-Greek form. Between the volutes there gradually grow up acanthus leaves and flowers until the palmettes are disintegrated into sprays of volutes. About the middle of the 1vth century Attic fashions come in again; e.g. an anthemion from Chersonese in Pentelic marble (f. 212), and imitations from Kerch. All these types are copied unintelligently in the 1st century A.D. and caricatured in the next6.

The figured stelae Watzinger' first classifies by their architecture: they offer curious examples of degradation. The actual relief is usually in a

 $^{^1}$ KW. (v. p. 295, n. 9) is mostly his work though he has used Kieseritzky's materials. He describes over 800 reliefs and illustrates some 350, but often older cuts, e.g. some in CR., Latyshev's in IosPE. IV. and BCA. X. and MacPherson's in Kertch are clearer.

² KW. 1-155, Pl. 1.-x.

³ KW. 87, Pl. IV., cf. O. Montelius, Die älteren Kulturperioden, 1. Nos. 319, 323, 371, 381.

⁴ KW. Pl. v. ⁶ KW. Pl. vi. vii. ⁶ KW. Pl. ix.

⁷ KW. pp. 22-28.

rectangular panel frequently flanked by pilasters; above is a kind of entablature, often with three rosettes on the frieze. Above this, again, the composition is in a few cases, in the 1st and 11nd centuries A.D., finished off with an anthemion; more usually by a pediment with acroteria, occasionally giving the top a gabled outline. Far more commonly above the pediment is another horizontal moulding. The acroteria are sometimes left flat as it were for painted palmettes (Figs. 214, 216), later they degenerate into shapeless lumps: more often an attempt at a palmette is carved upon them, usually without the base volutes (Fig. 215). Between the acroteria and in the pediment we generally have rosettes. The most elaborate composition (11 century B.C.)¹ has to flank the relief Ionic columns supporting an architrave



FIG. 212. Anthemion from Chersonese. KW. 128, pl. VIII. (cf. ib. 129 from Olbia).

with circles incised upon it; above this is an Ionic portico, with rails and large shields between the five columns, a bust of Demeter in the pediment and large rosettes above. Instead of the rectangular field we very often find a niche with an arched top, and the treatment of this arch in conjunction with the pilasters and architrave shews how early the Eastern Greeks began to try and reconcile the two principles, for these rude imitations follow more accomplished Hellenistic models; but we have all the combinations which elsewhere play a greater part, the arch rising from the pilasters themselves as on Fig. 213, or from an inner order or else from brackets; in the spandrels we have long-stemmed volutes or rosettes. Above the arch come the same upper members as above the rectangular fields.

The reliefs themselves—sometimes there are two on one stone—offer the ordinary types. The feminine figures, which occur singly or in all possible combinations, are all represented on Fig. 213, the lady sitting or standing

¹ KW. 407, Pl. XXVIII.

in an attitude of dejection and the basket-bearing maid often on a smaller scale. The man appears as taking leave of the woman, at other times he is standing alone, and then is usually armed. In Fig. 214 he is resting his elbow on a pillar against which his shield leans while his gorytus hangs behind him. At other times we see him riding out to war with his groom



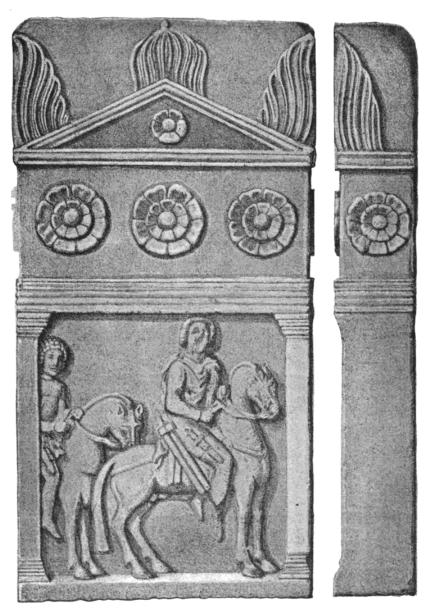


Fig. 213. Ios PE. IV. 391 = CR. 1890, p. 29, f. 15; KW. 201, Pl. XIV. Stele of Chreste. $\frac{1}{11}$. Kerch. Μελλόγαμόν με κόρην ἀπενόσφισε βάσκανος " $\Lambda(\iota)$ δης Χρήστην καὶ γ[νω]τών δὶς δύο καὶ γενέτου, μητρὸς ἐμῆς φθιμένης δὲ νηπίαχόν με κομίσσας εἰς φλόγα καὶ σποδίην έλπίδας έξέχεεν. (l. 2=four brothers and a father.)

FIG. 214. CK. 1876, μ. 214 = los PE. 11. 62, KW. 454, Pl. XXXIII. Stele of Mastus. $\frac{1}{18}$. Kerch. Ή σύνοδος ή περὶ ήρέαν Παντάγαθον καὶ συναγωγὸν Μίκαν καὶ φιλάγαθον Εὐρήμωνα καὶ παραφιλάγαθον Ήλιν καὶ πραγματᾶν Φαρνάκην Μαστοῦν Μαστοῦ μνήμης χάριν. (ήρέαν = leρέα.)

following on foot or on horseback (Fig. 215). Both these stelae have been set up by the society to whom the deceased belonged (v. Ch. xix.). The galloping type like Fig. 218 is rare; usually the horse is walking. When

there are two reliefs they may represent two different aspects of the dead man's life, e.g. on the stele of Gazurius (p. 507, f. 339), above the relief of arms typifying his warlike side, is a group shewing him with his wife, a boy



F16. 215. Kerch. Stele of Daphnus in coarse local stone. $\frac{1}{10}$. KTR. p. 217, f. 197: CR. 1872 (Text), XVII. 3: KW. 627, Pl. XLII. = IosPE. II. 65. Δάφνε Ψυχαρίωνος | ἐπὶ τῆς αὐλῆς | χαῖρε. | οἰ συνοδεῖται.

and a child. In the case of Fig. 216 the name of Dionysius and his relief have been added after that of Diophantus. The armed horseman is often combined on one stele with the so-called "Funeral Feast" (*Totenmahl*),



FIG. 216. *CR.* 1890, p. 26, f. 14: IosPE. IV. 300: KW. 624, f. 15. Stele of Diophantus. $\frac{1}{11}$. Kerch.



FIG. 217. Mat. XIX. p. 49: Selections from the most humble Report on Archaeological Investigations made in 1853 (St P. 1855), p. 168: KW. 734, Pl. LIV.: Latyshev, Inscr. Christ. p. 23, No. 12. Tombstone from Chersonese used again in Christian times.

κυρης βοηθη τον υκον τουτον αμην i.e. Φῶς. Ζωή. Κύριε, βοήθει τὸν οἶκον τοῦτον. ᾿Αμήν.

a very common subject¹; we have a man reclining on a couch, a woman sitting at the end of it, a servant offering him a cup, a three-legged table before him, and other minor figures. The scene is universal throughout the Greek world. Besides Panticapaeum, where it also occurs painted on the walls of "catacombs" (pp. 312—321, ff. 223, 224, 229, 231), we meet it at Tyras

¹ KW. 687-737, Pl. L.-LIV., cf. Kulakovskij, Mat. XIX. "Two Kerch Catacombs," p. 44 sqq.

(IIIrd century B.C.), Olbia, and Chersonese (Fig. 217); this last in Christian times was let into the walls of a basilica, hence the crosses and inscriptions. Originally the type exhibited the dead man as a hero, as in the well-known Sparta reliefs³; but the specimens on the Bosporus have become purely conventional; if they represent anything it is rather the dead man in his family circle. Soracus, for instance (p. 321, f. 231), holds a lyre instead of the usual cup or the bunch of grapes that often takes its place. The idea of the deified dead man still survives on the tombstone with elaborate architecture, quite an aedicula, described above'; on it the man is being crowned by Nike, and his wife appears as a goddess (Aphrodite?).

Unusual subjects are those on the stele of Glycarion and Polysthenes⁵ two men in red in a blue and red boat upon a blue sea-and the memorial of a poet with a lyre and book-chest.



FIG. 218. Tanais. Votive Relief. 1/5. KTR. p. 14, f. 12: ABC. Vol. 1. p. 278, v. inf. p. 369.

Rather like a grave relief is Tryphon's dedication from Tanais (Fig. 218). The type recalls the coins of Cotys II (Pl. VIII. 4), terra-cottas from Kerch', and a clasp in the form of a horseman from Sympheropol*. From this latter site come reliefs of Tauri (?), one a trousered rider, early 19th century, the other with two fields, in one a horseman, in the other a spearman in a doublet with a small targe.

The ordinary stelae with reliefs date from the 11nd century B.C. to the 11nd century A.D. Two, clearly among the latest in style¹⁰, bear the actual date 426 of the Bithynian, Pontic or Bosporan era (A.B.) = 130 A.D. Hardly one of them has any artistic merit; the great majority come from Panticapaeum,

¹ KW. 687, Pl. L.

² Kulakovskij, p. 50, ff. 13, 14; Uvarov, Recherches, Pl. XIII. takes the dead man for Asclepius, cf. Furtwängler, Ath. Mitt. 1883, p. 368.

³ Tod and Wace, Catalogue of Sparta Museum, pp. 102-113, cf. J. E. Harrison, Prolegomena to the Study of Greek Religion, pp. 350—360.

⁴ p. 300=KW. 407, Pl. XXVIII.

⁵ IosPE. IV. 238; KW. 550, Pl. XXXVII. ⁶ ABC. I. p. 279, Reinach, p. 96, not in KW.

⁷ ABC. LXIV. 2, v. p. 369, n. 3.

⁸ CR. 1889, p. 26, f. 11.
9 KW. 557, Pl. xxxvIII. 442, Pl. xxxIII.
10 KW. 272, Pl. xvIIII.; 614, Pl. xLIII.=BCA. x.

p. 81, No. 94; IosPE. 11. 301.

a few from Olbia and Chersonese. I cannot detect any local distinction of style. The very last stage of degradation would seem to be reached in the stones set up by Roman soldiers at Chersonese, e.g. to Aurelius Victor and the son of Aurelius Viator¹, if it were not for rude plates in the shape of head and shoulders² something like Muhammadan tombstones but flat. There are a few attempts at sepulchral effigies³, but they are very poor. The stelae from Kerch not only crowd the Hermitage and the Kerch, Moscow and Odessa Museums, but are preserved, many of them, in the Royal and Melek Chesme Barrows; some twenty-five are in the British Museum.

MacPherson tells us how two statues, one of an orator, the other of a woman, both double life size and of marble and so presumably imported work, were lost in the Volga on the way to Petersburg, and we may regret their loss, as that of Astara mentioned above, but they were probably of late date.

§ 4. Painting.

Of painting we have more remains than of sculpture. It is to this rather than to its carpentry that the coffin of the Kul Oba queen, the most elaborate early example, owes its interest. The top plank (Pl. LXXXIII. 1a) is much the most important for colour and composition; the ground colour is not clear, but beginning from the left we have a mass of green for the chariot, whiteygreen horses with red straps, a man's figure with reddish-brown flesh in a red chiton, pursuing a girl in a green dress; a second girl (on 1b) has a yellow dress, then comes a man in a blue and white chiton with a red border running after a yellow and brown swan; the next figure, green and brown, is rather being attacked by a swan; there follow a figure in green and brown, and one in a red chiton with a blue border; finally, on the last division (1c) a grey female figure, pursued by a brown-fleshed man in a white and blue chiton, and beyond him another chariot, brown, with whitish horses. The hunting scene on the plank below (LXXXIV. 16 and 1e) has a primrose ground, the chariot is neutral tint, the driver green, the two horses grey; in front a red-fleshed man runs after a bird with a neck outlined in red and wings of white and The lowest plank (1c, 1f) has a red ground; upon it are yellow griffins with white wings, yellow lions and other yellow beasts. Below is a plain yellow band. The end fragment (1d, 1g) is brown, with a kind of red panel; upon it are a griffin and a lion, both yellow. I have given this colouring at length as the original ABC. is very rare and Reinach's reprint accessible, so his plates are worth supplementing; for this is a richer and more subtle range of colour than we find elsewhere in 1vth century works.

¹ IosPE. IV. 120, 122.

² KW. LV. LVI. ³ KW. LIV. LV. ⁴ Kertch, p. 85.

⁵ ABC. Reinach, pp. 10, 127, Pl. LXXXIII. LXXXIV. We have four planks of it left shewn in their mutual relation in LXXXIV. I. Three of them 1a, 1b and 1c came one above the other along one side: 1d was part of the framing of an end: 1a is reproduced on a larger scale at the top of Pl. LXXXIII., and on a still larger scale, so that it had

to be taken in three pieces, on the same plate 1a, 1b, 1c; it represents the rape of the daughters of Leucippus. The other two long planks (with a hunting scene, 1b and 1c of Pl. LXXXIV.) are repeated on a fairly large scale on Pl. LXXXIV. as 1e and 1f. The end piece 1d of Pl. LXXXIV. is enlarged alongside as 1g; cf. Dubois de Montpéreux, IV. xxv. xxvi.

⁶ For a discussion of the drawings on ivory, pp. 204, A-D, ff. 100-103, and the polychrome decorations of other sarcophagi, v. p. 330 sqq.

Simpler in every respect and therefore presumably earlier in date is the stele of Apphe, wife to Athenaeus (Fig. 219), found in January 1887 on the way from Kerch to the Quarantine. The lines are lightly incised on the stone, and the spaces were filled in with colour, since vanished. According to Gross's drawing, here reproduced, we have a life-sized picture of a woman looking down at an infant that she holds in her arms. Her cloak which covers her head is brown with a red border: the child wears a red cap and a white-sleeved shirt. In front of her stands a Herm with a wreath painted on it, but Kieseritzky saw therein a woman with a pine-cone and a box. Above is the inscription traced in red upon a brown band: the whole was surmounted by a wreath of bay leaves in white, now mostly broken away. The work cannot be later than the first half of the 1vth century: even as interpreted by Gross it is a charming drawing: nothing else like it has survived on Scythian soil.

The architectural patterns on the stele of Apaturis, wife of Thynus¹, are painted, a cymation in green and blue upon red, and a bay wreath blue and green with a red stalk and dark berries; both go round to the sides of the stele. The inscription is in red. The stele of Xeno and Xenopeithes' has at the top a red cymation (?), under it the inscription, incised but filled in with red, and below this a red fillet tied in a knot with its ends hanging right down. Both stelae are of the 1vth century.

We have no good wall painting from houses: the Hellenistic house³ at Olbia, which had an interesting design in the pebble-mosaic of its peristyle⁴, and the baths at Panticapaeum' only yielded architectural patterns and marbled plaster.



FIG. 219. Painted Stele of Apphe. Kerch. CR. 1882-8, p. 20; KW. 284, f. 6; IosPE. II. 217. Height 1 m. 98 cm.

IosPE. IV. 363; Mat. XVII. Coloured Plate.
 BCA. XVIII. p. 130, No. 47, KW. 34, Pl. II.

³ v. p. 457, *BCA*. XIII. p. 62, f. 34. ⁴ ib. pp. 40–43, ff. 22–25. ⁵ *CR*. 1898, p. 14.

But it was on the walls and roofs of grave chambers that the greater part of ancient paintings—hence loosely called frescoes—in South Russia have survived. The earliest seem to be in the Taman Peninsula. In the second chamber of the Great Bliznitsa there were elegantly painted cornices (v. p. 423, ff. 312, 313), and in the middle of the roof a woman's head on a dark blue ground. About her neck was a string of gold beads, and behind fell a light and dark red veil. Her hair, eyes and brows were dark brown, and about her head and in her right hand were leaves and flowers, red, yellow and white. This is one of the very few examples of late 1vth-century painting. The head is probably that of Persephone¹.

In the same district, about a mile and a half to the west, Tiesenhausen found in Vasjurin hill the next term in the series of S. Russian wall paintings. In the outer corridor (for the tomb was in two parts) a pattern representing blocks of masonry went almost to the top of the wall, and was crowned with a very realistic cornice shewing a row of oves and dentels, with lions' heads for gargoyles, and above them the line was broken alternately by swallows and ornaments representing meagre conventionalized antefixes. Within the chamber the masonry courses only went up to a dado, above which there was a broad brown band below the cornice. Other colours used were red, grey, black, blue and green'.

To this early class the traces of fresco at Karagodeuashkh (v. sup. p. 216) seem to have belonged.

"Catacombs" at Kerch.

The sepulchral chambers of Kerch itself offer curious specimens of the later stage of wall painting as practised far from the centres of Hellenistic art, but yet in accordance with its traditions. Something of the same kind was universal in the Graeco-Roman world and is most familiar to us from the wall paintings of Pompeii. Other well-known examples have been found in Rome, the discovery of some of them being of importance in the history of the Renaissance. The fashion has long been supposed to originate in Alexandria, and the earliest examples of the fully developed architectural style are two graves lately found there', in which the architectural motives being logically worked out produce a much more satisfactory decoration than the rather mechanical architectural style and later baroque extravagances of the Pompeian examples. It is, however, just as likely that the real birthplace of the style was one of the magnificent cities of Asia Minor. There is no doubt that in each case the tomb reflected as faithfully as convenient the local style of house decoration and even arrangement. We must, however, never forget that these paintings were hurriedly executed by artificial light under unfavourable conditions and that it is hardly fair to judge them as if they were the highest of which their makers were capable.

bei Alexandria, Berlin, 1904: but cf. Wiegand-Schrader, Priene, p. 308 and M. Bulard, "Peintures Murales et Mosaïques de Délos," Mon. Piot, XIV.

¹ Coloured Frontispiece, CR. 1865, Text. ² CR. 1868, p. xiii.: 1869 Text, pp. 174-5, with illustrations: reopened in 1907, BCA. XXXV. p. 47. ³ H. Thiersch: Zwei Antike Grabanlagen

The closest parallel to the Kerch tombs is a great sepulchral cave at Palmyra', where the mixture of Greek and Oriental races offered some analogies to Bosporan conditions, but the whole being on a much larger scale than anything in Kerch gave much greater scope for the artist who distinctly foreshadows some of the typical effects of the Byzantine style. Another very close parallel is offered by the decoration of a tomb in the northern necropolis of Cyrene; here the flat pattern on the walls resembled very much the carpet-like pattern of the later Kerch examples².

At Kerch the sepulchral chambers, generally called "catacombs"," occur on the north side of the ridge running west from Mount Mithridates where a bed of calcareous rock overlies one of stiff clay. A perpendicular shaft was sunk through the rock and the chamber dug out in the clay. From the shaft a passage usually leads into a main room from the sides of which open out recesses with couches on which the dead were placed. In the walls there were generally one or two niches to hold lamps or vases. In most cases there was no attempt at decoration and the contents of the catacombs are not often very interesting, since all date from after the Christian era. Moreover nearly always they have been plundered, because it was so easy to violate a whole series of them by breaking through the partition walls. How they stand to one another may be well seen by the section given as MacPherson's frontispiece. In one or two examples of sepulchral vaults the walls which are adorned with paintings are of real masonry; the usual practice was to cover the natural clay with plaster to afford a satisfactory ground, only in a few late cases very simple decorations or crosses and inscriptions were traced directly upon the clay.

The decoration of the chambers may be classified into three styles according as the walls are treated mostly to represent masonry or marble lining or embroidered hangings respectively. The styles succeeded apparently in this order, though Rostovtsev in his last article asserts that the textile style came between the masonry and the marble lining and overlapped both. In all there persists a low band of plain colour or uniform marbling running along the base of the wall and representing a plinth.

¹ Bulletin of the Russian Archaeological Institute in Constantinople, Vol. VIII. Pt 3, Sophia, 1903, B. V. Pharmacovskij, "Painting in Palmyra," an account of the Megaret-Abu-Skheyl. J. Strzygowski, Orient oder Rom, p. 11 sqq., Leipzig, 1901, has less satisfactory illustrations. Both refer to Ostrup, Historisk-topografiske-Bidrag til Kendskabet til den syriske Orken, Kjøbenhavn, Lunos, 1895; I copy the title just as they give it.

2 Smith, R. M. and Porcher, E. A., History of the recent Excavations in Cyrene made during the Expedition to the Cyrenaica in 1860-61. Pl. XXI.

4 A. Ashik, Antiquities of Kerch; a Panti-

capaean Catacomb adorned with Frescoes, Odessa, 1845, was the first to publish a Kerch catacomb; Stephani, as occasion offered, described or illustrated in CR. those found from year to year, but V. V. Stasov was the first to go into the subject in CR. 1872, pp. 235—328, his XVIII plates are in the Text not the Atlas of $CR_{.}$; J. A. Kulakovskij after publishing "A Christian Catacomb of 491 A.D. at Kerch," in Mat. VI. (1891), made a fresh survey of the question in Mat. XIX. (1896), "Two Kerch Catacombs with Frescoes; also a Christian Catacomb opened in 1895,"upon this my account has been mainly based.
M. I. Rostovtsev reviewed Kulakovskij in TRAS. 1X. (1896), Pt 11. p. 291, and added much of his own; he has made a new classification and given fresh details in Journ. Min. Pub. Instr., St P. 1906, May, pp. 211-231," Decorative Painting at Kerch, and it is this article that I have in mind when I refer to him. He is preparing a comprehensive work on the subject.

p. 31.

This term was given them by the early explorers and has clung to them ever since, although they are not really like the Roman Catacombs: there is sometimes a fortuitous resemblance, owing to grave-robbers having broken through from chamber to chamber, so making a kind of passage instead of sinking a fresh shaft.

Among the very earliest vaults are the two with a masonry lining. Of one we did know only by MacPherson's very untrustworthy sketch¹, but Rostovtsev describes a drawing preserved in the Hermitage. The stones below the dado were jointed in black with red rustication, one course was sham marble, another had birds on sprays, above were horsemen with red and blue cloaks: the figures outside the door, shewn by MacPherson as lionheaded, were probably Hermes and Calypso, typical of parting. The other frescoed masonry tomb was opened by Kareisha in 1832. The description is very vague and it is hard to trust the published pictures²; the date seems to be the 1st century A.D.; the chief subject was the contest of Pygmies and Cranes.

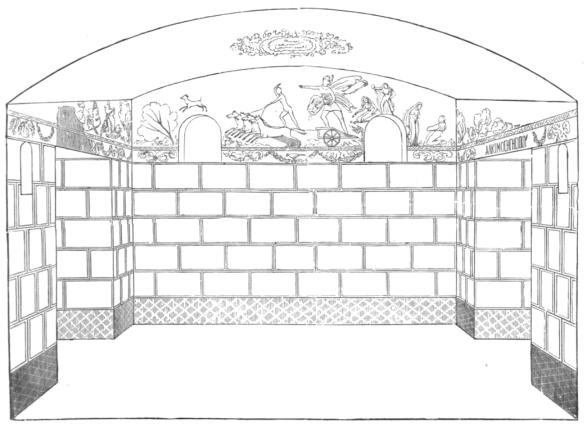


FIG. 220. CR. 1868, p. 114. View of the Catacomb of Alcimus. Kerch.

In an ordinary plastered tomb of the first class, which corresponds in some degree to Mau's first style at Pompeii, we have above the dark plinth an imitation of four or five unequal courses of big blocks of stone treated a little decoratively. This reaches almost to the height of the lowest spring of the irregular roof and is finished off by a broad band representing a cornice and

¹ Kertch, p. 76.

² Dubois de Montpéreux, Sér. IV. Pl. xviii. 2.

leaves but little space above itself where the roof is low, but considerable lunettes or spandrels where the roof rises. This space above the cornice is at the free disposal of the artist. To this class belongs the tomb of Alcimus, son of Hegesippus, found in 18671. The free wall space opposite the entrance was adorned with the rape of Core. Four brown horses draw a red chariot with blue wheels: the driver above may be either Eros, who should have wings, or Hermes, who usually leads the horses. On the car stands Pluto in a short red chiton and flying chlamys holding the blue-draped figure of Persephone whom he has seized from among four women. Of these one with a blue veil falling back is probably Demeter, the others, Persephone's usual companions. The cornice is adorned with swags of foliage and birds. In the



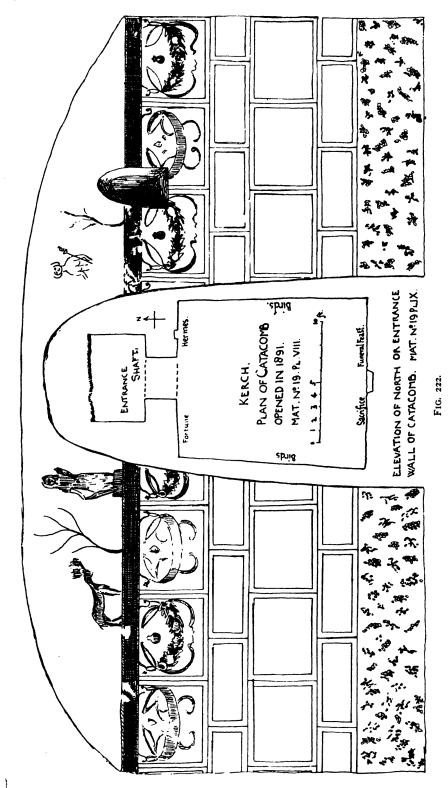
FIG. 221. CR. 1868, p. 116. Ceiling of Catacomb of Alcimus. Kerch.

middle of the roof was a woman's head surrounded by green leaves and red, white and blue flowers (f. 221), recalling the head in the Great Bliznitsa (p. 307). Another catacomb (Zaitsev's) with the rape of Core was opened in 1895. Its frescoes have stood well and one can still see a head in the middle of the ceiling labelled Δ]H MHTHP, and a side scene of Hermes and Calypso².

Of much the same date as the catacomb of Alcimus is the vault opened in 18913; above a plinth treated as a perfunctory imitation of marble are four courses of large stones, the joints marked with blue lines and the outline followed in brown. The top course has the thickest stones and each of them is treated as a panel filled with a garland hanging from two hooks. The garlands are alternately simple brown fillets and swags of fruit with flowers, the remainder of the oblong being filled with fluttering ribbons, the whole having a very graceful effect. Above the broad brown cornice band, we have peacocks and other birds on the long walls, on the entrance wall Hermes and Fortune and a deer under a tree. The principal wall opposite the entrance is divided into two by a niche, above which is the familiar motive of two peacocks drinking from a standing cup. On the right of this, but not well preserved, are the frequent scenes of a horseman and his companions and a sacrifice with a man and woman (Rostovtsev calls them Serapis and Isis) wearing calathi. On the left we have the familiar "funeral feast" with the unusual addition of a cradle with children, and beyond a picture of a tent. The whole is flanked by decorative trees and beasts. Something similar must

¹ f. 220, CR. 1868, pp. 114 and 116. ² Trans. Od. Soc. XIX. Minutes, p. 56.

⁸ Fig. 222; Kulakovskij, Mat. XIX. pp. 34-43, Pl. VIII.—XI.



have been a catacomb opened in 1852, of which the only account is in an article by P. Becker on "Kerch and Taman in July 18521." He mentions two horsemen and birds above, and birds painted on the stones of the wall-pattern. Here seems to belong one opened in 1908; the walls were covered with broad stripes, yellow, dark red and yellow again with a narrow white band between and a white cornice: all round were painted alabastra, round vessels, garlands, olive crowns, Hercules clubs, and embroidered cloths represented as

hanging from nails².

But much the most interesting of this class, though perhaps the latest, is that of Anthesterius, the son of Hegesippus, discovered in 18773. Whether this Hegesippus was the same as the father of Alcimus cannot be decided, but there is sufficient resemblance in style between the tombs to make it not unlikely. Rostovtsev makes this vault earlier than that of Alcimus. Above the plinth we have four courses of stones separated by black lines and outlined in brown, the whole suggesting rustication. The stones of the top course, which are far the largest, are treated as panels, two of them bear figures with leaves in their hair and caducei in their hands, one (Fig. 223, No. 3) wears brown, the other (No. 4) green and red. Above the black and brown cornice is the chief scene (No. 1): Anthesterius in a blue and white shirt (conceivably steel mail) and brown trousers on a black horse with white patches is shewn receiving a blue cup from a boy in a brown shirt and red hose. Behind this latter is a woman shrouded in red sitting upon a high wooden chair with a blue cushion at her back: on each side stands a girl, one with a long blue dress and white shirt over, the other with these colours reversed. Next we have the tent, brown with reddish people within and apparently a blue floor: against it leans an inordinately long spear, brown with a blue head. Beyond stands a conventional tree with a gorytus hanging on it, and round the corner on a side wall are a brown and a green horse flanking a similar tree (No. 2). With the exception of the green horse the objects seem coloured according to nature. Here we evidently have a contamination of the funeral feast and the scene of the horseman's departure, so the slave and the three-legged table with vessels on it have been supplied on one of the top stones beneath the cornice band. On the right-hand side of a niche we have a man clothed like Anthesterius, but with a blue (steel) cap and a long spear riding a light-brown horse and leading a black one. Behind follows another lightish-brown horse.

In the shaft of the catacomb found in 1891 was found a coin of Mithridates VIII; this goes towards dating this class any time in the second half of the first century A.D.

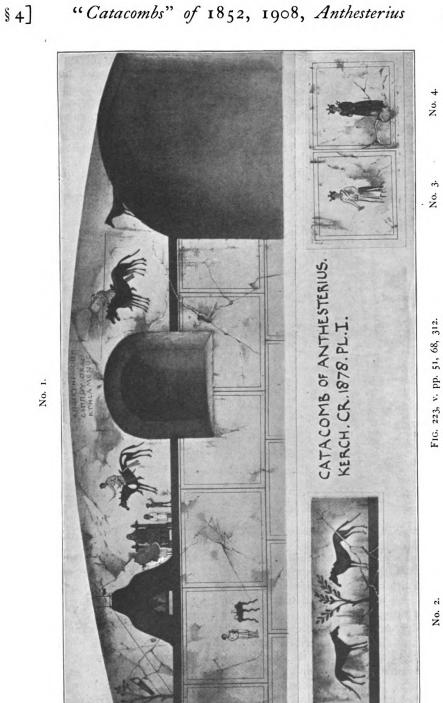
A transitional stage in which we miss the imitation of a wall built with solid stone blocks, but still have the high cornice, is exemplified by a fine specimen discovered in 1841 and published by Ashik. Unfortunately the drawings then made were anything but exact, and it is hard to see what we may take as authentic in them. Attempts to reopen the chamber have hitherto

¹ Propylaea, A Russian Classical Magazine,

² Arch. Anz. 1909, p. 149, where for some reason it is put down to the early IVth century

³ f. 223, coloured in CR. 1878-9, Pl. I. f. 1 and

⁴ op. cit., his most important drawings have been reproduced in KTR., pp. 211, 212, ff. 193, 194 and in Stasov XVIII. 35.



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M.

failed. In this case the wall surface below the cornice was divided up by Ionic pillars, between which were various scenes, while there were more scenes above the cornice. Accordingly more space was taken up with figure-work than in any catacomb known. There were also purely decorative panels with sprigs, peacocks, masks, and architectural adornments. The scenes represented included a specially full version of the funeral feast and a cavalry engagement wherein some combatants wear short scale-coats, sometimes partly hidden by a surcoat, others coats of mail so long that they have to ride side-saddle. The surface of these latter is not indicated with typical scale pattern, but with oblongs just like masonry, perhaps they were quilted and

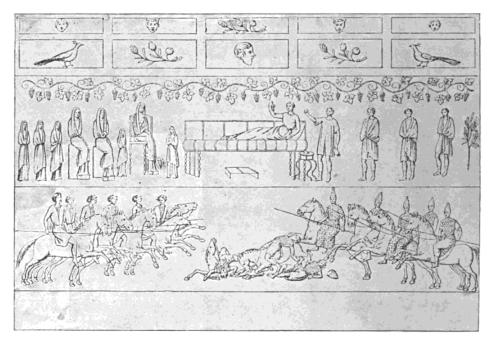


FIG. 224. Wall Painting from catacomb at Kerch (1841) after Ashik. KTR. p. 211, f. 193.

not covered with scales at all. Which are Bosporans and which barbarians is not clear. Other scenes shew the funeral, the dead man carried high in a covered litter, also various scenes from daily life and even gladiatorial combats. All with a Roman touch which may be genuine or may be due to the training of the copyist.

Typical specimens of the second class were those discovered in 1872 and 1875. They are characterized by the disappearance of the plain wall of apparently solid blocks: in its place we find an imitation of as it were high wainscoting made with panels of many-coloured marbles rendered architectural with pilasters. A similar change of taste is observed at Pompeii. The favourite pattern for the wainscot panels seems to be a rayed circle within a larger circle inscribed in a lozenge in its turn inscribed in the oblong of the

panel. The wainscoting is not as high as the former wall pattern and leaves

more space for free decoration above.

Judging from the description a good early example of this style was a tomb excavated in 1902 on the way to Katerles². It is interesting for the painting of Medusa's head on the inner side of the door slab, and for a very pretty and natural design of a vine with grapes that adorned the long front of one sarcophagus. These give an idea much higher than usual of the skill of Bosporan painters. It is a pity that the decoration of the other original sarcophagus and of the vault itself has only left very small traces.

Another sarcophagus³ had interesting painting on its inside: upon one end was depicted a garland, upon the other a table with vessels and two comic dancers; each side was divided by Composite pilasters into three panels, bearing (1) a man with a horse and arms hanging behind him, (2) a painter at work in his studio, (3) the funeral feast, (4) a lady seated and two servants,

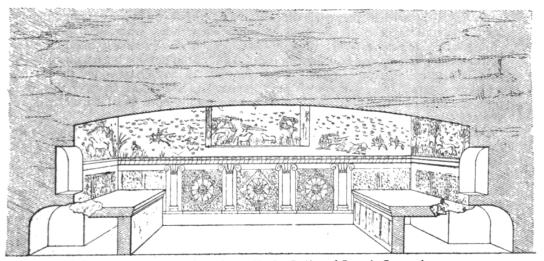


FIG. 225. CR. 1872, Pl. III. (Text). Section of Stasov's Catacomb.

(5) two horsemen opposed to each other, (6) musicians; the lower face of the cover was adorned with roses. Thus the interior of this coffin presented all

that a catacomb could do; it is referred to the 1st century A.D.

The richest specimen of a catacomb and the best illustrated was found in 1872 and published with very full treatment by V. V. Stasov. This author is too much inclined to see Oriental influence in every detail: the fact is that there is nothing but what can be paralleled from Hellenic sources, save the actual portraits of barbarians and the barbarous costume of the Bosporans themselves.

The greater part of the surface of the tomb above the panelling is taken up with trees, birds and beasts, among which the peacock, boar, dog, deer,

¹ Stasov, Pl. XII.: a photograph of something like this pattern on an actual wall, CR. 1901, p. 58,

BCA. IX. p. 151, Pl. IX.—XI., coloured.
 CR. 1900, pp. 27, 28; Arch. Anz. 1901, p. 57.

lion and leopard can be distinguished, also two winged Genii or Erotes, one of whom has an orthodox Greek chlamys, but the other is arrayed in a brown coat and knickerbockers. The background of walls and ceiling (op. cit. Pl. XIII.) is semé of an ornament in the shape of a light and dark pink heart associated with pairs of green leaves (apparently a conventionalized rose), and has besides long yellow things like centipedes with ribbons at each end and sometimes leaves sticking out of them: these appear to be garlands of a kind or rather bags stuffed with flowers worn as garlands. These two motives occur in all the late Kerch catacombs and can be paralleled from Sicily and from textiles made in Egypt under Greek influence. For this habit of strewing a background is certainly derived from textiles, and the whole scheme of decoration was influenced by the custom of hanging tapestries on the walls of rich rooms².

To us the chief interest of Stasov's catacomb consists in the pictures of combats between what we may take to be Bosporans and natives. In these the difficulty again arises that the Bosporans had so far adopted barbarian arms that it is hard to say which side is which. First we have people with long coats of steel mail and buff jerkins under them, with loose brown trousers and conical caps on their heads³. When on horseback these ride astride, have long spears and saddles with a kind of tail sweeping back on each side, and resemble Anthesterius. Their footmen (f. 227) bear round shields and two spears apiece, but not all have the coats of mail. In front of them goes a standard-bearer with a standard which recalls both the labarum and

the standard on Parthian coins. The principal personage, probably the owner of the vault, always has a red chlamys flying behind him. These people have round faces and no beards. Against them fight folk on horseback who do not wear the clumsy mail but coats and trousers. They use short nomad bows, but so did the Bosporans to judge by Anthesterius and the grave reliefs. Finally, we find the principal figure in all his glory fighting a bearded fellow in coat, knickerbockers and stockings, with a short sword and a lozenge-shaped shield; he would seem to be a rude mountaineer. That there was not much difference in



FIG. 226. Mat. XIII. p. 30, f. 3. Coin with Standard and Candys⁴.

armament between Bosporans and Sarmatians or whoever their enemies may have been is evident; probably they found that the best way to combat nomads was to adopt their ways, and so they suffered the same outer assimilation that has made the Terek Cossacks so like their hereditary enemies among the mountaineers.

In one place the surface layer of plaster with its painting had cracked off and disclosed signs scratched on the wall just like those on the Olbia lions and (occasionally upside-down) on certain gravestones, all idle scribbles, but thus proved to be ancient. Similar separate signs or modifications of these, occurring one or two at a time on coins, slabs, buckles and strap-ends,

¹ op. cit. Pl. v. VII. VIII. XI., v. f. 227. ² Rostovtsev, TRAS. IX. ii. pp. 296, 297, e.g. the embroidered sheet from Akhmim in the British

Museum, 2nd Egyptian room, No. 29771.

3 Pl. VIII. = KTR. p. 210, f. 192.

⁴ ZMDG. XXI. 1867, p. 460, Pl. 1. 2; Levy,

[&]quot;Beiträge zur Aramäischen Münzkunde Erans."

⁵ Baddeley, J. F., *The Russian Conquest of the Caucasus*, London, 1908, p. 11.

Caucasus, London, 1908, p. 11.

6 f. 227, cf. p. 298, Trans. Od. Soc. 111. p. 247,
Pl. vi.; 1X. p. 191, Pl. xiv.; XV. pp. 504, 505.

7 IosPE. 11. 219, 232.

must have had some real meaning analogous to that of the tamga or brand of possession among Caucasian tribes. One particular device &, that to the left

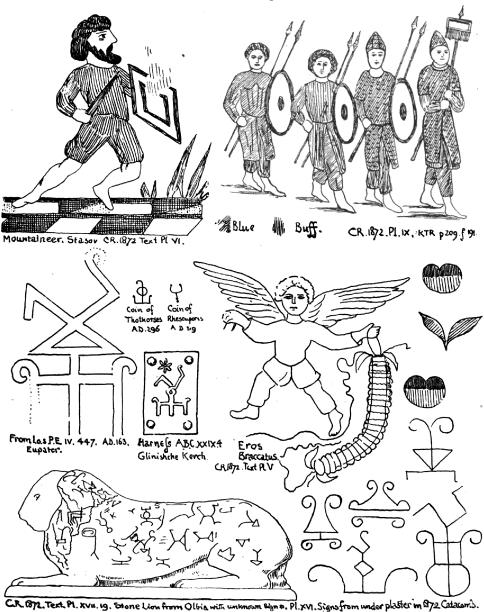


FIG. 227. Paintings from Stasov's Catacomb. Various Tangi.

on Fig. 227, almost seems to have been the Bosporan "broad arrow," as it heads

¹ Trans. Od. Soc. xv. p. 50 sqq.: cf. the marks on Kushana and Crim-Tartar coins.

an official inscription and appears crowned by Nike upon bas-reliefs'; other patterns sometimes used in conjunction with it look

like the marks of individuals, kings or citizens.

Very similar to Stasov's is a catacomb entered in 1875 (f. 229)²; it has much the same sham wainscoting and the same rose background; the scenes include Apollo in green with a lyre riding upon a blue-grey griffin facing Artemis (?) also in green and sitting on a bull, the conventional funeral feast and the horseman's stirrup cup.



FIG. 228. CR. 1891, p. 53, f. 29. Kerch. Part of bronze buckle with Tamgi, A and another. }.

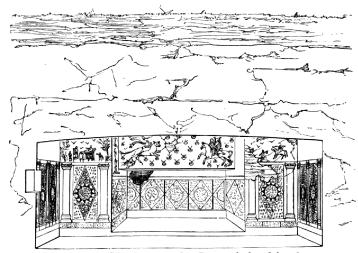


FIG. 229. CR. 1876, p. 218. Catacomb found in 1875.

A vault (Feldstein's) opened in 1906 shewed both the first and second styles: the first chamber was poor and only had the masonry pattern, the second had sham marble incrustation, the top of the wall offering squares with garlands and flowers or circles and rhombs, and the roof, coffers with birds and rosettes; the third chamber was much spoilt, but its plinth bore columns with purple curtains between them. Rostovtsev classes with this a vault that Lutsenko found in 1860 but did not record very clearly. It was the burial place of the Ulpii who were well known in the Bosporan kingdom, being $\epsilon n n n$ $\epsilon n n$

1 V. V. Škorpil, BCA. XXXVII. pp. 23—35, collects examples of this mark (which I denote by \Re): it is hard to tell mere varieties from true species; so many, like mediaeval merchants' marks, have the same top. Official insert. with different marks, each except \Re personal to a king: IosPE. II. 423 (App. 52), Sauromates II (those on 428 seem private); 431, Rhescuporis; 433, 434 (App. 59), Ininthimaeus (cf. mirror, CR. 1904, p. 75, f. 115); IV. 447 \Re , Eupator v. f. 227. Reliefs on which Nikai flank the mark, Inser. Chr. No. 99, Pl. xi., \Re with another mark both defaced, and Škorpil, f. I, \Re , alone; less careful carvings on stone slabs: ib.

ff. 2, 3 shew fi and another mark, the same two as f. 228; gravestones: IosPE. 11. 84 fi (cf. KW. 626, f. 16), 219 (fi ?), 232 (fi ?), 1V. 237, 283, 359, BCA. x. p. 36, No. 28 (fi ?); buckles etc.: f. 228, ib. xxv. p. 14, f. 5 fi, xxxvII. pp. 31, 32, ff. 4—12 fi, ABC. xXIX. 4 fi (f. 227), xxXII. 19 (fi ?), 20 fi; the four strap-ends have the same tip, it may be a mark: cf. TRAS. Slav. Sect. IV. (1887) p. 519, Orient. Sect. I. (1886) p. 304: KW. l.c. calls these marks "Gothic."

² Stephani in *CR*. 1875, pp. xxiv—xxvi, 1876 pp. 218—222; *KTR*. p. 37, ff. 37—39. ⁸ *CR*. 1860, p. vi. § 4]

In the 1902 catacomb were coins of Cotys II (123—131 A.D.), and in that of 1875 coins of Rhoemetalces and Eupator (131—153—170 A.D.), so as far as our evidence goes this class of tomb went right through the 11nd century A.D.

The third class is represented by the tomb found in 1873 and that of Soracus. In these the architecture is reduced to a mere plinth and all the wall space given up to fancy patterns. In the former (Fig. 230)¹ the style of these patterns differs little from that of those in the second class. We have the same roses and peacocks and garlands as in Stasov's; new are figures of four women dancing and three people under a tree. There is the usual combat, but less well drawn than in Stasov's. The enemy is represented as



FIG. 230. CR. 1874, p. 115. Combat from Catacomb found in 1873. Kerch.

almost identical with the victor. On the roof is a Hermes head with blue wings set as a medallion within a flower-sack garland brought round to form a circle: near by is a brown dog with a green collar. There is a kind of cornice pattern, but that is the only concession to architectural feeling.

The tomb of Soracus son of Soracus (f. 231) published by Kulakovskij² comes last in the series: a painted tabella ansata (op.cit. Pl.vII.) bore an inscription in lines alternately red and black, a curious specimen of Bosporan Greek; both writing and language point to the IIIrd century A.D. and can tell us a good deal as to the pronunciation of that time and place; e.g. $a\hat{t} = \hat{\eta}$ and $i \in \rho \hat{\omega} \iota o \nu$ appears to be for $\hat{\eta} \rho \hat{\omega} o \nu$, so that Soracus regarded himself as joining the ranks

Δ[Γ] Αθ[Ĥ] ΤΥΧΗ
 ΘΕΝΕΙ ΤΡΑΝΤώΡ,
 ΟἰΚοδομής Τὸ ἱκῶν πράκτωρ,
 Οἰκοδομής ΘΕΝΕΙ ΚΑΙΝΟΝ
 Το ἐτο Βαλῶν ἔτερον
 Ο ο τέον τινός.
 ἐνο Βαλῶν ἔτερον
 Ο ο τέον τινός.
 ἐνο Βαλῶν ἔτερον
 Τὰ κα μηδείς μοι παργβρίς μηθρίς μηθρίς μηθρίς κατοικῶντά μο τις σκγλεῖ τὰ ὀςτέα ὡς ἄν
Δέ μό τις παργβρίς τὰ ὀςτέα ὡς ἄν
Δέ μό τις παργβρίς τὰ ὀςτέα τὰ ὀςτέα,
 Α΄ ἔτω Βαλεί, μήτε ἐς Γρις καρπὸν
 Ο λάβοιτο, μήτε ἐχ θαλάς κς, μήτε
 θανῶν εἰς ἄδογ χωρής οιτο³.

of heroes and his sepulchral chamber as a shrine. Yet that did not prevent a

¹ CR. 1874, pp. 112–118; KTR. pp. 34–36, ff. 32–36.

² Mat. XIX. pp. 16–33, Pl. 1.–VII.: references

to these, but the details can be seen on Fig. 231.

Spelling unchanged, but accents etc. supplied:
1. 9, so Kulakovskij; Latyshev, IosPE. IV. 342, βάλει.

justifiable fear that the shrine might be plundered and his heroic bones cast out, and the inscription contains the usual comprehensive curses to guard against this. He seems to have amassed some wealth as an exactor of legal fines.

As regards the decoration, except for the brown plinth which goes right round there is no architecture left (Pl. 11.). The whole wall is covered irregularly with the heart-shaped rose, whose leaves are not quite so much conventionalized as usual: we also have the brown garlands sometimes pecked at by a pair of birds; a fresh pattern is one of crossed palms (Pl. 11.). On the left of the entrance stood Hermes (Pl. 111.) on a pedestal with money-bag and caduceus painted on a kind of buttress or pier supporting the roof. To this corresponds on the right an actual square pier which bears on one side the inscription and below it two Erotes (Pl. vi. b), on another a dancing Satyr with flutes (Pl. v.). At the back of the Hermes buttress, looking towards the couch on which no doubt was placed the body of Soracus, we have the inevitable funeral feast with some apparent attempt at portraiture of the principal figure (Pl. vi. h).

This is the latest catacomb with frescoes, but that method of burial went on for another two hundred years. To this interval belong such as have rude drawings or patterns executed directly upon the clay². In unadorned catacombs have been found coins of a whole series of sovereigns from Sauromates I (92—124 A.D.) to Valentinian III (424—455) and later still

a silver shield with a splendid figure of Justinian on horseback.

Sometimes in Christian tombs crosses and extracts from the Psalms and hymns covered the walls. Such a case was published by Kulakovskij in his first monograph (Mat. vi.) and was important for the definite date 788 A.B. = 491 A.D. The names of the dead pair Sauagas and Phaeisparta are clearly of the same Iranian or Ossetian type that we have said to be characteristic of the earlier Bosporan citizens. This and the continued use of the Bosporan era proves that there had not been such a break-up as had been hitherto supposed. The greater part of the walls is covered with Psalm xc., but the writing is so inaccurate that it is of no importance for the Greek text; the presence of μ is so much against that form being Egyptian.

In another Christian catacomb, discovered near by in 1895, we have the same Psalm xc. (but written much more correctly), the Trisagion and various crosses but no names; the writing again points to the vth century A.D.*

At Chersonese, with the exception of three Christian vaults, only one chamber with frescoes has been discovered, and that in such bad condition that it is hard to judge of date, style or subject. It was only possible to distinguish the figure of a woman, half nude, turned away from the spectator, and a group that suggests the winged figures bearing away a dead man, so common upon white lecythi. At Olbia practically no remains of painting have survived.

The figures and inscription recall tomb paintings near Tripoli, Arch. Anz. 1904, p. 118.
 Cf. CR. 1873, p. xi; 1890, pp. 28, 29; 1894, p. 89, f. 148; 1907, p. 76, f. 63.
 J. Strzygowski and N. V. Pokrovskij in Mat.

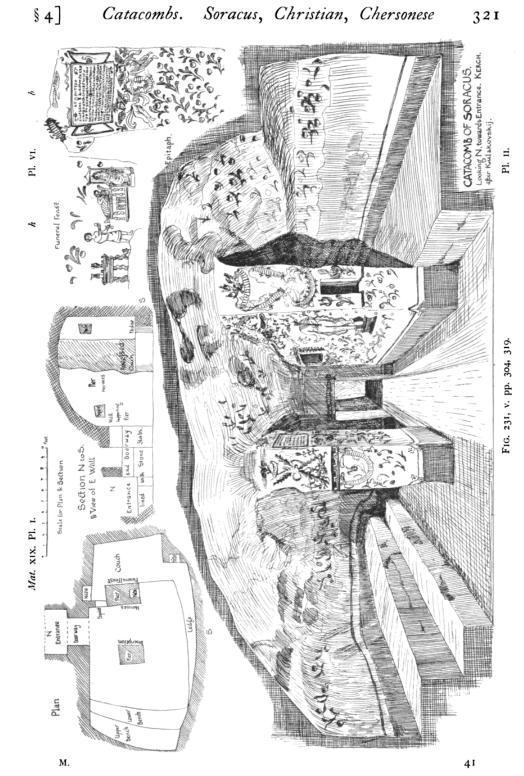
⁴ Sauagas seems actually to occur in *IosPE*. II. 49¹ (inf. App. 66), 389, Phaispharta, in a Christian

amulet, Trans. Od. Soc. XXI. Minutes, p. 8.

⁵ Kulakovskij in an appendix to Mat. XIX. p. 61.
Mr N. McLean kindly informs me that the text offers no points of interest.

⁶ BCA. xvi. p. 98, No. 1494, xxv. pp. 166—169, Nos. 2086, 2114.

⁷ CR. 1894, pp. 71, 72, ff. 103, 104. ⁸ Two rude figures BCA. XIII. p. 26, f. 16.



§ 5. Woodwork. Coffins.

The solidity with which the tombs were built about the Bosporus has preserved for us a large number of coffins which rank as among the best specimens of Greek woodwork extant. They are mostly constructed in a manner suited to the material, with framing and panelling: the enrichments are like those used in stone architecture, which had itself borrowed some from wooden construction, but are applied with due regard to the material. Only rarely do we find an instance of a wooden coffin clearly imitating a stone sarcophagus in its turn designed after the pattern of a small temple. The Niobid coffin (pp. 332—334, ff. 241—244) is evidently put together on the pattern of such a stone sarcophagus as the well-known one from Sidon² called Les Pleureuses, and both reproduce the columns round a temple or mausoleum,



FIG. 232. CR. 1900, p. 103, f. 183. Wooden Coffin from Olbia in Odessa Museum.

the statues between them (e.g. the Nereid monument) and the railings put from column to column. Simple wooden treatment we have in that from Olbia, a little more elaborate in that from Jüz Oba. In this already we have the application of colour which is such an interesting feature. Panels and frames were painted with figure subjects, enriched with elaborate marquetry, and even had applied to them wooden, plaster or terra-cotta figures and adornments coloured and gilt, until the more splendid coffins when fresh must have presented a magnificent combination of colour and form.

The plain chest from Olbia (f. 232), probably made to hold clothes, is very like an old English hutch, except that the front has such broad framing that the single panel bordered with beading that runs along the middle of the side is not half the breadth of the enclosing frame, being in fact not an inserted

siderable remains. W. gives many illustrations and a most interesting analysis of technical and decorative development; his work has rendered this section almost unnecessary, cf. Catalogue Générale des Antiquités Égyptiennes du Musée du Caire. C. C. Edgar, "Graeco-Egyptian Coffins," Cairo, 1005, pp. 1-10, Nos. 33101—33123. Pl. 1.—V.

1905, pp. 1-10, Nos. 33101-33123, Pl. 1.-v.

² O. Hamdy Bey et Th. Reinach. *Une Nécropole Royale à Sidon*, Paris, 1892, Pl. IV.—XI. p. 238 sqq.

¹ C. Watzinger, "Griechische Holzsarkophage aus der Zeit Alexander's des Grossen," Heft 6 der Wissenschaftlichen Veröffentlichungen der Deutschen Orient-Gesellschaft, Leipzig, 1905, has treated the whole subject thoroughly in connexion with the coffins found in 1902-4 at Abu Sir in Lower Egypt. He enumerates over 60 coffins, of which nearly 50 come from S. Russia. I have only noticed those of which there are published drawings or con-

panel but one with the frame. The lid had two slopes and there were bronze handles on it1: the end view was very like Fig. 233.

Simple also, but very effective, is a coffin (f. 233)2 found in a splendid stone chamber under one of the Jüz Oba barrows to the south of Kerch.

The sarcophagus took the form of an immense chest crowned by a roof of two slopes with a cornice along the sides and pediments at the ends. In each side and end of the chest was a panel of bright red set in the framework of dark brown and surrounded by a carved and gilded cymation: all the other mouldings were equally carved and gilded, and the whole produces an effect perhaps all the better for the loss of decorations stuck onto the panels. There was an inner coffin with simpler mouldings. Within this was found among other things the curious ring bearing on its bezel a serpent drawing a bow and vase fragments of the end of the vth century.



FIG. 233. CR. 1860, VI. 2 and p. iv. Coffin from Jüz Oba. Brown; mouldings and pegs, white; panel,

Of similar general construction, with a long narrow panel down each side, was a coffin

discovered by Ashik in the barrow of Mirza Kekuvatskij near Kerch in a chamber with an "Egyptian" vault. The framing of the panel was of cypress and the panel set in an egg-and-dart border of red and gold. On the ground of the red panel were gilt wooden figures of griffins attacking various animals. These have mostly come off the one panel that has been preserved, and we have A B Γ Δ E I Θ incised on the places from which they came, as a guide to the workman in fixing them on. Stephani suggests that the normal Ionic alphabet had not yet come into use, hence the absence of H. This would argue for an early date, but the style can hardly be much before the middle of the ivth century.

A more elaborate and better preserved example of somewhat the same design was found by Tiesenhausen in 1868 in the stone chamber of a barrow, about a mile and a half from Taman on the way to Tuzla. The coffin was built with three long panels in the sides one above the other, each surrounded with beading, but only the centre one, the narrowest, was decorated with wooden groups of griffins and panthers attacking deer. As usual the ground was red and the animals coloured and gilt. The framing was further adorned with inlaid arabesques and the corner posts with rosettes representing pegs. The cover was of two slopes with cornice and at each end a pediment; one of the latter is preserved; it has a winged figure and arabesques in marquetry, and is surmounted by acroteria on the gable and at each angle.

¹ Watzinger, p. 38, No. 15, ff. 67, 68, shews its relation to No. 1 coffin from Abu Sir, which appears actually to have been used as a chest; cf. Edgar, op. cit. Pl. I. III.

² Watzinger, p. 35, No. 10, f. 63. ³ CR. 1861, VI. 8 on p. 427, f. 318.

⁴ ib. Pl. 111.—v.

⁵ ABC. LXXXIV. 2 shews the panel and griffins, 3, a part of the cornice; cf. also p. 21 of Reinach's reprint. Watzinger, p. 38, No. 14. For I perhaps we should read 1.
6 f. 234, CK. 1868, p. x, and 1869, pp. 177 and

^{178:} KTR. pp. 40, 41, ff. 44, 45. Watzinger, p. 37, No. 13, ff. 65, 66.

In 1882 the same explorer found the best specimen of this type near Anapa towards Vitjazevo and Blahovêshchenskaja¹. The lid is lost and nothing is known of it. The framing and panels, of which there are two one above the other, have been left uncoloured, but the architrave, the cornerposts and the broad horizontal band between the panels have as it were

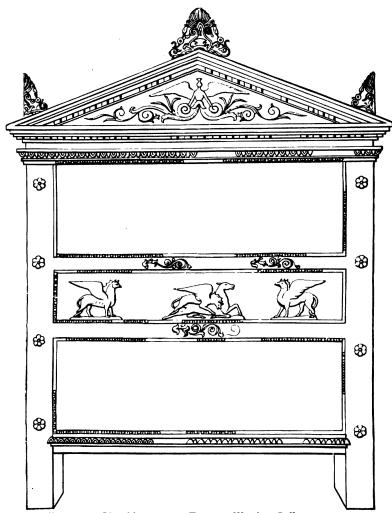
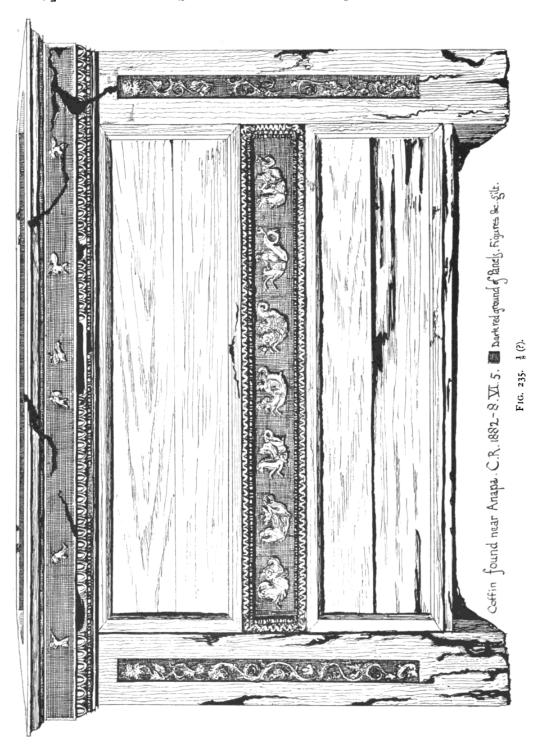
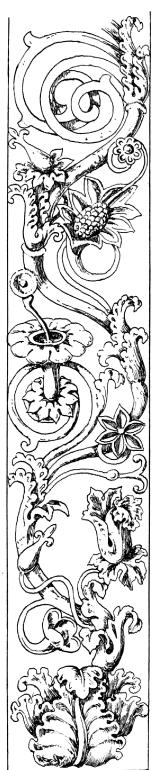


FIG. 234. CR. 1869, p. 177. Taman. Wooden Coffin, v. p. 323.

subsidiary panels with a dark red ground sunk into them (Fig. 235). On the corner-posts these are filled with beautiful arabesques of acanthus leaves, tendrils and palmettes of carved and gilt wood. Under the cornice the red band forms a kind of frieze and bore small figures of barbarians in combat (Fig. 236).

¹ CR. 1882—1888, pp. xxi—xxvi, Pl. v1. 5, p. 71 sqq. Watzinger, p. 36, No. 12, f. 64.

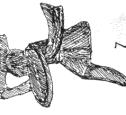
















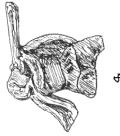
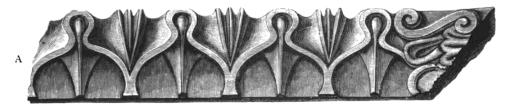


FIG. 236. Figures, 4: acanthus pattern, slightly reduced.



FIGS. 237, 238. CR. 1882-8, pp. 50 and 61. Wooden Nereids from Coffin found near Anapa. 1.

The broad band half way up each side has a row of Nereids bearing the arms of Achilles and riding upon sea monsters1. These were adjusted by letters of the alphabet. This band is enclosed by the usual cymatia and beadings, made separately. Among the lady's belongings found within was a coin of Lysimachus, dating the find as of the IIIrd century B.C. which just agrees with the style of the Nereids ultimately derived from Scopas.



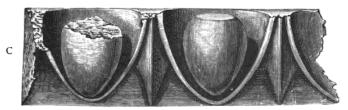


FIG. 239 CR. 1882-8, pp. 74, 75, A, B, C. Mouldings from Anapa Coffin. 1.

Of more complicated design, though scarcely more rich in execution, is a great coffin found by Ashik in the Serpent Barrow (Zmêinyj Kurgan) near Kerch in 1839' (Fig. 240): Stephani took the design to represent a house with a flat roof enclosed by a kind of railing and with many windows in the side walls. Accordingly the chief horizontal moulding, made up of a large bead moulding, then egg-and-dart, another bead and another smaller egg-and-dart, all enriched with red and gold, does not run along the extreme top, but some eight inches down; a smaller top moulding has alternate squares of red and brown and a cymation with reversed palmettes in red and white on a black ground. Between is a kind of chessboard three rows deep chequered red and green, all forming as it were an attic. The main order, so to speak, has panels filled with varied blind trellis patterns between grooved styles almost like triglyphs. Below is another row of egg-and-dart and a base moulding. At the ends the trellis gives place to three panels of brown ground colour, bearing gilt figures: Hera with a sceptre balanced by Apollo with a bay branch and between them a panel of acanthus arabesques with palmettes. Watzinger is probably

¹ ff. 237, 238, CR. 1882—1888, Pl. III.—v. 15, 17, Reinach. Coloured in Sabatier, Souvenirs de and Text pp. 48 sqq. Kertch, Pl. VIII.

4 op. cit. p. 40, No. 18.

^{18,} and Text pp. 48 sqq.

² f. 239, l.c. pp. 74, 75, A, B, C, D.

³ f. 240. *ABC*. Pl. LXXXI. 6, 7 and p. 22 of

right in thinking this to be an ordinary box-coffin which has lost its end-posts (the feet shewn are not original), has a kind of triglyph frieze instead of its main long panel and an extra board framed above it. The main body of the sarcophagus is of cypress-wood, the carved parts are of yew.

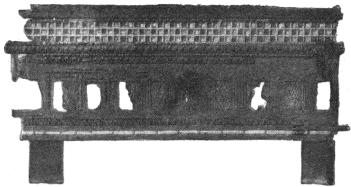


Fig. 240. Mat. XXIV. p. 20, f. 26. Wooden Coffin. Serpent Barrow, Kerch. $\frac{1}{20}$.

Of perfectly plain construction was the outer coffin of the Kul Oba king, it was just a great box about nine feet square and eleven inches high (v. p. 202), with one side left open; the elaborate inner coffin belongs to the next class. The queen's coffin¹, which Dubrux calls a catafalque, had turned pillars at the angles, but otherwise seems to have been quite simply made.

Its paintings have been noticed already (sup. p. 305).

Of unusual type was the ornament of a sarcophagus found in 1876 between Churubash and Eltegen (Nymphaeum)². Instead of the architectural patterns derived from stone, the framing was ornamented with inlaid rosettes and stars at intervals in quite an original style. So in mediaeval times ornament applied to wood occasionally escaped from the tyranny of stone forms and suddenly shewed a certain independence and designs adapted to the material. Watzinger regards the marquetry as preceding the application of figures in relief and this as the earliest coffin extant. He illustrates a very elegant example of inlay from Kerch³ with a simple olive-wreath pattern.

The coffins with more ambitious architecture being built up of a very large number of small pieces whose forms were not dictated by the simpler necessities of construction have on the whole suffered more than the artistically framed boxes. The application of strictly stone forms to the decoration of the coffins had to struggle against the important place that construction gave to the corner-posts, and this prominence was never quite got over. The simplest way to use stone forms was just to plaster them on to the frames and leave the wooden panels between. We have such an arrangement in the coffin found on Cape Pavlovskij as mentally reconstructed by Watzinger*. Here the ends were left much as on the box coffins, they had a panel with particularly rich marquetry work. The long sides had at each

¹ Watzinger, p. 44, No. 24. ² v. p. 214, f. 115, CR. 1876, pp. xvii—xix, 1877, p. 221; Watzinger, p. 39, No. 17.

³ p. 39, No. 16, ff. 69, 70. ⁴ p. 45, No. 26, ff. 81—85. *CR*. 1859, p. 29 Text: inside it a coin like Pl. v. 14.

end and in the middle an elegant Ionic column with inlaid palmettes on the neck and glass centres to the curls of the capitals. These columns must have stood on some sort of base and had above them some sort of entablature to which belonged sundry pieces of moulding enriched with marquetry. In the wide intercolumniations were panels similar to those in the end walls. The roof has left very little but seems to have had acroteria and a sima-like

ornament along the eaves. Watzinger (p. 56, No. 41) has shewn with some ingenuity that the beautiful ivory veneers from Kul Oba would suit such a coffin very fairly well. The wood seems all to have perished and the ivories were not noticed until late in the process of collecting the finds. The unfortunate history of the exploration (v. p. 205) prevented the possibility of seeking any more fragments'. The discoverers thought that they had found parts of a box or of a musical instrument, but the size of the capitals with their glass eyes' shews that we have to do with a large composition, for corresponding pilasters must be more than a metre high. We may suppose that there were two pilasters at each corner. The subject of the Judgement of Paris (pp. 204 A, B, ff. 100, 101) would take the main panel on one side, and the corresponding panel would have the meeting of Paris and Helen'. Or if there were a pilaster in the middle as on the Pavlovskij sarcophagus, the two incidents of the Paris story would be one on each side of it. The pieces with Herms' would do for the end- or back-panels. The narrow strips with the rape of the daughters of Leucippus and the preparations for the race of Pelops and Oenomaus (pp. 204 C, D, ff. 102, 103, LXXIX. 13, 14) may have run along the frame above a broader panel. The short thick pieces with a Scythian dragged by his horse and a hare pursued by a dog rather like a Russian borzoi would fit in across the breadth of the corner-posts (ib. LXXIX. 9, 10).

To the posts and frames rather than to panels would belong such decoratively treated pieces as the sitting women (ib. LXXIX. 7, 8), Hermes or a Boread (LXXX. 16), the lion and such mere decoration as the candelabrum (ibid. 14)

with patterns like the egg-and-dart and the quatrefoil border.

The main pieces here regarded as panels are engraved with the point upon ivory hardly more than a millimetre thick. They are delicately tinted, the colouring, which is chiefly noticeable at the outlines, being in very subtle greys and browns. It must have been brighter once but was probably always restrained, as the drawing is before the time of a varied palette.

The drawing is very like that of red-figured vases of the finest style save for one or two mannerisms (e.g. the treatment of the hands) which suggest the 1vth century? Still more like these ivories because of a similarity in technique are the engraved silver cylices from the VII Brothers, but if we

* v. pp. 206, 210, 382, CR. 1881, I. 1-4.

¹ Thanks to the great kindness of Mr E. M. Pridik I have reproduced on pp. 204 A—D, ff. 100—103, photographs of the most interesting of the fragments. They do better justice to the originals than even Piccard's beautiful drawings in ABC. to which all other pictures of them go back. References to pieces which I have not reproduced have been enclosed in square brackets.

² p. 205, f. 104, ABC. LXXX. [1, 5, 18,] 19.

³ [ABC. LXXIX. 11, 12.]

⁴ [ABC. LXXX. 11, 12, 15.]

⁵ [ABC. LXXX. 17.]

⁶ [ibid. 8, 13.]

⁷ This was pointed out to me by Professor Waldstein, who referred me for an example of early archaistic treatment, such as we get in the Hermes, to a relief at Epidaurus (Defresse et Lechat, p. 87).

are to judge of these too, photographs are a necessity, for the drawings fall far short, as Stephani complains.

There is considerable difference of style between the fragments, but perhaps it is not more than is to be explained by the more ambitious rôle that the panels would play in the original composition. The presence of the Scythian looks as if the work was done either at Kerch or definitely for the Scythian market, but he is so spirited that we cannot regard him, though different, as inferior to the more finished panels. Watzinger (p. 91) thinks the work Milesian because of the Asiatic look of the capitals, the fame of Milesian furniture and the resemblance to a sarcophagus found at Gordium: but in the 1vth century Miletus had lost its commercial predominance and it is at least as likely that we have Attic work. In any case these fragments are unsurpassed as specimens of Greek drawing.

The coffin of the Priestess of the Great Bliznitsa by Steblêevka has left but fragments including the capitals of two pilasters once curiously adorned with inlaid work, one with a palmette, the other with a group of two griffins and a deer' and also an Ionic fluted column, another shaft not fluted, thirteen greenish glass roundels from the eyes of Ionic capitals and a large number of pieces of ivory or bone for inlaying. Also various pieces of moulding, eggand-dart, etc. with traces of red colour. These would make up into something

not unlike the Pavlovskij coffin.

Also from the same Bliznitsa come the fragments of a man's coffin which was utterly destroyed by the falling in of the vault above it. They include a very large number of pieces of ivory for inlaying, having the forms of human figures, male and female, parts of Fauns, Erotes, birds, horses, deer and three figures of Sirens playing the drum, the cymbals and the flute, also a butterfly, leaves, grape bunches and palmettes, and purely architectural pieces with traces of colour, egg-and-dart mouldings, cymatia and Ionic capitals duly garnished with glass eyes to the volutes (v. p. 424, f. 314). In spite of the large number of fragments no attempt can be made to restore the general design. Very similar fragments were discovered by MacPherson.

The next step towards a temple form is when there are large pilasters or piers at the corners and along the sides small pilasters, usually five, supporting a fully-developed entablature and resting on an imposing plinth. A good example of such a type is figured by Watzinger*. It was found by Kareisha in 1842 and a drawing has been preserved, but the original has perished entirely. The pilasters were Corinthian with Attic bases. Along the eaves were triangles representing antefixes and on the gables strange acroterias. Under the projecting upper member of the plinth were turned balusters supporting the corners. Of the same type is a coffin from Kerch in the Antiquarium at Berlins. The capitals, this time Ionic (?), were moulded in stucco which has fallen away, the lid is lost.

¹ p. 424, f. 314, *CR*. 1865, Pl. vi. 4, 5 and p. 9. Watzinger, p. 47, No. 28, ff. 87, 88.

² *CR*. 1866, Pl. 1. and II. 1—26 and pp. 5—68 of

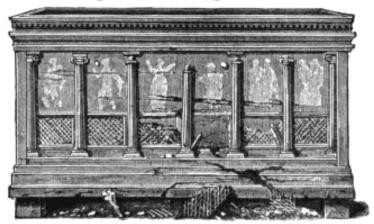
the Text. Watzinger, p. 56, No. 40.

3 Kertch, Pl. I. p. 55.

4 op. cit. p. 46, No. 27, f. 86.

⁵ Compare the solid flat corner acroteria of a marble sarcophagus found at Kerch, CR. 1905, p. 58, f. 66. Probably these were painted, cf. those of grave reliefs, supra, p. 301, f. 214.
⁶ Watzinger, p. 48, No. 29, ff. 89—91.

In these the corner-posts are still flat as natural construction demands, but the straining after stone effects led to the substitution of a round pillar at the corners. The simplest example had just a base moulding and a friezeless architrave and seven Ionic pillars along each side. In each of the panels between them hung a wreath of stucco, and two on each end-panel (compare the wreaths in the catacomb on p. 311, f. 222). The lid had two slopes'. To this class belongs a sarcophagus found near the Kerch Almshouse of Zolotarev in 1883. It was in rather bad condition but was remarkable for the great variety of applied figures that it once bore. At the angles there seem to have been turned pilasters on a flat carved base, the usual cornice and slender colonnettes along the sides. Along the frieze seem to have been



F1G. 241. Mat. XXIV. p. 19, f. 24=CR. 1875, Frontispiece. Niobid Coffin. Kerch. 18.

wooden figures of Centaurs, dolphins, hippocamps, pegasi, wolves attacking bulls, dogs, a horse, a lynx and a barbarian spearing a lion, and above at the corners wooden dolphins. In the panels were plaster appliques coloured white, blue and brown, including winged Naiads, Medusa-masks, bucrania and dolphins. The Hermitage exhibits a model coffin set up to shew off the plaster appliques; the coffin and arrangement are not to be regarded, but the photograph gives a good idea of the variety of the appliques found together. Somewhat similar was one found by Kulakovskij in 1890 at Glinishche near Kerch, but its preservation was not very good. The same kind of thing comes from near Cape Zjuk to the north of Kerch.

The most elaborate wooden sarcophagus that we possess has been already referred to as that of the Niobids. It was found in 1874 on Mount Mithridates. Were it not that it lacks its cover it would be a regular little temple of the Ionic order. Along the side (f. 241) are six intercolumniations with five complete columns and two half ones against the angle piers. At the ends

description.

Watzinger, p. 49, No. 30, f. 92, from a drawing in the Archaeological Commission. The coffin, found in 1864, has perished.

² CR. 1882-8, p. xl: this seems to be Watzinger's p. 49, No. 32, ff. 94-107, which shew very rude work, but subjects agreeing with the above

³ inf. pp. 371—373, ff. 269—277. Another with great variety is Watzinger's p. 51, No. 33, ff. 108— 111.

<sup>111.

4</sup> CR. 1882-8, p. 74, Note 1 and 1890, p. 25.

5 Trans. Od. Soc. XIX. Pl. IV. Materials, p. 127.

(f. 242) we have two half columns and a single whole one; these end columns stand in front of pilasters with imposts from which arches are turned across. Above the columns run a narrow frieze and a cornice with dentels. From column to column, about a third of the way up, go rods holding trellis work in place below them, answering to the railings put in this position in actual temples. The statues usual on the stylobate are represented by figures of coloured plaster



FIG. 242. Mat. XXIV. p. 19, f. 25 = CR. 1875, p. 5. End view of the same coffin. $\frac{1}{12}$.

stuck on to the surface of the panel immediately above the trellis. They belong to the series of the Niobids, and the Pedagogue (f. 243) was found actually in place. Most were rather broken, but their places could be traced on the panels. Within were found glass vessels and a gold wreath with an indication of a coin of Vespasian. On the whole the sarcophagus is a fine piece of work, although perhaps its design goes beyond what is legitimate in wood.

Joinery and Ivory-work.

It just happens that by far the greater part of Greek woodwork left to us consists of coffins. But the few fragments left of other pieces of furniture make us regret their rarity. In 1842 Kareisha discovered a three-legged table

has degraded the sarcophagus from being the first

¹ CR. 1875, p. 5 sqq. Watzinger, p. 54, No. 35. The identification of the indication made by Mr Markov trave: Stephani had put it down to a Diadochus trave: Stephani had put it down to a Diadochus and dated it in the IIIrd century, B.C.

in a tomb by the Kerch Public Garden. On being touched it fell to pieces, but one leg was saved, and the whole can easily be restored from this and from the pictures. For this is just the type of table commonly represented in the funeral feast scene. The same technique as was applied to coffins was used in making boxes for daily use. To such a box belonged a piece of ivory inlay representing Eros and Aphrodite. The drawing is wonderfully free, especially considering the material (v. p. 424, f. 314).



FIG. 243. Mat. XXIV. pp. 12, 16, ff. 14, 20. Plaster Niobid and Pedagogue from the same coffin. 12.

Some interesting ivories come from Olbia, archaic engravings of Eros and the "Persian" Artemis², a statuette of a seated woman about 2 in. high³,

ABC. LXXXI. 1—5, p. 126; Jahrb. d. k. deutschen Arch. Inst. 1902, pp. 125—140, C. Ransom, "Reste Gr. Holzmöbel in Berlin," p. 127, f. 2.

Vogell, Sammlung (v. inf. p. 339 n. 6), Nos. 1145, 1146, ff. 54, 55.
 BCA. XXXIII. p. 106, f. 4 = CR. 1907, p. 57, f. 47

and a box the bits of which bear Erotes playing the double flute and juggling with balls1. Unexpected are the remains of another box made up of fourteen narrow panels apparently representing a Sassanian king and his court watching nautch girls and child acrobats dancing and tumbling to the music of winged boys. Pharmacovskij cites Alexandrian analogues for the work, but they are not convincing and it is as likely to have come from somewhere further east, almost outside the classical tradition². From Chersonese come some late bone fragments carved with animals, a barbarian soldier and a statuette⁸.

We may also mention some sets of men for playing games, one with heads of nine gods, Augustus, L. Caesar, and a lady of their house, two wreaths and the Eleusinium, numbered on the reverse I—XV in Greek and Latin, all found at Kerch in a box complete, another at Odessa, most of a set of eighteen, also from Kerch', and one from Chersonese consisting of fifteen black and fifteen

white draughtsmen in glass.

Very neat joinery is shewn in a toilet box found at Kerch with little compartments containing a round bronze mirror, a comb and spaces for putting jewelry. Still higher skill went to making the comb with the words in open work $A\Delta E \Lambda \Phi H \Delta \omega P O N^7$.

So much for the remains of Greek woodwork found in South Russia to which Blümner's rightly points as to perhaps the most important source for

our knowledge of Greek carpentry.

It is curious to notice how much the Greek interpretation of stone forms in wood forestalled the ways of the Renaissance artists. For instance, the table-leg might well have been the work of a xvith-century Italian, and the same may be said of details such as those of the Niobid sarcophagus. Only the Italians could not remain so long at the stage of satisfying simplicity and degenerated much sooner into rococo. In the wall paintings resemblances are not always mere coincidences, for discoveries of ancient frescoes in Rome had an important effect in guiding Italian decoration: but the case of woodwork shews that without them the development would have been very similar.

§ 6. Textiles.

The special conditions that have preserved wooden objects for us in Bosporan graves have also allowed the survival of a few specimens of textiles: for the older time before our era little has been found elsewhere, later on Grecian Egypt has furnished us with some examples. Stephani has reproduced and discussed the best pieces. He prefaces his description with an account of the representation of textiles in art, especially vase-paintings.

The oldest piece (p. 212, f. 113, l.c. Pl. IV.) covered the sarcophagus in No. vI of the VII Brothers, which dates from the Ivth century. The stuff

¹ CR. 1904, p. 39, f. 57. ² Arch. Anz. 1907, pp. 149-151, ff. 15-28; CR. 1906, pp. 39-44, ff. 35-48; BCA. XXXIII. p. 134 sqq., cf. Bull. Soc. Arch. d'Alexandrie, v. Pl. 1. II. p. 3.

³ CR. 1895, p. 93, f. 239; 1901, p. 39, ff. 77, 78; 1902, p. 39, f. 64; 1903, p. 35, ff. 45—47; 1904, p. 62, ff. 94, 95.

⁴ M. I. Rostovtsev, BCA. x. pp. 109-124, Pl. 111. IV., cf. Rev. Archéol. 1905, V. pp. 110-124: Arch.

Anz. 1910, p. 238, f. 41.

⁵ BCA. IV. p. 109.

⁶ CR. 1899, p. 129, f. 251.

⁷ ABC. Reinach, p. 136.

⁸ Technologie, II. p. 329.

⁹ CR. 1878-9, Pl. III.—VI., Text, pp. 111-114.

must be much older as it has been darned in places. It is made of several strips sewn together and then covered with the design by means of some stain. There was a broad border of large palmettes, and six or more strips across filled with complicated figure-subjects separated by narrow patterned bands. The names NIKH, EPI[ξ , AOHNAIH, IOKA ξ TH, I]ONE $\Omega\xi$, MOYO ξ , I]PPOME $\Delta\Omega$ N, EVAIMENH, AKTAIH and Φ AI Δ [P]H shew both that many various tales were represented and that the dialect of the maker was Ionic. The stuff was yellow, but the ground of the design is black, and red is used also. The whole suggests some Ionian form of red-figured vase whereon the traditions of black-figured technique had survived more than they did at Athens (v. p. 210, n. 9).

From the same tomb comes a piece (Fig. 244, v. 2) with a pleasing pattern of ducks on a purple ground and a border of stags' heads; something of the same black-figured spirit survives in the manner in which the ducks are rendered. They are yellow with streaks of black and green, and green was

used for the stags' eyes: the trimming was of fur.

The finest piece left, from the Pavlovskij Fort Barrow, has a dark purple ground embroidered mostly with a pattern of spirals and palmettes, but also bearing the figure of an Amazon and edged with a green border of the texture of rep. The tendrils and stalks are pinkish-yellow, leaves are green, the Amazon has a green chiton with a red and yellow border. The drawing of it all is very free, considering that the design was to be carried out in satin stitch (Fig. 244, III. 1, 2).

On the same plate, III. in CR., we have specimens of golden leaves sewn on to a bark foundation covered with stuff to make a crown, a cheaper form than the all-gold crowns illustrated on pp. 388, 389, ff. 285, 286. In one case the gold was itself covered with fine woollen crêpe: one bore an indication of a coin marked BAE common also on the gold crowns. Thus I would date them about the middle of the 1st century A.D., assigning them to Mithridates VIII, but they are more usually put down to Mithridates Eupator

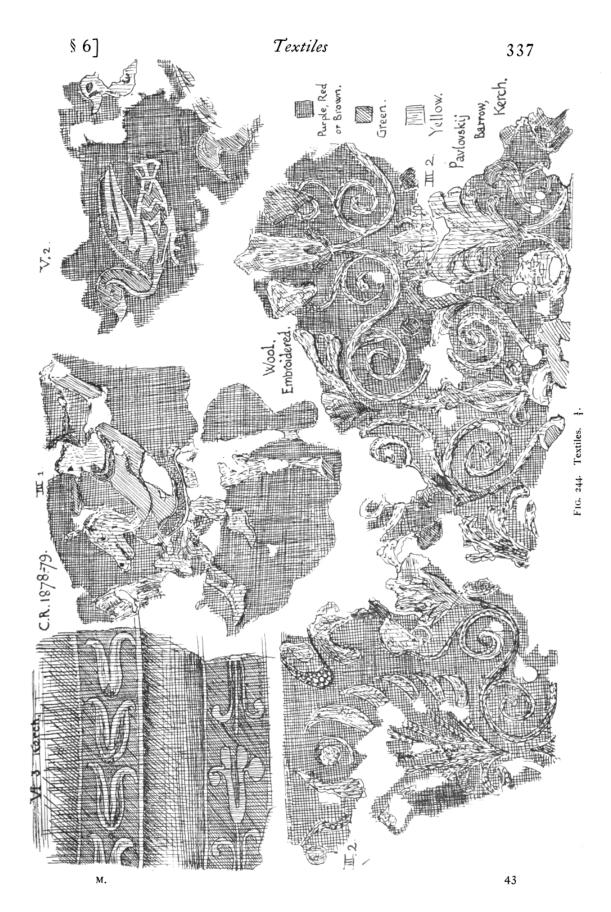
(v. coin-plate vii. 14—18 and Ch. xix.).

Other interesting pieces not reproduced on Fig. 244 may be mentioned; v. 3 is silk found with the three-legged table (v. p. 333); v. 4 is embroidery in gold on slate colour, making an ivy pattern. Other pieces on this and the following plate are mostly stripes and mat-like patterns: vi. 2 is a conical cap with a tassel at one end and stripes round the other: vi. 3 (Fig. 244) has its stripes enriched with simple arabesques which look thoroughly in the *Empire* style. In several of these pieces remarkable skill is shewn in making the red shade into the green by delicate gradations. The texture is mostly similar to what we call rep.

Byzantine textiles, some inwoven with figures of men and animals interesting when compared with Coptic work, have been found at Chersonese².

¹ VI. 5 and 6 shews an ancient shoe adorned with gold sequins and not more than 6½ in. long. Other shoes have been found at Pavlovskij barrow. CR. 1859, p. 30, No. 15, and in the Great Bliznitsa in the tomb of the Priestess of Demeter, CR. 1865,

<sup>p. 11, No. 16. Wooden soles of Roman date are figured, CR. 1878-9, p. 143. All are very like our shoes; cf. Watzinger, op. cit. p. 14, ff. 25, 26.
² CR. 1891, p. 5, f. 2; 1904, p. 51, ff. 63, 64: BCA. XVI. p. 38, ff. 1, 2.</sup>



§ 7. Ceramics.

For the history of the Ceramics of the Greeks the finds in South Russia have no such superlative importance as for the study of their carpentry, textiles or goldwork. Yet they have yielded much material towards filling up outlines traced by investigators working in other regions, and they have no small historical interest as determining the relations between the coasts of Scythia and other parts of the Greek world at various periods'.

In view of the endless number of specimens any attempt at an enumeration even of the most important is hopeless, and for finds made in Stephani's lifetime the reader is referred to CR. from 1859 to 1881 and to his Catalogue

of Vases in the Hermitage.

Early Vases.

One Geometric vase is said to have come from Berezan²; with, as far as I know, this single exception the earliest kind of Greek vase that occurs in South Russia is that referred by Boehlau to Miletus. From the environs of Kerch such vases are very rare, first published was that from Temír Gorá's. A Corinthian aryballus was found at Kerch in 1902, and with it one of "Egyptian porcelain" with a kind of cartouche upon it, not, it seems, Egyptian work but after the Saite type as Mr F. W. Green tells me'; another Corinthian and a Milesian (?) aryballus were found there the next year.

But these early finds are few on the Bosporus: the rather desultory excavations carried out in that region in spite of their long continuance do not seem to have happened upon the oldest cemeteries. Perhaps there was no considerable Greek population before the vith century, or it is just conceivable that the older diggers who were looking for productions of the "finest" periods took no notice of earlier and less elegant objects.

Be that as it may, the careful diggings of the last few years have produced plenty of early fragments from the Olbia district. They were first reported in any quantity from the island Berezan, from which were derived the collections of Father Levitskij's, soon to be published in Materials, and of Mr Voitinas'. Excavations were there carried on in 1900 and 1901 by G. L. Skadovskij and since 1902 by von Stern. The summaries of results published yearly mention Theran, Milesian and Samian⁸, Naucratis, "Egyptian porcelain," Clazomenian, Proto-Corinthian and Corinthian, Cyprian, Early Boeotian, Attic black-figured and a few severe red-figured vases: there is

¹ Professor E. R. von Stern summed up the whole results to 1899 in a paper read before the XIII Russian Archaeological Congress at Kiev, Trans. Od. Soc. XXII. pp. 1—21, "On the significance of Ceramic Finds in South Russia for elucidating the Cultural History of the Black Sea Colonization," and this with additions to bring it up to date has been the basis of the following section: but he has since remodelled it with much the same additions as mine and presented it to the International Congress of Historical Sciences at Berlin (1908), Klio, IX. (1909), pp. 139-152, "Die Griechische Kolonisation am Nordgestade des Schwarzen Meeres im Lichte archäologischer Forschung." Since Stephani's death nearly all advance in our

knowledge of S. Russian Ceramics has been due to von Stern and his pupil B. V. Pharmacovskij.

² Arch. Anz. 1910, p. 227, f. 27.
³ CR. 1870-1, Pl. 1v; Prinz, Klio, Beiheft VII., "Funde aus Naukratis," p. 134.
⁴ CR. 1902, pp. 53, 58, ff. 89, 120.
⁵ CR. 1903, p. 47, ff. 71, 72; cf. Arch. Anz.

1908, p. 170.

⁶ CR. 1901, p. 133: two late Milesian sherds, N. Radlov, BCA. XXXVII. p. 81, coloured Pl.

III. IV.

7 CR. 1903, pp. 152, 153, ff. 303, 304. 8 So J. Boehlau, Aus Jonischen und Italischen Necropolen, Leipzig, 1898, p. 52 sqq., renames Rhodian and Fikellura.

also a new ware most nearly allied to Naucratis and so probably Milesian, it consists of bowls, yellow or yellowish-grey outside, red, black, dark-brown or chocolate within: round the outside run three red or dark rings. Attic wares are confined to the top layers; among these were two signatures of Tlesus 1.

Olbia itself yields a not less abundant harvest of much the same sorts?: the best specimens seem at first to have fallen into the hands of the predatory diggers, as von Stern laments, but now Pharmacovskij has found very numerous fragments and some whole vases. He has grouped them temporarily and published some of the best pieces, recording the occurrence of Samian', Naucratis, Corinthian, Chalcidian and the unknown Ionian fabric with creamy ground and red decoration*: such already existed in Mr Vogell's collection at Nicolaev. More recently specimens of Milesian, Clazomenae and Daphnae wares have turned up, and lastly vases in the shape of a man with a hedgehog in "Egyptian porcelain" probably made at Naucratis or Miletus⁷.

Fragments of Milesian pots even penetrated into the interior as far as the government of Ekaterinoslav and the districts of Chigirin and Zvenigorodka in Kiev. A very early black-figured vase of curious shape like the weight on a steel-yard was found in a barrow near Ulskaja (Kuban) in 1898. It would appear to be of some Asiatic make, but is not quite like the Milesian.

Black- and Red-figured Vases.

Ordinary black-figured vases come from all the sites in South Russia, Kerch¹⁰, Theodosia¹¹, Berezan and Olbia¹², even Eupatoria (Cercinitis)¹³ and Chersonese". These Attic vases shew that the Athenian potters had conquered this market in the latter part of the vith century. Von Stern correlates this with the foreign policy of the Pisistratids. With the expulsion of the tyrants this pre-eminence was apparently lost, for the severe redfigured vases of about the time of the Persian wars are very scarce. From

¹ References for finds at Berezan, v. inf. p. 451, n. 1, also for the pots, von Stern, *Trans. Od. Soc.* XXIII. p. 28; *Klio*, IX. pp. 142—144.

² For the first example, v. G. Loeschke, *Arch.*

- Ans. 1891, p. 18, f. b.

 3 Trans. Od. Soc. XXII. Minutes, p. 119: the collection of which he speaks was acquired by the Hermitage and published in CR. 1901, pp. 129—131, ff. 219—227: it includes most of the kinds mentioned above, but it is not certain that they all really came from S. Russia.
- * BCA. XIII. pp. 217—220, ff. 157—160.

 * ib. p. 148, f. 94; cf. von Stern, l.c. p. 120.

 * This was mostly dispersed in May, 1908, but a fully illustrated record of it exists in J. Boehlau, Sammlung A. Vogell, Cassel, 1908; the early pots are Nos. 16—47, Pl. 1. II. Some now at Munich, Jahrb. d. k. d. Arch. Inst. 1910, p. 58, ff. 10, 11. 1 gladly take this opportunity of thanking Mr Vogell for his kindness to me at Nicolaev and for sending me his catalogue.

⁷ BCA. XXXIII. pp. 118—120, ff. 23—27, cf. CR. 1902, p. 53, f. 89; Arch. Anz. 1909, pp. 171, 175,

ff. 33, 34, 39; 1910, pp. 234, f. 33, 238, 239.

8 Von Stern, Trans. Od. Soc. XXIII. Minutes, p.
13; Klio, 1X. p. 141; Bobrinskoj, BCA. XX. p. 7, f. 9.

9 CR. 1898, p. 32, f. 47.

10 ABC. XLVIII. 6, 7; LXIIIa. 1; MacPherson, Pl. IX.; CR. 1898, p. 17, f. 16; 1899, p. 27, ff. 38—40; 1902, pp. 53, 54, ff. 90—93; 1903, p. 162, f. 132; 1905, p. 64, f. 80.

11 Von Stern, Das Museum der kais. Odessaer Ces. d. Gesch. u. Altertumsk. 111. "Theodosia und

11 Von Stern, Das Museum der kais. Odessaer Ges. d. Gesch. u. Altertumsk. 111. "Theodosia und seine Keramik," Odessa, 1906, Pl. 11. 1-9.

12 CR. 1873, p. xxii; 1897, p. 79, ff. 187, 188; 1902, p. 7, f. 3: Trans. Od. Soc. XXII. Minutes, p. 119: BCA. XIII. p. 149, f. 95, pp. 155--159, ff. 103-108, p. 184, f. 136, p. 187, f. 143; XXXIII. p. 121, ff. 28-30; Arch. Ans. 1909, p. 173, f. 40. Vogell, Samml. Nos. 59-107, Pl. 1. 11.

13 BCA. XXV. p. 185, f. 26.

14 A fragment, Mat. VII. p. 24: the Milesian sherds from Inkerman in the British Museum.

sherds from Inkerman in the British Museum, A. 1675, Prinz, l.c. and letter from Mr H. B. Walters, were probably in native hands.

Leuce we have part of a cantharos made by Nicosthenes and painted by Epictetus with a symposium'; from Olbia a pelice with a flute-player and Nike², an amphora a colonnette with Dionysus and Maenads², and one or two bits'; from Kerch a shallow cup with Menelaus and Helen that von Stern⁵ puts down to Amasis II⁶, an amphora a colonnette like that from Olbia⁷, and the fragments figured on CR. 1873, 111., of which Fig. 245 is an example. A beautiful alabastron, made by Hilinus and painted by Psiax, with a warrior on one side and an Amazon on the other, though in the Odessa Museum was not certainly found in South Russia*.

Among all the fragments of red-figured pottery found by General Bertier-de-La-Garde during the harbour works at Theodosia, not one belonged

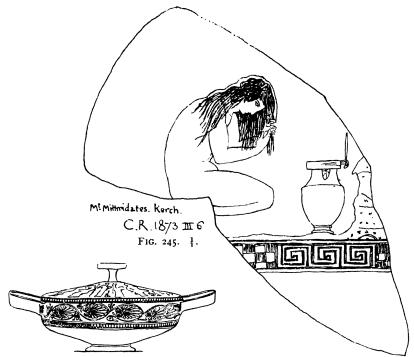


FIG. 246. Side view of Fig. 247. $\frac{1}{9}$.

to the severe style. It seems likely that upon the interruption of the trade with Greece the colonies in Scythia were no longer in a position to indulge in such luxuries as the finest painted pottery. We have no hint as to their fate during this disturbed period which included the expedition of Darius, an event which must have excited anxiety among the men of Olbia. Athens did not regain the market at once, her attention was diverted to the West,

¹ Pharmacovskij, Trans. Od. Soc. XVI. p. 39,

Pl. II. 3.

² Von Stern, ib. XXII. p. 93, Pl. III. 2.

³ Vogell, *Samml*. No. 109, Pl. II. 5.

⁴ *BCA*. XXXIII. p. 122, ff. 32, 33.

b.c. p. 73, Pl. III. I.
 J. D. Beazley, JHS. XXX. (1910), p. 38 would call him Kleophrades.

⁷ CR. 1903, p. 159, f. 318. ⁸ Von Stern, Trans. Od. Soc. XVII. p. 37, Pl. 11.

to Italy and Sicily, and vases of the transitional style are also rare. But with the introduction of the free style, South Russia becomes one of the richest sources. The ware destined for it was singularly like that exported to Cyrene. From this time forth we can study the changes in fashion of Greek pottery by innumerable examples drawn from Olbia², and still



FIG. 247. Lecane from Kerch. $\frac{3}{10}$. I have much pleasure in thanking Miss J. E. Harrison for the loan of the block made from a drawing by Mrs H. F. Stewart after *Trans. Od. Soc.* XVIII. Pl. 1.

more from Kerch and its environs. From Theodosia we get fragments; from Chersonese two or three late vases and some fragments, of importance in their way as the first proof that the site of the "New" Chersonese dated from at least the 1vth century B.C.

Among the various classes of free-style vases found at Kerch the lecanae are quite a speciality. Half of those extant come from the Bosporus, and

¹ Olbia, BCA. xxxIII. pp. 122, 123, ff. 34, 35; cf. von Stern, Theodosia, Pl. II. Nos. 10, 11.

² e.g. *CR*. 1902, p. 7, ff. 2, 4; 1906, pp. 47, 48, ff. 55—57; *BCA*. XIII. p. 189, f. 145; XXXIII. pp. 123, 124, ff. 36, 37; Vogell, *Samml*. Nos. 110—183, Pl. III.; *Arch. Anz.* 1908, p. 187, f. 20.

³ e.g. a fragment by Andron, Pharmacovskij, Trans. Od. Soc. XVI. p. 14, Pl. II. 1; a pelice, Heracles crowned by Nike, von Stern, ib. XIX. p. 94, Pl. I.; CR. 1903, p. 47, f. 73, p. 157, f. 314,

[&]amp;c. Pharmacovskij classifies all vases of these styles known down to 1901 in a wonderful appendix to his "Vase Painting and its relation to Monumental Art in the period directly after the Graeco-Persian Wars," TRAS. XII. (1901, 2): all found in Russia are indexed s.v. Poccia.

⁴ Von Stern, Theodosia, Pl. III.-v.

⁶ CR. 1903, p. 32, f. 33, p. 39, f. 55. ⁶ CR. 1904, p. 68, f. 104; BCA. IV. p. 78, ff. 28, 29; Mat. VII. iv. 2, 3, 4.

they are almost always marked by singular elegance'. Their use for washing face, hands and feet in perfumed water just suited the luxurious tastes or



Fig. 248. Jüz Oba Lecane. KTR. p. 77, f. 106. 1/3.

In Panticapaeum as in South Italy the simple contrast of black and red at last ceased to satisfy customers, and vase-painters took to heightening the effect of their wares by adding white details and gilt accessories. This is almost universal upon a second type of lecane with high body and vertical handles2. Lastly came the use of relief that was finally to oust the styles which relied on mere painting. A famous example of this relief-work, with the further addition of bright colour, is the vase that reproduces, as is supposed, not only the subject of the west pediment of the Parthenon, the contest of Athena and Poseidon, but also its composition³.

many books since.

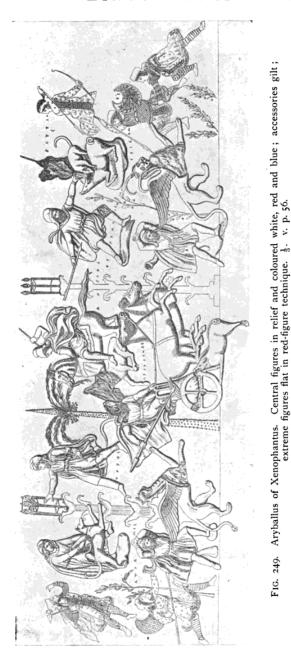
¹ e.g. those published by Pharmacovskij, Trans. 1 e.g. those published by Pharmacovskij, Irans.
Od. Soc. XVI. p. 29, Pl. II. 2, and von Stern, ib.
XVIII. pp. 19—63, Pl. I. (Figs. 246, 247), also CR.
1860, I. (=KTR. pp. 76—78, ff. 105—107, v. Fig.
248) p. 5 sqq., 1861, I. II. &c.: plain ones from Olbia,
CR. 1900, p. 9, f. 18; BCA. XIII. p. 137, f. 79: list
in Pharmacovskij's "Vase Painting" App. p. 73.

² Pharmacovskij, op. cit. App. p. 75, but Boehlau Samml. Vogell, No. 181, Pl. III. 4, calls them amphorae. The best was found at Kerch in 1906, Arch. Anz. 1907, pp. 131–136, ff. 3–7; another ABC. LII. Reinach, p. 104.

³ CR. 1872, Pl. 1. 1=KTR. p. 78, f. 108 and many books gives

The same kind of work adorns the equally well-known vase¹ signed round the neck just where it rises, below the palmettes which decorate it,

ΞΕΝΟΦΑΝΤΟΣΕΓΟΙΗΣΕΝΑΘΗΝ



nature has been usually completed 'Aθηναίος not ' $\Lambda \theta \dot{\eta} \nu \eta \sigma \iota$, and it is supposed that Xenophantus was an Athenian artist working at Panticapaeum, but it is quite conceivable that he worked at Athens . and exported his wares. Round the shoulders comes a narrow frieze in gilt relief-a biga with attendant figures thrice repeated, a gigantomachy and a centauromachy in between. The main subject (f. 249) belongs to the world of pure phantasy: the dress and the names of the figures are more or less Persian, the date-palm and silphium in the background are Libyan—even in Libya tripods do not grow on silphium stems-only the griffins suggest Scythia, and one of these is of quite a strange type².

Aryballus of Xenophantus. Central figures in relief and coloured white, extreme figures flat in red-figure technique. 3. v. p. 5

The last word of the sig-

The less elaborate colour effects of white lecythi did not find much favour outside Attica, but we have one or two examples from Kerch³, and one apparently from Olbia⁴.

¹ ABC. XLV. XLVI., Reinach, p. 98 = CR. 1866, IV. Rayet et Colli-gnon, Céramique Grecque, pp. 264, 265, ff. 100, 101, &c.

the same style, v. ABC. XLVIII. I, 2, 3: and one just slender enough to be called a lecythus, Arch. Anz. 1908, pp. 173, 174, ff. 10 a, b.
3 ib. p. 170; CR. 1902, p. 55,

97. 4 Vogell, Samml. No. 145, Pl. 111. 13.

Vases in the Shape of Statues, Animals and Heads.

Something of the same taste which rejoiced in the many-coloured vases decorated with reliefs also approved of vases actually made in the form of



FIG 250. Phanagoria. Tinted Vase. KTR. p. 81, f. 110. 3/4.

human figures and beasts or monsters, and these, also beautifully coloured, are rather a speciality of South Russia, although they do occur elsewhere. Particularly beautiful specimens are a Sphinx and an Aphrodite Anadyomene,

both found in a tomb near Phanagoria¹. The former (f. 250) has preserved its colours specially well: the handle and mouth of the vessel are the ordinary black; the Sphinx herself wears a red diadem with gilt flowers, gilt also are her hair and necklaces with touches on wings and tail: these last are white with blue streaks: blue also are her eyes: her body is a warm white, shading up from her breast to the delicate flush of her face: the base is red and blue,



Fig. 251. Phanagoria. Tinted Vase=CR. 1870-71, I. 3. From a photograph kindly sent me by Mr J. I. Smirnov. $\frac{3}{4}$.

and between the feet it is adorned with white palmettes on a red ground. It is a pity that this vase is not published in colours before it fades, as it must do in spite of the great care taken to shield it. The Aphrodite (Fig. 251) is in much the same style but not so well preserved. She is

indebted to the late Mr Kieseritzky for shewing me these figures. For the types of this class of vase, v. Die Antiken Terrakotten, herausg. v. R. Kekulé von Stradonitz; Bd III. 1, 2, "Die Typen der figürlichen Terrakotten," bearb. v. F. Winter, Berlin 1903, 1, p. 228. 6; 2, p. 158. 2, p. 203. 3, 4.

¹ CR. 1870-1, I. I, 2 and 3, 4=KTR. pp. 81, 82, ff. 110, 111; Rayet et Collignon, pp. 273, 271, ff. 104, 103; G. Treu, XXXV www.wise.elmannsfest-programm, "Griechische Thongefässe in Statuettenund Büsten-form," Berlin, 1875, Pl. I. 5; cf. W. Froehner, Collection Tyszkiewicz, Pl. XLI. I am

coming out between two valves of a shell, white without and red within. The type is common in terra-cottas¹. The same idea of a figure made into a vase is less well carried out in the Dancer Vase² from the Pavlovskij Barrow a little to the south of Kerch. Another such vase represents a Siren, but the mixture of woman, bird and fish is clumsily managed³.

A whole series of vases somewhat similar in conception and in colouring was found in 1852, likewise by Phanagoria, but they differ in that they have the form of upright human figures. One presents a winged dancer with castanets standing by an altar: each of the next two, a girl without wings: the last, a young man, perhaps Dionysus. The back in each case has the black or brown of an ordinary vase, and the neck projects above the figure's head. The colouring may have faded from these, the flesh tints have not the delicacy of the former vases. Still less delicate in colour is a group of a goddess riding upon a goat, and a charming vase from Kerch at Odessa relies entirely upon modelling for its effect.

In quite a different style are vases made in the form of a Silenus reclining on a wineskin⁷ or leaning against it. Another vase from Olbia takes the shape of a female bust and brings us to a whole class of vases in the form of heads from the Quarantine road at Kerch¹¹, from Chersonese¹³, and from Olbia heads of a Maenad, Silenus, Pan, a negro, a child and women handler form of head-cup furnished with handles comes from Kerch¹⁴. Cups shaped like a horse's head occur at Kerch¹⁵ and Olbia¹⁶, also a boar's head at Olbia¹⁷. Whole animals are specially common there—the earliest is a blackfigured askos in the shape of a bird¹⁸—a bull¹⁹, many rams²⁰, a dog²¹, a lion²² and a cock²³, made in fine red clay. Mr Vogell²⁴ had replicas of pretty well all these types and more, a crouching negro, swine, hedgehog, ape, etc. They mostly belong to about the 11nd century B.C. Similar examples from Kerch are an eagle²⁶, a wolf²⁶, a nondescript animal with an old man's head²⁷, and an elephant²⁸. Some also come in Scythic graves (v. supra p. 232, n. 5).

Rhyta in the form of human or animal heads have in them something of the same idea, and besides the well-known silver examples clay specimens occur at Kerch.

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<sup>1</sup> CR. 1870-71, pp. 5, 161, 170, 177, 181, 197.
<sup>2</sup> KTR. p. 192, f. 182 = CR. 1859, III. 1: for the costume see E. Pottier and S. Reinach, La Nécropole de Myrina, Pl. XXVIII. 3, XXXI. and p. 393.
<sup>3</sup> CR. 1870-71, Pl. 1. 6.
<sup>4</sup> ABC. LXX. 1−8; cf. Kekulé-Winter III. 2, p. 156. 7.
<sup>5</sup> ABC. LXXI. 4, 4a; cf. Treu, op. cit. II. 5. Kekulé-Winter III. 2, p. 197. 1.
<sup>6</sup> Odessa Museum, Terra-cottas (v. p. 363 n. 1), 1. xii. 4.
<sup>7</sup> ib. II. xii. 2.
<sup>8</sup> BCA. XXXIII. p. 132, f. 56.
<sup>9</sup> CR. 1900, p. 8, f. 16.
<sup>10</sup> The earliest example of this idea is from Berezan, a hemeted head of "Rhodian" ware, Arch. Ans. 1908, p. 180, f. 14.
<sup>11</sup> CR. 1900, p. 27, f. 64; 1905, p. 66, f. 86= Arch. Ans. 1907, p. 141, ff. 11, 12, a fine head of Heracles.
<sup>12</sup> CR. 1891, p. 149, f. 183.
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13 Arch. Anz. 1908, p. 186, f. 19; 1910, p. 235, f. 36; CR. 1897, p. 80, f. 195; 1904, p. 40, ff. 60, 61; Od. Mus. 11. xii. 1, 3. For glass heads v. p. 362, n. 3.

14 ib. xiii. 2. 16 ib. x. 1.

16 op. cit. 1. xvii. 4.

17 CR. 1902, p. 27, f. 45.

18 Arch. Anz. 1909, p. 175, f. 40; Tritons, ib.

1910, p. 214, f. 14.

10 Od. Mus. 1. xvii. 2.

20 op. cit. II. xvii. 3, 4; Arch. Anz. 1891, p. 19, f. 4; CR. 1902, p. 11, f. 14.

21 Drevnosti, Xv. ii. p. 11, f. 10, v. p. 420.

22 BCA. VIII. p. 54, f. 55.

24 Samml. early, Nos. 45, 46, Pl. 1. 2, 6; later, Nos. 523—541, Pl. VIII. 1—18.

25 Od. Mus. 11. xvi. 2.

26 ABC. LXXI. 5, 5a.

27 CR. 1906, p. 86, f. 95; Arch. Anz. 1907, p. 130, ff. 1, 2.

28 Arch. Anz. 1910, p. 214, f. 13.

29 Od. Mus. II. xiii. 1, 3.
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Late Painted and Distempered Vases.

But the plastic feeling did not suddenly destroy the taste for painting. The red-figured technique survived longest in little aryballi with women's heads or palmettes hastily touched in (e.g. f. 252)1, or else in various vases which seem to have been imported from South Italy. In one grave at Kerch^a we have one of the ordinary plates with fishes and a squid for decoration and a lecane of the same style, and from Chersonese a fish plate's. Pieces of Italian ware have been sold as from Olbia, but their provenance is not certain; there were, however, many specimens in the Vogell collection, an Apulian "Prachtamphora," pelicae, craters, jugs and fish plates.

To the latter part of the 1vth century belong the Panathenaic vases that have been found at Kerch*: their technique is black-figured, but their style readily betrays their date: rather an earlier one was found at Nymphaeum and is in the possession of Mr A. V. Novikov. Another, from Olbia (?), was



FIG. 252. Late Vase from Olbia. CR. 1901, p. 10, f. 12a. 1/2.

in the Vogell collection. It is interesting to think that Greeks from these distant towns won prizes at the Panathenaea. Something similar is a prize vase with pictures of a horseman and of a quadriga in the old black-figured technique; it was found by Pharmacovskij at Olbia⁷, and there are other such in the Odessa Museum. There is nothing so far to shew at what contest they were awarded. The subsidiary decoration seems to be in the Hellenistic manner.

When moulded ware took the place of painted in most parts of the Greek world, the Pontic Greeks seem to have wished to continue the custom of depositing painted vases with their dead. Accordingly, since the supply of Attic vases had ceased, they endeavoured to provide a substitute, and produced a kind of vase which has never been found south of the Euxine. Such vases are of a badly prepared clay and have thick sides so that they weigh three times as much as good Greek vases, and their surface could never be brought to the smoothness of the old ware. This clay was sometimes coloured black,

¹ Cf. MacPherson, Pl. VIII. CR. 1862, II. 1-40.

² CR. 1902, p. 54, ff. 94, 95. ³ CR. 1903, p. 32, f. 34. ⁴ Samml. Nos. 546—574, Pl. IV. V.

 ⁶ CR. 1876, I. pp. 5—108; 1881, p. 127 sqq.
 ⁶ Samml. No. 108, f. 6 and Pl. IV. 5.
 ⁷ CR. 1901, pp. 10, 11, f. 13.

sometimes left its natural dirty yellow. To this ground they applied their painting in something of the nature of tempera, but they did not know how to fix the colours, which accordingly brush off very easily, and it is rare to find a well-preserved specimen. The best according to von Stern is at Berlin; the examples at Odessa, one of which comes from Olbia (hitherto these have been found at Kerch only), have but single figures left, yet the Hermitage is not without fair pieces, reproduced by Stephani¹. Upon another (f. 253) we have a combat of a Greek with an Amazon. The Greek has reddish brown flesh with high lights, a red chiton, blue scarf, whites to his eyes and black pupils, a bluey white shield, a brown helmet and spear and a red plume: the



FIG. 253. Distemper Vase. Kerch. CR. 1878-9, Pl. 1. 5. 1/3.

Amazon is painted with a blue helmet, yellow flesh, brown chiton, red scarf and a bluey white shield with a gorgoneion in the centre. Another good vase of the kind is represented on the Frontispiece of CR. 1863. It is not the drawing or colouring that is so bad in this curious class of vase as the technical side, the knowledge how to prepare clay, make a pot and apply colours so that they shall stand properly. There can be no doubt that they were made on the north coast of the Euxine, probably at Kerch, in spite of one being found at Olbia, and this shews that the Panticapaeans had a fair share of skill in drawing, and raises the question whether we must really put down most of the artistic objects found in South Russia as foreign importations.

We have seen (p. 339) that even Milesian vases found their way up into the interior of the country. The Attic vases are naturally of far more frequent occurrence (p. 82, n. 4). Early examples are a black-figured cylix from Gorobinets* and a white lecythus with black patterns from near Shpola*: later a red-figured aryballus and crater from Bobritsa⁵, a fine crater with Europa and the Bull from Galushchino, another crater from near Kanev in Kiev

Dniepre, 11. 2. xxxvi. No. 809.

 ¹ CR. 1874, Pl. 11. 5, 6, black clay, a garland;
 7 and 8, natural coloured clay, two Sirens and a tripod, v. Text, p. 42 sqq.
 2 KTR. p. 72, f. 95.
 3 BCA. XX. p. 7, f. 7.

⁴ Smêla, II. viii. 1, p. 117.

⁵ Sm. III. xx. 5, 6. 6 Khanenko, Antiquités de la Région du

§ 7] Distempered and Plastic Vases. Vases in Native Hands 349

University Museum, a careless cylix with a dedication from Zhurovka (pp. 176 and 361), and a number of pieces of mere black-glazed pottery; the care with which they are mended shews how much they were valued. All these places are in the Government of Kiev, but there are plenty of Greek pots from Poltava, Ekaterinoslav and the Kuban¹.

Plastic Decoration.

While the belated distemper-vases were being put in graves by those who regarded old customs, plastic decoration became more and more usual for vases used by the living. After becoming hasty in order to be cheap, and gaudy in order to be attractive, vase painting gave up the struggle and yielded to various wares which could receive rich ornament from a mould without the labour involved in hand-painting. A last survival of painting was a practice of putting a wreath round a vessel's neck or a kind of necklace in white paint, giving almost an effect of relief. This was often done in local work, which is betrayed by the poor quality of its glaze. There is a large amphora of such work in the Museum at Chersonese. Better work, probably imported, recalls the style associated with Gnathia in Apulia². The main cause of the change of fashion was that the wealthy classes in the Hellenistic states had now



FIG. 254. CR. 1901, p. 12, f. 17. Cantharos, Olbia. $\frac{1}{3}$. Such are found in Scythic tombs (v. p. 82), e.g. Chertomlyk.

within their reach great masses of gold and silver, some of which they applied to the making of plate, and Toreutic became a far more important art than it had been. The common people who could not afford these precious materials could at least copy the metal forms in clay, an imitation which at its best produced some undeniably elegant pots, but when coarsened to suit common clay and poor workmanship led to a loss of that adaptation of form to material which makes quite rude work satisfactory.

Vessels which shew this imitation of metal work specially clearly are similar to those which, when found in Italy, are called Cales ware. They are characterized by the use of medallions (emblemata) as ornaments whether

of a cup from Olbia adorned with a relief." A perfect example from Olbia, BCA. XIII. p. 164, f. 114; Rayet et Collignon, p. 348. H. Dragendorff in Bonner Jahrbücher, XCVI. XCVII. (1895), "Terra Sigillata," pp. 23—26f.; Arch. Anz. 1910, p. 213, ff. 11, 12, p. 235, f. 35; R. Pagenstecher, Jahrb. d. k. d. Arch. Inst. Erg. heft VIII. (1909), "Die calenische Reliefkeramite," pp. 12, 120, Pl. IV.

¹ pp. 165, 182, 228 n. 2; von Stern, Trans. Od. Soc. XXIII. Minutes, p. 11, "The action of Ancient Civilization on the region outside the range of the Colonies on the Euxine Coast," cf. Klio, 1X. p. 141.

Rayet et Collignon, p. 328; ABC. XLVII. 4, 5; Vogell, No. 572, Pl. v. 4; R. Pagenstecher, Arch.

Anz. 1909, p. 1.

3 Pharmacovskij, BCA. II. p. 73, "A fragment

let into the bottoms of cups or into the sides of larger vessels. Exactly similar medallions are used in the silver plate that has survived. In plate their use began in Hellenistic and went on into Roman times, so that the Bosco Reale and Hildesheim treasures offer perfect parallels. Such a medallion in silver has actually been found at Olbia, and at Chersonese was found a whole series of moulds apparently made from such metallic originals2. That these Olbian clay pots were not imported from Cales is shewn by the fact that they are closer to the metallic originals and finer in their workmanship than the Italian The fashion probably spread from Asia Minor. A curious trace of the making of pottery at Chersonese is a kind of triangle with a pyramid on each point, itself made of clay, and used to keep apart the different shallow vessels in a pile while they were being baked in the kiln.



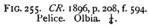




FIG. 256. *CR*. 1901, p. 13, f. 20. Cylix. Olbia. $\frac{1}{2}$.

The influence of metal work is further shewn in a growing tendency to flute vessels, to make the handles very thin, often to imitate in clay the methods of riveting a metal handle to its body, and in general to apply a style of ornament more suited to repoussé work. At the same time the varnish gets less and less beautiful; instead of the hard black smooth varnish of former times, it is brownish or greyish with metallic lights and unevenly put on. This kind of stuff is well represented and fully illustrated in Pharmacovskij's account of his excavations in Olbia in 19014.

The question of Hellenistic pottery and the transition from the characteristic black varnish and painted style of classical Greek times to the red varnish and plastic style of typical Roman ware has received much illustration from excavations near the west end of the Athenian acropolis. Evidently the

Egypt, rather later in date, v. LVIIItes Winckelmannsfestprogramm, E. Pernice, "Hellenistische

Silbergefässe im Antiquarium," Berlin, 1898, Pl. 11. IV.; and C.Waldstein JHS. III. (1882), p. 96, Pl. XXII.

**BCA.* 1. p. 44, f. 41.

**BCA.* 1. p. 44, f. 41.

¹ Pharmacovskij, BCA. II. p. 75, f. 2. ² v. p. 365, f. 265. W. K. Malmberg, Mat. VII. "Antiquities from Chersonese," Pl. I. 1, 2, 3, II. 4, 5, 6, thinks that some were taken from mirror boxes, but Pharmacovskij's view seems more probable. For examples of such medallions from

⁴ BCA. VIII. pp. 33-40, ff. 16-38; Vogell, Samml. Nos. 296-388, Pl. VI. Some at Munich, Jahrb. d. k. d. Arch. Inst. 1910, pp. 58, 59, f. 12. ⁶ Ath. Mitt. XXVI. (1901), pp. 50—102, C. Watzinger, "Vasenfunde aus Athen."

new-fashioned vases were made even in Athens, and they correspond fairly closely to the various types from South Russia¹, but the change of fashion seems to have come in from Asia Minor, which had led the way in the metallic originals.

Watzinger points out very clearly how a set of silver vessels such as the cantharos, cylix, jug and standing saucer found in a tomb on the Quarantine Road at Kerch², or those in Artjukhov's Barrow³, can be paralleled in clay. Both these tombs contained a coin of Lysimachus, in the latter case one coined in Byzantium shortly after his death in B.C. 281, shewing that the burials belong to about the middle of the century. So Watzinger gets dates for the potsherds, comparing ABC. xxxvIII. 5 with the Calenian style, xxxvIII. 1 with the inscribed canthari, CR. 1880, p. 19 with the cups upon which raised decoration is just beginning, and ABC. xxxvII. 5 or xxxvIII. 3 with those wares upon which the plastic principle has triumphed. To this transitional period, or some half century later, belong vases with a light surface and decoration in red or brown rather carefully put on. In this style are jugs with sketches of objects, e.g. one from Kerch with a jug like itself, an amphora, a basket, a lyre, a harp and pan-pipes. The most extraordinary example of a metal shape in clay is a kind of stand from Olbia. It is like a candlestick with a disproportionately large sconce, from the underside of which hang loose rings: the whole is supported by high claw feet. A fragment of a similar one was found at Chersonese. It is wonderful that pottery should have been strong enough to hold together in such a shape.

Megarian Bowls.

One class of ware with rather rich ornament in relief is that most commonly represented by the small hemispherical or shallow cups called Megarian bowls. The Russian dealers call them Jermolki, skull-caps, which has the advantage of not begging the question of their origin. A cup of similar shape in silver occurred in Karagodeuashkh Barrow, but it may be of barbaric make and it lacks decoration. These cups are dark grey, brown or almost black, and have a dull surface. They were formed in moulds, themselves covered with patterns by means of stamps in relief, and the makers shewed much ingenuity in adapting the same moulds to the production of various-shaped vessels by adding bases, necks and handles to the fundamental

CR. 1876, p. 185; 1899, p. 124, f. 235.

7 Mat. XIII. p. 43, f. 8, cf. the gold Graeco-Bactrian (?) bowl from Transcaucasia, Smirnov, Argenterie Orientale, VII. 20 = KTR. p. 449, f. 393.

¹ Watzinger's pelice, op. cit. Pl. III., is like Olbian pelicae, f. 255; CR. 1900, p. 6, f. 5; 1901, p. 14, f. 23; Vogell, Nos. 302—306, Pl. VII. 16—19: others, from Kerch, Annali dell' Instituto, 1840, Pl. C. 4 (Ashik's report of excavations) and from Artjukhov's Barrow (v. p. 430), CR. 1880, p. 14 and extra plate, 4, 5. His cantharos (op. cit. p. 74, f. 18 n. 1) is like cylices from Olbia, f. 256, inscribed ΦΙΛΙΑΣ; Arch. Anz. from Oldia, i. 250, inscribed Φ INIA2; Arch. Arz. 1891, p. 19, f. 2, $A\Theta$ HNAC, CR. 1896, p. 80, f. 333, Δ IONY Σ OY, f. 334, YΓIEIA Σ ; Vogell, Nos. 334 — 340, f. 14, Pl. VI. 13, 1, 3, 9, 7, 11, 15 and the canthari Nos. 313, 314, Pl. VI. 31, with similar inscriptions and also $\Delta \omega$ PON and $\Delta \Phi$ PO Δ ITH Σ ; cf. Trans. Od. Soc. XXIII. p. 23: Watzinger's saucer, p. 80, No. 29, is like Arch. Anz. 1910, p. 211, ff. 9, 10.

v. p. 384, ABC. Reinach, p. 20, XXXVII. 5,
XXXVIII. 1, 3, 4, 5; Annali dell' Instituto, 1840, p. 13.

³ CR. 1880, pp. 17, 22, Pl. 11. 19, 20, 21, IV. 8, 9;

³ CK. 1000, pp. 17, 2-7, v. p. 431, f. 321. ⁴ CR. 1906, p. 90, f. 108=Arch. Anz. 1907, p. 138, ff. 8, 9; cf. one with wreaths and pots, Vogell, No. 389, Pl. v. 17, cf. p. 353 n. 6. ⁶ BCA. xx. p. 26, f. 9. ⁸ December on cit. p. 28 sqq.: Bonner Jahr-

⁶ Dragendorff, op. cit. p. 28 sqq.: Bonner Jahrbücher, CI. (1897), p. 142: R. Zahn, Jahrb. d. kais. deutschen Archäol. Inst. 1908, pp. 45-77, "Hellenistische Reliefgefässe aus Südrussland," describes and illustrates some 35 examples from the Vogell Coll., cf. Vogell, Samml. Nos. 245-295, mostly figured on p. 28 and Pl. VII. 1—12: others illustrated in ABC. XLVII. 1, 2, 7, 8, XLVIII. 8—10;

bowl¹. The conditions of extracting the moulded vessel determined the shapes that this process could produce. In any case, the manufacture seems to have been carried on somewhere in Central Greece, Dragendorff says Chalcis, whereas von Stern points out that the attribution to Megara, which is now universally discredited, rested for a while on much the same evidence as that which now points to Chalcis: nothing short of the discovery of an actual potter's workshop with broken moulds and pots of this make can really settle the question. In any case, the same firm sent identical bowls to Vulci and Panticapaeum. But undoubtedly there were imitators on the spot. Zahn makes out that only his Nos. 1 and 2 were made in Greece, but no doubt the moulds for others came from abroad, as his Nos. 4 and 5 are of native clay but identical with examples from Montefiascone and Megara.



FIG. 257. CR. 1901, p. 15, f. 26, identical with Vogell, No. 288, Zahn, 6. "Megarian bowl." Olbia. 3. bowl." Olbia. 3. bowl." Olbia. 3. " Megarian

Demetrius² and Menemachus³ are well-known names in this trade, but they may have worked in Greece; Menemachus ware occurs in Italy'. But the stamps for pots with the strange word KIP BEI must have been made on the Euxine, for only in this region do we find genitives in -ei from nominatives in -eis according to some native declension⁵, and in one of the Pontic colonies there must have been a potter with the barbarous name $Ki\rho\beta\epsilon us$. These bowls and

403 and many others: v. BCA. IV. p. 141, B. B. Latyshev, "On the question of ancient pottery with the inscription KIP BEI": Zahn, p. 49, points out that the letters come round the head of a bust like that of Tyche (Demeter?) on Olbian coins (Pl. 111. 3 and its degradation III. 27), but his pictures, on pp. 55, 56, 60, 61, 67 or Arch. Anz. 1910, p. 234, f. 34, do not establish an identity of type: for the grammatical form he compares Doric genitives in -a.

¹ Pelicae thus made Zahn, Nos. 28, 29; CR. 1903, p. 157, f. 315; a jug, Zahn, No. 32; handled cups, Nos. 30, 31; a deep vase on a foot with several bands of ornament, von Stern, BCA. III. pp. 93-113, Pl. XIV. XV.

² e.g. BCA. I. p. 31, f. 24, Chersonese.

³ Malmberg, Mat. VII. p. 27.

⁴ Dragendorff, XCVI. p. 27.

⁵ e.g. Γάστεις gen. Γάστει in IosPE. 11. 267.

their like are placed in the IIIrd and early IInd century B.C. Von Stern (l.c.) suggests that they are the Vasa Samia, a name that has long been familiar and used to be applied to the bright red Arretine ware. He argues that there was an important class of what we should term Hellenistic ware called after Samos, and that the affinities of the compositions reproduced on "Megarian" ware are rather with Asia than Europe, so that Samos would suit as the place of its manufacture.

Closely connected in technique is this same Arretine ware. The chief difference is caused by the discovery that more intense baking produced a harder substance and a uniform bright red colour much more attractive than the dull surface of the "Megarian" ware. This discovery was probably made in some Greek country; but Arretium became a great centre of the industry, and imitations were made in France, Germany, and even Britain. That products of the Italian factories were exported as far as South Russia is proved by the stamps of Roman makers, both in Latin and Greek letters (e.g. CCELLVM and TAIOT2), from Olbia, and I have myself a broken lamp from Chersonese with Latin letters upon it³.

This ware is the first witness of the intercourse with Italy and Rome, which ended in the Roman protectorate over Olbia' and Chersonese and suzerainty over the Bosporus.

Alexandrian Vases, Painted and Glazed.

Vases were imported not only from Greece and Italy, but also from Alexandria, whose artistic influence we have already seen in the frescoes of tombs. One class said to have come from there is that of vases on which the body has been covered all over with white to receive painting in red, pink, yellow and black. Ornament consisted e.g. in a bay garland of alternate red and black leaves about the neck, on the shoulders another of various coloured leaves upon a black ground, and on the body a panther and a round medallion which has lost its decoration. These vases seem mostly amphorae, sometimes put upon most curious stands.

The same white ground and bright-coloured decoration distinguishes a unique amphora found at Olbia in 1901. But in this case there is the addition of plastic decoration which marks the vase as belonging to the 11nd century. Body and base were of the ordinary late varnish, only marked by fluting and by as it were a whorl of sepals above the base. Shoulders and handles were covered with white, and the latter adorned with masks with gilt diadems and brown hair, and the former with elaborate patterns of acanthus and vine in relief, coloured pink and blue and gold. Upon the neck were figure subjects.

¹ The intermediate steps were well represented in the Vogell Coll. Nos. 438—518, ff. 30, 31 and on p. 48, Pl. VII. 20—33, cf. Dragendorff, XCVI. p. 96, ff. 2—12.

² Trans. Od. Soc. XXII. Minutes, p. 88, BCA.

XVI. p. 57.

3 Cf. Zahn, op. cit. p. 73, a late cup with OYIAIS

= Vilis; CR. 1896, p. 185, f. 565 a lamp with MAPKOY and one with two gladiators, CR. 1892, p. 25,
f. 20; from Kerch a saucer with POY Φ OY, Trans.
Od. Soc. XXIII. p. 29, and C. CORV. S. on a lamp,

ABC. Inscr. LXVI. Reinach, p. 135.

4 Very good specimens from Olbia, CR. 1906,

p. 35, ff. 27—29.

⁶ CR. 1900, pp. 11, 12, f. 22; Vogell, Nos. 395,

^{396,} Pl. v. 8, 12.

⁶ Cf. Amer. Journ. of Archaeology, I. (1885), p. 18, A. C. Merriam, "Inscribed Sepulchral vases from Alexandria," Pl. I. No. 1: ib. 1909, R. Pagenstecher, p. 387.

⁷ ff. 259—261, BCA. VIII. p. 31 and Pl. III. The vase is to be published in colours in Materials.

From Alexandria too comes, at a still later date, a class of vases to which much attention has been drawn of late1. It is distinguished from all other ancient pottery by being covered with a metallic glaze somewhat similar in composition to modern lead glaze². The best Russian specimen, published



FIGS. 259, 260. BCA. VIII. Pl. III. Olbia. Dark glaze below, white ground, gilt and coloured above, v. p. 353. $\frac{1}{6}$.

by Schwartz³, was found at Olbia in 1891. It is of red clay covered with green glaze, and is more or less the shape of an inverted bell or a brass mortar⁴, furnished with a handle made up of two snakes intertwined. Round

¹ Drevnosti, i.e. Trans. of Moscow Archaeolog. Soc., Vol. XV. Pt II. 1894, p. 14, Pl. II. 1V. A. N. Schwartz "With regard to a vase with representations in relief found at Parutino (Olbia)"; Trans. Od. Soc. Vol. XXII. p. 22, Pl. 1. II. E. von Stern, "Ancient glazed Pottery in South Russia"; Pharmacovskij, BCA. VIII. p. 50; Dragendorff, CI. p.

^{144,} ff. 5—13; further literature ap. Zahn, op. cit. p. 76 n. 33.

² Cf. Rayet et Collignon, op. cit. p. 372, f. 139,

³ See also von Stern, loc. cit., Pl. 1. 1 and 1 a. 4 Cf. a silver original from Bosco Reale, Monuments Piot, V. Pl. VII. VIII.

the base go three tori and a pattern of oves and lotuses very hastily indicated. Above this is the figure subject, also roughly but cleverly modelled—a caricature of the Judgement of Paris, in which Hermes and Paris are in the usual attitude, but treated in the comic style, and the three goddesses are represented by sketches of three low-class Alexandrians who are not distinguished by any particular attributes. Hera is giving Athena a slap in the face, and preparing the insulting gesture $\partial v \partial v \rho \mu a$; Athena has started back from her and is making the usual sign to ward off the effect of bad language. Aphrodite is also giving way before Hera's fury, and holds what seems to be a flower before her face. The whole is a good instance of the boldness with which the Greeks caricatured their gods. In the same tomb was found another example of the same technique, now in the possession



Fig. 261. BCA. VIII. Pl. III. Upper part of the same vase. $\frac{1}{3}$.

of Mr Pierpont Morgan (Fig. 262), whom I heartily thank for allowing me to take the photograph. In form it is an oenochoe, about 7 inches high, with the usual trefoil lip; round the neck is the same adaptation of oves as on the last vase; at the setting on of the handle is a mask, with horns rather large for a Silenus and rather small for a Zeus Ammon. On the body of the jug are three skeletons wearing conical hats; the middle one has also a necklace; they seem to be dancing some obscene dance; between them are ravens; the whole is covered with a brownish green glaze. The skeletons recall the Bosco Reale cups, to which reference has been made. The imitation of metal originals is unusually clear in this ewer. Everything joins to put

Tomb-find made at Olbia in 1891") have shewn that it is from the same tomb, for an account of which v. inf. p. 420.

¹ It has been lent to S. Kensington since Dec. 1905 and I there recognised that it must be by the same hand. The investigations of Professor von Stern (*Trans. Od. Soc.* XXVII. pp. 87—100 "A