

Teutonic-speaking people is therefore supported and intensified by the linguistic affinities between the Celtic and the Teutonic tongues; and philology concurs with history in testifying to the ethnic unity of the Celtic-speaking people on the left bank of the Rhine, with the Teutonic-speaking* people to the eastward. In their clothing, in their arms, in their houses, in their employment of horses and wheeled carriages, no differences of moment obtain between the Celtic-speaking and the Teutonic-speaking people of old Europe; nor in their fashion of government, their social organisation, their morality,† or their theology, do there seem to be any greater differences than are readily accounted for by the fact that the Teutonic-speaking nations were more remote from the corrupting influences of wealth and civilisation. The Tonga islanders of Mariner's time offered the same contrast to the Tahitians that the Germans of Tacitus do to the Gauls, but no one would dream, on that ground, of declaring them to be of different races.

Hence, there can be no reasonable doubt, that the fair element of the Celtic-speaking population of these islands 1,900 years ago was simply the western fringe of that vast stock which can be traced to Central Asia, and the existence of which on the confines of China in ancient times is testified by Chinese annalists. Throughout the central parts of the immense area which it covers, the people of this stock speak Aryan languages—belonging, that is, to the same family as the old Persian or Zend, and the Sanskrit. And they remain still largely represented among the Afghans and the Siahposh on the frontiers of Persia on the one hand, and of Hindostan on the other. But the old Sanskrit literature proves that the Aryan population of India came in from the north-west, at least 3,000 years ago. And in the Vedas these people portray themselves in characters which might have fitted the Gauls, the Germans, or the Goths. Unfortunately there is no evidence whether they were fair-haired or not.

India was already peopled by a dark-complexioned people more like the Australians than anyone else, and speaking a group of languages called Drawidian. They were fenced in on the north by the barrier of the Himalayas; but the Aryans poured from the plains of Central Asia over the Himalayas, into the great river basins of the Indus and the Ganges, where they have been, in the main, absorbed into the pre-existing population, leaving as evidence of their immigration an extensive modification of the physical characters of the population, a language, and a literature.

Italy is to the Alps what Hindostan is to the Himalayas. The Po is its Ganges. Four centuries B.C. it was peopled mainly by the dark and short stock represented by Ligurians, Etruscans, and old Italians. The Gauls poured into it over the north-western passes, and settled in Cis-Alpine Gaul, modifying the physical characters and the language of the population, but becoming lost eventually in the great Roman nationality. And, doubtless, in more ancient times, the Aryan-speaking ancestors of these Celts and Belgæ had similarly made their way through the Hercynian forest or along the shores of the North Sea, into Gaul, and thence into Britain. The correspondence of the names of places in Gaul and ancient Britain fully confirms Cæsar's statement that the Belgic Gauls had, at some comparatively recent time, colonised south-eastern Britain in great numbers. But the primitive colonisation of Britain from the mainland by the fair people is doubtless of extreme antiquity.

I have now, I believe, accounted for the fair Celtic-speaking population of ancient Britain. There remains the problem, Why did Britain contain another Celtic-speaking population, of a totally different type?

The key to this riddle is, I believe with Dr. Thurnam, De Belloguet, and others, afforded by history and philology. History, which tells by the mouths of Cæsar, Strabo, and Tacitus, that the Aquitani, who lived beyond the Garonne, were a small and dark people like the Iberians, who spoke a language different from that of Gaul. Philology, which tells us that this language was the Euskarian, represented by the modern Basque, which is unlike every other European language, and which once covered a vastly greater area than it now occupies—the great majority of the people who once spoke it having acquired other languages.

* I use this phrase without prejudice to the much-debated question, Did the Germans of Cæsar and Tacitus speak "Deutsch" (not 'Dutch,' *pace* Mr. Freeman) or Celtic? and with the greatest respect for the champions of both "Keltenthum" and "Deutschthum." It is enough for me if nobody doubts the "Deutschheit" of the Goths and Alemanni.

† The grossest immorality with which the Gauls are charged may well enough have been imported by the Greeks of Massilia along with other products of Greek civilisation.

Thus, once more, physical and philological ethnology properly viewed, concur. The physically distinct stock turns out to be linguistically distinct—to have, in fact, all the ethnological characters of a distinct race.

In Spain, and within the boundaries of the old Aquitania, the Euskarian language lingers only among a fragment of the population, though the Spaniards and southern Frenchmen retain, to a great extent, the dark complexion and short stature of the Melanochroic stock. In Britain the same process of extinction seems to have been consummated as far back as the time of Tacitus. For from what has been said, it can hardly be doubted that the Silures and the dark type in general were the outliers of the continental Euskarian-speaking dark type, just as the British Belgæ, and the fair type in general, were the offshoots of the continental Celtic-speaking fair type. And just as in Western and Middle Gaul, and in Spain, the Celtic-speaking fair people had, even in the time of Cæsar, largely supplanted and absorbed the dark stock; so, in Britain, it is to be supposed that it had altogether absorbed it, and that the dark stock had given up their Euskarian for the Celtic language.

All these reasonings may be put into the form of a probable hypothesis, as follows:—The chain of the Alps, the densely wooded highlands of Central Europe known in old times as the Hercynian forest, and the broad Rhine in its lower course, form a natural rampart between the vast central plains of Eurasia and Western and Southern Europe. Before England was peopled by the ancestors of its present population, the latter region, including the north shore of the Mediterranean, Spain, and Gaul (and perhaps the shores of the Baltic) were occupied by people of the dark type, who may, by possibility, have been the chief people of the so-called bronze age in those parts. These people occupied the British islands wholly or in part, and were, very probably, at first their sole occupants. And in Spain, France, and Britain they spoke Euskarian dialects.

During this time the fair stock, with its Aryan languages, wandered over the great Eurasian plain to the east of the rampart, from Poland to the frontiers of China, and from Siberia to those of Persia and India. But at length the fair people found their vast plains too narrow, or the luxuries beyond its natural barriers too tempting, and they began to overflow—as Celtic-speakers into Western Europe; as Zendic and Sanskritic speakers into Persia and Hindostan. The Celtic-speaking fair people, passing into Gaul, partly extirpated and partly mixed with the pre-existing dark Euskarian-speaking population, imposing their language and habits on all the northern, middle, and eastern parts of Gaul, and extending widely into Spain. From Gaul they passed into Britain, and Celticised it still more completely; so that, though much of the old blood of the dark stock remained, its language vanished.

The Teutonic-speaking people were simply another wave of the same great Aryan ocean of Central Eurasia. They treated the Celtic-speakers exactly as the latter had treated the dark stock, and before another century has passed the Celtic language will probably be as much a thing of the past in these islands as the Euskarian is.

If this is a fair picture of the general course of events, it furnishes the explanation of the fact from which we started, namely, the presence in the British Islands of two distinct ethnical elements—a fair and a dark. T. H. HUXLEY

ASTRONOMY

Ephemeris of the Satellites of Uranus

By A. MARTH, ESQ.

Angles of Position at 8^h Greenwich Mean Time

1870				1870					
Mar.	Ariel.	Umbriel.	Titania.	Oberon.	Mar.	Ariel.	Umbriel.	Titania.	Oberon.
17	250	243	277	159	29	340	288	144	192
18	114	162	229	135	30	191	193	100	169
19	330	71	189	106	31	47	115	51	146
20	181	347	154	75	April				
21	35	257	114	44	1	271	19	11	120
22	256	172	65	18	2	132	302	336	90
23	120	86	22	355	3	345	205	297	58
24	335	357	346	333	4	196	128	249	29
25	186	274	310	308	5	53	31	204	5
26	41	182	263	278	6	278	314	109	343
27	264	101	216	246	7	137	217	132	320
28	126	8	179	216	8	350	141	86	293

The Apparent Distances vary between the Limits.

Ariel	15"	and	12"
Umbriel	21"	"	16"
Titania	35"	"	27"
Oberon	46"	"	36"