It was at first my intention to have taken the weight and measurements of 25 males and females respectively of each tribe; but owing to many little difficulties, and to the manner in which some of these people are scattered over the district in small groups, I did not succeed, except in the case of the Yenadies. Of the Villees, fourteen men only, and of the Dombers nine men and three women, are all I have been able to take measurements of as given in the tables.

Crania.—I succeeded in obtaining nine crania of the Yenadies of Strihurreecottah; of these two belong to youths, seven to adults (three females and four males). On a cursory view of these there is nothing remarkable among any of them; they are somewhat small and light, and whilst the female skulls are uniform in contour, the males have a great parietal width. The malar bones are rather prominent in some, the teeth appear well formed, regular, and sound, the sutures very distinct, and the bones are well articulated. The squamous suture is arched and uniform.

In the only Irooler I had an opportunity of dissecting, the brain weighed two pounds ten ounces.

XXV.—Fixity of Type. By the Rev. Frederic W. Farrar. (Read November 8th, 1864.)

There was, at one time, a universal impression that the diversities of type and complexion observable in the human race might easily be accounted for from the effects of climate, custom, food, and The opinion is now entirely abandoned by the manner of life. majority of scientific men, but it is still firmly adhered to by thousands, who content themselves with a prima facie view of Instead of here adducing the very strong, if not the subject. wholly irrefragable, arguments by which it is refuted, it may be useful briefly to call attention to the facts which prove the extraordinary fixity of type which, during every period of history from its earliest dawn, has characterised the races, and even the varieties of mankind. The fact certainly appears to be that as far as we can go back, the races of man, under all zones, have maintained, wherever we can trace their records, an absolute and unalterable fixity.

So far as we know, there is no single race of pure blood which, when traced back to its earliest origin, did not present the very same traits which it now exhibits. It may fearlessly be said that history knows of no deep or permanent change effected in any

race since her primeval dawn. On the oldest Egyptian* monuments—as, for instance, on the tomb of Ramses-Meiamoun and the hypogeum discovered by Belzoni near the ancient Thebes—we find Jews, Arabs, Negroes, Egyptians, Assyrians, and Europeans, "depicted with a fidelity as to colour and feature hardly to be surpassed by a modern artist." There are modern Assyrians wandering about the ruins of Mosoul, who might have stepped down bodily from the monuments of Nineveh. Any one who has travelled in Greece, or walked in the Trastevere at Rome, will have observed that the lineaments of many modern Greeks+ and Romans might have been copied directly from the physiognomy Where we possess historical descriptions of of their ancestors. various ancient nations, they correspond with minute accuracy to the persons of their modern representatives. To use the illustration of the Prophet Jeremiah, the colour of the Ethiopian

appears to be as indelible as the spots of the leopard.

But, it may be objected, this preservation of race characteristics is only what we should expect, where the surrounding conditions remain unaltered; indeed, until recently, even physiologists have believed that colour, for instance, is due solely or mainly to A single glance at the map ought long ago to have exploded a theory so demonstrably false, and to have established the fact that colour is often identical under opposite and different under identical conditions. So far from being an important agent. climate has upon colour only a very slight and secondary influ-Thus, as M. Godron has pointed out, the Eastern region of Asia, from 70° of north latitude to the equator, offers every variety of temperature, and yet is peopled by one single type, the Mongolian, whose hue grows darker instead of lighter, as you advance northwards, so that the Chinese of the Tropics is much fairer than the Samoiedes or Tongous, who live on the shores of the "At the same distance from the equator," says Mr. Crawfurd, "we find fair Greeks, yellow Chinese, red Americans, and black Australians." By the side of fair Caucasians, we find

^{*} Rosellini, *I Monumenti dell' Egitto*. Voy. du Comte Minutoli, p. 271. Journ. of Asiatic Society, 1846.

[†] Nott and Gliddon, *Indigenous Races*, pp. 108, 147; Pouqueville, *Voy. dans la Grèce*; Blumenbach, *Decades Craniorum*, vi, 6, quoted by Godron, *De l'Espèce*, ii, 335.

[‡] E.g. the Hindus of N.W. India, as described by the contemporaries or successors of Alexander the Great. Crawfurd on Classification, Trans. of Ethnol. Soc.: Om. d'Halloy. Elémens d'Ethnolographie, p. 6.

Ethnol. Soc.; Om. d'Halloy, Elémens d'Ethnographie, p. 6. § De l'Espèce, i, 247, seq.; Pouchet, De la Pluralité des Races, p. 120; Bérard, Cours de Physiol., i, 457; Hamilton Smith, p. 203; Types of Mankind, p. 70; etc. The only effect of climate seems to be a slight and rapidly arrested modification of colour. C. Vogt, Köhlerglaube und Wissenschaft, § 71.

brown Calmucks; short dark Lapps live side by side with tall fair Fins; the Nepaulese, who inhabit a mountainous and temperate region, are far darker than the Bengalese, who live in a sultry and far more southern plain. Alexander von Humboldt noticed long ago that the colour of the American Indian depended very little on his geographical position; and, in short, colour is distributed over the globe in patches, not in zones—a sufficient proof, if proof were wanted, that even colour, which seems to be the most easily altered of external peculiarities, is, nevertheless, wholly independent of climatic influences. But, as though to prove with additional force that races are endued with an innate power of resistance against the effects of all external conditions, we are possessed of numerous instances which show that the characters of race are not materially, or even appreciably affected, by a change of physical agencies. Europeans transplanted from the temperate to the torrid zone do not, even in the course of generations, undergo any considerable modification of Three hundred years have elapsed since the Dutch settled in Southern Africa, yet we have the direct testimony of Dr. Andrew Smith.* "that their descendants at this moment are as fair as the fairest of Europeans." The descendants of the Spaniards who migrated to America three hundred and fifty years ago, do not differ in physical form from their brethren of Arragon or Andalusia. Don Ulloa+ says that the children of the Spaniards in Guayaguil have blonde hair, and are fairer than the Spanish children in Europe. The Portuguese, who, three centuries ago, colonised Brazil, Zanguebar, and Mozambique, are as truly Portuguese now as their ancestors were when they migrated from Europe. The French in Canada, the English, French, Danes, and Spaniards, in the West Indies—the English, Dutch, and Chinese in Malacca, remain altered and perfectly distinguishable from each other and from the original inhabitants. For two centuries, at least, there have been negros in all parts of America, and we are told by an eyewitness, that "there are still many of the seventh and eighth generations whose depth and glossiness of colour would render them remarkable in the country of their ancestors." For the same period Danes and Norwegians settled in Greenland, have not advanced a single step towards a resemblance to the Esquimaux.

It may be objected that a period of two or three centuries is little or nothing in ethnographical matters. It is, at any rate, everything to those who, without miraculous interference, of

^{*} Dr. Knox, On Race, p. 473; Livingstone, Mission. Travels, p. 98. † Voy. Hist. d'Amérique Mérid., i, 145; Godron, ii, 258; Desmoulins, Hist. Nat. des Races Hum., pp. 161-168.

[‡] Dr. Caldwell, On Unity, p. 66.

which nothing is recorded, have not more than that period between the deluge and the date of the oldest Egyptian monuments in which to account for the appearance of the full-grown well-marked negritian type. But, independently of this, we find races widely differing from each other, yet dwelling side by side, who, so far as we know, have from time immemorial been affected by precisely the same climatic and external influences. Such is the case with the Bosjesmen and the Kaffirs, the Fuegians and Patagonians, the Parsees and Hindoos. Such, too, is remarkably the case with the Abyssinians, who differ so completely from negros, though for unknown ages they have been hemmed in on all sides by nations of the negritian stamp. Nay more, this historic fixity of type is found even in slight peculiarities of life The life of the Ishmaelite of to-day might be described in the identical terms applied to his first ancestor. Bullocks still draw the waggon-tent of the Mongol across the steppes of Asia as persistently as they did in the days of Æschylus and Herodotus, and perhaps a thousand years before; and although there is something startling in Dr. Knox's assertion that "Jews seem to have been trafficking in cast-off garments before Rome itself was founded," we have abundant evidence that their general character and their general habits as pedlars and wanderers are as old as Juvenal and Martial. "Everywhere," says General Dumas,* "they have the same instincts, and the double genius for language and commerce." How, then, can it be denied that the specific characters of race are constant under the most diverse conditions, or that the longevity of type reaches back as far as human knowledge can penetrate in spite of all changes in circumstance and locality? We believe that the opposite opinion has arisen in great measure from the supposed changes which animals and vegetables undergo when removed from one country to another; but even if such changes were certain and important, we should have no right to infer the equal mutability of type in the human race, and without here showing that the effect of such influences has been greatly exaggerated, we may quote the high authority of Mr. Darwin for the belief that, even in the case of animals, the changes thus produced are extremely small.

The argument would hardly fail to have some weight, even if we left it here; but there are three races which illustrate it so forcibly, and which have been known to exist for so many ages that they deserve a few moments of separate consideration. mean the Negroes, the Gipseys, and the Jews.

The Negroes are known to have existed some twenty-three or

^{*} Le Grand Desert, p. 244.

[†] Origin of Species, p. 132; Godron, De l'Espèce, pp. 16, 76; Waitz, Anthropol. der Natur-Völker, § 41.

twenty-four centuries before Christ: some would assert that we have historic evidence of their existence even thirty or forty centuries before Christ. Accepting the lowest calculation, and arguing on the supposition of a deluge universal as regards mankind, we have but a very short period to explain the gradual development of a Nigritian from a Caucasian, or a Caucasian from a Nigritian type. Now there is no reasoner so utterly uninformed as to suppose that mere natural causes are sufficient to account for so vast a change in so brief a period. We find negroes not in Africa only, but in Kouenlun, in Assam, in Formosa, in Malacca, the Andamans, the Phillippines, and many other regions. Under whatever climate they are placed, there is no material variation in the apparently indelible characteristics of their race, and no known set of conditions is capable of producing their colour, much less their conformation, in any historic period of years. How, then, is it possible to account for the appearance of well-defined negroes by the side of equally wellmarked European, Asiatic, and African nations, only a few generations after the period of Noah? And if, in the space of four thousand years, we see in these races not the slightest tendency to change, what right have we to assume that, by natural causes, a change ever took place in them at all? Neither heat, nor cold, nor moisture, nor scarcity of food, nor an arid soil, nor degraded habits, nor any known physical agent, is adequate to produce in any given term of years the characteristics of this race. How then is their origin to be explained? It is hardly worth while, before a scientific assembly, to call to our aid the curse of Noah, respecting which the common argument seems to be that Ham and his descendants who were not cursed, were slaves and negroes, because Canaan and his descendants, who never were negroes nor, in the same sense, slaves at all, were cursed! We may hope that the time is past when such logic could have been identified with orthodoxy in theological belief.

Again, for some five centuries or more,* the Gipseys have wandered over and lived in all the countries of Europe, exposed to every variety of climate, tattered and houseless, yet retaining to the last the clearest marks of their Asiatic origin. Wherever we find them—in England, France, Germany, or Italy—in Russia or in Castile,—in bleak Scotland or in sunny Spain,—"on the heaths of Brazil or the ridges of the Himalayan hills,"—their characters, their habits, their figures, and their complexions recall their ancestors on the banks of the Indus. No variety of soil or weather, no number of centuries, no hardships or beggary, have

^{*} Borrow, The Zincali, or an Account of the Gipseys of Spain; A. F. Pott, Die Zigeuner in Europa und Asien, Halle, 1844; Brace, Races of Old World, pp. 310-313.

obliterated the seal which has been stamped on the forehead of the Gipsey race.

Still more remarkably is this the case with the Jews. little short of two thousand years they have been a despised and often a roving community, in every region from tropical heat to almost arctic cold, and yet in spite of frequent intermarriages with people of other blood, the race continues and has remained unalterably true to its well-known type. The supposed black Jews, of whom so much has been made, are, in point of fact, as fabulous as white Indians. On close examination, and on unimpeachable testimony, they turn out to be either nonexistent in the localities mentioned, or people with but a slight admixture of Jewish blood, or else the descendants of proselytes, half-converted Arabs or Africans, not Jews at all.* Jews, though they have adopted the costume, language, and manners of every people among whom they have dwelt, resemble each other all over the world, not only in lineaments, but also in conformation, temperament and moral character—nay more, which is a most remarkable fact, they retain even in the extreme north, their precocity in attaining to the nubile age. † "The stamp of his features," observes the Count de Gobineau, t of a Polish Jew. "distinctly betrayed his origin. This inhabitant of the North, whose direct ancestors had been living for several generations in the snow, appeared to have been embrowned but yesterday by the rays of the Syrian sun." In fact, the Jew is, perhaps, the only cosmopolite. From Gibraltar to Norway, from Algiers to the Cape of Good Hope, from Cochin China to the Caucasus, from Jaffa to Pekin, from Montevideo to Quebec, we find him, says Dr. Boudin, everywhere indestructible, though without any apparent principle of life. What he was in Egypt, perhaps three thousand years before Christ, that he is in Sweden and Poland nearly two thousand years after Christ. The vigorous caricatures which the Egyptians drew of him in the hypogeum of Thebes, have lost none of their comic force, and might be reproduced at this day with perfect fidelity from many living members of the race.

Such are a few facts respecting Fixity of Type in the Human Race; it remains for every one who is convinced of them to draw from them such inferences as appear to him to be most truthful and logical.

^{*} The evidence for these assertions is forthcoming, but would require a separate paper.

[†] Müller, Handb. der Physiologie, ii, 639.

[†] De l'Inégalité, i, p. 207. See, too, Dr. Beddoe, in Trans. of the Ethnol. Soc., 1861, "On the Characteristics of the Jews", p. 223, etc.; Boudin, Du Non-Cosmopolitisme, Mém. de la Soc., i, p. 96, sqq.