

On the Universality of Belief in God, and in a Future State.

By the REV. F. W. FARRAR, M.A.

"Es ist ein seltsamer Irrthum, anzunehmen, dass alle Völker an das Dasein eines Gottes glauben; ich habe viele Wilde gesehen, die davon keinen Begriff hatten."

DE LAUTURE.

WHETHER or not all nations believed in a God, was a question debated even by the ancients. On the one hand, Artemidorus* and Plutarch† positively assert that there was no race without this belief; on the other hand, the Phlegyes, Nasamones, Callaici, Akrothoi,‡ and others, are expressly charged with such ignorance, and Cicero§ pointedly affirms his belief in the existence of such people.

In modern times it has generally been *assumed* that there is no doubt about the matter, and such a consensus of the whole human race has even been most needlessly inserted among the certain evidences of religion. But what are the facts? If we may believe the testimony of travellers,—*who are generally prejudiced in the opposite direction*, and who frequently implant their own belief, which is found there by subsequent voyagers—there are not only isolated tribes, but whole nations who are so degraded as to live with no knowledge of their Creator.

For instance—1. Of the *Australians*, Mr. Schmidt says, "*They have no idea of a Divine Being*," and Mr. Parkes, "That they have no words for justice or for sin;" and Dr. Laing, "They have no idea of a superior Divinity, *no object of worship, no idols, nor temples, no sacrifices*, nothing whatever in the shape of religion to distinguish them from the beasts." Similarly Perty,|| in describing the aborigines of Solomon's archipelago, says, "that in many of the islands there is no trace of any religion." 2. If we turn to *Africa*, the missionary, J. Leighton, tells us of the *Mpongwes*, that he found among them neither religion nor idolatry; and another missionary, the Rev. G. Brown, tells us of the *Kaffirs*, "That they have not in their language *any word to use as the name, or to denote the being, of a God—of any God*." According to one account, the nearest approach to it appears to be the word *Tixo*, which means "wounded knee," and was the name of a celebrated medicine-man a few generations back! The natives of Cape Mount, when questioned by Smith about their religion, said, they obeyed their chiefs, and troubled themselves about nothing higher. A Bosjesman, when asked the difference between good and wicked, said, "It was good to steal another person's wife, and wicked when one's own wife was stolen." Respecting Fetishism in general, which is the prevalent religion (?)

* Οὐδὲν ἔθνος ἀνθρώπων ἔθεον. Artemid., i, 9.

+ Ἀνιέρου δὲ πόλεως καὶ ἀθέον . . . οὐδεὶς ἐστὶν οὐδ' ἐστὶ γέγονώς θεότης. Plut. Adv. Colot. Epicureum, p. 1124.

† See Fabricius, Bibl. Antiq., p. 229

§ "Equidem arbitror multas esse gentes sic immanitate efferas, ut apud eas nulla suspicio Deorum sit." Cic. De Nat. Deor., i, 23.

|| Grundzüge d. Ethn., § 282.

of Africa, Captain Burton* observes, that "it admits *neither God, nor angel, nor devil*; it ignores a resurrection, a *soul or a spirit*, a heaven or a hell." Of the Kaffirs the missionary Scultheiss† also says, that "they have no religion, never pray, know nothing of a higher Being, and believe only in the existing life." 3. Of the *Malagache*, Rochon‡ says, "The *Malagache*, like the savage, is *destitute alike of virtue and vice*; he is susceptible of no kind of foresight; and he does not conceive that there are men on the earth who give themselves uneasiness respecting futurity." 4. Of the *Esquimaux*, Whitebourne,§—whose testimony is valuable because he wrote in 1612, and before they could have learnt of God from more frequent intercourse with Europeans—says, "*They had no knowledge of a God*, and lived under no form of civil government." And even Sir J. Ross¶ observes, "That they have a moral law of some extent written in the heart I could not doubt, as numerous traits of their conduct show; but beyond this *I could satisfy myself of nothing*." 5. Of the *Mincopies* or *Andamaners*,** Dr. Mouat says, "They have no conception of a Supreme Being,—no conception of a Cause, and are not even polytheists. One of them who was taken captive said that his countrymen 'had no kind of worship, not even the most gross, being entirely ignorant of the being and nature of a God.'" 6. Finally, of the *Veddahs* of Ceylon, Sir J. Emerson Tennent†† does not hesitate to say, "They have no religion of any kind,—*no knowledge of a God or of a future state*; no temples, idols, altars, prayers, or charms." Mr. Bailey, long a resident among them, confirms this judgment, "They have no knowledge of a Supreme Being! 'Is he on a rock? on a white ant-hill? on a tree? I never saw a God,' was the only reply I received to repeated questions. They have no idols, offer no sacrifices, and pour no libations."

It is probable that these testimonies might by further search be largely multiplied; but if not, they are alone amply sufficient to set the question at rest, and to prevent the repetition of that which is, on the best interpretation, very questionable. We need not, therefore, weaken them by cases like that of the Diggers, who, because they consider the world to have been made by a large capote, and the sun by a cunning rabbit, are supposed to believe in a superior Intelligence! A vague fear of the Unknown is found even among animals, and is widely different from the belief in a God. At the same time, everyone would rejoice if the testimonies here adduced could be impugned by trustworthy evidence.

It is not necessary to say anything about the supposed world-extensive belief in a future state. It is absurd to say that such a belief *can* be general among all nations, when it is now all but universally admitted that it was a belief at the best but *very darkly*

* Personal Advent. in South Africa, p. 12.

† Lake Regions of Central Africa; Schultheiss, in Perty, Grundzüge d. Ethn., § 274.

‡ Voyage to Madagascar, Pinkerton, xvi, 241.

§ See Pouchet, De la Plur., ch. v, pp. 90-115.

¶ Second Voyage, p. 548.

** Adventures among the Andamaners, pp. 14, 303.

†† Ceylon, ii, 441.

revealed even to the ancient Jews* themselves before the captivity; and that when they did learn it, they continued to assign *total annihilation* to those who denied the resurrection and the judgment. The Scriptures themselves teach us that it was Christ, and not Moses, who "brought life and immortality to light."

The PRESIDENT said that Mr. Farrar had done great service to anthropology in bringing the subject of the asserted universality of belief in the existence of a God and a future life before the Society. He had stated many facts which deserved to be more noticed than they have been; for the universal belief in the existence of a supreme Creator had been generally assumed. This was so much the case that at a meeting of the Sydney Philosophical Society much surprise was excited when the question was raised whether it was true that the aborigines of Australia had no notions of a God. The question was examined into, and the assertion of Mr. Laing to that effect was pronounced to be perfectly correct. In Victoria, indeed, it was found that the natives entertained a notion of a good and a bad spirit, but Victoria was a small district, and the evidence on the subject obtained there afforded no real answer to the assertion of Mr. Laing and others, that there is no universality in the belief of a God. As to the assumed belief in a future life among all tribes of savages, such a notion was quite out of the question if they did not believe in a God. He should be glad to hear evidence on the subject from any gentleman present. The facts stated in the paper were very important, and he should be pleased if any facts could be brought forward on the other side of the question.

Mr. REDDIE said there could be no doubt it was an unfortunate proposition that had been advanced many years ago, that the existence of a God could be proved by the universality of such a belief. There were, doubtless, many degraded nations who had no proper idea of a Supreme Creator; but it was questionable whether all the assertions which travellers had made on this subject were correct; for a great deal of what they represented rested on a very slight foundation. There could be no doubt that, even in our own country, there was great ignorance of religion; and fifteen or twenty years ago a blue book was published, containing the report of the Commissioners on Education, in which it appears that they had found among our own people in the mining districts persons who were totally ignorant of a God. With respect to the assertions of travellers it might be observed, that many of them know so little of the language of the savage races they have visited, that even if they had a belief in a God they would often not know how to express it, or would not be well understood. It was a fact, even in our own country, that many men, women, and children, often gave very lamentable answers to the questions put to them; but these questions (as appears by the Blue Book referred to) were often not very skilfully framed, in language adapted to the common people; and it was very doubtful whether the questions put by travellers, who had but an imperfect knowledge of the imperfect languages of savage

* See Ps. lxxxviii, 10-12; Is. xxxviii, 9-20; Ecl. ix, 5, 6, 10; Job xiv, 19-21; Eccles. xvii, 27, 28, etc.

tribes, were calculated to gather the accurate meaning of the people they addressed. But it would be a false deduction to think that a race of people had always been devoid of the knowledge of a God, because some of them had since sunk to that degraded state. Though a great portion of the statements quoted by Mr. Farrar might be true, yet it was sufficiently apparent from the recent works of travellers—and he referred especially to that of Captain Speke—how little they often used their eyes or their intellects to discover trustworthy facts in their intercourse with the natives; and he ventured to think that much of what travellers had said might be questioned, as merely formed upon inadequate and superficial considerations.

Mr. LOUIS FRASER said that all the negroes of Africa whom he had seen believed in the existence of a good spirit and of a bad spirit. They did not attend much to the former, because they thought he would do them no harm; but they were in great dread of the latter, and endeavoured to propitiate him.

Mr. WALLACE said that when he was among the wild tribes of the Moluccas and of New Guinea, he endeavoured to ascertain what were their ideas respecting the Creator of the universe, but he could only get from them a confession of total ignorance of the subject. It was difficult to distinguish the real opinions of those savages from the opinions that they had heard. If they were told by any traveller that there was an invisible Creator of the universe, so far as they were capable of receiving such an idea they would receive it, and repeat it afterwards when questioned on the subject; but so far as he was able to ascertain, they had no such idea whatever. They had no desire for knowledge, but were contented to go on in their own ways. They have, indeed, some vague ideas of the existence of unknown powers; diseases, for instance, were supposed to be unnatural, and to be caused by some supernatural agency, but that was very different from the belief in a God. The intellectual capacities of those tribes were so feeble, that he doubted whether they could be made to appreciate or understand what was meant by a God. They were unable even to comprehend the simplest relations of numbers, such as the adding of four and five together, or even less quantities, without putting stones before them and showing them the amount visibly. In the same manner, their language contained no general terms. They had names for particular things, but for no classes of things. They had names for particular trees or plants, but they had no names to express the meaning of trees or plants in general.

The Rev. Mr. KERR expressed great satisfaction at having heard the able paper of Mr. Farrar, for he had often considered that it was a question which deserved careful thought. His own experience in several large parishes in England had taught him that, even in this country, there were many persons who had but little notion of a God. In Liverpool he had found several instances of persons who were occupied in certain kinds of employment who had very little idea of a Supreme Being. In the eastern parts of London also, he had met with several similar instances; and he had no doubt that a great many, even in this Christian country, had no idea of a God. It had been asserted

by Grotius in his work *Religionis Christianæ*, that the idea of a God was general throughout mankind, but his own observations among the heathen at home bore out the remarks of the travellers who had been quoted by the author of the paper.

Mr. T. BENDYSHE observed that two questions had been mixed together in the discussion, which were really quite distinct. It was one question whether there are individuals in any community who have no knowledge of a God; and quite another question whether there were races of men devoid of such knowledge. That there are individuals who are ignorant of the existence of a Supreme Being must be apparent to every one who investigated the subject. He considered it very doubtful whether the Australians, as a race, had any idea of a God. That some individuals among them might have was probable, but that would not negative the assertion of the author of the paper. It had been said by Mr. Reddie that the opinions formed by travellers might be owing to their ignorance of the language of the tribes whom they visited. But there were cases to which that objection would not apply. There was a well authenticated case of a man who was a captive among a savage tribe for thirteen years, who stated that they had no notion of a God, and that statement was made with a full knowledge of the language and of the sentiments of the tribe. It was stated, also, by Captain Speke, that when he asked the king of Uganda whether he believed in the existence of a Supreme Being, he laughed at the idea of such a thing. The prevalence of some superstitions was not sufficient to prove the belief of a God. There was a great distinction to be observed between Fetish practices, and other superstitions of the kind, and the belief in a Supreme Creator. To establish the position of the author of the paper, all that was wanted was the proof of one negative instance. Captain Ross was among the Esquimaux for several months, and the whole of that time he saw no indication of any religious worship. Even among the Chinese, there was no word to express the signification of a Supreme Being, the word God and heaven being synonymous,—so difficult was it for them to conceive the meaning of the word God. Those instances were, he thought, sufficient to prove Mr. Farrar's general proposition.

The Rev. F. W. FARRAR said his object in bringing the subject before the Society was to obtain testimony on one side or the other. He should have been delighted if the opinion he had stated, on the authority of various travellers, had been refuted by other travellers; and that was his main object in bringing the question forward. After all, however, the main assertion in his paper was little more than what was stated in the Bible—that there were people who knew not God. They had, indeed, heard it stated that evening by a London clergyman that even in England there are people living within the sound of church bells who do not know anything of God. That was important evidence, and after that they should not be surprised that in certain parts of the world there are savage tribes who have no belief in a God. All races, probably, have a *fear of the unknown*, but a similar feeling exists among animals, as may be proved by many well-authen-

ticated instances, some of which have been adduced by Prof. Carl Vogt. Of course, it was well known that *individuals* in all nations were unfortunately to be found who had no belief in a God. Even among the Greeks, there were some who avowed their disbelief in an invisible Creator of the universe. It was a verification of the maxim that extremes meet, to observe the strong intellect of cultivated men arrive at the same conclusion as the most degraded types of humanity.

The following paper was next read :

On Hybridity. By the REV. F. W. FARRAR, M.A.

WE hope in the following paper to adduce some evidence in favour of two propositions, viz. :

I. That it is erroneous to assume that the fertility of hybrids furnishes a decisive proof of the unity of species ; and

II. That it is as yet premature to assert that the union of all varieties of the human race produces an offspring continuously fertile.

I. Of course if we choose to define species in a conventional way, and consistently abide by our definition, we may apply the term to all varieties which are capable of producing between themselves a fertile offspring. But then it is a mere playing with words to assert that the intermixture of all human races is "eugenesic", and then to say that we have, in any valuable sense, proved the unity of the human species ; on the contrary, we have merely been reasoning in a vicious circle, and misusing philosophical terms. If, again, we could prove that all races of men can produce by intercourse a *continuously* fertile offspring, we should prove that fact,—and it is an interesting one,—but we should prove *nothing more*. We should still leave absolutely untouched the question of their origin from a single pair.

The definition of species, which makes it depend on the fecundity of cross-breeds, is very open to attack. Fruitful hybrids have been produced between animals whose common origin cannot for a moment be assumed. The repulsion supposed to exist between different races of animals is occasionally* overcome, though not so easily as in the case of men. Positive experiment has proved that the wolf† and hound, hound and fox, camel and dromedary, goat and sheep, goat and steinbock, horse and ass, are severally capable of producing fertile offspring. But does any one venture seriously to assert that these classes of animals must therefore have severally originated from single pairs ? Yet if not, it is absurd, on the assumption of similar grounds, to make such an assertion in the case of man. Besides, as Vogt justly remarks, what we call species is merely an abstraction from individuals ; and, similarly, fruitful intercourse, as a character of species, is merely an abstraction derived from the observation of a comparatively few individual cases.

The remarks of Agassiz‡ on this whole subject are so weighty and

* Jessen, Ueber die Lebensdauer. Bonn, 1855.

† See on the whole subject, Broca, Sur l'Hybridité ; C. Vogt, Köhlerglaube und Wissenschaft, § 68 ; and Bulletins de la Soc. de l'Anthrop., Apl. 1860, where the whole subject is ably discussed by MM. Broca, Boudin, De Quatrefages, etc.

‡ Provinces of the Animal World, Types of Mankind, p. lxxv.

authoritative, that we must here quote a portion of them in spite of their length. Speaking of the horse and ass, the tame bull and wild buffalo, the three species of bears, etc., he says: "The ground on which these animals are considered distinct species is simply the fact, that, since they have been known to man, they have always preserved the same characteristics. *To make specific difference or identity depend upon genetic succession is begging the principle, and taking for granted the question under discussion.*... We know that the horse and ass, etc., may be crossed, we are therefore not justified in doubtful cases in considering the fertility of two animals as decisive of their specific identity; any definition of species, in which the question of generation is introduced, is therefore objectionable. The assumption that the fertility of cross-breeds is necessarily limited to one or two generations does not alter the case, since, in many instances, it is not proved beyond dispute. It is, however, *beyond all question*, that individuals of distinct species may in certain cases be productive with one another as well as with their own kind.... I am prepared to show that the differences existing between the races of men, are of the same kind as the differences observed between the different families, genera, and species of monkeys or other animals;... nay, the differences between distinct races are often greater than those distinguishing species of animals one from the other.... Unity is determined by a typical structure, and by the similarity of natural abilities and propensities; and, unless we deny the typical relations of the cat tribe, for instance, *we must admit that unity is not only compatible with diversity of origin, but that it is the universal law of nature.*"

11. It was asserted by Prichard, and has been reasserted, as a capital point in their argument, by all monogenists, that the union of any two human races is capable of producing an offspring *continuously* fertile. This proposition is, as we hope to show, at least *premature*.

In the first place, we ask with M. Pouchet,* "have all, or anything like all, the combinations been tried? the union, for instance, of the Esquimaux and the Negro, of the American and Australian, of the Tartar and Bosjesman?" Moreover, is it certain that of those which have been tried all *are* capable of producing a progeny capable of perpetuation? M. Broca, who has made hybridity his special study, expressly denies it. Is it, for instance, certain that the hybrid† between the European and the Australian woman is fertile in even the first instance? Does there exist—in spite of the opportunities which have occurred—a single hybrid between the European and the Andamaner?‡ or between the Kaffir and Hottentot? or between the diminutive Negroes of the Philippines and the Malay? or between the Veddahs and Cingalese? Count Strzelecki asserted that Australian women, who had once lived with Europeans, became infertile for their own race. If this were certain, it would be a most important fact; but it has been keenly contested. On the one hand, Goodsir,

* De la plur. des Races Hum., p. 134.

+ Such half-castes are *very rare*. Jacquinet, Voy. au Pôle Sud. Zoologie, ii, 353.

‡ Om. d'Halloy, Des Races Hum., p. 108.

Carmichael, and Maunsell have pronounced it *unquestionable* ;* on the other hand, Mr. F. Heywood-Thompson† has denied it absolutely. This much, however, appears to be certain, viz., that such a mixture of races produces among several savage tribes a strong *tendency* to sterility, and this is a consideration which obviously has much weight in the argument.

It is true, that M. Om. d'Halloy‡ reckons the number of half-castes in the world as amounting to the enormous sum of 12,300,000. But this proves nothing, unless it can also be shewn that they are maintained without infusion of fresh blood, and solely by intermarriages among themselves. Now, after all that has been asserted, it is extremely doubtful whether there exists on the globe a *single hybrid race*. M. Pouchet, supported by a host of great authorities, maintains that there does not. In many cases it is *known* that the intermarriage of hybrids leads to rapid extinction. The Griquas on the Orange River—the favourite instance of Prichard and all monogenists—a tribe of half-breeds between Dutch and Kaffirs, are asserted by eye-witnesses to be constantly replenished by fresh blood, or else to revert rapidly to the African type. Nor is there any other single people§ which can be pointed out as a positive proof that a race of hybrids can maintain itself without constant fresh infusions. As long as this is the case, and as long as we find such writers as Dr. Knox and M. Broca denying the universal fertility of different human varieties, or the certain continuation of any really hybrid races, we may safely hold that the question is as yet very far from being so decided as monogenists have maintained.||

Nor are positive facts wanting to support the belief that a race formed by the mixture of two very different types is *incapable*¶ of maintaining itself. The Mamelukes could never propagate their race in Egypt. In the Isle of Flinders, where perished the last miserable remnants of the aboriginal Tasmanians, barely one or two children grew up from the intercourse of the convicts with the native women. M. de Rochas** says, that in New Caledonia, in spite of very numerous unions, he only met *two* half-castes. There are half-castes of Kanaka women (in the Sandwich Isles) with Europeans,†† Negroes,

* Bull. de la Soc. d'Anthr., Apr. 1860. + Journ. of Ethn. Soc.

† Des Races Hum., pp. 109, 117.

§ Of the Cafusos, a cross between blacks and red-skins, we must know a great deal more, before we can accept them as a case in point. Prichard (Nat. Hist. of Man, i, 27) quotes an account of them from Martius and Spix, Travels in Brazil.

|| See on this subject, Dr. Knox, On Race; and Broca, Sur l'Hybridité, *passim*; Caldwell, On Unity, p. 35; Rev. des Deux Mondes, viii, 162; Col. Hamilton Smith, Nat. Hist. of the Human Species, p. 21; Pouchet, p. 78; Dr. Knox, On Acclimation; Nott and Gliddon, Types of Mankind, p. 465; Indigenous Races, p. 367; Squier, Notes on Central America, pp. 54-58; Davis and Thurman, Crania Britannica, p. 7.

¶ Some of these facts are attested by M. Pouchet, pp. 135-153. He quotes Types of Mankind, p. 373; Boudin, Geog. Méd., i, xxxix; Indigenous Races, p. 443; Squier, Nicaragua, ii, 153; Cabanis, Rapports du Physique et du Moral, i, 484; Courtet de l'Isle, Tabl. Ethnogr., p. 77, etc.

** Bulletins de la Soc. d'Anthrop., Apl. 1860, p. 402.

†† Ibid., July 1860, p. 509.

and Chinese, but two half-castes are *never fertile among themselves*. According to Dr. Nott, half-castes are short-lived, and, if they intermarry, are unprolific. In Java, according to Dr. Boudin—a very high authority—the half-breeds between Dutch and Malays cannot subsist beyond the third generation. The Zambos—sons of Indians and Negroes—are the most degraded and criminal of all classes; the sons of Spaniards and Indians are weak and poor in type. Mixture of types in *most* cases, if not in all, leads to “*abrutissement*” and degradation. Mulattoes, as is well known to practical physicians, have a special tendency to consumption and other diseases. From a multitude of such considerations M. Pouchet deduces two laws:—1. That no mixed race can exist *of itself*. 2. That when two races come in contact, either one absorbs the other, or they continue unchanged side by side, with a third inferior and less numerous set of half-castes.

Hybridity was one of the three *causæ degenerationis*, which, according to Blumenbach, caused the primeval white race to degenerate into dark varieties; the other two being *climate*, and *mode of life*. We may remark, in passing, that these must for Prichard, and those who follow him in regarding all races to have sprung from the black and stupid African, be considered on the other hand as *causæ perfectionis*! With climate and mode of life as supposed causes of variety we are not here concerned; but all that has been advanced about *hybridity* in this brief paper will amply tend to prove that the crossing of races, *so far from producing differences, only attenuates them*, by creating a mean between two extremes. “It does not produce varieties,* but is only the consequence of them; and even in this limited function its action is insignificant.”

Professor Rudolph Wagner, in his Anthropological Lecture before the Naturalists at Göttingen, put forward what he stated to be “certain results” of ethnology in seven axioms, of which two were that “the differences between various nations are not greater than those between animals of the same species, *e. g.*, the dog and sheep”; and “that all races of mankind produce fertile hybrids.” We have seen how baseless both axioms are, and we may add that recent scientific inquiries have pointed out the groundlessness of the assumption that the dog, for instance, forms in all its varieties but one single species.

So that in this branch of the subject—which is one on which monogenists most firmly rely—the facts tend powerfully against them; even if we accept their arbitrary criterion of species, which we do not; and even if we admit, which we do not, that unity of species is incompatible with descent from different pairs. It seems to us, that their method of treating this subject has been to assume the unity of the human species as an axiom, and then to prove it by a definition!†

Professor CARL VOGT (who spoke in French) said that the question was one which demanded great consideration, and on which many theories had been propounded, though none of them had received general acceptance. They were met at the very first step, in consi-

§ Jessen, Ueber die Lebensdauer der Gewächse. Bonn, 1855.

* Pouchet, De la Plur., p. 118.

† Vogt, Köhlergl., § 1.

dering the subject, with the difficulty of defining what is meant by species. By some persons it was regarded as an assemblage of individuals who reproduce their exact similitudes; but the continuance of fruitful intercourse proved, on examination, to be a very defective definition of species. Some classes of animals, for example, reproduce with others that are apparently dissimilar; and some which appear to approach each other in kind are not fruitful. The distinction of species could not, indeed, be proved by unfruitfulness any more than similarity of species could be established by continued fertility. He instanced the great differences between different kinds of dogs, which all reproduce, though one kind is only to be distinguished from another by its distinctive external characters. The question of distinction of species by hybridity could not, therefore, be determined, because they were ignorant in what the distinction of species consists. The external characters of animals also undergo much change by change of climate, of which the altered character of the dog introduced into Paraguay formed an example. The question might, perhaps, be resolved into a question of the transmutation of species; and to a certain extent he agreed with Mr. Darwin in that theory. As it was impossible to determine in what difference of species consists, either from the external character of animals or from hybridity, it was evident the question became one of great difficulty. To add to its complexity, there might be internal and external influences which affected reproduction in one case and not in another, and that increased the difficulty of arriving at any safe conclusion as to species from the test of hybridity. The difference of climate, for example, had a powerful influence on productiveness, of which the great fertility of the French in Algeria was an instance. There were, in fact, a multitude of considerations which affect hybridity, and before they could arrive at any satisfactory conclusion respecting the effect of hybridity as a distinguishing test of species, it would be necessary to ascertain what were the influences that affect it, and how far those influences operate. The question of hybridity, he considered, did not prove anything as to the unity or diversity of the origin of the human race.

Mr. A. R. WALLACE thought the meeting were much indebted to M. Vogt for the eloquent and forcible manner in which he had pointed out the excessive difficulty and complexity of the subject, and the state of ignorance which generally prevails as to what constitutes species. All the facts stated in the paper would, however, go to prove that no two *nations* could produce fertile offspring, for it might be said that in all instances where fertility existed there had been an influx of new blood. Such problems could not be satisfactorily solved, because it was impossible to make the requisite experiments on men. It might be done with animals, but with men it was a different thing. The only method by which the problem could be solved would be, to introduce into some island women of one race and men of another, and leave them to themselves, taking care that no other races were admitted on the island. But as that could not be done, no evidence could be obtained that was not open to objection. One of the in-

stances alluded to in the paper, as affording evidence against the general fertility of human races, rested on but slight grounds. It was asserted that with the Australians there was great difficulty in producing offspring even at the first cross, and that instances of subsequent fertility are rare. But he had received a communication from a friend, who had recently come from Australia, which contradicted that opinion. He stated that he had known two instances of Australian women having had children by white men and afterwards by men of their own tribe. Numerous cases of the kind, he said, occurred in the bush, in one of which the woman had four children; but the illegitimate children were always destroyed by the chiefs of tribes, which accounted for their scarcity. His friend also mentioned that he had seen half-castes who had children of their own, and his evidence also contradicted the assertion of Count Strzelecki, that Australian women who had lived with Europeans became infertile for their own race. There was the well known case of the Pitcairn islanders, in which the males of one race and females of another race were shipwrecked on the island, and lived together for a long time without communication with other people, and it would be important to know the results.

Mr. T. BENDYSHE said that the Pitcairn islanders increased so fast that it was found necessary to remove some of them to Norfolk Island, as they increased so rapidly that they exceeded the means of subsistence. There had been no mixture of other races among them, nor any infusion of new blood. So far, therefore, the evidence of the Pitcairn islanders contradicted the assertion that the progeny of mixed breeds are infertile. With respect to what Mr. Wallace had communicated about the Australians, there was a paper to the same effect inserted in the last number of the proceedings of the Anthropological Society of Paris, which gave an account of the half-breeds of Australia, and represented them to be well developed; and that these half-castes are numerous, notwithstanding all the statements of M. Broca. As to the statement of Count Strzelecki, it was evidently a very baseless assertion. The fact of the matter was, that the half-caste Australian women were nearly all prostitutes, and therefore they had no children. The fact that the Mamelukes could not propagate their race in Egypt, only showed that the climate of Egypt did not agree with them; and their infertility in that country did not apply to the case of hybridity in general. As to the statements of Dr. Knox, it should be borne in mind that he had taken his instances from the mulattoes in the Slave States of America, where the climate was not favourable for the development of the half-castes. In certain latitudes they would propagate, and in others not.

Mr. JAMES REDDIE remarked on the complexity of the general question of hybridity, and on the want of some more accurate definition of what constitutes a species. The question of the fertility of hybrids, or whether all varieties of the human race now existing can produce a continuously fertile offspring, did not, however, affect the question of the original unity of the human race. He conceived that even Mr. Wallace's suggested experiment would not be satisfactory, even if it could be carried out; for the argument did not depend on

proving the continued fertility, say of the progeny of black women and white men, for it might still be a question, whether the result would be the same if they were to reverse the cross, and see whether we should equally have a progeny from black men and white women; which, according to M. Broca, is impossible.

The **PRESIDENT** observed that the question was so difficult that it was impossible, in the present state of knowledge, to come to a definite conclusion. The great advantage of the paper was, that it might elucidate further information; and he hoped it might be the means of bringing many more new facts to light. He believed that the evidence yet received on the subject was in favour of the propositions of M. Broca; there were, however, very few facts and data to rest upon. With respect to the Australians, it was stated by Mr. Stanbridge, that it was very difficult to rear the half-castes, and he related no tales about killing them. There was very little stability in their constitutions; they died off early, and the girls were always prostitutes. It was the same with mixed races in other parts of the world. In Virginia, the mulattoes suffered much more from the climate than the pure negroes; there was no doubt whatever about that fact. As to the question which had been raised of the existence of mixed races in France, he considered it showed such an utter confusion in the use of the words species and races, that nothing could be said about it. When talking of people so different as the Europeans and Australians, they might be properly called different species, without attaching to the term the signification that they had a different origin; but it was a complete confusion of terms to apply the word species to the different people of Europe. For his own part, he held most firmly the opinion that the difference in species among the races of men observable at the present day had nothing to do with the unity of the origin of man. The question of human hybridity was a very complicated one, and he did not hope to see it settled; but he felt sure that the meeting must agree with him that they were much indebted to the author of the paper for the light he had thrown on it, and it was satisfactory to see a clergyman of the Church of England contribute to the Society two such liberal and instructive papers as had been read that evening.

The **PRESIDENT** then stated that the paper which had been announced to be read by Mr. Blake must be postponed, on account of the absence of that gentleman from illness; and he called on Mr. Fraser to read a communication received from Africa relating to the capacity of the negroes for civilisation.

Mr. LOUIS FRASER then read a letter he had received from Mr. Anthony from the Bight of Benin, in which he expressed his full approval of the paper read before the Society by Dr. Hunt "On the Negro's Place in Nature;" and adduced a great number of facts in confirmation of the opinion that the negro is incapacitated by nature for European civilisation. He spoke,—partly from his own observation, and partly from hearsay evidence,—of the cannibalism of the negroes, of their brutality and mental incapacity, and of their posses-

sion of all the vices with none of the virtues of humanity. The writer expressed his sentiments against the negro very strongly.

Mr. JAMES REDDIE objected to the terms in which the negroes were spoken of in the letter. The most important and startling things said in it relate to cannibalism; but it is worthless, since the writer himself says "*all this is mere hearsay, of course*"! He thought they had had a great deal of trustworthy evidence collected about the negro, and he feared it might be supposed that they were getting up a case against him, if they appeared ready to circulate more loose statements and hearsay gossip on the subject. The letter, he considered, should be revised and corrected before it appeared in the proceedings of the Society, if it were printed at all. He was sorry to add that, valuable as some of the information it contained might be, even that was not fitted to appear in print in the precise terms in which it was written.

The PRESIDENT observed that it was no doubt very advisable to keep strictly to scientific matters in the papers contributed to the Society; nevertheless all authors must be allowed to express their opinions, and they were liable to have those opinions openly criticised in discussion. If the statements given in the letter were true, there could be no objection to their being stated; but if not true, they might be refuted. With respect to the assertion about the cannibalism of the negroes, all the evidence was not hearsay evidence, for there was the fact that the writer had seen one of the chiefs eating human flesh. That gentleman had been in Africa many years, and he wrote the results of his observations to his friend Mr. Fraser, who had been the naturalist of the Niger expedition. He (the President) could not consent to have contributions from foreign correspondents doctored, like wines, to suit the English taste and the English market. It was open to the Council to publish the letter or not as they thought proper; but he was decidedly of opinion that if published at all, they ought to publish every word as it reached them.

Dr. TURLE said he had understood that the papers read at the meetings of the Society were previously revised by the Council. He understood Mr. Reddie to mean that the paper was not intended by the writer to be read before the Society as it was written, and that it was merely a private gossiping letter to his friend. Papers of that kind ought to be considered by the Council before they were read.

Mr. REDDIE observed that his suggestion was to this effect: as the letter was evidently written off-hand, that the question should be considered by the Council, whether it was a paper that should be printed by the Society. He should be the last person to wish to alter what a writer deliberately wished to say. And, even now, if Mr. Fraser will accept the responsibility of the paper, and will revise it, then whatever *he* might wish to print, he (Mr. Reddie) would also say, *print*.

The meeting then adjourned to the 19th instant.
