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RACES AND PEOPLES

LECTURES

ON THE

SCIENCE OF ETHNOGRAPHY

BY

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TO
HORATIO HALE,
PHILOLOGIST TO THE UNITED STATES EXPLORING
EXPEDITION IN 1838-42,
WHOSE MANY AND VALUABLE
CONTRIBUTIONS TO LINGUISTICS AND ETHNOGRAPHY
PLACE HIM TO-DAY AMONG THE FOREMOST AUTHORITIES
ON THESE SCIENCES,
THIS VOLUME
IS INSCRIBED IN RESPECT AND FRIENDSHIP
BY THE AUTHOR.

PREFACE.

THE lectures which appear in this volume were delivered at the Academy of Natural Sciences, Philadelphia, in the early months of 1890. They have since been written out, and references added in the foot-notes to a number of works and articles, which will enable the student to pursue his readings on any point in which he may be interested. My endeavor has been to present the results of the latest and most accurate researches on the subjects treated; though no one can be better aware than myself that in compressing such an extensive science into so limited a space, I have often necessarily been superficial. It is some excuse for the publication, if one is needed, that I am not aware of any other recent work upon this science written in the English language.

Philadelphia, August, 1890.

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LECTURES ON ETHNOGRAPHY.

LECTURE I.

THE PHYSICAL ELEMENTS OF ETHNOGRAPHY.

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THAT no two persons are identical in appearance is such a truism that we are apt to overlook its significance. The parent can rarely be recognized from

the traits of the child, the brother from those of the sister, the family from its members.

On the other hand, the individual peculiarities become lost in those of the race. It is a common statement that to our eyes all Chinamen look alike, or that one cannot distinguish an Indian "buck" from a "squaw." Yet you recognize very well the one as a Chinaman, the other as an Indian. The traits of the race thus overslaugh the variable characters of the family, the sex or the individual, and maintain themselves uniform and unalterable in the pure blood of the stock through all experience.

This fact is the corner-stone of the science of Ethnography, whose aim is to study the differences, physical and mental, between men *in masses*, and ascertain which of these differences are least variable and hence of most value in classifying the human species into its several natural varieties or types.

In daily life and current literature the existence of such varieties is fully recognized. The European and African, or White and Black races, are those most familiar to us; but the American Indian and the Mongolian are not rare, and are recognized also as distinct from each other and ourselves. These common terms for the races are not quite accurate; but they illustrate a tendency to identify the most prominent types of the species with the great continental areas, and in this I shall show that the popular judgment is in accord with scientific reasoning.

If an ordinary observer were asked what the traits

are which fix the racial type in his mind, he would certainly omit many which are highly esteemed by the man of science. He would have nothing to say, for instance, about the internal structures or organs, because they are not visible; but in approaching the subject from a scientific direction, we must lay most stress upon these, as their peculiarities decide the external traits which strike the eye.

Nor does the casual observer note the mental or physical differences which exist between the races whom he recognizes; yet these are not less permanent and not less important than those which concern the physical economy only. In both these directions the student of ethnography as a science must pursue careful researches.

In the present lecture I shall pass in review the physical elements held to be most weighty in the discrimination of racial types; and, first, those relating to

The Bones.—Most important are the measurements of the skull, that science called *craniology*, or *craniometry*.

Ethnologists who are merely anatomists have made too much of this science. They have applied it to the exclusion of other elements, and have given it a prominence which it does not deserve. The shape of the skull is no distinction of race in the individual; only in the mass, in the average of large numbers, has it importance. Even here its value is not racial. Within the limits of the same people, as among the Slavonians, for example, the most different skulls are found,

and even the pure-blood natives of some small islands in the Pacific Ocean present widely various forms.*

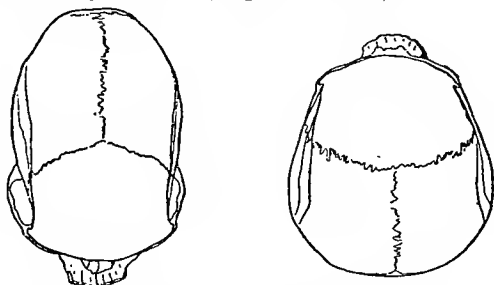
Experiments on the lower animals prove that the skull is easily moulded by trifling causes. Darwin found that he could produce long, or short, or non-symmetrical skulls in rabbits by training.† The shape also bears a relation to stature. As a general rule short men have short or rounded heads, tall men have long heads. The longest skulled nation in Europe are the Norwegians, who are also the tallest; the roundest are the Auvergnats, who, of all the European whites, are the shortest.

Nevertheless, employed cautiously, in large averages, and with a careful regard for all the other ethnic elements, the measurements of the skull are extremely useful as accessory data of comparison.

* The cranial indices on one of these islands varied from 70 to 83. The excessive claims of craniometry have been severely but justly rebuked by Moriz Wagner, in his thoughtful work, *Die Entstehung der Arten durch räumliche Sonderung*, s. 528, sq. (Basel, 1889), and more forcibly censured by Waitz, *Anthropologie der Naturvölker*, Bd. I., ss. 84-88. The French school of anthropologists have been especially one-sided in their devotion to this one element of the science. Among other great naturalists, Charles Darwin was careful to point out the variability of the skull as an anatomical part. (*The Descent of Man*, p. 26.)

† Darwin, *The Descent of Man*, p. 56. The anatomical cause of elongated or short skulls is the earlier union of either the transverse or longitudinal sutures, thus forcing the growth to be in the other direction. (L. Holden, *Human Osteology*, p. 127). Of course, this begins in foetal life; and Pruner Bey had observed children with different forms of the skull born of the same mother. (Oscar Peschel, *Völkerkunde*, s. 80).

Some craniologists have run up these measurements to more than a hundred; but those worth mentioning in this connection are but few. There is, first, the proportion which the length of the head has to its breadth. This makes the distinction between long, medium and broad skulls, "dolicho-cephalic," "meso-cephalic," and "brachy-cephalic." In the medium skull the transverse bears to the longitudinal diameter the proportion of about 80:100. The proportion 75:100 would make quite a long skull, and 85:100 quite a broad skull, the extreme variations not exceeding 70:100—90:100. (Figs. 1 and 2.)



FIGS. 1 AND 2.—Long and Short Skulls.

The Asiatic race or typical Mongolians are generally brachy-cephalic, the Eskimos and African negroes dolicho-cephalic; while the whites of Europe and American Indians present great diversity.

The lengthening of the skull may be anteriorly or posteriorly, and this is probably more significant of brain power than its width. In the black race the lengthening is occipital, that is at the rear, indicating a preponderance of the lower mental powers.

The height of the skull is another measurement which is much respected by craniologists; but they are far from agreed as to the points from which the lines shall be drawn, so that it is difficult to compare their results.* The "sutures," or lines of union between the several bones of the skull, present indications of great value. In the lower races they are much simpler than in the higher, and they become

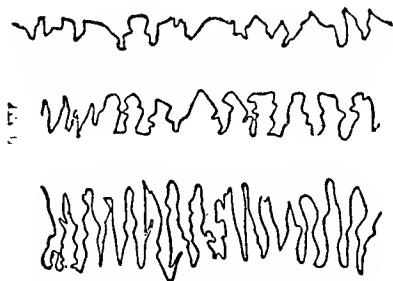


FIG. 3.—Lines of Sutures in the Skull.

obliterated earlier in life; the bones of the skull thus uniting into a compact mass and preventing further expansion of the cavity occupied by the brain.† (Fig. 3.) Occasionally small separated bones are found in these sutures, more frequently in some races than in

* See Dr. Emil Schmidt, *Anthropologische Methoden*, s. 221. This is a valuable handbook for the student of anthropology.

† An interesting study of this subject has been made by Dr. F. C. Ribbe, *L'Ordre d'Obliteration des Sutures du Crane dans les Races Humaines* (Paris, 1885).

others. One of these, toward the back of the head, occurs so constantly in certain American tribes that it has been named the "Inca bone." *

In many savage tribes there are artificial deformations of the skull, which render it useless as a means of comparison. The "Flathead Indians" are an example, and many Peruvian skulls are thus pressed out of shape. It is singular that this violence to such an important organ does not seem to be attended with any injurious result on the intellectual powers.

The orbit of the eyes is another feature which varies in races. The proportion of the short to the long diameter furnishes what is known as the "orbital index." The Mongolians present nearest a circular orbit, the proportion being sometimes 93:100; while the lowest range has been found in skulls from ancient French cemeteries, presenting an index of 61:100. The latter are technically called "microsemes;" the former "megasemes," while the mean are "mesosemes." †

In a similar manner the aperture of the nostrils varies and constitutes quite an important element of comparison known as the "nasal index." Where this aperture is narrow, the nose is thin and prominent;

* For a careful paper on this point see Dr. Washington Matthews, in the *American Anthropologist*, Oct., 1889.

† Instead of these terms the Germans use:

Chamaekonch = orbital index below 80

Mesokonch = " " 80-85.

Hypsikonch = " " above 85.

The French expressions are preferable.

when broad, the nose is large and flat. The former are "leptorhinian," the latter "platyrhinian," while the medium size is "mesorhinian." This division coincides closely with that of the chief races. Almost all the white race are leptorhinian, the negroes platyrhinian, the true Asiatics mesorhinian. The Eskimos have the narrowest nasal aperture, the Bushmen the widest.

The projection of the maxillaries, or upper and lower jaws, beyond the line of the face, is a highly significant trait. When well marked it forms the "prognathic," when slight the "orthognathic" type. It is much more observable in the black than in the white race, and is more pronounced in the old than in the young. It is considered to correspond to a stronger development of the merely animal instincts.

The relation of the lower to the upper part of the head is measured mainly by two angles, the one the "maxillary," the other the "facial" angle. The former is the angle subtended by lines drawn from the most projecting portion of the maxillaries to the most prominent points of the forehead above and the chin below. (The angle M G S in the accompanying diagram, Fig. 4.) This supplies data for two important elements, the prognathism and the prominence of the chin. The latter is an essential feature of man. None of the lower animals possesses a true chin, while man is never without one. The more acute the maxillary angle, the less of chin is there, and the more prognathic the subject. The averages run as follows:

more acute this angle, the lower is the brain capacity. The following are its averages:

The European white . . .	80°.
The African negro . . .	70° to 75°.
The Orang-outang . . .	40°.

The amount of brain matter contained in a skull is called its "cerebral or cranial capacity." This is proved by investigation to average less in the dark than in the light races, and in the same race less in the female than in the male sex. Estimated in cubic centimetres the extremes are about 1250 cub. cent. in the Australians and Bushmen to 1600 cub. cent. in well-developed Europeans. We cannot regard this measurement as a constant exponent of intellectual power, as many men with small brains have possessed fine intellects; but as a general feature it certainly is indicative of brain weight, and therefore of relative intelligence. The average human brain weighs 48 ounces, while that of a large gorilla is not over 20 ounces.

The *teeth* offer several points of difference in races. In the negro they are unusually white and strong, and in nearly all the black people (Australians, Soudanese, Melanesians, etc.), the "wisdom teeth" are generally furnished with three separate fangs, and are sound, while among whites they have only two fangs, and decay early. The most ancient jaws exhumed in Europe present the former character. The prominence of the canine teeth is a peculiarity of some tribes, while in others the canines are not conical, but resemble the incisors.

The *size* of the teeth has also been asserted to be an index of race, and an effort has been made to classify peoples into small-toothed (microdents), medium-toothed (mesodents), and large-toothed (megadents).* But this scheme includes in the first mentioned class the Polynesians with the Europeans, and in the second the African negro with the Chinese, which looks as if the plan has little value.

The milk-teeth have a much closer resemblance to those of the apes than the second dentition, and some naturalists have thought that the forms of the second teeth point often to reversion and are characteristic of races, but this has not been proved.

The teeth and the period of dentition have been studied in man with the view to show that certain races more than others retain the dental forms of the lower animals, but the latest investigations go rather to overthrow than to support these theories.†

Turning to the other bones of the skeleton, I shall note a few peculiarities said to be ethnic. The skeleton of a negro usually presents iliac bones more vertical than those of a white man, and the basin is narrower. This peculiarity is measured by what is called

* W. H. Flower, in *Journal of the Anthropological Institute*, Vol. XIV., p. 183.

† The "Lemurian reversion" in human dentition brought forward some years ago as a racial indication by Professor E. D. Cope has been largely negated by the later researches of Dr. Harrison Allen. See *Proceedings of the American Philosophical Society*, 1890; also, Virchow, *Verhandlungen der Berliner Anthropol. Gesellschaft*, 1886, s. 400, sq.

the "pelvic index," by which is meant the ratio of the transverse to the longitudinal diameter. The average ratio is about 90 or 95 to 100.

Another trait of a lower osteology is the unusual length of the arms. This is found to depend upon the relative elongation of the fore-arm and its principal bones, the radius and ulna. From comparisons which have been instituted between the negro and the white, it appears that the proportionate length of their arms is as 78 to 72. The long arms are characteristic of the higher apes and the unripe fetus, and belong, therefore, to a lower phase of development than that reached by the white race.

There is also a peculiarity among many lower peoples in the shape of the shin-bone or tibia. Usually when cut in cross-section, the ends present a triangular surface; but in certain tribes, and in some ancient remains from the caves, the cross-section is elliptical, showing that the tibia has been flattened (platycnemic). This was long regarded as a sign of ethnic inferiority, but of late years the opinion of anatomists has undergone a change, and they attribute it to the special use of some of the muscles of the leg.

The heel-bone, the os calcis or calcaneum, is currently believed to be longer and project further backward in the negro than in the white man. There is no doubt of the projection of the heel, and it is typical of the true negro race, but it does not seem to be owing to the size of the bone, as an examination of a series of calcanea in both races proves. The length-

ening is apparent only, and is due to the smallness of the calf and the slenderness of the main tendon, the "tendon of Achilles," immediately above the heel.*

With the pithecoïd forms of the bones is often associated another simian mark. The line in the hand known to chiromancy as the "heart" line, in all races but the negro ceases at the base of the middle finger, but in his race, as in the ape, it often extends quite across the palm.

The bones offer the most enduring, but not the most obvious distinctions of races. The latter are unquestionably those presented by

The Color.—This it is which first strikes the eye, and from which the most familiar names of the types have been drawn. The black and white, the yellow, the red and the brown races, are terms far older than the science of ethnography, and have always been employed in its terminology.

Why it is that these different hues should indelibly mark whole races, is not entirely explained. The pigment or coloring matter of the skin is deposited from the capillaries on the surface of the dermis or true skin, and beneath the epidermis or scarf skin.† I have seen a negro so badly scalded that the latter was detached in large fragments, and with it came most of his color, leaving the spot a dirty light brown.

* L. Holden, *Human Osteology*, pp. 188, 189.

† More accurately, the pigment cells in man are in the deeper layer of the *rete mucosum Malpighii*. Cf. A. Kölliker, "Ueber die Entstehung des Pigments in den Oberhautgebilden," in the *Zeitschrift für wissensch. Zoölogie*, Bd. XLV., s. 713 sq.

The coloration of the negro, however, extends much beyond the skin. It is found in a less degree on all his mucous membrane, in his muscles, and even in the pia mater and the grey substance of his brain.

The effort has been made to measure the colors of different peoples by a color scale. One such was devised by Broca, presenting over thirty shades, and another by Dr. Radde, in Germany; but on long journeys, or as furnished by different manufacturers, these scales undergo changes in the shades, so that they have not proved of the value anticipated.

As to the physiological cause of color, you know that the direct action of the sun on the skin is to stimulate the capillary action, and lead to an increased deposit of pigment, which we call "tan." This pigment is largely carbon, a chemical element, principally excreted by the lungs in the form of carbonic oxide. When from any cause, such as a peculiar diet, or a congenital disproportion of lungs to liver, the carbonic oxide is less rapidly thrown off by the former organs, there will be an increased tendency to pigmentary deposit on the skin. This is visibly the fact in the African blacks, whose livers are larger in proportion to their lungs than in any other race.*

* This was the result of numerous autopsies during the American civil war. Some dissections reported by M. T. Chudzinski seem to show that the liver of the negro is smaller than that of the white. (*Revue d'Anthropologie*, 1887, p. 275). But its relative size to the lungs is the question at issue. The comparative splanchnology of the different races has yet to be worked out.

While all the truly black tribes dwell in or near the tropics, all the arctic dwellers are dark, as the Lapps, Samoyeds and Eskimos; therefore, it is not climate alone which has to do with the change. The Americans differ little in color among themselves from what part soever of the continent they come, and the Mongolians, though many have lived time immemorial in the cold and temperate zone, are never really white when of unmixed descent.

A practical scale for the colors of the skin is the following:

- | | | |
|---------|---|--------------------------------------|
| Dark. | { | 1. Black. |
| | | 2. Dark brown, reddish undertone. |
| | | 3. Dark brown; yellowish undertone. |
| Medium. | { | 1. Reddish. |
| | | 2. Yellowish (olive). |
| White. | { | 1. White, brown undertone (grayish). |
| | | 2. " yellow undertone. |
| | | 3. " rosy undertone. |

The color of the *eyes* should next have attention. Their hue is very characteristic of races and of families. Light eyes with dark skins are rare exceptions. Other things equal, they are lighter in men than in women. Extensive statistics have been collected in Europe to ascertain the prevalence of certain colors, and instructive results have been obtained.* The division usually adopted is into dark and light eyes.

* Dr. John Beddoe in England, Topinard in France, and Virchow in Germany, have been especially active in obtaining these statistics.

- | | | |
|-------------|---|-------------------------|
| Dark eyes. | { | 1. Black. |
| | | 2. Brown. |
| Light eyes. | { | 1. Light brown (hazel). |
| | | 2. Gray. |
| | | 3. Blue. |

The eye must be examined at some little distance so as to catch the total effect.

Next in the order of prominence is

The Hair.—Indeed, Haeckel and others have based upon its character the main divisions of mankind. That of some races is straight, of others more or less curled. This difference depends upon the shape of the hairs in cross-section. The more closely they assimilate true cylinders, the straighter they hang; while the flatter they are, the more they approach the appearance of wool. (Fig. 5.) The variation of the two diameters

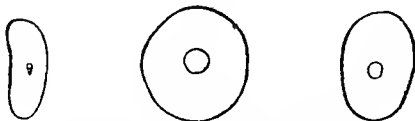


FIG. 5.—Cross Sections of Hairs.

(transverse and longitudinal) is from 25:100 to 90:100. The straightest is found among the Malaysians and Mongolians: the woolliest among the Hottentots, Papuas and African negroes. The white race is intermediate, with curly or wavy hair. It is noteworthy that all woolly-haired peoples have also long, narrow heads and protruding jaws.

The amount of hair on the face and body is also a

point of some moment. As a rule, the American and Mongolian peoples have little, the Europeans and Australians abundance. Crossing of races seems to strengthen its growth, and the Ainos of the Japanese Archipelago, a mixed people, are probably the hairiest of the species. The strongest growth on the head is seen among the Cafusos of Brazil, a hybrid of the Indian and negro.

The Muscular Structure.—The development of the muscular structure offers notable differences in the various races. The blacks, both in Africa and elsewhere, have the gastrocnemii or calf muscles of the leg very slightly developed; while in both them and the Mongolians the facial muscles have their fibres more closely interwoven than the whites, thus preventing an equal mobility of facial expression.

The anomalies of the muscular structure seem about as frequent in one race as in another. The most of them are regressive, imitating the muscles of the apes, monkeys, and lower mammals. Indeed, a learned anatomist has said that the abnormal anatomy of the muscles supplies all the gaps which separate man from the higher apes, as all the simian characteristics reappear from time to time in his structure.*

Certain motions or positions, such as I may call "muscular habits," are characteristic of extensive groups of tribes. The method of resting is one such. The Japanese squats on his hams, the Australian stands on one leg, supporting himself by a spear or

* L. Testut, in *L'Homme*, 1884, p. 377.

pole, and so on. The methods of arrow-release have been profitably studied by Professor E. S. Morse. He finds them so characteristic that he classifies them

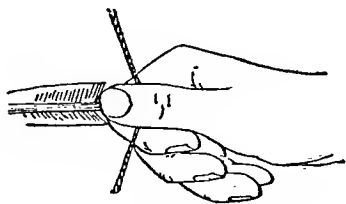


FIG. 6.—Primary Arrow-Release.

ethnographically, with reference to savagery and civilization, and locality. The three most important are the primary, the Mediterranean, and the Mongolian re-

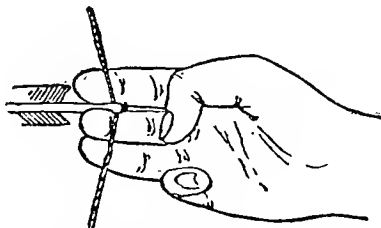


FIG. 7.—Mediterranean Arrow-Release.

leases. The first is that of many savage tribes, the second was practiced principally by the white race, the last by the Mongolians and their neighbors. (Figs. 6, 7, 8.) The last two are the most effective, and thus gave superiority in combat.

Allied to muscular variation are the peculiar deposits of fatty tissue in certain portions of the system. The Hottentots are remarkable for the prominence of the gluteal region, imparting to their figure a singular projection posteriorly. It is called "steatopygy," and appears to have been, in part at least, a cultivated deformity, regarded among them as a

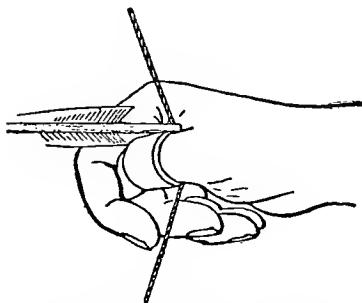


FIG. 8.—Mongolian Arrow-Release.

beauty. The thick lips of the negro, and the long and pendent breasts of the Australian women, are other examples of ethnic hypertrophies.

Stature and Proportion.—Differences in stature are tribal, but not racial. The smallest peoples known, the Negrillos, the Aetas, the Lapps, belong to different races, as do the tallest, the Patagonians, the Polynesians, the Anglo-Americans. The researches of Paolo Riccardi and others prove that stature is correlated with nutrition; the better the food, other things being

equal, the taller the men.* It is also markedly hereditary; the stature of children will average that of their parents.

What is called the "canon of proportions" of the human body varies with the race and the nation. There is indeed an ideal, an artistic canon, which the sculptor or the painter seeks to body forth in his productions; and this seems in close conformity with an extensive average of the proportions of the highest peoples; but it is never found in individuals, and it is essentially unlike in man and woman, in youth and age, in the blonde and brunette.† Nor is the ideal of the artist also that which is consonant with the greatest muscular development or highest powers of endurance.

Special Senses.—It cannot be said that the different races display positive discrepancies in the special senses. Their development appears to depend on cultivation, and all races respond equally to equal training. There is, to be sure, a higher musical sense in the native African than in the native American, but quite as much difference is seen between European nations.

Much has been written of the color-sense as a trait of nations. It has been said that some tribes, some races, appreciate hues more keenly than others; that within historic times marked gains in this respect are

* In *Archivio per l' Antropologia*, 1885.

† See Topinard, "Le Canon des Proportions du Corps de l' Homme Européen," in *Revue d' Anthropologie*, 1889, p. 392.

noticeable. I think these statements are incorrect. The savage of any race distinguishes precisely the difference of hues when it is to his material interest so to do; but concerns himself not at all about colors which have no effect on his life. He is well acquainted with the colors of the animals he hunts, and has a word for every shade of hue. This proves that his color-sense is as acute as that of civilized people, and merely lacks specific training.

Ethnic Relations of the Sexes.—There are some curious facts in reference to the relative position of the sexes in different peoples. As a rule the expression of sex in form and feature is less in the lower than in the higher races. Travelers frequently refer to the difficulty of distinguishing the men from the women among the American Indians or the Chinese. Investigate the fact, and you will find that it is not that the women are less feminine in appearance, but the men less masculine. In other words, the expression of sex in such peoples is less in man than in woman. This seems to be true also of the highest ideals of manhood in artistic conception. The Greek Apollo, the traditional Christ, present a feminine type of the male. This was carried to its excess in the Greek Hermaphrodite.

The reason for this approximation to the female in art-ideals is probably the zoological fact that the law of beauty in the human species is the reverse of that in all the other higher mammals, the female sex with us being the handsomer. This also becomes more

evident in the comparison of the best developed peoples.

On the other hand, the muscular force of the sexes presents the greatest contrast in nations of the highest culture. The average European woman of twenty-five or thirty has one-third less muscular power than the average European man. But among the Afghans, the Patagonians, the Druses and other tribes, the women are as tall and as strong as the men; and in Siam, Assanti, Ancient Gaul, and elsewhere, not only the field-laborers but the soldiers were principally women, selected because of their greater physical force and courage.

As the value of mere brute force in a social organization lessens in comparison to mental powers, the condition of woman improves, and her faculties find appropriate play. Her brain capacity, though absolutely less, is relatively more than man's. That is, the difference of the whole average weight of woman and man is greater in proportion than the difference of their brain weights.

It is believed, also, that the viability or prospect of life in woman is greater in higher than in lower peoples, and generally greater than in men. European statistics show that 106 boys are born to 100 girls: but at twelve years of age the sexes are equal, the boys suffering a greater mortality. At eighty years of age, there are nearly three women living to one man, indicating a superior longevity.

Correlation of Physical Traits to Vital Powers.—

The physical traits are correlated to the physiological functions in such a manner as profoundly to influence the destiny of nations. They enable or disable man with reference to the climatic and other conditions of his surroundings. For instance, certain races can support given temperature better than others. The intense heat and humidity of Central Africa or Southern India are destructive to the pure whites, while the climate north of the fortieth parallel soon exterminates the blacks. The food on which the Australian thrives destroys the digestive powers of the European. Exemption and liability to diseases differ noticeably in races. The white race is more liable to yellow fever, malarial diseases, syphilis, scarlet fever and sunstroke; the colored races to measles, tuberculosis, leprosy, elephantiasis, and pneumonia.

Indeed, from the physical point of view, the pure white is weaker than the dark races, worse prepared for the combat of life, with inferior viability. This has been shown by the careful researches of statisticians.* But in the white this is more than compensated by the development of the nervous system and the intellectual power. He can bear greater mental strain than any other race, and the activity of his mind supplies him with means to overcome the inferiority of his body, and thus places him at the head of the whole species.

* An instructive article on this subject is that of Alphonse de Candolle, "Les Types brun et blond au point de vue de la Santé," in the *Revue a' Anthropologie*, May, 1887.

The *tolerance of disease* is an obscure but momentous element in the comparison of races. It is almost a proverb among the Spanish-American physicians that "when an Indian falls sick, he dies." The greater longevity of the European peoples is due to their ability to support disease long and frequently, without succumbing to it. On the other hand, surgical injuries, wounds and cuts, appear to heal more rapidly among savage peoples.* It is clear that in civilized conditions this is less important than tolerance.

The Causes of the Fixation of Ethnic Traits.—These causes are mainly related to climate and the food-supply. The former embraces the questions of temperature, humidity, atmospheric pressure (altitude), malarial or zymotic poisons, and the like. All these bear directly upon the relative activity of the great physiological organs, the lungs, heart, liver, skin and kidneys, and to their action we must undoubtedly turn for the origin of the traits I have named. On the food-supply, liquid and solid, whether mainly animal, fish or vegetable, whether abundant or scanty, whether rich in phosphates and nitrogenous constituents or the reverse, depend the condition of the digestive organs, the nutrition of the individual, and the development of numerous physical idiosyncrasies. Nutrition con-

* A number of striking instances have been collected by Waitz, *Anthropologie der Naturvölker*, Bd. I., s. 141. Dr. Max Bartels, in the *Zeitschrift für Ethnologie*, 1888, s. 183, establishes this rule: "The higher the race, the less the tolerance of surgical disease; and in the same race, the lower the culture, the greater the tolerance."

trols the direction of organic development, and it is essentially on arrested or imperfect, in contrast to completed development, that the differences of races depend.

These are the physiological and generally unavoidable influences which went to the fixation of racial types. They are those which placed early man under the dominion of natural, unconscious evolution, like all the lower animals. To them may be added natural selection from accidental variations becoming permanent when proving of value in the struggle for existence, as shown in the black hue of equatorial tribes, special muscular development, etc.

But I do not look on these as the main agents in the fixation of special traits. No doubt such agencies primarily evolved them, but their cultivation and perpetuation were distinctly owing to *conscious* selection in early man. Our species is largely outside the general laws of organic evolution, and that by virtue of the self-consciousness which is the privilege of it alone among organized beings.

This conscious selection was applied in two most potent directions, the one to maintaining *the physical ideal*, the other toward *sexual preference*.

As soon as the purely physical influences mentioned had impressed a tendency toward a certain type on the early community, this was recognized, cultivated and deepened by man's conscious endeavors. Every race, when free from external influence, assigns to its highest ideal of manly or womanly beauty its special racial

traits, and seeks to develop these to the utmost. African travelers tell us that the negroes of the Soudan look with loathing on the white skin of the European; and in ancient Mexico when children were born of a very light color, as occasionally happened, they were put to death. On the other hand the earliest records of the white race exalt especially the element of whiteness. The writer of the Song of Solomon celebrates his bride as "fairest among women," with a neck "like a tower of ivory;"* and one of the oldest of Irish hero-tales, the *Wooing of Emer*, chants the praises of "Tara, the whitest of maidens."† Though both Greeks and Egyptians were of the dark type of the Mediterranean peoples, their noblest gods, Apollo and Osiris, were represented "fair in hue, and with light or golden hair."‡

The persistent admiration of an ideal leads to its constant cultivation by careful preservation and sexual selection. Thus the peoples who have little hair on the face and body, as most Chinese and American Indians, usually do not like any, and carefully extirpate it. The negroes prefer a flat nose, and a child which develops one of a pointed type has it artificially flattened. In Melanesia if a child is born of a lighter hue than is approved by the village, it is assiduously held over the smoke of a fire in order to blacken it. The

* *Solomon's Song*, Chap. VII., v. 4, etc.

† See "The Wooing of Emer," translated by Kuno Meyer, in *The Archaeological Journal*, Vol. I., p. 68 sq.

‡ C. P. Tiele, *History of the Egyptian Religion*, pp. 93, 95, etc.

custom of destroying infants markedly aberrant from the national type is nigh universal in primitive life. Such usages served to fix and perpetuate the racial traits.

A yet more powerful factor was *sexual preference*. This worked in a variety of ways. It is well known to stock breeders that the closer animals are bred in-and-in, that is, the nearer the relationship of father and mother, the more prominently the traits of the parents appear in their children and become fixed in the breed. It is evident that in the earliest epoch of the human family, the closest inter-breeding must have prevailed without restriction, as it does in every species of the lower animals. By its influences the racial traits were rapidly strengthened and indelibly impressed. This, however, was long before the dawn of history, for it is a most remarkable fact that never in historic times has a tribe been known that allowed incestuous relations, unless as in ancient Egypt and Persia, for a sacrificial or ceremonial purpose. The lowest Australians, the degraded Utes, look with horror on the union of brother and sister. The general principle of marriage in savage races is that of "exogamy," marriage outside the clan or family, the latter being counted in the female line only. This strange but universal abhorrence has been explained by Darwin as primarily the result of sexual indifference arising between members of the same household, and the high zest of novelty in that appetite. Whatever the cause, the consequences will easily be seen. The racial traits once fixed in the

period before this abhorrence arose would remain largely stationary afterwards, and by exogamous marriages would be rendered uniform over a wide area.

This form of conscious selection has properly been rated as one of the prime factors in the problem of race differentiation.* The apparently miscellaneous and violent union of the sexes in savage tribes is in fact governed by the most stringent traditional laws, and their confused cohabitations are so only to the mind of the European observer, not to the tribal conscience.†

Causes of Variation in Types.—The physical type once fixed by the influences just mentioned remains very stable; yet may fall under the influence of conditions which will greatly modify it.

Changes in climatic surroundings and of the food supply exert a visible effect. These generally come about by migration, though geologic action has occasionally completely altered the climate of a given locality, as at the glacial epoch, which change would have the same effect as migration.

How far migration may alter race-types after many generations is not yet defined. The Spanish-American of pure white blood, whose ancestors have lived

* The most valuable study upon it is that by the late Moriz Wagner, printed in his volume *Die Entstehung der Arten durch räumliche Sonderung* (Basel, 1889).

† Some excellent remarks on this subject are offered by Elie Reclus, in his discussion of marriage among the Australians, in *Revue d'Anthropologie*, 1887, p. 20, sq.

for three centuries in tropical America, the citizen of the United States who traces his genealogy to the passengers in the *Mayflower* or the *Welcome*, have departed extremely little from the standard of the Andalusian or the Englishman of to-day, though the contrary is often asserted by those who have not personally studied the variants in the countries compared. Conditions of climate and food materially impress the individual, but not the race. The Greeks of Nubia are as dark as Nubians, but let their children return to Greece and the Nubian hue is lost. This is a general truth and holds good of all the slight impressions made upon pure races by unaccustomed environments.

Another cause of variation is the recurrence to remote ancestral traits, or the appearance of what seem merely accidental variations, which may be perpetuated. It is not very unusual in pure African negroes and Chinese to observe instances of reddish hair and gray or brown eyes.

Those peculiar congenital conditions known as *albinism* and *melanism* may be frequent and are unquestionably transmissible by descent.*

The Mingling of Races.—But the mightiest cause in the change of types is intermarriage between races, what the French call *métissage*. This has taken place from distantly remote epochs, especially along the lines where two races come into contact. In such regions

* On the interesting questions of the recurrence of red hair and albinos in various races, consult Richard Andree, *Ethnographische Parallelen und Vergleiche*, ss. 238, 261. (Neue Folge, Leipzig, 1889).

we always find numerous mixed breeds, leading to a shading of one race into another by imperceptible degrees.

The widespread custom of exogamous marriage fostered the blending of types, and it was greatly increased in early days by the institution of human slavery, the habit of selling captives taken in war, the purchase of wives and concubines, and the rule in early conquest that the men of the conquered were killed or sent off, and the women retained as the spoils of the victors. In all ages man has been migratory, and very remote relics of his arts show that war and commerce led to extensive intermixture of races long before history took up the thread of his wanderings.

It is noticeable, however, that these prolonged interminglings have not produced another race. The nearest approach to it is in the Australians, but these do not refute my statement as we shall see later. Many ethnologists have indeed classed the mixed types as separate races, running the number of the subspecies of the genus *homo* up to thirty or forty. But this was hasty generalization.

I would impress upon you this fact, that since the intermingling of two races *docs not produce a third race*, it is not likely that any of the existing races arose from a fusion of two others. The result of observation shows that after two or three generations the tendency in mixed breeds is to recur to one or the other of the original stocks, not to establish a different variety.

Were it not for such constant crossings, we have reason to believe that the race types would resist all environment and retain their traits under all known conditions. It is only where the element of *métissage* prominently enters that we are unable to assign individuals to one or another race.

Such being the case, it is a fair comparison to set one race over against another and deduce the

Physical Criteria of Racial Superiority.—We are accustomed familiarly to speak of “higher” and “lower” races, and we are justified in this even from merely physical considerations. These indeed bear intimate relations to mental capacity, and where the body presents many points of arrested or retarded development, we may be sure that the mind will also.

There are two explanations of the presence of the inferior physical traits in certain races of men; the one, that of the evolutionists, that they are reversions or perpetuations of the ape-like (simian, pithecoïd) features of the lower animal which was man's immediate ancestor; the other, that of the special creationists, that they are instances of surviving fetal peculiarities, or else deficiency or excess of development from unknown causes.

The following are the principal traits of the kind:

Simplicity and early union of cranial sutures.

Presence of the frontal process of the temporal bone.

Wide nasal aperture, with synostosis of the nasal bones.

Prominence of the jaws.

Recession of the chin.

Early appearance, size and permanence of the "wisdom" teeth.

Unusual length of the humerus.

Perforation of the humerus.

Continuation of the "heart" line across the hand.

Obliquity (narrowness) of the pelvis.

Deficiency of the calf of the leg.

Flattening of the tibia.

Elongation of the heel (os calcis).

When all or many of these traits are present, the individual approaches physically the type of the anthropoid apes, and a race presenting many of them is properly called a "lower" race. On the other hand, where they are not present, the race is "higher," as it maintains in their integrity the special traits of the genus Man, and is true to the type of the species.

The adult who retains the more numerous fetal, infantile or simian traits, is unquestionably inferior to him whose development has progressed beyond them, nearer to the ideal form of the species, as revealed by a study of the symmetry of the parts of the body, and their relation to the erect stature.

Measured by these criteria, the European or white race stands at the head of the list, the African or negro at its foot.

The investigations of anthropologists extend much beyond the outlines I have now presented you. All parts of the body have been minutely scanned, meas-

ured and weighed, in order to erect a science of the comparative anatomy of the races. Much of value has been discovered; but nothing absolutely characteristic, nothing which enables us to divide more sharply one race from another than the facts I have given you. It is a question, indeed, whether not too much, but too exclusive attention has not been devoted by many anthropologists to the purely physical aspects of their science. They have multiplied useless anatomical refinements and a pedantic nomenclature. The more valuable general distinctions and their technical terms I present to you in the following table:—

Scheme of Principal Physical Elements.

Skull	{	Dolichocephalic, long skulls.
		Mesocephalic, medium skulls.
		Brachycephalic, broad skulls.
Nose	{	Leptorhine, narrow noses.
		Mesorhine, medium noses.
		Platyrrhine, flat or broad noses.
Eyes	{	Megaseme, round eyes.
		Mesoseme, medium eyes.
		Microseme, narrow eyes.
Jaws	{	Orthognathic, straight or vertical jaws.
		Mesognathic, medium jaws.
		Prognathic, projecting jaws.
Face	{	Chamæprosopic, low or broad face.
		Mesoprosopic, medium face.
		Leptoprosopic, narrow or high face.
Pelvis	{	Platypellic, broad pelvis.
		Mesopellic, medium pelvis.
		Leptopellic, narrow pelvis.

Color { Leucochroic, white skin.
Xanthochroic, yellow skin.
Erythrochroic, reddish skin.
Melanochroic, black or dark skin.

Hair { Euthycomic, straight hair.
Euplocomic, wavy hair.
Eriocomic, wooly hair.
Lophocomic, bushy hair.

LECTURE II.

THE PSYCHICAL ELEMENTS OF ETHNOGRAPHY.

CONTENTS.—The mental differences of races. Ethnic psychology. Cause of psychical development.

- I. THE ASSOCIATIVE ELEMENTS. 1. The Social Instincts; sexual impulse; primitive marriage; conception of love; parental affection; filial and fraternal affection; friendship; ancestral worship; the gens or clan; the tribe; personal loyalty; the social organization; systems of consanguinity; position of woman in the state; ethical standards; modesty. 2. Language; universality of; primeval speech; rise of linguistic stocks; their number; grammatical structure; classes of languages; morphologic scheme; relation of language to thought; significance of language in ethnography. 3. Religion: universality of; early forms; family and tribal religions; universal or world religions; ethnic study of religions; comparison of Christianity, Islam, and Buddhism; material and ideal religions; associative influences of religions. 4. The Arts of Life: architecture; agriculture; domestication of animals; inventions.
- II. THE DISPERSIVE ELEMENTS: adaptability of man to surroundings. 1. The Migratory Instincts; love of roaming; early commerce; lines of traffic and migration. 2. The Combative Instincts: primitive condition of war; love of combat; its advantages; heroes; development through conflict.

THE mental differences of races and nations are real and profound. Some of them are just as valuable for ethnic classification as any of the physical elements I referred to in the last lecture, although purely physical anthropologists are loath to admit this. No one can deny, however, that it is the psychical endowment

of a tribe or a people which decides fatally its luck in the fight of the world. Those, therefore, who would master the highest significance of ethnography in its function as the key to history, will devote to this branch of it their most earnest attention.

The study of the general mental peculiarities of a people is called "ethnic psychology." As a science, it may be treated by various methods, applicable to the different aims of research. For our present purpose, which is to study the growth, migrations and comminglings of races and peoples, the most suggestive method will be to classify their mental distinctions under the two main headings of Associative and Dispersive Elements. The predominance of one or the other of these is ever eminently formative in the character and history of a people, and both must be constantly considered with reference to their bearings on the progress of a nation toward civilization.

The psychical development of men and nations finds its chief explanation, less in the natural surroundings, the climate, soil, and water-currents, as is taught by some philosophers, than in their relations and connections with each other, their friendships, federations and enmities, their intercourse in commerce, love and war. Around these must center the chief studies of ethnographic science, for they contain and present the means for reaching its highest, almost its only aim—the comprehension of the social and intellectual progress of the species.

I. THE ASSOCIATIVE ELEMENTS.

The sense of fellowship, the gregarious instinct, was inherited by our first fathers from their anthropoid ancestors. The "river drift" men, who dwelt on the banks of the Thames and the Somme before the glacial epoch, were gathered into small communities, as their remains testify. The most savage tribes, Fuegians and Australians, roam about in detached bands. They are not under the control of a chief, but are led to such union by much the same motives as prompt buffaloes to gather in a herd.

These fundamental mental elements which impel to association are:

1. *The Social Instincts.*

Strongest of them all is *the sexual impulse*. The foundation of every community is the bond of the man and woman, and the nature of this bond is the surest test of a community's position in the scale of culture. It is not likely that miscellaneous cohabitation, or that slightly modified form of it called "communal marriage," ever existed. No instance of it has been known to history.* In the most brutal tribes the man asserts his right of ownership in the woman. The rare custom of "polyandry," where a woman has several husbands at once, gives her no general license.

It is equally true that the tender sentiments of love

* The alleged examples are satisfactorily set aside by Dr. Wilhelm Schneider, *Die Naturvölker*, Bd. II., ss. 425, sqq. (Paderborn, 1886.)

appear to be less known to the lowest savages than they are to beasts and birds. The process of mating is by brute force, marriage is by robbery, and the women are in a wretched slavery. Mutual affection has no existence. Such is the state of affairs among the Australians, the western Eskimos, the Athapascas, the Mosquitos, and many other tribes.*

But it is gratifying to find that we have to mount but a step higher in the scale to find the germs of a nobler understanding of the sex relation. In many tribes of but moderate culture, their languages supply us with evidence that the sentiment of love was awake among them, and this is corroborated by the incidents we learn of their domestic life. This I have shown in considerable detail by an analysis of the words for love and affection in the languages of the Algonkins, Nahuas, Mayas, Qquichuas, Tupis and Guaranis, all prominent tribes of the American Indians.†

Some of the songs and stories of this race seem to reveal even a capability for romantic love, such as would do credit to a modern novel. This is the more astonishing, as in the African and Mongolian races this ethereal sentiment is practically absent, the idealism of passion being something foreign to those varieties of man.

* Much of this seeming violence is "ceremonial," as I have already observed (page 44); but what I wish now to emphasize is that the marriage is without show of affection.

† D. G. Brinton, "The Conception of Love in some American Languages," in *Essays of an Americanist*, p. 410, sq. (Philadelphia, 1890.)

The sequel of the sexual impulse is the formation of the family through the development of *parental affection*. This instinct is as strong in many of the lower animals as in human beings. In primitive conditions it is largely confined to the female parent, the father paying but slight attention to the welfare of his offspring. To this, rather than to a doubt of paternity, should we attribute the very common habit in such communities, of reckoning ancestry in the female line only.

Akin to this is *filial* and *fraternal* affection, leading to a preservation of the family bond through generations, and in spite of local separation. It is surprising how strong is this sentiment even in conditions of low culture. The Polynesians preserved their genealogies through twenty generations; the Haidah Indians of Vancouver's Island boast of fifteen or eighteen.

The sentiment of *friendship* has been supposed by some to be an acquisition of higher culture. Nothing is more erroneous. Dr. Carl Lumholtz tells me he has seen touching examples of it among Australian cannibals, and the records of travelers are full of instances of devoted affection in members of savage tribes, both toward each other and toward persons of other races. There are established rites in early social conditions, by which a stranger is received into the bond of fellowship and the sanctity of friendship.* This is often by a transfer of the blood of the one to the body of the

* For numerous examples, see Dr. Wilhelm Schneider's work, *Die Naturvölker*, Th. II., ss. 290, 294, etc.

other, or a symbolic ceremony to that effect, the meaning being that the stranger is thus admitted to the rights of kinship in the gens or clan. Springing from this clannish affection is the custom of *ancestral worship*, which adds a link to the bond of the family. It is so widely spread that Herbert Spencer has endeavored to derive from it all other forms of religion. But this is a hasty generalization. The religious sentiment had many other primitive forms of expression.

Through these various personal affections we reach the development of the family into the *gens*, the clan or *totem*, all of whose members, whether by consanguinity or adoption, are held to represent one interest.

The union of several gentes under one control constitutes the *tribe*, which is the first step toward what is properly a *state*. The tribe passes beyond the ties of affinity by embracing in certain common interests persons who are not recognized as allied in blood. Yet it is curious to note that the tribal sentiments are among the very strongest mankind ever exhibits, surpassing those of family affection. Brutus felt no hesitation in sacrificing his son for the common weal. Classical antiquity is full of admonitions and examples to the same effect. So powerful is the devotion of the Polynesians that they have been known when a canoe was capsized where sharks abounded, to form a ring around their chief, and sacrifice themselves one by one to the ravenous fish, that he might escape.

This sentiment of *personal loyalty* has been in his-

tory the main strength of many a government, and has in it something chivalric and noble, which challenges our admiration; yet it is quite opposed to the principles of republicanism and the equal rights of individuals, and we must condemn it as belonging to a lower stage of evolution than that to which we have arrived.

The result of these gregarious instincts is the formation of the *social organization*, the bond under which first the primitive horde and later the members of the developed commonwealth consented to live. From first to last, wherever found, communities of men are bound together by ties of consanguinity and affection rather than mere self-interest. Those writers who pretend that society once existed without the idea of kinship, with promiscuity in the sexual relation, and without some recognized controlling power, have failed to produce such an example from actual life.

These ties led to the systems of "consanguinity and affinity" which recur with singular sameness at a certain stage of culture the world over. They give rise to what is called the totemic or gentile phase of society, in which its members are organized into "gentes" or clans, "phratries" or associations of clans, and the tribe, which embraces several such phratries. This theory affected the disposition of property, which belonged to the clan and not to the individual, and the form of government, which was usually by a council appointed from the various clans. The recognition of the wide prevalence of these ideas in the ancient world has led to profound modifications of our views respect-

ing its institutions, and a better understanding of many of the events of history.*

In social organizations one of the criteria of excellence is the *position of woman*. Upon this depends the life of the family and the development of morality. Those nations which have gained the most enduring conquests in power and culture have conceded to woman a prominent place in social life. In ancient Egypt, in Etruria, in republican Rome, women owned property, and enjoyed equal rights under the law. Where woman is enslaved, as among the Australian tribes, progress is scarcely possible; where she is imprisoned, as in Mohammedan countries, progress may be rapid for a time, but is not permanent. Unusual mental ability in a man is generally inherited from his mother, and a nation which studies to prevent women from acquiring an education and from taking an active part in affairs, is preparing the way to engender citizens of inferior minds.

Among other ethnic traits, the appreciation of the *ethical* standard differs notably. Long ago the observant Montaigne commented on the conflicting views of morals in nations, and remarked rather cynically that what was good on one side of a river was deemed wicked on the other. This is especially noticeable in the sense of justice, the rights of property,

* Our countryman, Lewis H. Morgan, was the first to place this subject in its true light in his work *Ancient Society* (New York, 1878). He doubtless carried the theory too far in certain directions, but in others it has not yet been sufficiently appreciated by historians.

and the regard for truth. No Asiatic nation respects truth telling, or can be made to see that it is abstractly desirable when it conflicts with their immediate interests. The rights of property are generally construed entirely differently to ourselves among nations in the lower grades of culture, because the idea of independent personal ownership does not exist among them. What they have belongs to the clan or the horde, and they merely have the use of it.

The basis of ethics in all undeveloped conditions is not general but special; it relates to the tribe and the family, and is in direct conflict with the philosopher Kant's famous "categorical imperative," which makes the basis the welfare of the whole species. Hence, in primitive culture and survivals there is a dual system of morals, the one of kindness, love, help and peace, applicable to the members of our own clan, tribe or community; the other of robbery, hatred, enmity and murder, to be practiced against all the rest of the world; and the latter is regarded as quite as much a sacred duty as the former.* Ethics, therefore, while a powerfully associative element in the one direction, becomes dispersive or segregating in others, unless the sense of duty is taught as a universal and not as a class or national conception.

The sentiment of *modesty* is developed by man in society, and he alone among animals possesses it. Whatever has been said to the contrary, it is never

* See M. Kulischer, "Der Dualismus der Ethik bei den primitiven Völkern," in *Zeitschrift für Ethnologie*, 1885, s. 105.

absent. Frequently, indeed, its manifestation is not according to our usages, and is thus overlooked. Women with us expose their faces, which a Moorish lady would think most indelicate. The Bedawin women consider it immodest to have the back of the head uncovered; the Siamese think nothing of displaying nude limbs, but on no account would show the uncovered sole of the foot. In certain African courts, the men wear long robes while the women appear nude. The necessary functions of the body are everywhere veiled by retirement, and in the most savage tribes, a regard for decency is constantly noted.

The second chief associative principle is

2. Language.

Unlike the elements of affection which I have been tracing, language is not a legacy from a brute ancestor. It is the peculiar property of the genus Man, and no tribe has ever been known without a developed grammatical articulate speech, with abundance of expressions for all its ideas. The stories of savages so rude that they were forced to eke out their words with gestures, and could not make themselves intelligible in the dark, are fables. The languages of the most barbarous communities are always ample in forms, and often surprisingly flexible, rich and sonorous.

We must indeed suppose a time when the speech of primeval man had a feeble, imperfect beginning. "The origin of language" has been a favorite theme for philologists to speculate about, with sparse fruit

for their readers. We can, indeed, picture to ourselves something like what it must have been in its very early stages, by studying a number of very simple languages, and noting what parts of the grammar and dictionary they dispense with. Following this plan, I once undertook to show what might have been the language of man far back in palæolithic times. It probably had no "parts of speech," such as nouns, pronouns, prepositions or adjectives; it had no gender, number nor case, no numerals and no conjugations. The different sounds, vowels or consonants, conveyed specific significations, and each phrase was summed up in a single word.*

In some such way language began. But remember that this is quite another question from the origin of *languages*, or, to use the proper term, of *linguistic stocks*. They are very numerous, and many of comparatively late birth. Those convolutions of the brain which preside over speech once developed, man did not have to repeat his long and toilsome task of acquiring linguistic facility. Children are always originating new words and expressions, and if two or three infants are left much together, they will soon have a tongue of their own, unlike anything they hear around them. Numerous examples of this character have been collected by Horatio Hale, and upon them he has based an entirely satisfactory theory of the

* See "The Earliest Form of Human Speech as revealed by American Tongues," in my *Essays of an Americanist*, p. 390. (Philadelphia, 1890).

source of that multiplicity of languages which we find in various parts of the globe.* In the unstable life of barbarous epochs, very young children were often left without parents or protectors, or wandered off and were lost. Most of them doubtless perished, but those who survived developed a tongue of their own, nearly all whose radicals would be totally different from those of the language of their parents. Thus in early times numerous dialects, numerous independent tongues, came to be spoken within limited areas by the same ethnic stock.

It is a common error to suppose that there was once but one or a few languages, from which all others have been derived. The reverse is the case. Within the historic period, the number of languages has been steadily diminishing. We know of scores which have become extinct, as many American tongues; others, like the Celtic, are in plain process of disappearance. We can almost predict the time when the work and the thought of the world will be carried on in less than half a dozen tongues, if indeed that many survive as really active.

If we take a comprehensive survey of the grammatical structure of all known tongues, we are cheered by the discovery that they can be divided into a few great classes or groups. The similarities of each group are not in words or sounds, but in the plan of "ex-

* "On the Origin of Language," in *Proceedings of the Amer. Assoc. for the Adv. of Science*, 1887, p. 279.

pressing the proposition," or placing words together in a phrase to convey an idea.

This may be accomplished in one of four ways:

1. By *isolation*. The words representing the parts of the phrase may be ranged one after another without any change. This is the case in the Chinese and the languages of Farther India.

2. By *agglutination*. The principal word in the phrase may have added to it or placed before it a number of syllables expressing the relations to it of the other ideas. Most African and North Asian tongues are agglutinative.

3. By *incorporation*. The accessory words are either inserted within the verbal members of the sentence, or attached to it in abbreviated forms, so that the phrase has the appearance of one word. Most American languages belong to this type.

4. By *inflection*. Each word of the sentence indicates by its own form its relation to the main proposition. All Aryan and Semitic idioms are more or less inflected.

These distinctions have great ethnographic interest. They almost deserve to be called racial traits. Thus, the inflected languages belonged originally solely to the European race; the isolating languages are still confined wholly to the Sinitic branch of the Asian race; the incorporative languages are found nowhere of such pure type and so numerous as in the American race; while the agglutinative type is that alone which is found in independent examples in every race.

Scheme of Languages.

- | | | | | | | | | | | | |
|--------------------------------------|---|--|--------------------------------------|---|---|------------------------------|---|---|-----------------------------|--|----------------|
| 1. Isolating | { | Chinese, Thibetan, Sifan, Tai.
Siamese, Annamite, Burmese, Assamese. | | | | | | | | | |
| 2. Agglutinative | { | <table border="0"> <tr> <td>1. By reduplication and prefixes</td> <td>{</td> <td>Polynesian, Papuan.
Bantu.</td> </tr> <tr> <td>2. By suffixes</td> <td>{</td> <td>Sibirc tongues, (Ural-altaic),
Basque.
Japanese, Korean, Dravidian.</td> </tr> </table> | 1. By reduplication and prefixes | { | Polynesian, Papuan.
Bantu. | 2. By suffixes | { | Sibirc tongues, (Ural-altaic),
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Japanese, Korean, Dravidian. | | | |
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Bantu. | | | | | | | | | |
| 2. By suffixes | { | Sibirc tongues, (Ural-altaic),
Basque.
Japanese, Korean, Dravidian. | | | | | | | | | |
| 3. Incorporative | { | <table border="0"> <tr> <td>1. With synthetic tendency</td> <td>{</td> <td>Algonkin, Nahuatl.
Quichua, Guarani.</td> </tr> <tr> <td>2. With analytic tendency.</td> <td></td> <td>Otomi, Maya, Sahaptin.</td> </tr> </table> | 1. With synthetic tendency | { | Algonkin, Nahuatl.
Quichua, Guarani. | 2. With analytic tendency. | | Otomi, Maya, Sahaptin. | | | |
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Quichua, Guarani. | | | | | | | | | |
| 2. With analytic tendency. | | Otomi, Maya, Sahaptin. | | | | | | | | | |
| 4. Inflectional | { | <table border="0"> <tr> <td>1. By annexing grammatical elements.</td> <td></td> <td>Egyptian.</td> </tr> <tr> <td>2. By inner changes of stem.</td> <td></td> <td>Libyan, Semitic.</td> </tr> <tr> <td>3. By addition of suffixes.</td> <td></td> <td>Aryac tongues.</td> </tr> </table> | 1. By annexing grammatical elements. | | Egyptian. | 2. By inner changes of stem. | | Libyan, Semitic. | 3. By addition of suffixes. | | Aryac tongues. |
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| 2. By inner changes of stem. | | Libyan, Semitic. | | | | | | | | | |
| 3. By addition of suffixes. | | Aryac tongues. | | | | | | | | | |

The principles on which languages should be compared are frequently misunderstood, and this is one of the reasons why the value of linguistics to ethnography has so often been underrated.

The first rule which should be observed is to *rank grammatical structure far above verbal coincidences*. The neglect of this rule will condemn any effort at comparison. For example, there have been writers who have sought to derive the Polynesian, an agglutinative, from the Sanscrit, an inflected tongue; or an American from a Semitic stock. Such attempts reveal an ignorance of the nature of language.

A second rule is that in tracing the etymology of words, the *phonetic laws of the special group to which they belong* must be followed. This is an even more frequent source of error than the former. Writers of high reputation will trace variations in African or American or Semitic names by the phonetic laws of

the Aryac dialects—an absurd error, as the phonetic changes are not at all the same in different linguistic stocks.

Yet a third rule is *to appraise correctly the value of verbal identities*. Generally, it is placed too high. All developed tongues include many “loan words,” borrowed from a variety of sources. They are not *prima facie* evidence of ethnic relation; they have frequently been transmitted through other nations, as is the case with thousands of English words.

An absolute verbal identity is always suspicious; or rather it is of *na* ethnic value. There must be a series of words in the languages compared of the same or similar meanings, but whose forms have been altered by the phonetic laws peculiar to the group, for such lists of words to merit the attention of a scientific linguist.

The question how far languages can be accepted as indicating the relationships of peoples has been a bone of contention. One principle we may lay down, with unimportant exceptions—*No nation has ever willingly adopted a foreign tongue*. Whenever such a change has taken place, it has been under stress of sovereignty, *vi coactum*, as the lawyers say. Hence in the savage state, where prolonged domination of one tribe by another rarely occurs, language is an excellent ethnic guide, as in America and ancient Europe.

Another principle is that in a conflict of tongues, as after conquest, *that tongue prevails which belongs to the more cultured people*, whether this be conqueror or

conquered. This is well illustrated by the survival of the Romance languages after the inroads of the Teutonic hordes at the Fall of the Western Empire.

A third maxim in linguistic ethnography is that *mixture of languages, especially in grammatical structure, indicates mixture of blood*. When, for instance, we find the Maltese a dialect partly Arabic, partly Romance, we may correctly infer that the people of the island are descended from both these stocks. This holds good even of loan words, when they are numerous; for though such have no influence on the grammatical structure of a tongue, they testify to some relations between nations, which we may be sure corresponded to others of a sexual nature.

The "American citizens of African descent" speak English only; and though they have been in contact with the white race for but three or four generations, the majority of those now living are related to it by blood, that is, are mulattoes.

The *mental aptitude* of a nation is closely dependent on the type of its idiom. The mind is profoundly influenced by its current modes of vocal expression. When the form of the phrase is such that each idea is kept clear and apart, as it is in nature, and yet its relations to other ideas in the phrase and the sentence are properly indicated by the grammatical construction, the intellect is stimulated by wider variety in images and a nicer precision in their outlines and relations. This is the case in the highest degree with the languages of inflection, and it is no mere coincidence that

those peoples who have ever borne the banner in the van of civilization have always spoken inflected tongues. The world will be better off when all others are extinguished, and it is only in deep ignorance of linguistic ethnography that such a language as *Volapük*—agglutinative in type—could have been offered for adoption as a world-language.

I have said that alone of all animals, man has articulate speech; I now add that also alone of all animals, he is capable of

3. Religion.

Not only is he capable of it; he has never been known to be devoid of it. All statements that tribes have been discovered without any kind of religion are erroneous. Not one of them has borne the test of close investigation.* The usual mistake has been to suppose that this or that belief, this or that moral observance, constitutes religion. In fact, there are plenty of immoral religions, and some which are atheistic. The notion of a God or gods is not essential to religion; for that matter, some of the most advanced religious teachers assert that such a notion is incompatible with the highest religion. Religion is simply the recognition of the Unknown as a controlling element in the

* The proof of this is furnished by Gustav Roskof, *Das Religionswesen der Rohesten Naturvölker* (Leipzig, 1880), and Wilhelm Schneider, *Die Naturvölker*, II. Theil (Paderborn, 1886). The assertions to the contrary by Herbert Spencer, Sir John Lubbock, and various French writers, arise from a lack of study of the evidence, or a misunderstanding of terms.

destiny of man and the world about him. This we shall find in the cult of every nation, and in the heart of every man.

Some nations identified this unknown controlling power with one real or supposed existence, some with another. Those in whom the family sentiment was well developed believed themselves still under the control of their deceased parents, giving rise to "ancestral worship;" more frequently the change from light to darkness, day to night, impressed the children of nature, and led to light and sun worship; in some localities the terrific force displayed in the cyclone or the thunder-storm seemed the mightiest revelation of the Unknown, and we have the Lightning and Storm Myths; elsewhere, any odd or strange object, any unexplained motion, was attributed to the divine, the *super-natural*. The last mentioned mental state gave rise to those low cults called "fetichism" and animism," while the former are supposed to be somewhat higher and are distinguished as "polytheisms." In all of them, the prevailing sentiment is fear of the Unknown; the spirit of worship is propitiatory, the gods being regarded as jealous and inclined to malevolence; the cult is of the nature of sorcery, certain formulas, rites and sacrifices being held to placate or neutralize the ill-will or bad temper of the divinities. In its lowest forms this is called "shamanism;" in its highest, it is seen in all dogmatic religions.

In early conditions, each tribe has its own gods, which are not supposed to be superior, except in force,

to the gods of neighboring tribes. No attempt is made to extend their worship beyond the tribe, and in their images they are liable to be captured, as are their votaries. Special prisons for such captive gods were constructed in ancient Rome and Cuzco.

These "tribal religions" prevailed everywhere in early historic times. The religion of the ancient Israelites, such as we find it portrayed in the Pentateuch, was of this character. In later days, profoundly religious minds of philosophic cast perceived that tribal cults do not satisfy the loftiest aspirations of the religious sentiment. The conceptions of the highest truths must be universal conceptions, and in obedience to this the Universal or World-religions were formed.

The earliest of these was preached by Sakya Muni, Prince of Kapilavastu, in India, about 500 B. C. It is known as Buddhism, and has now the largest number of believers of any one faith. The second was that taught by Christ, and the third is Islam, introduced by Mohammed in the seventh century. It is noteworthy that all these world-religions were framed by members of the white race. None has been devised by members of the other races, for the doctrines advanced by Confutse and Laotse in China are philosophic systems rather than religions.

The three World-religions named have rapidly extinguished the various tribal religions, and it is easy to foresee that in a few generations they will virtually embrace the religious sentiments of all mankind. They are all three on the increase, Christianity the

most rapidly by the extension of the nations adhering to it, but Mohammedanism can claim in the present century the greater number of proselytes, its fields being in Central Asia, India, and Central Africa.

In the ethnographic study of religions for the purpose of estimating their influence on the life and character of nations, we must take notice especially of three points: 1. The ethical contents of a faith; 2. The philosophic "theory of things" on which it is based (cosmogony, theosophy, etc.), and 3. Its power over the emotions, as upon this rests its practical potency.

As currently taught, no one of the three world-religions named is fully adequate on all these points. The cosmogony of Christianity is a series of Assyrian and Hebrew myths contradicted by modern science, and its ethical purity has been often sullied by efforts to place faith in dogmas above the law of conscience. Mohammedanism, a more genuine monotheism than Christianity, in some respects higher in practical morality (temperance, charity, equality), and certainly superior in power over the emotions, is weak in its doctrine of fatalism and in its degradation of woman. Buddhism is tainted by a profound distrust of the value of the individual life, by a false theory of the universe, and by its borrowed doctrine of metempsychosis; but rises high in its appeals to the sense of justice and right within the mind.

A religion tends to elevate its votaries in the proportion that it withdraws their minds from merely

material aims, and sets before them stimulating ideals. This is the distinction between "material" and "ideal" cults. Where the rites are directed mainly to conjuration, where the prayers are for good luck in life, where the myths are mere stories of exaggerated human shapes, there the faith is material. Such were all the religions of the African blacks and of the Eastern and Northern Asiatic tribes. They have never developed any thing higher. Among the whites, however, and in a less degree among the American Indians, there were mythical ideal figures, ranked among the gods, who embodied grand ideal conceptions of the possible perfectibility of man, and served as examples and models for the religious sentiment.*

The associative influence of a religion, whether tribal or universal in theory, is singularly powerful. The Mohammedan who looks toward Mecca, the Christian who turns toward Rome, feels a like bond of sympathy with his fellow worshippers of every race and color, as did the Israelite who wended his way to Jerusalem, or the Nahuatl who travelled to the sacred city of Cholula. The pilgrimages, the Crusades, the ecclesiastical Councils of past ages, have collected nations together under the control of ideas stronger than any which practical life can offer.

Other bonds of union are those derived from the practice of

* I have endeavored to show this, so far as it applies to native American religions, in my volume, *American Hero-Myths* (Philadelphia, 1882).

4. *The Arts of Life.*

Unquestionably the earliest of these to exert such an influence was the construction of a shelter, in other words *architecture*. We know that even glacial man had learned enough to make himself a house, though it was probably inferior to that of the muskrat. In early conditions one structure sheltered several families. Such are called "communal houses," and some ethnologists have argued that they are well nigh universal down to a very late day in the evolution of domestic architecture. The temple, the fortified refuge, the city with its grouped homes shut in by a common wall of defence—all these illustrate how architecture has ever tended to bring men together, and strengthen their instincts of association.

Later in time but wider in its influence in the same direction was the growth of *agriculture*. This art completely revolutionized the habits of life, and rendered possible the advent of civilization. The tribe, dependent on hunting and fishing or on natural products for a livelihood, is necessarily migratory and separative in its habits. The tillage of the ground with equal necessity demands a stable residence and a centralization of individuals. The areas of primitive culture, the sites of the earliest cities, were always in situations favorable to agricultural pursuits.

Along with the cultivation of food-plants went hand-in-hand the domestication of animals. The horse was trained independently in both Europe and Asia, some species of the dog in all continents, the ox for

draft and the cow for milk principally in Asia, and the camel for the deserts of Arabia and Africa. These humble aids brought together distant tribes, and assimilated their characters.

The prosecution of the various special arts, as pottery, metal work, textile fabrics, etc., led to the formation of guilds and the association of workers in particular localities favorable to obtaining and utilizing the raw products. Each such conquest of the inventive faculties drew men into closer bonds of harmonious labor, and opened for them new avenues of joint industry. The pre-historic past of the race is measured by archæologists by the rise and extension of new arts, not because of themselves, but because they are indicative of improved social conditions, greater aggregations of men, more potent actions in history. The fine arts, in crowning the useful arts with the iridescent glory of the ideal, impart to the handiwork of men that universality of motive which unites all into one brotherhood.

The second class of psychic traits are:

II. THE DISPERSIVE ELEMENTS.

These have been of the utmost moment in the history of the species, and a controlling factor in the records of every people. They are derived from two quite different impulses in human nature; the one, a natural propensity to roam, the other, a predisposition to contest.

Both have been favored by the ability of the species

to adapt itself to its surroundings, far surpassing that of any other animal. There is no zone and no altitude offering the necessary food supplies that man does not inhabit. The cat, with its traditional "nine lives," perishes in the upper Andes, where men live in populous cities. No one breed of dogs can follow man to all latitudes. His powers of locomotion are equally surprising. He can walk the swift horse to death, and his steady and tireless gait will in the long-run leave every competitor behind. An Indian will track a deer for days and capture it through its utter fatigue. A Tebu thinks little of passing three days under the sun of the Sahara without drinking. Such powers as these endow man with the highest migratory faculties of any animal, and give rise to or have been developed from

1. The Migratory Instincts.

Many species of animals, especially birds, change their habitat with the seasons, the object usually being to obtain a better food supply. So do most hunting and fishing tribes, and for the same reason. Often these periodical journeys extend hundred of miles and embrace the whole tribe.

This must also have been the case with primeval man when he occupied the world in "palæolithic" time. His home was along the shores of seas and the banks of streams. Up and down these natural highways he pursued his wanderings, until he had extended his roamings over most of the habitable land.

What prompted him and all savage tribes is not al-

ways the search for food. The desire for a more genial climate, the pressure of foes, and often mere causeless restlessness, act as motive forces in the movements of an unstable population. Certain peoples, as the Gypsies, seem endowed with an hereditary instinct for vagabondage. The nomadic hordes of the Asiatic steppes and the wastes of the Sahara transmit a restlessness to their descendants which in itself is an obstacle to a sedentary life.

Such vagrant tribes became the colporteurs and commercial travellers of early society. They invented means of transportation, and conveyed the products of one region to another. Only of late have we learned to appreciate the wide extent of pre-historic commerce. Long before Abraham settled in Ur of the Chaldees (say 2000 B. C.), a well-travelled commercial road stretched from the cities of Mesopotamia, through Egypt to the Pillars of Hercules, and thence into Europe.* When Hendrick Hudson sailed into the bay of New York, the commercial relations of the tribes who lived on its shores had already extended to the coast of the Pacific.†

These lines of early traffic were also the lines of the

* See my *Essay, The Cradle of the Semites* (Philadelphia, 1890), and Sir Daniel Wilson, "Trade and Commerce in the Stone Age," in *Trans. Royal Soc. Canada*, 1889.

† This is shown not only by the presence of artefacts and shells from the Pacific in old graves on the Atlantic coast, but by the well-preserved traditions of the Eastern tribes. See my *Essays of an Americanist*, p. 188 (Philadelphia, 1890).

migrations of nations. They were fixed by the physical geography of regions, and have rightly attracted the careful attention of ethnographers. Along them, nation has blended into nation, race fused with race. The conviction that early man was not sedentary, but mobile, by nature a migratory species, wandering widely over the face of the earth, is one which has been brought home to the ethnologist by the science of pre-historic archæology, and it is full of significance.

2. The Combative Instinct.

The philosopher Hobbes taught that the natural condition of man in society is one of perpetual warfare with his neighbors. This grim theory is sadly attested by a study of savage life. The wretched Fuegians, the miserable Australians, with really nothing worth living for, let alone dying for, fall to cutting each other's throats the moment that tribe encounters tribe. So it has been in all ages, so it has been in all stages of culture. The warrior, the hero, is the one who wins the hearts of women by his fame, and the devotion of men by his prowess. Civilization helps not at all. In no century of the world's history have such destructive battles been fought as in the nineteenth; at no former period have the powers of the earth collected such gigantic armies and navies as to-day.

This love of combat at once separates and unites nations. To destroy the common foe, the bonds of national or tribal unity are drawn the tighter; and the aversion to the enemy tends to the preservation of the ethnic type.

In spite of the countless miseries which follow in its train, war has probably been the highest stimulus to racial progress. It is the most potent excitant known of all the faculties. The intense instinct of self-preservation will prompt to an intellectual energy which nothing else can awake. The grandest works of imagination, the immortal outbursts of the poets, from Homer to Whitman, have been under the stimulus of the war-cry ringing in their ears.

The world-conquerors and the holy wars, Alexander and Napoleon, the Crusades and the Mohammedan invasions, have been landmarks in history, a destruction of the effete, an introduction of the new and the viable. Guizot's bold statement that in the decisive battles of the world it has been, not the strongest battalions, but the truest idea which has conquered, may be a profound ethnologic truth. Certain it is that in weighing the psychical elements of man's nature and their influence on the past history of the species, we must assign to his combative instincts a most prominent place as stimulants, and we must recognize, amid all the miseries which they have brought upon him, the part they have played in his development. That they have always resulted in promoting the "survival of the fittest," it is hard to believe, and there is much to make us doubt; but that a great deal of the unfit has thus been destroyed, we may reasonably accept.

What has been true always, is true to-day. It is force, might, which forever exercises "the right of eminent domain;" and this principle is as necessary as it

is indestructible. Proudhon was logical, when, in his treatise on *War and Peace*, he placed war and the duty of waging war at the basis of all society, and defended it as the necessary condition of civilization, inasmuch as it alone is the highest form of judicial action, the last appeal of the oppressed. Never, we may be sure, will the human species be ready or willing to forego this, the greatest of all their privileges.

LECTURE III.

THE BEGINNINGS AND SUBDIVISIONS OF RACES.

CONTENTS.—The origin of Man. Theories of monogenism and polygenism; of evolution; heterogenesis. Identities point to one origin. Birthplace of the species. The oldest human relics. Remains of the highest apes. Question of climate. Negative arguments. Darwin's belief that the species originated in Africa confirmed; but with modifications. Quaternary geography of Europe and Africa. Northern Africa united with Southern Europe. Former shore lines. The Sahara Sea. The quaternary continents of "Eurafica," and "Austafica." Relics of man in them. Man in pre-glacial times. The Glacial Age. Effect on man. Scheme of geologic time during the Age of Man. His development into races. Approximate date of this. Localities where it occurred. The "areas of characterization." Relations of continents to races. Theory of Linnaeus; of modern ethnography. Classification of races. General ethnographic scheme. Sub-divisions of races; branches; stocks; groups; peoples; tribes; nations. Other terms; ethnos and ethnic; culture; civilization. Stadia of culture.

In the rapid survey contained in the previous lectures you have seen in how many points the races differ. No wonder that the question has often been seriously mooted by scientific men, Could they all have been derived from one common ancestral stock? This is the old debate about "the unity of the human race," still surviving under the more learned terms of *monogenism* or *polygenism*.

As to that other question, whether man came into

being as such by a gradual development, evolution, or transformation, from some lower mammal, this may be regarded as the only hypothesis now known to science, and must, therefore, be accepted, at least provisionally, until some better is proposed. It is the only theory consistent with man's place in the zoölogical world, and is borne out by numerous anatomical analogies, which have been referred to in my first lecture.

In fact, we are driven to it by necessity. No other origin of species than by transformation of earlier forms has been suggested, even by those who reject it. I do not speak of specific creation, for that supposition does not belong to science, but to an obscurant mysticism, which is the negative of all true knowledge.

But within the limits of the transformation theory there is more than one method by which varying forms are produced, and one of these may prove applicable to man, in whose earliest remains we have so far found no positive indications of a lower physical character than he now has.* So far, the "missing link" is as much out of sight as ever it was; so far, man appears to have been always what he is to-day.

May he not, as a species, have come into being through a short series of well-marked varieties, each

* Such at any rate is the opinion expressed last year (1889) by the most celebrated living anthropologic anatomist, Professor Virchow, in an address before the German Anthropological Association. (*Correspondenz Blatt der Deutschen Anthropol. Gesell.*, Sept., 1889, s. 96.) Except for the weight of his great name, I should hesitate to say as much; and as it is, I entertain some doubts as to the accuracy of the statement.

produced by what is called "heterogenesis," that is, the birth of children unlike their parents? All children are unlike their parents, more or less; and though at present this unlikeness is strictly within the limits of the several races, it is the opinion of some who have studied the matter, that in earlier geologic epochs changes in organic forms were more rapid and more profound than at present.

I am aware that this suggestion of heterogenesis looks like a return to the ancient doctrine called *generatio equivoca*, which, in its old form, is certainly obsolete. But there is no question that in many existing plants and animals we find singular evidence that from a given form another may arise, widely different in structure, and perpetuate itself indefinitely. I am convinced that the importance of these facts has never been properly appreciated by students of the origin of species, and of the origin of men in particular.

This, or any hypothesis of evolution, renders the supposition quite needless that the various races had distinct ancestral origins. Any evolutionist who accepts the view that man is but a differentiation from some anthropoid ape, is straining at a gnat after swallowing the camel, if he hesitates to believe that the comparatively slight differences between the races may not have originated from like influences. Furthermore, the resemblances between the various races are altogether too numerous and exact to render it likely that they could have been acquired through several ancestries running back to various lower zoological

forms; a consideration greatly strengthened by the fact that man is the only species of his genus, and there is even no genus of his class closely related to himself. The chances that such a perfected animal should have been twice or oftener developed from the apes, monkeys or lemurs—his nearest cousins—are so small that we must dismiss the supposition.

It seems to me, indeed, that any one who will patiently study the parallelisms of growth in the arts and sciences, in poetry and objects of utility, throughout the various races of men, cannot doubt of their psychological identity. Still more, if he will acquaint himself with the modern science of Folk-lore, and will note how the very same tales, customs, proverbs, superstitions, games, habits, and so on, recur spontaneously in tribes severed by thousands of leagues, he will not think it possible that creatures so wholly identical could have been produced by independent lines of evolution.

The Birthplace of the Species.—Accepting the theories therefore of the evolutionists and the monogenists as the most plausible in the present state of science, it is quite proper to inquire where primeval man first appeared, and what were his social conditions and personal appearance.

To some it may seem premature to put such questions. They are needlessly timid. It is never too soon to propound any question in science; always too soon to declare that any has been finally and irrevocably answered.

Beginning our search for the birthplace of the species, we may consider that it will be indicated by the cumulative evidence of three conditions. We may look for it, (1) where the oldest relics of man or his industries have been found; (2) where the remains of the highest of the lower mammals, especially the man-like apes, have been exhumed, as it is assumed that man himself descended from some such form; and (3) where we know from palæontologic evidence a climate prevailed suited to man's unprotected early conditions.

The first of these lines of investigation leads us to the science of "pre-historic archæology." We shall discover that a study of this branch of learning is indispensable not only in this connection, but to solve many other questions in ethnography. Here its answer is unexpected. We have been taught by long tradition and venerable documents to look for the first home of primeval man "somewhere in Asia," as Professor Max Müller generously puts it. He is inclined to think that from the highlands of that continent the tribes dispersed in various directions, some going to the extreme north, and then southward into Europe. Others would have it that the species itself came into life in the boreal regions, in that epoch when a mild climate prevailed there.

Such dreams meet no countenance from pre-historic archæology. The oldest remains of man's arts, the first rude flints which he shaped into utensils and weapons, have not been discovered in Asia, and do not occur at all in the northern latitudes of either continent.

They have been exhumed from the late tertiary or early quaternary deposits of southern England, of France, of the Iberian peninsula, and of the valleys of the Atlas in northern Africa. They have been searched for most diligently but in vain in Scandinavia, Germany, Russia, Siberia, and Canada. Not any of the older types of so-called "palæolithic" implements have been reported in early deposits in those countries.* But in the "river drift" of the Thames, the Somme, the Garonne, and the Tagus, quantities of rough stone implements have been disinterred, proving that in a remote epoch, at a time when the hippopotamus and rhinoceros, the African elephant and the extinct apes, found a congenial home near the present sites of London, Paris and Lisbon, man also was there. These relics, especially those found in Portugal, Central Spain and Southern France, are the very oldest proofs of the presence of man on the earth yet brought to light.

Where, now, do we find the remains of the highest of the lower animals? By a remarkable coincidence, in the same region. Of all the anthropoid apes yet known to the palæontologist, that most closely simulating man is the so-called *Dryopithecus fontani*, whose bones have been disinterred in the upper valleys of the Garonne, in Southern France. Its height was

* This is the result of the most recent researches. See Prof. J. N. Woldrich's paper, "Ueber die palæolithische Zeit Mittel-Europas," in the *Correspondenz-Blatt der Deutschen Gesell. für Anthropologie*, 1889, p. 110. sq. Also *Verhand. der Berliner Anthropol. Gesell.*, 1884, s. 530, for the absence of the old stone age in Siberia, a fact which also tells heavily against the first peopling of America from that region.

about that of a man, its teeth strongly resembled those of the Australians, and its food was chiefly vegetables and fruits. Other remains of a similar character have been found in Italy.*

It is well known to geologists that the apes and monkeys or Simiadæ were abundant and highly developed in Southern Europe in the pliocene and early pleistocene, just the time, as near as we can fix it, that man first appeared there. These facts answer the third of our inquiries—that for a climate suitable to man in an unprotected early condition, when he had to contend with the elements and the parsimony of nature, ill-provided as he is with many of the natural advantages possessed by other animals. At that date Southern Europe and Northern Africa were under what are called sub-tropical conditions, possessing a climate not wholly tropical, but yet singularly mild and equable. This we know from the remains, both animal and vegetable, preserved in the deposits of that epoch.

A series of negative arguments strengthens this conclusion. Where we find no remains of apes or monkeys of the higher class, we cannot place the scene of man's ancestral evolution. This excludes America, where no tailless and no narrow-nosed (catarrhine) monkeys and no large apes have been found; it excludes Australia, and all portions of the Old World north of the Alps and the Himalayas.

In view of such facts, Darwin reached the conclu-

* G. de Mortillet, *Le Préhistorique Antiquité de l'Homme*, p. 120. (Paris, 1883.) A. Gaudry, *Le Dryopithèque* (Paris, 1890).

sion that it is most probable that our earliest progenitors lived on the African continent. There to this day we find on the one hand the human beings most closely allied to the lower animals, and the two species of these, the gorilla and the chimpanzee, now man's nearest relations among the brutes.*

Darwin was disturbed in this conclusion by the presence of the large apes to whom I have referred in Southern Europe in late tertiary times. This, however, merely requires a modification in his conclusion, the general tenor of which, to the effect that man was first developed in the warm regions of the western or Atlantic portion of the Old World, somewhere within the present or ancient area of Africa, and not in Asia, has been steadily strengthened since the great evolutionist wrote his remarkable work on the *Descent of Man*.

Quaternary Geography of Europe and Africa.—The modification which I refer to is the obvious fact that since the late tertiary epoch, and especially during and after the glacial epoch, some material changes have taken place in the physical geography of Europe and Africa. To these I must now ask your particular attention, as they controlled not only the scene of man's origin, but the lines of his early migrations.

When primal man, with no weapon or tool but one chipped from a stone flake, roamed over France, England and the Iberian peninsula, along with the rhinoceros, the hippopotamus and the elephant, the coast

* Darwin, *The Descent of Man*, p. 155. (New York, 1883).

lines of Europe and North Africa were quite unlike those of to-day. England and Ireland were united to the mainland, and neither the Straits of Dover nor St. George's Channel had been furrowed by the waves. Huge forests, such as can yet be traced near Cromer, covered the plains which are now the bottom of the German Ocean. In the broad shallow sea to the north, the mountainous regions of Scandinavia rose as islands, and between them and the Ural Mountains its waters spread uninterruptedly.

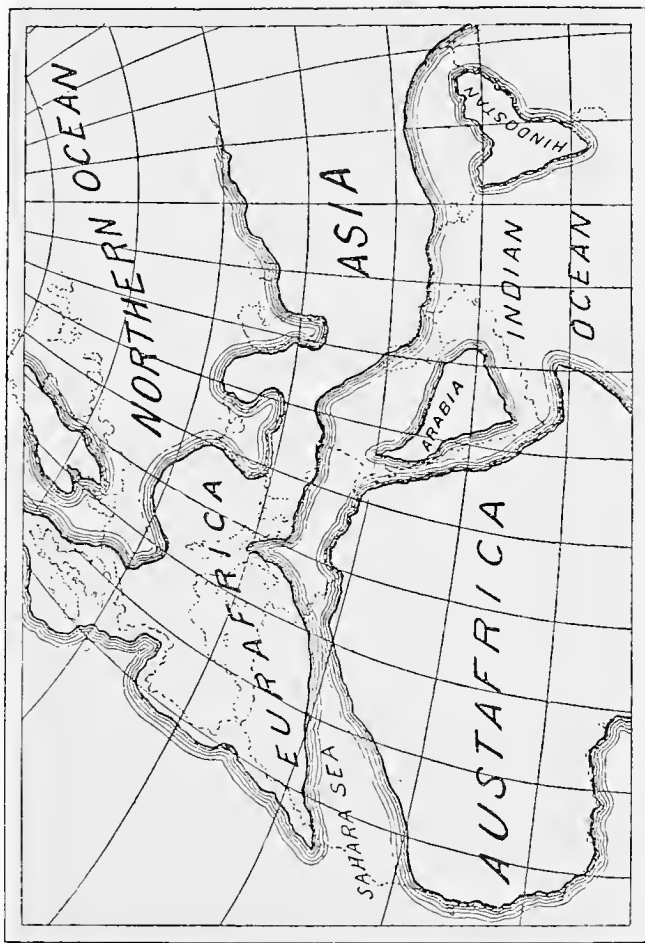
To the south, Northern Africa was united to Southern Europe by two wide land-bridges, one at the Straits of Gibraltar, one connecting Tunis with Sicily and Italy. The eastern portion of the Mediterranean was a contracted fresh-water lake, pouring its waters into a broad stream which connected the Atlantic with the Indian Oceans. This stream covered most of the present desert of the Sahara, the delta of Egypt, and a large portion of Arabia and Southern Asia. Its northern beach extended along the southern base of the Atlas Mountains from the River Dra on the Atlantic to the Gulf of Gabes in the Mediterranean; thence northward between Malta and Sicily to the Straits of Otranto; by the Ionian islands easterly till it intersected the present coast-line near the mouth of the Orontes; northeasterly to about Diarbekir, whence it trended south and east along the foot of the Zagros mountains to the Persian Gulf. From that point it followed the present coast-line to the mouth of the Indus, and thence pursued the base of the great north-

ern mountain range to the mouth of the Ganges, covering the north of Hindustan, while the southern elevations of that spacious peninsula, as well as a large part of southern and western Arabia, rose as extensive irregular islands above the water. Toward them the mainland of equatorial Africa extended much nearer than at present. It included in its area the island of Madagascar, and reached far beyond into the Indian Ocean. Toward the north, peninsulas and chains of islands, now the summits of the plateaus and mountains of the central Sahara, reached nearly or quite to the present shore-line of the Mediterranean, about Tripolis.*

This disposition of the water left two great land areas in the old world, probably not actually united though separated only by narrow straits, one between the modern Tripolis and Tunis, and another on the northern Syrian coast. I represent these areas on the accompanying map, not indeed minutely, but approximately.

The general accuracy of the contours delineated are now fully recognized by geologists. They are attested by the remaining beach-lines of this primitive ocean, by the geographical distribution of its contemporary fauna and flora, and by the proofs of elevation and submergence along the shores and in the bottom of the adjacent seas and oceans. The "great sink" of the western Sahara, the vast "schotts," or shallow salt-

* For the details of these features, see the work of E. Suess, *Das Antlitz der Erde*, Bd. I., s. 371, 768, etc. (Leipzig, 1885.)



OUTLINES OF THE EASTERN HEMISPHERE IN THE EARLY QUATERNARY.

water ponds south of the Atlas, the salt Dead Sea at the bottom of a profound depression, prove that the drying up of the ancient ocean is scarcely yet complete.

So familiar have these ancient continental areas become to geological students that they have been named like a newly-discovered island or cape. The northern continent has been called *Eurasia*, compounded of the words Europe and Asia, and the southern *Indo-Africa*, from a supposed union of India and Africa.*

Neither of these names is quite acceptable. The former leaves out of account the connection of Europe with Africa, which is of the first importance in the study of early man; and the latter assumes a geographic union between India and Africa, which is not likely to have existed in the period of man's life on earth. I prefer the two names which I have inserted on the map; *Eurafrica*, indicating the connection between Europe and Africa, and *Austafrica*, designating the whole of the continent south of the ancient dividing sea. The name *Asia* should be confined to the Central Asian plateau and the regions watered by the countless streams which flow from it toward the north, east and south.

* On the recent connection of North Africa with Europe, see A. R. Wallace, *The Geographical Distribution of Animals*, Vol. I., pp. 38, 39; De Mortillet, *Le Préhistorique Antiquité de l'Homme*, p. 225. "Even in post-tertiary times," writes Huxley (*Physiography*, p. 308), "Africa was united to Europe at the Straits of Gibraltar and across by Malta and Sicily. The Sahara is an old sea bottom, which was below water at a comparatively recent period." "The Atlas mountains," remarks Suess, "belong to the intricate orographic system of Europe." (*Das Antlitz der Erde*, Bd. I., s. 462.)

Relics of Man.—Such was the configuration of land in the Eastern hemisphere when man first appeared. We know he was there at that time. I have referred to his rude stone (palæolithic) implements exhumed from the river-drift of the Thames and the Somme, a deposit which dates from a time when the hippopotamus bathed in those rivers; still older seem some rough implements discovered in gravel layers near Madrid, Spain, deposited by some large river in early quaternary times. The worked flints near Lisbon were manufactured when a wide fresh-water lake existed where now not a trace of it is visible on the surface, and according to some archæologists, are the most ancient manufactured products yet discovered.*

In numerous parts of North Africa, as near Tlemcen in the province of Oran, and in Tunisia, the oldest forms of stone implements have been found in place beneath massive layers of quaternary travertin,† and in some of the most barren portions of the Libyan desert, now utterly sterile, the travertin contains abundant remains of leaves and grasses, along with chipped flints, proving that at the recession of this diluvial sea not only was the vegetation luxuriant, but man was then on the spot, as a hunter and fisher.‡

* Emile Cartailhac *Les Ages Préhistoriques de l'Espagne et du Portugal*, pp. 24–30 (Paris, 1886).

† Comp. Dr. Bleicher and Sir John Lubbock in the *Journal of the Anthropological Institute*, Vol. X., p. 318; Dr. R. Collignon in *Bulletin de la Société d'Anthropologie de Paris*, 1886, p. 676, sq.

‡ See the article of C. Zittel, "Sur les silex taillés trouvés dans le desert Libyque," in *Congrès Internat. d'Anthropologie et d'Archéologie*, 1874, pp. 78, etc.

Not less certain is it that he was a most ancient occupant of Austafrica. Chert implements of the true "river-drift" type have been discovered "in place" in quaternary stratified gravels near Thebes, and elsewhere in the Nile valley; and in the diamond field of the Cape of Good Hope, palæolithic forms have been exhumed from diluvial strata forty or fifty feet below the surface of the soil.*

From similar evidence we know that man spread widely over the habitable earth in that remote time. It is known to archaeologists as the earliest period of the Stone Age, and the implements attributed to it are singularly alike in size and form. They seem to indicate a race of beings who were unprogressive, lacking perchance the stimulus of necessity in their mild climate and with their few needs.

The Glacial Age.—But a wonderful change took place in their conditions of life. Slowly, from some yet unexplained cause, mighty ice-sheets, thousands of feet in thickness, gathered around the poles, and collected on the flanks of the northern mountains. With silent but irresistible might they advanced over land and sea, crushing beneath them all animal and vegetable life, changing the perennial summer of Eurafica to an Arctic winter, or at best to an Alpine climate. The tropical animals fled, the plants perished, and under the enormous weight of the ice-mass, the

* See W. D. Gooch, "The Stone Age of South Africa," in *Journal of the Anthropological Institute*, 1881, p. 173, sq., and various later reports and discussions in the same periodical.

ocean bottom in the north was depressed a thousand feet or more. This in turn brought about material oscillations in the land levels to the south. The bed of the Mediterranean sank, that of the Sahara Sea slightly rose, leaving the latter little more than a swamp, while the former assumed the shape which we now see.

These alterations in the land areas and climatic conditions exerted the profoundest influence on the destiny of man. When with the increasing cold the other animals native to warm regions had fled or perished, he remained to encounter with undaunted mind the rigors of the boreal climate. Instead of depressing or extinguishing him, these very obstacles seem to have been the spurs to his intellectual progress.

Men were still in the lower stages of culture, with no knowledge of metal, not capable of polishing stones, without a domestic animal or trace of agriculture. Yet everywhere these artisans possessed skill and sentiments far above that of the highest anthropoid ape described by the zoölogist. They knew the use of fire, they constructed shelters, they dwelt together in bands, they possessed some means of navigating streams, they ate both vegetable and animal food, they decorated themselves with colored earth and ornaments, they wielded a club, they twisted fibres into ropes and strings, if occasion required they fastened together skins for clothing. All this is proved by a careful study of what tools and implements they have left us.

Development into Races.—Whatever may have been

the physical type of men at their beginning, in culture they were upon the same level for a long while after they had dispersed over the globe.

When, where and how did they develop into the several distinct races that we now know?

We can answer these questions, not fully, but to some extent.

Man developed into certain strongly marked subspecies or races long before the dawn of history. More than six thousand years ago the racial traits of the black, the white, and the yellow races, and even of their subdivisions, were as pronounced and as inefaceable as they are to-day. This we know from the representations on the Egyptian monuments of the third and sixth dynasties, from the comparative study of ancient skulls, and from the uniform testimony of the earliest writings, wherever we find them.

This permanent fixation of traits, this profound impression of peculiar features, was probably no rapid process, but a very slow one. It took place between the close of the glacial epoch and the proto-historic period. This interim gives time enough; at the lowest calculation, it was twenty thousand years, while others have placed it at a hundred thousand. The division of the species into races unquestionably was completed long before the present geologic period, and under conditions widely diverse from those now existing.*

* This opinion was long ago expressed by the distinguished geologist, d' Omalius d' Halloy: " Tout nous porte á croire que les differences que presente le ~~genre~~ humain remontent á un ordre de

As within these wide limits of time we can reply to the question when the races became such, so within similar broad boundaries of space we can answer where their peculiar types were developed.

At the dawn of history, all the clearly marked sub-species of man bore distinct relations in number and distribution to the great continental areas into which the habitable land of the globe is divided. Nearly the whole of Europe and its geographical appendix, North Africa, were in the possession of the white race; the true negro type was limited to Central and Southern Africa and its appended islands; the yellow or Mongolian type was scarcely found outside of Asia; and the American sub-species was absolutely confined to that continent.

The "Areas of Characterization."—In claiming that each sub-species had its origin and developed its physical peculiarities in the land areas here assigned to it, the ethnographer is supported by the unanimous verdict of modern zöological science. "Whatever be the cause," writes the Rev. Samuel Haughton, "the distribution of fauna shows clearly that forces have been at work, developing in each great continent animal forms peculiar to itself, and differing from the animal forms developed by other continents." *

choses antérieur à l' état actuel du globe terrestre." *Des Races Humaines*, p. 11 (Paris, 1845). This is also the result of recent studies. See Prof. Edward S. Morse, on "Man in the Tertiaries," in the *American Naturalist*, 1884, p. 100.

* *Lectures on Physical Geography*, p. 273. (London, 1880.)

In ethnography, those geographical areas whose physical conditions have left a durable impress on their human inhabitants have been called either "geographical provinces" (Bastian) or "areas of characterization" (de Quatrefages). I prefer and shall adopt the latter as more indicative of the meaning of the term. It signifies that like physio-geographical conditions prevailing over a given area inhabited for many generations by the same peoples have impressed upon them certain traits, physical and psychical, which have become hereditary and continue indeterminate, even under changed conditions of existence.

This general law is the recognized basis of modern scientific ethnography.* It is open to numerous limitations, and its application must never be made without the consideration of accessory and modifying circumstances. For instance, certain areas are much more potent than others in the influence they exert on man: some act more powerfully on his mind than on his body, or the reverse; some peoples are more susceptible to physical influences of a given class than others; and the length of time required is variable.

* See A. Bastian, *Zur Lehre von den Geographischen Provinzen* (Berlin, 1886); A. De Quatrefages, *Histoire Generale des Races Humaines*, p. 333, (Paris, 1889); Dr. Thomas Acheili, *Die Entwicklung der Modernen Ethnologie*, s. 65, (Berlin, 1889). Agassiz was the first to announce (in 1850) that the different races of man are distributed over the world in the same zoölogical provinces as those inhabited by distinct species and genera of mammals. This fact is coming more and more to be the accepted axiom for the study of racial development. (Compare Darwin, *Descent of Man*, p. 169).

Quaternary, Diluvial or Pleistocene Epoch.	1. Preglacial.	<ul style="list-style-type: none"> { Europe connected with Africa. { Temperature mild. { African elephant in England. { Tropical animals abundant. 	<ul style="list-style-type: none"> { Man homogeneous. { Industry palcolithic with simple implements. { Migrations extensive. { Language rudimentary.
	2. Glacial.	<ul style="list-style-type: none"> { Europe severed from Africa. { Temperature low. { Reindeer in France. { Arctic animals abundant. 	<ul style="list-style-type: none"> { Man dividing into races. { Industry palcolithic with compound implements. { Cave dwellings. Migrations limited; races in fixed areas.
	3. Post-glacial.	<ul style="list-style-type: none"> { Continents assume present forms. { Temperature rising. { Temperate zones established. 	<ul style="list-style-type: none"> { Races completely established. { Industry neolithic. { Beginning of sedentary life. { Languages developed in classes.
Present or Alluvial Epoch.	1. Pre-historic.	<ul style="list-style-type: none"> { Geographic conditions undisturbed. { Wild animals not diminished. 	<ul style="list-style-type: none"> { Races develop into contact. { Industry of stone and copper.
	2. Proto-historic.	<ul style="list-style-type: none"> { Conditions altered by agriculture. { Wild animals slain or tamed. 	<ul style="list-style-type: none"> { Great migrations begin. { Industry of bronze and iron.
	3. Historic.	<ul style="list-style-type: none"> { Geographic conditions greatly modified by man. { All lower animals subjugated. 	<ul style="list-style-type: none"> { Extensive mingling of races. { Development of nations.

According to the analogy of other organic beings, man would have been more impressible to his surroundings in the early history of his existence as a species, the young, either as an individual or a genus, being more plastic than the old. Furthermore, in his then condition of culture, or absence of culture, he had less to oppose to the assaults of his environment.

Classification of Races.—It is not possible in the present status of the science of man to point out precisely how the various conditions of the great continental areas reacted on the homogeneous primitive type to develop the races as we know them. The same difficulty encounters us with other animals and with plants. We know, however, that at the dawn of history each of these areas was peopled by nations resembling each other much more than they resembled nations of any of the other areas.

In addition to the great continents there were many lesser regions, peninsulas and islands, usually on the borders of the main areas of characterization, where intermingling of types was sure to arise, and other types be formed, who in turn received some particular impress from their environment.

These considerations prompt me to offer the following as the most appropriate scheme in the present condition of science for the subdivision of the species Man into its several races or varieties.

I. THE EURAFRICAN RACE.—*Traits.*—Color white, hair wavy, nose narrow, jaws straight, skull variable, languages inflectional, religions ideal.

II. THE AUSTAFRICAN RACE.—*Traits*.—Color black, hair woolly, nose flat, jaws protruding, skull long, languages agglutinative, religions material.

III. THE ASIAN RACE.—*Traits*.—Color yellowish or brownish, hair straight, nose flat or medium, jaws straight, skull broad and high, languages isolating or agglutinative, religions material.

IV. THE AMERICAN RACE.—*Traits*.—Color coppery, hair straight, nose narrow, jaws straight, skull variable, languages incorporating, religions ideal.

V. INSULAR OR LITORAL PEOPLES.—*Traits*.—Color dark, hair lank or wavy, languages agglutinative.

In this scheme the more prominent and permanent traits are named first. While individuals of pure blood can easily be found in all the races who do not correspond in all particulars to these descriptions, I do not hesitate to assert that ninety-five per cent. of the whole of the pure blood of any of the races here classified will correspond to the standards given.

Subdivisions of Races.—The further subdivisions of ethnography follow to some extent the important doctrine of the "areas of characterization," that is, they are geographical; but as the classification of men advances in minuteness, other considerations become paramount, notably, language and government. These elements allow us to subdivide a *race* into its *branches*; a branch into its *stocks*; a stock into its *groups*, and these again into *tribes*, *peoples*, or *nations*.

Classified in this manner, the human species presents the subdivisions shown on the adjacent scheme:

General Ethnographic Scheme.

<i>Race.</i>	<i>Traits.</i>	<i>Branches.</i>	<i>Stocks.</i>	<i>Groups or Peoples.</i>
Eurafrican.	Color white. Hair wavy. Nose narrow.	I. South Mediterranean. II. North Mediterranean.	1. Hamitic. 2. Semitic. 1. Euskaric. 2. Aryac. 3. Caucasian.	1. Libyan. 2. Egyptian. 3. East African. 1. Arabian. 2. Abyssinian. 3. Chaldean. 1. Euskarian. Indo-Germanic or Celtindic peoples. Peoples of the Caucasus.
Austrifrican.	Color black or dark. Hair frizzly. Nose broad.	I. Negrillo. II. Negro. III. Negroid.	1. Central African. 2. South African. 1. Nilotic. 2. Soudanese. 3. Senegambian. 4. Guinean. 1. Bantu.	Dwarfs of the Congo. Bushmen, Hottentots. Nubian. Caffres and Congo tribes.
Asian.	Color yellow or olive. Hair straight. Nose medium.	I. Sinitic. II. Sibiric.	1. Chinese. 2. Thibetan. 3. Indo-Chinese. 1. Tungusic. 2. Mongolic. 3. Tataric. 4. Finnic. 5. Arctic. 6. Japanic.	Chinese. Natives of Thibet. Burmese, Siamese. Manchus, Tungus. Mongols, Kalmucks. Turks, Cossacks. Finns, Magyars. Chukchis, Ainós. Japanese, Koreans.
American.	Color coppery. Hair straight or wavy. Nose medium.	I. Northern. II. Central. III. Southern.	1. Arctic. 2. Atlantic. 3. Pacific. 1. Mexican. 2. Isthmian. 1. Atlantic. 2. Pacific.	Eskimos. Tinneh, Algonkins, Iroquois. Chinooks, Kolosh, etc. Nahuas, Tarascos. Mayas, Chapanecs. Caribs, Arauaks, Tupis. Chibehas, Quichuas.
Insular and Litoral Peoples.	Color dark. Hair wavy or frizzly. Nose medium or narrow.	I. Negritic. II. Malayic. III. Australic.	1. Negrito. 2. Papuan. 3. Melanesian. 1. Malayan. 2. Polynesian. 1. Australian. 2. Dravidian.	Mincopies, Aetas. New Guineans. Feejeeans, etc. Malays, Tagalas. Pacific Islanders. Australians. Dravidas, Mundas.

That these distinctions may be plain I append definitions of the ethnographic terms employed.

Race.—A variety or sub-species of the species *Man*, presenting a number of distinct and permanent (hereditary) traits of the character above described.

Branch.—A portion of a race separated geographically, linguistically, or otherwise, from other portions of the race.

Stock.—A portion of a branch united by some prominent trait, especially language, offering presumptive evidence of demonstrable relationship. The individual elements of a *stock* are its *peoples*.

A *group* consists of a number of these peoples who are connected together by a closer tie, geographical, linguistic, or physical, than that which unites the members of the stock.

A *tribe* is a body of men collected under one government. They are presumably of the same race and dialect.

A *nation*, on the other hand, is a body of men under one government, frequently of different languages and races. Its members have no presumed relationship further than that they belong to the same species.

There are some other terms the precise meaning of which should be defined before we proceed, the more so as there is not that uniformity in their use among ethnographers which were desirable.

This very word *ethnos*, with its adjective *ethnic*, is an example. What is an *ethnos*? I know no better word for it in English than a people, as I have already explained this word,—one of the elements of a stock all whose members, there is reason to believe, have a de-

monstrable relationship. Thus we should speak of the Aryan *stock*, made up of the Latin, Greek, Celtic and other *peoples*. The relationship among the members of a *people* is closer than that between the members of a *stock*. *People* corresponds to the Old English *folk* (German *Volk*), but *folk* in the modern English scientific terms "folk-lore," "folk-medicine," has acquired a different signification.

Culture and *civilization* are other terms not always correctly employed. The former is the broader, the generic word. All forms of human society show more or less culture; but civilization is a certain stage of culture, and a rather high one, when men unite under settled governments to form a state or commonwealth (*civitas*) with acknowledged individual rights (*civis*). This presupposes a knowledge of various arts and developed mental powers.

Much attention was paid by older writers to dividing the progress of culture into a number of stages or stadia. One of these, an American author, Lewis H. Morgan, suggested an elaborate scheme according to which the periods of man's development should correspond with historical conditions of culture, and these he divided into lower, middle and upper states of savagery, barbarism, and civilization, each characterized by the introduction of some new art.

The problem is far too complicated to admit of any such mechanical solution. The possession of a given art, as the bow and arrow, or smelting iron, does not lift a people, nor is it an indication of their culture.

Peoples low in one point are high in others; they develop along different lines, with scarcely a common measure, and their place in a general scheme must be determined by an exhaustive investigation of all their powers and conquests, and perhaps a comparison with some other standards than those which we have been brought up to consider the best.

LECTURE IV.

THE EURAFRICAN RACE; SOUTH MEDITERRANEAN BRANCH.

CONTENTS.—The White Race. Synonyms. Properly an African Race; relative areas; purest specimens. Types of the White Race; Libyo-Teutonic type; Cymric type; Celtic type; Euscaric type. Variability of traits. Primal home of the White Race not in Asia, but in Eurafria. Early migrations and subdivisions. North Mediterranean and South Mediterranean Branches.

A.—THE SOUTH MEDITERRANEAN BRANCH.

- I. THE HAMITIC STOCK. Relation to Semitic. 1. The Libyan Group. Location. Peoples included. Physical appearance. The Libyan blondes: languages. Early history; European affiliations; relations to Iberian tribes; the names *Iberi* and *Berberi*. Government. Migration. The Etruscans as Libyans. Later history; present culture. Syrian Hamites and their influence. 2. The Egyptian Group. Kinship to Libyans. Physical appearance. The stone age in Egypt. Antiquity of Egyptian culture. Its influence. Physical traits. 3. The East African Group. Relations to Egypt.
- II. THE SEMITIC STOCK.—First entered Arabia from Africa. 1. The Arabian Group. Early divisions and culture. The Arabs. Physical types; mental temperament; religious idealism. 2. The Abyssinian Group. Tribes included. Period of migration. Condition. 3. The Chaldean Group. Tribes included. The modern Jew.

THE leading race in all history has been the White Race. It is proper therefore that it should have our chief attention in the study of the distribution of

Scheme of the European Race: South Mediterranean Branch.(Extinct peoples in *italics*.)

- | | | | | |
|------------------------|---|--|---|--|
| I. Hamitic Stock. | { | 1. Libyan Group. | { | <i>Numidians, Getulians, Libyans, Maurianians, Guanches,</i> |
| | | | | Berbers, Rifians, Zouaves, Kabyles, Tuareks, Tibbus, |
| | | | | Ghadumes, Mzabites, <i>Ghanatas, Etruscans, Amorites,</i>
<i>Assyrians, Hittites.</i> (?) |
| 2. Egyptian Group. | | Copts, Fellaheen. | | |
| 3. East African Group. | | Gallas, Somalis, Danakils, Bedjas, Bilins, Afars, Khamirs. | | |

- | | | | | |
|--------------------|---|----------------------|---|--|
| II. Semitic Stock. | { | 1. Arabian Group. | { | <i>Himyarites, Sabaeans, Nabothians,</i> Arabs, Bedawin, Ehkils. |
| | | 2. Abyssinian Group. | | Amharnis, Tigris, Tigrinas, Gheez, Ethiopians, Harraras. |
| | | 3. Chaldean Group. | | Israelites, Arameans, Samaritans. |

the species. By some writers it is called the Caucasian, by others the Japetic, and by others again the European race—all inaccurate terms, for the race never originated in the Caucasus, never descended from the mythical Japetus or Japheth, and when first it appeared on the horizon of history, its most extensive possessions and the seats of its highest culture were not in Europe, nor yet in Asia, but in Africa.

This statement may astonish you, and I know no writer who has properly emphasized the fact that the white race is geographically and historically an *African* race. I have calculated with some care the area of its control of the three continents when their inhabitants first became known. The results are these: The white race then possessed:*

In Asia	2,500,000	square miles.
In Europe	3,000,000	“ “
In Africa	3,500,000	“ “

These figures vindicate for the race the title I have given it—Eurafrican.

More than this: the purest and finest physical specimens of the white race always have been and *still are*

* This calculation includes in Asia the Arabian peninsula, Syria, the Iranic regions, most of Asia Minor and the Caucasus; but excludes Hindostan, the occupation of which by the Aryans is within the historic period. In Africa it embraces the tract from the Atlantic to the Red Sea, and from the Mediterranean to the Sudan, nearly all of which was held by the Hamitic peoples when we first learn about it. In Europe it includes the whole continent south of a line drawn from the mouth of the Volga, through St. Petersburg to the Atlantic.

found native to African soil; and the leading nations of the race, those who have most contributed to its glory, and to the advance of the civilization of the world, either have resided in Africa or can be traced to it as their ancestral home.

Types of the White Race.—Let us first define the characteristics, physical and mental, of the white race.

In one of its pronounced types, the individuals are blondes, tall in stature, the eyes blue or grey, the hair yellow or reddish and wavy, the beard full, the nose narrow and prominent (leptorhin), the chin well defined, the jaws straight (orthognathic), the skull long (dolichocephalic) or medium, the eyes narrow (microsemes), the supra-orbital ridges rather prominent, the face moderately oval.

This is the typical appearance of the ancient Goths, Teutons and Scandinavians, and of the modern Swedes and Germans. It was also that of the ancient Libyans, and is still preserved in the greatest purity among their descendants in Morocco and Algiers; hence I shall call it the Libyo-Teutonic type.

A second type is also tall in stature, but red-haired, freckled complexion, the face and forehead broad, the cheek bones prominent, the eyes nearly circular (megasemes), the jaws and mouth projecting (prognathic), the skulls broad and high (brachycephalic-hypsistenocephalic), the chin square and firm.

This is the type we see preserved in some of the Highland Scotch clans, and in the "Tuatha de Danann" of Ireland, recalling the large-limbed and red-

haired "Caledonians" of Tacitus, and those ancient Britons who, under Queen Boadicea, withstood so valiantly the Roman legions. The Gauls or Cimbri of Belgium and northern France were of this type, and hence it has been called the "Cymric" type.

But there is a second Celtic type, also of vast antiquity, claimed by some to be the only pure form. In it the skull is also broad—broader than the former variety; but the stature is undersized, the hair and eyes dark-brown, the complexion brunette, the orbits rounded, the forehead full. Modern representatives of this type are the dark clans of the Highlanders, the Irish west of the river Shannon, the Manx, the Welsh, the Bretons of France, the Auvergnats, the Walloons of Belgium and the Ladins of eastern Switzerland.

The most ancient known seats of these dark Celts were in extreme western Europe and the isles adjacent. This location points them out as one of the oldest peoples in Europe, whether their presence is explained by immigration or autochthonous descent. Part of their possessions in early historic times was in the Iberian peninsula, along the Cantabrian mountains in northern Spain. Here they were in immediate contact with members of the white race of a different type, the Euscarians or Basques.

In them the stature is medium, the form symmetrical, hair and eyes are dark but rarely black, the complexion dark and sallow, the face oval, and the skull long, the length being in the posterior (occipital) region. Although the last mentioned is an important

distinction between the Celtic and the Euskaric skull, there is unquestionably a closer resemblance physically between the Celts and Basques, who speak totally diverse tongues, than between the Celts and Cymri, whose tongue was the same.

In these four typical groups from the extreme west of Europe we find sharp contrasts within limited areas, among peoples some of whom are unquestionably consanguine. Two of the groups, the Teutonic and Cymric, belong in color and hair and stature to the blonde type, but differ profoundly in shape of skull and facial bones; the two others belong to the brunette type, but differ equally in osseous character. In general physical traits the Celtic differs less from the Euskaric than from the Cymric type, as was recognized by the historian Tacitus.

These facts bring out an ethnic principle of importance—the variability of traits within the racial limits—and this becomes more marked as the race is higher in the scale of organic development. No race remains closer to its type than the Austafrican, none departs from it so constantly as the Euraffrican. Wherever we find the unmixed white race we find its blonde and brunette varieties, its prognathic and orthognathic jaws, its long-skulled and broad-skulled heads.* To establish genealogic schemes exclusively

* One of the leading European students of anatomical racial type is Dr. J. Kollmann, of Basle. He claims that there are four fundamental skull types in that continent:

1. Narrow faced, brachycephalic.

upon these differences, as has been the work of so many living anthropologists, is to build houses of cards.

These contrasts are presented to us daily. The researches of Virchow, De Candolle, Kollmann, and many others, prove that in the same city, in the same family, the children to-day are born brunettes or blondes, dark or light eyed, to some degree broad or narrow skulled, with but partial reference to their parents' peculiarities. The aberrant types are usually about twenty per cent. of the whole. It seems generally to have been so in the unmixed white race wherever located.

All such variations, however, remain strictly within the racial lines, and are not approximations to other races. Each race retains to-day the characteristics of its earliest representatives, so far as we know them.

Primal Home of the White Race.—Where should we look for these earliest representatives, for the primal home of the Eurafrian race? The usual answer has been "in Asia," but now that answer is rejected by all the younger and most earnest ethnologists.

2. Narrow faced, dolichocephalic.

3. Broad faced, brachycephalic.

4. Broad faced, dolichocephalic.

These forms he believes have been steadily perpetuated and have undergone no change, except by intermarrying; they bear no relation to intellectual ability, and they recur in nations of the same language, customs and history. "Ethnic unity in Europe rests not upon racial identity, but racial (anatomical) diversity. *Verhand. der Berliner Anthropol. Gesell.*, 1889, s. 332.)

A steady stream of information has of late been contributed by the sciences of linguistics, palæontology, pre-historic archæology and racial anatomy, sufficient to convince even the skeptical that not Asia, but the western water-shed of the Eastern Continent, was the area of characterization which developed this race with its marked physical traits and singular mental endowments. In the previous lecture I have shown you that man himself probably came into being as such within the limits of that region which I have described as Eurafrika; and as its conditions were such as to foster his transformation from some inferior primate, so they continued, though profoundly altered, to favor his growth, as they still do continue to-day. It is by no mere accident or result of political manœuvres that western Europe has for two thousand years produced the mightiest nations and greatest minds of the earth.

The discussion of the precise locality where in Europe the primitive man developed into the white race has occupied many learned pens in the last score of years. But by nearly all of them the discussion has been limited to the birthplace of merely the Aryan linguistic stock—an unfortunate narrowness of view, which has prevented a comprehensive grasp of the question at issue.*

* A more appropriate view was taken by Canon Isaac Taylor at the meeting of the British Association for the Advancement of Science in 1889. He defended the thesis that the human race originated in Europe and bifurcated into the Asian and African branches. (See *Nature*, 1889, No. 40, p. 632.)

The Aryan peoples present by no means the only, nor yet the purest types of the white race. I have seen quite as noble blondes among the Kābyles of the Djurjura as in Denmark, quite as handsome brunettes among the Basques of the Pyrenees as among the Celts of France or the Italians. A broad construction of the question must include all these, and in this spirit I approach it.

We must search for the first abode, the primitive "area of characterization" of the white race:

1. Where its most ancient residence and greatest numbers were in earliest historic times.

2. Where the prehistoric remains prolong that residence most remotely back.

3. Where the earliest forms of linguistic structure continue to exist in large communities.

4. Where its purest types are retained in considerable numbers.

5. Where the climatic conditions are favorable to the physical traits of the race.

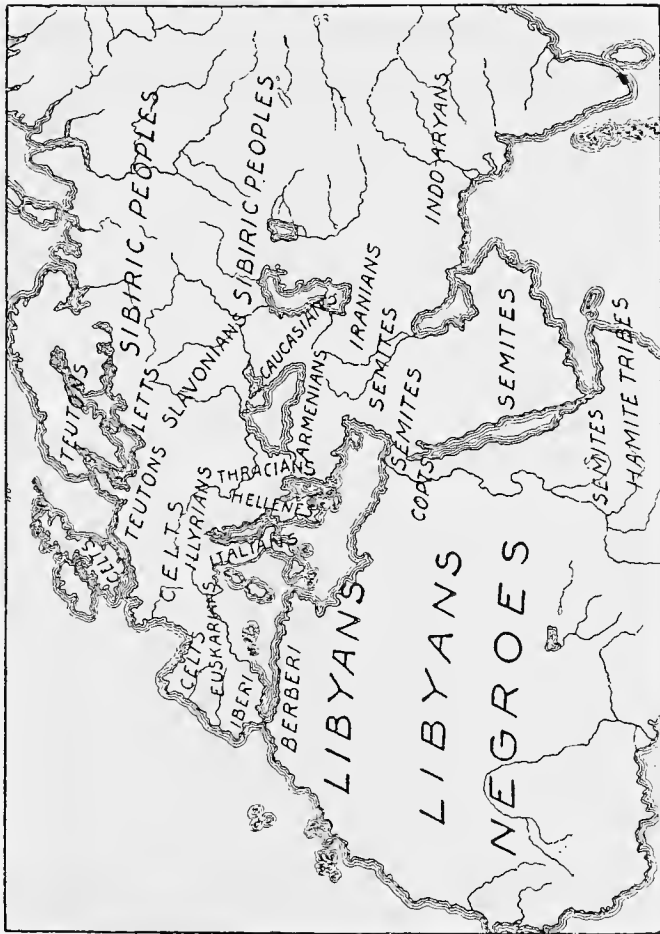
If we can select a locality in which all of these arguments unite, the cumulative evidence is so powerful that we may consider the question settled.

I have already shown that at the dawn of history the white race possessed either in Europe or Africa a far larger area than in Asia, and possessed it practically exclusively. The most recent researches in the pile dwellings of the Swiss lakes and the plain of the Po show that the same race inhabited them from the classic period of Greece to far back in the stone age.

The most ancient shell-heaps or kitchen-middens on the shores of Portugal contain skulls of the peculiar type of the Basques of to-day. The hiatus or gap which was once supposed to exist between palæolithic and neolithic culture in France has been bridged over by numerous observations, showing that the same race continued to live and grow there.* As for language, every linguist recognizes the agglutinative type of the Basque, and the semi-agglutinative character of the Berber as more antique forms than the inflectional caste of Aryan or Semitic tongues. Nowhere else do white tribes speak an agglutinative tongue, except a few in the Caucasus, where we know they settled at a comparatively recent period.

The purest types of the whites in any large number have always been found in Western Europe and North-western Africa. There the blondes were represented by the Suevi, the Goths, the Vandals, the Cymri, the Berbers; the brunettes by the Euskarians, the Celts, and the native Italic tribes. In the Orient, the Parsees, the high-caste Brahmins, the Siagosch of the Hindu Kusch, and some Caucasian tribes, have by close inter-marriage retained in a measure the traits of the race; but confessedly not in the same distinctness as the nations of Western Europe; nor do the Semitic peoples of Asia present the purity of the type with anything like the distinctness of the descendants of the Libyans in the valleys of the Atlas. Finally, we do not

* For a recent summary of the evidence on this point consult Isaac Taylor, *Origin of the Aryans*, p. 129, sq. (London, 1890.)



ETHNIC CHART OF THE EURAFRIKAN RACE.

anywhere in Asia find the physical conditions favorable to the development of the white race—the moist, cool, cloudy climate, the extensive shady forests covering broad areas of low elevation, with absence of malaria and diminished demand on the chylopoietic organs.

Early Migrations and Subdivisions.—It is not necessary to suppose that the different peoples of the race developed themselves from one central point. The contrary is more probable.

Beginning at the extreme West of Europe, and its appendix North Africa, the race pursued an easterly course, divided by the great intervening sea of the Mediterranean into two sections, which for convenience I designate as the “North Mediterranean” and the “South Mediterranean” branches, though it will be seen that these geographical limits are not to be taken absolutely.

The North Mediterranean branch embraces as its most important member the Indo-Germanic peoples. When first heard of in history, this stock extended along the shores and islands of Europe from Cape Finisterre to the Gulf of Finland, occupying all of Central Europe and much of Asia Minor, the regions of Modern Persia, and at a later date the southern vales of the Himalayas. Its northern limits have always been in contiguity with the Asian or Yellow race. Stretch a line on the map from Singapore to St. Petersburg, continue it to the Atlantic, and you have roughly the ethnic boundary which has ever separated the races, and does so to-day.

In western Europe, south of the Aryac was the Euskaric stock, occupying central Spain, central and southern France, portions of Italy, and various islands in the Mediterranean.

As speaking a language of a different family from the prevailing inflectional type of the race, it is spoken of as "allophylic." It does not stand alone in this respect. Some of the white Caucasian tribes speak similar agglutinative tongues, and it is supposed by some that the ancient Pictish, Illyrian, Lycian, Van, and Etruscan were of similar character. Probably many such languages obtained which are now extinct.

The South Mediterranean Branch consists of two related stocks, which have been called the Hamitic and the Semitic. These names are not objectionable, in so far as they indicate a distant genealogic unity, still recognizable, between the two branches; but should not in any way be accepted as acknowledging as historic facts the myth of the Deluge and their origin in Asia. The reverse is true. The migrations of both stocks have been from west to east, and the two great branches of the White Race entering Asia, the one by the Bosphorus and the second by the Isthmus of Suez, encountered each other after thousands of years of separation in the region where the venerable myth locates their point of departure.

A. THE SOUTH MEDITERRANEAN BRANCH.

I shall begin my survey of the race and its distribution with the South Mediterranean branch, as that

which has been the more important of the two in history, controlling by far the greater territory, and developing the earlier and more potent civilizations. It has ever been, and still is, the leader in intellectual acumen, and the monuments of its achievements, both in the realms of thought and action, remain unrivalled in the world. With great propriety, therefore, it claims our first attention.

I. THE HAMITIC STOCK.

The affinity between the Hamitic and Semitic stocks is distinctly shown by their physical traits and the character of their languages. The latter statement, which was long in doubt, has now been acknowledged by the most competent students, such as Friedrich Müller and A. H. Sayce.*

Within their own lines the Hamites are divided into three groups, the Libyan, the Egyptian and the East African groups, each distinguished by physical and linguistic differences.

I. The Libyan Group.

Of these the Libyan group occupies the region furthest to the west, and presents the purest type of the stock. From time immemorial it has occupied the land from the Nile Valley to the Atlantic, and from the

* See Friedrich Müller, *Grundriss der Sprachwissenschaft*, Bd. III., s. 224-5; Sayce, *Science of Language*, Vol. II., page 178. The latter uses the expression that between the old Egyptian, the Libyan, and the Semitic tongues "the grammatical agreement is most striking."

Mediterranean to the Soudan. In the classical geographies its tribes are referred to as Numidians, Libyans, Mauritians and Getulians, and at present they are known as Berbers, Rifians, and Shillias in Morocco, the Tuariks and Tibbus of the desert, the Kabyles and Zouaves in Algeria, the Ghadames, Serkus, Mizabites of the south, the Senegas of Senegal, and many others. The Guanches, who once inhabited Teneriffe, and are now extinct, belonged to the Rifian tribes of this stock,* and the rulers of the once powerful empire of Ghanata, which for centuries before the rise of Mohammedanism controlled the valley of the Upper Niger, were allied to the Moroccan family.† Arab historians of the seventh century tell us that at that time the Berbers were “the lords of Maghreb (Africa), from the Arabian Gulf to the western ocean, and from the middle sea to the Soudan.”‡

The physical appearance of the Libyan peoples distinctly marks them as members of the White Race, often of uncommonly pure blood. As the race else-

* On the Guanches, consult the various works of Sabin Berthelot, Dr. Verneau, and later J. Harris Stone in *Proceedings of the British Association for the Advancement of Science*, 1888, p. 851. The last-mentioned dwells on the many similarities of their arts to those of the Egyptians.

† Barth is of opinion that the Berbers conquered the Sahara, not from blacks, but “from the sub-Libyan race, the Leucæthiopes of the ancients, with whom they intermarried” (*Travels in Africa*, Vol. I., 340). This is, I think, the correct opinion, and not that the Sahara was occupied by the negroes.

‡ Ritter, *Erkunde*. Bd. I., s. 561.

where, they present the blonde and brunette type, the latter predominant, but the former extremely well marked. Among the Kabyles in Algeria, I have seen many fine specimens of blondes, with yellow hair, light eyes, auburn beard, and tall stature. An English traveller who visited last year some remote villages in the mountains of Morocco, describes their inhabitants as "for the most part fair, with blue eyes and yellow beards, perfectly built and exceedingly handsome men."* This has been from the earliest times the characteristic of the Libyans, and there is abundant evidence that it was more general in former centuries than it is now. The Guanches of Teneriffe are described by the first voyagers as unusually tall and fair, their yellow hair reaching below their waists.†

The Greek poet Callimachus, who was librarian of the famous library at Alexandria two hundred and fifty years before the Christian era, applies the same adjective ξανθός, blonde or auburn, to the Libyan women, which Strabo and other Greeks do to the Goths and blonde Celts of Germany.‡

* Walter B. Harris, in *Proceedings of the Royal Geographical Society*, 1889, p. 490.

† For numerous authorities, see Sabin Berthelot, *Bulletin de la Société d'Ethnologie*, 1845, p. 121, sq., and his *Antiquités Canariennes* (Paris, 1879).

‡ The early Greek geographer known as Scylax, also speaks of the Libyan men as blondes, and very handsome. For a recent and able discussion of this subject, consult F. Borsari, *Geografica Ethnologica e Storica della Tripolitana*, p. 23, sq. (Naples, 1888.) The French writers Broca, Faidherbe, etc., have also written copiously on the Libyan blondes.

Long before this, again, in monuments of the XIXth dynasty of Egypt, the Libyans are painted as of a pronounced blonde type, with light eyes and skins, and are mentioned by a term which signifies fair or blonde.* The extended researches of ethnologists on this point have accumulated a mass of facts proving that the ancient Libyans were in appearance strikingly similar to the North Germans and Scandinavians, having a fair skin, yellow or auburn hair, blue or grey eyes, full blonde beards, the face medium, the skull dolichocephalic, the orbital ridges prominent, the chin square and firm, forehead vertical or slightly retreating, the stature tall, and the body powerful.†

This identity of type impressed me very much among the Kabyles, and I note that the German ethnologist, Quedlinfeldt, who was among the Berbers in Morocco lately, writes of them: "I very often met individuals with flaxen hair and blue eyes, who in face and form corresponded perfectly to the ordinary type of our North German people."‡ For this reason, I give it the name of the "Libyo-Teutonic" type.

* The *Tahenuu*. Rawlinson, *History of Ancient Egypt*, Vol. II. p. 292.

† As distinguished from the Arab, Pruner Bey described the Kabyle as "of higher stature, cerebral and facial cranium broader, forehead more vertical, eyebrows less arched, jaws more orthognathic." My own studies in Algeria lead me to recognize the correctness of these distinctions. Dr. R. Collignon describes what he thinks is the most ancient Tunisian type as tall, dolichocephalic (73), mesorrhinic (75), narrow face, forehead and chin retreating. He says of the blonde element in Tunisia that it is "assez rare, mais un peu partout." *Bull. de la Soc. d'Anthropologie de Paris*, 1886, pp. 620, 621.

‡ *Zeitschrift für Ethnologie*, 1888, s. 115,

In the pure-blooded clans who still dwell in the fastnesses of the Atlas and the Djurdjura, this antique type is that which is general; but in the valleys, in the desert and in Tunisia the type is darker, having been corrupted by admixture with negro, Arabic and other stocks.* The fact which I wish especially to impress on you is that nowhere do we find a purer type of the white race than in northern Africa, and that this was recognized by the earliest writers and records as that especially belonging to this stock.

The languages spoken by the various Libyan peoples prove on examination to be dialects of one tongue, all so much alike that a few days' practice will enable the speaker of any one of them to express himself in another. In its grammatical formation, it is inflectional with agglutinative tendencies. Its radicals are made up of consonants, the indications of time and place being formed by changes in the vowel sounds. In this respect it resembles the Semitic tongues, but differs from them in having radicals of one, two, three, or four consonants, while they have usually those of three consonants only. In many other respects it presents analogies to the Semitic dialects, of such a nature that these latter seem to have developed themselves out of conditions of speech as represented by the Libyan. Hence some writers have called it and its allied tongues "proto-Semitic languages." It

* Yet Barth mentions that in the western Sahara one of the most powerful of the Berber tribes was called *Aurághen*, the yellow, or the gold-colored. *Travels in Africa*, vol. i, pp. 230, 339.

stands in distinct relation to the Coptic or ancient Egyptian, and to some East African dialects.

The Libyans have possessed from time immemorial the country in which we find them. They are its indigenous inhabitants—all others, as Carthaginians, negroes and Arabs, being demonstrably intruders. Can we obtain any clue to their monuments in pre-historic times by the aid of archæology and linguistics? Some able students have thought they could, and have brought forward some singular surmises. There is a series of structures of huge stones, called dolmens, menhirs and cromlechs, extending over northern and central France, southern England, northern Spain, Portugal, Morocco, Algiers, and central Tunisia. They are much alike, and seem to have been constructed by some one people in very ancient times. The skulls in them are often long, like those of the Libyans and Teutons. Hence several French writers have suggested that the ancestors of the white Libyans moved from central Europe into Morocco, along the line of these megalithic structures.*

In spite of a good deal of severe criticism, there remains much in favor of the view that these remains mark a route by which some neolithic people extended their conquests. But it seems to me the trend of migration was in the other direction, *toward* the east,

* See Broca, "Sur les blondes, et les monuments megalithiques de l'Afrique du Nord," in *Revue d'Anthropologie*, 1876; and Faidherbe, *Collection Complète d'Inscriptions Numidiques*, Introduction. (Paris, 1870.)

and not from it. The white race began as such during the glacial epoch; it could scarcely have developed north of the Pyrenees, for the climate was so cold that the reindeer, which to-day cannot breed in Stockholm, found a suitable home in the valley of the Garonne. The Iberian peninsula and the Atlas at that time possessed climatic conditions about like those of Great Britain to-day.

In that peninsula, at that time connected with Morocco by a land bridge at the straits of Gibraltar, are the oldest forms of languages spoken by the race, the Euskaric dialects. There is reason to believe that at the dawn of history these occupied the centre of the peninsula; north of them, in the Cantabrian mountains and along the shores of the Bay of Biscay, were the Celtiberians, the rearguard of the migratory hordes of Aryans; and along the southern shores and in North Africa extended the tribes whose direct descendants are the Libyan peoples. The name *Iberi*, Iberians applied by the ancients to the inhabitants of the eastern and southern shores of Spain, testifies to this. It means in the Libyan tongue *freemen*, and in the plural form *berberi* or Berbers, is that by which the old Egyptians knew them, and which from the same root is their own favorite designation to-day.*

* In offering this new derivation of the much discussed name Berberi or Barbari, one must remember that it has always been the name of a powerful tribe in Morocco, the Brebres; that it was what the ancient Egyptians called them (Herodotus); and that it is to-day a pure Libyan word. *Iberru*, is from the verbal root *ibra*, they

That the Iberians were Hamites, and not Basques, has long been suspected, and is plainly the opinion to be derived from the statements of the ancients and the presence of Libyan proper names in the south of Spain.*

are free; *ibarbar*, they come forth (Newman, *Libyan Vocabulary*, pp. 40, 133). The plural in the Hamitic group was originally formed by repetition (F. Müller, *Sprachwissenschaft*, Bd. III., s. 240). Hence Berberi may mean either "those who came forth," *i. e.*, emigrants, or those who go where they list, *i. e.*, freemen. This is also the meaning of *amóshagh*, the generic name of the Touaregs (Barth, *Travels in Africa*, vol. v., page 555). Barth, a high authority, believes that the same word *ber* is the radical of the names Bernu, Berdoa, Berauni, etc. The legendary ancestors of the Moroccan Berbers (Brebres) was Ber, in which, says Barth, "we recognize the name Afer," the *f* and *b* being interchangeable in these dialects. From "Afer" we have "Africa" (*Travels*, vol. i., p. 224). One of the principal gods of ancient Libya and of the Guanches was Abōra, or Ibru. See my article "On Etruscan and Libyan Names" in *Proceedings of the American Philosophical Society*, Feb., 1890. One of the Pindaric fragments recites a Libyan tradition to the effect that the first man, Iarbas, sprang from the sun-heated soil, and chose for food the sweet acorns of the tree (Lenormant, *The Beginnings of History*, p. 48). In "Iarbas" we can scarcely fail in recognizing the same root *bar*, the change being by the familiar process of reversal.

* Early in this century, Bory de St. Vincent maintained the identity of the Iberians and Berbers (*Essai Géologique*, Paris, 1805). Humboldt argued that there was but one language in old Spain beside the Celtic, in spite of the direct assertion of Strabo to the contrary, and the well-known fact that many Celtiberic inscriptions cannot be read either in Celtic or Basque (*Prüfung der Untersuchungen*, etc., § 39).

The Roman geographer, Rufus Festus Avienus, offers the important correction that the Iberi derived their name, not from the Ebro, as is usually stated, but from a stream close to Gibraltar on the Atlantic side.

When the Berber chieftain Tarik crossed the straits in the seventh century, and gave to the great rock his name (Gibraltar, Djebel-el-Tarik), he was but returning to seize anew the land from which his ancestors had been driven by Carthaginians and Romans.

From the remotest times the Libyans have had the same form of government—village communities, united by loose bonds into federations. The Egyptians referred to them as “the Nine Bows,” or Bands,* the Romans as the “Quinquingentes,” the Five Peoples, the Arabs as “Qabail” or Kabyles, Confederates. These confederations were sufficiently powerful, even so far back as 1400 years before Christ, to put in the field an army of 30,000 or more men for an attack on Egypt; and that the general culture of their country was quite high is shown by the character of the spoils obtained by the Egyptians—horses, chariots, vessels of brass, silver, copper and gold, swords, cuirasses, razors, etc.†

“ At Iberus inde manat amnis et locos
 Fœcundat undâ : plurimi ex ipso ferunt
 Dictos Iberos, non ab illo flumine
 Quod inquietos Vasconas prælabitur.”

—*Ora Maritima.*

The two names show that it was a *nomen gentile*, and that the tribe so known extended along the southern coast.

It has been recently asserted that many north African place-names occur in Spain (*Revista de Anthropologia*, Madrid, 1876, quoted by Fligier).

* The Coptic word is *Na-pa-ut*, Bunsen, *Egypt's Place in History*, Vol. III, p. 137.

† This war is recorded in the celebrated “inscription of Meneph-

At that date the nations of the North Mediterranean branch were yet in the stone age, and the sites of Greece and Rome were the homes of savages.*

It is probable that this defeat of the Libyans by the armies of Rhamses gave a serious shock to their progress, by disintegrating their growing state. It appears that about this time there were various colonies which migrated to sites on the northern shores of the Mediterranean. One of these I have believed to be the Etruscans, who settled on the west coast of Italy about 100 years before our era. They were tall blondes, dolichocephalic, speaking an un-Aryan language, and by their traditions came by sea from the south.†

The Libyans were at times partially under the dominion of the kings of Egypt, and many of them entered the Egyptian armies as mercenaries. They allowed the Phenicians peaceably to found the great city

tah," of the XIXth dynasty. See *Records of the Past*, Vol. IV; Brugsch Bey, *History of Egypt*, Vol. II, p. 129, and the more recent studies of these inscriptions by Dr. Max Müller, in the *Proceedings of the Society for Biblical Archaeology*, Vol. VI.

* As further showing the ancient culture of the Libyans. I may note that they constructed stone dwellings before their conquest by the Romans. For extracts showing this, see *Revue des deux Mondes*, Dec., 1865.

† The evidence to this effect I have marshalled in two papers read before the American Philosophical Society: "On the Ethnic Affinities of the Ancient Etruscans" (*Proceedings of the Amer. Phil. Soc.*, Oct., 1889), and "A Comparison of Etruscan and Libyan Names" (*Ibid.*, Feb., 1890).

of Carthage on their shores, and from these early colonists they learned the art of writing. The alphabet which is still preserved among some of their hordes is derived from the Punic letters.* When Carthage fell, Rome seized the mastery of the coasts and productive valleys, but her legions never penetrated to the inland fastnesses. When the great empire tottered to its fall, Goths and Vandals poured across and over the straits of Gibraltar to found an ephemeral empire in Africa; but these cavalry soldiers, knowing to fight only on horseback, scarcely touched the confines of the Libyan mountain homes. Even the Arabs, sweeping resistlessly across their land in the beginning of the eighth century, failed to penetrate many of these fastnesses. To this day no Arab dares venture into the land of the Rifian Berbers, and many a tribe of the Djurjura keeps its customs and its blood unaltered by the Koranic laws, or the Semitic intruders, or the Code Napoleon of the French invaders.

The ancient elements of their culture are still largely retained. Among the Kabyle and Touareg tribes of to-day, in spite of the liberty authorized by Islam, monogamy is the almost invariable rule, the women are not only respected, but generally possess most of the property, and prostitution is unknown. They are, moreover, usually the learned class, and most of the "tifinar" manuscripts come from the hands of these

* The most scholarly analysis of this curious alphabet, called the *tifnagh* or *tifinar*, will be found in Prof. Halevy's *Essai d'Épigraphie Libyque* (Paris, 1875).

fair scribes.* As to the general character of the Berbers of Morocco, we may take Sir Joseph Hooker's word when he tells us that they are "decidedly superior in intelligence, industry and general activity to their neighbors." †

The wander-loving Libyan tribes pursued other journeys far to the east. Following the coast of the Mediterranean, they formed settlements on the Syrian shore, and extended their possessions into the Mesopotamian valley, and north into the mountain vales of Asia Minor. The Phenicians and Canaanites, the Amorites, who were blonde Berbers of true Libyan type, the Hittites, and the old Assyrians, who were the builders of Babylon and Nineveh, were of Hamitic stock, as is shown by the accordance of the ancient biblical statement with modern linguistic and archæological research.‡

* See Duveyrier, *Les Touaregs du Nord*, p. 339; H. Bissucll, *Les Touaregs de l'Ouest*, pp. 106, 115 (Alger., 1888), etc.

† Hooker and Ball, *Tour in Morocco*, p. 86.

‡ To Prof. A. H. Sayce is, I think, due the honor of showing that the pre-Semitic white race of Palestine was of the Libyan stock. See *Nature*, 1888, p. 321. He had previously pointed out that the two forms of tenses of the Libyan verb "correspond most remarkably with Assyrian forms" (*Introduction to the Science of Language*, Vol. II., p. 180). Rawlinson, in his *Story of Phenicia* (N. Y., 1889), adopts the view that the early Phenicians were Hamites. The epochal discovery of Halevy, now accepted by Delitzsch and other Assyriologists, that the "second" column of the cuneiform inscription is merely a Hamito-Semitic dialect in another character, finally destroys the "Turanian" hypothesis, and restores the ancient Assyrians to the Euraffrican race.

From these culture-centres of the Hamitic stock flowed the mighty stream of human progress back along the southern shores of the Mediterranean to Cyrene and Carthage, and along its northern shores to Cyprus, Greece, Italy and beyond; while the Accadian and Summerian learning, preserved for all time in the cuneiform writing, made its beneficent influence felt far into India and China, and reacted beneficially on the older wisdom of Egypt, from which it had at first largely drawn its inspiration.

2. The Egyptian Group.

From this all too hasty survey of this most ancient people we must turn to another, akin to it, which has played an important, yes, the most important part in the culture-history of our species. I refer to the ancient Egyptians. They belonged to the Hamitic stock, but wandering eastward from its primal seats certainly more than ten thousand years before our era, had possessed themselves of the Nile valley from the mouth of the stream quite up to and beyond the first cataract.

Their kinship to the Libyans is proved by numerous linguistic identities between the ancient Coptic and the Libyan dialects, and by their physical appearance. In color they are yellowish-white, passing to a reddish-brown though the women who are not exposed to the sun would pass in Europe as merely dark brunettes. In the bony structure, the skull, the face, and the proportions, they assimilate entirely with

the white race and the Libyan type. This has been shown by the researches of Virchow and others.*

The ancient Egyptian is represented to-day by the modern Fellah or field-laborer of the Nile. The type has been very well preserved, for though the riches of this wonderful valley have attracted myriads of foreigners in peace and war from the earliest times, all have suffered greatly in longevity and fertility compared to the native population. This type is of medium stature, the limbs and body symmetrical and delicately moulded; the skull is long, the face oval, the hair dark and straight, or slightly curly; the eyes are brown and small, the nose straight, the lips rather full, the mouth small, the chin not prominent, the beard scanty.

In all respects, in the pure Copt we must recognize a delicate, thorough-bred member of the Euraffrican race, in spite of his reddish-brown hue. These traits are to be explained by the narrow limits of the Nile valley, shut in by trackless deserts from the rest of the world. Here for thousands of years lived this stock, closely intermarrying, and under climatic conditions of singular uniformity.

Whether they were the first inhabitants of the valley has not been ascertained. Certain it is that at a

* Virchow, after close studies in Egypt, expressed himself very positively that the affinities of the old Egyptian stock were "with the Hamites, with the Berbers and Kabyles, the peoples who from the remotest times have inhabited the regions of the Atlas." See his address in the *Correspondenz Blatt der deutschen Ceellschaft für Anthropologie, Ethnologie und Urgeschichte*, 1888, p. 110.

period long before the date we usually assign to Egyptian civilization, a people dwelt on the Nile ignorant of any implements but those of rough stone. Their relics have been found in the stratified gravels of the hills, and on the summits of the arid plateaus.* I know no reason, however, to suppose that the tribes of the Egyptian stone age were other than the ancestors of those who were brought under the control of the founder of the first dynasty, the historic king Mena.

This was about 4000 B. C. But previous to him the ancient Egyptian priests claimed some 25,000 years of occupation under various gods and demi-gods; and the general accuracy of their claim I am not prepared to dispute.† Certainly the culture of lower Egypt must have been at a high level for thousands of years before the date of Mena, or he could never have established the state which we know he did. From all that archæology has yet taught us, we must place the beginnings of Egyptian civilization earlier than that in the valley of the Yang tse Kiang, earlier by far than

* On the stone age in Egypt, see General Pitt-Rivers, in *Journal of the Anthropological Institute*, 1881, p. 387, sq.; and especially the exhaustive article by Dr. Virchow in *Verhandlungen der Berliner Anthropol. Gesell.*, 1888, p. 345, sq. As early as 1881 Prof. Henry W. Haynes of Boston announced his discovery of palæolithic stone implements in Upper Egypt. (*Mems. of the Amer. Acad. of Arts and Sciences*, Vol. X., p. 357.) The latest contributions to the subject is by W. Reiss, *Funde aus der Steinzeit Aegyptens* (Berlin, 1890).

† M. G. de Lapouge goes quite as far. He writes (*Revue d'Anthropologie*, 1887, p. 308), "L'Egypte s'est civilisée pendant notre quaternaire, et son plus grand développement a coïncidé avec notre époque néolithique."

any other on the globe. Its streams have permeated all the lands to which the Euraffrican race have extended; fecund as the waters of its own Nile, its elements have nourished and developed the best intellectual powers of the race through all subsequent ages; to it we owe the seeds of our arts, the germs of our sciences, the forms of our religion, the schemes of our literatures, and the inestimable boon of our written language. Look where you will among the most ancient remains of the Old World culture, you find the impress of Egypt's land and mind—in Etruscan tombs, in Guanche mummy caves, in treasure houses of Mycenæ, in Cypriote vaults, in Assyrian mounds, under Carthaginian foundations.* The species Man owes nowhere else such gratitude as to these African nations of the Euraffrican race.

The Egyptian presents the best known and complete type of the psychical traits of the Hamitic stock. Unideal, laborious, utilitarian, he was devoted to material progress and the gross animal enjoyments of life. His preferred employment was agriculture, his favorite art the huge in architecture, his religion was a polytheism with numberless images and pictures, his pleasures were those of the appetite, his hopes of immortality were bound up with the preservation of the present body.

* "Jusqu' a cette heure," writes A. L. Delattre, in the *Bulletin des Antiquités Africaines*, 1885, p. 242, "les pieces archéologiques de notre collection de Carthage, qui remontent incontestablement à la période primitive de l'histoire de cette ville fameuse, ont toutes le cachet égyptien prononcé."

3. *The East African Group.*

The singular uniformity of the Egyptian type does not allow us to divide it into several branches, and on account of its segregated position, it does not seem to have had much intercourse with the east African group of the Hamitic stock, living to the south of it.

At present this east African group of the Hamites includes the Bedjas and Bilins between the Nile and the Red Sea, the Afars or Danakils near the mouth of the Red Sea, Gallas and Somalis between the gulf of Aden and the Indian ocean, and the adjacent tribes of the Agaouas, Adals, Khamirs, and others. In appearance these peoples are usually reddish brown in color, with dark wavy hair, of moderate stature and symmetrical form, the face oval and the skull moderately long, the nose aquiline and the chin well shaped, and heavier built than the Egyptians.

Their life is principally nomadic, living in tents of skin, and governed by chiefs who rule over small communities. The descent is reckoned and property passes on the female side. Some are Mahommedans, but hold the faith lightly, and like the Kabyles, attach more importance to the customs of their clan than to the precepts of the Prophet. In many parts they betray admixture with the Negro tribes to whom they are neighbors, and from whom they have always obtained slaves.

Thus the Danakils are described as sooty black, with scanty beards, thin calves, and thick lips, but with features and hair in other respects quite European,

their faces rarely prognathic, and their bodies symmetrical.* The Somalis are lighter in color, but like the Danakils, do not cultivate the soil nor establish fixed abodes.

II. THE SEMITIC STOCK.

Owing to the unreasoning acceptance of myths as history, it is generally believed that the Semites originated in Asia. From what I have already said you will appreciate that such an opinion is quite inconsistent with modern research. We may, at the most, concede that the peculiar form of their language and certain physical traits were developed during their long residence in the peninsula of Arabia, where history first finds them. But that they entered Arabia in remote pre-historic times from Africa, and not from Asia, is now acknowledged by an increasing number of learned and unprejudiced writers.†

There is a difference of opinion whether this immigration was by the way of the Isthmus of Suez or the Straits of Bab el Mandeb, but the course of their wanderings in Arabia seems to have been from north to

* Dr. L. Faurot, in *Revue d'Ethnographie*, 1887, p. 57.

† See my essay on this subject, *The Cradle of the Semites* (Philadelphia, 1890); also the able paper of G. Bertin, "On the Origin of the Semites," in *Journal of the Anthropological Institute*, 1882, p. 423, sq., and the speculations of R. G. Haliburton, in *Proceedings of the British Assoc. for the Adv. of Science*, 1887, p. 907. An excellent summary of the argument that the Semites came from Africa will be found in Gifford Palgrave's article on Arabia in the *Encyclopædia Britannica*.

south, the Ethiopian Semites being distinctly emigrants from the other side of the Red Sea. Hence the probability is that the ancestors of the ancient Arabians wandered from the Libyan plateau, or the eastern Atlas, through the Delta into the region of the Sinaitic mountains, whence they spread south and east, forming several distinct groups.*

I. The Arabian Group.

The first of these included the Arabians proper. At a very early period they became divided into a northern and southern portion, the former represented by the Ishmaelites and Bedawins, the latter by the ancient Himyarites, Sabeans and Nabothians, and the modern Ehkili and kindred clans. The Himyaritic nations had important cities, and possessed a written literature at least 700 B. C., and probably much earlier.† The Queen of Sheba, who paid a memorable visit to King Solomon, came from one of these cities, and her journey is strong testimony to the admiration for learning which prevailed in her land, and which she so evidently fostered.

At that time, and for centuries afterwards, there were few parts of the world more favored than the

* The important Berber folk of the Mzabites in Southern Algiers are said strongly to resemble Semites, presenting "a reunion of the secondary characteristics of the Jews and Arabs." *Revue d'Anthropologie*, 1886, p. 353.

† The late investigations of E. Glaser in Southern Arabia have brought many hundreds of these inscriptions to our knowledge.

southern portions of the peninsula. It was known as "Arabia felix," Araby the Blest, and was famed for its abundant products, its spices and perfumes, and the wealth and luxury of its inhabitants. Some change of climate apparently, and the inroads of the Ishmaelitic hordes, quite destroyed this happy condition about the fifth century, A. D. The Himyaritic language disappeared, the cities were laid waste, many of the people migrated to Africa or sank into despised outcasts, as the present Ehkili of the Hadramaut. In this manner the whole of the great peninsula fell under the control of the true Arab.

It is he who preserves in his language the oldest and purest form of Semitic speech, and in mind and body its most pronounced mental and physical type. He is rather tall (1.65), his face oval, the nose straight or aquiline, the features sometimes singularly noble and prepossessing, the skull long (index 73° -- 75°), the complexion ruddy rather than brown, when due allowance is made for the tan, and the hair slightly wavy or straight. Crisp hair is looked upon with disapproval, as indicating mixed and ignoble blood.* In temperament the Arab is abstemious, and his powers of physical endurance are phenomenal. His mental temperament is that of an idealist; he has added nothing to the grand creations of plastic art, nothing to inventions of utility in life, nothing to the marvels of archi-

* Doughty, *Travels in Arabia Deserta*, Vol. I., p. 102. About five per cent. of the Arabs of the Peninsula of Sinai are pure blondes. See *Revue d' Anthropologie*, 1886, p. 351.

ecture or the beauties that appeal to the senses; he cares neither for history nor the drama. In his dreams he conquers the world, and it falls at his feet; in fact, his greatest states have been ephemeral bubbles.

Yet his dreams have been realized. The Semite has conquered the world, and it is at his feet. Twice have arisen among his people majestic forms, before whom all civilized nations bow, Jesus and Mahomet.

The religious idealism which led the Semite in the days of Moses to reject the images of stone and wood and proclaim that God is one, overawed in its later expressions the whole of the white race, and now extends its sway to the farthest seas.

Though the Aryan to-day may dislike the Semite and doubt of the God whom he preached, let him not forget that the first vivid impression of such a great idea came from the Semitic stock. If in his marts, his diplomacy and his learned professions, he finds the Semites still pressing him aside, let him remember that this is the people whose destiny seems to be to own no country, but to rule all.

2. *The Abyssinian Group*

Of tribes is evidently descended from fugitives from the Arabian peninsula. The Ethiopians, or Geez (a word meaning emigrants), speak a dialect the nearest related to the Himyaritic of the inscriptions. It has a literature and an ancient alphabet of its own. The Tigre, the Massawa, the Amhara, and, further to the south, the Harrari, are Semitic dialects, more or less akin to the Ethiopic.

The period when this migration took place is not precisely known, but it was at a calculable period before the beginning of our era. Quite likely it was about the time of the dissolution of the Joktanide monarchy in the Hadramaut. There can be no question but that the course of migration at this point was from Arabia into Africa.

The Tigre is the predominant nation of North Abyssinia, the Amhara in the south of that region. The Harrari extends into the land of the Somalis. All these are of Himyaritic descent, but near them are a number of later Arab tribes who speak dialects of the modern Arabic. These are the Jalin about Khartoum, and others near Senaar and Baqqara, west of the Nile. There are also many Jews, who have inhabited the country from the early centuries of our era.

An infusion of negro blood is visible in much of the population. Their color is dark brown, the hair is crisp, and the features are negroid. Where this mingling is absent, the color is a light or bright brown, the face oval, the nose thin, lips not at all thick, and the hair wavy and straight. In other words, the features are truly European, framed in a brown setting.

The Abyssinians proper have always been an agricultural, pastoral and manufacturing people. The soil is fertile and the climate temperate, but there are no large rivers, and communication is difficult. The crops are barley, dates, millet, sugar-cane, etc.

Formerly the country was under one ruler, who was called the Grand Negus. The late "Negus," Theodoras, could put in the field over fifty thousand fighting men, and made himself so obnoxious to Europeans that the English sent an expedition against him in 1868, and he perished under the ruins of his capital, Magdala.

From the fourth century the principal religion in Abyssinia has been Christianity, but in a corrupt form, mixed with the ancient heathen observances, such as ceremonies at the rise of certain stars, and veneration of holy stones and springs. The clergy are numerous, estimated at about 72,000, and exert a leading influence in the state. There are many monks and nuns living in cloisters, and possessing extensive holdings. The church service is conducted with an effort at pomp, and there is a considerable sacred literature, of very little value. The influence of the religious teaching on the people is scarcely visible except in making them fanatical, superstitious and averse to enlightenment. Abyssinia thus presents the picture of a country which for more than 1500 years has been a Christian state, and where Christianity has wholly failed to render the people moral, intelligent or pure.

3. The Chaldean Group.

The third group of the Semites was the Chaldean, including the Syrians and Arameans, the later Assyrians and Babylonians, the Israelites, Samaritans

and Jews. All these were from early times deeply tinged with other blood. The Syrians and Chaldeans removed first from the Arabian peninsula, and their dialects depart the furthest from the pure stock. Abraham, the traditional ancestor of the Israelites, left northeastern Arabia for Mesopotamia about 2000 B. C., to dwell in "Ur of the Chaldees," a city near the mouth of the Euphrates. Already the Chaldees had secured from the older Hamitic settlers a portion of Mesopotamia, and gradually extended their conquests.

Many of the Syrians united with the Hamitic residents on the coast, so that the Phœnicians became largely Semitized. All these nations were in constant intercourse with the highly developed civilization of Egypt, as is shown by the Mosaic books, and from that source derived most of the germs of their intellectual growth. In spite of their love of travel and commerce, in spite of their dispersion over the earth, this group has retained a striking individuality. Many ethnographers charge it against the Jews that the presence of blondes among them, and of brachycephalic heads, proves a crossing of the blood. This is not the case. The Semitic stock is a markedly white type of the race, and in all ages fair complexion, light eyes and hair, have been admired as especially beautiful. This is repeatedly referred to in the Hebrew Scriptures, and is shown by observation among these people at the present day.*

* The statistics in Central Europe show that among the Jews

The physical type of the Jew is well known and unmistakable; wavy hair, dark or blonde, full beard, eyes soft, nose prominent, rather heavy, with an accentuated and peculiar outline, lips full, face oval, skull medium or long. Nor are his mental traits less familiar; a pliant, supple disposition, a distaste for physical labor or the toil of the pioneer or soldier; deficiency in personal courage; subtlety in monetary transactions; quickness in applying social or individual weaknesses to his own benefit; industry in intellectual pursuits; love of display and of position; strong devotion to family ties.

This is the Jew as we know him in the tussle of modern life, a character prominent in all European and American cities, without a nationality, in conflict with the prevailing religion, suspected and disliked, but wielding an influence out of all proportion to the numerical strength of his people. It may be regarded as continuing in his person that remarkable intellectual superiority which the South Mediterranean Branch of the white race has from the earliest time exerted on the history of man.

there, about 15 per cent. are true blondes, 25 per cent. brunettes, and the remainder intermediate. The blondes are generally dolichocephalic, the brunettes brachycephalic or medium. See Dr. Fligier, "Zur Anthropologie der Semiten," in *Mittheil. der Wiener Anthropol. Gesell.*, Bd. IX., s. 155, sq.

Scheme of the Eurafrian Race.—North Mediterranean Branch.

(Tribes in *italics* are extinct.)

- | | | |
|-----------------------|-----------------------|---|
| I. Euscaric Stock. | 1. Euscaric group. | { Euscaldonac, Basques, <i>Sards</i> , <i>Siculi</i> , <i>Aquitanians</i> , <i>Picts</i> (?),
<i>Ligurians</i> (?), <i>Cantabrians</i> . |
| | 1. Celtic group. | { <i>Gauls</i> , Highland Scotch, Irish, Welsh, Manx, Bretons, <i>Celtiberians</i> , <i>Cymri</i> . |
| | 2. Italic group. | { <i>Latins</i> , <i>Umbrians</i> , <i>Oscans</i> , <i>Sabines</i> , Italians, French, Spanish,
Portuguese, Roumanians, Wallachians. |
| | 3. Illyric group. | { <i>Illyrians</i> , Albanians, <i>Thracians</i> , <i>Japyges</i> (?). |
| | 4. Hellenic group. | { <i>Pelagæi</i> , <i>Phrygians</i> , <i>Lydians</i> , <i>Macedonians</i> , Greeks. |
| | 5. Lettic group. | { Letts, Lithuanians, <i>Old Prussians</i> . |
| | 6. Teutonic group. | { <i>Goths</i> , <i>Vandals</i> , <i>Franks</i> , <i>Angles</i> , <i>Saxons</i> , <i>Suevi</i> , Scandina-
vians, Germans, Danes, Dutch, English, Anglo-Americans. |
| | 7. Slavonic group. | { Russians, Poles, Czechs, Servians, Croatians, Wends, Bul-
garians, Montenegrins. |
| | 8. Indo-Iranic group. | { Armenians, Persians, <i>Bactrians</i> , Hindoos, Kafirs, Dards,
Beluchis, Hunzas, Gypsies. |
| II. Aryac Stock. | | |
| | 1. Lesghic group. | { Avars, Laks, Udes, Kurins. |
| | 2. Circassic group. | { Circassians, Abkhassians. |
| | 3. Kistic group. | { Tush, Karaboulaks. |
| | 4. Georgic group. | { Georgians, Mingrelians, Lazs. |
| III. Caucasian Stock. | | |

LECTURE V.

THE EURAFRICAN RACE: NORTH MEDITERRANEAN BRANCH.

CONTENTS.—*B.*—THE NORTH MEDITERRANEAN BRANCH.

- I. THE EUSKARIC STOCK. Basques and their congeners. Physical type. Language.
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IN my previous lectures I have shown with as much detail as my time permits, that the original home of the white race was in that portion of the Atlantic

seaboard which I have called *Eurafrica*, and which includes the present areas of northwestern Africa and southwestern Europe. From this region, I have pointed out, the race divided into two branches, the one moving eastward, south of the Mediterranean sea, the other in the same direction, north of this separating stream. To-day we shall consider the ethnic history of the latter.

B. THE NORTH MEDITERRANEAN BRANCH.

Unlike the South Mediterranean Branch, whose languages present everywhere some degree of resemblance, sufficient to predicate for them a remote common origin, the North Mediterranean Branch includes several stocks fundamentally diverse. They are the Euskaric, the Aryac, and the Caucasian stocks. The second of these is by far the most extended and important; but, as I have previously observed, it does not bear the impress of the highest antiquity, nor yet is its location that where we should look for the most ancient members of this branch. Both these conditions are fulfilled by

1. *The Euskaric Stock.*

At present this contains but one group, the Basques, residing in the valleys of the Pyrenees, on both the Spanish and French frontiers. There is little doubt from the linguistic studies of Humboldt and from the researches of archæologists that the Basques once extended widely throughout the present area of Spain

and Portugal; but I am not inclined to identify them with the Iberians of the classical geographers, for reasons given in my last lecture. There is a great deal of evidence that in proto-historic times they occupied central and southern France, portions of Italy, Corsica, Sardinia, perhaps Sicily, and some southern tracts of England. Many believe that the ancient Aquitanians and Ligurians, the Picts and Cantabrians, were of this stock, as well as the pre-Aryac tribes of Greece.*

I described in my last lecture the Basques as representatives of one of the dark types of the white race, with a peculiarly shaped skull, elongated posteriorly.† The face is oval, the chin pointed and weak. The general aspect indeed of a Basque cranium conveys the impression of a feeble character, and such the history of the people shows them to have been. They never contributed anything to the advance of the race, and from their earliest appearance in history have been retiring before the pressure of sturdier nationalities. At present they do not number over three hundred thousand, and in a few generations will be merged in the neighboring Spaniards and French.

The Basque language belongs to one of those

* Compare Taylor, *Origin of the Aryans*, p. 98, and Paul Broca, *Sur l'Origine et la Répartition de la Langue Basque*, Paris (1875). Broca recognized the autochthony of the Basque in Spain, and considered their language the oldest in Europe.

† Called by the French craniologists *tête de lièvre*. De Quatrefages identified certain skulls from kitchen-middens in Portugal as of this form, indicating that the Euskaric peoples once extended that far west. *Hist. Gen. des Races Humaines*, p. 478.

primitive forms of human speech such as we find among the Negroes of Central Africa, or the savage tribes of Siberia. It is of that type called agglutinative and polysynthetic, and in some points has the incorporative tendency of American tongues. It is the speech of a people whose ideas remained confined to objective material relations. According to the latest students, it is absolutely without connection with any of the so-called Turanian (Ural-Altai) languages, and is equally remote from the Hamitic group.*

I now turn to

2. *The Aryac Stock*

of peoples and languages. It is sometimes called the "Indo-European," or "Indo-Germanic," or "Celt-Indic" † stock, and embraces the principal historic nations of Europe, and in Asia the Armenians, Persians and Hindostanees.

Origin of the Aryans.—No ethnographic question of late years has led to keener discussion than the origin and affinities of these peoples. The theory derived from the Hebrew myth of the Deluge, that they migrated into Europe from Asia, was long ac-

* See on this point the detailed comparisons in Heinrich Winkler's *Ural-altaische Völker und Sprachen*, ss, 155-167, and elsewhere. The attempted identifications of Basques and Berbers by Dr. Tubino (*Los Aborígenes Ibericos*, Madrid, 1876) is therefore a failure.

† I should prefer the term "Celtindic" to either of the others. "Aryan," or Aryac, suggested by Prof. Max Müller from a Sanscrit root, signifies "noble," "superior." It is open to several objections, but I have adopted it on account of its popularity.

cepted without question, and seemed to be strengthened by the discovery that Sanscrit, the classical language of India, and Zend, the ancient tongue of Persia, are related to Greek, Latin and German.

But reflection and extended observation led to other results. It was perceived that the majority of the Aryac peoples had lived in Europe from the remotest historic times, and only a small minority in Asia; that some of the Aryac tongues of Europe retain more ancient forms than either Sanscrit or Zend; that the oldest traditions point to migrations from Europe into Asia, and not the reverse; that these traditions are supported by the Indian Aryans, who distinctly claim that their ancestors migrated from the north into India, and by the Persians, whose sacred book, the Avesta, declares they were not the original owners of Iran, and finally by an examination of the arts of the pre-historic Europeans,* and an exhaustive analysis of the words common to all the dialects of Aryac speech, which indicate that the ancestral tribe must have lived in geographic surroundings not to be found in the Aryac districts of Asia, but answering in all points to the regions of central or western Europe.

I constantly see it stated in works on ethnology and linguistics that the scientist who first advanced

* The European bronze age, for instance, was not introduced by the Indo-Aryac peoples, as their early art-forms in bronze are quite distinct, and their alloy different, the Asian bronze being a zinc, the European a tin alloy. See on this R. Virchow in the *Correspondenz-Blatt der deutschen Gesell. für Anthropologie*, 1889, s. 94.

this opinion was the Englishman, Dr. Robert G. Latham. Nothing is more erroneous. For a score of years before he introduced it to the English public, this view had been repeatedly and ably defended by the eminent Belgian naturalist, d'Omalius d'Halloy. He lost no opportunity of showing that the ancestors of the modern Europeans did not come from Asia, but belonged originally to the continent they now inhabit.*

Since his first promulgation of this theory in 1839, the evidence in its favor has been slowly but steadily accumulating, until now it numbers among its adherents practically all the ethnologists of the day who do not feel committed by their previous writings, or by their creeds, to the Asian hypothesis. Among the English writers who have recently treated the subject with marked ability and much more fullness than is possible for me at present, I mention Canon Isaac

* See d' Halloy's articles in the *Bulletins de l' Academie Royale de Belgique*, beginning with Vol. VI (1839); especially in 1848 his "Observations sur la Distribution ancienne des peuples de la race blanche." Dr. Latham first stated this view in an Appendix. dated 1859, to an article on "The original extent of the Slavonic area." See his *Opuscula*, pp. 127-28 (London, 1860). I observe that Dr. John Beddoe, in his last address before the Anthropological Institute of Great Britain this year, 1890, repeats the statement: "The first anthropologist of note who took up the notion of the European origin of the Aryans was Dr. Robert Latham" (*Jour. Anthropol. Inst.*, 1890, p. 491). On the contrary, d'Halloy, in the "Observations" above quoted (p. 9), urges that the "Indo-Germanic" languages point to a kinship of those who speak them, and that they always have been in Europe, and did not come from Asia.

Taylor and Professor A. W. Sayce; in Germany, O. Schrader, Karl Penka, Theodor Pösche, L. Geiger, and in France, M. de Lapouge, etc.

I shall not enter into a recital of these arguments, for I believe the debate is so nearly terminated that the conclusion may be accepted that the Aryac peoples originated in Western Europe and migrated easterly. This you will observe is in accord with the general theory of the origin and distribution of the white race which I laid before you, and is a potent argument in its support.

The Aryac Physical Type.—When we endeavor to fix more precisely the home of that tribe which was the lineal Aryac progenitor, several considerations must be carefully weighed. The physical types of the Aryac people differ markedly, as I stated in my last lecture, and some writers (Penka, Lapouge, etc.) have claimed that the Teutonic, the tall blonde type, is peculiar to the Aryans, and must have been the original character. But it is found with just as great purity among the Libyans of Africa, so that the assumption is vain.

It is an undeniable fact that at the earliest period, both in Europe and Asia, the majority of Aryan-speaking peoples were brunettes, and it is also a fact that in the population of Europe to-day there is a tendency to revert to that type. When a blonde and a brunette intermarry, ten per cent. more children will take after the brunette.* There is a probability, there-

* A. De Candolle, *Revue d' Anthropologie*, 1887, p. 265, sq. This

fore, that the original Aryac tribe was a mixture of blondes and brunettes, with a majority of the latter, and also that the form of its skulls was variable, some long, some broad.*

This would indicate a mixed descent, and such, no doubt, it owned. It is absurd to suppose the contrary. The type of the *proto-Aryac language* is one which originates not early, but late in the history of human speech. The process of grammatical inflection is the highest stage of linguistic evolution. It is the result of a slow growth, in which the material elements of language are transformed into formal elements, and the "grammatical categories," or parts of speech, gradually assume logical distinctness and independent expression. We can watch this growth in its imperfect form in the Nahuatl of Mexico and the Berber of Morocco; and when we see it completed, as in the Arabic or Latin, we may be sure it is a comparatively late fruit of the human intellect. The expressions common to all Aryac languages reveal a primitive social condition to correspond with this. It was above that of savagery. These common ancestors had domesticated dogs, cattle, and perhaps sheep; nomadic at times, they at some seasons tilled the soil; they were ac-

is ingeniously explained on the mechanical theory of mixing colors by d' Halloy. *Obs. sur la Distrib. de la Race Blanche*, p. 11. (Bruxelles. 1848.) Compare also R. Virchow, *Die Verbreitung des blonden und des brunetten Typus in Mitteleuropa*, who attributes the increase of brunette's to a reversion to "Celtic or pre-Celtic ancestry."

* This opinion has also been defended by Fligier, *Zur praehistorischen Ethnologie Italiens*, p. 55.

quainted with copper, and brewed mead from honey; they had probably even invented a wagon, and milked their cows, and they certainly lived on or near the seashore, and used boats.

The conclusion is that the original inflected Aryac tongue arose from the coalescing of two or more uninflected agglutinative or semi-incorporative tongues, the mingling of the speeches being accompanied, as always, by a mingling of blood and of physical traits. This explains the fact that has puzzled so many ethnologists, that there is no fixed Aryac type.

Where should we look for this intermingling to have taken place? From the arguments already advanced you would naturally say, somewhere on the western coast of Europe.

This is supported by an unexpected piece of evidence of a strong character. The system of consonants is undoubtedly the most persistent part of a language, and there is no question but that the Celtic and Lithuanian, of all the Aryac tongues, have kept most closely to the primitive system of consonants once common to them all.* The Lithuanian is spoken by a limited community on the coast of the Baltic sea, while the Celtic, in proto-historic times, occupied the whole of Great Britain and northern Belgium, France and Spain. In the two latter areas it was from immemorial time in close connection with the Euskaric (Basque), and perhaps the Libyan (Berber) groups, and it is possible that in comparatively late (neolithic)

* Taylor, *Origin of the Aryans*, p. 259.

times the Aryac with its inflections might have been developed from these partly agglutinative languages.

This suggestion is not so hazardous as it may seem. William von Humboldt, one of the ablest linguists of this century, suggested that the Basques and the Celts, the Ligurians and the Gauls, in spite of the contrasted structure of their languages, may have sprung from the same ethnic trunk, and derived their languages from a common source.*

Other scholars of eminence, such as Delitzsch, Ascoli, Raumer, Schultze and Abel, have pointed out numerous affinities between the Hamito-Semitic, Libyan, old Coptic and Assyrian tongues, and the oldest Aryac forms, and have argued for the existence of a fundamental "proto-Ayro-Semitic" speech which existed before the separation of the white race into its northern and southern branches.† There is evidence that this very ancient tongue was of the "isolating" character, with a tendency to agglutination by suffixes.

It is now recognized that inflection did not exist in the primitive Aryac dialects, but was gradually developed by means of such suffixes added to the stem, by different processes in the different dialects, many of

* See his remarkable essay, published in 1821, entitled *Prüfung der Untersuchungen über die Urbewohner Hispaniens vermittelt der Tuskischen Sprache*, § 47.

† In his latest work, Dr. Abel avers that the old Egyptian and Indo-European stocks have as many radicals in common as the idioms of the latter have among themselves. *Ägyptisch-Europäische Sprachverwandtschaft*, s. 58 (Leipzig, 1890).

which are in activity to-day.* These inflective processes bear closer resemblance to the Libyan, which has suffixes, and the old Egyptian, than to pure Semitic tongues, which leads to the suggestion, again, that the separation of the race was in the west rather than the east.

Proto-Aryac Migrations.—Leaving these speculations as to the origin of the Aryac stock, let us sketch its probable migrations, as indicated by linguistic research. It appears to have divided early into two main streams, the one occupying central and southern Europe, the other moving eastward on a northerly route, the two meeting as they neared the Bosphorus.

The central stream was of Celtic affinities. Its tribes having possessed themselves of the coast line from Cape Finisterre to the mouth of the Rhine and the islands of Great Britain, passed up the valleys of the Rhine and its affluents into southern Germany, the valleys of Switzerland and the Tyrol, quite to the Danube. Its easternmost tribes were probably the Dacians.

The Aryac Italic peoples, the Umbrians, the Oscans, the Latins, were the first offshoot of this southern migration; not that they were directly descended from the Celts, but that they sprang from the same division of the primitive Aryac stock. This is still so clear that I remember Matthew Arnold in his lectures on

* See Karl Brugman, *Comparative Grammar of the Indo-Germanic Languages*, Vol. I., pp. 13, 14; Wharton, *Etyma Latina*, Introduction.

poetry quotes sentences from ancient Irish which are also intelligible Latin.

A second offshoot was the Illyrians, who peopled the northern and eastern shores of the Adriatic, the ancestors of the modern Albanians.

A third was the Hellenic people, organized later than the Latins, and imbued with elements quite foreign to these.

The northern stream was the Letto-Slavic, whose primitive home was on the shores of the German Ocean north of the mouth of the Rhine, and in the region which extends thence to the Gulf of Finland. Its members presented the physical traits of the Libyo-Teutonic type, contrasting in this to the traits of the central and southern stream, who were of the dark type of the race. The Cymric type seems to have been a mingling of the two, and was found at or near the boundaries between them.

At a comparatively late period—certainly after the beginning of the bronze age, as we know from their languages—the Teutonic tribes separated from the Letto-Slavs, and moved into Central and South Germany, where they remained. Numerous Salvonic hordes, however, pushed eastward, some passing to the north of the Black and Caspian Seas, where they formed the ancient Sarmatians, others approaching the Hellespont, where they mingled with Celtic and other elements to make the Thracian and other peoples.

Passing into Asia across the Hellespont and Bos-

phorus, or along the coast in their vessels, or pursuing the shores of the Caspian, numerous Aryac colonies from the vanguard of the eastern emigrants wandered into Asia. The Indo-Eranians that is, the ancient Persians and Sanscrit speaking tribes, entered first and progressed farthest, settling in Iran, and occupying the land between the Caspian Sea and the Indian Ocean.

Later came the Phrygians and Armenians, who had formerly lived in Thrace, crossing the Bosphorus and establishing themselves in Asia Minor.

The dates of these occurrences can be fixed only approximately. The Armenian migration was later than 700 B. C., as previous to that date the Vans, a people of non-Aryac speech, occupied the region later known as Armenia. The Brahmans crossed the Hindu-Kusch into India, about 1500--2000 B. C., and the Persians possessed themselves of Iran at least a thousand years earlier.

Scheme of Aryac Migration.

		<i>European.</i>	<i>Asian.</i>
Primitive Aryans. (Western Europe.)	Northern Peoples (Blondes).	Letto-Lithuanians.	
		Teutons.	
		Slavonians.	<i>Phrygians.</i>
	Southern Peoples. (Brunettes).	<i>Thracians.</i>	<i>Cappadocians.</i>
		<i>Dacians.</i>	Armenians.
		Hellenes.	<i>Medes.</i>
	<i>Illyrians.</i>	Iranians.	
	Italians.	Indians.	
	Celts.		

(The names in *italics* are of extinct peoples.)

We must not suppose that the languages of these peoples developed one out of the other. That is not the way languages grow. It was by contact in various centres with various dialects and wholly different linguistic stocks that the speech of these nomads was altered. They did not journey always in one direction, but to and fro, now rapidly advancing, now retreating, now long stationary, ever through war, commerce and marriage adding new elements to their speech, each tribe developing its dialect with independent material and on different grammatical principles.

We are now prepared to study the historic and modern representatives of this important stock.

1. The Celtic Peoples.

The Celtic peoples of the present day form a decaying group, which in a few generations will wholly disappear. Two thousand years ago they were the most important Aryac stock in central and western Europe. Their sole representatives now are the Highland Scotch, the Irish, the Manx, the Welsh, and the natives of Brittany in France. In all these localities the Celtic speech is losing ground before English or French. In Ireland about 900,000 persons can speak Irish, but not more than 150,000 are ignorant of English.

These Celtic groups form two dialects, one spoken in Scotland, Ireland and the Isle of Man, known as *Gaelic*, the other common to Wales, Brittany, and in the last century to Cornwall, called *Armorican* or

Cymric. The Irish possessed a sparse literature going back to the eighth century, and the Welsh to the twelfth, while the oldest Scotch or Breton songs date at the furthest from the fourteenth century, in spite of assertions to the contrary.

To this day the Celtic peoples present the same contrast of physical type that they did to the Romans. Some of the Scotch clans, many of the Irish, most of the Welsh and Bretons, are of moderate stature, dark eyes and hair, and brunette complexion, while the remainder are tall, raw-boned, red-haired, with florid, freckled skins and tawny beards.

Their mental traits are quite as conspicuous; turbulent, boastful, alert, courageous, but deficient in caution, persistence and self-control, they never have succeeded in forming an independent state, and are a dangerous element in the body politic of a free country. In religion they are fanatic and bigoted, ready to swear in the words of their master, rather than to exercise independent judgment. France is three-fifths of Celtic descent, and this explains much in its history and the character of its inhabitants.

2. The Italic Peoples.

The principal Aryac tribes who possessed themselves of the Italian peninsula were the Umbrians in the north, and the Samnites (or Oscans) and Latins in the south. They conquered in time the Etruscans, Ligurians, Volscians and others of non-Aryac lineage, and laid the foundation for the mighty Aryac Empire

of Rome, destined to command the world, and to introduce the Latin tongue as the dominant speech of Southern Europe.

From the Latin speaking Roman colonies have sprung the *Romance languages* of modern times and the existing "Latin peoples." These include the modern Italian, the French, the Spanish, the Portuguese, the Roumanian, the Wallachian, and the Ladinish in Switzerland, besides a number of dialects. Through the conquests of the European Romance nations, their tongues have gained the ascendancy over the whole continent of America south of the United States, over a large part of Canada and North Africa, and over many islands. To-day, the speech of imperial Rome, more or less modified, prevails over an area five times as great as that of the empire in the zenith of its glory.

Like the language, the physical type of the ancient Italic peoples indicated their near relationship to the dark Celts. The Latin and Umbrian skulls were short or rounded (brachycephalic), the stature medium, the hair dark and curly, the eyes brown or black, the nose aquiline, the complexion brunette. In later generations this type was modified by mixture with the blonde or long-skulled Etruscans, and the numerous foreigners who came to live in Rome: but to this day it is that which prevails throughout the peninsula.

None of the Romance nations can boast of much purity of descent. After the fall of the Western Empire (476 A. D.), hordes of Germans poured into

Italy; they also overran France and Spain, while Arabs and Berbers occupied for generations nearly the whole of the Iberian peninsula, the island of Sicily, and portions of France. The Roumanians are partly Slavonic, and the Portuguese have Celtic and Basque blood.

In spite of these admixtures, the Romance peoples have retained many of the mental features of the old Romans. In government they display the same acknowledgment of authority, love of system and bureaucratic forms of administration, which made the Roman municipium the wonder of the world; in religion, they cultivate the same respect for external show and material rites rather than for the ideal aspects of faith; and in literature, it is only in later days that they have declared independence from the models of classicism, which too long fettered their best minds.

The ancient Romans had little idealism. They achieved nothing in poetry, philosophy or the plastic arts. It was owing to the Hellenic and Semitic influence that, under the Empire, Rome became the centre of artistic, as of all other training. These acquired qualities have been transmitted to the Romance nations, and it is to them we owe nearly all that is best in art down to the beginning of the present century. The sentiment of symmetry is native to them, and one has but to compare either the scientific works or the public buildings of France with those of Germany during the last five-and-twenty years to be convinced

how the sense of form is present in the former and defective in the latter.

3. *The Illyric Peoples.*

The ancient Illyrians were the ancestors of the modern Albanians, a people numbering in all nearly two million souls, occupying a portion of western Turkey, bordering on the Adriatic Sea, about 40° north latitude. They are scarcely more than semi-civilized, and neither in ancient nor modern times have they taken any prominent part in the history of Europe. Their language undoubtedly belongs to the Aryac stock, and has various affinities with Greek and Latin, but is a long-separated and almost isolated fragment of Aryac speech. The national name they give themselves is Skyptetars, which means mountaineers. They are also known as Arnauts.

The physical type of the Albanians is mixed, those to the south being chiefly blondes, to the north brunettes; their skulls are generally long, their stature tall, their bodies muscular. Some of them are Mohammedans, others Roman Catholics, while others belong to the Greek church. In disposition they are turbulent and warlike, caring little for the amenities of civilization.

The nearest related groups to the Illyrians are believed to have been the Thracians, who were a blonde people, the Dacians, who were largely Celtic, and the Macedonians. Some recent writers have argued that the ancient Japyges were Illyrians, and had occupied

most of the peninsula of Italy previous to the arrival of the Latins; * but this question remains obscure.

4. *The Hellenic Peoples.*

It is acknowledged even by those who maintain the Asiatic origin of the Aryans that the Greeks entered the peninsula and the adjacent isles of the Ionian and Egean seas from a northwesterly direction.† It has been also argued "from the unmixed character of their language" that they found the region uninhabited,‡ but there are reasons for believing that it was sparsely populated by a non-Aryac people of the Euscaric physical type.∥

The separation of the Greeks from the southern Aryac stream took place somewhere in the valley of the Danube, whence a portion of the original Hellenes moved down the Adriatic into the Morea, and other bands known as Carians, Leleges, Phrygians, etc., passed into Asia Minor.§ Even the island of Cyprus,

* See Dr. Fligier, *Zur prachhistorischen Ethnologie Italiens* (Wein, 1877). There is a markedly brachycephalic type among the Albanians, quite dissimilar from the Greek. I incline to believe it is Celtic. See Dr. Raphael Zampa, "Anthropologie Illyrienne," in the *Revue d' Anthropologie*, 1886, p. 625, sq.

† See Max Duncker, *History of Greece*, Vol. I, p. 11.

‡ *Ibid.*, pp. 13, 142.

∥ Taylor, *Origin of the Aryans*, p. 98.

§ The Phrygian was about as closely related to the Greek as Gothic to middle High German. See Curtius, *History of Greece*, Vol. I, p. 43, who acknowledges that the testimony of antiquity is in favor of the easterly migration of the Hellenic peoples, but denies the fact because it is in conflict with his Asiatic hypothesis.

close to the Syrian shore, appears to have supported a Greek population previous to its occupancy by the Egyptians and Semitic peoples.*

The Greek language has strong affinities to the ancient Persian and Sanscrit, showing conclusively that the Aryac tribes whose descendants developed these tongues dwelt in eastern Europe between the Slavonic peoples on the north and the proto-Hellenes on the south. At a later date, that is, about 1500 B. C., numerous Phœnician colonists occupied the shores of Greece, constructing the so-called "Cyclopean" walls, and leaving a lasting impression, both on the language and culture of the Aryac population.† Greek civilization undoubtedly derived its early inspiration from Semitic and Hamitic sources, and nearly thirty per cent. of the Greek roots are non-Aryac, proving a large admixture of foreign thought and blood at some remote epoch.

The ancient Greek physical type was rather Slavonic than Celtic. The skull was long (about 76), the forehead high, the nose narrow and straight (the "Grecian nose"), the face oval and orthognathic, the complexion fair, the hair blonde or chestnut, and the eyes blue or grey.‡ The highest bodily symmetry of the

* The Cypriote Greeks used a remarkable syllabic alphabet of great antiquity. R. H. Lang, *Cyprus*, pp. 8, 12 (London, 1878).

† On this important subject see Max Duncker, *History of Greece*, Vol. I, Chap. IV, "The Phœnicians in Hellas;" and H. Schliemann, *Tiryns*, pp. 28, 57, etc.

‡ Hovelacque et Hervé, *Précis d' Anthropologie*, p. 573.

human species was reached among them, and its proportions were perpetuated for all time in the noble products of Greek plastic art.

The modern Greeks have undergone extensive commingling with Slavonians, Turks, Bulgarians, etc., so that the ancient type is no longer common, and the population is generally darker in complexion, and the skull more globular than in classic ages.

At a very remote epoch the Hellenic peoples occupied southern Italy (Magna Grecia), Sicily, portions of southern France and the regions on both shores of the Hellespont, their easternmost colonies extending quite into Syria. During the middle ages the establishment of the capital of the eastern empire at Constantinople, gave to Greek a position in the east equal to that of Latin in the west. Crushed out, first by the Romans and next by Mongolianordes, within this century the Hellenic peoples are rapidly regaining a prominent position. Their settlements in Asia Minor are displacing the Turks, and in all the cities of the Levant they form one of the most active elements of the population.

In certain mental endowments, the Hellenic peoples won a position far ahead of all others. The sense of artistic form was possessed by them in a superlative degree; for the highest philosophic thought they showed an aptitude unparalleled in the annals of the race; in mathematics and mechanics, in poetry and the drama, in architecture and in literature, they created models of such perfection that the later generations

of other nations have been content to do little more than imitate them. To this day that culture which is properly called the highest, must be based on a long and loving study of Greek art and thought.

5. *The Lettic Peoples.*

The Letts and Lithuanians, dwelling on the shores of the Baltic Sea, partly in Prussia and partly in Russia, are unimportant peoples politically, and indeed every way but ethnographically. In this respect, however, they deserve particular attention, because in the opinion of a number of modern writers they "have the best claim to represent the primitive Aryac race."* This claim is based on the structure of their language, which seems to preserve characteristics of an exceedingly primitive type, such for instance as a dual number, numerous oblique cases, an archaic phonology; † and also on their physical appearance, being tall blondes, with blue eyes, and moderately long skulls (about 78°). Both in appearance and language they are a connecting link between the Slavonic and Teutonic peoples. The westernmost dialect of the group, the "old Prussian," now extinct, was spoken west of the Vistula, and perhaps extended to the coast of the German Ocean. Their total number at present is not over 2,000,000.

* This is the opinion of Penka, Schrader, Taylor, etc.

† "The Lithuanian language has more antique features by far than any other now spoken dialect of the whole great (Aryac) family." W. D. Whitney, *Oriental and Linguistic Studies*, Vol. II, p. 228.

6. *The Teutonic Peoples*

Separated from the Letto-Slavonians about the beginning of the Age of Bronze (see above p. 152), and extended themselves toward central and southern Germany, north into Scandinavia, and west along the shores of the North Sea. Their most celebrated ancient tribes were the Goths and Vandals, the Angles and Saxons, the Danes and Norsemen, the Franks and Alemanni, the Lombards and the Burgundians. The modern nations which with more or less justice are classed as of Teutonic descent, are the German speaking population of the German and Austrian empires, the States of Sweden and Norway, Denmark, Holland, western Switzerland and England. It is needless to say that there is little purity of descent in most of these lands; the highest is believed to be in Scandinavia. There we find still in the ascendant the tall and muscular frame, the fair hair and complexion, the blue eyes and full blonde beards which the Greek and Roman writers agree in attributing to the dreaded northern barbarians. The skull is long, the temperament lymphatic, and the complete growth attained later than in the Celtic stock.*

The mental character of the Teuton is somewhat sluggish and material, but is directed by clear insight and unconquerable pertinacity. His conquests,

* In North Germany the present percentage of blondes is 42; in the German empire, 32; in Austria, 20; in Switzerland, 11. (Virchow, *Die Verbreitung des blonden und des brunetten Typus in Mitteleuropa.*)

whether on the field of battle or in the arena of the intellect, have been attained by deliberate calculation and dogged obstinacy. His clear judgment refuses to be controlled by the mere dicta of authority. In the fourth century the Goths attached themselves to the great Arian heresy, and a thousand years later their descendants were the first to throw off the yoke of the Roman church. The profoundest metaphysician of modern times, Emmanuel Kant, was a Teuton; but his avowed purpose was to prove the futility of all metaphysical speculation. The poets and dramatists of the Teutonic nations, Shakespeare, Schiller, Goethe, were the first to break definitely with the classical models, and vindicate the freedom of the artist.

Within the last century, the extension of this group over the globe has left all others far behind. The German, the Englishman and the Anglo-American now control the politics of the world, and their contributions to every department of literature, science and the arts have been the main stimuli of the marvelous progress of the nineteenth century.

7. The Slavonic Peoples.

In the early historic period there stretched a line of kindred agricultural and nomadic tribes from the Baltic to the Black and Caspian seas, forming the northern outposts of the Aryac stock, in immediate contiguity with the Mongolian race. They were the Scythians, Sarmatians, Massagetes, etc. Their languages belonged to what is called the Slavonic group,

and had a marked family likeness; but the physical traits of the various tribes were then, as now, very various, and the most that can be said is that the majority were blondes, with flaxen hair, full beards and a tendency to dolichocephaly.*

These tribes were the ancestors of the numerous Slavonic peoples of the present day, the Russians, Ruthenians, Poles, the Wends in Prussia, the Czechs of Bohemia, the Bulgarians and Servians, the Montenegrins, Dalmatians and Croatians. All these, and some smaller communities, speak to-day Slavic dialects, though they are by no means all of pure Slavic descent. There has been a constant intermingling with the Mongolians, easily recognizable in physical traits and mental character. Though early brought into contact with civilization, the Slavonic peoples have been the last of all the Aryans to appreciate its greatest benefits. Within a century, however, their progress has been phenomenal, and, except the English people, no other nation within that period has extended so widely the domain of enlightened governmental control over half-savage tribes. The conquests of the Russians in northern and central Asia have always been attended with beneficent results for

* On the extreme diversity of skull-forms among the modern Russians see *Revue d' Anthropologie*, 1889, p. 99. The race of the "Kurgans," or ancient tombs, which are supposed to date back to the ninth or tenth century, had usually long skulls; but about 20 per cent. are short. Hervé is quite right in his statement, "Il n'y a pas un type général slave, il n'y a même pas un type slave du nord et un type slave du sud." *Précis d' Anthropologie*, p. 564.

the conquered people, and nothing but the selfish jealousy of other European governments has prevented these conquests from being far more extensive and far more fruitful of good to mankind.

The Russian is laborious, submissive, dreamy, unpractical. The individual is lost in the community, the *mir*, a communistic village association of great antiquity. His religion is the merest formality, relieved by outbreaks of fanaticism. Russian literature, which has lately become the vogue in other nations, is introspective and unhealthful, oriental in its spirit, occidental in its cravings,

The ancient Slavonic tribes had close relations with the Eranic peoples, the Medes and Persians. The connecting link seems to have been the Sigyni and Agathyrsi tribes, who dwelt south of the Carpathians, in what is now Transylvania. Both of these claimed relationship to the Medes, and when they were conquered by the Celtic Dacians, many of them followed their cousin in Asia. They were not without culture, and Herodotus speaks of them as loving luxury, and decorating themselves with gold. Ornaments of this metal, worked with creditable skill, are found in their graves, along with polished stone, implements and fragments of pottery.*

8. *The Indo-Eranic Peoples.*

The colony of the Aryans which pushed its way

* Cf. Gesa Kuun, "L' Origine des Nationalités de la Transylvanie," in *Revue d' Ethnographie*, 1888, pp. 232, sqq.

furthest to the east was the Indo-Eranic. Its various dialects prove conclusively that its ancestral tribe, when on European soil, occupied a position between the Slavonic and Hellenic peoples, probably between the Danube and the Egean Sea. Its latest contingent, the Armenian people, was a branch of the Thracian Briges, and occupied their territory in Asia Minor about 700 B. C. The main migration preceded them at least two thousand years, and divided into two branches, one establishing its chief power between the Caspian Sea and the Indian Ocean, the other crossing the Hindu-Kusch range and gradually obtaining the chief control of Hindostan. The former includes the Eranic, the latter the Indic groups of the Aryac stock.

The ancient representatives of the Eranic peoples were the old Bastrians and Persians. In the language of the former, sometimes called *Zend*, their sacred book, the *Zend-avesta*, was written probably about 500 B. C., and in the latter many cuneiform inscriptions are preserved, dating somewhat later.

Their modern descendants are the Persians and Parsees, the tribes of Afghanistan, Beluchistan, Kurdistan, and Luristan, and the Ossetes, who dwell in the vales of the central Caucasus.* Most of these are Mohammedans in religion, and in a backward condition of civilization. Their physical appearance

* Omalius d'Halloy has called attention to the statement of Potocki, *Voyages*, p. 167, that the Ossetes, by their own traditions, came from southeastern Russia, on the river Don. They are generally blondes of the brachycephalic Slavonic type.

speaks of frequent intermixtures with Mongolic and Semitic elements.

The ordinary rural population of Persia are called the Tadchiks. They are diligent agriculturists, and devoted likewise to commercial pursuits. In the latter capacity they are often met from Constantinople to China. Their language is usually the modern Persian, an Aryac dialect which has departed from the original inflectional standard almost as much as the modern English. Those who live in Kaschgar, however, speak Turkish, while retaining the physical traits of their Aryac ancestry.

Modern Persian has developed an interesting literature, consisting chiefly of poetry and works of imagination.

The Afghans and Beluchis are the nearest related to the Indian stock. Their dialects are derived from the Sanscrit, and in appearance they resemble the Indo-Aryans rather than the Persian. The assertion of some ethnographers that they are of Semitic affinities has been disproved. They are, however, mixed with Semitic and Dravidian blood. Although historically established about their present locality since the days of Alexander the Great, they retain faint traditions that their ancestors came from the west, which has led some to suppose them of Syrian extraction.* In religion they are generally fanatical Mohammedans, and their nationality is a loose federation of independent clans.

* Cf. Louis Rousselet, *Les Afghans*, in *Revue d' Anthropologie*, 1888, p. 412.

The Indic branch of this colony entered Hindostan as late as 2000--1500 B. C. Its language was then as closely akin to the Bactrian as, say, Italian and French are to-day. Its members were roving herdsmen, and first occupied the valleys of the Punjab, driving before them the Dravidas, a non-Aryac folk, who had occupied the land. The priestly class of these colonists were called Brahmans, their dialect Sanscrit, and in this we have preserved from that remote epoch many religious chants called the Rig Veda, committed to writing probably about 500 B. C. The original tongue soon split up into many dialects, as the Pali, the Prakrit and the modern Hindoostantee.

The population of the Indian peninsula to-day, who speak these dialects and are more or less of Aryac blood, numbers nearly a hundred million. They include the Rajpoots, the Djats, the Hindoos, the Hunzas, and numerous other tribes and castes. The ubiquitous gipsies or Romany are a wandering branch of these who left India as late as the twelfth or thirteenth century, and have been roving over Europe ever since.

The earliest Indo-Aryans had undoubtedly retained many pure Aryac traits. They were of medium height, oval faces, handsome regular features, symmetrical in body, the skull dolichocephalic (about 77), the complexion brunette but not brown, the eyes hazel, the hair wavy. This is the type of the highest Brahmans to-day, and throughout all their history they have exercised the utmost care to preserve it intact.

The institution of castes was undoubtedly established with this object in view, the word for "caste," *varna*, in Sanscrit meaning "color."

The mental aptitudes of the Indic immigrants are seen to advantage in their rapid conquest of Hindostan, in the civilization they developed, and in the vast literature which they created.* While in art and philosophy inferior to the Greeks, they succeeded in one point far beyond any other Aryac people, that is, in the formation of two of the most successful religions of the world, Brahmanism and Buddhism. The former, a pure pantheism, has been established nearly 4000 years, and still can claim votaries; the latter, theoretically an atheism, to-day has more believers than any other cult.

III. THE CAUCASIC STOCK.

The defiles and fastnesses of the Caucasus have been time out of mind harbors of refuge for the defeated tribes of the neighboring regions. Isolated in their secluded homes, in ceaseless warfare with their neighbors, an astonishing diversity of type and language arose. When the Romans undertook to explore these mountains, they had to call in the aid of seventy interpreters! It is not surprising, therefore, that we find communities there to-day, tribes apparently of Aryac

* Sanscrit civilization extended throughout most of Farther India and Malasia, and at one time had one of its chief seats in Cambodia, where the ruins of magnificent palaces decorated with subjects from the Ramayana attest its presence. See Abel Bergaigne, "Sur l'histoire Ancienne du Cambodge," in *Revue d'Ethnographie*, 1885, p. 477, sq.

lineage, speaking agglutinative languages, and others, of Mongolic appearance, quite unconnected with any Mongolic tongue. Divided as far as possible by linguistic resemblances, the Caucasian peoples may be placed under four groups:

1. The Lesghic, which includes the Avars, and people of Daghestan.

2. The Circassic, in which fall the Circasians proper, and others.

3. The Kistic, and

4. The Georgic, the principal members of which are the Georgians and Mingrelians.

The physical types vary greatly, but it is well known that the brunette beauties of Georgia have long been accounted among the handsomest women of the race, and many of the men are remarkably noble in feature. Intellectually, however, they have never taken a high rank.

Of them all, the Georgian tribes have the oldest culture, the traditions reaching as far back as 1200 B. C., and some trustworthy data as far as 700 B. C. They were among the early converts to Christianity, and about the beginning of this century voluntarily accepted the sovereignty of Russia.*

The Georgian girls have long been celebrated for their beauty, and merit their renown; but they age very rapidly. The Circassian women are also celebrated, but are less perfect beauties. Both have black

* A. F. Rittich, *Die Ethnographie Russlands*, p. 2. (4to, Gotha, 1878.)

eyes and dark hair, the complexion a brunette sometimes to brownness. The Circassian girls were those who principally supplied the harems of Constantinople. They went willingly, and their families saw nothing shameful in such a transaction.

Their traits and geographical location have gained for the Caucasians the credit of being the oldest as well as the purest type of the white race, which indeed has been often called the "Caucasian" race. Recent archæological researches, however, have shown that the Caucasus was not inhabited until the close of the neolithic period.* An examination of the geological condition of these mountains proves that they were covered with glaciers until a late period, especially on the southern slope, and no vestige of human occupation previous to the neolithic period has been found in this alleged cradle of the human race, and pretended place of origin of some of our domestic animals.†

* "Everything goes to prove," writes de Quatrefages, "that the Caucasus was not a center of *emigration*, but of *immigration* by various peoples at a comparatively late date. (*Histoire Generale des Races Humaines*, p. 475.) The researches of Rudolph Virchow result in showing that these mountains were peopled at about the beginning of the age of bronze.

† This is the result of the observations of Ernest Chantre, who spent years in personal investigations throughout the Caucasus. (*Recherches Anthropologiques dans le Caucase*, quoted in *Revue d'Anthropologie*, 1888, p. 480.) Virchow reached the same conclusion from his osteologic studies (*Zeitschrift für Ethnologie*, 1887, p. 97.) It is high time therefore to stop talking about the "Caucasian" race.

LECTURE VI.

THE AUSTAFRICAN RACE.

CONTENTS.—Former geography of Africa. Area of characterization of the race. Its early extension. Divisions.

I. THE NEGRILLOS. Classical tales of Pygmies. Physical characters. Habits. Relationship to Bushmen. Description of Bushmen and Hottentots.

II. THE NEGROES. Home of the true negroes. 1. The Nilotic Group. 2. The Sudanese Group. 3. The Senegambian Group. 4. The Guinean group.

III. THE NEGROIDS. Physical traits. Early admixtures. 1. The Nubian Group. 2. The Bantu group.

GENERAL OBSERVATIONS ON THE RACE. Low intellectual position. Origin of negroes in the United States; in Arabia.

WE have seen that the African continent at the period of its first occupancy was divided by the sea (now desert) of the Sahara into two unequal portions, the northern being properly an appendix of Europe. The southern portion began at the Mediterranean on the north, where the tertiary plateau of Tripoli rises above the sea, included the valley of the Nile above the Delta, and the remainder of the continent as it now is, together with the island of Madagascar, with which it was then connected by a land bridge. As the Sahara sea evaporated to become a desert, its

Scheme of the Austafrican Race.

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|-----------------------------|--|
| <p>I. Negrillo Branch.</p> | <p>1. Equatorial Group.
 { Akkas, Tikkitikis, Obongos, Dokos, Vouatoaus,
 Kimos of Madagascar.
 Bushmen, Hottentots, Namaquas, Quaquas.</p> |
| <p>II. Negro Branch.</p> | <p>1. Nilotic Group.
 Shillaks, Dinkas, Bongos, Kiks, Baris, Nuers.
 Haussas, Battas, Bornus, Kanoris, Ngurus, Akras.
 Sererus, Banyums, Wolofs, Foyes.
 { Ashantis, Dahomis, Fantis, Yorubas, Mandingoes,
 Veis, Krus.</p> |
| <p>III. Negroid Branch.</p> | <p>1. Nubian Group.
 { Nubas, Barabras, Dongolowis, Fouls, Tumalis, Nyam
 Nyams, Monbutts.
 Caffirs, Zulus, Bechuanas, Sakalavas, Damas, Herre-
 ros, Suahelis, Ovambos, Bassutos, Barolongs, Ben-
 gas, Duallas, Wagandias.</p> |
| <p>2. Bantu Group.</p> | |

vast tracts and also the lower Nile valley and the eastern coast nearly to the Equator were occupied by the Hamitic stock of the white race. The remainder of the continent was in the possession of the Austafrican or black race.

This race is divisible into three quite different types or branches, resembling each other in possessing a very dark skin, black eyes, woolly hair, a prognathic face, and generally a dolichocephalic skull, but differing widely in many minor traits. These types are the *Negrillos*, the *Negroes*, and the *Negroids*.

The general characteristics of the Austafrican race are the most positively marked of any of the varieties of our species, and as it is certainly the lowest in zoölogical analogies, by some writers it has been considered the oldest of all. This reasoning is erroneous. The black race developed quite locally, under the influence of intense heat and humidity. Its original habitat must have been where alone its purest representatives have always been permanently residing, that is, on the lowlands of western central Africa, between the equator and 12° north latitude, and from lake Tchad to the Atlantic. The hot and moist depression watered by the great river Niger, may be named as the probable "area of characterization" of the distinctive physical type of this race.

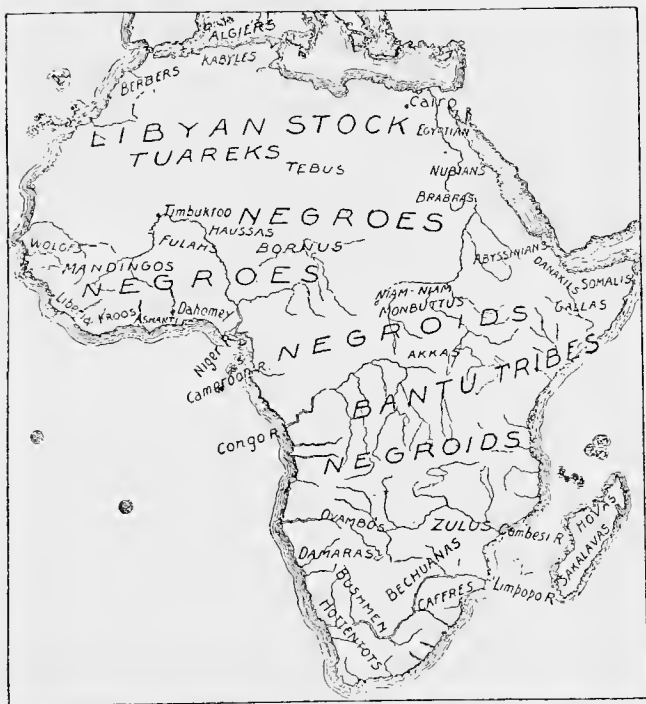
How far from this center was its maximum extension has been variously estimated. There is no evidence that the blacks ever occupied the lower Nile valley, the area of ancient Egypt. On the oldest

monuments they are represented as slaves, and the Egyptian type discloses no sign of admixture with Negro blood. They occupied at one time the southern oases of the Sahara, but their dominion never extended as far north as Fezzan. The presence of Negro colonies and mixed breeds which is visible in the northern oases, is owing to the importation of the Soudanese as slaves, and also to the extensive migrations they are still in the habit of making. I learned when visiting some of these oases, that many black families are constantly moving from one to another in pursuit of their various callings.

It is an historical fact that from the beginning of the Christian era at least, and probably much longer, the whole of the southern Sahara and the northern portion of the Niger valley have been under the absolute control of the Berbers, members of the Eur-african race. They founded in those lands the extensive monarchies of Ghanata and Melle, which maintained their supremacy through many centuries.

On the east it is not likely that the Negroes ever gained prolonged control east of the White Nile. That portion of the continent between this river and the Arabian gulf has been held by the same peoples since the time the ancient Egyptians sent their trading ships to "the land Punt," the name under which they knew it; and these peoples were not of the Aust-african type or race.

The general tendency of migration in central as in southern Africa, so far as it can be traced in historic



ETHNIC CHART OF AFRICA.

times, has been westerly and southwesterly. The densest population has been near the Atlantic coast, as if the various tribes had been crowded to the impassable barrier of the ocean.

Whether the basin of the Congo was ever held by the true Negro race, is an undecided question. If so, they were completely driven thence in proto-historic times. South of that region they certainly never penetrated, as the Hottentot and Bushman type cannot be considered as a derivative from the true Negro, but only as a descendant from a common ancestor, unlike either, and is perhaps a much older member of the family. Hence I shall begin the description of the race with

I. THE NEGRILLOS.

This diminutive form of the Spanish word *negro*, black, is applied to an unusually small variety of the race, which by several careful writers is believed to be the oldest of all the African varieties, and at one time to have occupied the most of the continent. Herodotus and other classical authors speak of the Pygmies of Ethiopia, and there is sufficient evidence to show that in his day they dwelt in localities as far north as the 18th degree of latitude.*

For a long time modern skepticism assigned these statements to the realms of fable, but the rapid exploration of Central Africa in this century proves their

* For a full discussion of this subject consult de Quatrefages, *Les Pygmées des anciens et de la science moderne*, Paris, 1886.

general correctness. Many travellers, especially Du Chaillu, Schweinfurth, Stanley, and Emin Bey, have seen and described these dwarfs, and a few of them have been brought to Europe.

At present they are not found more than two degrees north of the equator, whence they extend southward into the territory of the Congo. Their various tribes are known by different names, as Akkas, Tikkitikis, Batuas, Dokos, Obongos, Vouatouas, etc.

The height of the male is four feet six to eight inches, the body is symmetrical and remarkably agile, the facial angle is exceedingly low (about 60° -- 65°), the face markedly prognathic, the chin retreating, the lips protruding, and the ears large and ugly. The color is not black, but a dark reddish brown, and the skull has a tendency to a globular form. The nose is flat (about 55°), and there is a strong odor to the skin. The hair is woolly, and in tufts, and the body is covered with coarse short hairs, "so that the surface feels like a piece of felt."*

These extraordinary people have no settled abodes, build no towns, cultivate nothing. They depend entirely on hunting and fishing, and the barter of the products of the chase to agricultural tribes. They are skilful in the use of the bow, employing small poisoned arrows, and also manufacture spears. Voracious cannibals and unerring marksmen, they are looked on with dread by the negroes around them.

* See the very detailed observations of Emin Bey in the *Zeitschrift für Ethnologie*, 1886, s. 145. The hairy skin is also mentioned by Du Chaillu.

Of their religion we have no knowledge further than that they have an extreme dread of strange objects, lest some malignant influence lurk in them.

In the south of Africa we find another group of tribes, the Bushmen and Hottentots, also of small stature, and in many respects resembling the Akkas. They are equally far removed from the true negroes, and it is the opinion of some very competent observers, notably the German travelers, Schweinfurth and Fritsch, that all these dwarf tribes belong to the same stock.* The objection to this chiefly is that the Bushmen are often dolichocephalic, but so also are some of the Akkas, and at any rate this consideration is not alone of sufficient weight to be decisive. There is little doubt but that this dwarf stock extended over Madagascar, where they were known as Quimos or Kimos, and are believed still to exist in the southern part of the island.†

The Bushmen are much better known than the Akkas. They dwell in and around the great Kalihari desert, usually in a half-famished condition, and on the lowest social scale. They are wandering hunters, making use of the bow and arrow, and are not cannibals.

The Hottentots are a mixture of the Bushmen and

* Dr. K. Schweinfurth, *The Heart of Africa*, vol. i., p. 139; and Fritsch, *Verhandlungen der Berliner Anthrop. Gesellschaft*, 1887, s. 195.

† Leclerc, "Les Pygmées à Madagascar," in *Revue d' Ethnographie*, 1887, p. 323.

the Negroid-Bantu tribes in their vicinity. They are taller than the Bushmen, better nourished, and lead a pastoral life, possessing herds of cows and fixed habitations. Their language is remarkable for the number of its "inspirates," or "click" sounds, to form which one must draw in the breath, similar to some we use in urging horses. In form it is agglutinative. In these respects and in others, it resembles the dialects of the Bushmen, and those who are competent to speak on the subject believe that both can be traced to a common source.*

The Hottentot is rather a hopeless case for civilization efforts. He hates profoundly work, either physical or mental, and is passionately fond of rum and tobacco, or failing the latter, he will stupefy himself by smoking the wild hemp. He is too indolent to attempt agriculture, and is content to live on milk, raw roots, and the product of the chase.

Some of the English travellers, on the other hand, say the Hottentots have as much wit as their neighbors, the Dutch boors! Certain it is that before they were oppressed by the whites, they possessed herds of cows, goats and sheep, dressed hides, dug wells, manufactured pottery, in some places tilled the ground and built fixed villages or kraals.

The oft-repeated assertion that they are destitute of religion is, like all such, utterly false. On the contrary, they have quite a developed mythology, perform rites and say prayers. Their principal deity is Tsuni-

* Theodore Hahn, in *Revue d' Anthropologie*, 1887, p. 272.

goam, to whom they appeal as "the father of all things" and "our master." At the rise of certain stars they hold festivals in honor of the gods of light, and they believe the spirits of the dead wander about and should be placated.* Their cult, indeed, compares favorably with that of classic Greece.

II. THE NEGROES.

The true Negroes of Africa are confined to what the Arabs call *Belcd es Sudan*, the Land of the Blacks, the Sudan, and adjacent parts. It is therefore an error to look on that continent as mainly inhabited by negroes. At least a third of it has always been principally peopled by the whites, and another third by tribes not of pure negro stock. The true negro type, such as I have described it in my first lecture (see page 48), is scarcely seen in resident tribes south of the Equator or north of the tropic of Cancér. Within that limit they may be divided for purposes of study into four groups, the Nilotic, the Sudanese, the Senegambian and the Guinean.

1. *The Nilotic Group.*

These begin with the Changallas, east of Sennaar, in the Egyptian Sudan, between the 10th and 15th degree of north latitude. To the south of them along the White Nile are the Dinkas, the Chilluks, the Nuers, Kiks, Baris, and other tribes. These are

* See M. Pleix, "Les Hottentots et leur Religion," in *Revue d'Anthropologie*, 1887, p. 271, sq.

wholly black and in a rudimentary stage of culture, depending chiefly on hunting and fishing. They go naked, the women at most wearing little aprons. Some of them are cannibals, and all are of savage dispositions. As a rule they are tall and powerful, and brave in war.

The Nuers are spoken of as of fine physical traits, and building handsome and durable houses. Their bows and arrows, and the helmets of their warriors, resemble those depicted on ancient Egyptian monuments. It is probable that they are of mixed blood, their hair being less woolly than that of their neighbors. The Baris, who live on the White Nile, are described as an intelligent people. They cultivate millet and tobacco, understand the reduction of iron and copper from the ores found in their country, and are skilful merchants, making long voyages to exchange their wares.

2. The Sudanese Group.

The Central Sudan is the site of the most important negro states, the monarchies of Bornu, Bagirmi and Wadai. The two former are in the fruitful depressions which surround Lake Tchad, a large fresh water sea in the center of one of the most delightful tropical basins in the world. The natives are known as Kanoris, Kanembus, Marghis, Haussas, Biddumas, etc. They are true negroes, very black, and of strong body.

Further to the west commences the watershed of the Niger, the great river of Central Africa, describing

in its course a vast semicircle more than two thousand miles in length. On its banks are numerous kingdoms and some cities of magnitude, as Sansandig, with 30,000 inhabitants, and the better known Timbuctoo, with 20,000. Many of their houses are built of sun-dried bricks, and an active commerce is carried on. But it must be added that these houses and this commerce have been created by the Arabs, Tauregs, and mixed races, not by the negroes themselves. These are principally tillers of the soil, hunters, fishers and warriors. They nominally govern the states of Gando, Sokoto, Fellata and others, but Arab influence is visible everywhere, and the beneficent results of the introduction of the Mahommedan religion in this part of Africa is strongly attested even by English travellers.

The Haussas, the Todas, and the Tibbus, tribes near the border of the desert, are principally of negro blood, but with a visible strain of Hamitic descent in them. The last mentioned, indeed, should properly be classed with the Berber stock.

3. The Senegambian Group.

The country south of the Senegal river to the coast of Sierra Leone is known as Senegambia, or the western Sudan. It is claimed by the French, who own the shadow of a sway there. The tribes near the coast are the Sereres, the Wolofs, the Baniuns, and many others, all in a low stage of culture. To the east is the important nation of the Mandingoes, occupying an

extensive territory adjoining western Guinea on the south, and stretching east to the heights near Timbuctoo.

The Wolofs present a pure type of the Negro race, perfectly homogeneous, and, according to Dr. Tautain, it is impossible to find among them a single physical character hinting at an admixture of any other blood. Their faces are prognathic, and the women have the projecting gluteal region, so marked a trait in the Austafrican. Their language is agglutinative, and is an independent stock. Most of the Wolofs are Mohammedans, and in social organization they maintain a rigid system of castes, based principally on occupation.*

The principal divisions of the Mande or Mandingo nation are the Mallinki, the Soninki, and the Bambaras. They are not so pure in blood as the Wolofs, many among them having regular features, light complexions, and straighter hair. These traits are doubtless owing to their long contact with the Arabs and the Berbers, the latter of whom have controlled their country more or less for two thousand years. They are active in commerce, and cultivate the soil, the men working with the women in the fields.

4. *The Guinean Group.*

Most of the tribes of the coast of Guinea are in a condition of savagery, and have deteriorated by their

* Dr. L. Tautain, "Sur l' Ethnographie du Sénégal, in *Revue d' Ethnographie*, 1885, p. 61, sq.

contact with the whites. The petty kingdoms of Ashanti, Fanti, and Dahomey are heard of from time to time in our newspapers as the scene of some particularly bloody rite or massacre. For generations this was the central point of the slave trade, and the encouragement it gave to devastating wars led to the destruction of all progress. It is here, on what is called the Pepper Coast, that we established the Republic of Liberia, where about 20,000 negroes from the United States are carrying out a moderately successful experiment of returning to their native continent.

III. THE NEGROIDS.

A large portion of the African continent is occupied by tribes of dark hue, but lacking some of the most prominent traits of the true negro. These are the "Negroids," who are probably the products of a long and close fusion of the Negro with the Hamitic and Semitic types. Their color is not black, but a dark, reddish, coppery brown; the hair is crisp and frizzly, but not woolly; the nose is straight and better formed than that of the negro; the lips are thick, the skull long, and the peculiar odor of the negro is absent.

1 We find these traits in two groups, both of which unquestionably had their historic origin along the Nile, above the first cataract, and in the region drained by its tributaries—in other words, the locality where for ten thousand years or more the Hamites and the Negroes have been in constant contact.

We can only speculate on the numberless wars and marriages, on the extensive slave trade and commercial intercourse which throughout this period have blended the races into so many intermediate types that it becomes impossible in many cases to say with which a given tribe should be classified. To add to the confusion, a large Semitic element was added at two epochs, one when the Abyssinian branch of the Semites moved across from Arabia to occupy Abyssinia, the other when, under the impulsion of the fanaticism of Islam, the Arabs followed up the Nile in their proselyting campaigns.

The latter event began in the seventh century of our era and has continued ever since. The former probably began in earnest in the height of the power of the Himyaritic states of southern Arabia, which we may roughly put at seven centuries before Christ. A century or two later than this, negro tribes from the Sudan overran the decaying cities of the upper Nile and established a temporary control along its banks; and the emperor Diocletian induced many of them to settle as far north as Assuan.* These various influences combined to produce the numerous mixed types which one sees along the Nile, rendering its ethnography peculiarly obscure.

Under the pressure of increasing population and external inroads, these mixed peoples divided into two groups, one, the Nubian, remaining in the original district, the other, the Bantu, removing to the south and southwest.

* See Th. Waitz, *Anthropologie der Naturvölker*, Bd. II, ss. 476-8.

1. The Nubian Group

Includes the Nubas proper, who are partly a mixed people, while some of them are pure negroes from Kordofan; the Barabras, who dwell on both sides of the Nile between the first and second cataracts; the Fundjas and Bertas, further south; and the Monbutus and Nyam Nyams, or Sandehs, near Lake Victoria Nyanza, besides many tribes of less note. Most of them are more or less agricultural, and live in small villages. Their clothing is very slight, and many tattoo the skin. The Sandeh and Monbuttu are cannibals, and even eat those who die of disease. Nevertheless, they have a knowledge of metals, and are skilful iron-smiths.

The physical appearance of most of these tribes differs equally from the Arab and the negro. They are generally of medium stature with thin limbs and flat feet. The hair is crisp, but not woolly, and the color varies from a black to a white brown. The beard is meagre and the skin hairless. The features are not of the negro cast, but assimilate rather those of the European.

Most of them are agriculturists in a small way. They raise the "caffre corn" and millet, and make some efforts to irrigate their fields where it is necessary. Their dwellings are wretched huts, and their arts are of the rudest.

Not many centuries ago there was a large number of so-called Christians among them, but their religion seems to have left little impression on their character.

At present they are professedly Mohammedans, but really either fetichists or indifferent. Their morals are not well-spoken of, though it is also said that the class with whom travellers usually come into contact are not favorable specimens of the population—as is apt to be the case everywhere.

The Puls, or Fellahs, and the Fans, who live to the west in the Sudan, removed to the regions they now occupy from the Nile valley, and belong to the Negroid type. They have made extensive conquests in the vast unexplored country between Timbuctoo and the equator. Abstaining from alcohol and tobacco, condemning music and dancing, and blindly adhering to the precepts of the Koran, they are unpopular among their negro neighbors, but have brought many of them under subjection. Their occupations are both pastoral and agricultural, while as commercial travellers, and wandering smiths, they roam from one end of the Sudan to the other. They weave cotton cloth, tan and dye leather, and work it into various articles of use which are widely celebrated for their excellence, and in times past were among the most extensive slave dealers of Central Africa.

The languages of this group belong to four diverse linguistic stocks, all of the agglutinative character. It has been called the equatorial family of central Africa. They are usually agreeable to the ear, the verbs are simple, and the syntax not complicated.*

* See Dr. Frederick Müller, *Die Äquatoriale Sprach-Familie in Central Afrika*, Wien, 1889.

1. The Bantu Group

Occupies nearly the whole of Africa south of the equator, except the territory of the Bushmen and Hottentots. It includes the Sualielis, the Mazimbas and the Caffres on the east coast, the Sakalavas of Madagascar, the Bechuanas west of the Caffres, the Zulus, and nearly all the numerous tribes of the Congo basin, the Angola and Zambesi rivers.*

Their ancestors at one period resided to the north-east, probably somewhere in Ethiopia, where a prolonged fusion of Hamitic blood with the genuine Negro produced their physical type. They are usually tall and well built, the color is a dark coppery brown, the head is long (74), the hair is frizzly, and the nose rather straight.

All the Caffre people are pastoral in habits, and have large herds of cows. Agriculture is practised on a limited scale. Their temperament is turbulent and warlike, and many of them are cannibals. Their social organization is military, but slavery is unusual. Singular to say, they do not know the bow and arrow, their weapons being the war-club and a lance called an *assegai*. Their religion is a fetichism, and polygamy is universal. On the whole, they are on a higher level of culture than the Negroes of the Sudan. All the Bantu tribes are mono-glottic, that is, they speak dialects traceable to one original stem. These have a

* The word *bantu* in that language means "people" or "men." It is preferable to "Caffres," which is sometimes applied to the group, and which is an Arabic term meaning "infidels."

peculiar alliteration, and form their words by means of prefixes of elements placed before the root, this being their special method of agglutination. It is divided into three principal dialects, and is the most widely extended of any of the African linguistic stocks, except the Libyan.

The vast basin of the Congo river, including over two million square miles, is now mostly included in the "Congo Independent State." Its native inhabitants are connected by language with the Negroids of the Bantu group, and several of them retain traditions of their immigration into the districts they now inhabit. The Waganda, for instance, report that their ancestors came from the northeast, the Watuta and Masiti from near the Zambesi river. Many of them are of a light, bright brown, and are devoid of the peculiar odor of the true negro. All the tribes from Lake Tanganyika to the Atlantic speak dialects manifestly akin.

They are divided into independent nations, some of large extent, and are subject to chiefs, who rule with despotic power. Their religion is fetichistic, and though they generally are agricultural, and possess a certain degree of culture, cannibalism is or was frequent among them. Slavery also existed in some of its most deplorable forms, and up to a very recent date, if not still, there was a regular trade in young slaves to be fattened, killed and eaten on certain solemn occasions.

General Observations on the Race.—Although the

true Negroes occupied but a small portion of the African continent, the infusion of their blood into their Hamitic and Semitic neighbors, resulting in the Negroid type, was to such a degree that these mixed stocks became assimilated in character much more to the black than to the white race, and were brought approximately to the mental level of the former.

Neither the Negroes nor the Negroids ever carried out a conquest of lands occupied by the Hamites or Semites. We have vague histories of bloody wars on a large scale among themselves, and the erection of apparently powerful monarchies, but which soon fell to pieces.*

The low intellectual position of the Austrafrican race is revealed by the facts that in no part of the continent did its members devise the erection of walls of stone; that they domesticated no animal, and developed no important food-plant; that their religions never rose above fetichism, their governments above despotism, their marriage relations above polygamy. It is true that many of them practise agriculture and the pastoral life, but it is significant that the plants which they especially cultivate, the "durra" or sorghum, millet, rice, yams, manioc, and tobacco, were introduced from Asia, Europe or America.* Their cattle and sheep are descended from the ancient stocks domesticated by the Egyptians, and differ from those represented on the

* These traditions are briefly presented by de Quatrefages, *Hist. Gen. des Races Humaines*, pp. 371, sqq.

* Grandel, *Ethnography*, p. 335.

early monuments of Assyria and India. The brick-built cities of the Sudan were constructed under Arab influence, and the ruins of stone towers and walls in the gold-bearing districts of South Africa show clear traces of Semitic workmanship.* The knowledge of smelting and forging iron is of ancient date throughout Africa, and they can temper steel with skill, but the art of the smith is regarded as degrading, and their long acquaintance with this most useful of metals has not lifted them from a condition of barbarism.†

In many of the useful arts they reveal considerable skill. The weaving of grass into mats and cloth, the tanning and working of leather, the preparation of salt and soap, dyeing and pottery, are occupations which are wide spread. The true negroes are passionately fond of music, singing and dancing, and the invention of one instrument, the marimba, which is played by beating wooden keys with a stick, is attributed to them.

The tendency of the negro race in Africa is that which we observe among negro children in the public schools of the United States. Their powers develop quite as rapidly as those of white children up to a certain point, up to the age of thirteen or fourteen; but then there comes a diminution, often a cessation, of

* These are found in Bechuana land at Zimbabwe. See John Mackenzie, *Austral Africa*, Vol. I. p. 35 (London, 1887.)

† Except the Bushman and Hottentots and Negrillos, all the African tribes seem to have long known the working of iron. See Dr. F. Delisle, "Sur la Fabrication du fer dans l' Afrique Equatoriale," in the *Revue d' Ethnographie*. 1884. p. 465.

their mental development. The physical overweighs the psychical, and they turn away from the pursuit of culture. They are unwilling to undertake, they are unequal to, the more arduous intellectual tasks.

I have already remarked that the Austafricans never of their own volition made any serious inroad into the territory of the white race. Yet there are to-day probably more than twenty millions of them, including the mulattoes, living among the whites, seven millions of whom are in the United States. This extraordinary condition is the result of the enormous deportation of the blacks as slaves, which has been going on for thousands of years.

The origin of the negroes in the United States may be traced partly by the physical appearance, partly by the few words of their mother tongues which have survived the acquisition by them of the English language. These words are generally connected with the Mande stem of tongues spoken by the Mandingoes and their neighbors, whom I have already referred to as dwelling in Senegambia and the Western Sudan.* They were a nation of some importance, and having early become in great part adherents of the Mohammedan faith, established the monarchy of Melli, which in the thirteenth century extended from Timbuctoo to the coast, and forced many of the subjected tribes to learn the Mande tongue.

* On the geographical domain of the Mandingoes, see a careful note by Dr. Toutain in the *Revue d'Ethnographie*, 1886, p. 515.

Scheme of the Asian Race.

- | | | | |
|---------------------|--|---|---|
| I. Sinitic Branch. | { <ol style="list-style-type: none"> 1. Chinese Group. Chinese. 2. Tibetan. Tibetans, Ladakis, Nepalese, Bhotanese. 3. Indo-Chinese Group. <table border="0" style="margin-left: 20px;"> <tr> <td style="font-size: 2em; vertical-align: middle;">{</td> <td>Birmese, Siamese, Annamese, Cambodians, Cochinchinese, Tonkinese.</td> </tr> </table> | { | Birmese, Siamese, Annamese, Cambodians, Cochinchinese, Tonkinese. |
| { | Birmese, Siamese, Annamese, Cambodians, Cochinchinese, Tonkinese. | | |
| II. Sibiric Branch. | { <ol style="list-style-type: none"> 1. Tungusic Group. Tungus, Manchus. 2. Mongolic Group. Mongols, Kalmucks. 3. Tartaric Group. Turcomans, Yakouts, Turks (Osmanli), Usbeck, Kirghis, Cossacks, Huns. 4. Finnic Group. Finns, Lapps, Esthonian, Ugrians, Magyars, Mordvins, Samoyeds, Ostyaks, Voguls, Livonians, Karelians. 5. Arctic Group. Chukchis, Koraks, Kamschatkans, Namollos, Ghiliaks, Ainos. 6. Japanese Group. Japanese, Koreans. | | |

LECTURE VII.

THE ASIAN RACE.

CONTENTS.—Physical geography of Asia. Physical traits of the Race. Its branches.

I. THE SINITIC BRANCH. Sub-divisions. 1. The Chinese. Origin and early migrations. Psychical elements. Arts. Religions. Philosophers. Late migrations. 2. The Thibetan Group. Character. Physical traits. Tribes, 3. The Indo-Chinese Group. Members. Character and culture.

II. THE SIBIRIC BRANCH. Synonyms. Location. Physical appearance. 1. The Tungusic Group. Members. Location. Character. 2. Mongolic Group. Migrations. 3. The Tartaric Group. History. Language. Customs. 4. The Finnic Group. Origin and migrations. Physical traits. Boundaries of the Siberic Peoples. The "Turanian" theories. 5. The Arctic Group. Members. Location. Physical traits. 6. The Japanese Group. Members. Location. History. Culture. The Koreans.

IF you observe the relief of the continent of Asia, you will note that from the lofty plateau of Pamir, called by the orientals "The Roof of the World," two tremendous mountain chains diverge, the one to the northeast, finally reaching the sea of Ochotsk, the other to the southeast, meeting the southern ocean on the west of the bay of Bengal. The region between them is one of high and arid table lands, intersected by mountain ranges, and giving birth to streams which flow in circuitous courses to the eastern sea.

Along the coast the land sinks to alluvial plains, and north of this triangle, the endless forests, steppes, and "tundras" of Siberia and Turkestan continue to the Arctic sea.

The region thus described is the continent of Asia in the proper geological and zoölogical sense; the valleys of the Oxus, of Mesopotamia, and the land to the west of them, properly belong to Europe, and in fact, are included by naturalists in that continent, under the name "Eurasia."*

Asia proper is thus divided into two contrasted geographical areas, that of the table-lands and mountains on the south, and that of the plains on the north. These features have been decisive in directing the migrations of its inhabitants, and to some extent in modifying their traits. The vast majority, however, are distinctly recognizable members of one race, which has been variously termed the Asiatic, the Mongolian, or the Yellow race.

Physical Traits of the Asian Race.—As the last mentioned adjective intimates, the prevailing color is yellowish, tending in different regions toward a brown or white, but never reaching the clear white of the western European. The hair is straight, coarse and black, abundant on the head, scanty on the face, almost absent on the body. The stature is medium or undersized, the legs thin, and the muscular power inferior to that of the Eurafrican race. The skull has a tendency to the globular form (meso- or brachyceph-

* Cf. A. R. Wallace, *Geographical Distribution of Animals*.



ETHNIC CHART OF EURASIA AND ASIA.

alic), the face is round, the cheek bones prominent, the nose flat at the bridge and depressed at the extremity, the eyes are small and black, and the lids do not open fully at the inner angle, giving the peculiar appearance known as the oblique or Mongolian eye. This last trait is not uncommon in the children of Europeans, but it is generally outgrown. It is in the adult an arrest of muscular development, although in some instances it seems related to the bony confirmation of the orbit.*

Subdivisions.—These are the general traits of the Asian race, recurring more or less prominently wherever its members of pure descent are found. It is divisible, however, into two branches, corresponding roughly with the two geographical divisions of the continent to which I have alluded. The first of these branches I call the Sinitic, from the old Greek form of the word China, the other the Sibiric, an adjective from the proper orthography of the name Siberia (Sibiria). These branches are contrasted not only in geographical location, but quite as much so in language. The Sinitic peoples speak isolating, tonic, monosyllabic languages, while the tongues of the Sibiric population are polysyllabic and agglutinative.

I. THE SINITIC BRANCH.

This branch includes the people of the Chinese empire and Farther India. They are separable into three groups:—

* This is Mantegazza's opinion, *Archivio per l' Antropologia*, 1888, p. 121, sq.

1. The Chinese proper ;
2. The Thibetans ; and
3. The Indo-Chinese of Siam, Anam, Burmah, and Cochin China.

The languages of all these have peculiar features and such affinities that they all point to one ancestral stock.

1. The Chinese.

The population of China as we know it at present is the result of a fusion of a number of tribes of connected lineage. Those who claim the purest blood relate that somewhere about five thousand years ago their ancestors came from the vicinity of the Kuen-lun mountains, east of the Plateau of Pamir, and following the head waters of the Hoang-ho and Yang-tse-Kiang entered the northwestern province of China, Shen-si. Here they found a savage people, the Lolo and the Miaotse, whom they subjected or drove out, and pursuing the river valleys, reached the fertile lowlands along the coast. Their authentic annals begin about 2350 B. C. Even then they had attained a respectable stage of civilization, being a stable population, devoted to agriculture, acquainted with bronze, possessing domestic animals, and constructors of cities. The hoariest traditions speak of the cultivation of the "six field fruits," which were three kinds of millet, barley, rice, and beans. The sorghum, wheat, and oats now common in parts of China are of comparatively recent introduction.

It is interesting to inquire whether these ancient arts possessed by the Chinese were self-developed, or were borrowed in part from the Eurafrican peoples of Iran or Mesopotamia. The former opinion is that defended by Peschel and some other ethnographers. They claim that the culture of the Chinese was developed independently in the secluded and fertile valleys of their great rivers, and owed nothing to the evolution of other civilizations until commerce and travel brought them together within historic times. The individual character of Chinese ancient culture speaks strongly for this view; certainly the Chinese system of writing is one based entirely on their range and method of thought; their domestic animals are of varieties formerly unknown in western Asia; and the growth of many undoubted local industries, silk for instance, for which they were celebrated in the days of the prophet Ezekiel, prove an ancient capacity for self-development not inferior to the Eurafrican race.

On the other hand, their astronomical system, which was in use 2300 B. C., is practically identical with that of the Arabs and Indo-Aryans, and points for its origin to the Chaldees of Babylonia. In later days, that is, since the beginning of our era, undoubtedly much that has been looked upon as the outcrop of Chinese culture is due to the Indo-Aryans. My own conclusion is that in all important elements the ancient Chinese civilization was a home product, a spontaneous growth of an intellectually gifted people, but one whose capacity of development was limited, and that

later generations were satisfied to borrow and appropriate from the nations with whom commerce brought them into contact.

This insufficiency of development is the weak point of Chinese character, and is strikingly illustrated by the little use they made of important discoveries. They were acquainted as early as 121 A. D. with the power of the magnet to point to the north; but the needle was never used in navigation, but only as a toy. They manufactured powder long before the Europeans, but only to put it in fire-crackers. They invented printing with movable type in the eleventh century, but never adopted it in their printing offices. They have domesticated cattle for thousands of years, but do not milk the cows nor make butter. Paper money has been in circulation for centuries, but the scales and weight still decide the value of gold and silver, coins of these precious metals being unknown. Their technical skill in the arts is astonishing, but the inspiration of the beautiful is wholly absent.

These historic facts disclose the psychical elements of Chinese character. Its fundamental traits are sobriety, industry, common sense, practicality. The Chinaman regards solely what is visibly useful, materially beneficial. His arts and sciences, his poems and dramas, his religions and philosophies, all revolve around the needs and pleasures of his daily life. Such terms as altruism, the ideal, the universal, have for him no sort of meaning, and an explanation of them he would look upon as we do on the emptiest

subtleties of the schoolmen—a *chimera bombinans in vacuo*. Such an action as the martyr dying to atone for the sins of others he could understand only as the action of a deranged mind.

Their mental character is well shown in their religions. Originally, the Chinese combined a simple worship of the powers of nature with that of the spirits of their ancestors. The principal deity was Tien, the Heaven or Sky, in union with whom was the Earth, and from this union all nature proceeded. This natural and sexual dualism extended through all things. The affairs of life are governed by countless demons and spirits, whose tempers should be propitiated by offerings and prayers. Days and seasons are auspicious or the reverse, and most of the rites at present in use are divinatory rather than devotional.

The Buddhist religion was introduced into China about two centuries before Christ, and was officially recognized as a state cult by the Emperor Ming-ti in the year 65 A. D. Its spirit is, however, quite different from the Buddhism of Ceylon, as it has degenerated into a polytheism, a worship of the Bodhisattvas, or saints who have reached the highest stage of perfection, and might enter Nirvana, but do not, out of compassion for men. In general, it may be said that the philosophical and moral principles taught in the Buddhist classics are not known and would not be admitted as representing their faith by Chinese Buddhists.*

* D' Escayrac de Lauture, *Memoires sur la Chine*, Religion, p. 64 (Paris, 1877).

The teachings of the celebrated philosopher, Confucius (Con-fu-tse), which are a substitute for religion among the most intelligent Chinese, are in reality wholly agnostic. He declined to express himself on any question relating to the gods or the possible after life of the soul, asserting that the practical interests of this life and the duties of a man to his family and the state are numerous enough and clear enough to occupy one's whole time. When asked for some model or code of such duties, he replied by the sententious expression "When you are chopping out an axe-handle, the model is near you," meaning that it is in the hand, and that in a similar manner in practical life we always have the rule of right action in our own mind, if we choose to look for it.

The second great philosopher of China was Lao-tse, who lived in the generation following Confucius (about 500 B. C.). His doctrine was pantheistic and obscure, and his writings are considered the most difficult to decipher of all the old Chinese classics. Nor can his doctrine be called a religion. It was rather a mystical speculation on the universe. All-Being, he taught, is born of Not-Being, and existence, therefore, is an illusion.

Practically, all religions are looked upon as equally true. The Confucian will frequent the Buddhist temples, and the Buddhist priest will perform rites in the "house of reason," as the Confucian holy place is termed; or he will distribute tracts for the Christian missionaries. The government is absolutely neutral

in all religious questions, and the persecutions which have been carried on against the Christian missionaries have not been the promptings of fanaticism, but dislike of foreigners and suspicion of their intentions. The official documents of the Chinese government speak with equal contempt of every form of religion, and the rulers would never dream of interfering in any such question.*

Many of the Chinese are Mohammedans, Islam having been introduced by sea and land within the first century of the Hegira. The Chinese converts learn to repeat the Koran in Arabic, as it has not been translated into their tongue; but few understand much of it. Their rites and doctrines are learned by the verbal instruction of their religious teachers. The Chinese Mohammedans, however, recognize as their chief ruler the Khalif or Sultan, and not the Emperor at Peking, and hence the bloody revolutions which have from time to time broken out among them.

Christianity was introduced by the Nestorians in the eighth century, and now may be freely taught in any part of the realm. It has, however, had little success. There are perhaps half a million Roman Catholic and Protestant members. They belong to the lowest classes, and can occupy no official position, owing to the conflict of their dogmas with the teachings of Confucius and the agnostic principles of the government.

Within the last generation or two the Chinese have

* D' Escayrac de Lauture, *Memoires sur la Chine*, Religion, pp. 18-20 (Paris, 1877).

displayed an unwonted desire for emigration. They have swept down in hundreds of thousands on the islands of Malasia, Australia, the Sandwich Islands, Mexico, and the United States. We have as a nation felt so impotent before them that, in open contradiction to the principles of our government we have closed our ports to them, and warned them from our shores. This feeble and ignoble policy is a disgrace to us. Far better to admit them, and to train earnest men among us in the Chinese language and customs, so that these foreigners could be brought to a knowledge of the superiority of our religions and institutions, and thus be united with us in the advancement of mankind.

2. The Thibetan Group.

The mountain-ringed land of Thibet is an arid region from 10,000 to 20,000 feet in height, thickly inhabited by a people whose principal interests in life are religious. It is the centre of northern Buddhism, and at the holy city of Lhasa the living incarnation of the founder of that cult is supposed to live. In the numerous monasteries, some on almost inaccessible mountain sides, tens of thousands of monks pass their lives in religious exercises. They are vowed to celibacy, and throughout the land it is looked upon as a distinct degradation to marry. The natural result is that the relations of the sexes are relaxed, and their morals debased. Polygamy is not uncommon, and in Thibet, more than anywhere else, we find the peculiar institution of polyandry, where a woman has two,

three or four recognized husbands. It is usual for several brothers thus to have the same wife.

The women are small but well made, and exercise an unusual control in the affairs of life. The physical traits of both sexes are Mongolian, though the eyes are rarely oblique. The culture is rather low, the Thibetan not being an ardent agriculturist, but preferring the pastoral life. He milks his cows and makes butter, which with hides and fleece, leather and some local fabrics, are his principal articles of trade.

In the Himalayan valleys to the south are several nations in which the Asian blood dominates, such as the Ladakis of Cashmere, the Nepalese, the inhabitants of Bhotan and numerous others. They are generally mixed with Dravidian or Aryac blood, but speak dialects of the Sinitic type.

3. The Indo-Chinese Group.

The regions we call Farther India and Cochin China are at present inhabited by peoples speaking tonic, monosyllabic languages, who are, however, generally of mixed descent. Some of them have crimped hair and a dark complexion, suggesting the presence of some Nigritic blood; others have features more Aryac than Mongolian, hinting at an ancient fusion of Hindoostanee strains. These form the modern nations of Birma, Siam, Annam, Cambodia, Tonkin, and Cochin China.

The Birmans have a well marked round head (about 83°), oblique eyes, prominent cheek bones, and

are of medium stature and sturdy. Their color is a brownish yellow or olive. In religion they are Buddhists, but they are by no means celebrated for honesty and morality. By a curious freak of fashion, the dress of the women is open in front, but it is the height of immodesty to show the naked foot.

The Siamese call themselves "Thai," under which designation come also the Laos. They are a mild mannered people, without much energy, but willing to be taught.

The Annamese and Tonkinese are somewhat superior in culture to their neighbors, and of well marked Asiatic physiognomy. The Cambodians, called Khmers, are a mixed people, descended partly from Mongolian ancestry, partly from Dravidian and Aryac conquerors who occupied their country about the third century, and left behind remarkable vestiges of their presence in ruins of vast temples and stone-built palaces.

II. THE SIBIRIC BRANCH.

The branch of the Asian race which I have called the Sibiric, as geographically designating its prehistoric home, has also been called the Turanian, the Ural-Altaiic, the Finno-Ugric, the Mongolic, etc. Its geographical location is north of the Altai range, and the Caspian and Black seas, and from the Pacific to the Atlantic ocean. The languages of all its members are polysyllabic and agglutinative, contrasting as much with the Sinitic stock on the one hand as with

the Aryac on the other. In physical appearance individuals of reasonably pure descent present good specimens of the Asian type, the skull brachycephalic, the face round, the nose flat at the root, the eye small and black, the hair straight and coarse, the color yellowish. They are divided into many tribes, most of whom were until recently addicted to a wandering pastoral life, and though on the lower levels of culture and without coherent social bonds, they have at times loomed up as the most powerful and pretentious figures in the history of the world.

Furthest to the east is

I. The Tungusic Group,

Which occupies the coast from the northern boundary of China to Kamschatka, and westward to the Yenissei river. It embraces the Manchus and the Tungus. The former, a bold hardy people, possessed themselves of the throne of China early in the seventeenth century, and continue to rule it by a military despotism, adapted with consummate skill to the peculiarities of Chinese character. This has led to an extensive fusion of Sinitic blood among the Manchus, and also an improvement in their social status. They have become Buddhists, and their language is losing ground before the Chinese.

The Tungus to the north of them, inhabiting a vast district of forest, swamp and mountain, east of the Yenissei river, are of ruder life. They depend for subsistence on the chase and on their large herds

of reindeer. In religion they adhere to the worship of the powers of nature, and are under the control of their priests or "shamans." They present a well marked Asiatic type, a brachycephalic skull (81°), round face and oblique eyes, the hair coarse and straight, the beard scanty. In stature they are of medium height, strongly built, and the senses of sight and hearing unusually keen.

Like most nations dwelling in or near the Arctic zone, the disposition of the Tungus is decidedly cheerful and affable. He is hospitable to strangers, and honorable in his dealings. In habits, however, he has no notion of cleanliness, and the Tatar name applied to him—*tongus*, hog—expresses what his not over-nice neighbors think of his mode of life.

The tribes were subjected to the Russian domination about 1650, and have been gradually improving their condition. A portion of them called Lamuts reside on the sea of Ochotsk, and have fixed villages with houses built in the Russian style.*

2. *The Mongolic Group*

had their original home in Mongolia, a vast arid country south of the Altai range, and west of Manchuria. Before the Christian era they had extended north beyond the mountains and occupied the land around Lake Baikal, whence they proceeded easterly, and under the name of Kalnucks have settled quite to the

* A. F. Rittich, *Die Ethnographie Russlands*, ss. 20-24.

river Volga. Few of them are agriculturists, it being their preference to wander over the pastures with their flocks. Their religion is a debased form of Buddhism grafted on their ancient fetichism. In physical type they are true Asiatics, and are of a restless, warlike disposition.

In the extended region which they inhabit, stretching over seventy degrees of longitude, they have had space to multiply until their numbers once became a menace to all other nations of the Eurasian continent. Under Genghis Khan, in the beginning of the thirteenth century, they poured down in countless hordes on the cultivated nations of Asia and Europe, and in a few years established a monarchy, the then greatest in the world. About a century later his descendant, the sanguinary Tamerlane, swept Asia from the Indian Ocean to the Arctic circle; and at the close of yet another century Baber, of the same redoubted lineage, founded the empire of the Great Mogul (Mongol) in India, extending from the Indus to the Ganges. Based, however, on despotism, barbarism and fanaticism, these gigantic states disappeared in a few generations, leaving scarcely a trace of their existence except the ruins of the higher civilizations which they had destroyed.

3. *The Tataric Group.*

Derived its name from the Chinese word *ta-ta*, and is incorrectly written *Tartar*. Another Chinese name applied to them was *Tu-kiu*, from which is derived our word "Turk."

The earliest home of the Tatars or Turks was in Turkestan, north of the Plateau of Pamir and in the immediate vicinity of the Persian Aryans. Long before the beginning of the Christian era their predatory bands had repeatedly invaded the territory of the Aryans and the Semites, and quite down to two centuries ago the states which they had founded were looked upon with dread by the mightiest potentates of Europe. The Chinese annals speak of their inroads into that empire more than 200 years before our era.

At the period of the migration of nations which accompanied the dismemberment and fall of the Roman Empire, the Tatars appeared frequently in Europe, always as ruthless devastators. Attila, "the scourge of God," with his bands of Huns, the Avari, and the Bulgari, who followed in his wake, the Turcomans and the Cossacks, and finally the Osmanli Turks whose descendants now govern European and Asiatic Turkey, and whose Sultan is the political head of the Mohammedan world, all belong in this group.

It is needless to say that in these roving they have undergone much admixture. The modern Turk has more of the blood of the Semite and the Circassian in his veins than of his Tartar ancestors; but his language has maintained a singular purity, and the Tartar hunter, the Jakout, in the delta of the Lena on the frozen ocean, finds no difficulty in understanding its ordinary expressions. The Jakout speaks indeed the purest and most ancient form of the idiom, "The Sanscrit of the Tatar," as it has been called by Friedrich Müller.

The peculiarity of this language is that it has a law of vocalic harmony, by which the various suffixes added to the root change the vowels they contain in accordance with the vowel of the root. It has not only a pleasing sound, but superior flexibility and an unusual capacity to express fine shades of meaning. It is, however, losing ground both in Europe and Asia, as are all the agglutinative languages.

Next to the Turks, the Cossacks and Kirghis Tatars are prominent members of the stock. They are closely related, being branches of the same dialectic family. The former wander over the steppes between the Sea of Aral and the main chain of the Altai. It is not known when they occupied this region, but it was within historic times, and they drove from it a people of higher civilization, acquainted with the use of bronze and brass, and dwellers in cities.* The Kirghis themselves build no houses, but dwell in felt tents called "yourts." They did not cultivate the soil, deriving their food from their flocks and herds, but of late years have begun a careless agriculture. In religion they profess Mohammedanism, but in reality they cling to their ancient Shamanistic superstitions.

4. *The Finnic Group*

Has lived for certainly two thousand years or more in Northern Europe. It is mentioned by Tacitus, and its traditions as well as its dialects support this antiquity.

* Nicholas Seeland, "Les Kirghis," in *Revue d' Anthropologie*, 1886, p. 27.

That it ever extended, as many theorists pretend, into Central or Southern Europe, may now be dismissed as an obsolete hypothesis, disproved by craniological studies and a closer scrutiny of the alleged linguistic resemblances which have been urged. The probability is that the Finns and Lapps had the same ancestors as the Samoyeds of Northern Siberia, who once lived on the upper streams of the Yenissei in the Sajan mountains and around Lake Baikal. The Laplanders are said still to retain some reminiscence of the migration, and the verbal affinities of the Finnic and Samoyedic demonstrate an early relationship.*

The eastern members of the group are the Ugrians in the government of Tobolsk, some tribes on the Volga, and the Permians on the Kama river (an affluent of the Volga). The Magyars of Hungary are a branch of the Ugrians who possessed themselves of the land in the ninth century, and who still retain their language, not remote from the Finnish.

The present Finland was first occupied by the Lapps or Laplanders, who were driven northward and westward by bands continually arriving from the east. The Finns, who call themselves "Suomi," which is the same as the initial syllables of "Samo-yed," are subdivided into the Esthonians and Livonians on the Baltic, south of the Gulf of Finland, the Tavastes, Karelians, and others to the north.

The physical type of the members of the Finnic

* The best recent authority is Dr. Heinrich Winkler, *Uralaltaische Völker und Sprachen*. (Berlin, 1884.)

group has given rise to much discussion. Many individuals are blondes, with light hair and eyes, and with dolichocephalic skulls. Such are especially numerous among the Esthonians, Karelians, and Tavastes. But it must be remembered that for two or three thousand years these tribes have been in contact with the blonde and dolichocephalic type of the Aryans, represented by the ancient Teutonic and Slavonic groups (see Lect. V). It is not in the least surprising therefore to find the Finnic group everywhere deeply infused with Aryan blood. Even the remote Lapps are no exception. Nominally there are 25,000 or more of them. But Prince Roland Bonaparte says as the result of his recent observations among them, "Pure Lapps no longer exist;"* and when this is true of that isolated people, how much more is it of the tribes in closer proximity to the Eurafrian race? We may conclude with Professor Keane that the genuine traits of the Finnic group are "fundamentally and typically Mongolic," *i. e.*, Sibiric.†

There is no reason to suppose that any of the Sibiric peoples extended southerly in Asia or Europe much beyond their present boundaries. It has been a mania with many ethnographers, especially linguistic ethnographers, to discover "Turanian" peoples and dialects in numerous parts of southern and central Europe. They would have it that the Basques, the Etrus-

* *Note on the Lapps of Finmark*, p. 8. (Paris, 1886.)

* A. H. Keane, *Journal of the Anthropological Institute*, Vol. XV., p. 218.

cans, the Ligurians, the Pelasgians, were "Turanian;" that the prehistoric inhabitants of Palestine, the Hittites, and the Shepherd Kings of Egypt, were also of this ilk. They are like those other ethnographers who find "Mongoloid" indications everywhere, in America, in Polynesia, even among the Bushmen of South Africa. As Friedrich Müller says of these writers, "Mongolian" is a sack into which everything is crammed by them. There is no true science in catching at superficial resemblances or exalting remote analogies while fixed distinctions are disregarded.

5. *The Arctic Group.*

In northeastern Siberia, close to the Arctic circle, and occupying the territory between the Pacific and Arctic oceans, dwell a number of tribes in a condition of barbarism. Their languages are in general form of the Sibiric type; their physical traits vary, indicating frequent admixture. In color they are rather dark, and the skull is generally slightly dolichocephalic.

Of these the Chukchis occupy the extreme north-east of the continent. Nordenskjöld, who saw much of them, considers them the mixed descendants of various tribes, driven from more hospitable regions to the south.* Some of them have a marked Mongolic aspect, but the majority differ from that type. They are yellowish-brown in color, prominent nose, tall in stature, and well built. They are active hunters and

* N. A. E. de Nordenskjöld, in *Revue d'Ethnographie*, 1884, p. 402; also A. F. Rittich, *Die Ethnographie Russland* s. 12 (Gotha, 1878).

fishermen. The Namollos are a sedentary branch of the Chukchis, and both are related to the Koraks and Kamschatkans. The Namollos live along the Arctic coast, near East Cape, while the Koraks live to the south. "Kora" means "reindeer," and they are essentially the reindeer people, that useful animal being their chief wealth. Close to East Cape, and southward along the coast of Behring sea, are Eskimo tribes. They have lived there from the first discovery of the coast, and doubtless long before. Indeed, as far as tradition goes, the movements of the Eskimos have been from America into Asia, and not the reverse, until they were driven back by the advancing Chukchis.*

The Kamschatkans to the south are of small stature, but strongly formed. They live upon fish, and are skillful in the use of dogs for sleds. They number only about 2000 souls, and are disappearing.

The Ghiliaks live near the mouth of the Amoor river and on the Saghalin islands. They are a mixed people, the cephalic index varying from 74 to 85; some of them have abundant beards, which is very rare among the pure Asiatics.†

* I have followed in this obscure subject W. H. Dall, "On the so-called Chukchi and Namollo People of Eastern Siberia" in the *American Naturalist*, 1881, p. 857. Rittich says, erroneously, that the Namollos are not related to the Chukchis. (*Die Ethnographie Russland*, s. 15.) The relationship of the Chukchi, Korak and Kamschatkan is demonstrated by Heinrich Winkler, *Uralaltäische Völker und Sprachen*, s. 120.

† J. Deniker, *Les Ghiliaks d'après les derniers Renseignements*, pp. 5, 17. (Paris, 1884.)

The Aleutians, who occupy the long chain of islands reaching from Kamschatka to Alaska, are of medium height, flat nose, black eyes and hair, and mesocephalic. They belong to the American, not to the Asian race.

Most of these peoples speak tongues differing widely among themselves, but of the agglutinative type. They are in no way related to the American languages, and are equally remote from the Mongolian.

6. *The Japanese Group.*

The Japanese cannot claim purity of descent. Their complexion and frequent crisp or wavy hair indicate that their Asian origin has been modified by other blood. They were not the earliest inhabitants of the archipelago they occupy, but moved into it probably about a thousand years before the Christian era.* The immigrants seem from some linguistic evidence to have come from Manchuria or Mongolia, and to have found upon the islands a different people, the Ainos (properly Ainu) remarkable for their heavy beards and hairy persons. These have now been driven to the northernmost portion of the archipelago, where about 1200 of them still reside. It was long thought that the languages of the Ainos and Japanese have some affinities, but except in loan words and a general phonetic resemblance, this has now been dis-

* The date of the foundation of the Japanese ecclesiastical empire is put at 660 B.C. D'Escayrac de Lauture, *La Chine et les Chinois*, Vol. I, p. 17.

proved. The Ainos seem physically related to the Ghiliaks, and came from the north and west. They are supposed to have been the first occupants of the Kurile islands.

Like other mixed peoples, the Japanese vary so much in height, form of skull, hue and bodily proportion, that it is impracticable to set up any fixed type for them, further than to say that their general Asiatic aspect is usually unmistakable to the trained eye.* In mental qualities they are gifted, being intelligent, artistic, brave, kind, and honorable, fully alive to the benefits of a high civilization, and able to accept with profit all that the western world has to offer.† They are monogamists, and the position of woman has always been respected among them. The prevailing religion is the Shintoism or worship of the powers of nature, but Buddhism, introduced in the 7th century, has also many votaries. At heart, however, they are an irreligious people, like the Chinese, and are unconcerned about the ideal and the mystical. Many of their arts, like that of writing, were at first learned from the Chinese; but they have improved upon them, and given them other directions, as in the development of their phonetic from the Chinese syllabic alphabet.

* For details, see Hovelacque et Hervé, *Precis d' Anthropologie*, p. 468-470.

† An admirable analysis of the physical traits of the Japanese will be found in the *Journal of Speculative Philosophy*, Vol. VI., written by Benjamin Smith Lyman, long a resident among them.

Japanese art has attracted in recent years the admiration of the European world, and many motives in it have been accepted by our lovers of decorative effects. It is indeed wonderful in its technical finish, and its theory of composition has novelties which are worthy of imitation, but it is devoid of that something which we call the ideal; and its canon of proportion of the human body has never been developed to approach the classical models.

There is an extensive literature in the Japanese tongue. Most of it deals with practical subjects, and even the poetry is usually didactic in spirit.

The Koreans seem originally to have come from the same stock as the ancestors of the Japanese. They are of more positive Asiatic type, and are a mixed people, the ruling class (the Kaoli) having conquered the peninsula in the second century before our era. They closely resemble the Loochoo islanders, and doubtless are consanguine with them. Their industries are similar to those of Japan, which country, indeed, obtained many of its arts from China by way of the Korean peninsula.

LECTURE VIII.

INSULAR AND LITTORAL PEOPLES.

CONTENTS.—Variability of islanders and coast peoples. Physical geography of Oceanica. Ethnographic divisions.

- I. THE NEGRITIC STOCK. Subdivisions. 1. The Negritic Group. Members. Former extension. Physical aspect. Culture. 2. The Papuan Group. Location. Physical traits. Culture and language. 3. The Melanesian Group. Physical traits. Habits. Languages. Ethnic affinities of Papuas and Melanesians.
- II. THE MALAYIC STOCK. Location. Subdivisions. Affinities with the Asian Race and original home. 1. The Western or Malayan Group. Physical traits. Character. Extension. Culture. Presence in Hindostan. 2. The Eastern or Polynesian Group. Physical traits. Migrations. Character and culture. Easter Island.
- III. THE AUSTRALIC STOCK. Affinities between the Australians and Dravidians. 1. The Australian Group. Tasmanians and Australians. Physical traits. Culture. 2. The Dravidian Group. Early extension. Members. Culture. Languages.

BEFORE proceeding to the ethnography of the American continent, I would have you take a rapid survey of the inhabitants of that extensive archipelago whose islands are thickly dotted in the Indian and Pacific oceans, and ascertain as far as may be the relationship in which they stand to the population of the adjacent coasts.

It was Darwin's theory that the distant progenitor of man was an amphibious marine animal, and cer-

Scheme of Insular and Littoral Peoples.

- | | |
|-----------------------|---|
| I. Negritic Stock. | { 1. Negrito Group.
{ Mincopies, Aetas, Schobaengs, Mantras, Semangs, Sakates.
2. Papuan Group.
{ Papuas, New Guineans.
3. Melanesian Group.
{ Natives of Feejee Islands, New Caledonia, Loyalty Islands, New Hebrides, etc. |
| II. Malayic Stock. | { 1. Malayan Group.
{ Malays, Sumatrese, Javanese, Battaks, Dayaks, Macassars, Tagalas, Hovas (of Madagascar).
2. Polynesian Group.
{ Polynesians, Micronesians, Maoris. |
| III. Australic Stock. | { I. Australian Group.
{ Tasmanians, Australians.
2. Dravidian group.
{ Dravidas, Tamuls, Telugus, Canarese, Malayalas, Todas, Khonds, Mundas, Santals, Kohls, Bhillas. |

tainly from earliest times he has had a predilection for water-ways and the sea-coast. The lines of these have always directed his wanderings, and it is not surprising therefore that nowhere do we find the physical types of the race so confusingly amalgamated as in the insular littoral peoples. Not only is transit easier in these localities, but on islands especially there is a more rapid intermingling and a closer interbreeding than is apt to occur in continental areas. This not only blends types, but it has another effect. It is well known from observation on the lower animals that such close unions result in the formation of more plastic organisms, liable to present wide variations, and to develop into contrasting characters.* This holds good also of mental products. For instance, you might suppose that the dialects of the same island or the same small archipelago would offer very slight differences. The reverse is the case. In the same area the dialects of an island differ far more than on the mainland. This is a fact well known to linguists, and is parallel to the physical variations.† The ethnographer, therefore, is prepared to attach less importance to corporeal and linguistic differences in insular than in continental peoples.

* This subject has been presented with great amplitude of illustration by the late Moritz Wagner. See *Die Entstehung der Arten durch räumliche Sonderung*, Basel, 1889.

† Dr. Finsch, for instance, mentions that on the little island of Tanna, in Melanesia, nearly every village has a dialect unintelligible to its neighbors. *Anthrop. Ergebnisse einer Reise in der Sudsee*, s. 38. (Berlin, 1884.)

Physical Geography of Oceanica.—The island world of the Indian and Pacific Oceans is divided geologically into two regions, Australasia and Polynesia. The former, as its name denotes, is really a southeasterly prolongation of the continent of Asia, and was united to it in late tertiary times. The huge islands of Sumatra, Java and Borneo are separated from the Malayan and Siamese peninsulas by channels scarcely a couple of hundred feet deep; and from these a chain of islands extends uninterruptedly to the semi-continent of Australia. All these islands are of tertiary formation, and the subsidence which separated them from the main took place at the close of that geologic epoch.

The Polynesian islands, on the other hand, are of recent construction. They are submarine towers of coral, erected on the crests of sunken mountain ranges rising on the floor of a profoundly deep sea. Nevertheless the flora and fauna of Polynesia resemble that of Australasia in its strongly Asiatic character.

The islands of the Indian Ocean present some singular anomalies. Ceylon, though so close to the Indian peninsula, is not a geological fragment of it; while Madagascar, though four thousand miles away, was unquestionably once a part of Southern Hindostan.* This, however, was in remote eocene tertiary times, and long before man appeared. The hypothesis, there-

* This lost continent is sometimes called Gondwana land, from the recurrence of the Gondwana formation in Hindostan, Madagascar, and the east coast of Africa. See Suess, *Das Antlitz der Erde*, Bd. ii.

fore, advanced by Hæckel and favored by Peschel and other ethnographers, that the Indian Ocean was once filled by the continent "Lemuria," and that there man appeared on the globe, must be dismissed so far as man is concerned, as in conflict with more accurate observations.

Yet one must acknowledge that it has some plausibility from the present ethnography of the islands and coasts of the Indian Ocean. There is a general consensus of opinion that the earliest occupants of these regions were an undersized black race, resembling in many respects the negrillos of Austafrica. Upon these was superimposed an Asiatic stock represented by the modern Malays; and the union of these two strains gave rise to the anomalous tribes which occupy Southern Hindostan, Australia, and some of the islands.

This historic scheme, which has a great deal in its favor, permits me to classify the great island-world and its adjacent mainland into three ethnographic categories as represented on the diagram.

Of these the most ancient is

I. THE NEGRITIC STOCK.

This embraces three subdivisions, (1) the Negritos, (2) the Papuas, (3) the Melanesians.

1. The Negrito Group.

The Negritos may be called the western branch of the stock. It is noteworthy that they are located nearer to Africa, and that they more distinctly resemble the

Negrillo stock of that continent than do the Papuas. To them belong the natives of the Andaman Islands known as Mincopies, the Semangs, Mantras, and Sakaïes of Malacca, the Aetas of the Philippine Islands, and the Schobaengs of the Nicobar Isles.* It is highly probable that they inhabited a large part of Southern Hindostan, perhaps before it was united to the Himalayan highlands (see p. 88), and some have been reported in Formosa.

They are believed to have been the original possessors of Borneo, Java, Sumatra and the Celebes Islands, as well as parts of Indo-China; but except in some mixed tribes, as the Moïs of the latter region, their stock has disappeared from those localities. It is noteworthy that not a trace of their blood has been found in Asia north of the Hindu Cush and Himalaya ranges.† Some writers have thought that they proceeded along the eastern islands as far north as the Japanese archipelago, and would explain some of the present physical traits of its inhabitants by an ancient infusion of Negritic blood.

In physical aspect they are of small stature, not more than one-fourth of the adult males reaching five

* The word *aëta* is Malayan, and means "black." There is some doubt about the Semangs, as some of them are fair. See *Journal of the Anthropological Institute*, 1886, p. 429, and compare F. de Castelnau in the *Revue de géologie et d'ethnographie*, 1876, p. 174, sq.

† The Susians in the lower valley of the Euphrates show in color and hair an infusion of Negro blood, but this is attributable to the introduction of slaves into that region from Africa. (Cf. *Revue d'Anthropologie*, 1888, p. 79.)

feet in height; their color is black, hair woolly, nearly beardless, and the body smooth. The nose is flat, the face moderately prognathic, and the skull generally globular (mesocephalic index 80° -- 81°), but on the Philippines and in Indo-China rather dolichocephalic. Their forms are symmetrical, though they are thin-legged, without calves; their movements agile and graceful.*

They are averse to culture, and depend on hunting and fishing. As weapons, they know the bow and arrow, the lance, and the sarbacane or blow-pipe, but have not acquired the art of chipping stone. When they use that material, they split it by exposure to fire. They are timid and distrustful of strangers, and they well may be, as they have been pursued remorselessly by slave-catching pirates, and were constantly exposed to the brutal aggressions of their stronger neighbors.

The portrait presented of their tribal customs is rather pleasing. The social organization is based on the family, the heads of which elect the tribal chieftain, and their respect for the dead amounts to a religion. Beyond the ancestral worship they have few rites, though some ceremonies are performed to appease the evil spirits, and others at the time of full moon and thunderstorms, and at births and deaths. Among their myths is one relating to a mythical great serpent,

* For an excellent study of the Andaman islanders, see E. H. Man, in *Journal of Anthropological Institute*, Vol. XII., etc. F. Blumentritt describes the Negritos of the Philippines with head and features thoroughly Negro like. (*Ethnographie der Philippinen*, s. 5, Gotha, 1882.)

who seems to be a beneficent deity, pointing out to them where game abounds, and where the bees have deposited wild honey. They are monogamous, and neither steal nor buy their wives, the lover arranging the matter with his chosen one, and then sending a present to her father. They have learned the luxury of tobacco, and prize it highly, but for alcoholic beverages they have no longing. As they are migratory, their house building is limited to shelters of light materials, and for clothing a breech-cloth is sufficient.*

In so many respects, geographical as well as physical, do these dwarfish blacks stand between the Negro peoples of Austafrica and Australasia that we are not surprised at the conclusion suggested by Prof. W. H. Flower, that they may be "the primitive type from which the African Negroes on the one hand, and the Melanesians on the other, may have sprung." †

2. *The Papuan Group*

Is found in its purity on the great island of New

* Dr. J. Montano, in *Revue d'Anthropologie*, 1886, p. 691; F. Blumentritt, *Ethnographie der Philippinen*, s. 7. (Gotha, 1882.) The description applies principally to the Negritos of these islands, where they number about 10,000 persons.

† Flower, "On the Osteology and Affinities of the Natives of the Andaman Islands," in *Journal of the Anthropological Institute*, 1880, p. 132. The same position is taken by James Dallas, in the *Proceedings of the British Naturalists' Society*, 1884. He argues that the Negritos, Papuas and African Negroes belong to one family, the "Melanochoic," which in view of the continuity and isolation of the region it occupies must originally have been a unit.

Guinea and the chains east and west of it, but even there it discloses considerable diversity. In color the Papuas vary from a coal black to a dark brown, their hair is woolly, and there is considerable on the body and face, stature medium, legs thin. Their lips are thick, and the nostrils broad, but the nose is high and curved. Yet the best observers agree that they vary extremely in physiognomy, and that in New Guinea, tribes of equally pure blood have the skull sometimes broad, sometimes long. These variations we may attribute to the influence of insular conditions, or to some intermixture of blood.*

The Papuas belong to the lowest stages of culture. Some of their tribes do not know the bow and arrow, and few of them have any pottery. Their languages are agglutinating, but have this peculiarity, that the modifications of the root are generally by prefixes instead of suffixes, in this respect reminding one of the African rather than the Sibiric families of tongues.

Their territory includes parts of the New Hebrides, the Loyalty Isles, New Caledonia, Viti, and a variety of smaller groups. These islanders are usually of mixed type, and are known as "Melanesians." The natives of the Feejee Islands are an excellent specimen

* See A. B. Meyer, in *Mittheilungen der Wiener Anthropologischen Gesellschaft*, 1874; and A. R. Wallace, *Australasia*, pp. 452-456. The great diversity in color, hair, etc., is commented on by Dr. O. Finsch, *Anthropologische Ergebnisse einer Reise in der Sudsee*, p. 34. The difference is sometimes by villages, some being quite fair and called "white Papuas," though of pure blood ostensibly.

of these, and their archipelago forms the dividing line between the Papuan and Polynesian groups.*

3. *The Melanesian Group.*

The Melanesians, of all the islanders, present in individual cases the strongest likeness to the equatorial African Negro; yet among these there is that prevailing variability of type so frequent in insular peoples. Their color passes from the black of the typical Negro to the yellow of the Malayan; their hair, generally frizzly, may be quite straight and of any hue from black to blonde. These variations are in individuals or families, and are not owing to mixed blood.†

Unlike the Polynesians, the Melanesians are agricultural in habits, and sedentary. They build artistically decorated houses, are acquainted with the bow and arrow, occasionally make pottery, and construct shapely canoes, though not given to long voyages. The women are modest and chaste, and their religion is principally a form of ancestral worship.

The languages of these islanders betray their compound origin. In form and in the pronominal ele-

* See Rev. L. Ella, "A Comparison of the Malayan and Papuan Races of Polynesia," in *Proceedings of the Australasian Association for the Advancement of Science*, Vol. I. (1888), p. 484, sq. The author writes from 26 years' intercourse with the various islanders. He claims that the Papuas "have distinctly African resemblances, habits, customs, languages, and religions."

† These singular facts are fully supported by the studies of Dr. O. Finsch, *Anthropologische Ergebnisse einer Reise in der Sudsee*, s. 34, sq.

ments they stand related to the Malayan and Polynesian idioms, and in structure approach sometimes the richness of the former. In the Viti, for example, both prefixes and suffixes are employed, and the possessive is added to the noun. The root words are monosyllables or dissyllables, and drawn from the Papuan idioms, and the phonetics are much richer than the Polynesian.

These facts go to show that the Melanesians are physically and linguistically a mixed people, a compound of the woolly-haired black Papuas, whom we may suppose to have been the aborigines of Melanesia, with the smooth-haired, light-colored Malays, who reached the archipelago as adventurers and immigrants. As their tongues form, as it were, the second stratum of structure when compared with the Polynesian dialects, we can go a step further and say that the ethnic formation of the Melanesian islanders occurred subsequently to the construction of the Polynesian physical type and languages.*

The ethnic relationship of the various adjoining islanders to the Papuas has been studied by many observers, but its solution has not yet been reached. The Papuas themselves impressed Hale as partly Malayan—"a hybrid race," † and Virchow calls attention to the fact that a broad zone of wavy-haired peo-

* See Fr. Müller, *Grundriss der Sprachwissenschaft*, Bd. II., Ab. II., s. 160.

† Horatio Hale, *Ethnog. and Philol. of the U. S. Exploring Exped.*, p. 44.

ples intervene between the Papuas and the pure Malays, shading off into the Australians on the one hand and the Veddahs of Ceylon on the other.* This is very significant of the ethnic origin of the inhabitants of Australasia.

It is borne out by an examination of the Papuan languages. These are quite dissimilar among themselves, and appear to have been derived from a number of independent linguistic stocks. While these were originally distinct from the Malayan, it is a recognized fact that all the Papuan, and still more all the Melanesian dialects, have absorbed extensively from Malayan and Polynesian sources, and we are certain, therefore, that a similar absorption of Malayan blood has taken place.†

II. THE MALAYIC STOCK

Is by far the most important group of peoples with whom we have to do in the area we are now studying. Many ethnologists, indeed, set it up as a distinct race, the "Malayan" or "Brown" race, and claim for it an importance not less than any of the darker varieties of the species. It bears, however, the marks of an origin too recent, and presents Asian analogies too clearly, for it to be regarded otherwise than as a branch of the Asian race, descended like it from some ancestral tribe in that great continent. Its dispersion

* In the *Verhand. der Berliner Anthropol. Gesell.*, 1889, s. 162.

† See Friedrich Müller, *Grundriss der Sprachwissenschaft*, Bd. I., Ab. II., s. 30. Bd. II., Ab. II., s. 160.

has been extraordinary. Its members are found almost continuously on the land areas from Madagascar to Easter Island, a distance nearly two-thirds of the circumference of the globe; everywhere they speak dialects with such affinities that we must assume for all one parent stem, and their separation must have taken place not so very long ago to have permitted such a monoglottic trait as this.

The stock is divided at present into two groups, the western or Malayan peoples, and the eastern or Polynesian peoples. There has been some discussion about the original identity of these, but we may consider it now proved by both physical, linguistic and traditional evidence.* The original home of the parent stem has also excited some controversy, but this too may be taken as settled. There is no reasonable doubt but that the Malays came from the southeastern regions of Asia, from the peninsula of Farther India, and thence spread south, east and west over the whole of the island world. Their first occupation of Sumatra and Java has been estimated to have occurred not later than 1000 B. C., and probably was a thousand years earlier, or about the time that the Aryans entered Northern India.

The relationship of the Malayic with the other Asian stocks has not yet been made out. Physically they

* M. O. Beauregard has compared 120 common words and numerals in dialects from Madagascar to Easter Island, and proves that all are affined to the pure Malay, though with many verbal admixtures from other sources. *Bulletin de la Société d' Anthropologie*, 1886, pp. 520-527.

stand near to the Sinitic peoples of small stature and roundish heads of southeastern Asia.* The oldest form of their language, however, was not monosyllabic and tonic, but was dissyllabic. Structurally, it was largely of the "isolating" type, the relations of the members of the proposition being expressed by loose words, as is still the case in some of the Polynesian dialects. This is scarcely recognizable in the developed Malayan and Tagala idioms where there is a richly varied structure by suffixes, prefixes and infixes; but the building up of these grammatical resources can be traced back from the simple original tongue, or *Ursprache*, I have mentioned.† We cannot be far wrong, therefore, in associating in some remote past the ancestral Malays, with their isolating, dissyllabic speech, yellowish-brown complexion, short skulls and small stature, with the Indo-Chinese group of the Sinitic branch of the Asian race.

1. *The Western or Malayan Group.*

The purest type of the true Malays is seen in Malacca, Sumatra and Java. They are of medium or slightly under size, the complexion from olive to brown. The hair is black, straight and lank, and the beard is scanty. The eyes are black, often slightly

* "On ne peut guère mettre en doute que les vrais Malais appartiennent au groupe des races à petite taille et à tête plus ou moins ronde de l'Asie." Hovelacque et Hervé, *Précis d'Anthropologie*, p. 470.

† See Friedrich Müller, *Grundriss der Sprachwissenschaft*, Bd. II., Ab. II., s. 1-3.

oblique, the nose straight and rather prominent, the mouth large, and the chin well developed. The skull is short (brachycephalic), and the muscular force less than the European average.

This type is found among the Malayans of Malacca and Sumatra, the Javanese, the Madurese and Tagalas. It has changed slightly by foreign intermixture among the Battaks of Sumatra, the Dayaks of Borneo, the Alfures and the Bugis. But the supposition that these are so remote that they cannot properly be classed with the Malays is an exaggeration of some recent ethnographers, and is not approved by the best authorities.* The chief differences are that the Battak type is larger and stronger than the average Malay, the skull is more oval, the hair finer in texture and lighter in color.

In character the Malays are energetic, quick of perception, genial in demeanor, but unscrupulous, cruel and revengeful. Veracity is unknown, and the love of gain is far stronger than any other passion or affection. This thirst for gold made the Malay the daring navigator he early became. As merchant, pirate or explorer, and generally as all three in one, he pushed his crafts far and wide over the tropical seas through twelve thousand miles of extent.

On the extreme west he reached and colonized Madagascar. The Hovas there, undoubtedly of Malay blood, number about 800,000 in a population of five

* Compare Fr. Ratzel, *Völkerkunde*, Bd. II., s. 371. Dr. Hamy and Mr. Keane have questioned the relationship of the Battaks.

and a half millions, the remainder being Negroids of various degrees of fusion. In spite of this disproportion, the Hovas are the recognized masters of the island. Their language stands in closest relation to that of the Battaks of Sumatra. In physical appearance they have a striking likeness to the Polynesians, so close, indeed, that the one may readily be mistaken for the other.*

On the great islands near the Malaccan peninsula there are tribes in different stages of culture. Those on the highest plane are the Javanese, whose ancient language, the Kavi, is preserved in their sacred books. The Battaks of Northern Sumatra are an agricultural people, who have not accepted Islam, and belong to the old stock of the Asian immigrants. They are still to some extent cannibals, a convict condemned to death being eaten by the community. The Dayaks of Borneo are not less truculent, being cannibals and famous "head hunters"—that is, their highest trophy of war and proof of manhood is to bring home the head of a slain enemy. Some of them are agriculturists, others sea robbers. Their dwellings are of the communal character, and their religion an idolatry, the figures of the gods being carved in wood.

The Macassars of the Celebes and the Tagalas of the Philippines are Malays of milder habits, and possess commercial importance and literary culture. In these islanders there is a mixed class called Alfures,

* Dr. O. Finsch, *Anthropologische Ergebnisse einer Reise in der Sudsee*, s. 1. (Berlin, 1884.)

who have attracted some attention as differing from the prevalent type, but they are of no ethnographic importance.

The Malays probably established various colonies in Southern India. The natives at Travancore and the Sinhalese of Ceylon bear a strongly Malayan aspect. But the latter speak a dialect largely Aryac, and the Veddahs in the interior of the island have a much lower cephalic index than the Malay (about 72), and their language is derived about one-half from Aryac and the rest from Dravidian (Tamil) sources.*

2. *The Eastern or Polynesian Group.*

Some ethnographers would make the Polynesians and Micronesians a different race from the Malays; but the farthest that one can go in this direction is to admit that they reveal some strain of another blood. This is evident in their physical appearance. They are uncommonly tall, symmetrical and handsome, a stature over six feet not being unusual among them. Their features are regular, their color a light brown. Their hair is black, smooth and glossy, sometimes with a curl or crisp in it, which betrays a touch of Papuan blood. All the Polynesian languages have some affinities to the Malayan, and the Polynesian traditions unanimously refer to the west for the home of their ancestors. We are able, indeed, by carefully

* A Thompson, "On the Osteology of the Veddahs," in *Journal of the Anthropological Institute*, 1889. "Veddah" in Sanscrit means "hunter."

analyzing these traditions, to trace with considerable accuracy both the route they followed to the Oceanic isles and the respective dates when they settled them.

Thus, the first station of their ancestors on leaving the western group, was the small island of Buru or Boru, between Celebes and New Guinea. Here they encountered the Papuas, some of whom still dwell in the interior, while the coast people are fair.* Leaving Boru, they passed to the north of New Guinea, colonizing the Caroline and Solomon Islands, but the vanguard pressing forward to take possession of Savai in the Samoan group and Tonga to its south. These two islands formed a second centre of distribution over the western Pacific. The Maoris of New Zealand moved from Tonga—"holy Tonga" as they call it in their songs—about six hundred years ago. The Society islanders migrated from Savai, and they in turn sent forth the population of the Marquesas, the Sandwich Islands and Easter Island.

The separation of the Polynesians from the western Malays must have taken place about the beginning of our era. This length of time permits the best adjustment of their several traditions, and is not so long as to render it difficult to explain the similarity of their dialects and usages.†

* On the inhabitants of Boru, see G. W. Earl, *Native races of the Indian Archipelago*, p. 185.

† Other Hypotheses about the Polynesians are that they are an autochthonous race developed in New Zealand (Lesson et Martinet, *Les Polynésiens*, Paris, 1884); that they came from America; that they are of Aryac descent (Fornander).

The disposition of the Polynesian is an improvement on that of the Malay. He is more to be trusted, and is more affable. In culture he is backward. Pottery is scarcely known, agriculture is not carried on, cannibalism was nigh universal, polygamy was prevalent, and the relation of the sexes was exceedingly loose, especially among the unmarried. The islanders, as may be expected, are singularly skilful navigators and build excellent canoes. They do not hesitate to undertake voyages of five or six hundred miles, and are such excellent swimmers that if the boat capsizes they are in no danger of drowning. Their weapons were the lance, the sling and club, but they were not acquainted with the bow and arrow.

Their religion, until the introduction of Christianity, was a frank polytheism. The deeds of the gods are related in long chants, which also contain many historic references.* The word "taboo" comes from Polynesia, and means "sacred," "holy." All objects which the priests declared "taboo" were considered to be consecrated to the supernatural powers, and to touch them was to incur sure death. They were accustomed to set apart enclosures which were "taboo," and served as temples, and the images of the gods, in wood or stone, rudely carved, were there erected.

The migrations of the Polynesians have been closely studied by Horatio Hale, *Ethnography and Philology of the U. S. Exploring Expedition*, pp. 116-196 (1847). Many later writers have pursued the subject.

* The sacred legends and rites of the Polynesians have been collected by Bastian, *Inselgruppen in Oceanien* (Berlin, 1883), and other writers.

Although their houses were generally of brush and leaves, on several of the islands they constructed stone edifices. Such are found upon the Caroline islands, on sacred Tonga, on Pitcairn, and on Easter island, the last mentioned have excited particular attention, and have given rise to various foolish theories about a previous race of high culture, and about relationship to the civilized American nations of Peru and Central America. It is enough to say that nothing on Easter island is peculiar to its culture. There are stone platforms with rude stone images on them thirty or forty feet high; there are the foundations of stone houses; there are remains of a primitive ideographic writing. All these occur also on the other islands I have named, and the natives of Rapa-nui, as the island is called by the Tahitians, have nothing in their language or arts to distinguish them from other Polynesians. The prehistoric colossal structures on Ponape, Lalla and others of the Caroline group, are of basalt, and testify to a creditable ambition and skill on the part of the builders; but careful investigations prove that they are "without any doubt" to be attributed to the ancestors of the present inhabitants.*

III. THE AUSTRALIC STOCK.

Under the heading of the Australic branch, I would class together the primitive inhabitants of the peninsula of Hindostan and of the semi-continent of Australia.

* Dr. O. Finsch, *Anthropologische Ergebnisse einer Reise in der Sudsee*, s. 19.

The collocation may seem hazardous, but it has its reasons. The physical traits of the two are not remote. In both the hair is black and curly, showing Negritic blood, the skull is medium or long, the lips are full, the nose not prominent, the color brown, and there is a beard. The relationship of the Australians to some of the hill tribes of central India has been referred to as possible by the naturalist Wallace, and the linguist Caldwell finds Australian analogies in the Dravidian tongues, and points out that both are of the agglutinative type, and with family resemblances.* The suggestion seems close at hand that the Australian is a compound of the Negritic stock of Australasia with the Malay, the Dravidian perhaps with the Malay, and also with some other Asian people.† The English ethnologist, C. Staniland Wake, has advanced an almost equivalent theory to the effect that a straight-haired stock combined with the Australasian Negrito to form the Australians, but this straight-haired people he would attach to the "Caucasian" (Eurafrican) race, for which there is little or no evidence.‡

* De Quatrefages found the Australian sub-type of skull reappearing among the Dravidians, and he goes so far as to add, "The affinity of the Australian and Dravidian languages is now universally admitted." *Hist. Gen. des Races Humaines*, p. 333. He quotes the authority of Maury; but Fr. Müller thinks the analogies "too weak" to be convincing. (*Grundriss der Sprachwissenschaft*. Bd. II., s. 95-98.)

† Dr. Friedrich Ratzel acknowledges the probable inroads of Malays in southern India, but condemns classing the Dravidas with the Australians. *Völkerkunde*, Bd. III., s. 411 (Leipzig, 1888).

‡ Wake, "The Papuans and Polynesians," in *Jour. of the Anthrop. Institute*, Nov., 1882.

I. The Australian Group

Occupies the whole semi-continent of Australia and the island of Tasmania south of it. The last of the Tasmanians perished some years ago, and Carl Lumholtz, one of the most recent of Australian explorers, calculates the survivors of the native inhabitants of that continent at not over 30,000 individuals of pure blood.

Their appearance differs considerably, although it is generally conceded that they speak related idioms, and originally came from one lineage and language. The Tasmanians had quite frizzly or woolly hair, and according to reliable observers correspond closely in habits and appearance to the Papuas.* Among the Australians of the north and northeast coast this resemblance is still accentuated, and no wonder, when the islands in Torres straits, one in sight of the other, form natural stepping stones from New Guinea to Australia. On the west coast the hair is straighter, and the signs of Malay blood are obvious. The color varies from dark to light brown, and the beard is generally full, the body being also well supplied with hair.†

* This is the positive statement of Geo. W. Earl, who had seen Tasmanians. (*Native Races of the Indian Archipelago*, p. 188. London, 1853.) It is contradicted by Dr. Hamy, in the *Crania Ethnica*, for no other reason, apparently, than that it does not fit his theories.

† "The cast of the face is between the African and Malay types." H. Hale, *Ethnography and Philology of the U. S. Exploring Expedition*, p. 107. Mr. Hale describes their hair as "long, fine and wavy, like that of Europeans," the color usually a dark brown.

The culture status of the Australians is generally put at the very lowest. Their roving tribes are without government, they do not till the ground, they go naked, and do not know the bow and arrow. Their weapons are the spear and the boomerang, a crooked club which they throw at the object. The story that it returns to the thrower is only true of some used in sport (Lumholtz). Marriage among them is by robbery or purchase, and the women are treated with deliberate cruelty. Cannibalism in its most revolting form is usual, and the sick are deserted. Their religion is a low fetichism, and they have no idols nor forms of worship. Certain rites, as fasting, sacrificing, and solemn dancing, clearly have reference to the supposed supernatural powers. In some parts, however, they draw figures of animals with charcoal on the sides of caves, and manufacture rude stone carvings.* They chip flakes into spear-points, and are skilful in making fire from friction, in catching animals and other simple arts. Their songs are numerous, and are chanted in correct time.

The *corroborees*, or dances, constitute their principal religious and social festivals. These are usually celebrated at night, by the light of great fires, and accompanied by a horrible clangor, which passes for music, produced from drums, flutes, and a sort of tambourine. The chants relate to adventures in war and

* Edwin N. Curr, *The Australian Race*, Vol. III., p. 675 (London, 1887).

love, in boasting recitals, and in descriptions of ancestral power. The initiation of the young of both sexes into the duties of adult life is always accompanied with some solemnities, such as fasting, incising the flesh in lines so as to leave prominent scars, cutting the hair, breaking one or more teeth, and with local mutilations of a painful and shocking character.

As usual among the primitive peoples, sickness and death are regarded, not as natural events, but as the maleficent action of evil spirits or living enemies. When ill, therefore, the services of the priest or magician is called in to counteract the sorcery and to name the adversary who sets it on foot. These adepts employ the same Shamanistic practices, rubbing, blowing, sucking, howling, which are popular with them everywhere, and if these fail, at least at death they can suggest who the hidden enemy has been, and thus furnish a pretext for the avenger of blood to start forth on his murderous mission.

In some parts the dead are burned; in others, the flesh is scraped from the bones, or the body is exposed until they are cleaned by the ants and other animals, and then they are carefully collected and placed in an ossuary; or again, the body is buried in the hut where the death took place, this is torn down and thrown on the grave, and the place is deserted. The spirits of the dead are supposed to haunt the place where the body is left, and as a rule to exercise an evil influence on the living. Food is occasionally placed on the grave, and some ceremonies of mourning are repeated

for eleven months; usually, the survivors refrain from repeating the name of the deceased, even if it is a word of common use.*

Rudimentary as was their culture, it is interesting to notice that they had developed the conception of writing: They were accustomed to send information, and even describe events, by incising peculiarly formed notches, lines and figures on pieces of wood, called "message sticks." These would be sent by runners for hundreds of miles, and could be read by the recipient through the conventional meanings assigned to the characters.†

2. *The Dravidian Group.*

I have already given you a description of the general appearance of the Dravidas or Dravidians. There is some physical resemblance among them all, but here the similarity ceases, as they vary greatly in culture and language. They are held to have been the pre-Aryac population of India, and one of their tribes, the Brahui, is found north of the mountains, in Beloochistan. When the Aryans entered India, about two thousand years before our era, they either subjugated, destroyed or drove to the south these earlier possessors of the soil. They either became the lowest caste in the Aryac states, the "sudras," or they

* Elisée Reclus, "Contributions à la Sociologie des Australiens," in *Revue d'Anthropologie*, 1887.

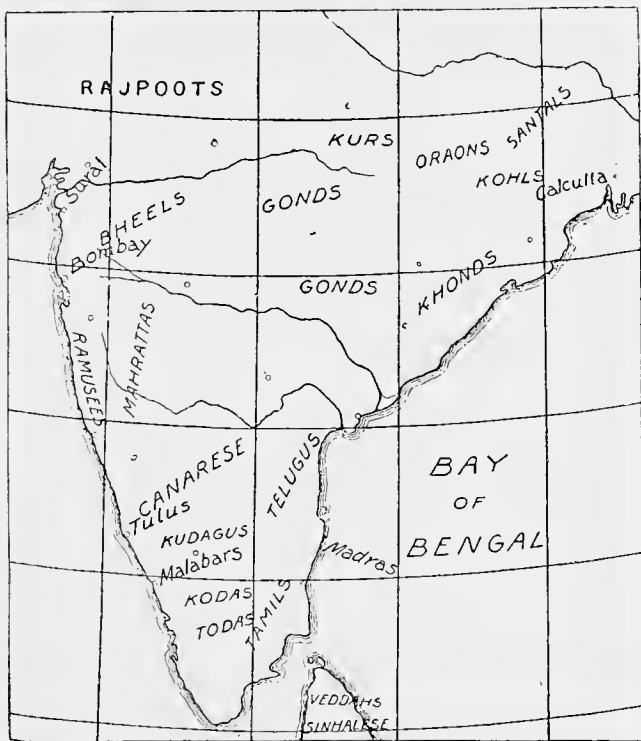
† For abundant authorities see A. Bastian, *Inselgruppen in Ozeanien*, ss. 121, 122 (Berlin, 1883).

fled to the swamps and hills. Their total number at present is about 50,000,000.

Linguistically they are divisible into two distinct groups, the Dravidas proper, and the Mundas. To the former belong the Tamuls, the Telugus, the Canarese, the Malayalas, the Todas, the Khonds, and other tribes of less importance. The skin of all these is brown, the hair curly, the head tending to dolichocephaly. The Todas of the Neilghery hills are regarded as of unusually pure blood. They are tall, with full beards and prominent noses, the hair black and bushy. Undoubtedly many of the Dravidas partake of Aryac blood through the long domination of that stock.

Most of the Dravida nations are cultured, possessing a written language and a literature. They are pastoral and agricultural in habits, and usually the women are well treated, and enjoy a certain degree of freedom. Monogamy is the prevalent custom, but polyandry (see p. 53) is frequent, and infanticide, particularly of female children, is looked upon with approval. Their religion is a nature-worship of a low order, consisting principally of conjurations against evil spirits and divination by sorcerers.

The Munda tribes include the Kohls, the Santals, the Bhillas and others, dwelling on the highlands of the interior, northwest of Calcutta. They are hunting and agricultural peoples, having a better reputation among the Europeans than their Hindoo neighbors. The physical type among them is variable, natives of



ETHNIC CHART OF HINDOSTAN.

the same village differing in color and hair, indicating frequent crossings with the Aryac and other foreign stock.

The languages of the Dravidians, though of the type called agglutinative, have no demonstrative connection with those of the Sibiric (Altaic) stock, and the efforts to connect them historically are visionary. The original roots are monosyllabic, which are modified by the addition of suffixes. These suffixes often show the same "vocalic harmony" to which I have referred in some of the Sibiric idioms (above, p. 212); but its action is reversed, as while in Turkish, for example, the vowel of the suffix alters the vowel of the root, in Telugu it is the latter which controls the former.

Although all the Dravida tongues have borrowed more or less from the Sanscrit, it has been in words only, and their peculiar structure stands as ever wholly apart from all Aryac speech. There is something that looks like inflection in them, but the case-endings are merely particles referring to place, and not true grammatical cases. They are still in that stage of growth where the distinction of verb and noun is ill-defined, and relative pronouns are absent.

The literature which has been developed in these tongues is of respectable extent. That of the Tamils of southern Hindostan and northern Ceylon stands in the front rank. It is in both prose and poetry, special forms of expression being characteristic of the latter. Everywhere it reveals Aryac inspiration, and illustrates

the general traits of the Dravidian intellect, ready facility in imitating and adapting the forms of a higher civilization, but limited originality and independence of thought.

LECTURE IX.

THE AMERICAN RACE.

CONTENTS.—Peopling of America. Divisions.

1. The Arctic Group. Members. Location. Character.
2. The North Atlantic Group. Tinneh, Algonkins, Iroquois, Dakotas, Muskokis, Caddoes, Shoshonees, etc.
3. The North Pacific Group. Tlinkits, Haidahs, Californians, Pueblos.
4. The Mexican Group. The Aztecs or Nahuas. Other nations.
5. The Inter-Isthmian Group. The Mayas. Their culture. Other tribes.
6. The South Atlantic Group. The Caribs, the Arawaks, the Tupis. Other tribes.
7. The South Pacific Group. The Qquichuas or Peruvians. Their culture. Other tribes.

THE American Race includes those tribes whom we familiarly call "Indians," a designation, as you know, which perpetuates the error of Columbus, who thought the western land he discovered was a part of India.

I shall not undertake to discuss those extensive questions, Who are the Indians? and, When was America peopled? and, By what route did the first inhabitants come here? These knotty points I treat in another course of lectures, where I marshal sufficient arguments, I think, to show satisfactorily that America was peopled during, if not before, the Great Ice Age; that its first settlers probably came from Europe by way of a land connection which once existed over the

northern Atlantic, and that their long and isolated residence in this continent has moulded them all into a singularly homogeneous race, which varies but slightly anywhere on the continent, and has maintained its type unimpaired for countless generations. Never at any time before Columbus was it influenced in blood, language or culture by any other race.

So marked is the unity of its type, so alike the physical and mental traits of its members from Arctic to Antarctic latitudes, that I cannot divide it any other way than geographically, as follows :

1. Arctic Group.
2. North Atlantic Group.
3. North Pacific Group.
4. Mexican Group.
5. Inter-Isthmian Group.
6. South Atlantic Group.
7. South Pacific Group.

All the higher civilizations are contained in the Pacific group, the Mexican really belonging to it by derivation and original location. Between the members of the Pacific and Atlantic groups there was very little communication at any period, the high Sierras walling them apart ; but among the members of each Pacific and each Atlantic group, the intercourse was constant and extensive. The Nahuas, for instance, spread down the Pacific from Sonora to the straits of Panama ; the Inca power stretched along the coast for two thousand miles ; but neither of these reached into the Atlantic plains. So with the Atlantic groups ; the

Guarani tongue can be traced from Buenos Ayres to the Amazon, the Algonkin from the Savannah River to Hudson Bay; but neither crossed the mountains to the west. The groups therefore are cultural as well as geographical, and represent natural divisions of tribes as well as of regions.

The northernmost of this division is

1. The Arctic Group.

This group comprises the Eskimo and Aleutian tribes.

The more correct name for the former is that which they give themselves, *Innuít*, "men." They are essentially a maritime people, extending along the northern coasts of the continent from Icy Bay in Alaska on the west, almost to the Straits of Belle Isle on the Labrador side. Northward they reach into Greenland, where the Scandinavians found them about the year 1000 A. D., although it is likely that these Greenland Eskimos had come from Labrador no long time before.*

Throughout the whole of this extensive distribution, they present a most remarkable uniformity of appearance, languages, arts and customs. The unity of their tribes is everywhere manifest.

The physical appearance of the Eskimos is characteristic. Their color is dark, hair black and coarse, stature medium, skull generally long (dolichocephalic,

* Cf. A. T. Packard, "Notes on the Labrador Eskimos," in *American Naturalist*, 1885, p. 473.

71--73). The beard is scant and the cheek bones high.

They usually have a cheerful, lively disposition, and are much given to stories, songs and laughter. Neither the long nights of the polar zone, nor the cruel cold of the winters, dampens their glee. Before their deterioration by contact with the whites, they were truthful and honest. Their intelligence in many directions is remarkable, and they invented and improved many mechanical devices in advance of any other tribes of the race. Thus, they alone on the American continent used lamps. They make them of stone, with a wick of dried moss. The sledge with its team of dogs is one of their devices; and gloves, boots and divided clothing are articles of dress not found on the continent south of them. Their "kayak," a light and strong boat of sealskins stretched over a frame of bones or wood, is the perfection of a sea-canoe. Their carvings in bone, wood or ivory, and their outline drawings, reveal no small degree of technical skill; and they independently discovered the principle of the arch and apply it to the construction of their domed snow-houses. The principal weapons among them are the bow and arrow and the lance.

The Aleutians proper live on the central and eastern islands of the Archipelago named from them. Their language differs wholly from the Eskimo. At present they are largely civilized.

2. The North Atlantic Group.

The spacious water-shed of the Atlantic stretches from the crests of the Rocky Mountains to the Eastern Ocean. Whether the streams debouch into Hudson Bay or the Gulf of Mexico, their waters find their way to the Atlantic. The most of this region was in the possession of a few linguistic stocks, whose members, generally at war with each other, roved widely over these lowlands.

The northernmost of them was the *Athapasca* stock. Its members called themselves Tinnéh, "people," and they are also known as Chepewyans, an Algonkin word meaning "pointed skins," applied from the shape of the skin robe they wore, pointed in front and behind.*

Their country extended from Hudson Bay to the Cascade Range of the Rocky Mountains, and from the Arctic Ocean southward to a line drawn from the mouth of the Churchill river to the mouth of the Frazer river. The northern tribes extend westward nearly to the delta of the Yukon river, and reach the seacoast at the mouth of the Copper river. At some remote period, some of its bands forsook their inhospitable abodes in the north, and following the eastern flanks of the Cordillera, migrated far south into Mexico, where they form the Apaches and Navajos, and the Lipans near the mouth of the Rio del Norte.

The general trend of the pre-historic migrations of

* E. Petitot, *Monographie des Déné Dindjié*, p. 24 (Paris, 1876).

the Tinnéh, seems to have been from a centre west of Hudson Bay, whence they diverged north, west, and southwest.

In physical features they are of average stature and superior muscular development. The color varies considerably, even in the same village, but tends toward a brown. The skull is long, the face broad, and the cheek-bones prominent.*

In point of culture the Tinnéh stand low. The early missionaries who undertook the difficult task of bringing them into accord with Christian morals have left painful portrayures of the brutality of the lives of their flocks. The Apaches have for centuries been notorious for their savage dispositions and untamable ferocity. They are, however, skilful hunters, bold warriors, and of singular physical endurance.

Immediately south of the Athabascans, throughout their whole extent, were the *Algonkins*. They extended uninterruptedly from Cape Race, in Newfoundland, to the Rocky Mountains, on both banks of the St. Lawrence and the Great Lakes. The Blackfeet were their westernmost tribe, and in Canada they embraced the Crees, Montagnais, Micmacs, Ottawas, etc. In the area of the United States they were known in New England as the Abnakis, Passamaquoddies, Pequots, etc.; on the Hudson, as Mohegans; on the Delaware, as Lenape; in Maryland, as Nanticokes; in Virginia, as Powhatans; while in the Ohio and Mis-

* See F. Michel, *Dix huit ans chez les Sauvages* (Paris, 1866), and Petitot, ubi supra.

Mississippi valleys, the Miamis, Sacs and Foxes, Kickapoos and Chippeways, were of this stock. Its most southern representatives were the Shawnees, who once lived on the Tennessee, and, perhaps, the Savannah river, and were closely related to the Mohegans of New York.

Most of these tribes were agricultural, raising maize, beans, squash and tobacco; they occupied fixed residences in towns most of the year; they were skilled in chipping and polishing stone, and they had a definite, even rigid, social organization. Their mythology was extensive, and its legends, as well as the history of their ancestors, were retained in memory by a system of ideographic writing, of which a number of specimens have been preserved. Their intellectual capacities were strong, and the distinguished characters that arose among them—King Philip, Tecumseh, Black Hawk, Pontiac, Tammany, Powhatan—displayed, in their dealings of war or peace with the Europeans, an ability, a bravery and a sense of right, on a par with the famed heroes of antiquity.

The earliest traceable seat of this widely extended group was somewhere between the St. Lawrence River and Hudson Bay. To this region their traditions point, and there the language is found in its purest and most archaic form. They apparently divided early into two branches, the one following the Atlantic coast southward, the other the St. Lawrence and the Great Lakes westward. Of those that remained, some occupied Newfoundland, others spread-

over Labrador, where they were thrown into frequent contact with the Eskimos.

Surrounded on all sides by the Algonkins, the *Iroquois* first appear in history as occupying a portion of the area of New York State. To the west, in the adjoining part of Canada, were their kinsmen, the Eries and Hurons; on the Susquehanna, in Pennsylvania, the Conestogas; and in Virginia, the Tuscaroras. All were closely related, but in constant feud. Those in New York were united as the Five Nations, and as such, are prominent figures in the early annals of the English colony. The date of the formation of their celebrated league is reasonably placed in the fifteenth century.

Another extensively dispersed stock is that of the *Dakotas*. Their area reached from Lake Michigan to the Rocky Mountains, and from the Saskatchewan to the Arkansas rivers, covering most of the valley of the Missouri. A fragment of them, the Tuteloes, resided in Virginia, where they were associated with the Monacans, now extinct, but who were probably of the same stock.

They are also called the Sioux. Their principal tribes are the Assiniboins, to the north; the Hidatsa or Crows, at the west; the Winnebagoes to the east; the Omahas, Mandans, Otoes, and Poncas, on the Missouri; the Osages and Kansas to the south.

The *Chahta-Muskoki* stock occupied the area of what we call the Gulf States, from the Atlantic to the Mississippi River. They comprised the Creeks or

Muskokis, the Choctaws, Chickasaws, and later the Seminoles. The latter took possession of Florida early in the last century. Previously that peninsula had been inhabited by the Timucuas, a nation now wholly extinct, though its language is still preserved in the works of the Spanish missionaries.

The Creeks and their neighbors were first visited by Fernando de Soto in 1540, on that famous expedition when he discovered the Mississippi. The narratives of his campaign represent them as cultivating extensive fields of corn, living in well fortified towns, their houses erected on artificial mounds, and the villages having defences of embankments of earth. These statements are verified by the existing remains, which compare favorably in size and construction with those left by the mysterious "Mound Builders" of the Ohio valley. In fact, the opinion is steadily gaining ground that probably the builders of the Ohio earthworks were the ancestors of the Creeks, Cherokees, and other southern tribes.*

Much of the area of eastern Texas, and the land north of it to the Platte River, were held by various tribes of the *Caddocs*. Fragments of them are found nearly as far north as the Canada line, and it is probable that their migration was from this higher latitude southerly, though their own legends referred to the east as their first home. They depended for subsistence chiefly on hunting and fishing, thus remaining in

* See an article on "The Probable Nationality of the Mound Builders," in my *Essays of an Americanist*, p. 67 (Philadelphia, 1890).

a lower stage of progress than their neighbors in the Mississippi valley.

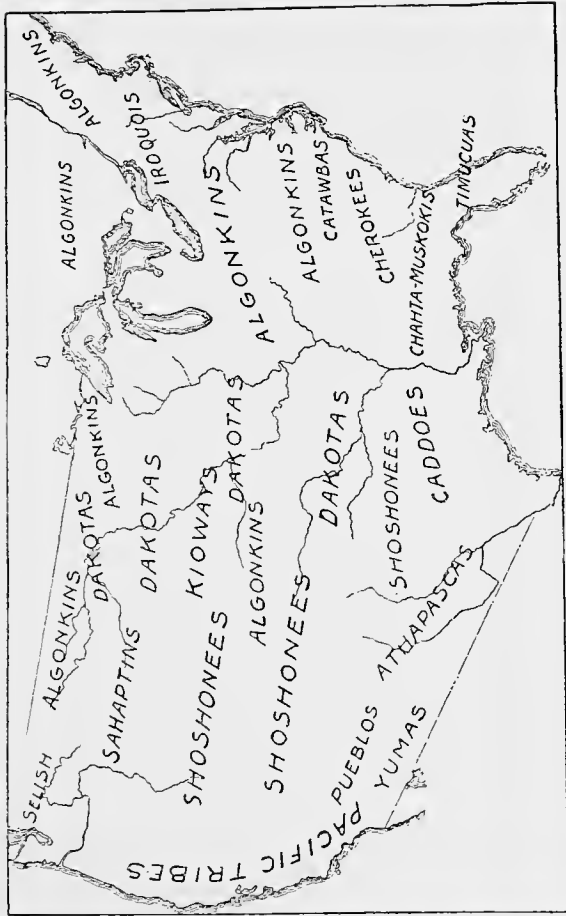
Sometimes this is called the *Pani* family, from one of their members, the Pawnees, on the Platte River. Their most northerly tribe was the Arickarees, who reached to the middle Missouri, and in the south the Wichitas were the most prominent.

The *Kioaways* now live about the head-waters of the Nebraska or Platte River, along the northern line of Colorado. Formerly they roamed over the plains of Texas, but according to an ancient tradition, they came from some high northern latitude, and made use of sleds.*

Omitting a number of small tribes, whose names would weary you, I shall mention in the Atlantic group the *Shoshoncc* bands, called also Snake or Ute Indians. They extended from the coast of Texas in a northwesterly direction over New Mexico, Colorado, Arizona and Nevada, to the borders of California, and reached the Pacific near Santa Barbara. Many of them are a low grade of humanity, the lowest in skull-form, says Professor Virchow, of any he has examined on the continent. The "Root-diggers" are one of their tribes, living in the greatest squalor. Yet it would be a serious error to suppose they are not capable of better things. Many among them have shown decided intellectual powers. Sarah Winnemucca, a full blood Pi-Ute, was an acceptable and fluent lecturer in the English language,† and their

* Dr. Ten Kate, in *Revue d'Ethnographie*, 1885, p. 122.

† *Life Among the Pi-Utes*, by Sarah Winnemucca Hopkins (Boston, 1883).



war chiefs have at times given our army officers no little trouble by their skill and energy.

The Comanches are the best known of the Shoshonees, and present the finest types of the stock. They are of average stature, straight noses, features regular, and even handsome, and the expression manly. They are splendid horsemen and skilful hunters, but men never given to an agricultural life.

3. *The North Pacific Group.*

The narrow valleys of the Pacific slope are traversed by streams rich in fish, whose wooded banks abounded in game. Shut off from one another by lofty ridges, they became the home of isolated tribes, who developed in course of time peculiarities of speech, culture and appearance. Hence it is that there is an extraordinary diversity of stocks along that coast, and few of them have any wide extent.

In the extreme north the *Tlinkit* or *Kolosch* are in proximity to the Eskimos near Mount St. Elias. They are an ingenious and sedentary people, living in villages of square wooden houses, many parts of which are elaborately carved into fantastic figures. Their canoes are dug out of tree trunks, and are both graceful in shape and remarkably seaworthy. With equal deftness they manufacture clothing from skin, ornaments from bone, ivory, wood and stone, utensils from horn and stone, and baskets and mats from rushes.*

To the south of them are the Haidahs of Vancou-

* Dr. A. Krause, *Die Tlinkit Indianer* (Jena. 1885).

ver's island, distantly related in language to the Tlinkit, and closely in the arts of life. Their elaborately carved pipes in black slate, and their intricate designs in wood, testify to their dexterity as artists. South of them are various stocks, the Tsimshian on the Nass and Skeena rivers, the Nootka on the sound of that name, the Salish, who occupy a large tract, and others.*

All the above are north of the line of the United States. Not far south of it are the Sahaptins, or Nez Percés, who are noteworthy for two traits, one their language, which is to some extent inflectional, with cases like the Latin, and the second, for their commercial abilities. They owned the divide between the headwaters of the Missouri and of the Columbia rivers, and from remote times carried the products of the Pacific slope—shells, beads, pipes, etc.—far down the Missouri, to barter them for articles from the Mississippi valley.

The coast of California was thickly peopled by many tribes of no linguistic affinities, most of whom have now disappeared. They offer little of interest except to the specialist, and I shall omit their enumeration in order to devote more time to the Pueblo Indians and Cliff-dwellers of New Mexico, Colorado and Arizona.

These include divers tribes, Moquis, Zuñis, Acomas and others, not related in language, but upon the same plane of culture, and that one in many respects higher than any tribe I have yet named to you. They

* The tribes of British Columbia have been especially studied by Dr. Franz Boas, who has published extensively upon them.

constructed large buildings (pueblos) of stone and sun-dried brick, with doors and windows supported by beams of wood; they were not only tillers of the soil, but devised extensive systems of irrigation, by which the water was conducted for miles to the fields; they were both skilful and tasteful in the manufacture of pottery and clothing; and as places of defence or retreat they erected stone towers and lodged well-squared stone dwellings on the ledges of the deep cañons, known as "cliff houses."

4. The Mexican Group.

The nations of leading prominence in this group spoke the Aztec or Nahuatl tongue. On the arrival of Cortes, they controlled the territory from the Gulf to the Pacific, and their colonies and commerce extended far north and south. They dwelt in populous cities built of brick and stone, were diligent cultivators of the soil, made use of a phonetic system of writing, and had an ample literature preserved in books.

The physical traits of the Aztecs were nowise peculiar. Their skulls were moderately long or medium, though a few are brachycephalic, the forehead narrow, the face broad. The hair is occasionally wavy, and they present more beard than most of the other Indians. The color is from light to dark brown, the nose prominent, and the ears large. In stature they are medium or less, strongly built and muscular. Persons ill-made or deformed are rare, and among the young of both sexes graceful and symmetrical forms are not uncommon.

The governments of the various nations were based on the system of clans, gentes or totems, which was common not only in America, but in most primitive communities. Each gens had a right of representation, and the land belonged to its members, not as individuals, but as parts of the clan. The highest officer of the State was in early times elected by the chiefs of the gentes, but later the office became hereditary.

Of all the arts, that of architecture was most developed. The pyramid of Cholula compares in magnitude with the most stupendous results of human labor. It has four terraces, and its base is a square, 1500 feet on each side. Similar structures are found at Papantla, Teotihuacan, and other localities. They are built of earth, stone, and baked brick, and could only have been completed by the united and directed labor of large bodies of workmen. The cities of ancient Mexico were many in number, and contained thousands of houses. Tenochtitlan was surrounded by walls of stone, and its population must have been at least sixty thousand souls.

Of their cultivated plants the most important were maize, cotton, beans, cacao and tobacco. An intoxicating beverage, called *octli*, was prepared from the fermented juice of the agave, but its use was limited by stringent regulations, and repeated drunkenness was punished with death.

The Aztecs were in the "bronze age" of industrial development. Various tools, as hoes, chisels and

scrapers, ornaments, as beads and bells, formed of an alloy of tin and copper, and copper plates of a crescentic shape were used as a circulating medium in some districts. In welding and hammering gold and silver they were the technical equals of the goldsmiths of Europe of their day. Most of their cutting instruments, however, were of stone.

They were lovers of brilliant colors, and decorated their costumes and buildings with dyed stuffs, bright flowers, and the rich plumage of tropical birds. Such feathers were also woven into mantles and head-dresses of intricate designs and elaborate workmanship, an art now lost. Their dyes were strong and permanent, some of them remaining quite vivid after four centuries of exposure to the light.

In order to obtain the materials used in their arts and to exchange their completed products, they carried on an active commerce, both domestic and foreign. All the cities had market days, when the neighboring country people would flock in great numbers to town, and the journeys of their merchants extended far toward the Isthmus of Panama.

The national religion was a polytheism built up on a totemic worship; that is, it was originally a nature worship grafted upon the superstitious devotion paid to the presiding genius of the gens. Huitzilopochtli was the chief divinity of the Aztecs of Tenochtitlan, Quetzalcoatl was especially adored at Cholula, and the two Tezcatlipocas, the one dark and one white, were other prominent mythical figures. According to the

myth these four were brothers, but engaged in a series of contentions among themselves, which repeatedly wrecked the world.*

The Nahuas were by no means the only nation who had made decided progress in culture. In Michoacan, to the northwest of the valley of Mexico, dwelt the Tarascos. They spoke a totally different tongue, but according to Aztec legend had accompanied the Nahua from a northern region into their Mexican homes. Physically they are described as a taller and handsomer folk than the Nahuas, with a language singularly vocalic and musical. Bold in war, they were never subject to the Aztecs, and appear to have been their equals in the arts. They constructed houses of stone, and made use of a hieroglyphic writing to preserve the records of their ancestors.†

The Mixtecs and Zapotecs were neighboring tribes, who lived on and near the Pacific above the Isthmus of Tehuantepec. By tradition both nations came together from the north; "mixtecatl" in Nahuatl means "people from the cloudy land." To them are attributed the remarkable edifices of Mitla, stone-built structures, whose walls are elaborately ornamented with rude stone mosaics in meander designs or "grecques." The roofs seem to have been supported

* See D. G. Brinton, *American Hero Myths*, Chap. III (Philadelphia, 1882).

† The Tarascos have been studied with much care by Dr. Nicolas Leon, of Michoacan, who has published a number of articles on their antiquities and languages.

by solid pillars of granite, some of which are still in place. Of the age or purposes of these buildings we know nothing, as they were deserted and in ruins when first visited by the Spaniards.

There are many smaller tribes in Mexico of independent stocks, but a catalogue of their names would be of little use. The most widely distributed are the Otomis. They are of small stature, dolichocephalic, and averse to civilization. According to tradition they are the oldest occupants of the land, possessing it before the arrival of the Nahuas. Their language is singularly difficult, nasal and primitive. In form it is almost monosyllabic, with a tendency to isolation. This has led some writers to believe it akin to the Chinese, for which there is not the slightest ground.

5. The Inter-Isthmian Group.

Between the Isthmus of Tehuantepec and that of Panama the continent narrows to a point, and the pressure of the population advancing from both directions forced a large number of diverse nationalities into a limited area. Only one of these could lay claim to a respectable civilization, most of the others living in primitive savagery.

This people, the Mayas, occupied the whole of the peninsula of Yucatan, and the territory south of it to the Pacific Ocean. It was divided into a number of independent tribes, the principal of which were the Quiches and Cakchiquels, in the present State of Guatemala. In all there were about eighteen dialects of

the tongue, each of which can easily be recognized as a member of the stock.

There can be little doubt that the common ancestors of these tribes moved down from the north, following the shore of the Gulf of Mexico. This is the statement of their most ancient traditions, and it is supported by the presence of one of their tribes, the Huastecas, on the shore of the Gulf, near Tampico. It has been calculated that their entrance into Yucatan was about the beginning of the Christian era.

Physically the Maya peoples are of medium height, dark in hue, the skull usually long (dolichocephalic), the nose prominent, and the muscular force superior. The artist Waldeck compares their features to those of the Arabs.

Their mental aptitudes are reflected in the culture they developed under circumstances not the most favorable. As architects they erected the most remarkable monuments on the continent. The elaborate decorations in stone, the bold carving, the free employment of the pointed arch, and the size of the edifices in the ancient cities of Palenque, Copan, Uxmal, Chichen Itza, and others, place them in the front rank among the wondrous ruins of the ancient world.

They were a decidedly agricultural people, cultivating maize, cotton, tobacco, peppers, beans, and cacao. The land was portioned out with care, each householder being granted an area in proportion to the size of his family. The cotton was woven into cloth, skil-

fully dyed, and cut into graceful garments. The dyes were vegetable substances, collected from the native forests. What is not elsewhere paralleled in America, they carried on an extensive apiculture, domesticating the wild bee in wooden hives, and obtaining from its stores both wax and honey.

Their weapons and utensils were mostly of stone. There is no evidence that the Maya tribes had the metallurgical skill of the Nahuas. Obsidian, jade, agate, and chert were the materials from which they made their tools and weapons.

In war and the chase they were expert with the bow, the long lance, and the blow-pipe or sarbacane, a device recurring in both North and South America, as well as familiar to the Malays. The war-club, the sling and the tomahawk or hand-axe were also known to them.

Small quantities of gold, silver and copper were found among them, but not in objects of utility. They were prized as materials for ornaments, and were employed for decorative purposes.

The art of writing was familiar to most of the Maya tribes, and especially to those in Yucatan. The Spanish authors assert that the Quiches in Guatemala had written annals extending eight hundred years before the conquest, or to 750 A. D., and the chronicles of the Mayas which have been preserved, refer to a still more remote past, possibly to about 300 A. D. The script was quite dissimilar in appearance from the Mexican.

Adjoining or near the numerous branches of the Maya peoples, there dwelt several outliving colonies of Nahuas in the Isthmian region, who have left there interesting relics of their culture. The Pipiles near the Pacific coast were the authors of a series of excellent bas-reliefs carved on slabs of stone, which have recently come into the possession of the Berlin museum.* The Nicaraos, between the Pacific Ocean and Lake Nicaragua, and on the islands in this lake, were the sculptors of the strange figures in stone pictured by Squier in his travels, and some of which are now in the Smithsonian museum; while the Alaguilacs in Western Guatemala have left ruins which have not yet been explored.† All these tribes were Nahuas of pure blood.

On the shores of Lake Managua, to the east and west, were the Mangues, a people of some cultivation, acquainted with a form of hieroglyphic or picture writing, very skilful in pottery, and agricultural in habits.‡ It has been ascertained that they are a branch of the Chapanecs, who dwelt in the province of Chiapas, Mexico.

The other tribes around Lake Nicaragua were wild.

* S. Habel, *The Sculptures of Santa Lucia Cosumalhuapa* (Washington, 1878). Bastian has also written a good account of them (Berlin, 1882).

† D. G. Brinton, "On the Alaguilac Language of Guatemala," in *Proceedings of the American Philosoph. Soc.*, 1887.

‡ D. G. Brinton, *The Güegüence, a comedy ballet in the Dialect of Nicaragua*. Introduction, p. viii. (Philadelphia, 1883).

The Woolwas on the north, and the Huatusos along the Rio Frio to the east, depended on hunting and fishing for a livelihood. So also did most of the tribes of Honduras, Vera Paz and the Isthmus. The only nation which distinguished itself in the arts were the Cuevas, in and around Chiriqui Bay. They were adroit in the treatment of gold. The early writers describe them as prominent in general culture and certain technical arts. To them we attribute the gold figures disinterred from the mounds of Chiriqui and its neighborhood. They are manufactured by two methods, the one by soldering gold wires drawn out into the finest thread upon thin hammered plates of the same metal, the wire forming the design; the other by casting hollow figures.* The skill displayed often excites the astonishment of the jewellers of our own day.

6. *The South Atlantic Group.*

The interminable forests of Brazil and the endless plains of the Pampas were at the discovery thickly peopled by bands of roving nations, dependent chiefly on the products of woods and streams for their support. None of them had sedentary dwellings, none knew the art of building with brick or stone, and none laid much stress on agriculture. Some of them had, however, considerable technical skill in various directions, and few if any of them could be assigned to as low a status as the Australians, for example.

* C. H. Berendt, *Bull. of the Amer. Geog. Society*, 1876, p. 11.

The ruling people on the northern coast and the Lesser Antilles at that time were the *Caribs*. They possessed much of the coast line from the Isthmus of Panama to the mouth of the Orinoco, and many of the smaller southern islands of the West Indian archipelago. They had established a colony on Hayti, but probably not on Cuba, and their expeditions, so far as we know, never reached Florida. According to their own statements, all the island Caribs came from the mainland at no long period before the Discovery. Recent researches have shown that the original home of the stock was south of the Amazon, and probably in the highlands at the head of the Tapajoz River. A tribe, the Bakairi, is still resident there, whose language is a pure and archaic form of the Carib tongue.*

They were a finely formed set of men, the skull long but variable, their color dark, large narrow nose, prominent cheek bones, wide mouth, and thin lips.

Their language is rich in vowels and pleasant to the ear. In some districts that spoken by the women varied in some degree from that in use among the men. This is not without other examples among the American race, and appears to have arisen partly from the custom of capturing women from other tribes for wives, partly from a tendency to easy dialectic variation in the languages themselves.

The *Arawaks* occupied on the continent the area of the modern Guiana, between the Corentyne and the Pomeroon rivers, and at one time all the West Indian

* Karl von der Steinen, *Durch Central Brasilien*, s. 308.

Islands. From some of them they were early driven by the Caribs, and within forty years of the date of Columbus' first voyage the Spanish had exterminated nearly all on the islands. Their course of migration had been from the interior of Brazil northward; their distant relations are still to be found between the headwaters of the Paraguay and Schingu rivers.

The extensive slope which is watered by the Amazon and its tributaries is peopled by numerous tribes whose affinities are obscure. Those on the plains near the coast belonged to the *Tupi-Guarani* stock. This extended along the Atlantic from Rio de la Plata to the Amazon, embracing in the north the Tupis or Tupinambas, and on the south the Guaranis. Scattered tribes of the stock extended westward to the Paraguay and Madeira rivers, reaching to the foot hills of Andes. Though positive data are lacking about their early migrations, the evidence at hand tends to show that these were from south to north, and that the Tupis displaced an earlier people of a different physical type and a lower grade of culture.

This is the result derived both from a comparison of existing dialects and from explorations in the artificial shell-heaps, or *sambaquis*, which are found along the coast. Many of them are of great size and very ancient. They contain skulls of an inferior type, with low foreheads, prominent and strong jaws, and short skulls (brachycephalic), while the Tupi skull is more fully developed and long (dolichocephalic). Similar shell-heaps, proving an equally rude people, are found

along the coast of Guinea, and both among the Arawaks of that locality, and still more among the Goajiros of the peninsula of that name on the coast of Venezuela, who are distantly related to the Arawaks, do we find the brachycephalic skull and strong jaws of the builders of the "sambaquis." We may suppose, therefore, that the Tupis drove these earlier residents to the shores of the northern ocean.*

In frequent contiguity with the Tupis was another stock, also widely dispersed through Brazil, called the *Tapuyas*, of whom the Botocudos in eastern Brazil are the most prominent tribe. To them also belong the Ges nations, south of the lower Amazon, and others. They are on a low grade of culture, going quite naked, not cultivating the soil, ignorant of pottery, and with poorly made canoes. They are dolichocephalic, and must have inhabited the country for a long time, as the skulls found in the caves at Lagoa Santa, in connection with the bones of extinct animals, are identical in form with those of the Botocudos, and probably belonged to their ancestors.

West of the Paraguay River is an extensive plain called El Gran Chaco, beginning at the eighteenth degree of south latitude, and continuing to the Pampas of Buenos Ayres. This region was peopled by nu-

* On this complex question compare *Verhandlungen der Berliner Anthrop. Gesell.*, 1886, s. 703; 1887, s. 532, and elsewhere; Karl von den Steinen, *Durch Central Brasilien*, s. 295, and the work of Von Martius, *Zur Ethnographie Amerika's zumal Brasiliens*, Vol. I. (Leipzig, 1867).

merous wandering tribes, the Abipones, the Guaycurus, the Lules, and scores of others. They were in nowise related to the Guaranis, having short skulls, different linguistic stocks, and an inferior grade of culture. As they were warlike, and in constant strife with the whites, as well as among themselves, they have now nearly disappeared.

The tribes of the Pampas were on a similar plane of development, and have also given way before the march of the white race.

In the extreme south of the continent are the Patagonians and Fuegians. The former are sometimes called Tehuelches, or Southerners. They are a nomadic and hunting people, dark olive-brown in color, tall in stature and robust.

The Fuegians are generally quoted as among the most miserable of savages. Though exposed to a damp and cold climate and always insufficiently nourished, they wear scarcely any clothing, and are content with wretched huts of branches and weeds. They have long skulls (about 75), long, narrow eyes, well-shaped noses, and generally are good specimens of one of the American types. Their language is eminently polysynthetic and rich in terms to express the objects and incidents of their daily life.

7. The South Pacific Group.

The principal nations in the South Pacific group are the Chibchas and the Qquichuas.

The former, called also Muyscas, resided near the

Magdalena River, near the present city of Bogota. They were sedentary, agricultural, and skilful in a number of arts. Their agriculture extended to maize, potatoes, cotton, yucca and other vegetables, and their fields were irrigated by canals. As potters and goldsmiths they ranked among the finest on the continent, and both for symmetry of form and richness of decoration some of the vases from their district cannot be surpassed from American products.

The most powerful and cultivated of the South American nations were the Qquichuas of Peru. Originally they were a small tribe near Lake Titicaca, where they dwelt in close relations to the Aymaras. About 1000 A. D., their chief, Manco Capac, conquered the valleys to the north and founded the city of Cuzco. His successors added to the territory of the state until it extended from a few degrees north of the equator to about 20° south latitude, or a distance along the coast of over 1500 miles. In width it varied from 200 to 400 miles. Of course it embraced a variety of distinct stocks, so that it is impossible to speak of any "Peruvian" type of skull or features, the less so as it was the policy of the Incas, as the rulers were called, to remove conquered tribes to distant parts of the realm.

The social organization of Peru rested upon the political union of clans or gentes, as it did in most other American nations. The ruler of the realm acted in accordance with the advice of the council elected by the gentes, but also exercised at times an autocratic

power, and it would be an error to consider him not more independent than the war-chief of one of the hunting tribes. The office was hereditary in the female line, provided a satisfactory candidate appeared; otherwise it was elective.*

No American nation surpassed the Peruvians in agricultural arts. Maize, cotton, coca, potatoes, and tobacco were the principal crops. As the arable land in the narrow vales of their country was limited, they increased its extent by constructing terraces along the mountain sides, and to guard against the aridity, numerous dams were built, from which canals carried the water for miles to the various fields. Fertilizers were dug into the soil, and a rotation of crops observed to prevent its exhaustion. The domestication of animals had advanced further in Peru than elsewhere on the continent. Besides the dog, and a fowl like a goose, they had large herds of lamas, an animal they used for food and also for carrying burdens, though its chief value was its wool. This was spun and woven into articles of clothing, mats, etc. Quantities of cloth from this substance and from cotton are exhumed from the ancient tombs. The specimens are often in good preservation, showing geometrical designs worked with symmetry, and dyed of various bright colors.

In the mountain regions the houses were generally

* The most careful analysis of the Peruvian government is given by Dr. Gustav Brühl, *Die Culturvölker Alt-America's*, pp. 369, sq. (Cincinnati, 1887).

of stone, and in the arid coast lands, of sun-dried bricks. They were located in groups surrounded by walls, also of stone or brick. The stones were sometimes fitted together with extraordinary nicety, or elsewhere were united with mortar or cement. Recent travellers have stated that the stone-work on some of the ruins of the Inca palaces is equal to that in any part of the world; this is especially true of the mysterious ruins of Tiahuanaco, near Lake Titicaca, where some of the most complete work on the continent is to be found.

These architects had not discovered the pointed arch, as had the Mayas, and in the details of their structures, as in the forms of their doors and the perfect simplicity of their walls, it is clearly seen that they had no connection with the northern civilizations. The structures were rarely erected on pyramids or mounds, and frequently were of several stories in height.

Their skill in the reduction and manufacture of various metals excited the admiration of the Europeans. Among the articles they offered the Spaniards were utensils, both solid and hollow, of gold, imitations of fruits and animals of the same substance, golden butterflies, idols, birds, masks, and mace-heads. Groups of half a dozen figures in various attitudes have been found of solid silver, the symmetry and expression being well preserved.

There was a like exuberance in the forms they gave their pottery. The jars and vases were imitations

of every kind of object around them—fish, birds, reptiles, fruits, men, houses. Often the product is so symmetrical that one is tempted to believe it was formed by a potter's wheel; but this invention, so ancient in the old world, was never known to the American Race. Curious ingenuity is displayed in the production of whistling or musical jars, which will emit a note when the fluid is poured in; or trick-jars, which cannot be emptied unless turned in a certain direction, not at first obvious. The art of glazing was not known, and most of the pottery seems to have been sun-dried only.

With the materialistic notions of religion and of a future life which they entertained, it was regarded of the utmost importance that the body should be preserved undisturbed in the tomb. Hence it was often carefully mummified, and the sepulchres were selected in the most secret and inaccessible location, either a cave on the side of a precipice, or if in the plains the grave was levelled, so that no sign of it appeared on the surface.

South of the Peruvian monarchy were the Araucanians, occupying the area of the modern state of Chili. They were a warlike, hunting race, physically and also linguistically akin to the tribes of the Pampas. Neither the Incas nor the Spaniards succeeded in reducing their indomitable spirit. In culture they had gained an advantage over the Pampean tribes by their relations to the Quichuas, but were far behind the latter in general aptitude in the arts. Much of their

subsistence was dependent on the chase, and they are not classed among the partly civilized natives of the continent. They are described as tall and robust, the skull brachycephalic, the face round, the nose short and rather flattened.

LECTURE X.

PROBLEMS AND PREDICTIONS.

- CONTENTS.—I. ETHNOGRAPHIC PROBLEMS. 1. The problem of acclimation. Various answers. Europeans in the tropics. Austrians in cold climates; in warm climates. The Asian race. Tolerance of the American race. Theories of acclimation. Conclusion. 2. The problem of amalgamation. Effect on offspring. Mingling of white and black races. Infertility. Mingling of colored races. Influence of early and present social conditions. Is amalgamation desirable? As applied to white race; to colored races. 3. The problem of civilization. Urgency of the problem. Influence of civilization on savages. Failure of missionary efforts. Cause of the failure. Suggestions.
- II. THE DESTINY OF RACES. Extinction of Races. The American race. Are the Indians dying out? Conflicting statements. They are perishing. Diminution of insular peoples; causes of fatality. The Austrian race. The Mongolian race stationary. Wonderful growth of the Eurafian race. Influence of the Semitic element. The future Aryo-Semitic race.
- Relation of ethnography to historical and political science.

THE population of the world in this year of 1890 is estimated at over fifteen hundred millions. This vast multitude have passed in review before us in their races, peoples and nations. What is the future of these jostling millions, each individual of whom is striving after some goal, seeking to satisfy some desire?

This momentous question depends directly on the solution of certain problems with which the ethnographer especially has to deal. On the right reading of these problems rests the destiny of races, and on the destiny of races hangs the fate of Man. We shall do well therefore to take home from the study of this science the horoscope it forecasts.

The first of these inquiries is

The Problem of Acclimation.

How far can the various races not merely support and live through, but do good work in the varied climates of the world?

Never was this question so urgent as to-day. With fleets of steamships ploughing every ocean, and the iron horse racing on its steel track over every continent, the movement of men is conducted in such masses and with such rapidity that the most extensive migrations of nations of other ages seem insignificant in comparison.

Like many other questions in ethnography, this one has been answered very variously, too often, evidently, by writers influenced by other motives than a single desire to reach the truth. It has been in close proximity to political and social movements, and facts have been twisted to serve the purposes of advocates.

The facts, indeed, are easily liable to misinterpretation. Take the white race, for instance. It has for centuries possessed flourishing colonies not only in the southern temperate zone, which would not surprise

us, but under the torrid suns of India, Mexico and Brazil, in Java and the Isle of France, in the West and East Indies, not to speak of the Hamitic tribes, who thousands of years ago established themselves on the borders of the Sudan (see above, p. 116). Long before that, the Indo-Aryans had crossed the Hindu Kush and extended their sway over the Dravidian peoples of Hindostan.

But in these tropical regions have they not merely existed, but also prospered? Have they retained, along with the purity of their blood, also their fecundity, their viability and their energy? I must reply emphatically, No. In the words of a medical observer of ample experience in the tropics—"The changes which a torrid climate impresses upon the constitution of Europeans and upon their descendants are pathological, and tend with fatal certainty to the extinction of the race."* In India the children of English parents must be sent back to Great Britain or they will perish. It is said that in the history of the civil service there has not been a single family which survived three generations. Even the first generation loses the energy which characterizes the parental stock. The whites nowhere in the tropics can undergo continuous physical toil exposed to the sun. They are always found subsisting on the labor of the native races.

The Spanish and Portuguese population of tropical America have survived in their new home for nearly

* Dr. J. Orgeas, *La Pathologie des Races Humaines*, p. 481 (Paris, 1886).

four hundred years. But when have they displayed the astonishing energy of the early *Conquistadores*? Many of the so-called Spanish creoles are really of mixed blood. In Peru and Mexico it is hard to find a family without the strain of another race in its pedigree. In Cuba, where there has been the least exposure to this result, owing to the prompt extinction of the natives, the descendants of the early European immigrants are enfeebled and infertile. While in Mexico, in Guatemala, and in Yucatan, the men of prominent energy are either of mixed blood or, like the late Governor Barrios, are of the once conquered, the pure American race. I do not call a race acclimated which merely manages to exist, at the sacrifice of those qualities which are its highest claim to distinction.

On the other hand, the black race finds it hopeless to struggle with the climate above the fortieth parallel of latitude. In no portion of Southern Europe did it ever maintain itself, and when its members were carried in numbers as slaves to Mauritius and Ceylon, they succumbed to the change.* Even in Africa it is doubtful if it ever effected a permanent settlement on the shores of the Mediterranean. Pulmonary diseases and scrofula are the chief morbid changes which destroy its emigrants.

In the West Indies and generally in tropical and sub-tropical America they seem to flourish. In the United States the "colored people" increase by birth

* Authorities in Hovelacque et Hervé, *Précis d'Anthropologie*, 214, sq.

more rapidly in proportion than the whites, though this calculation includes the mulattoes and others of mixed blood.

Whether the Asian race has greater or less powers of acclimation than others is a question of much significance at present, when the teeming millions of the Celestial empire seem ready to pour forth in resistless floods over the whole earth. We are not prepared to reply. The subjection of this race to foreign climatic influences has been too recent and under conditions too exceptional to furnish the requisite data; and in their own land, the Chinese, from whom we look for the most portentous migrations, have lived in a country which does not present contrasts equal to those of the various zones.

The American race may be regarded as an exception to the others. The area it always occupied extended from one polar circle to the other, including every degree of altitude, and every extreme of temperature to which man is exposed. No difference in the viability or the energy of its members in various parts of the continent can be noted. The most remarkable monuments of its toilsome industry were completed under the tropical sun of Yucatan; while one of the most ingenious of its tribes lived the farthest north of any human beings. The physical energy of the stalwart Patagonian is not superior to that of the active Carib or the northern Algonkin. We may possibly find the explanation of this in the trend of the chief mountains and rivers of the continent, which facilitated

easy progress from north to south, while in the eastern hemisphere the trend running parallel with the latitude, separated the early peoples into smaller climatic areas.

While the facts so far as ascertained seem to point to the decision that each race is confined to climatic conditions similar to that of its original area of characterization, the theory has been advanced that this is but for a time, that by persistence and repeated sacrifices of the unfit, finally a remnant will survive fully able to face the novel trials of the climatic change.*

This, however, is a theory only. It may be allowed credence to the extent that the survival of a remnant is possible; but it would be at the sacrifice of the distinctive qualities of the higher races; those can flourish only under the physical conditions which gave them birth.

It has also been urged that the improved sanitary hygienic science of modern times will do efficient battle against the lethal influences of strange climes. Doubtless in individual cases such precautions are of the highest value; they aid the system in withstanding malarial and zymotic poisons; but the best of them, employed on the widest scale, will prove sadly inadequate, as is shown by their failure in many a tract in the temperate zone. If we cannot restore salubrity to the Roman Campagna, or to Staten Island in New York Harbor, it is more than wild to talk of rendering healthful the Congo Basin.

* This is the opinion advocated by de Quatrefages. His arguments will be found in the seventh chapter of his *Histoire Générale des Races Humaines* (Paris, 1889).

I am tempted, therefore, to consider this problem of acclimation insoluble, and to express myself in the words of the learned physician I have already quoted, "There is no such thing as acclimation. A race never was acclimated, and in the present condition of the world, a race never can become acclimated." *

The second of our inquiries relates to

The Problem of Amalgamation

—that which the French call *métissage* and the Americans *miscegenation*. The fact that we have manufactured this "recent and ill-formed word," as Webster's *Unabridged* calls it, is evidence that the questions involved in this problem touch us nearly. They touch the whole world, and very closely. I know of nothing within the range of human power to control, more decisive of the future prosperity or failure of the human species than this of the effect of race-intermarriage.

The consequences of such blendings may be studied with reference to the viability of the offspring, their mental faculties, and their fecundity.

At the outset it is important to premise that the question cannot be treated as simple and single. It is complex. The results of race-crossings differ with races and with environment. The law that applies to one case in one place is not certainly good in other cases and elsewhere.

It seems, for instance, tolerably certain that the

* Dr. J. Orgeas, *La Pathologie des Races Humaines*, p. 481.

cross between the white and black races produces ✓ offspring (mulattoes) who are deficient in physical vigor. It is well ascertained in the United States that they are peculiarly prone to scrofula and consumption, unable to bear hard work, and shorter lived than either the full black or the white. This is not owing to our climate, as the same results are recognized by the negroes of the Gold Coast, who for four hundred years have been in constant contact with the whites.* In the West India Islands, the mulattoes must be constantly reinforced by new crossings, or they disappear.

The fertility of such unions, though generally equal if the number of births alone is considered, is really less on account of the greater mortality of the infants. As a rule, the third generation of descendants of a marriage between the white and the Polynesian, Australian or Dravidian, become extinct through short lives, feeble constitutions or sterility. According to one writer, except a few small islands in the Pacific, there is not an instance of a modern population of mixed white blood, living by itself, which is not on the road to extinction.†

It is not certain that this applies either to the crossing of the Eurafrian or the African with the American race. The half-breed between the negro and the Indian, of which we have examples in the Cafusos of

* Darwin, *The Descent of Man*, p. 171 (New York, 1883).

† Dally, quoted in Hovelacque et Hervé, *Précis d'Anthropologie*, p. 218.

Brazil, the Zambos of Paraguay, the Chinos of Peru, and the "Black Caribs" of St. Vincent, are said to be finely formed and vigorous. Throughout Mexico, Central and South America, there has been a blending of the white and red races on an enormous scale, and the result has been that both physically and mentally this mixed race has repeatedly taken precedence in political and social life over the pure descendants of the European colonists. It is well-known that the half-breeds of our frontiers, of British America and of Greenland, are singularly hardy, intelligent and vigorous scouts, guides, hunters and soldiers. Not a few of them have distinguished themselves in our colleges, and later in clerical and political life.

It would appear also that in the earlier conditions of social life, no such debility attended the crossing of the Eurafrican and African race as seems at present to be the case. The only physiological explanation which can be offered of the numerous negroid tribes of eastern and southern Africa, is that they are the descendants of prolonged and intimate unions between the pure negroes and members of the Hamitic and Semitic divisions of the white race (see above, p. 185). This permits the suggestion that there are special causes now at work which alter the influences of race-mixture from what they once were.

Some of them are patent. In modern times it is an almost universal law that all mixed-white populations derive their white blood exclusively from the father, their dark blood exclusively from the mother. I do

not know that I can tell you precisely what effect this would have,* but it is certain that such a divergence from what is customary within the race limits would exert a decided influence both physically and socially. It is generally believed among students of heredity that the pscyical qualities are inherited more from the mother, the physical more from the father; and if this holds good in most cases, we should expect the children of such unions to be intellectually inferior to the average of their parents. This I think is true. Advocates of miscegenation, such as de Quatrefages, Serres and others, are apt to draw a different conclusion, because they compare the average intellectual ability of the products of such unions with the average of the lower race, and this is certainly in favor of the mixed stock, but is an unscientific procedure.

It is also true that in perhaps ninety per cent, of the cases, these mixed unions are illegal, and the children suffer under the stigma of illegitimacy. This means more or less deficiency in home training, education, legal protection, and social recognition. In primitive conditions this was not the case, and hence race minglings at that time were under far more favorable auspices.

In most modern communities the prejudice against members or partial members of the dark races forces them to rest content with unequal advantages, if not educational, at least social, and the recognition of

* See the question discussed by Waitz, *Anthropologie der Naturvölker*, Bd. I, s. 188.

these invisible barriers must necessarily have a deteriorating influence on ambition. This of course was not the case in primitive society, where no other power was recognized than that of the strong right arm.

The possibility of a vigorous and fertile cross-race under certain conditions seems therefore to have been demonstrated by the past history of the species. Is it a desirable result in itself? May we look forward to the commingling of races as worth the fostering care of states and societies? The question bristles with difficulties—moral, not physical difficulties.

There can be no doubt but that any white mixed race is lower in the scale of intelligence than the pure white race. A white man entails indelible degradation on his descendants who takes in marriage a woman of a darker race; and any relation other than that of marriage, no matter if it does lift the lower race, is unauthorized by any sound moral code. Still more to be deplored is the woman of the white race who unites herself with a man of a lower ethnic type. It cannot be too often repeated, too emphatically urged, that it is to the women alone of the highest race that we must look to preserve the purity of the type, and with it the claims of the race to be the highest. They have no holier duty, no more sacred mission, than that of transmitting in its integrity the heritage of ethnic endowment gained by the race through thousands of generations of struggle. That philanthropy is false, that religion is rotten, which would sanction a white woman enduring the embrace of a colored man.

The two problems we have now discussed seem to present a dilemma. The pure races do not flourish out of their physiological surroundings; and yet some of them are not adequate for the work required by modern culture. What resource have we? The answer is, in the union of the lower races among themselves, especially the Mongolian and the African. Thus we may expect a blending capable of resisting the heat of the tropics, and intelligent enough to carry out the directions of that race which will ever and everywhere maintain its supremacy so long as it maintains its ethnic purity—the Eurafican.

Let us now turn to

The Problem of Civilization.

It is one which has arisen within the last two or three centuries, and is now so urgent that it will have an instant reply. With increased means of locomotion and augmented love of progress, civilization is now transported, with all its complex forces, to every nation and every tribe, no matter where or of what race, and the question is put point blank, Will you accept this precious gift, or will you have it forced upon you, with such results as may happen? Japan has welcomed the message, inscrutable China hesitates, Persia wavers, the miserable Australians refuse, the savages turn their back—all in vain; the message is importunate, will take no denial, must be accepted. Opposition means destruction. The Bechuana kraal which refuses to have a grand opera house and electric

lights, if the European sees fit to put them there, will be wiped out of existence. So will every tribe, every nation, every race, which sets forth to oppose the resistless flow of civilized progress.

Preservation, however, and not destruction, is the maxim of the ripest culture. The Tasmanian is extinct, the Polynesian disappearing, many an American tribe lives only in name, all gone down before the fierce flames of a civilization which did not lighten, but consumed them. Many another people is disappearing in the same way, in spite of the devoted efforts of earnest men and women to save them, to bring them into accord with the thought of the higher race, to teach them the boundless blessings of European enlightenment.

What is the history of these efforts? Failure, and yet again failure. Consider the history of the attempts to bring the American race into accord with the European. There were the noble endeavors of the Jesuits in Paraguay, the untiring zeal of the Franciscans in Yucatan, the admirable devotion of the Moravian brethren in the northern continent, and the long list of missionary societies in Protestant churches. These represent the most sustained, unselfish and enlightened efforts which have ever been made to civilize the Indians. They are of the same nature and on the same plan as those which have been and still are directed toward other savage peoples, the Polynesians and Africans for example.

Have they been successful? Can an instance be

adduced where they have achieved a full and permanent introduction of a savage tribe to the real benefits of our civilization?

I cannot answer for the history of missions throughout the world, but I can and do for my special field, America, and I say, not a single instance of success can be named. The Jesuits and the Moravians succeeded, indeed, in reclaiming the natives from their wild life; they transformed them from warring savages into peaceful planters; from drunken, cruel and superstitious, they made them sober, kind and religious. This was a noble, an admirable result. But were their converts any the more able to accept the civilization of Europe? Not a whit. David Zeisberger's last sermon was a wail that his sixty years' of missionary work had failed to accomplish this result. Ten years after the expulsion of the Jesuits from Paraguay, their extensive "reductions," which at one time included thirty or forty thousand Christianized natives, were a heap of ruins, and the converts dispersed to the four winds—and this after nearly two centuries of training!

Should we conclude from these sad histories that it is impossible to bring the existing savage nations into accord with our own culture? This is not my conclusion. Rather I infer that we have not tried the proper measures. We have relied almost exclusively on missionary religious work, forgetting that our religion is only one part of our civilization, and, so far as it is dogmatic and ceremonial, much the least part. We have been singularly inconsequent. We send our own

children six days to a secular school, and only on the seventh to a Sunday-school; but the poor Indian we send to Sunday-school all seven days, and then expect him to have an education like our own! Our missionaries hold up to the savage pictures of Christian brotherhood, of unselfish motive, of universal charity, which he soon finds have no existence in Christian communities or modern civilization. If he is an honest convert, he is absolutely disqualified from contact with civilized peoples! The Jesuits and the Moravians, both practical orders, knew this well, and therefore not only prevented their acolytes learning European tongues, but used every means at their command to banish all relations between the two races in those under their control.

It may seem uncharitable in me to oppose and condemn missionary enterprises in savage communities; but I do so under the full conviction that as usually conducted they fail, and are bound to fail, in the most excellent aim they have in view. To succeed, they should be combined with a broad secular education, with a full recognition of the real impulses of modern life, and an effort to inculcate sound principles rather than respect for ceremonies and dogmas, about which the Christian sects themselves are never in unison. The native religious and moral codes should be studied, and all that is good in them—generally there is a great deal of good—should be retained; right actions should be based on respect for law, on the inherent sense of justice, on natural affection, and not

merely on ecclesiastical edicts. Above all, independence of thought should be encouraged, the principles of religious and political freedom should be held up as superior to those of subjection, and the convert should be instructed that attachment to any particular creed is in no wise requisite to enjoy the best results of civilization.

It may be objected that doctrines such as these would leave the missionary as such little to teach. I reply that these doctrines are true, and are those necessary to the reception of civilization, and if they are omitted or obscured, the missionary is not an apostle of light, but of darkness, and that his efforts will prove unsuccessful in the future, as they have in the past.

The consideration of this problem of civilization leads us to cast a glance at the future and to ponder on

The Destiny of Races.

We are well aware that many a family, many a tribe, many a linguistic stock, has perished off the face of the earth, leaving no trace of its existence. Of others we know but the "naked nominations." May not whole races have followed the same fatal course? Nay, more, may not some of the existing races be likewise doomed, as the mature tree, to fall and disappear?

It was the opinion of the learned Broca that certain osseous remains in Europe point to a race once there

entirely unlike any other, modern or ancient.* The gloomy precedent is established, therefore, and we have to reflect if it applies to any now living varieties of our species.

Beginning at home, we may first inquire concerning the American race. The question, Are the Indians dying out? was investigated some years ago by learned authorities at Washington, who announced the cheerful result that, contrary to the universal opinion, the red man is not decreasing at all, but increasing in numbers! †

I have studied these pleasing statements with care, and regret that I do not reach the same satisfactory conclusions. The writers in question take no account of the signs of a dense ancient population in the Ohio valley, in Michigan, in Florida, in the Pueblo region; they take for granted that the estimates of all the early voyagers and travelers were gross exaggerations; they pay no attention to the historic fact that the natives of the Atlantic coast suffered severely from epidemic diseases before the English established their first settlements, diseases probably disseminated from the Spanish colonies in Florida or Mexico; finally, they commit the fatal ethnographic error of confounding under the name "Indians" both the pure and the mixed members of the race.

* Quoted in Darwin, *The Descent of Man*, p. 182.

† S. N. Clark, *Circular of the Bureau of Education*, Washington, 1877; Garrick Mallery, in *Proceedings of the Amer. Assoc. Adv. Science*, 1877, p. 340.

This last oversight vitiates all the argument. No one is prepared to say that some faint strain of native American blood may not be perpetuated indefinitely. But this is not the survival of the race or of the "Indians," any more than the Normans survive to-day in England.

My own studies convince me that the American race is and has long been disappearing, both actually, tribe by tribe, and relatively, by admixture with the whites. In our own area there were many tribes once of considerable numbers, who have become wholly extinct. The Timucuas of Florida, the Catawbas of South Carolina, the Monacans of Virginia, the Mohegans of New York, the Boethucs of Newfoundland, have no living representatives. The whole of the inhabitants of the Bahamas and Greater Antilles were hurried to destruction in a couple of generations after the discovery by Columbus. The list would be long were I to recapitulate the dead languages known by name or by a few sentences in some old missionary book, to the student of American linguistics.

The process is not suspended. Beginning at the north with the Eskimos, we find their number steadily diminishing; * the Athabascas, according to Petitot, are but a wreck of their former selves: of the tribes of the United States, Miss Alice Fletcher, who has traveled extensively among them, assures me that in a few generations there will be scarcely any of pure descent

* This is the statement of Dr. F. Nansen, the recent explorer of Greenland, and many others.

surviving; and I have noted for myself on the reservations what an increasing proportion of the young people reveal the infusion of European blood.

The same is true all over the Continent. The American Indian, as such, is destined to disappear before European civilization. If he retains his habits he will be exterminated; if he aims to preserve an unmixed descent, he will be crushed out by disease and competition; his only resource is to blend his race with the whites, and this infallibly means his disappearance from the scene.

The Island World, extending from Easter Island to Madagascar, presents the same spectacle. The aboriginal, undersized Negritos have long disappeared from many of the larger islands where they lived in historic times; and on the Philippines and elsewhere the report is that they are slowly but steadily drifting toward annihilation.* The Tasmanians have perished to the last man; the Australians are one-fifth what they were estimated by the best authorities at the beginning of the century; the Maoris of New Zealand have lessened one-half; the natives of Easter Island have sunk from twenty-five hundred in 1850 to less than three hundred; and so on for nearly all the Polynesian islands.

This extreme fatality has received the earnest attention of philanthropists and scientific physicians. Its causes are visible. They are the introduction of

* F. Blumentritt, *Die Ethnographie der Phillipinen*, s. 8 (Gotha, 1882).

new epidemics, as measles, small-pox, syphilis and consumption, the last mentioned peculiarly fatal, and now recognized as eminently contagious under certain conditions; an increased infant mortality; drunkenness and its consequences; and diminished fecundity in the women. This last is both one of the most potent and one of the obscurest of the causes of diminished population. Why at some certain period a people should be smitten with sterility is a mysterious fact, for which the explanation must be postponed until we become better acquainted with the many enigmas which surround the process of reproduction.

Add to the death-rate the considerable percentage of children who are born of unions with the White, the Asian or the African races, and are thus no longer representatives of the ancestral stock, and we must acknowledge that these insular peoples are in no better, even a worse case than the American Indians. They, too, are sitting beneath the Damocles sword of extinction.

Such an assertion is doubtfully applicable to the Austrafrican race. I have already referred to some statistics showing its heavy mortality in the isles of France and Ceylon, and the German ethnographer Ratzel is inclined to believe that it is diminishing in Central Africa itself.* But the census returns of our own country and of the West Indies show a positive

* Fr. Ratzel, *Völkerkunde*, Bd. I, s. 628, who quotes the authority of Du Chaillu.

and rapid increase—particularly if we include the large population of mixed blood.

We have been taught in this country to look with something like terror on the teeming millions of China, only awaiting the chance to overrun the whole earth, underbid all other laborers, profit by the fruits of our more liberal governments and nobler religions, and give nothing in return. A few centuries ago a still more dreadful fear haunted the nations of Europe that some other Timurlane or Genghis Khan would lead his countless hordes of merciless Mongolians from the steppes of Siberia across the cultivated fields of the Danube to wipe out, as with a sponge, the glorious picture of renascent European culture.

The latter fear no longer disturbs any mind. The mightiest of the Tartar powers is but a shadow, maintained by the mutual jealousy of Europeans themselves; the illimitable steppes of Tatory and Mongolia acknowledge the suzerainty of the Slavonian; and the nomadic hordes of the steppes and tundras are steadily diminishing under the same baneful influences of civilization which are blighting the Australian and the American.

Whether this is true also of the Sinitic stocks, especially of the Chinese, we have no positive information. It has been rumored that of late years repeated periods of drought, resulting in disastrous famine, have materially reduced the population of the interior of China, many perishing and others removing nearer the coast. As it is only near the coast that foreigners have the

opportunity to observe the people, it is likely that they bring away an exaggerated notion of the density of population in the country at large. It is at any rate doubtful if the Chinese are more than stationary.

Widely different is the vista which appears before us when we contemplate the Eurafrikan race. It goes forth conquering and to conquer, extending its empire over all continents and to the remotest islands of the sea. Never has that progress been so rapid as to-day. Two centuries ago the whole of the white race which could lay claim to purity of blood numbered not over one hundred millions, or ten per cent. of the population of the world, and was confined to the limits of Europe and North Africa; now the European branch of it alone counts nearly five hundred millions, or one-third of the whole. In the year 1800, the non-resident whites of European descent were ten millions; now they are over eighty millions. Every navy and every army of any fighting capacity belong to the European whites and their descendants. No nation and no race of other lineage dare withstand an attack or disobey an order from a leading European power. Africa and Asia are dismembered and parceled out at London, Berlin and St. Petersburg, and no one dreams of asking the consent of the inhabitants of those continents.

This astonishing progress is not due alone to the North Mediterranean branch of the Eurafrikan race. The representatives of the South Mediterranean branch are for a large part in it. In the forefront of it, whether in the great capitals of Europe or in the

pioneer towns of the frontiers, we find the acute and versatile Semite, full of energy and knowledge, guiding in councils, his master hand on the levers of the vastest financial schemes, his subtle policy governing the diplomacy of statesmen and the decisions of directors. As Prof. Gerland has well said, there is something in the Semitic character which is complementary to that of the Aryan,* and it is not without significance that the surprising development of the latter began when the religious prejudices against the Jews commenced to yield to more enlightened sentiments. They are now the growing people. Statistics show that in Europe, while the Aryan population doubles in number in thirty-four years, the Semites double in twenty-five years, having more children to a marriage and less infantile mortality.† When bigotry ceases on both sides, and free inter-marriage restores the Aryan-Semitic stock to its original unity, we may look for a race of nobler capacities than any now existing.

Still more rapid would that progress be, still more beneficent would be the sway of European civilization, could the great powers of that continent lay aside unworthy jealousies, and agree to extend in harmony the blessings of just government and sound education over other races. An unreasoning distrust has prevented the removal of the barbaric Sibiric power which centers at Constantinople; and the excellent results of

* George Gerland, *Anthropologische Beiträge*, Bd. I., s. 5 (Halle, 1875).

† *Zeitschrift für Ethnologie*, 1887, s. 88.

the extension of the Slavonian supremacy in Central Asia have been studiously ignored by British writers.

Reflections such as these teach us how closely the study of ethnographic science is related to practical politics. Ethnography, indeed, is the necessary basis of correct history and sound statesmanship. It offers to history a foundation on natural law; it explains events by showing their dependence on the physical structure, the mental peculiarities, and the geographic surroundings of the peoples engaged in them; it presents, in its present pictures of savage life, the condition of the highest nations in the earlier stages of their culture.

To the statesman it offers those facts about the capacities and limitations of peoples which should guide his dealings with them; it comes with no vague theory of optimism or pessimism, such as doctrinaire philosophers love to air, but with the admonition that each people, each race, must be studied by itself, free from bias, free from bigotry, and with the conviction that no matter what metaphysics say, any nation, as any man, may lift itself by the recognition of those indefeasible and universal elements of the mind, the "I," the "ought," and the "can"—the reverence of self, the respect for duty, and the devotion to freedom.

" Man who man would be,
Must rule the empire of himself ; in it
Must be supreme, establishing his throne
On vanquished will, quelling the anarchy
Of hopes and fears, being himself alone."

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