CHAPTER IX.

THE "FALL OF MAN" AND ETHNOLOGY.

We have seen that, closely connected with the main lines of investigation in archæology and anthropology, there were other researches throwing much light on the entire subject. In a previous chapter we saw especially that Lafitau and Jussieu were among the first to collect and compare facts bearing on the natural history of man, gathered by travellers in various parts of the earth, thus laying foundations for the science of comparative ethnology. It was soon seen that ethnology had most important bearings upon the question of the material, intellectual, moral, and religious evolution of the human race; in every civilized nation, therefore, appeared scholars who began to study the characteristics of various groups of men as ascertained from travellers, and to compare the results thus gained with each other and with those obtained by archæology.

Thus, more and more clear became the evidences that the tendency of the race has been upward from low beginnings. It was found that groups of men still existed possessing characteristics of those in the early periods of development to whom the drift and caves and shell-heaps and pile-dwellings bear witness; groups of men using many of the same implements and weapons, building their houses in the same way, seeking their food by the same means, enjoying the same amusements, and going through the same general stages of culture; some being in a condition corresponding to the earlier, some to the later, of those early periods.

From all sides thus came evidence that we have still upon the earth examples of all the main stages in the development of human civilization; that from the period when
man appears little above the brutes, and with little if any re-
ligion in any accepted sense of the word, these examples can
be arranged in an ascending series leading to the highest
planes which humanity has reached; that philosophic ob-
servers may among these examples study existing beliefs,
usages, and institutions back through earlier and earlier
forms, until, as a rule, the whole evolution can be easily
divined if not fully seen. Moreover, the basis of the whole
structure became more and more clear: the fact that "the
lines of intelligence have always been what they are, and
have always operated as they do now; that man has pro-
gressed from the simple to the complex, from the particular
to the general."

As this evidence from ethnology became more and more
strong, its significance to theology aroused attention, and
naturally most determined efforts were made to break its
force. On the Continent the two great champions of the
Church in this field were De Maistre and De Bonald; but
the two attempts which may be especially recalled as the
most influential among English-speaking peoples were those

First in the combat against these new deductions of
science was Whately. He was a strong man, whose breadth
of thought and liberality in practice deserve all honour;
but these very qualities drew upon him the distrust of his
orthodox brethren; and, while his writings were powerful
in the first half of the present century to break down
many bulwarks of unreason, he seems to have been con-
stantly in fear of losing touch with the Church, and
therefore to have promptly attacked some scientific rea-
sonings, which, had he been a layman, not holding a brief
for the Church, he would probably have studied with more
care and less prejudice. He was not slow to see the deeper
significance of archæology and ethnology in their relations
to the theological conception of "the Fall," and he set the
battle in array against them.

His contention was, to use his own words, that "no com-
munity ever did or ever can emerge unassisted by external
helps from a state of utter barbarism into anything that can
be called civilization"; and that, in short, all imperfectly
civilized, barbarous, and savage races are but fallen descend-
ants of races more fully civilized. This view was urged
with his usual ingenuity and vigour, but the facts proved
too strong for him: they made it clear, first, that many races
were without simple possessions, instruments, and arts which
never, probably, could have been lost if once acquired—as, for
example, pottery, the bow for shooting, various domestici-
cated animals, spinning, the simplest principles of agricul-
ture, household economy, and the like; and, secondly, it was
shown as a simple matter of fact that various savage and
barbarous tribes had raised themselves by a development of
means which no one from outside could have taught them;
as in the cultivation and improvement of various indigenous
plants, such as the potato and Indian corn among the Indians
of North America; in the domestication of various animals
peculiar to their own regions, such as the llama among the
Indians of South America; in the making of sundry fabrics
out of materials and by processes not found among other na-
tions, such as the bark cloth of the Polynesians; and in the
development of weapons peculiar to sundry localities, but
known in no others, such as the boomerang in Australia.

Most effective in bringing out the truth were such works
as those of Sir John Lubbock and Tylor; and so conclusive
were they that the arguments of Whately were given up as
untenable by the other of the two great champions above
referred to, and an attempt was made by him to form the
diminishing number of thinking men supporting the old
theological view on a new line of defence.

This second champion, the Duke of Argyll, was a man of
wide knowledge and strong powers in debate, whose high
moral sense was amply shown in his adhesion to the side of
the American Union in the struggle against disunion and
slavery, despite the overwhelming majority against him in
the high aristocracy to which he belonged. As an honest
man and close thinker, the duke was obliged to give up
completely the theological view of the antiquity of man. The
whole biblical chronology as held by the universal
Church, "always, everywhere, and by all," he sacrificed, and
gave all his powers in this field to support the theory of
"the Fall." Noblesse oblige: the duke and his ancestors had
been for centuries the chief pillars of the Church of Scot-
land, and it was too much to expect that he could break
away from a tenet which forms really its "chief corner-
stone."

Acknowledging the insufficiency of Archbishop Whate-
ly's argument, the duke took the ground that the lower, bar-
barous, savage, brutal races were the remains of civilized
races which, in the struggle for existence, had been pushed
and driven off to remote and inclement parts of the earth,
where the conditions necessary to a continuance in their
early civilization were absent; that, therefore, the descend-
ants of primeval, civilized men degenerated and sank in the
scale of culture. To use his own words, the weaker races
were "driven by the stronger to the woods and rocks," so
that they became "mere outcasts of the human race."

In answer to this, while it was conceded, first, that there
have been examples of weaker tribes sinking in the scale of
culture after escaping from the stronger into regions unfa-
vourable to civilization, and, secondly, that many powerful
nations have declined and decayed, it was shown that the
men in the most remote and unfavourable regions have not
always been the lowest in the scale; that men have been fre-
quently found "among the woods and rocks" in a higher
state of civilization than on the fertile plains, such examples
being cited as Mexico, Peru, and even Scotland; and that,
while there were many examples of special and local de-
cline, overwhelming masses of facts point to progress as a
rule.

The improbability, not to say impossibility, of many of
the conclusions arrived at by the duke appeared more and
more strongly as more became known of the lower tribes of
mankind. It was necessary on his theory to suppose many
things which our knowledge of the human race absolutely
forbids us to believe: for example, it was necessary to sup-
pose that the Australians or New Zealanders, having once
possessed so simple and convenient an art as that of the pot-
ter, had lost every trace of it; and that the same tribes, hav-
ing once had so simple a means of saving labour as the
spindle or small stick weighted at one end for spinning,
had given it up and gone back to twisting threads with the
hand. In fact, it was necessary to suppose that one of the main occupations of man from "the beginning" had been the forgetting of simple methods, processes, and implements which all experience in the actual world teaches us are never entirely forgotten by peoples who have once acquired them.

Some leading arguments of the duke were overthrown by simple statements of fact. Thus, his instance of the Eskimo as pushed to the verge of habitable America, and therefore living in the lowest depths of savagery, which, even if it were true, by no means proved a general rule, was deprived of its force by the simple fact that the Eskimos are by no means the lowest race on the American continent, and that various tribes far more centrally and advantageously placed, as, for instance, those in Brazil, are really inferior to them in the scale of culture. Again, his statement that "in Africa there appear to be no traces of any time when the natives were not acquainted with the use of iron," is met by the fact that from the Nile Valley to the Cape of Good Hope we find, wherever examination has been made, the same early stone implements which in all other parts of the world precede the use of iron, some of which would not have been made had their makers possessed iron. The duke also tried to show that there were no distinctive epochs of stone, bronze, and iron, by adducing the fact that some stone implements are found even in some high civilizations. This is indeed a fact. We find some few European peasants to-day using stone mallet-heads; but this proves simply that the old stone mallet-heads have survived as implements cheap and effective.

The argument from Comparative Ethnology in support of the view that the tendency of mankind is upward has received strength from many sources. Comparative Philology shows that in the less civilized, barbarous, and savage races childish forms of speech prevail—frequent reduplications and the like, of which we have survivals in the later and even in the most highly developed languages. In various languages, too, we find relics of ancient modes of thought in the simplest words and expressions used for arithmetical calculations. Words and phrases for this purpose are frequently found to be derived from the words for hands, feet, fingers, and toes, just as clearly as in our own language some of our
simplest measures of length are shown by their names to have been measures of parts of the human body, as the cubit, the foot, and the like, and therefore to date from a time when exactness was not required. To add another out of many examples, it is found to-day that various rude nations go through the simplest arithmetical processes by means of pebbles. Into our own language, through the Latin, has come a word showing that our distant progenitors reckoned in this way: the word *calculate* gives us an absolute proof of this. According to the theory of the Duke of Argyll, men ages ago used pebbles (*calculi*) in performing the simplest arithmetical calculations because we to-day "*calculate.*" No reduction to absurdity could be more thorough. The simple fact must be that we "calculate" because our remote ancestors used pebbles in their arithmetic.

Comparative Literature and Folklore also show among peoples of a low culture to-day childish modes of viewing nature, and childish ways of expressing the relations of man to nature, such as clearly survive from a remote ancestry; noteworthy among these are the beliefs in witches and fairies, and multitudes of popular and poetic expressions in the most civilized nations.

So, too, Comparative Ethnography, the basis of Ethnology, shows in contemporary barbarians and savages a childish love of playthings and games, of which we have many survivals.

All these facts, which were at first unobserved or observed as matters of no significance, have been brought into connection with a fact in biology acknowledged alike by all important schools; by Agassiz on one hand and by Darwin on the other—namely, as stated by Agassiz, that "the young states of each species and group resemble older forms of the same group," or, as stated by Darwin, that "in two or more groups of animals, however much they may at first differ from each other in structure and habits, if they pass through closely similar embryonic stages, we may feel almost assured that they have descended from the same parent form, and are therefore closely related." *

* For the stone forms given to early bronze axes, etc., see Nilsson, *Primitive Inhabitants of Scandinavia*, London, 1868, Lubbock's *Introduction*, p. 31; and
for plates, see Lubbock's *Prehistoric Man*, chap. ii; also Cartailhac, *Les Âges Préhistoriques de l'Espagne et du Portugal*, p. 227; also Keller, *Lake Dwellings*; also Troyon, *Habitations Lacustres*; also Boyd Dawkins, *Early Man in Great Britain*, p. 292; also Lubbock, p. 6; also Lyell, *Antiquity of Man*, chap. ii. For the cranogs, etc., in the north of Europe, see Munro, *Ancient Scottish Lake Dwellings*, Edinburgh, 1882. For mounds and greater stone constructions in the extreme south of Europe, see Cartailhac's work on Spain and Portugal above cited, part iii, chap. iii. For the source of Mr. Southall's contention, see Brugsch, *Egypt of the Pharaohs*. For the two sides of the question whether in the lowest grades of savagery there is really any recognition of a superior power, or anything which can be called, in any accepted sense, religion, compare Quatrefages with Lubbock, in works already cited. For a striking but rather *ad captandum* effort to show that there is a moral and religious sense in the very lowest Australian tribes, see one of the discourses of Archbishop Vaughan on *Science and Religion*, Baltimore, 1879. For one out of multitudes of striking and instructive resemblances in ancient stone implements and those now in use among sundry savage tribes, see comparison between old Scandinavian arrowheads and those recently brought from Tierra del Fuego, in Nilsson as above, especially in Plate V. For a brief and admirable statement of the arguments on both sides, see Sir J. Lubbock's Dundee paper, given in the appendix to the American edition of his *Origin of Civilization*, etc. For the general argument referred to between Whately and the Duke of Argyll on one side and Lubbock on the other, see Lubbock's Dundee paper as above cited; Tylor, *Early History of Mankind*, especially p. 193; and the Duke of Argyll, *Primeval Man*, part iv. For difficulties of savages in arithmetic, see Lubbock, as above, pp. 459 et seq. For a very temperate and judicial view of the whole question, see Tylor as above, chaps. vii and xiii. For a brief summary of the scientific position regarding the stagnation and deterioration of races, resulting in the statement that such deterioration "in no way contradicts the theory that civilization itself is developed from low to high stages," see Tylor, *Anthropology*, chap. i. For striking examples of the testimony of language to upward progress, see Tylor, chap. xii.