CHAPTER 35

DISCOVERY UPON DISCOVERY

In order fully to understand the exclamation made by my uncle, and his allusions to these illustrious and learned men, it will be necessary to enter into certain explanations in regard to a circumstance of the highest importance to paleontology, or the science of fossil life, which had taken place a short time before our departure from the upper regions of the earth.

On the 28th of March, 1863, some navigators under the direction of M. Boucher de Perthes, were at work in the great quarries of Moulin-Quignon, near Abbeville, in the department of the Somme, in France. While at work, they unexpectedly came upon a human jawbone buried fourteen feet below the surface of the soil. It was the first fossil of the kind that had ever been brought to the light of day. Near this unexpected human relic were found stone hatchets and carved flints, colored and clothed by time in one uniform brilliant tint of verdigris.

The report of this extraordinary and unexpected discovery spread not only all over France, but over England and Germany. Many learned men belonging to various scientific bodies, and noteworthy among others, Messrs. Milne-Edwards and De Quatrefages, took the affair very much to heart, demonstrated the incontestable authenticity of the bone in

question, and became--to use the phrase then recognized in England--the most ardent supporters of the "jawbone question."

To the eminent geologists of the United Kingdom who looked upon the fact as certain--Messrs. Falconer, Buck, Carpenter, and others--were soon united the learned men of Germany, and among those in the first rank, the most eager, the most enthusiastic, was my worthy uncle, Professor Hardwigg.

The authenticity of a human fossil of the Quaternary period seemed then to be incontestably demonstrated, and even to be admitted by the most skeptical.

This system or theory, call it what you will, had, it is true, a bitter adversary in M. Elie de Beaumont. This learned man, who holds such a high place in the scientific world, holds that the soil of Moulin-Quignon does not belong to the diluvium but to a much less ancient stratum, and, in accordance with Cuvier in this respect, he would by no means admit that the human species was contemporary with the animals of the Quaternary epoch. My worthy uncle, Professor Hardwigg, in concert with the great majority of geologists, had held firm, had disputed, discussed, and finally, after considerable talking and writing, M. Elie de Beaumont had been pretty well left alone in his opinions.

We were familiar with all the details of this discussion, but were far

from being aware then that since our departure the matter had entered upon a new phase. Other similar jawbones, though belonging to individuals of varied types and very different natures, had been found in the movable grey sands of certain grottoes in France, Switzerland, and Belgium; together with arms, utensils, tools, bones of children, of men in the prime of life, and of old men. The existence of men in the Quaternary period became, therefore, more positive every day.

But this was far from being all. New remains, dug up from the Pliocene or Tertiary deposits, had enabled the more far-seeing or audacious among learned men to assign even a far greater degree of antiquity to the human race. These remains, it is true, were not those of men; that is, were not the bones of men, but objects decidedly having served the human race: shinbones, thighbones of fossil animals, regularly scooped out, and in fact sculptured--bearing the unmistakable signs of human handiwork.

By means of these wondrous and unexpected discoveries, man ascended endless centuries in the scale of time; he, in fact, preceded the mastodon; became the contemporary of the <i>Elephas meridionalis</i>-the southern elephant; acquired an antiquity of over a hundred thousand years, since that is the date given by the most eminent geologists to the Pliocene period of the earth. Such was then the state of paleontologic science, and what we moreover knew sufficed to explain our attitude before this great cemetery of the plains of the Hardwigg Ocean.

It will now be easy to understand the Professor's mingled astonishment and joy when, on advancing about twenty yards, he found himself in the presence of, I may say face to face with, a specimen of the human race actually belonging to the Quaternary period!

It was indeed a human skull, perfectly recognizable. Had a soil of very peculiar nature, like that of the cemetery of St. Michel at Bordeaux, preserved it during countless ages? This was the question I asked myself, but which I was wholly unable to answer. But this head with stretched and parchmenty skin, with the teeth whole, the hair abundant, was before our eyes as in life!

I stood mute, almost paralyzed with wonder and awe before this dread apparition of another age. My uncle, who on almost every occasion was a great talker, remained for a time completely dumfounded. He was too full of emotion for speech to be possible. After a while, however, we raised up the body to which the skull belonged. We stood it on end. It seemed, to our excited imaginations, to look at us with its terrible hollow eyes.

After some minutes of silence, the man was vanquished by the Professor. Human instincts succumbed to scientific pride and exultation. Professor Hardwigg, carried away by his enthusiasm, forgot all the circumstances of our journey, the extraordinary position in which we were placed, the immense cavern which stretched far away over our heads. There can be no doubt that he thought himself at the Institution addressing his

attentive pupils, for he put on his most doctorial style, waved his hand, and began:

"Gentlemen, I have the honor on this auspicious occasion to present to you a man of the Quaternary period of our globe. Many learned men have denied his very existence, while other able persons, perhaps of even higher authority, have affirmed their belief in the reality of his life. If the St. Thomases of paleontology were present, they would reverentially touch him with their fingers and believe in his existence, thus acknowledging their obstinate heresy. I know that science should be careful in relation to all discoveries of this nature. I am not without having heard of the many Barnums and other quacks who have made a trade of suchlike pretended discoveries. I have, of course, heard of the discovery of the kneebones of Ajax, of the pretended finding of the body of Orestes by the Spartiates, and of the body of Asterius, ten spans long, fifteen feet--of which we read in Pausanias.

"I have read everything in relation to the skeleton of Trapani, discovered in the fourteenth century, and which many persons chose to regard as that of Polyphemus, and the history of the giant dug up during the sixteenth century in the environs of Palmyra. You are well aware as I am, gentlemen, of the existence of the celebrated analysis made near Lucerne, in 1577, of the great bones which the celebrated Doctor Felix Plater declared belonged to a giant about nineteen feet high. I have devoured all the treatises of Cassanion, and all those memoirs, pamphlets, speeches, and replies published in reference to the skeleton

of Teutobochus, king of the Cimbri, the invader of Gaul, dug out of a gravel pit in Dauphine, in 1613. In the eighteenth century I should have denied, with Peter Campet, the existence of the preadamites of Scheuchzer. I have had in my hands the writing called Gigans--"

Here my uncle was afflicted by the natural infirmity which prevented him from pronouncing difficult words in public. It was not exactly stuttering, but a strange sort of constitutional hesitation.

"The writing named Gigans--" he repeated.

He, however, could get no further.

"Giganteo--"

Impossible! The unfortunate word would not come out. There would have been great laughter at the Institution, had the mistake happened there.

"Gigantosteology!" at last exclaimed Professor Hardwigg between two savage growls.

Having got over our difficulty, and getting more and more excited--

"Yes, gentlemen, I am well acquainted with all these matters, and know, also, that Cuvier and Blumenbach fully recognized in these bones the undeniable remains of mammoths of the Quaternary period. But after what

we now see, to allow a doubt is to insult scientific inquiry. There is the body; you can see it; you can touch it. It is not a skeleton, it is a complete and uninjured body, preserved with an anthropological object."

I did not attempt to controvert this singular and astounding assertion.

"If I could but wash this corpse in a solution of sulphuric acid," continued my uncle, "I would undertake to remove all the earthy particles, and these resplendent shells, which are incrusted all over this body. But I am without this precious dissolving medium.

Nevertheless, such as it is, this body will tell its own history."

Here the Professor held up the fossil body, and exhibited it with rare dexterity. No professional showman could have shown more activity.

"As on examination you will see," my uncle continued, "it is only about six feet in length, which is a long way from the pretended giants of early days. As to the particular race to which it belonged, it is incontestably Caucasian. It is of the white race, that is, of our own. The skull of this fossil being is a perfect ovoid without any remarkable or prominent development of the cheekbones, and without any projection of the jaw. It presents no indication of the prognathism which modifies the facial angle.[4] Measure the angle for yourselves, and you will find that it is just ninety degrees. But I will advance still farther on the road of inquiry and deduction, and I dare venture to say that this human

sample or specimen belongs to the Japhetic family, which spread over the world from India to the uttermost limits of western Europe. There is no occasion, gentlemen, to smile at my remarks."

[4] The facial angle is formed by two planes--one more or less vertical which is in a straight line with the forehead and the incisors; the other, horizontal, which passes through the organs of hearing, and the lower nasal bone. Prognathism, in anthropological language, means that particular projection of the jaw which modifies the facial angle.

Of course nobody smiled. But the excellent Professor was so accustomed to beaming countenances at his lectures, that he believed he saw all his audience laughing during the delivery of his learned dissertation.

"Yes," he continued, with renewed animation, "this is a fossil man, a contemporary of the mastodons, with the bones of which this whole amphitheater is covered. But if I am called on to explain how he came to this place, how these various strata by which he is covered have fallen into this vast cavity, I can undertake to give you no explanation.

Doubtless, if we carry ourselves back to the Quaternary epoch, we shall find that great and mighty convulsions took place in the crust of the earth; the continually cooling operation, through which the earth had to pass, produced fissures, landslips, and chasms, through which a large portion of the earth made its way. I come to no absolute conclusion, but there is the man, surrounded by the works of his hands, his hatchets and his carved flints, which belong to the stony period; and the only

rational supposition is, that, like myself, he visited the centre of the earth as a traveling tourist, a pioneer of science. At all events, there can be no doubt of his great age, and of his being one of the oldest race of human beings."

The Professor with these words ceased his oration, and I burst forth into loud and "unanimous" applause. Besides, after all, my uncle was right. Much more learned men than his nephew would have found it rather hard to refute his facts and arguments.

Another circumstance soon presented itself. This fossilized body was not the only one in this vast plain of bones--the cemetery of an extinct world. Other bodies were found, as we trod the dusty plain, and my uncle was able to choose the most marvelous of these specimens in order to convince the most incredulous.

In truth, it was a surprising spectacle, the successive remains of generations and generations of men and animals confounded together in one vast cemetery. But a great question now presented itself to our notice, and one we were actually afraid to contemplate in all its bearings.

Had these once animated beings been buried so far beneath the soil by some tremendous convulsion of nature, after they had been earth to earth and ashes to ashes, or had they lived here below, in this subterranean world, under this factitious sky, borne, married, and given in marriage, and died at last, just like ordinary inhabitants of the earth?

Up to the present moment, marine monsters, fish, and suchlike animals had alone been seen alive!

The question which rendered us rather uneasy, was a pertinent one. Were any of these men of the abyss wandering about the deserted shores of this wondrous sea of the centre of the earth?

This was a question which rendered me very uneasy and uncomfortable. How, should they really be in existence, would they receive us men from above?