

SCIENCE.

FRIDAY, AUGUST 28, 1885.

BIOGRAPHICAL SKETCH OF THE PRESIDENT OF THE ASSOCIATION.

PROFESSOR HUBERT ANSON NEWTON, who is the president of the American association for the advancement of science, has held the chair of mathematics in Yale College since 1856. Virtually, he has had charge of the instructions in that branch of science at New Haven since 1853, when the college was deprived, by death, of the services of Professor Stanley. He had evinced, in his undergraduate course, strong proclivities toward mathematical studies; and his appointment to a tutorship, two years after his graduation in the class of 1850, undoubtedly confirmed these predilections, and opened to him the career in which he has won distinction at home and abroad.

His outward life has been uneventful. From the time when he entered college, almost forty years ago, he has remained in New Haven, assiduously devoted to the work of his professorship. Occasional visits to Europe have brought him into personal relations with the mathematicians and the institutions of other countries. Academic honors, as little sought as they were well deserved, have fallen upon

him. He was made an associate editor, many years ago, of the *American journal of science*, in whose pages his principal memoirs have appeared; he has been a vice-president in the scientific association of which he is now the head; he was one of the original members of the National academy of sciences. In the Winchester observatory of Yale college, he is a leading manager. The University of Michigan conferred upon him, in 1868, the degree of doctor of laws.

But he has still stronger claims than these to that recognition which his scientific friends have bestowed by inviting him to preside over their meeting at Ann Arbor. It is as an astronomer that he has won his highest reputation; and, as an astronomer, his name is forever to be associated with the discovery and enunciation of the laws of meteoric showers, so mysterious when

he applied his mind to their investigation, so comprehensible now

Professor Newton came into the field of meteors by what might be called an official inheritance. While he was an undergraduate, Denison Olmsted, his teacher in astronomy, with Alexander C. Twining, Edward C. Herrick, and others whom they had enlisted, were intent upon understanding the phenomena of shooting-stars. The resplendent shower of



Nov. 13, 1833, had aroused the imagination and the determination of these keen observers, and they were constantly engaged in meteoric discussions. The enormous Texan aerolite, preserved in the college cabinet, was an imperishable wonder. The Weston meteor had been described, long before, by Silliman and Kingsley. Even in the previous century, Thomas Clap, the rector of the college, had published a tract upon meteors, interesting now as an embodiment of what was then known and thought. These were precursors of the investigations in which Newton was destined to become a leader. The story of this period may easily be gathered from an article (which appeared in the *New Englander* for 1868) by a writer qualified in all respects to prepare the narrative, Prof. C. S. Lyman.

Without going over the ground there traversed, we shall follow Professor Lyman in saying that the cosmical origin of the November meteors, and the true explanation of the radiant, as well as of its position with respect to the earth's orbit, had been well settled by the observations of Olmsted and Twining after the shower of 1833. Olmsted had attempted, but unsuccessfully, to point out the probable orbit of the meteors in space. Newton first took sure and definite steps toward such a determination. He collected and analyzed previous observations, and pointed out not only the five possible orbits, but how the only true one could be determined. The laborious computations necessary were made by the distinguished English astronomer, Professor Adams of Cambridge; and thus the orbit of thirty-three and one-fourth years was definitely established. Newton's papers on this subject in the *American journal of science* have become classical, and are referred to by all writers on meteoric astronomy. His later papers on comets are characterized by the same originality and ability as those on meteors, and have largely added to his scientific reputation. An important memoir from his pen appeared in the first quarto volume published by the National academy of sciences in 1866, wherein he endeavored to show the laws which govern

the movement of sporadic meteors, as he had previously investigated the phenomena of periodic showers. Two admirable summaries of what is known in respect to meteoric laws have been contributed by this acknowledged authority to the new edition of the *Encyclopaedia Britannica* (vol. xvi. 1883), and to *Johnston's Cyclopaedia* (1877).

In all matters pertaining to the advancement of education and the progress of science, Professor Newton has been a wise and firm upholder of conservative ideas. He has shown no desire for popular applause: he has rarely appeared as a speaker before public assemblies. But wherever he has been called upon, he has come forward with independence, courage, and persistence, to uphold what he believed to be right. In electing him to be their president, the association has shown its desire to honor one whose titles to such a distinction are of the most solid character, — important contributions to knowledge, by difficult and prolonged study, guided by an acute and well-trained mind.

LETTERS TO THE EDITOR.

**.* Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Man's ancestry.

PERMIT me to dissent from your editorial comment (*Science*, vol. vi., p. 81), that man is of those forms whose ancestry is unknown. I cannot but think that the data at hand are already abundant for an answer, and that we can allocate his systematic relationships as well as those of any other animal. The data are given in the anatomical monographs, or, better still, can be tested by a comparison of the structure of man, and the primates, as expressed in the skeletal and other systems. It is difficult for me to understand how any one acquainted with the data could reach a conclusion other than that man is the derivative of a form very much like the chimpanzee and gorilla, and that, could his remote ancestors be seen, they would be placed not only in the same family, but in the same group with the African apes. The general agreement in the skeleton, the anapophyses, the digits, the sternum, the pelvis, the carpal and tarsal bones, the tuberculation and ridges of the molars, and numerous other points in which there is similarity between man and the African anthropoids, appear to me to preclude any other scientific conception. Compare man and the anthropopithecus of Africa, contrast the several species with the other apes, and the monkeys generally, and then apply the doctrine of probabilities to the morphological results. The only logical conclusion must be that man is