

other sources of information it seems that probably there are not five, but seven lakes in the valley. It may well, therefore, be nameless until more fully explored. It should be remarked in passing, that beginning with South Red Mountain, and extending northward, is a geological section of remarkable extent. No less than five miles in thickness of strata is presented before the observer with diagrammatic clearness.

Leaving the glacier we passed northward over a rocky upland where the 'sheep backs' testified of former glacial work on a tremendous scale. This led us into another amphitheater of smaller dimensions than the one occupied by the snow fields of the glacier. In this basin, eight thousand feet above sea level, a small lake met our sight. The mountain wall on its western shore was covered by what may be called glacial snow fields. These fields were of sufficient extent to be partially compacted into ice. As these ice masses moved down into the lake great cakes were broken off after the manner of icebergs where glaciers descend into the sea. This lake we called Summit Lake.

The outlet of this lake dropped by a series of cascades into a deep valley on whose far side rose a mountain of such form that Pyramid Mountain must be its name.

Returning from Summit Lake we crossed the snow fields, again traversing nearly its greatest diameter. Noting the time required gave a basis for estimating this diameter at about three and one-half miles. We also examined the lateral moraine, finding it to consist of basaltic fragments mainly of large size. There appeared to be considerable mineral bearing material in this mass. A surface moraine of yellow slate was of considerable interest. An enormous mass of rock had evidently fallen upon the surface of the ice from the overhanging mountain. Through and under it were a number of water-worn tunnels of curious

form, which I did not have time to examine with care.

Some crude observations were made as to rate of movement. Between two days there seemed to be a movement of the center of the mass of about two inches. This is not reliable, however, since conditions for accuracy could not be supplied.

To the peaks north and south of the ice field we gave the names of Mt. Blanchard and Mt. Cunningham, in honor of the guides who had served us during the expedition.

At some future time I hope to return to this region and extend these explorations further. In the meantime I commend it to those who wish to study mountain forms or glaciers and glaciation. There is an abundant and very interesting fauna and flora to be investigated, and on every side the majesty and glory of one of the noblest mountain ranges. In accessibility, in varied interest, in all which may attract either the lover of splendid scenery or the devotee of scientific exploration, no American or foreign locality is more enticing.

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THE HUXLEY MEMORIAL.

THE first meeting of the general committee formed for the purpose of establishing a memorial to Huxley was held in the Museum of Practical Geology, London, on the afternoon of November 27th. We take from the detailed report in *The Times* the following particulars:

The chair was occupied by the Duke of Devonshire, who opened the proceedings by referring to the official side of Huxley's career, stating that he did this as the official head of the Science and Art Department. Prof. Huxley immediately after leaving the Navy, in which he commenced his career, succeeded, in 1854, Prof. Forbes as Lecturer on Natural History in the Central School of Science in Jermyn-street.

This school subsequently became the Royal School of Mines. It was transferred to South Kensington in 1881, and there merged in the Royal College of Science. Prof. Huxley was the first Dean of the College, and on his retirement from the public service, in 1885, he was requested by the heads of the Department to retain the office in an honorary capacity, and that he did to the day of his death, attending the meetings of the Council and giving assistance in other ways. He was also honorary professor of biology in the College and retained a general charge of the biological section. While professor at the College he developed his system of biological teaching, which has had so marked an influence on biological teaching in all parts of the world. On his retirement, in 1885, he presented to the College his large and valuable collection of books on natural history. The room which he occupied was, by the authority of the Lords of the Committee of Council on Education, devoted to a Huxley biological laboratory for research, and it is in constant use by advanced students of biology. A scholarship has been endowed in connection with the College, and the history of the endowment may be of some interest. Prof. Huxley on one occasion met in society Miss Marshall, daughter of Mr. Matthew Marshall, for many years chief cashier of the Bank of England, and in consequence of her conversation with Prof. Huxley on that occasion Miss Marshall left to the department a large number of books and other instruments, and in addition a bequest of £1,000, from the proceeds of which a scholarship has been endowed. Prof. Huxley was for more than 40 years intimately connected with the Science and Art Department. The museum in Jermyn-street, in which we are met to-day, is a section of that department, and both in the lecture theatre and in the class-rooms upstairs Prof. Huxley for

many years delivered his lectures. It was almost my first duty—and I need not say my painful duty—on becoming President of the Council to address, on behalf of the Committee of Council on Education, a letter of condolence to Mrs. Huxley, in which the committee placed on record its high appreciation of the services to science and art rendered by Prof. Huxley, in the capacities to which I have referred and on the many inquiries by Royal Commission in which he had taken part.

Prof. M. Foster said that the history of the movement for a memorial to Prof. Huxley, he thought, would be of interest. The movement was initiated by a few friends of Prof. Huxley, who met at the Royal Society, and a provisional committee of representative men was formed. The invitations which they issued to a large number of influential persons to form a general committee were cordially accepted, and the Prince of Wales consented to join the committee and undertake the duties of honorary president. At that time it was too late in the summer to take active steps; so the meeting of the general committee was postponed till the present date. The provisional committee had given much time to the consideration of the form which the proposed memorial should take, but, of course, the decision would rest with the general committee.

Lord Kelvin then moved the following resolution:

“That it is desirable to establish a memorial to the late Right Hon. T. H. Huxley.” He said that, as an original investigator in biology, Huxley had, by his life-long perseverance in work for the increase of knowledge, left to the world a monument more enduring than any bronze or marble in which his survivors might give material expression to their gratitude. Of his originality Huxley gave early proof. His first writings were not done in a

scholastic manner, but were inspired by the innate fire and determined purpose of the man, and were the beginning of a long series of memoirs which made Huxley's name famous throughout the scientific world, and won for him early recognition as one of the first biological investigators of the day. In comparative anatomy Huxley's work was of immense value, and he almost created a new era in biological science by the great advances which he made in the new morphology. The instruction in morphology and general biology which students of Huxley's day could not obtain in any medical school or university was now regularly and systematically given, to the great advantage of medical science, of science in general, and of those who wished to understand the grandeur and beauty of nature, and what lay under it. Huxley also entered upon the subject of geology and paleontology, and there he had left results of an enduring character. His important contributions to the great and newly-developed science of evolution were well known, and only needed to be mentioned to indicate how much science owed to Huxley. But he was not a man who was merely a specialist, content to work out his special subject in the complete and thorough manner which characterized all his work. From the first he had a mind which must extend into philosophic thought; his moral lessons from biological work extended even into the field of politics. His contributions to thought in respect of theology were themselves such as would put Huxley's name and fame in a very high position indeed. He sacrificed his ease, his health and his time primarily for the advancement of science, but ultimately for the object which he felt to be even greater than the advancement of science—the promotion of the moral and material welfare of mankind. And that being the case, who could deserve a monument better than Huxley?

Mr. A. J. Balfour, in seconding the resolution, referred more especially to Huxley's contributions to the doctrine of evolution. He said that in the critical period of scientific history which followed the publication of the 'Origin of Species,' in 1857, the man who did more than any other man, perhaps, to stimulate public interest in the subject, to bring into line all the younger scientific thinkers of the day, to inspire them with his ardor, with his beliefs, and with his convictions, was probably Huxley. That is no small title to fame. If it be the fact, as I think it is, that it is now the common property of all educated men to look on this material world in which we live from the evolutionary standpoint, if that is a matter of common knowledge, belief and conviction, as I think it is, we owe that, not to the great original investigators who started the theory, but to those who, like Professor Huxley, did so much by their scientific discoveries to support it, and even more by their preaching and example to spread it among all classes of their fellow-countrymen. There were other questions never far absent from the mind of Prof. Huxley, as any one who knows his work will admit, on which he has left few positive results, and concerning which differences of opinion exist. But there ought to be no difference of opinion as to that great claim on our consideration; and that, even if it stood alone, dissociated from his literary and strictly scientific work, would, in my judgment, be quite sufficient justification for this meeting, and for us to use every exertion to carry into effect the resolution which it is my honor and duty to second.

Lord Playfair, in supporting the resolution, said that it had been his privilege to be associated with Prof. Huxley in many of his labors as a public man. The present position of technical education owed very much to the advocacy and scientific labors

of Prof. Huxley; and up to the time of his last illness he was actively interested in the establishment of scientific scholarships in almost every college in the United Kingdom, and of the Indian Empire and the colonies. One whole autumn he had spent on a gunboat with Prof. Huxley, in connection with the Royal Commission on the Fisheries of the Coast, and his labors, assistance and knowledge in that inquiry were most valuable. He did not wish to over-rate Prof. Huxley's labors as a public man in comparison with his scientific work. Discoveries in abstract science were of far greater service to humanity than the labors performed for one particular generation. But public work had done much to make Huxley's name loved by the people; and it was right to ask the people, for whom in his generation he had done so much, to join in making the memorial worthy of him.

Sir Joseph Hooker moved: "That the memorial do take the form of a statue to be placed in the Museum of Natural History, and a medal in connection with the Royal College of Science; and that the surplus be devoted to the furtherance of biological science, in some manner to be hereafter determined by the committee, dependent upon the amount collected." He said that he and Prof. Huxley entered the public service together as volunteers. The choice lay between them for the appointment to the Rattlesnake, and when Huxley returned from that cruise a friendship sprang up between them that had lasted for 40 years; and he owed his success in scientific life to the advice, stimulus and example of Huxley. He was sorry to say that Huxley's services to science were more appreciated abroad than even in this country. In the committee lists, which included more than 700 names, the foreign acceptances were more numerous than those at home. He hoped this state of things would speedily be remedied. The provisional committee

had thought of publishing, in a series, Huxley's scientific papers; but that was no longer necessary, as Messrs. Macmillan had written that they were prepared at their own risk to publish Huxley's papers in a collected, memorial form, provided that the committee would appoint some one to supervise the series. Messrs. Macmillan had promised to defray the cost of editing.

Mr. Leslie Stephen, in seconding the resolution, said that a high sense of personal gratitude to Huxley moved him to take part in this meeting. In a friendship of nearly 40 years Huxley had shown to him exceptional kindness on more than one occasion. Huxley was a man not only to be honored for his intellectual power, but to be loved for his masculine, affectionate nature. Lately he had read through Huxley's collected works, and he was convinced that when the history of this time came to be written, Huxley would find a place, not only among the leaders of the most characteristic scientific movement of the day, but also as one of the very first writers of English.

Mr. Alma-Tadema moved the following resolution:

"That the persons named in the list which has been circulated do form a general committee, and that the following 20 persons be selected to form an executive, with power to elect its own chairman, and to add to the number of the general committee: Sir J. Lister, Prof. M. Foster, Lord Rayleigh, Prof. E. Frankland, Sir J. Evans, Sir W. Besant, Sir J. Donnelly, Sir J. Fayrer, Sir W. H. Flower, Sir A. Geikie, Sir J. Hooker, Prof. E. Ray Lankester, Prof. J. N. Lockyer, Mr. Briton Riviere, Dr. P. L. Sclater, Sir H. Thompson, Mr. Spencer Walpole, Lord Shand, Sir John Lubbock and Prof. G. B. Howes."

Prof. G. B. Howes said that the sum already received in subscriptions to the memorial was £213, while £344 more was promised, making a total of £557.