

FIG. 1.—A normally eroded mountain mass, not affected by glacial erosion.

The three diagrams here presented are reproduced from an article by the undersigned on 'The sculpture of mountains by glaciers' (*Scot. Geogr. Mag.*, XXII, 1906, 76-89), in which evidence for glacial erosion is found in a comparison of glaciated and non-glaciated mountains, entirely independent of whether glaciers are known to be capable of eroding or not. In view of the inaccessibility of the

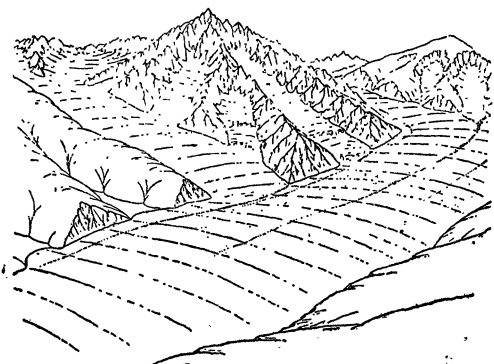


FIG. 2.—The same mountain mass as in Fig. 1, strongly affected by glaciers which still occupy its valleys.

bottom of a large Alpine glacier, it is believed that the best means of determining whether it acts as a sculpturing agent or not is to be found in a comparison of districts, otherwise similar, one of which has not been glaciated, while the other has been glaciated. The diagrams are not drawn from nature, although they summarize a variety of facts seen in various mountain ranges. The third one of the series may be taken as typical of La Plata peak, in the Sawatch range of Colorado, and of the overdeepened trough of Lake Creek

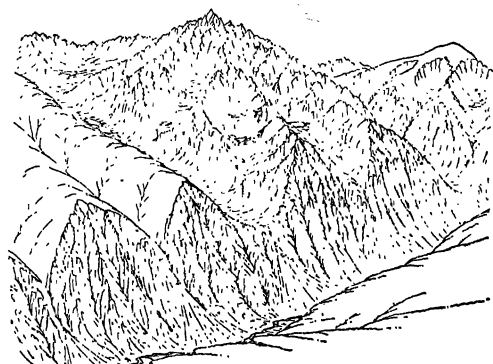


FIG. 3.—The same mountain mass as in Fig. 2, shortly after the glaciers have melted from its valleys.

beneath it, with a well-defined hanging lateral valley between the two.

It is of interest to note in this connection that a good explanation of hanging lateral valleys was given earlier than the date, 1898, usually assigned for this important advance in rational physiography; namely, in 1888, by La Noé and Margerie, in '*Les formes du terrain*' (Paris, *Service géographique de l'armée*, p. 177), where the cause of the discordance of hanging lateral valleys over their trough-like main valleys is very clearly set forth.

W. M. D.

#### THE WISTAR INSTITUTE OF ANATOMY

THE annual meeting of the advisory board of anatomists of the Wistar Institute was held on April 14 to 16. The members of the board present were Professors Barker, Donaldson, Gage, Huber, Huntington, Mall, McMurrich, Minot and Piersol; of the institute's staff, Drs. Greenman, Hatai, Stotsenburg and Streeter; of the institute's board of managers, Drs. Brown and Lewis.

The board held two sessions on Monday, April 15.

The general work of the year and the financial condition of the institute were explained by M. J. Greenman, the director.

The research in neurology was reviewed by Professor Henry H. Donaldson, chief of the neurological research of the institute. Professor Donaldson also reported upon the Vienna meeting of the International Brain Commission (May, 1906) and stated that an

important result of this commission would be the organization of special institutes for the study of the central nervous system and the establishment of international relations for the advancement of this study.

From Professor Donaldson's statement of the research work it appears that the investigations now under way at the institute are as follows:

The development of the fiber tracts in the brain of the human embryo, together with some experimental work for the control of these observations (Streeter); biometric studies on the skull and nervous system of the albino rat as modified by age and nutrition, and the chemistry of nerve tissue (Hatai); the growth of the white rat before birth (Stotsenburg); the development of the heart and vessels of teleosts (Senior); regeneration of the peripheral nerves (Greenman); and a comparison of the growth of the nervous system and its parts in the albino rat and man (Donaldson).

The committee on further organization of the neurological workers of the country consisting of Donaldson, Piersol and LeConte reported progress.

Professor Gage, chairman of the committee on relations of the Wistar Institute to American anatomists, reported that they had issued a circular letter to the anatomists of the country, and that this had served the desired purpose of bringing the anatomists and the Wistar Institute into closer relations. The committee is to remain as a permanent one for further work of this kind.

As a central institute for brain research, the institute is desirous of securing for distribution exact information concerning the facilities for neurological work in this country. It was proposed to obtain this by means of both a circular letter and special inspection of laboratories, but the matter was left with the institute staff for final action.

Dr. Huntington, chairman of the committee on comparative anatomy and embryology, spoke encouragingly of the outlook for the future, and suggested that material for comparative anatomy be collected, with especial reference to the general subject of vascular

morphology. Dr. Piersol urged in this connection the collection of human embryos.

The following general suggestions were made:

By Professor Barker, that the question of library be considered at an early date, and that the institute prepare a statement concerning the collections of anatomical literature in the city; secure the more important periodicals, and be prepared to purchase essential books of reference and new monographs, taking care not to duplicate books or journals, except where these were constantly needed in the building.

Professor Gage made the suggestion that the institute organize a bureau for information, bearing on the acquisition of materials, apparatus, models, photographs, etc., useful to anatomists. In this the institute would have the assistance of the board and others interested, and the work would be thus facilitated. The suggestion was recorded and will be carried out. Any assistance which anatomists or zoologists can render the institute in executing this plan will be gratefully received.

The publication of monographs was suggested by Professors Huber and Mall. It was the general opinion of the board that desirable monographs might be accepted by the board, published in the *American Journal of Anatomy* at the institute's expense, and as the edition was sold, the institute could then be reimbursed. This suggestion was so recorded, and will be carefully considered with reference to future action.

Professor Minot proposed that the institute take charge of the reproduction of original models and lantern slides. He stated that there were many original drawings which authors would entrust to the institute for the purpose of having lantern slides made from them, when they would not loan them to dealers. The reproduction of original models, as well as lantern slides, was favored by the board, and it was unanimously agreed that this was a most desirable undertaking. The suggestion did not imply that the institute should in any way act in a commercial capacity, but merely publish or reproduce models and lantern slides which can not be otherwise

obtained. The cooperation of the members of the board was promised for this work, and it is expected that the institute will take it up soon.

#### BERMUDA BIOLOGICAL EXPEDITION

By an arrangement with the Bermuda Natural History Society, opportunity is offered for a limited number of instructors and research students in zoology and botany to spend a few weeks at the Bermuda Biological Station this summer.

Members of the expedition will sail from New York on the steamer *Bermudian* (Quebec Steamship Co.) at 11 A.M. on Wednesday, June 19, arriving in Bermuda June 21, and returning will sail on August 7. Those who can not sail on June 19, may do so two weeks later—July 3.

The expense will be \$107 for first-class passage from New York to Bermuda and return, and for board and lodging at the Islands six weeks and five days. For the shorter time—four weeks and five days in Bermuda—the expense will be \$90. Payments are to be made to the undersigned,—fifty dollars twenty days before sailing, the balance on arriving in Bermuda.

For further information apply to

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#### MINUTES OF THE FIRST MEETING OF THE COMMITTEE ON SEISMOLOGY

THE initial meeting of the committee on seismology of the American Association for the Advancement of Science, was called to order in the council room of the Cosmos Club, Washington, D. C., at 10 o'clock on April 19, 1907. There were present L. A. Bauer, W. W. Campbell, J. F. Hayford, W. H. Hobbs, A. C. Lawson, C. F. Marvin, W. J. McGee and H. F. Reid. The members of the committee unable to attend the meeting were C. E. Dutton, G. K. Gilbert, L. M. Hoskins, T. A. Jaggar, Otto Klotz, C. J. Rockwood, Jr., and R. S. Tarr.

Mr. H. F. Reid was made temporary chairman, and in the deliberations of the com-

mittee which continued throughout the day, the counsel was sought of the heads of the principal government and other bureaus likely to be instrumental in furthering the objects before the committee. O. H. Tittmann, superintendent of the U. S. Coast and Geodetic Survey; G. O. Smith, director of the U. S. Geological Survey; C. D. Walcott, secretary of the Smithsonian Institution, and R. S. Woodward, president of the Carnegie Institution of Washington, were all for a portion of the time in attendance upon the meeting and expressed their approval of the plans and purposes of the committee. Willis L. Moore, chief of the U. S. Weather Bureau, whose counsel was sought, could not be reached.<sup>1</sup> The following resolutions were adopted by the committee: (1) In the judgment of the committee its functions should be regarded as initiatory and advisory. (2) In the judgment of the committee the time has come for asking the support of the federal government in seismological work. (3) This seismological work requires a cooperation of the various scientific bureaus of the government. (4) The appropriations for seismological stations should be made through the U. S. Weather Bureau, and the results of the observations should appear in its publications. (5) A subcommittee of three, to include the chairman of the committee, should confer with the chief of the Weather Bureau, the superintendent of the Coast and Geodetic Survey, and the director of the Geological Survey with reference to framing the legislation providing for seismological stations and the publication of observations, as recommended in the preceding resolution.

A permanent organization of the committee was effected by the election of H. F. Reid, chairman, and William H. Hobbs, secretary.

The following subcommittees were named: (1) A committee to determine the best form or forms of seismograph for the seismological stations to be established—Messrs. Reid, Marvin and Bauer. (2) A committee of three members with power to add to its number, to report as to what action is deemed desirable

<sup>1</sup> Chief Moore later expressed his hearty approval of the committee's plans.