

Brown, the United States Commissioner of Education, and Dean Frederick C. Ferry, Williams College, from the New England Association of Colleges and Preparatory Schools.

The officers of the past year were reelected as follows:

President—President George E. MacLean.

Vice-President—Headmaster Wilson Farrand.

Secretary-Treasurer—Dean Frederick C. Ferry.

The sub-committee of four, consisting of Headmaster Farrand, President Pritchett, Principal Bliss and Dean Ferry, appointed at the 1908 meeting to formulate the definition of the minute for the measurement of admission requirements, submitted a final report on this question, which was adopted after slight modification in the following form:

(DEFINITION)

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

(EXPLANATION)

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high-school course as a basis, and assumes that the length of the school year is from thirty-six to forty weeks, that a period is from forty to sixty minutes in length, and that the study is pursued for four or five periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject can not be accomplished in less than one hundred and twenty sixty-minute hours or equivalent. Schools organized on any other than a four-year basis can, nevertheless, estimate their work in terms of this unit.

The sub-committee was requested to continue its consideration of various subjects already before it and to report again at the next meeting. It is hoped in particular that it will present at that time recommendations as to some accurate use of the terms "progress of study," "curriculum," "course of study," "hour," "count," "point," "exercise," etc.

The committee passed a resolution expressing its approval of the tendency shown by many colleges to make their definitions of admission requirements conform to those of the College Entrance Examination Board, and

its hope that the definitions of admission requirements published by that board come into universal use.

It was voted to invite the Association of American Universities to accept membership in the committee and to send a delegate to its meetings.

The full minutes of the proceedings of the conference will be printed and distributed to the members of the associations which are represented in the committee.

FREDERICK C. FERRY,
Secretary-Treasurer

THE NEW ENGLAND GEOLOGICAL
EXCURSION

THE ninth annual intercollegiate geological excursion of New England was held in the northern Berkshires, Massachusetts, on Saturday, October 9, 1909, under the leadership of Professor H. F. Cleland, of Williams College. Representatives from Bates, Brown, Dartmouth, Harvard, Mt. Holyoke, Smith, Tufts, Wellesley, Wesleyan, Williams and Yale Colleges, the normal schools at Boston, North Adams, Salem and Worcester and other institutions, a total of 44, gathered for a preliminary discussion in Hotel Wendell, Pittsfield, on Friday evening. At this meeting papers were read on the glacial geology of the region to be traversed by Professor Cleland, on the areal geology by Professors Barrell and T. Nelson Dale, and on the anthropogeography by Professor Davis.

The party left Pittsfield at eight o'clock, Saturday morning, on a special electric car and made its first stop at the outlet of Glacial Lake Bascom. Here Professor Cleland explained the conditions attending the formation and the various halts of this former lake, and Professor Davis discussed the esker which traversed the valley. A second stop was made at the glass sand quarries and mill at Cheshire where Professor Emerson spoke of the origin of the sand and furnished the party with an explanation of its physical characters. Mr. C. Q. Richmond, superintendent of the Berkshire Street Railway, gave an interesting description of the industries of the Hoosic valley.

Following this, a fine series of glacial forms were seen; a kame terrace, which was the subject of a talk by Professor Goldthwait; the Great Esker; a well-marked and interesting moraine; and a great variety of kames. In addition, a delta terrace which was formed by a tributary of Lake Bascom and a broad high terrace on the old shore line of this same lake were observed. The scars of the Greylock landslides of August, 1901, were seen from the car. Noonings was taken at Williamstown where the members of the party enjoyed the hospitality of Williams College and were the guests of the officers of the college at a dinner served in the new College Commons.

In the afternoon, the party visited the natural bridge of the Hoosac mountains and studied the transition between the marble of the Natural Bridge quarry and the calcareous mica schists at the foot of the mountain.

It is just to add that the pleasures of the trip were enhanced by delightful weather and by the gorgeous spectacle of the mountains arrayed in autumnal colors.

ROBERT M. BROWN

WORCESTER, MASS.

*WISCONSIN GEOLOGICAL AND NATURAL
HISTORY SURVEY*

THE legislature of 1909 appropriated \$30,000 annually for the use of this survey. Of this sum \$10,000 is a permanent appropriation, which the survey has received for several years. An appropriation of \$10,000 for two years, chiefly for the use of the highway division, was repeated and a new appropriation of \$10,000 annually for two years was granted for the establishment of a soil survey. The commissioners of the survey have appointed William O. Hotchkiss, formerly economic geologist of the survey, to the position of state geologist, and have placed the geological work of the survey under his immediate charge. For the present a considerable part of Mr. Hotchkiss's time is being given to the highway department, which has been under his direction.

The last legislature appointed a special committee to make suitable investigations and

draw a bill providing for state aid for roads. This committee is studying the question of state aid along lines suggested by Mr. Hotchkiss and is requiring much service from him. The regular road and bridge work of the highway division of the survey has consisted in aiding towns and counties to spend more efficiently the taxes they raise for highway purposes. This has been done by bringing more business-like methods into use, and by making careful surveys, designs and estimates. The assistance thus given to local officers has been greatly appreciated by them, as it has given them technical advice and trained supervision. This work is carried on by A. R. Hirst, M. W. Torkelson and H. J. Kuelling.

A report on the peat resources of the state is in preparation by F. W. Huels, who has been working under Mr. Hotchkiss's direction.

Mr. Hotchkiss and Mr. F. T. Thwaites have been compiling a new geological map of the state, which will be issued in connection with a bulletin on the general geology of the state.

E. H. J. Lorenz has been employed to make a physiographic model of the state, under the direction of Mr. Hotchkiss and Mr. Thwaites. This model is on a scale of seven miles to the inch and will show in a graphic manner the various topographic forms. It is planned to distribute copies of this model to the various educational institutions of the state.

The natural history division of the survey has continued its work under the immediate charge of the director, E. A. Birge and the biologist, Chancey Juday. During the summer the field work for a forthcoming report on the dissolved gases and plankton of the Wisconsin lakes has been completed and the report will very shortly be ready for the press. This work has been carried on in cooperation with the U. S. Bureau of Fisheries and with financial assistance from it.

The work on the fishes of the state has been prosecuted under the general charge of George Wagner. A careful study is being made of the distribution, habits and food of the cisco of Lake Geneva. H. H. T. Jackson has spent a large part of the summer in collecting the