wavemeter by this means. A tuning fork of known frequency, approximately 1,000 cycles per second, is used as the basis of the standardization. A low-frequency generator is tuned to successive multiples of this frequency by means of the cathode-ray oscillograph and corresponding settings of the wavemeter are obtained. A third generator is similarly tuned to multiples of these frequencies and thus by successive stages the standardization is extended to include frequencies as high as 5,000 kilocycles (60 meters). It is intended that this wavemeter be used as the basic standard for the standardization of commercial wavemeters.

## THE DEVONIAN FOREST AT GILBOA, N. Y.

CONTINUED operations of the New York Board of Water Supply have brought to light 20 to thirty additional specimens of these earliest trees, all of which, by courtesy of the commissioners, have come to the State Museum, with the exception of one specimen presented 'to the American Museum of Natural History. These great stumps have now been located at three distinct horizons in the sandstones of late Devonian age, at or near Gilboa, and thus indicate the rising and falling of the shore land on which they grew. The botanical interest attached to this extraordinary occurrence is intensified by the fact that no satisfactory solution has been offered of the relationships of these trees, though they have been known for many years. The character of the stumps themselves and such portions of their tissue as remain have not proved a satisfactory clue to their nature, but Winifred Goldring, paleobotanist, has found in their foliation and fructification evidence which has led to the belief that they are seed ferns (Pteridospermophyta), partaking of the character of Lyginopteris and allied forms, but of a simpler organization. That trees of such magnitude, rising to heights of 30 to 40 feet, should appear so abruptly in geological history is sufficient to indicate what a long unobserved record lies back of this majestic plant growth, the oldest of known forests. In due time an effort will be made to reproduce in the State Museum the conditions under which these trees grew on the sloping shores of the Appalachian.

## THE BOYLSTON MEDICAL PRIZES

THESE prizes, which are open to public competition, are offered for the best dissertation on questions in medical science proposed by the Boylston Medical Committee. At the annual meeting held in Boston in 1920 a prize of \$300 was awarded to an essay entitled "Acute Inflammation of the Nose, Pharynx and Tonsils" by Mr. Stuart Mudd, of St. Louis. For 1922 there is offered a prize of \$500 and the Boyston Prize Medal for the best dissertation on the results of original research in medicine, the subject to be chosen by the writer. The Boylston Prize Medal will be added to the money prize only in case the winning essay shows special originality in the investigations detailed. Dissertations entered for this prize must be in the hands of the secretary on or before February 1, 1923.

In awarding these prizes, preference will be given to dissertations which exhibit original work, but if no dissertation is considered worthy of a prize, the award may be withheld. Each dissertation must bear, in place of the author's name, some sentence or device, and must be accompanied by a sealed packet, bearing the same sentence or device, and containing the author's name and residence within. Any clew by which the authorship of a dissertation is made known to the committee will depar such dissertation from competition. Dissertations must be printed or typewritten, and their pages must be bound in book form. All unsuccessful dissertations are deposited with the secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

By an order adopted in 1826 the secretary was directed to publish annually the following votes: (1) That the board does not consider itself as approving the doctrines contained in any of the dissertations to which premiums may be adjudged. (2) That, in case of publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

The Boylston Medical Committee is appointed by the president and fellows of Harvard College, and consists of the following physicians: Reid Hunt, M.D., secretary; William T.