

It is stated in *Nature* that the annual meeting of the Association of Public School Science Masters was held at the London Day Training College on December 31, 1918, and January 1, 1919, under the presidency of Sir Ronald Ross. The subject of the president's address was "Observations on the results of our system of education." A lecture on poison-gas warfare was given by Lieutenant-Colonel Smithells. There were discussions on the importance of restricting specialization in university scholarship examinations and giving weight to general education, opened by Mr. F. S. Young; science in the general education of boys, opened by Mr. W. D. Eggar and Mr. C. V. G. Civil; and courses in general science for classical Sixth Forms, opened by the Rev. S. A. McDowall.

#### UNIVERSITY AND EDUCATIONAL NEWS

GIFTS aggregating \$128,000 to Yale University were announced on January 23. They include \$25,000 to the Forestry School from Mr. and Mrs. Gifford Pinchot.

THE zoology department of Wabash College, of which Professor A. Richards has charge, has received from the estate of Professor Donaldson Bodine, formerly professor of zoology the sum of \$5,000, to provide for the purchase of books for the zoology department, subject to an annuity.

At the request of Professor Bailey Willis, professor of geology at Stanford University, who is continuing his war work with the House Commission in New York, Professor James Perrin Smith will act as executive head of the department of geology and mining for the coming year. Dr. Eliot Blackwelder, of the University of Illinois, has been appointed acting professor of geology during the winter quarter.

MR. H. P. STUCKEY, for the past ten years horticulturist at the Georgia Experiment Station, has been appointed director, to succeed J. D. Price, who resigned to accept the position on the Railroad Commission to which he was elected. Other changes in the station staff are the appointment of Mr. T. E. Keitt, formerly chemist of the South Carolina Sta-

tion, as chemist the appointment of Mr. H. E. Shiver, formerly assistant in chemistry at the South Carolina Station as assistant chemist; the appointment of J. A. McClintock, formerly extension pathologist for Georgia, as plant pathologist and botanist, and the resignation of Mr. J. C. Temple, bacteriologist.

DR. N. L. BOWEN, of the Geophysical Laboratory, Carnegie Institution, has been appointed to the professorship of mineralogy at Queen's University, Kingston, Ontario.

#### DISCUSSION AND CORRESPONDENCE AN UNCOMMON ICE FORMATION

WHILE skating on the upper part of the Charles River at North Bellingham, Mass., January 13, 1918, during a severe cold spell, we encountered an ice formation of a kind wholly new to us, though we have practised river skating for many years and are both fairly observant of natural phenomena. There is a low dam here over which a good head of water was flowing. Just below the dam an uneven bridge of ice resting partly on rocks and partly on the water formed a hood over the stream, and out of this rose a considerable number of upright columns of ice superficially somewhat resembling stalagmites. They were of pretty uniform diameter, about four or five inches, and varied in height from two or three inches to as many feet, while the tallest was perhaps three and a half feet. This tallest one and a number of the others were completed, being finished off with a tapering cap of snow-like structure that curved over towards the dam and into the wind, which was blowing pretty strongly down stream. Many, however, in process of formation showed how they were made.

They were all tubular and were built up from the inside by the bursting of bubbles that rose through the tubes and the freezing of the resulting spray. It was evident that the rush of water over the dam carried air with it under the hood of ice below, and that this air found vent here and there in the form of bubbles, which, bursting, gradually built up these vertical columns. Each unfinished, or live, column showed a crown of bursting