DR. HERMANN M. BIGGS has been elected a member of the international health board of the Rockefeller Foundation for Medical Research.

PROFESSOR G. H. CLEVENGER has resigned as research professor of metallurgy at Stanford University and is now engaged in directing cooperative experimental work in the U. S. Bureau of Mines, Netherlands East Indies government, Research Corporation of New York and others.

DR. F. E. CARRUTH, formerly connected with the chemical division of the North Carolina Experiment Station, has become associated with the Schaefer Alkaloid Works, Maywood, N. J.

PROFESSOR LUIGI LUCIANI, of the chair of physiology at the University of Rome, retires at the end of the present academic year, having reached the age limit. He has been a member of the senate and of the national board of public instruction.

UNIVERSITY AND EDUCATIONAL NEWS

MRS. RUSSELL SAGE has given $100,000 to Syracuse University. The fund will be devoted to the direct interests of the John Slocum College of Agriculture, which is named after Mrs. Sage's father.

THE new building of the University of Cincinnati College of Medicine was dedicated on February 25, the principal speakers being Major Christian R. Holmes, dean, and Dr. Henry S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching. The new medical building was erected and equipped at a total cost of approximately $600,000.

ACCORDING to the *Journal* of the American Medical Association, the Ontario legislature has granted to the Ontario University for 1918, the following amounts: Western, London, $20,000 for the public health department; $15,000 for the medical department; $15,000 for the arts, and a special grant of $10,000; Toronto University, large grants, including a special grant of $175,000; Queen's, Kingston, $80,000, including a special grant amounting to $25,000.

LORD BALFOUR OF BURLEIGH, who presided at the recent annual meeting of the Carnegie Trust at Westminster stated that experts had reported favorably on the work accomplished during the past year, especially by research students, whose achievements had been of real use to the nation. Assistance to students, under payment of class fees for the past year, had been again reduced by £3,000 to £26,000, the beneficiaries numbering 2,112. Scottish university incomes from this source had in five years fallen to about half. This was a serious matter for the universities, and it was hoped that Treasury grants would alleviate the position. An encouraging feature of last year was the voluntary repayment of £1,308 by 21 beneficiaries.

DR. WILLIAM M. JARDIN, since 1910 professor of agronomy, and later dean of the division of agriculture and director of the agricultural experiment station of the Kansas State Agricultural College, has been elected president of the College. Dr. J. T. Willard, professor of applied chemistry, becomes vice-president.

DR. HARRY CLARK, who was from 1911 to 1917 an instructor in physics at Harvard University has been appointed professor of physics in Victoria College, Wellington, New Zealand.

THE following have been appointed fellows of University College, London: Miss Harriette Chick, D.Sc., assistant to the director of the Lister Institute of Preventive Medicine; Dr. Ernest Marshall Cowell, M.D., B.S., F.R.C.S., captain R.A.M.C.; Dr. Charles Authur Lovatt Evans, D.Sc., professor of physiology in the University of Leeds, major, R.A.M.C.; Dr. David Heron, D.Sc., secretary to the London Guarantee and Accident Company; Mr. William Howard Lister, D.S.O. captain R.A.M.C.; Mr. Edward Kenneth Martin, F.R.C.S. surgical registrar to University College Hospital, major R.A.M.C.; Mr. Edward Talbot, Paris B.Sc. The following were appointed fellows of King's College. Professor Arthur Dendy, D.Sc., F.R.S. professor of zoology in the Uni-

versity since 1911 (of zoology and animal biology at the College since 1905); Mr. Francis Lydall, 13th Wrangler; special lecturer on Advanced Electrical Engineering at the College, 1910–14.

DISCUSSION AND CORRESPONDENCE

THE AURORA BOREALIS

THE most extensive and brilliant aurora witnessed in central Illinois within the memory of living men attracted unusual attention on the evening of March 7, 1918, at Urbana, Illinois, in lat. 40° 6′ N., long. 88° 13′ W. Although the aurora is only rarely visible here at all, this one reached beyond the zenith.

The aurora first attracted my attention at 9:25 P.M., central time, in the form of a band of white light about 2° wide, extending in an arc from a point on the horizon at about N. 45° W. across the north sky, reaching a maximum altitude of about 20°, approximately due north, and descending at about N. 45° E. Through and beyond this, radiating white bands extending upward, and two rosy areas of about the color of the strontium flame appeared, one about N. 45° E. and 20° above the horizon, the other about N. 10° W. and 25° or 30° above the horizon.

The illuminated area extended rapidly, reaching a maximum at about 9:45 P.M., when it included the entire north half of the sky and overlapped into the south half from horizon to zenith. The main framework consisted of streamers of white light converging toward a point 30° or more south of and below the zenith. These streamers rose vertically from the north point of the horizon and its vicinity, but those rising from the east and west points of the horizon were inclined about 20° from the vertical (toward the south).

The streamers were fairly steady, in large part, extending, multiplying, and fading gradually; but in many parts of the sky there was a nearly continual play of light, in pulsations proceeding swiftly upward along the rays. Occasionally a streamer or a group of streamers brightened suddenly, giving an effect like that of the throwing on of a great searchlight.

Against the background of white streamers the red color expanded in glowing patches, increasing in brilliance as in area. During the maximum brilliance and extent of the aurora, the red was bright from the due east to the due west vertical circles and beyond them, and especially near the zenith (just below it to the north). It was never a continuous sheet of uniform brightness, but appeared brightest in roundish patches, locally streaking out parallel to the white streamers. The red lights pulsated and played up and down over the sky like the white.

About 9:50 P.M., after the aurora had faded slowly for a few minutes, the white streamers shortening to an altitude of 45° or less, the red light concentrated again in two patches, one about N. 45° E. and 20° above the horizon, the other N. 5°–10° W. and 25°–30° high. They varied from 3 to 10 degrees or more in diameter. About 9:55 a third bright red area appeared, about N. 40° W. and 20°–25° above the horizon. It was less perfectly circular than the other two, having a tendency to show brightest and to expand along lines parallel to the white streamers.

About 10:05 P.M. the N. 40° W. and N. 45° E. red areas faded out, leaving a single glowing patch N.–N. 10° W. and 20°–25° above the horizon, which continued to pulsate faintly and grow weaker. The white light had now subsided to a rather uniform sector of the north sky reaching from about N. 50° W. to about N. 50° E. and from the horizon to an arc whose maximum altitude lay in the site of the red patch in the north. At 10:45 P.M. there was still a glow in the north sky, apparent to an altitude of over 5°.

The angles here given were estimated, as I unfortunately had no instruments available at the time.

C. W. TOMLINSON
UNIVERSITY OF ILLINOIS

On the evening of Thursday, March 7, a remarkable auroral display was visible here. Some observers report a faint red glow in the eastern sky as early as seven o'clock, and it would appear from the testimony of several observers that the phenomena increased in brilliancy until about 9:45, at which time it