

Principal Benjamin F. Buck, of the Lake View High School, for high schools of the state.

There are being held during the week a large number of assemblies and conferences, including a conference on 'Religious Education in State Universities and Colleges,' a conference on 'Commercial Education' and 'A National Conference of College and University Trustees.' Among those announced to speak at the latter congress are the Hon. Andrew S. Draper, president Henry S. Pritchett and Professor Charles E. Bessey.

SCIENTIFIC NOTES AND NEWS.

IN memory of Professor DeWitt B. Brace, head of the department of physics of the University of Nebraska, whose death we were compelled to record last week, the new physics building, the construction of which he supervised and into which he was about to move, will be named Brace Hall.

PROFESSOR G. E. HALE, director of the Mt. Wilson Solar Observatory, on September 30, gave a lecture in the Cavendish Laboratory, Cambridge University, on 'The Development of a New Method in Solar Research,' and on October 4 he gave a lecture at a special meeting of the Royal Astronomical Society on the 'Solar Observatory on Mount Wilson, California.'

THE medical profession of Chicago will give a banquet to Dr. Nicholas Senn on Saturday, November 11. The committee of arrangements consists of Drs. William A. Evans, Frank Billings, John B. Murphy, William L. Baum and David J. Doherty.

DR. C. H. GILBERT, who has been working during the summer on the deep-sea fishery collections at Washington, has returned to Stanford University.

MR. J. H. BATTY, who has been collecting mammals, birds and reptiles for the American Museum of Natural History in Mexico for several years past, finished his work in southern Sinaloa in November of last year, going thence overland through Tepic to Jalisco, where he has since been making important collections. Several shipments from Jalisco have already reached the museum, containing

hundreds of birds and mammals, besides many reptiles and insects, accessories for groups and a large number of valuable photographs. During the last two or three months he has been exploring the fauna of Mount Colima and the adjacent regions.

DR. H. BECHHOLD has been appointed a member of the Royal Institute for Experimental Pathology at Frankfort.

THE Royal Commission on the Care and Control of the Feeble-Minded, consisting of Mr. W. P. Byrne, C.B., Mr. W. H. Dickinson, Dr. H. B. Donkin, Dr. J. C. Dunlop and Mrs. Pinsent, left Liverpool for the United States on October 2 to study American methods of treating the insane.

PROFESSOR W. E. CASTLE, of Harvard University, will lecture before the New York Association of Biology Teachers, on the evening of October 20, his subject being 'The Experimental Study of Heredity.'

PROFESSOR EDGAR L. HEWETT, of Washington, will lecture on October 30 at the American Museum of Natural History before the American Ethnological Society, on 'The Life and Culture of the Tewa Indians in Pre-Spanish Times.'

PROFESSOR H. MARSHALL WARD, F.R.S., delivered the inaugural address at the opening of the present session of the Southeastern Agricultural College, at Wye, England, taking as his subject 'Botany and Agriculture.'

DR. J. W. LOWBER, F.R.G.S., F.R.A.S., of Austin, Texas, has been elected a member of the Royal Societies Club of London.

SIR WILLIAM WHARTON, F.R.S., hydrographer of the British Navy, died at Cape Town, on September 29, of enteric fever. Sir William Wharton was president of the Section for Geography at the meeting of the British Association in South Africa.

DR. WILHELM JOHANN FRIEDRICH VON BEZOLD, professor of physics and meteorology at the University of Berlin and director of the Prussian Meteorological Bureau, died on September 13, at the age of sixty-eight years.

THE death is announced of Dr. Alexander Hay Japp at the age of sixty-six years. He

was a man of letters who wrote a life of Thoreau, books on Darwin and some works on natural history.

M. ALEXIS PACHE, with three natives, was killed in August, by an avalanche, while making explorations in the Himalayas.

THE generosity of a friend of the American Museum of Natural History enables the department of ornithology to plan to assemble a special collection of Birds of Paradise. Many species of this family are now becoming so rare that specimens can be secured only with difficulty. Mr. Chapman, associate curator of ornithology, while attending the fourth International Congress of Ornithologists in London recently, took advantage of the occasion to examine the stocks of London dealers in natural history supplies and was fortunate in procuring some desirable material for use in the proposed group.

PEABODY MUSEUM of Yale University has received a large cabinet of shells from the estate of the late O. P. Hubbard.

THE International Congress of Radiology, which met recently at Liège, has decided to hold another congress in five years, which was placed under the charge of an international committee.

WE learn from the *Bulletin of the American Mathematical Society* that the Academy of Sciences of Berlin held its Leibnitz session on June 29. The Steiner prize was not awarded, but the sum of six thousand Marks was set apart in recognition of the investigations of the late Professor Guido Hauck.

THE following resolution was passed by the Congress of Tuberculosis recently held at Paris: "The congress, after hearing the *exposé* of the most recent investigations, declares that it is not only indispensable to avoid contagion from man to man, but also to pursue the prophylaxis of bovine tuberculosis and to continue to take administrative and hygienic measures to avert its possible transmission to our species, and finally that it is desirable to be on our guard against all forms of animal tuberculosis."

PROFESSOR W. C. UNWIN delivered the inaugural address of the opening session at the City and Guilds Central Technical College, taking as his subject 'The Niagara Power Stations.' Professor W. E. Ayrton, the dean, presided. According to the *London Times*, Professor Unwin, in the course of his address, which was freely illustrated by lantern views, pointed out that if the total energy due to the fall from Lake Erie to Lake Ontario could be utilized it would amount to 7,000,000 horsepower. At the fall itself the horsepower of the descending water was about 4,000,000. The first great scheme for utilizing the water power resulted in the formation of the Niagara Falls Power Company, who obtained, in 1886, the right to develop 200,000 horsepower on the American side, and later 250,000 horsepower on the Canadian side. Work on a canal and tunnel for 100,000 horsepower was commenced, and in 1890 Mr. Adams went to London to consult the engineers on that side of the Atlantic. A competition for hydraulic and electric plans was started. A commission with Lord Kelvin as chairman was formed to consider the plans. The competition practically settled the hydraulic arrangements to be adopted, but two or three years of conferences and discussion elapsed before a really practicable scheme of electrical distribution for all purposes was threshed out. Professor Unwin gave a detailed description of the plant of the Niagara Falls Power Company, and referred to the chief points of interest in the undertakings of the Ontario Power Company, the Canadian Power Company, and the Electrical Development Company. Dealing with the question of the destruction of the falls, he stated that in 1885 Mr. Evershed thought he was taking a very safe line in saying that for power purposes no more than 4 per cent. would be required. If 150,000 horsepower were produced the daily demand would be 11,000 cubic feet per second, which was 5 per cent. of the mean flow, or not quite 7 per cent. of the minimum flow. The development of 650,000 horsepower demanded 48,000 cubic feet per second, or 21½ per cent. of the mean flow and 30 per cent.

of the minimum flow. It was obvious that when the whole of the machinery was in working order the appearance of the falls would be startling. Taking into account the water used for the Welland Canal and Chicago drainage and other canals projected the total diversion of water would be at least 41 per cent. of the minimum flow. Nor was the end of projects for the diversion yet in sight, so that there seemed likely to be a fulfillment of Lord Kelvin's prophecy that before long Niagara would be a dry ravine.

UNIVERSITY AND EDUCATIONAL NEWS.

SIR DONALD CURRIE has offered £20,000 to Queen's College, Belfast, on condition that an equal sum is otherwise raised. A large portion of the necessary sum has already been promised.

MR. BASIL MCCREA, of Belfast, has given £6,000 to found a chair of experimental physics in Magee College, Londonderry, and to provide two scholarships in connection therewith, on condition of the subscription of funds for a suitable laboratory within a certain period.

THE trustees of the Carnegie Foundation to provide pensions for college professors will hold their first meeting in New York City on the afternoon of November 15.

THE president of the Louisiana State University announces that as the yellow fever quarantines are still in force, it is deemed best not to open the university until November 1. The session will close on June 27, 1906. Perhaps it would be safe to open at an earlier date, but the university authorities wish to be sure of avoiding all danger, not only of infection in the school, but of detention of students by quarantine. There have been seven sporadic cases of yellow fever in Baton Rouge since September 4, but there has been no yellow fever at the university, and no serious sickness of any kind.

THERE have this year registered at Stanford University 590 new students as compared with

488 last year. They are distributed among the departments as follows:

	1904.	1905.
Greek	4	8
Latin	18	23
German	27	28
Romanic Languages	8	14
English	69	87
Psychology	—	4
Education	5	11
History	27	38
Economics	27	29
Law	52	97
Drawing	3	6
Mathematics	14	14
Physics	3	3
Chemistry	24	31
Botany	3	6
Physiology	17	12
Zoology	12	10
Entomology	1	2
Geology and Mining.....	53	41
Civil Engineering	49	47
Mechanical Engineering.....	37	33
Electrical Engineering.....	35	47

THERE are this year 713 students in the freshman class of Harvard University, as compared with 788 students last year.

An instructorship in the department of physics of the University of Pennsylvania is vacant. Applications may be addressed to Professor Arthur W. Goodspeed.

PROFESSOR NATHANIEL BUTLER has been appointed dean of the College of Education of the University of Chicago to fill the vacancy caused by the resignation of Professor H. E. Locke.

AUSTIN CARY, A.B., has been appointed assistant professor of forestry at Harvard University, and R. T. Fisher, A.B., has been promoted to an assistant professorship in the same subject.

PROFESSOR A. EMCH, of the University of Colorado, has been appointed professor of mathematics at the Cantonal College of Solothurn, Switzerland.

DR. TH. PAUL, director of the scientific department of the Bureau of Health at Berlin, has accepted a call to the professorship of pharmacology and applied chemistry at Munich.