medicine, the first meeting of which was held on December 9. Dr. Mélis was appointed president, and Dr. Muls of Brussels, secretary.

Dr. Ella B. Everitt, professor of gynecology at the Woman's Medical College, Philadelphia, was killed on January 24 when her automobile collided with a motor truck.

THE Yale Alumni News writes: "The late Professor Joseph Paxson Iddings, of the United States Geological Survey, a graduate of the Sheffield Scientific School in the Class of 1877. and who had a distinguished career as a teacher and research worker in the field of petrology, was always greatly interested in the work of petrology at Yale, and especially in the work of his friend, the late Professor Pirsson. Dr. Iddings gave, some years ago, the Silliman Lectures at Yale University, and he was for many years connected with the University of Chicago as professor of petrology. Through a gift from his sister, Mrs. Estelle Iddings, Cleveland, the entire portion of Dr. Iddings' estate, amounting to over \$25,000, has been presented to the Board of Trustees of the Sheffield Scientific School, the income of this fund to be used for the promotion of research work in petrology. During the life of one person a portion of the income of this fund will not be available, but there will be established for the next university year a scholarship of \$500 open to a properly qualified student in the graduate school of the university competent to carry on research work in petrology. scholarship is to be known as the Joseph Paxson Iddings Scholarship in Petrology. award of this scholarship is, by the terms of the gift, in the hands of a committee composed of the director of the Sheffield Scientific School and the professor of geology, who is a member of the Governing Board of the Sheffield Scientific School."

ATTENTION is called in *Nature* to the fact that on January 2 occurred the centenary of the birth of Rudolf Julius Emmanuel Clausius, the distinguished mathematical physicist and the predecessor of Hertz in the chair of natural philosophy at Bonn. The son of a pastor and schoolmaster, Clausius was born at Koslin,

in Pomerania, and after attending the gymnasium at Stettin, spent four years at Berlin, where he studied under Dirichlet, Steiner, Dove, and Magnus. Before going to Bonn he held appointments at the Royal Artillery School. Berlin, Zürich Polytechnic, and Würzburg University. Recognized as one of the founders of the science of thermo-dynamics, it was in his memoir to the Berlin Academy of Sciences in 1850 that he re-stated Carnot's principle in its correct form. To him is also due the conception of entropy. His chief work, "Die Mechanische Wärmetheorie," appeared in 1867. The kinetic theory of gases and the theory of electrolysis also owed much to his labors. He was called to Bonn in 1869, served as Rector of the University during 1884-85, and died there on August 24, 1888.

THE House of Representatives has passed the Lampert bill to increase the salaries of the chief or principal examiners of the Patent Office from \$2,700 to \$3,900 per year and those of the assistant examiners by amounts ranging from \$150 to \$900 per year. The bill provides an increase of force to the extent of one law examiner, 26 assistant examiners, and 22 clerks.

UNIVERSITY AND EDUCATIONAL NOTES

THE will of Amos F. Eno, disposing of \$13,000,000 or more, is declared invalid by a surrogates' court jury on the ground that Mr. Eno was of unsound mind when he executed it. It is the second time the will has been declared invalid in surrogate's court, the appellate division having ordered a retrial. The will was executed in June, 1915, two months before Mr. Eno's death. His estate has increased since then, so that the distribution under the document now would have been approximately: Columbia University, between \$5,000,000 and \$6,000,000; other institutions, \$3,000,000, and relatives, \$4,600,000. Besides the residuary bequest to Columbia University Mr. Eno bequeathed to New York University, the American Museum of Natural History, the Metropolitan Museum of Art and other institutions, \$250,000 each. The largest cash beneficiary was the General Society of Mechanics and Tradesmen, to which the testator left \$1,800,000.

FEBRUARY 24, 1922]

The will of Cora M. Perkins gives her residuary estate to Columbia University, in addition to a direct bequest of \$30,000 for chemical research.

A REUTER dispatch from Brussels states that Louvain University has received a legacy of \$100,000 toward erecting a special building for cancer research.

DR. M. C. MERRILL, professor of horticulture at the Utah Agricultural College, has been appointed professor of horticulture and dean of the new College of Applied Arts at the Brigham Young University, Provo, Utah.

T. L. Patterson, Ph.D., formerly of the physiological department of the State University of Iowa College of Medicine, has been appointed professor and director of the department of physiology at the Detroit College of Medicine and Surgery.

Dr. ALICE SULLIVAN has sufficiently recovered from her accident of last summer in the Colorado floods to assume her position as instructor in psychology at the University of Illinois.

DISCUSSION AND CORRESPOND-ENCE

KILOBAR, KILOCAL, KILOGRAD

In a letter just received from The Meteorological Office, Professor Whipple very kindly informs me of the result of a question put to the Secretary of the Chemical Society regarding the attitude of British chemists regarding the bar.

While the opinion expressed is to be regarded as unofficial, Professor Philip says:

"Your letter in reference to the definition of the 'bar' was considered by our Publication Committee. The general opinion is that very few English chemists use the 'bar' as a unit of pressure on either basis. There was a feeling, however, that in view of the use of the 'bar' in Langmuir's papers and other communications emanating from the same quarter (see e. g. Dushman in the General Electric Review, 1920-1) English chemists would be more likely to use the 'bar' in that sense than in the sense employed by meteorologists."

207

It will be recalled that meteorologists in 1913, quite unaware of the fact that the bar had been accurately defined by Professor T. W. Richards in 1903, and thinking they were coining a new word, adopted the bar as the unit of pressure but gave it the value of a megabar. My friendly correspondent, a meteorologist of prominence, adds: "This looks as if the confusion is likely to spread. We shall have a permanent ambiguity like those in the words billion and calorie."

To this, I have answered: There need be no confusion if meteorologists will simply write kilobar, where they now use millibar.

The practical unit of pressure is 1000 bars, the bar being the pressure expressed in terms of force which will give an acceleration of 1 centimeter per second per second to one gram of matter.

It is the natural basic unit, strictly C. G. S. and was in legitimate use by chemists and physicists 10 years previous to its appropriation by meteorologists.

With regard to the calorie, it will no longer be necessary to specify the calorie as the gram calorie or therm. The word calorie by itself will mean the amount of heat that will raise the temperature of a gram of pure water from 1000 to 1003.66 Kelvin-kilograds. The larger unit, much used by engineers, being the amount of heat required to raise the temperature of one kilogram of water, can be called the kilocal.

The scale of temperature which has been used without difficulty at Blue Hill Observatory for the last five years, makes the thermal coefficient of the expansion of a gas (air) at constant pressure .001 instead of .00366.

This is very easily accomplished by making zero on the scale, the absolute zero (-273.12° Ac) and making the freezing point of pure water at megabar pressure, 1000. There are numerous advantages in the use of the scale. When used in connection with kilobar pressure, values of temperature and pressure are