THE Harriman memorial gold medal for 1928, awarded for the best safety record by a railroad operating 10,000,000 or more locomotive miles a year, was formally presented to the Union Pacific Railway by the American Museum of Safety at a luncheon on December 5 in the Metropolitan Club, New York City.

THE corporations of the New York Post-Graduate Medical School and Hospital and of the Reconstruction Hospital, at separate meetings on December 4, ratified the consolidation of the two institutions. The announcements were made by Dr. Edward Hume, executive vice-president of Post-Graduate, and by Allen Wardwell, president of the Reconstruction Hospital. After the merger is approved by the State Board of Charities and by the courts, the new institution will be known as the New York Post-Graduate Medical School and Hospital. Unified operation is expected to be effected about January 1. The Post-Graduate Hospital was founded a little more than forty-seven years ago. Its buildings are at 303 East Twentieth Street, at Second Avenue. The Reconstruction Hospital, which came into being during the Spanish-American War, is at 395 Central Park West. The combined capacity of the two institutions will be 500 beds.

THE establishment of a national land-grant college and university institute in Washington, D. C., to enable the land-grant institutions to contribute more effectively toward the solution of national problems, was urged by Anson Marston, dean of engineering of Iowa State College, in an address at the annual dinner of the Association of Land-Grant Colleges and Universities in Chicago, the evening of November 12.

THE New York State Psychiatric Institute and Hospital was dedicated on December 3 at the medical center of Columbia University. Addresses of welcome were delivered at the morning session, at which Dr. Nicholas Murray Butler and Acting Governor Herbert H. Lehman spoke. The afternoon meeting was devoted to the reading of scientific papers. Dr. Butler welcomed the institute to the medical center and declared that the new unit represents the cooperation of public and private services that is characteristic of American life.

THE Elizabeth Thompson Science Fund makes grants of small amounts of money for scientific research. The secretary will be glad to receive applications from men and women working in specialized fields of science, whether or not in academic institutions, who are unable to obtain funds elsewhere to initiate or complete investigations. Applications should be addressed to the secretary of the fund, Professor E. B. Wilson, 55 Van Dyke Street, Boston, Massachusetts.

THE future of the Radcliffe Infirmary and the Radcliffe Observatory, Oxford, are involved in a provisional agreement which has been concluded between Sir William Morris and the Radcliffe trustees. The trustees undertake to sell the observatory site to Sir William Morris for the sum of £100,000 and will lease the observatory buildings from him for a period of five years, after which the observatory will be removed to South Africa. Meanwhile the needed extensions to the Radcliffe Infirmary will be begun on the observatory grounds in the course of the next few months. The Radcliffe Observatory is said to be the second oldest observatory in the British Isles.

Industrial and Engineering Chemistry reports that the British Color Council was established October 9 as the result of a meeting supported by leading representatives of the textile trades, the dyeing industries and other interested industries, such as leather and shoe manufacturing firms. The proper classification of colors and the establishment of names to avoid a great variety for the same color was suggested as a reform to be brought about by the council. An international color conference was also suggested, as a preliminary to the adoption of an international color card, to facilitate the standardization of colors. At present entirely independent color cards are published in England, France, Germany, Switzerland and the United States. Another suggestion was the appointment of a technical adviser on the council, to advise members processing different types of fiber how the particular colors agreed upon could be supplied.

UNIVERSITY AND EDUCATIONAL NOTES

AT the dedication of the John Markle Mining Engineering Hall of Lafayette College on December 6, which was built at a cost of $500,000, given by Mr. John Markle, it was announced that $400,000 more had been given by Mr. Markle for endowment.

A GIFT of $1,000,000 from the family of the late Charles Dering, of Evanston, Illinois, has been made to Northwestern University for the construction of a new general library building.

DR. J. ERNEST CARMAN, professor of geology at the Ohio State University since 1917, has been made chairman of the department of geology. Dr. E. Willard Berry, who studied at the Johns Hopkins University and who has been with the International Petroleum Company in Peru for several years, has been appointed instructor.

CARL D. BRANDT, general superintendent and as-

sistant agent of the Bondsville Bleachery Company of Bondsville, Massachusetts, has accepted the position of head of the department of textile engineering in the Texas Technological College.

DR. JOHANNES NÖRR, professor of pathology and physiology at the University at Giessen, has been called to Munich.

FATHER FREDERICK W. SOHON has succeeded the late Father Francis A. Tondorf as director of the seismic station of Georgetown University.

DISCUSSION

RECENT DISCUSSIONS OF THE REDUCTION DIVISION IN DROSOPHILA MELANOGASTER

IN his well-known monograph on "The Genetics of Drosophila," published in Bibliographia Genetica, Vol. II, 1925, Morgan makes a statement that little or nothing is known of the reduction divisions in *Drosophila melanogaster*. Later in the same year, in collaboration with Professor G. C. Hicks, of the University of Buffalo, the present author described the meiotic or maturation phenomena in *D. melanogaster*. It was there pointed out that the absence of any adequate description of the maturation phenomena in *D. melanogaster* was deplorable in view of the heavy weight of biological theory that has been put upon its chromosomes. The results of Professor Hicks and the present author made it clear that the reduction divisions in this species are entirely abnormal and present a marked and apparently significant resemblance to the reduction divisions present in known hybrids. This general situation was correlated by us with the great variability of *D. melanogaster*, and it was emphasized that, both on account of variability and its unusual meiotic phenomena, *D. melanogaster* was to be regarded as a natural hybrid.

A significant silence has prevailed on this subject of Drosophila, until recently. In an excellent and beautifully illustrated volume[1] Belar has put forth the claim that the reduction divisions in *D. melanogaster* are normal, and is of the opinion that certain photomicrographs which he presents prove the correctness of this statement. In his Plate II, an actual photographic reproduction of his photomicrographs, in figures 5a, 5b and 5c, he shows the first division (reduction division) of the spermatocyte from the same nucleus in three different focal planes. In all these three figures, representing different foci, at least one chromosome of those appearing is far removed from the equatorial line. This situation corresponds exactly with the description furnished by Hicks and Jeffrey. It is obvious from Belar's own illustrations that there is no normal equatorial plate in the reduction division of *D. melanogaster*. Belar criticizes the use of Carnoy's fluid for preservation of the material. This criticism appears captious inasmuch as the author himself describes his own use of the same preservative in such difficult cases as fixing divisions in Nematodes. Further, Morgan himself has made use of Carnoy's solution in his important studies of the chromosomes in Aphids. It may be further added that Carnoy's solution is universally recognized by cytologists as a reliable reagent for the fixation of chromosomes. Belar's conclusions are all the more remarkable because he considers some of the structures seen in the nucleus and protoplasm in *D. melanogaster* to be abnormal vestiges of mitichondria produced by the reagents. This is all the more surprising because he claims to have obtained well-preserved mitichondria in his own preparations by the use of Flemming's fluid. It is surely universally known that Flemming's fluid will not preserve mitichondria. It accordingly is difficult to attach any great importance to Belar's criticisms, which seem to rest more on prejudice than a critical examination of the facts.

In the interval since the first paper on *D. melanogaster* we have examined a large amount of material of this species from various sources and from the wild, and have used chrom-osmioacetic mixture as well as Carnoy's preservative. The only difference that we have found between the former and the latter is that Carnoy's solution gave very much better preparations, showing a better fixation of all the tissues than did Flemming's solution. The situation in regard to the reduction division appeared in the addition material substantially the same as in our original description, and we accordingly stand by the results there obtained. It may be added that a very wide use of preservatives in connection with a range of studies covering both plants and animals has quite confirmed in our mind the approval of Carnoy's solution as a nuclear fixative which is in general voiced by cytologists.

Less excusable than Belar's criticisms are those made privately by certain American geneticists who affect to believe that the reduction divisions in *D. melanogaster* are perfectly normal and have always been known to be so. The most charitable view that one can take of such statements is that the authors are unfamiliar with Morgan's monograph on the

[1] "Die cytologischen Grundlagen der Vererbung," Berlin, Gebrüder Borntraeger, 1928.