MRS. C. V. RILEY, widow of Dr. Riley, predecessor of Dr. L. O. Howard as chief entomologist of the U. S. Department of Agriculture, has donated to the library of the National Museum the scrapbooks of economic entomology which were kept by her husband in the period of his activity from 1865 to 1894. These volumes, about one hundred in number, contain many articles of great historical interest. In giving these scrapbooks to the museum, Mrs. Riley wished to have them housed in the same place as the Riley collection of insects.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Missouri will ask the state legislature for an appropriation of $6,348,962.39 for the biennium of 1927–28. This is $227,920.29 less than was requested two years ago. The Missouri School of Mines and Metallurgy is asking the state legislature for $1,227,250 for the next two years.

A GIFT of $25,000 to Howard University's medical school $250,000 endowment fund by Julius Rosenwald, of Chicago, has been announced.

PHILLIPS ANDOVER ACADEMY has been presented with $125,000 by A. I. du Pont, of Wilmington, Del., for use in completing the $300,000 science building.

ON March 5 the medical college of The Long Island College Hospital, Brooklyn, inaugurated its new course in "Medical Literature and Bibliography." In a number of schools the importance of bibliographical knowledge has been stressed by individual teachers, but this is said to be the first established course of this nature included in the curriculum of a medical school in this country. An attempt is being made to show the student the value of literature which constitutes an important part of the background of his work; and to teach him how to use a library. The faculty has secured as a lecturer Mr. Charles Frankenberger, librarian of the Medical Society of the County of Kings, whose wide knowledge of bibliography and of the relative values of medical literature can now be made available for the medical student as a part of his training.

A FACULTY of mechanical engineering and mining chemistry and technique is to be founded in the University of Münster, Westphalia, at a cost of 1,500,000 marks. A contribution of 1,000,000 marks has been promised by the provincial government, and 500,000 marks have been received from industrial bodies.

DR. ALFRED OWRE, dean of the school of dentistry at the University of Minnesota, has been named dean of the school of dental and oral surgery at Columbia University, succeeding Director Frank T. Van Woert, who is to be relieved of administrative duties at his own request.

AT Harvard University, Dr. Oliver D. Kellogg has been promoted to a full professorship of mathematics. Other promotions include those of Dr. E. A. Hooton, assistant professor of anthropology, and Dr. William Henry Westen, assistant professor of botany, to be associate professor.

PROFESSOR L. D. AMES, of the Texas Technological College, has been appointed professor of mathematics at the University of Southern California.

DR. H. B. ENGLISH, associate professor of psychology at Wesleyan University, has resigned to take a position at Antioch College.

DISCUSSION AND CORRESPONDENCE

THE COLOR OF HYDRATED SILICA AND ALUMINA

DURING a study of the hydration of silica, alumina and ferric oxide I noticed that alumina became more and more colored as its hydration increased. The anhydrous oxide Al_2O_3 is snow white by either reflected or transmitted light. The hydrated form $Al(OH)_3$ is a decided tan or even brown by transmitted light, but the complementary bluish white by reflected light. A small flake or chip of the hydroxide under a low power microscope shows the effect nicely since the light is easily shifted. Silica shows a precisely similar effect as the SiO_2 goes over to the orthosilicic acid $Si(OH)_4$.

In other words, these hydrated oxides show a pronounced *dichroism* while the oxides do not. This dichroism is a useful qualitative test for the degree of hydration. Previous workers have evidently attributed the brownish color to traces of iron, overlooking the bluish tint of the same particle by reflected light. Either precipitates or suspensions of either hydrate show the effect very well. I have not been able to locate definite *steps* in the hydration of either oxide by this means, to do that would require rather precise spectrophotometric data. Most complex oxides apparently do *not* show similar dichroism on hydration, but only a hasty survey has yet been made.

An interesting application to meteorology is evident in relation to sky colors. Both silica and alumina are strongly hygroscopic, adsorbing water films (at even low humidities) many molecules deep. Due to the intense internal pressures in these films on minute particles, hydration is relatively rapid. Hence we should expect that dust particles (largely