1879, as a course in applied physics. A portable four and a half inch telescope was the only available instrument until 1900, when the beautiful Whitin Observatory equipped with twelve-inch telescope, three-inch transit, all necessary apparatus, and an adequate library in astronomy was opened, through the generosity of Mrs. John C. Whitin, a trustee of the college. In 1906 the observatory was doubled to make room for the teaching of astronomy as other sciences are taught by the laboratory method, and a residence for the astronomers was added. Professor Hayes, head of the department of applied mathematics, a pupil of Ormund Stone, meantime conducted work in mathematical astronomy. In 1901 the department of astronomy was created, including both the astrophysical and the mathematical sides of the subject. Duncan has worked at Lick, Lowell and Yerkes observatories, and has taught at Harvard and Radcliffe Colleges.

Frank H. Probert, a graduate of the Royal School of Mines in London, and for the past twenty years engaged in consulting mining engineering practise, has been appointed professor of mining in the University of California, as successor to the late Professor Samuel Benedict Christy.

Dr. Jesse F. Williams, assistant professor of hygiene and physical education at Columbia University, has been appointed professor of hygiene and physical education in the University of Cincinnati.

Dr. Henry W. Wandless has been appointed clinical professor of ophthalmology at New York University and Bellevue Hospital Medical College.

Dr. Edward H. Horton, director of the bacteriologic department of the Tri-Cities Hygienic Institute, LaSalle, has resigned to become bacteriologist in the Northwestern University Dental College, Chicago.

Dr. Sterling Temple, instructor in chemistry in the University of Minnesota, has accepted a position as professor of chemistry at Hamline University, and will take up his work there in the autumn.

At Ohio Northern University, Joseph Hamilton Hill has become professor of mathematics.

Sir R. Havelock Charles, president of the medical board of the India Office, has been appointed dean of the London School of Tropical Medicine in succession to the late Sir Francis Lovell.

DISCUSSION AND CORRESPONDENCE

A NEW FORM OF PLANT DRIER

A NUMBER of notices have been published¹ regarding the use of single or double-faced corrugated straw board as a means of rapid drying of plants for herbaria. Some have omitted the use of the customary driers with the corrugated boards, a procedure which has a tendency to cause the plants to be somewhat wrinkled. It has also been recommended that the boards be cut so that the corrugations run crosswise of the board. The pressure of the straps around the press, however, has a greater tendency to close up the ends of the corrugations when they run crosswise than when they run lengthwise. To avoid handling two driers and a corrugated board for every plant placed in press the writer adopted the plan several years ago of fastening at the corners with a wire stapling machine two driers with a corrugated board between. This procedure saves two thirds of ones' time in handling the corrugated boards and two driers in the old way. While this form of drier worked very satisfactorily when hot sunshine or artificial heat was available for drying it made the drying material much thicker than necessary. An order was consequently given to a local firm for a special drier consisting of two pieces of ordinary felt drying paper with a corrugated filler such as is used in the single and double-faced corrugated straw board. This material has given entire satisfaction and can be obtained in large quantities at a cost of about \$16.56 per 1,000 as compared with

¹ Kellerman, W. A., SCIENCE, N. S., 27: 67-70, 1908; Collins, J. F., *Rhodora*, 12: 221-224, 1910; Conrad, H. S., *Plant World*, 15: 135-139, 1912; Ricker, P. L., Bureau of Plant Industry Circ., 126: 27-35, 1913.

\$10 per 1,000 quoted by one firm for medium weight and \$14 per 1,000 for heavy weight driers. When it is considered that a large part of the material pressed under the old system, using blotters alone, required the use of two blotters between each specimen, it will be seen that a considerable saving is effected in the cost of the drying material as well as in the time required to handle and completely dry the material.

P. L. RICKER

BUREAU OF PLANT INDUSTRY

A NEW COLOR VARIETY OF THE NORWAY RAT

Norway rats with dilute coat color have recently been taken in the vicinity of the University of Pennsylvania. If we may judge from the fact that the nine individuals thus far found are all approximately alike and are distinctly different from the normal type, they probably represent a new Mendelian variety.

The coat is intermediate in color between that of the ordinary dark form and the albino and resembles that of the red-eyed guinea pig. In the guinea pig this color has been shown by Wright to be allelomorphic with albinism and with dilute. As in the guinea pig, the hair of the new rat seems to be without yellow pigment and is dilute black or brown ticked with white.

The eyes look black unless the light is very bright. When the light shines directly into them they appear pink. They are distinctly lighter than the eyes of Castle's red-eyed yellow rats, but darker than those of his pink-eyed yellows.

The new rats are now in the care of the Wistar Institute, where the endeavor is being made to increase the stock and to cross with the color varieties already known.

Data in regard to the distribution of the new form is being collected and will later be published.

The previously known Mendelian varieties in the rat are five: black, hooded, albino and Castle's two yellow varieties, red-eye and pinkeye. This new variety is a non-yellow dilute and may be called ruby-eye.

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SYLVESTER AND CAYLEY

UNDER the portrait with which the editor has adorned my article "Sylvester at Hopkins," in *The Johns Hopkins Alumni Magazine* of March, 1916, the designation is simply "James Sylvester."

This omits his real name, his family name, the name to which he was born; for his father was Mr. Abraham Joseph, his two sisters were the Misses Joseph. The name by which we know him he chose for himself, following the example of his eldest brother, who early in life established himself in America and assumed the name of Sylvester.

My laborious and critical friend, Professor G. A. Miller, of the University of Illinois, in his recent book "An Introduction to Mathematical Literature," commits the colossal error of representing Sylvester and Cayley as friends together at college, Cambridge chums, whereas Sylvester entered Cambridge in 1831 and Cayley was senior wrangler at Cambridge in 1842, more than a decade later. Sylvester had already in the session 1837–38 been appointed professor in London University College, and it was in London, but only after the lapse of nearly another decade, in fact in 1846, that Cayley met Sylvester.

GEORGE BRUCE HALSTED

GREELEY, Colo.

SCIENTIFIC BOOKS

Indian Mathematics. By G. R. KAYE. Calcutta & Simla, Thacker Spink & Co., 1915.
Pp. 73.

Of all the British writers on the history of Indian mathematics at the present time, none is better known or more serious in his purpose than Mr. Kaye. A scholar by nature and, through his connection with the Indian service, placed in an environment which is conducive to the study of the original sources, few men have the opportunities which are his for bringing the mathematical learning of the East to the knowledge of the West.

This being the case, the reader might naturally expect to find in a publication with such a title as this an exhaustive and well-