

Mines. This is said to be the first time that a course in geophysics has been introduced into an American college or university.

ASSISTANT PROFESSOR F. W. OWENS, of Cornell University, has been appointed head of the department of mathematics at Pennsylvania State College.

DR. A. F. O. GERMANN has resigned his position with the Laboratory Products Company, where he was in charge of development and research, in order to organize work in chemistry at Valparaiso University, Indiana.

PROFESSOR A. C. SEWARD, master of Downing College and professor of botany in the University of Cambridge, has relinquished the office of vice-chancellor of the university which he has held for the past two years. He is succeeded by the Rev. George Arthur Weeks, master of Sidney Sussex College.

DR. J. H. SIMONS, head of the department of chemistry at the University of Porto Rico, has joined the staff of Northwestern University, where he will continue his researches in physical chemistry.

ERNEST CLARE BOWER, associate astronomer at the U. S. Naval Observatory, has been appointed assistant professor of astronomy and mathematics in Ohio Wesleyan University.

DR. S. B. CHANDLER, of Northwestern University, and Dr. Gordon H. Scott, of the University of Minnesota, have been appointed to assistant professorships in anatomy in Loyola University School of Medicine, Chicago.

DISCUSSION AND CORRESPONDENCE

THE USE OF PITH DUST IN A KUNDT'S TUBE

DURING the summer of 1924, while experimenting at Indiana University with a Kundt's tube, I discovered that the striae could be most readily observed by using pith dust in the tube.

I obtained the pith dust by grinding dry pith from sunflower on a fine-grained emery wheel. By the use of this dust I was able to obtain discs that extended completely across the tube and having the same diameter as the inside of the tube.

These striae were obtained by the ordinary method used with a Kundt's tube, but for demonstration purposes I found the following to be an excellent way to produce them: Some pith dust was placed in a glass tube of any convenient length and diameter. In one end of the tube a stopper was placed and the open end of the tube was inserted in the open end of a sounding organ pipe. When the tube was inserted the proper distance the striae formed at regularly

spaced intervals and showed the nodes and loops in an excellent way. Discs apparently but one particle in thickness were formed and when the tube was carefully adjusted with regard to distance to which it was inserted into the organ pipe the separate particles remained almost motionless. Often they wove themselves into thin sheets and when the air was turned off they fell over, maintaining the sheet form.

Also I obtained these striae by passing an electric spark across the end of a glass tube (either open or closed) into which some pith dust had been placed. The howl produced by a telephone receiver excited excellent striae in a glass tube. Some photographs of the striae were made.

Pith dust being lighter than cork dust gives striae of greater height than the latter. As it does not adhere to the tube I find its use for this purpose better than lycopodium powder.

ROLLA V. COOK

BETHANY COLLEGE

TWO INTRODUCED PLANTS OF RARE OCCURRENCE IN THE UNITED STATES

Two plants of very rare occurrence in the United States have come to the writer's attention in this section in the last few years and it seems worth while to broadcast the news for interested botanists.

Two specimens of *Tagetes minuta*, L., were found in a field of Rhodes grass in Riverside, California, in 1921. Thinking them to be marigolds the rancher transplanted them by his house, where they grew to be ten and eleven feet high with a spread of five to six feet. They were identified by Miss Alice Eastwood, of the California Academy of Sciences, and the Smithsonian Institution later reported that the plant had been reported only once before in this country, from North Carolina—probably having been introduced upon ballast in some boat. The Rhodes grass seed used for planting the field in which the plants were found at Riverside was imported from Australia.

Three plants of an unrecognized *Erodium* were found in the cover crop of a lemon orchard at Corona, California, on February 26, 1923. Purple vetch had been sown as a cover crop, the seed doubtless coming from Washington or Oregon, but its germination was very poor and the majority of the cover crop growth was made up of our common *Erodium cicutarium*.

Only a flower specimen of the plant was saved in 1923. Owing to a very dry winter there was practically no cover crop growth in this orchard in 1924, but in 1925 about twenty plants of the new *Erodium* were found and it was identified by Miss Alice Eastwood, of the California Academy of Sciences, and by Dr. I. M. Johnston, at the Gray Herbarium, as *E.*