DR. WILLIAM MANSFIELD CLARK, PH.D., of the Hygienic Laboratory of the U. S. Public Health Service, Washington, has accepted the position of professor of physiological chemistry at the Johns Hopkins University School of Medicine.

QUENTIN D. SINGEWALD, Ph.D. (Johns Hopkins, '26), has been appointed to an assistant professorship of petrography in the Colorado School of Mines, at Golden.

DR. PETER DEBYE, professor of physics in the Technical School of Zurich, has accepted a call to the University of Leipzig, where he will succeed Professor Otto Wiener.

DISCUSSION AND CORRESPONDENCE

AN ECHO FROM MORRISON CHAPEL, TRANSYLVANIA UNIVERSITY

THE description of the echoes from the Lincoln Memorial by C. A. Browne in SCIENCE, July 29, 1927, calls to mind an interesting echo produced by Morrison Chapel of Transylvania University. The sound comes from the bell of the Court House clock, several blocks away. The echo was first noticed one evening several weeks ago when the writer was sitting in a

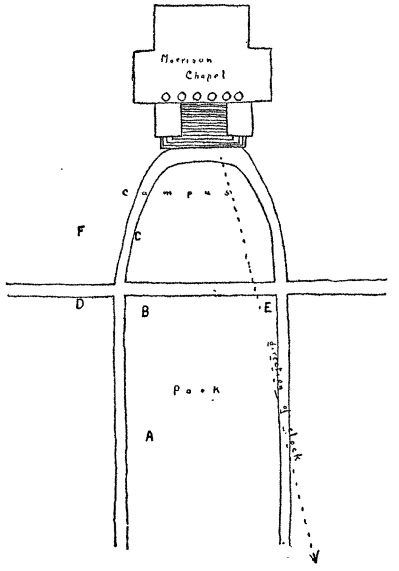

FIG. 1

park adjacent to Transylvania campus. It so happened that the position taken was such that the echo gave the impression of the clock striking twice as rapidly as usual, and, of course, a double number of strokes. The echo seemed slightly higher pitched than the clock bell. This first position is indicated as point A. Subsequent observations from various points in the park and campus are as follows: From points B, C and D the echo follows the bell so closely as to sound like a double stroke rather than a double number of strokes, and at E and F the echo was not heard.

WILLIAM A. ANDERSON, JR.
KENTUCKY AGRICULTURAL
EXPERIMENT STATION, LEXINGTON

ICARUS AND MELTING WAX

IN Professor Eddington's fascinating book "The Internal Constitution of the Stars," we are given the privilege of watching the "hurly-burly of atoms, electrons and ether-waves" in stellar interiors. Our astronomer pictures the commotion prevailing in these tremendous gas-houses, as atoms go whizzing by, now and then shedding an electron and anon grabbing some stray one, the whole result of the bustle being the emission of ether-waves. No humble earthworm can say aught to the contrary; but he may balk in following the astronomer in flights through the earth's atmosphere.

"In ancient days," he says, "two aviators procured to themselves wings. Daedalus flew safely through the middle air and was duly honored on landing. Icarus soared upward to the sun till the wax melted which bound his wings and his flight ended in fiasco. . . . The classical authorities tell us that he was only doing a stunt, but I prefer to think of him as the man who brought to light a serious constructional defect in the flying machines of his day."

These pioneer airmen were father and son. And the question naturally arises "Was not father in equally great danger?" His wax attachments were exposed to the full radiation from the earth. Icarus, poor boy, flying higher and higher had to go through the troposphere. And as he rose from earth it got colder and colder. Even in a genial clime on a midsummer day, by the time he was five miles high, he would have been frozen stiff. With a temperature of $-40°$ C. the very mercury in his thermometer would have solidified. If he lived to reach the stratosphere he still had to fly a hundred miles in cold storage!

And why decry old Daedalus? If it was necessary to find the melting-point of wax, the experiment could have been carried on just as well down below.

My good friend Dr. W. W. Campbell used to say "This would be a happy world for astronomers if only there were no atmosphere!"

ALEXANDER MCADIE
BLUE HILL OBSERVATORY

HORTUS GRAMINEUS WOBURNENSIS

THE undersigned would like to be advised of the location of an 1816 edition of George Sinclair's Hortus Gramineus Woburnensis. The copy in the Library of the United States Department of Agriculture gives on page 108 a description of *Trifolium medium*, a red perennial clover, and the author states that to avoid any chance of mistake he presents a specimen of