voltage laboratory, in which pressures as high as 500 kv. can be obtained.

## UNIVERSITY AND EDUCATIONAL NEWS

Steps have been taken to insure the erection of a new building for the Indiana University School of Medicine on a site near the Robert W. Long Hospital, Indianapolis.

Professor Robert M. Yerkes, of Harvard University, has been appointed head of the department of psychology at the University of Minnesota.

At the Johns Hopkins University, Professor Edward W. Berry, associate professor of pale-ontology, has been advanced to be professor of pale-ontology, and Associate J. T. Singewald, Jr., to be associate professor of economic geology.

At the Massachusetts Institute of Technology, Dr. Charles L. Norton has been appointed professor of industrial physics. Promotions from instructor to assistant professor have been made as follows: Mathematics, Joseph Lipka and Frank B. Hitchcock; physics, Herbert P. Holnagel; drawing, Arthur L. Goodrich.

Dr. H. H. Newman, dean of the college of science of the University of Chicago (medical and premedical students), has been promoted from an associate professorship in zoology to a professorship in that department.

In the botanical department of the Michigan Agricultural College Dr. G. H. Coons has been promoted to associate professor, and Dr. E. F. Woodcock to assistant professor. Beginning with July 1, Mr. Ezra Levin, at present instructor in botany at the Kalamazoo High School, takes up his work as extension agent in plant diseases, for half his time, and assistant pathologist in the Experiment Station for the other half.

Dr. Pierre Marie has been appointed to the chair of clinical neurology in the University of Paris in succession to the late Professor Dejerine.

Fräulein A. M. Curtius has been appointed lecturer in French at Leipzig. She is said to

be the first woman on the staff of a German university.

## DISCUSSION AND CORRESPONDENCE SURFACE TENSION, CAPILLARITY AND PETROLEUM POOLS

WHILE surface tension and capillarity<sup>1</sup> are being discussed, the writer would like to raise the question of whether or not the material composing the tube makes any difference in the height to which the liquid rises.

It is surprising that it is not possible to settle this apparently elementary question at once by reference to any one of a score of good treatises on physics; physics is an old science, the subject of intermolecular attraction is fundamental, capillarity is discussed at length and the deductions carry conviction born of impressive formulæ. As a matter of fact, statements bearing on the point in question seem inharmonious and many of them lack clearness. One of the most convincing that the writer has seen is that of Bigelow and Hunter,<sup>2</sup> who say: "We have demonstrated that capillary ascension of water (and benzene) is different in tubes of different substances," and they base the assertion on experimental evidence.

This declaration accords with the writer's's concepts concerning capillarity. Since he is not a physicist, these concepts should come from the conclusion of physicists concerning the point or at least from well-known and unquestioned principles of physics, but as a matter of fact they are based partly upon such conclusions and principles, partly upon several years of cogitation, and partly upon the

<sup>1</sup> Patrick, W. A., Ostwald's "Handbook of Colloidal Chemistry," Science, N. S., Vol. XLV., No. 1,143, pp. 750-751, November 24, 1916. Kimball, Arthur L., "Negative Surface Tension," Science, N. S., Vol. XLV., No. 1,152, p. 75, Jan. 26, 1917. Becker, Geo. F., "Propulsion by Surface Tension," Science, N. S., Vol. XLV., No. 1,153, p. 115, Feb. 2, 1917.

<sup>2</sup> Bigelow, S. L., and Hunter, F. W., "The Function of the Walls in Capillary Phenomena," *Jour. Phys. Chem.*, Vol. 15, p. 380, 1911.

<sup>3</sup> Shaw, E. W., "The Role and Fate of Connate Water in Oil and Gas Sands" (discussion), Am. Inst. Min. Eng. Trans., Vol. 51, p. 601, 1916.