May 28 and at the clinic of Dr. Willard Bartlett at the Missouri Baptist Sanitarium May 29. Papers by local surgeons will be delivered on recent advances on thoracic and cardiac surgery, X-ray therapy and kindred subjects.

UNIVERSITY AND EDUCATIONAL NOTES

HALF a million dollars has been appropriated by the New York State legislature to start work on a new plant industries building for the College of Agriculture at Ithaca. A few years ago the state adopted a program that called for the expenditure of $3,000,000 and the college has been empowered to proceed in a building plan in accordance with this appropriation, though it may not expend more than the amount made available in any one year.

THE residue of the estate of the late George E. Hoadley, of Trinity College, is to be divided equally between Trinity College and the Connecticut Historical Society. Each institution will receive about $200,000.

PROFESSOR W. A. HAMILTON has been appointed chairman of the administrative interim committee of Beloit College, until a president of the college is appointed to succeed President M. A. Brannon, who was recently made chancellor of the University of Montana. Professor H. H. Conwell has been appointed acting head of the department of mathematics.

DR. DAVID FRIDAY, president of the Michigan Agricultural College, has presented his resignation to become effective on June 1. The State Board of Agriculture accepted the resignation over the protest of Governor Groesbeck. Dr. Friday has accepted a professorship of economics at the new school for Social Research in New York City.

DR. BRADLEY STOUGHTON, formerly of Columbia University and later secretary of the American Institute of Mining and Metallurgical Engineers, a New York consulting engineer, has been appointed professor of metallurgy at Lehigh University.

DR. HARRY A. CURTIS, government nitrate expert, has accepted an appointment as professor of chemical engineering at Yale University.

AT the University of Chicago, Dr. Andrew C. Ivy, of Loyola University, has been appointed associate professor of physiology and Ernest P. Lane, of the University of Wisconsin, assistant professor of mathematics.

DISCUSSION AND CORRESPONDENCE

DYE SOLUBILITY IN RELATION TO STAINING SOLUTIONS

IN a recent note appearing in these pages[1] attention was called to the fact that different batches of stain may contain very different amounts of actual dye; hence, staining solutions made up according to formulae calling for so many grams of dry stain may vary considerably in their actual strength. For this reason it was recommended in the note above mentioned that solutions of stain be made up by using definite quantities of saturated solution of the stain. In this way it was believed that the resulting solutions would be much more nearly the same strength than when prepared on the basis of weight of the dry stain.

There seems to be no question but that this statement is correct as far as it goes; but since the publication of the above mentioned article a certain serious criticism of the procedure recommended has been brought to our attention. It seems that the solubility of a dye varies considerably according to the amount and kind of mineral matter present in solution. It is well known in the dye industry that many of the dyes may be "salted out" of solution, that is precipitated by the addition of some mineral salt. Now the inert material present in many samples of stain is of a mineral nature and may act in the same way. There is never enough present to prevent the dye itself from going into solution, but there is often enough to lessen its solubility. For this reason two staining solutions made up from a pure and an impure dye, respectively, each containing ten per cent. of a saturated alcoholic solution may vary considerably in their actual dye content. This is not only theoretically true, but practical experience in the handling of stains has shown that it may actually be the case.

On account of this fact it is very plain that

[1] The preparation of staining solutions, SCIENCE, 67, January 5, 1923, p. 24.