always be kept on hand with an excess of undissolved material at the bottom of the bottle, adding more water or alcohol from time to time as more stock solution is needed in preparing staining solutions. This type of formula, therefore, has so many advantages without serious disadvantages that its use is recommended in all possible cases.

H. J. CONN,
Chairman, Commission on the Standardization of Biological Stains

SYMPOSIUM ON MATERIALS OF CHEMICAL EQUIPMENT CONSTRUCTION

MANY prominent chemists have suggested from time to time that a symposium should be held upon the subject relating to materials as applied to construction and equipment in the industry. Therefore, at the spring meeting of the American Chemical Society, it has been decided to hold a symposium entitled "Materials of Chemical Equipment Construction."

The literature upon this subject is so widely scattered and published in many journals inaccessible to the average chemist that in many cases much time must be spent in duplicating work which has already been done. The symposium will tend to bring together such matter for which chemists are constantly in search.

The officers of the Industrial Division have been particularly fortunate in securing Mr. Philip A. Singer, of the Singer-Perlstein Company, Chicago, Ill., to act as chairman of this symposium. Mr. Singer was graduated from Bradley Technical Institute in 1899 and then he pursued graduate work at the University of Heidelberg, Germany. He then returned to this country as chemist for the Glucose Sugar Refining Company, now the Corn Products Company, and became their plant manager and superintendent. Later he became manager of the Standard Alcohol Company, of Fullerton, La. A few years later he became superintendent of the Piel Brothers Starch Works at Indianapolis. While in the last two positions he was also employed in a consulting capacity by the Chicago Starch Works and the Industrial Chemical Institute of Milwaukee. For the last seven years he has been a consulting engineer on the subject of starches, dextrin, glucose and allied subjects. Mr. Singer not only does the engineering work, that is, designs the complete plant, but also superintends the construction and actually operates the plant until it has been put on a practical operating basis.

The subject matter of the symposium will cover woods, metals, vitreous materials, coatings, rubber fabrics, etc. All of these headings will deal with the resisting properties of acids and alkalies, their resistance to temperature, oxidation characteristics, cost, chemical composition, etc.

It is hoped that industrial chemists and university professors will cooperate in every possible way with Mr. Singer by writing to him directly, stating on what phase of the subject they would be glad to present papers at the New Haven meeting.

ERLE M. BILLINGS,
Secretary Industrial Division

TEN-YEAR PROGRAM OF THE NEW YORK AGRICULTURAL EXPERIMENT STATION

IN order that the New York Agricultural Experiment Station may serve satisfactorily the agricultural interests of the state and nation, Dr. R. W. Thatcher, director of the station, and his associates have formulated a program for the development of the work at Geneva for the next ten years. The program has been endorsed by all the organized agricultural agencies of the state and is to be presented to Governor-elect Smith and the new legislature for their consideration. It is believed that only with the aid of a definite program can funds be intelligently appropriated for the work of the station and the affairs of the institution satisfactorily administered. The program provides for the further development of present lines of research and for the inauguration of several new lines of work not now receiving attention.

Activities which the station authorities are anxious to develop further or to undertake as new projects are the breeding and testing of new varieties of small fruits and vegetables, particularly for canning; investigations into the manufacture and preservation of fruit juices, drying of fruits and vegetables, and the utilization of cull fruits and vegetables for