

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

jellies, glues and coloring matters; chemical and bacteriological studies of milk and its products; soil tillage studies with special reference to the movement and utilization of soil moisture; studies in plant physiology; investigation of the effect of climatic factors upon plant growth; and careful observations on the relation of birds to agriculture. It is also hoped to study further the efficient use of farm crops for both human and animal food.

"It is not expected to put all of this program into effect at any one time, but to develop it gradually as circumstances permit," says Dr. Thatcher. "The first consideration in carrying out the program, however, is increased laboratory space, as the present laboratories are already overcrowded and will not permit of any expansion of the work. The immediate provision of a new laboratory building is essential if the research work of the station is to progress as it should. The people of the state are asked to back a campaign in the legislature for this building and program, because it is certain that the necessary expenditure will be returned to the state many times over in the increased wealth and prosperity of its agricultural population."

#### THE CENTENARY OF PASTEUR'S BIRTH

FRANCE'S homage to Louis Pasteur, on the occasion of the centenary of his birth, began on December 24 with a ceremony in the Pasteur Institute. Delegations from scientific bodies, headed by Dr. Pierre Roux and Dr. A. C. Calmette, of the Pasteur Institute, marched in procession before the tomb of Pasteur, which is a crypt in the institute. Afterward Dr. Pozerski of the institute delivered a lecture on Pasteur's life and work.

On December 26 the centenary was observed by the Paris Academy of Medicine, when addresses were made by Professor Behal, president of the academy, and Dr. Calmette, of the Pasteur Institute.

Numerous celebrations were held in France and throughout the world on December 27. Cardinal Dubois celebrated mass in the Paris church where Pasteur worshipped. Pasteur's daughter, Mrs. Valery Radot, and her husband and son were present. President Millerand presided over a memorial ceremony at the

Pasteur Institute, where Dr. Pierre Roux, director of the institute, delivered the address.

In this country there were special exercises in Philadelphia on December 27, the principal addresses being made by Ambassador Jusserand and Dr. Hugh S. Cumming, surgeon-general, U. S. Public Health Service. Messages of appreciation were read from President Harding, Mr. Wilson, Chief Justice Taft and many others.

At the American Museum of Natural History in New York there was a meeting at which Dr. George F. Kunz, president of the New York Mineralogical Club, presided. The speakers were M. Gaston Liebert, French consul general; Dr. Henry Fairfield Osborn, president of the American Museum of Natural History; Dr. Hermann M. Biggs, state health commissioner; Dr. George D. Stewart, president of the New York Academy of Medicine; Dr. Pierre Lecomte du Nouy and Dr. Hideyo Noguchi, of the Rockefeller Institute; Major Henry J. Nichols, United States Army, and Professor C.-E. A. Winslow, of Yale University.

The Federation of American Societies for Experimental Biology, meeting at Toronto, arranged a dinner at which addresses were given by Professor Graham Lusk, of the Cornell Medical School, and Professor F. G. Novy, of the University of Michigan.

The centenary is being celebrated by the New Academy of Medicine. A public exhibition which opened on December 27 will continue until January 10. It includes books, portraits, statues, medallions and other objects intimately connected with Pasteur and his work. Commemorative exercises will be conducted in the Academy of Medicine on the evening of January 10.

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#### SCIENTIFIC NOTES AND NEWS

A SPECIAL number of SCIENCE containing the address of the retiring president of the American Association for the Advancement of Science and the proceedings of the association, of the sections and of the affiliated national scientific societies meeting at Boston during convocation week will be issued next week, or as soon thereafter as the material can be col-