

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.

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-