the community, medical, educational, social, governmental and commercial.

Every effort will be made, according to the commission, the governmental body in charge of the project, to erect an institutional center for the care, treatment and study of the physically and mentally sick that will be the last word in modern hospitalization from the standpoint of scientific medicine and construction engineering. To this end the commission has drawn heavily upon professional and technical talent in the United States for advice and guidance.

Early this year Dr. Eduardo Blanco Acevedo, president of the commission, came to New York and consulted with Dr. C. C. Burlingame, chief executive officer of the group which built the Presbyterian Hospital-Columbia University Medical Center. This summer Dr. Burlingame was invited to Montevideo to consult with the commission and to study in detail its plans for the Medical Center which, apparently, was to follow in principle the New York Medical Center as a model project of this type.

Dr. Burlingame spent two months in Uruguay giving the authorities the benefit of his wide experience and expert knowledge in hospital planning, and making a number of recommendations as to organization and construction which were all adopted. Thanks to Dr. Burlingame, the needs of the mentally sick will have the same adequate attention under the scheme as those of the physically sick. In the plan adopted the psychiatric institute and hospital has been made an integral part of the medical center and is being designed, as to structure and function, along the lines of the New York State Psychiatric Institute and Hospital.

El Imparcial, one of the local newspapers which have been giving considerable attention to the project, remarked, in its discussion of the plans: "One of the items upon which Dr. Burlingame was most insistent in his conferences with the commission was the incorporation within the Medical Center of a Psychiatric Institute and Hospital, which he considered a vital part of the center and indispensable in any adequately conceived and comprehensive project of this type. Modern scientific medical opinion, Dr. Burlingame declared, considered such an institute as absolutely necessary not only to provide expert care for the patients suffering from mental disorders but to make possible research and educational work looking to the prevention of such disorders and the reduction of the great burden represented by the enormous amount of mental disease existing under present conditions of civilization."

According to the *Mental Hygiene Bulletin* the Psychiatric Institute and Hospital, which received the unanimous endorsement and enthusiastic support of the Psychiatric Society of Uruguay, will be built in close relationship with its sister hospital, the Neurological Institute, and will be equipped with clinical, research and diagnostic laboratories. Hospital beds will be so arranged as to make possible intensive study of any one of several types of mental disease. The whole institution will be organized around the four-fold function of treatment, research, teaching and public education. Special attention will be given to the teaching of all medical students in the fundamentals of psychiatry, and for the training of psychiatrists, mental nurses and psychiatric social workers.

THE TESTING LABORATORY OF THE BUREAU OF STANDARDS

ACCORDING to the statement which was made public by the Department of Commerce, an increase of 27,214 in number of items tested at the Bureau of Standards during the fiscal year 1930 as compared with 1929 and a corresponding increase in fee value of $139,212 have been announced by Dr. George K. Burgess, director of the bureau. A comparison of figures for 1928 and 1930 shows increases for the latter year of 68,513 and $218,497. The total number of items tested during 1930 was 200,726 and the fee value $683,614.51.

These figures are particularly interesting at this time since they show a steady increase in the work of the government's largest testing laboratory during a period when business in general has decreased and when one would naturally have looked for a decided drop in general testing.

The bureau's statistics cover 46 different items or classes of tests. During 1930, as compared with 1929, there were increases registered under 26 of these items while in 20 cases the number of tests decreased. In the matter of fee value increases were noted in 28 cases, in two cases the fee value did not change, while in 16 cases the fee value decreased.

The greatest single increase of 1930 as compared with 1929 was in clinical thermometers where an increase of nearly 24,000 occurred during the year. (Total number tested, 100,648.) Large percentage increases were also recorded in electric batteries, miscellaneous dimensional determinations, aircraft engines, engineering materials, cement and ceramic materials. In comparing 1928 and 1930, important increases have taken place in electric batteries, electric lamps, dimensional determinations, weights and balances, volumetric apparatus, hydrometers, laboratory and clinical thermometers, radioactive materials, ceramic products and in the distribution of standard samples.

Roughly, two thirds of the bureau's test work is for

the national and state governments while one third is for the general public. Although the latter class of tests decreased about 14 per cent. in 1930 as compared with 1929 there was still an increase of 17 per cent. as compared with 1928. This is a very satisfactory showing and proves that the value of carefully conducted tests is becoming more generally appreciated.

BEAR RIVER MIGRATORY BIRD REFUGES

STATISTICS assembled by the Biological Survey of the Department of Agriculture covering the land status on the Bear River Migratory Bird Refuge in Utah, as of June 30, made public on September 20, show that the lands purchased total 15,860.65 acres; public lands withdrawn, 30,632.12 acres; state cession lands, 2,132.85 acres; lands leased, 7,860.98 acres, and right-of-way easement, 0.14 acre; or a total of 56,486.74 acres. When withdrawal lands exchanged, amounting to 4,099.8 acres, are deducted, the net refuge area is 52,386.94 acres. During the fiscal year 1930 there was expended for lands $24,547.28; other expenditures for acquisition purposes amounted to $307.41, making a total of $24,854.69. The average cost an acre for lands purchased was $1.55.

Of the 163,468 acres within the boundary of the Upper Mississippi River Wild Life and Fish Refuge, 19,162 acres are reported as agricultural and semi-agricultural lands, 20,000 acres as unsuited for purchase, 9,743 acres as state and city owned, 25,018 acres as public domain (made part of refuge by executive orders), 1,650 acres as acquired by gifts and cessions, 8,777 acres under contract, and 56,548 acres actually paid for, leaving 22,570 acres to be taken under contract.

The cost of examining and appraising 225,000 acres was $22,500, or 10 cents an acre. This calculation is based on land area examined and takes no account of approximately 70,000 acres of interlocking waters that were covered by examinations. For making boundary surveys $10,939 has been expended, and $40,393.46 for negotiating for 65,325 acres under contract or acquired, or an average of 62 cents an acre. This figure is based on the tracts covered by contracts, although all the tracts within the refuge have been negotiated for. The average cost of lands taken under contract is $6.29 an acre, and the average cost of lands paid for is $6.06 an acre.

Lands to be acquired for the Cheyenne Bottoms Migratory Bird Refuge, near Great Bend, Kansas, the creation of which was authorized by act of Congress approved on June 12, are being surveyed by field crews of the Biological Survey. When the government gains control of the lands needed for the purpose, the refuge established will be of outstanding importance to the birds migrating in the Mississippi Valley region.

Topographic surveys of other proposed refuge areas are being conducted and engineering facts gathered with dispatch. Part of the information being obtained is to enable the Biological Survey to determine what may be done toward establishing migratory-bird refuges in regions where it may be possible to restore areas now desolate to their natural condition.

These refuges are being established in furtherance of the terms of the migratory bird conservation act, to preserve the birds of the United States and Canada protected by treaty with Great Britain.

MEMORIAL TO GEORGE WESTINGHOUSE

NATIONAL, state and city officials and executives of public utilities, industrial concerns and banks have dedicated in Schenley Park, Pittsburgh, a monument to George Westinghouse, inventor of the air brake and other railway devices, the automatic telephone exchange, the jet steam turbine, a piping system for natural gas and organizer of alternating current electric systems in the United States.

The memorial is the tribute of 50,000 workmen and professional men, members of the Westinghouse forces living under many flags. More than three hundred prominent men accepted invitations to the ceremony. The site of the monument is near a small pond in a grove of willow trees.

Henry Hornbostel, designer of the Harding Memorial at Marion, Ohio, the Hell Gate Bridge and other structures, designed the Westinghouse Memorial in association with Eric Fisher Wood. Daniel Chester French, sculptor, executed the main sections in war under Mr. Hornbostel's guidance and Paul Fjelde produced the panels representing Westinghouse's six chief mechanical achievements.

The base is of Norwegian granite, which also is inserted into the bronze upper portions. The rest of the monument is of bronze, gold-leafed. The center or main section shows a medallion of Westinghouse between an engineer and a skilled mechanic. Facing this semi-circular construction is a figure representing American youth taking inspiration from the inventor.

Among those present were Lord Southborough, of Great Britain; H. G. Brown, deputy chairman of the Westinghouse Air Brake and Saxby Signal Company, Ltd., of London; R. G. Gage, chief engineer of the Canadian National Railways, and P. J. Myler, president of the Canadian Westinghouse Company.

Herman Westinghouse Fletcher, grandnephew of George Westinghouse, unveiled the memorial, which was presented to Pittsburgh by George Munro, veteran Westinghouse employee, and accepted by Mayor Charles H. Kline.