brought to bear upon the problem of flood control, and also a great aid to navigation and irrigation, because of the better conservation of water in the soil for springs and streams.

It is a problem with which the individual farmer of an intellectual turn of mind can experiment in a small way, but above all it is one which needs, even demands, the attention of the federal government and many of the agricultural experiment stations.

J. RUSSELL SMITH

UNIVERSITY OF PENNSYLVANIA

## THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND THE STATE

In an address at the annual banquet of Technology alumni in January, Governor Walsh suggested a closer cooperation between the institute and the state. The result has been, in its successive steps, the appointment of a special committee to consider the matter by Jasper Whiting, president of the alumni association, a conference with the governor in March, an investigation of all the sources of information and a report to the alumni council on May 25. The latter while it has naturally been based on the institute and its resources proves to be so broad in its applications that there is place in the plan for all the institutions of the state that can give advice. "When they are so harnessed to the state's interest," the report reads, "they will constitute a great state university geographically diversified, possessing the momentum of valuable traditions, the strength of long years of experience and moral influence through their great alumni bodies-all this making of them units, which if assimilated by a wise state policy will form a coordinated system of educational facilities, which in its broadest sense is a university."

First there is recommended legislation which shall increase and regularize the services of members of the faculty of the institute (and other institutions, to be specified in the act) on state boards and commissions, either as members or in an advisory capacity. Such legislation should be applicable to all state commissions which conduct work requiring scientific or technical skill or advice. Suggestions for direct payment for such services direct to the institution are made, since it is best fitted to apportion such payments between individual service and the use of the laboratories of the school.

The second recommendation is that the use of the laboratories and shops of the institute be placed at the service of the state under appropriate conditions which will safeguard the educational purpose of the institute and the administrative needs of the state. No direct charge should be made for the use of these laboratories, but the state should bear the expenses of labor and material plus a fixed sum to be added to cover wear and depreciation. Provision should be made for an equitable adjustment of this charge.

For its third suggestion the committee advises the establishment of a bureau of technical information, which shall without charge furnish to the state and the public, advice which may be obtained without substantial expense, either in furnishing ordinary scientific information or indicating the lines of inquiry to be followed.

The committee recommends the appointment by the governor of a permanent committee on cooperation to carry into effect these recommendations, to study further the needs of the state as to closer cooperation between it and the institute and additional means of making such cooperation effective. Such a committee would also look forward to a system of cooperation between the state and the various other educational institutions.

The committee finds that from its inception the Massachusetts Institute of Technology was intended to serve the scientific needs of the state and its people. Its charter looks to aiding the advancement, development and practical application of science in connection with the arts, agriculture, manufacture and commerce. In this department of its activities the committee finds momental achievements to the credit of Tech in many different divisions of work. In fact the whole history of the institute shows that the institute has given to the state and that the state has drawn freely from the institute. The state has availed itself of the faculty of technology and of the shops, laboratories and experiment stations and it has furnished problems for the student body. But all of this, the committee believes, has been in an incidental and casual way. There has been cooperation undefined, unguided and fragmentary. It has lacked the stimulus of continuity or organization, the spur of recognized state service. "The time has come," writes the committee, " to formulate the union, to make it official, to the end that the institute may be strengthened, in power and prestige, and that the state may derive in full the benefit at hand."

## PRESERVATION OF THE NATIONAL MONU-MENTS OF CHINA

PRESIDENT HENRY FAIRFIELD OSBORN of the American Museum of Natural History has addressed under date of May 14, 1914, to Secretary of State Bryan and to President Yuan Shih-k'ai of China, the following letters relative to the preservation of the art and historical monuments of China.

HONORABLE WILLIAM J. BRYAN,

Secretary of State,

Washington, D. C.

Sir: The Chinese race furnishes perhaps the greatest of all records of human society, and its future is closely associated with the destiny of society in this hemisphere. Our country contains an ever-increasing number of men and women devoted to the hope of China's triumph in modern civilization and government, in which case she will extend her matchless social and human experiment continuous from the remotest times unbroken. In this connection interested persons and institutions in the United States are seeking to establish in China a school of archeology as a means to encourage protection of the antiquities of China and provide for study there of China's ancient history.

On account of the ruthless destruction and plunder of antiquities in China since 1900, involving American citizens, the following individuals and organizations represented, having memorialized President Yuan Shih-k'ai as shown herewith, have the honor to request your aid in the official transmission of their memorial herewith enclosed, directly to Peking.

Furthermore, we have the honor to request:

First, That the Department of State, through its officials in China, use such means as it may determine to discourage all American citizens from vandalizing in China and from trafficking in broken and stolen sculptures and other archeological and art works of historical value belonging to the people of China, and to render aid with counsel wherever possible to shield Americans from being involved with plunderers of Chinese antiquities, and in all ways possible assist in preserving the good name of the United States, its citizens, agents and institutions, free from connection with the destruction of Chinese monuments and antiquities and the traffic in stolen and otherwise immorally or criminally obtained Chinese objects of antiquity.

Second, That the Department of State, officially, semi-officially or unofficially, as possible, through its officials in China and elsewhere, discourage the plunder and destruction of Chinese antiquities in times of peace or war in China, whenever opportunities permit, and support and encourage the Chinese officials and people in taking effective means to conserve their antiquities for China's benefit and the benefit of other nations.

Respectfully submitted,

(Signed) HENRY FAIRFIELD OSBORN, President

PRESIDENT YUAN SHIH-K'AI.

Sir: We have learned with profound concern. that through various evils of modern origin, monuments and antiquities in China invaluable to present and future generations of Chinese and to the world, have been irreparably lost and destroyed; that the high material value put by Western civilization upon antiquities and products of art showing the progress of mankind, has lately resulted in the commercialization, plunder and destruction of antiquities in China beyond the power of ordinary influences to control; furthermore, that such plunder and destruction not only are despoiling China of some of the garments of her ancient civilization, but actually tend to break down Chinese society by depriving the Chinese people of their heritage, besides crippling research and education. and retarding progress;

Therefore, having a friendly interest in the good of China and the republic, and having in mind the interests of enlightenment of human welfare generally, as well as the responsibilities devolving upon the nations and upon all well-wishers and friends of China, we have the honor herein to memorialize your Excellency and respectfully and earnestly to urge as follows: