

*THE JOINT COMMISSION AND THE
SIGNAL-SERVICE.*

ONE of the last acts of the late congress was to continue in power the joint commission appointed "to consider the present organization of the signal-service, geological survey, coast and geodetic survey, and the hydrographic office of the navy department, with a view to secure greater efficiency and economy of the administration of the public service in said bureaus."

Thus far this commission seems to have elicited from the witnesses who have testified before it a considerable diversity of opinions, although each one is positive that his own service is properly conducted and needs no change. Major Powell and the committee of the National academy of sciences undoubtedly take a broad view of the questions at issue, and defend the abstract and theoretical importance of a union of all scientific work under one head, which may be either a person or a commission. The others generally defend special questions; such as, Is each organization efficient or economical? Does each co-operate with other departments? Is there an immediate need for any change?

Many of the questions and replies imply that there are some underlying fundamental questions that should be discussed and settled before considering the matter of efficiency and economy. Some of these may be suggested, as follows: Shall pure science be separated from applied science? Shall the refined operations of the coast-survey, signal-office, etc., be classed as science, or as economic arts? Shall the civilian scientific element in the country be intrusted with applied sciences, or shall it only be employed to teach these to military and naval officers? Shall such officers be taken away from their proper work, thereby spoiling the little nucleus of an army and navy that the government maintains in times of peace? Shall the ten or twenty millions spent annually by government in internal improvement be disbursed by officers skilled in military engineering, or by civilian engineers especially fitted

for the task? Shall all executive work be in the hands of various bureaus, including one of public works, while all scientific questions are referred to a special bureau of science whose members devote their whole time to the government service? Will education, science, and knowledge, and the progress of the people throughout the land, be stimulated more by giving scientific work to army officers, or by giving it mostly to civilians? Shall West Point, Annapolis, Willets Point, Fortress Monroe, Fort Myer, Fort Leavenworth, become not merely military, but also scientific, schools, with the understanding that the graduates of the civilian scientific schools at Cambridge, Ithaca, New York, New Haven, and elsewhere, cannot hope to receive much encouragement in the way of government employment? Shall our government make a decided effort to stimulate the general spread of education and scientific investigation by throwing its patronage into the hands of competitors from every rank of life? Shall not army, navy, and civilians at least stand on an equal footing in times of peace, and in questions of fitness to conduct works of applied science or higher engineering?

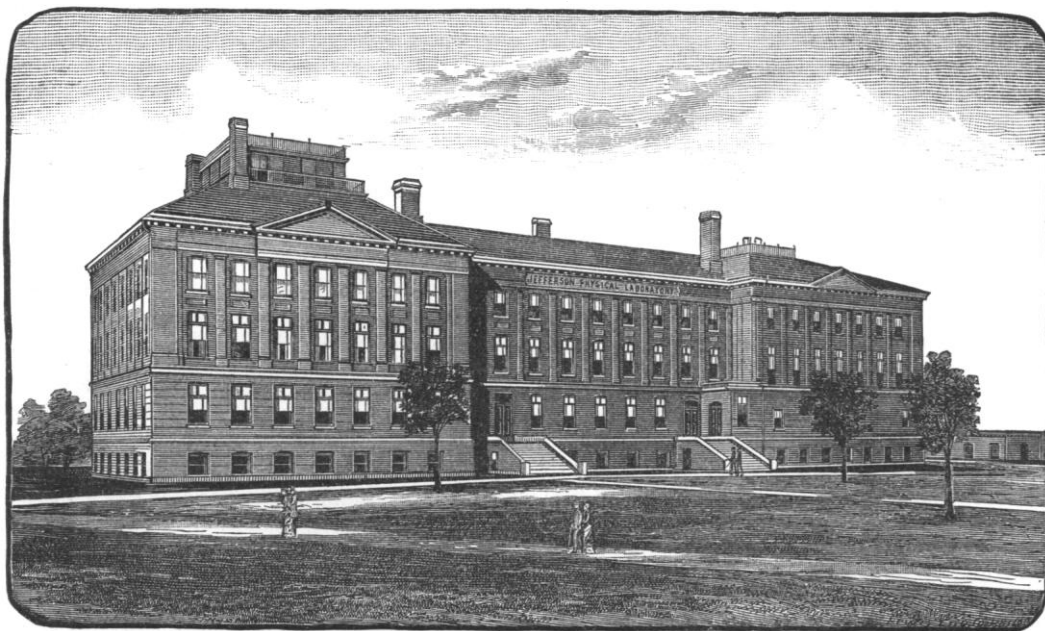
A slight examination will certainly show that very many of the public works carried on by the executive branch of our federal government have been assigned, whether by the president or by congress, in a very unsystematic manner, to the various departments and bureaus at Washington. Sometimes this has occurred, to the detriment of the work; but generally it has been to suit the exigencies of some temporary condition of affairs, and frequently for some political or personal reason. There is need, in fact, of considering the question of re-organization of all the government work.

However, the special and present business of the joint commission is to suggest, if possible, how to infuse a little harmony, efficiency, and economy into some or all of the public work; and most of the witnesses have confined their remarks to this restricted temporary aspect of affairs, leaving it to the commission, by cross-questioning, if possible, to draw more

profound truths from the partisan testimony of each witness.

The most expensive and important of the organizations studied by the commission is the signal-service; and considerable interest attached to the testimony of Professor Abbe, himself a member of the National academy of

that the proper interpretation of all and even of his own testimony affords an unanswerable argument against a purely military administration, and rather in favor of a purely civilian business and scientific one. The committee has evidently failed to obtain an exposition of the arguments for and against the present



THE NEW PHYSICAL LABORATORY AT HARVARD COLLEGE.

sciences, as it was hoped he would contribute facts favoring its transfer to a civilian scientific bureau. It is difficult to believe that he does not appreciate the strong arguments on this side of the question; but, like most government employees, he has chosen to consider the commission as an aggressive body, inquisitive as to whether the laws of congress have been properly carried out by his branch of the executive: he has therefore not touched upon questions of the general policy of the federal government, but has simply defended the present administration of the signal-office as being quite efficient and economical, and is especially strong in his defence of Gen. Hazen. He thus leaves it to his examiners to penetrate to the core of the matter, and to show

management of such institutions as the naval observatory, the signal-office, nautical almanac, geodetic survey, etc.

THE JEFFERSON PHYSICAL LABORATORY.

THE Jefferson physical laboratory, which has recently been completed at Harvard university, is a three-story brick building with a basement, the floor of which is nearly on a level with the surface of the ground. The building is 209.4 feet long. The two wings are 67 feet square, and are connected by the main walls of the building, which are 46.8 feet apart. The ground-plan thus consists of two squares connected by a rectangle. The longest line of the laboratory runs very nearly east and west: there is therefore a great southern exposure, with no