Many Americans who have been in Japan will learn with regret that Mr. H. Katō, who has been in the responsible position of the president of the university for the last nine years, is no longer connected with the university, having lately been transferred to the senate (Genrōin). During his presidency, the university grew up from a very insignificant institution to be one of the great seats of learning in the world. Mr. Katō's services will long be remembered in the university. The president of the new Imperial university is Mr. H. Watanabe. He has occupied with success many positions of responsibility under the government, and was latterly very popular as the mayor of Tōkyō. His appointment to the university is considered by all to be eminently fitting.

MR. GOODRIDGE has another article in a recent *Scientific American* on 'Modifying the climate by closing the Straits of Belle Isle,' in which, as before, his argument is based on the error that the great body of the Labrador current comes to us through these straits instead of around the eastern coast of Newfoundland. He gives no evidence in support of this assertion, but vaguely discusses the question of the origin of ocean-currents, which has nothing to do with his climatic problem. Referring to the objection pointed out in *Science* some months ago, that our cold weather comes from the west and north-west, he grants that this will 'sometimes occur,' as if it were exceptional. He thinks that "if we had not the cold wall between our shores and the Gulf Stream, it is fair to presume that we should have a less stormy coast." This presumption is very questionable indeed; for in winter, when most of our notable storms occur, they do not originate on the coast, but come from the far west and south-west; and, moreover, in the winter season, the contrasts in temperature along our shores would be stronger if the warm Gulf Stream flowed close along the cold land. As far as this contrast is effective, our winters would be more stormy then than now.

THE SCIENTIFIC COMMISSION REPORT.

THE long-looked-for report of Mr. Allison's commission on the surveys has at last been completed, and submitted to congress. It proves to be even more conservative than was indicated in the summary of the views of the commission, which was given in our issue of May 7. At that time the members of the commission were all of opinion that the operations of the geological survey should be restricted by law in the direction indicated by Mr. Herbert's bill. The majority, comprising Messrs. Allison and Hale of the senate, and Messrs. Lowry and Wait of the house, now frankly admit that the statements and arguments of Major Powell have led them to modify their views, so that they no longer propose any restriction upon the paleontological or other work of the survey. They therefore propose, in lieu of Mr. Herbert's bill, one which only requires that the printing of the survey shall be specifically estimated for, — a provison to which no one will object, and which ought to be extended to other bureaus of the government. The following sentences from the report embody the gist of its judgment upon the work of the survey: —

The commission is of opinion that the administrative part of the bureau is well conducted and with economy and care, and discloses excellent administrative and business ability on the part of its chief.

The commission expresses no opinion as to the plan of the survey as delineated by the director, as it does not regard itself charged with this duty, nor is it competent to express an opinion on a subject involving so difficult a scientific question. This, in the judgment of the commission, must be left to the criticism of those who are able to do so more intelligently than can the commission, with its limited means of knowledge.

The commission has no doubt of the wisdom of a geological survey of the whole country, and considers the question as to the propriety of its being done by the general government as settled by existing legislation.

In treating of the coast survey, the commission gives an outline of its history from its inception in 1807 until the present time. The report treats at length of the feasibility of transferring the survey to the navy department, and shows that only a small part of its work is of a kind with which naval officers are legitimately concerned. It also speaks with favor of the geodetic work of the survey, sees no occasion for any other legislation than can be incorporated in the appropriation bills, and concludes that the secretary of the treasury can make all necessary regulations governing it.

The report on the signal service will disappoint all who have been dissatisfied with General Hazen's management. It recommends no legisla-

tion changing the general administration of the office, unless the proposed abolition of the 'study-room' and of the school at Fort Meyer be considered such. The commission says that any intelligent young man of good education can learn every thing necessary to the practical work of an observer in six weeks, and sees no occasion for so elaborate a scheme of instruction as that provided. It is not, however, intended to dispense with the services of the able meteorologists who have been employed by the office.

On the question of the military control of the meteorological service, the report is extremely mild. It is found that the work is in no sense military, and that military discipline and law are not necessary to its efficiency. If the question were a new one, whether a civilian bureau with a civil head should be established rather than an extension of a military bureau, the commission would recommend this rather than a military organization. As the matter stands, the commission is equally divided on the question of leaving the service in its present hands. Three do not see why it cannot be as well managed by the chief signal-officer of the army as by a civilian head; three think such a head necessary to its efficiency. All, however, are in favor of cutting down the military staff as it now exists. As with the other bureaus, the commission does not find that congress can advantageously define the operations of the signal-office by other legislation than such limitations as may be imposed on expenditures in framing the appropriation bills.

The principal minority report is signed by Senator Morgan and Representative Herbert. It consists largely of severe criticisms upon the work of both the coast and geological surveys. The topographical system of the coast survey is strongly condemned on the score of extravagance in delineating minute features of no use whatever to the navigator, and of little or no use to any one else. It favors the transfer of the office to the navy, and would abolish entirely the further prosecution of other geodetic measurements than are necessary to map-making.

Such are the main points of the report. Comment is unnecessary, because there is no reasonable chance of legislation on the subject. The surveys will be left, as they have heretofore been left, in the hands of the appropriation committees. It is expected that the house committee will sympathize with the minority rather than the majority, so far at least as the coast survey is concerned, and will therefore be disposed to reduce the appropriations to the lowest limit, and perhaps cut down the force also.

HATCHING, REARING, AND TRANSPLANTING LOBSTERS.

THE experiments of Dannevig in hatching the ova of the European lobster, naturally awakened an interest in the propagation of the American species, which, as has been shown by Mr. Rathbun, is becoming less abundant on what were formerly the best lobster-fishing grounds on our coast. This depletion of the supply of lobsters is very probably due in large part to the fact that vast numbers of females are annually caught and killed, together with the many thousands of eggs hanging to their abdominal legs. It happens in this way that not only the individuals most directly concerned in reproducing their species are destroyed, but that almost countless millions of partly developed young are also sacrificed, in the ordinary process of supplying the markets with this crustacean.

Recent experiments under the direction of Capt. H. C. Chester at the U. S. fish-commission station at Wood's Holl, Mass., have demonstrated that it is possible to hatch the ova of the lobster in unlimited quantities in the same device in which the ova of the cod were successfully hatched last year. The eggs, at any stage, may, in fact, be removed from the parent female without injuring her, or an appreciable number of ova making up the masses of eggs hanging to her swimmerets. The eggs, if then placed in the hatching-apparatus, will develop and become embryos, which will free themselves from their investing envelopes in due course of time. The length of the period of incubation is not known, as artificial fertilization of the eggs of this creature is not practicable; though with greater experience, and a wider range of accurate observation, it may soon be possible to state the length of that period pretty accurately. The approach toward the completion of development in the egg is marked by the gradual diminution in the bulk of the yelk, as a result of which the eggs become more and more translucent; so that, by the time they are ready to hatch, they are dirty-yellowish in color instead of dark greenish-brown as at first. At the same time the ova become larger by about one-half their original diameter. Towards the close of the period of development, the eggs also lose their original globular form, and become decidedly oval. During the later stages of development the eggs show