

Scientific American.

ESTABLISHED 1845

MUNN & CO., - - - EDITORS AND PROPRIETORS.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, - - NEW YORK.

TERMS TO SUBSCRIBERS

One copy, one year, for the United States, Canada, or Mexico \$3.00
 One copy, one year, to any foreign country, postage prepaid, 20 lbs. 5d. 4.00

THE SCIENTIFIC AMERICAN PUBLICATIONS.

Scientific American (Established 1845).....\$3.00 a year.
 Scientific American Supplement (Established 1876)..... 5.00
 Scientific American Building Edition (Established 1885)..... 2.50
 Scientific American Export Edition (Established 1873)..... 3.00

The combined subscription rates and rates to foreign countries will be furnished upon application.

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 MUNN & CO., 361 Broadway, corner Franklin Street, New York.

NEW YORK, SATURDAY, APRIL 14, 1900.

NEW YORK'S WATER SUPPLY AND THE RAMAPO CONTRACT.

New York is in no danger of a water famine, alarmists' rumors to the contrary notwithstanding. In our recent discussion of this subject we showed that with an average total annual supply of 147,000,000,000 gallons, the consumption is only 92,000,000,000 gallons, and this with a daily per capita consumption probably larger than that of any other city in the world. It was also shown that the Boroughs of Brooklyn and Queens were amply supplied, the present daily consumption, though not as large as that in Manhattan and the Bronx, being, nevertheless, more than is necessary for the actual needs of householders; for, in the opinion of the Water Commissioners, the consumption, particularly in Manhattan and the Bronx, could be enormously reduced by the simple expedient of putting in self-closing faucets and the adoption of other means of reducing the present wilful and stupid waste of water. On the other hand it is a fact that the building of reservoirs and aqueducts is, in the nature of things, costly and tedious work, and, therefore, it is expedient that provision for increased water supply be made many years in advance of present necessities.

From our recent review of the subject, which will be found in our issue of March 24, it is seen that practically the entire supply of water is drawn from works belonging to the city itself. Taken as a whole the present system is an extraordinarily good one, and justifies the citizens in the determination that any further enlargement of the water supply shall be made at the public expense and owned and controlled by the city.

During the past few months New York City has been not a little agitated by the discovery that an organization known as the Ramapo Water Company which, for the past seventeen years, has been engaged buying up all the available sources of water supply throughout the State and in securing legislation designed to make it secure in the monopoly thus acquired, was about to obtain a contract from the Water Commissioners which would force the city to take its future supply of water from this company, paying therefor the enormous sum of \$200,000,000. In contemplating this extraordinary proposition, one is impressed both with the audacity and magnitude of the scheme, and the silence and subtlety with which, through all these long years, it has been carried out.

The work of securing and making safe this monopoly had to be prosecuted in two different fields. On the one hand surveys had to be made of the various watersheds which might, in any way, be made contributory to the city, and also of the possible routes which might be followed by the aqueducts for conveying the water. The other field of operations lay within the halls of the Legislature, and in both fields the promoters of the Ramapo scheme appear to have been only too successful. They have secured options upon practically all the sources of water supply, and they have secured the right of way for pipe lines and aqueducts, paying therefor the nominal sum ordinarily required in such purchases. In the Legislature they have succeeded in taking away from the city the right of eminent domain, or, in other words, the city's right to condemn land for water supply purposes. Not only so, but the Ramapo Water Company has been granted special powers of condemnation not possessed by any other company eligible to contract with this city. The present situation resulting from these provisions as stated by the Merchants' Association of New York is as follows: First, an adequate water supply for the city of New York can be procured only by use of public powers to condemn water rights; second, the city is deprived of the power to condemn, or to buy indispensable water rights; third, no company eligible to contract with the city has been granted the power to condemn water rights, with one exception; fourth, the Ramapo Water Company alone has the public powers to condemn water rights; and only by contracting with the Ramapo Water Company to use those powers on its behalf can the city of New York obtain more water,

By the terms of the notorious Ramapo contract, the company has to deliver, by a gravity system of transmission, 200,000,000 gallons of water every day for a period of forty years from and after the first day of some specified month in the year 1902, the water to be paid for at the rate of \$70 per million gallons. In view of the fact that the present supply of the greater part of this city is at last 100 per cent greater than the actual necessities of the city, it is seen how iniquitous would be the signing of a contract saddling the city with an additional and altogether superfluous supply, which is almost as large as the actual amount now required for the daily use of the city.

Some human rights there are, whether of a public or a private nature, which need no definition, and among these, surely we may place the right of a city to control its own supply of one of the primal necessities of life. That any private corporation should systematically set itself to buy up the water rights of the second greatest city of the world, just as the real estate speculator buys up the outlying farms of some booming Western city, is not to be tolerated.

Relief is being sought through the Legislature, and we are much pleased to see that in spite of the inevitable veto of the distinguished Mayor of this city, Governor Roosevelt has attached his signature to the Fallows Anti-Ramapo bill, which restricts the powers claimed by the Commissioner of Water Supply of the city of New York, forbidding him to enter into any water contract without the approval of the Board of Public Improvements and the Board of Estimate and Apportionment, and the separate written consents of the Mayor and Comptroller. Further legislation has been sought in the Morgan bill, which aimed at the restoration to the city of New York of its rightful powers of eminent domain, whereby it should once again be enabled to obtain any needed water supply by the exercise of the power of condemnation. Although the bill was defeated, it seems to us that the restoration of these rights would throw an additional and much-needed safeguard around the interests of the city.

THE PROPOSED DEPARTMENT OF COMMERCE AND INDUSTRY.

The wonderful progress which we have made in the last few years in the increase and extension of our export trade, has naturally resulted in the desire of our legislators to foster our commerce by all possible means. The proposal to establish a new executive department to be known as the "Department of Commerce and Industries," the head of which shall hold a seat in the President's cabinet, seems a wise one. In none of the departments of the government have we any bureau or division of the public service to which is committed the supervision of the manufacturing and mining interests of the country. In view of our great progress and our development in manufacturing industries, the products of which now far exceed our ability to consume at home; in view of the urgent necessity of securing more extensive markets abroad, it must be apparent to anyone who gives the subject the least thought that there is an urgent demand for an establishment of a department of the public service to have charge of, and aid in our industrial development, and to secure better and more extensive markets abroad. This fact has been recognized for many years by all the principal commercial bodies throughout the country, and there now seems to be an urgent demand in the industrial world for such a department. Most of the other governments have something of the kind. England has her Board of Trade; France, her Minister of Commerce, Industry and Telegraphs; The Netherlands, a Minister of Public Works and Commerce; Austria Hungary, a Minister of Commerce and National Industries; Italy, a Minister of Commerce, Industry and Agriculture; Spain, Portugal, and Russia also have similar officers. In all of these governments the fact is recognized that a department of this kind is essential and necessary for the care, promotion, and development of commerce and manufactures. The United States, in order to be on a footing of equality, and in order to be fully equipped to enter the competitive field with the strongest commercial nations ought to take a lesson from and be guided by these examples. In order to make such a department comprehensive and effective, and in order fully to equip it with the necessary appliances to execute its great task and purpose, all branches and departments of the public service relating and germane to the subject of commerce, manufactures and other industries ought to be vested in it.

Bills with this end in view have been introduced in both the house and the Senate, the latter being fuller and more elaborate, and it is the one likely to be considered in preference to the other. There is little prospect that the bill will be considered this session, but it is expected that it will be passed the next session of this Congress.

The Senate bill number 738 provides for a cabinet officer and an assistant secretary, and that the new department shall have general jurisdiction over the foreign and internal commerce of the United States,

except in so far as regards the revenue and collection of customs. It shall also have general jurisdiction over all matters pertaining to transportation facilities by land or water, except in cases under the jurisdiction of the Interstate Commerce Commission. It shall have general jurisdiction over the Geological Survey, the mining industries, and the fish industries, as well as everything pertaining to the manufactures of the United States, including the securing of foreign markets. It is also intended that the new department shall have jurisdiction over Patents, Trade Marks and Copyrights.

Many bureaus and offices would be transferred from their old departments to the new one. Thus, the Treasury Department would have to give up the Life Saving Service, the Light House Service, Marine Hospital Service, the Steamboat Inspection Service, the Bureau of Navigation and the United States Shipping Commissioners, the Bureau of Immigration, the Bureau of Statistics, as well as the United States Coast and Geodetic Survey. From the Interior Department would be transferred the Commissioner of Railroads, the Patent Office, the Census Office, and the Geological Survey, and from the State Department, the Bureau of Foreign Commerce, which would be consolidated with the Bureau of Statistics transferred from the Treasury Department. The Director of the Geological Survey would be the Chief of a new Bureau of Geological Survey and Mining Industries. The bill also provides that the Department of Labor, and the office of the Commissioner of Fish and Fisheries be transferred to the new executive department. It will readily be perceived that the bureaus, departments, and branches of the public service that are transferred to the new department are all intimately connected with, and directly pertain to the subject of commerce, manufactures and the other industrial enterprises committed to the new department. It is estimated that the changes brought about by the transference of the various bureaus and the salaries of the new officers would not be greater than \$50,000 per annum.

The secretary and the assistant secretary are to be appointed by the president and the salaries are to be respectively \$8,000 and \$4,000 per annum.

The transference of the Patent Office from the Department of the Interior to the Department of Commerce and Industries, would be a curious and interesting experiment. Provided that the internal affairs of the Patent Office are not interfered with, it seems as though it made little difference under which department it is classified, if it had proper representation in the Cabinet councils.

THE DOUBLE-TURRET SYSTEM ON TRIAL.

The favorable results of the recent trial of the double turrets of the "Kearsarge" can scarcely be overestimated in the far-reaching influence which they will exert upon the future designs of United States warships. Although the tests are not final, they were so far successful as to clear up many of the doubts which had existed as to the practicability of this novel and daring method of mounting the main battery of a warship.

The history of the double-turret controversy shows that the objections to the design may be summed up as of two kinds, structural and military. The structural objections which were raised chiefly, as they properly should be, by the Construction Department, have been met and successfully overcome by our naval constructors, who stated early in the history of the controversy that, if the turrets were finally approved on military grounds, they could and would overcome the mechanical difficulties involved in working out the installation. Briefly stated the structural objections are: The concentration of weight so near the ends of the vessel, tending to impair her seaworthiness; the risks in docking due to this concentration; the complication involved in concentrating at one point the large ammunition supply necessary for the four guns, and in the juxtaposition of the four ammunition hoists and the necessary power to work them; and last, and perhaps the chief of all, the abnormal stresses to which the substructure of the double turrets would be subjected from the simultaneous recoil of four heavy guns. These difficulties, however, have been cleverly met and removed.

The military objections might seem, strictly speaking, to be a matter for the exclusive consideration of the line officers who command and fight the ship. Indeed, the argument is advanced by them that as the structural side of the question has been completely solved, the problem has passed out of the hands of the Construction Department, and the determination of the value of the double-turret system and of its incorporation as a permanent feature in future battle-ships should be left to the officers of the line. We cannot say that we agree with this position, for it seems to us that a naval constructor has not only to devise proper means for disposing and protecting the guns, but he should be entitled to determine whether those dispositions are such as will secure the very best offensive and defensive results.

The military objections as expressed by Rear-Ad