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Contents.

(Illustrated articles are marked with an asterisk.)

Table listing various articles such as 'Aquarium, the New York', 'Bicycle hub bearing', 'Locomotive, three-cylindered', 'Logging in the Sierra Nevada', etc.

TABLE OF CONTENTS OF SCIENTIFIC AMERICAN SUPPLEMENT No. 1094.

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Table listing contents of the supplement with page numbers, including 'ARBORICULTURE', 'ARCHAEOLOGY', 'ENTOMOLOGY', 'ETHNOLOGY', 'MISCELLANEOUS', etc.

THE PRESIDENT'S MESSAGE.

The dignified conservatism, the studied moderation of the President's message, is what is most needed at the present juncture in our national affairs. Many of the troubles with which the country is oppressed have sprung from over-speculation and an unfortunate disposition to boost the wheels of progress by artificial means, legislative or otherwise.

It is possible that the trade of the country has suffered from overmuch legislation; that the change from pillar to post, the perpetual seesaw from one policy to another, is largely answerable for the present stagnation. We need a rest—at least from legislation of the radical and sweeping kind.

This is certainly a very remarkable and encouraging showing, and it is fully in line with the conservative spirit of his address that the President should implicitly suggest that for the present at least legislation affecting our foreign trade relations should be left in statu quo.

In this connection we would suggest that the most effective means for opening foreign markets and establishing active commercial relations is that which we outlined in a recent issue, and which is now being carried out by the National Association of Manufacturers. This organization, it will be remembered, is establishing exhibition warehouses for the display and sale of American products of various kinds in the South American states.

The tone of the message is equally conservative in matters of foreign policy. In spite of the diplomatic success which has attended the Venezuela negotiations, the subject is dismissed with a modest reference; and while the language in speaking of our relations with the Spanish government is dignified, it deals with the question of the hour in a moderate and conciliatory spirit, which the more rash and impetuous spirits in Congress would do well to carefully consider.

THE UNDERGROUND TROLLEY AND THE THIRD RAIL IN ELECTRIC TRACTION.

Two powerful transportation companies which have been carrying out experiments in electric traction have recently taken steps to extend their electrical equipment to new divisions of their systems. The New York, New Haven and Hartford Railroad Company, whose trial of the third rail system on the Nantasket line has been closely watched by the electrical world, is intending to lay a third rail at various points on its property during the coming year.

The Metropolitan Company is one of those which has been making careful tests of the compressed air motor; it is also the owner of the Broadway cable road and the electric underground trolley road on Lenox

Avenue; the compressed air experiments having been carried out on the last named branch. The company is, therefore, in a good position to judge of the relative performance of these three forms of mechanical traction, and there is food for thought in the fact that in the meeting of the directors in which it was determined to make the above mentioned change the weight of opinion was in favor of using the electric trolley in preference to the cable or compressed air.

In view of its cheaper first cost and uniform success in operation, it is not surprising that the underground trolley is to be chosen in preference to the cable for the new equipment, but that it should have competed successfully against the Hoadly compressed air motors is a fact which will surprise those people who have been impressed with the claims of economy which have been made by the company for the recent application of compressed air. The present costly experiments—there are five compressed air motors in operation and two more shortly to be so—were not undertaken until the engineers of the company had made an exhaustive examination on the spot of the various self-contained motors, gas, oil, and compressed air, in European cities.

The announcement that the New Haven Railroad is intending to make a further application of electricity to its steam roads will be taken as evidence that the present Nantasket electric line has given better results than the steam-equipped road. If this be the case, electric traction has taken another step in the direction of its application to the trunk roads of the country, and this goal for which electrical engineers are striving is brought within measurable distance.

At a recent discussion of electric traction under steam railway conditions, at the American Institute, New York, Mr. Charles K. Stearns stated that the chief object in view in equipping this line was to demonstrate that an electrically equipped road could be operated as satisfactorily in regard to the facility of handling large numbers of passengers on time as a steam road, and that it could be proved beyond a doubt. The line has now been in operation for two seasons. In 1895 there were 6'86 miles of double track equipped with special trolley wire, and the train schedule called for 150 trains a day.

Another much talked of substitution of electric for steam traction is that which has just commenced operation on the Brooklyn Bridge. In place of the switching engines at each end of the road, one car in every train is equipped with an electric motor, and handles the train from the time the cable is dropped before entering the station until it is picked up again on the return journey. A third rail is used, which is placed on the outside of the track, and is laid continuously across the bridge, electric traction being used for the whole trip during the hours of lighter travel at night and in case of slipping of the cable.

The success of the New Haven trials raises the question