TRANSPORTATION.

SHIPPING.

The shipping of the United States in 1890 amounted to 7,633,676 tons. Of this, however, only 12 per cent was engaged in foreign trade, the rest being engaged in domestic trade. The tonnage engaged in domestic traffic may be divided as follows: 31 per cent engaged in coastwise traffic, 12 per cent in traffic upon the Great Lakes, and 45 per cent, or not much less than one-half, engaged in traffic upon our navigable rivers. This subdivision of our traffic is illustrated by Diagram 368.

Our merchant marine may again be subdivided as follows: 24 per cent consists of steam vessels, an equal proportion of sailing vessels, and 52 per cent, or a little more than one-half, of unrigged craft. This last item may require some explanation. The great bulk of the traffic upon our rivers, and no small part of that upon the Great Lakes, is carried in scows towed by steamers. Most of these scows are of large dimensions, the average tonnage of the unrigged craft being not less than 500 tons, and scows of 1,000 tons are not uncommon. This distribution of the merchant marine is shown by Diagram 369.

Map 370, plate 59, shows the routes of most of our domestic traffic by water, including the routes of coastwise and lakewise navigation and the navigable rivers. Concerning the last, it must be said that the extent of navigable streams differs with the draft of the vessel which is adopted as the criterion and with the stage of water. The criterion is here assumed to be steamers of as small draft as are commonly used, and the navigability at high water is that indicated.

RAILWAYS.

The railway system of the United States comprised in 1890, 163,597 miles. This railway system has cost in capital and funded debt nearly $10,000,000,000, an average of nearly $60,000 per mile. Its gross earnings during the year exceeded $1,000,000,000, and its net income about one million dollars. The criterion is here assumed to be steamers of as small draft as are commonly used, and the navigability at high water is that indicated.

The enormous railway system has been constructed within the past half century. Its growth is shown by Diagram 371, the length of each bar indicating the mileage in operation at the end of that year.

Map 372, plate 60, shows the railway lines as they existed in 1890. It is seen that the northern states are very fully supplied with this means of transportation; that, comparatively speaking, the south is insufficiently supplied, while in most parts of the west railroads are few.