values, was engineered by a well-known New York business house largely interested in American railways. In England it was variously attributed to a resolve on the part of American traders to share in the transport of the national trade; to a desire on the part of the lines concerned to effect economies by a consolidation of management, and to a scheme intended to benefit certain great American railways. The transaction gave rise to much comment in Great Britain, being by not a few regarded as contemplating the eventual transfer of the lines to American owner- ship. And indeed, though the steamers continued to be under the British flag, the extent to which they remain substantially under British ownership cannot be affirmed. It was stated in 1908 that on completion of its building programme the combined fleet would consist of 132 vessels of together, 1,159,704 tons.

The general adoption of steamships in place of sailing vessels was gradually followed by their separation into two classes, one devoted to a fixed service on regular lines of employment, the other to promiscuous trade. The former class arc now known somewhat vaguely as “ liners,” ranging, however, from the first-class mail and passenger steamer on the one hand, to the regular cargo steamer on the other. To the second class belong the “ seekers ” or “ tramps ” which come and go wherever profitable employment offers, and which more especially lay themselves out to be chartered to carry full cargoes of coal, timber, wheat, nitrate, jute and such like. These vessels, some of which are of great capacity, are frequently in competition with the liners. This competition sometimes results in “ cut rates ” of freight, to the serious loss of the great shipowning firms and companies. With the establishment of regular lines, moreover, there grew up competition between rival lines, with similar results. A solution was found by the creation of working agreements between rival lines at agreed rates of freight, but the lines thus associated were still exposed to the attacks of “ tramps ” upon what the liner owners regarded as their privileged trade. Fierce conflicts from time to time ensued, with great disturbance of the freight market and with consequent loss or inconvenience to the merchants themselves. As the result, shipping “ rings ” or “ conferences” were created in many trades, the owners of the liners undertaking to provide the traders with a regular service accompanied by advantageous conditions, whilst the traders undertook to ship only by the conference steamers. In order to ensure this support, the shipowners instituted the system of deferred rebates, under which each merchant, at the end of a year or other fixed period, should be entitled to a discount or rebate on the amount of freight paid by him during such period, provided that he should have shipped no goods at all by steamers outside the conference, the discount only to be paid after a further fixed period of six or nine months, during which time also he should rigidly support the conference lines. In the event of failure to comply with the conditions, a merchant is exposed to forfeiture of the rebate, and in addition to measures in the nature of a boycott on the part of the con- ference lines. Notwithstanding, attempts are from time to time made by steamers outside the ring to gain admittance, with the consequence of occasional freight wars, and with the incidental result that goods are sometimes carried, for example, from America to a British colony at lower rates of freight than similar goods manufactured in England. Mainly on account of com- plaints made against the working of the South African ring, a British royal commission was in 1906 appointed to take evidence and report upon the subject generally.

With the growth of populations and the development of means of transport, both by land and sea, a great increase arose both in production and consumption, and competition became very keen for markets, both home and foreign. In this competition the cost of carriage is always an element of great importance, even though the freight payment may bear but an insignificant relation to the value of the goods carried. For in modern trade rivalries every penny saved in charges counts with the importer, and if goods of a similar kind can, by reason of lower transport charges, be obtained a fraction cheaper from one industrial centre than from another, the tendency is to give the preference to the centre or country which can deliver most cheaply to the consumer. Trade follows cheapness, and, with the world’s industrial development, the striving for cheapness took at the outset the form of economies in production. The day of small trade with large profits was passed, and producers of all kinds now aimed at a large output at diminished cost, and contended themselves with a smaller ratio of profits on a larger business. The utmost economy was studied with a view to successful competition, especially in over- seas markets; and in this struggle for the cheapening of supplies the cost of transport became an important element. The fact was recognized that the ship is but a link in the chain of con- nexion between producer and consumer, and the system of “ through ” bills of lading was introduced, under which a particular steamer line or railway service contracted for the through- carriage of goods in conjunction with other lines, with the object and effect of cheapening the transport as a whole. Individual shipowners, in order to obtain cargoes for their ships, were in turn driven to devise economies in transport, with the result that rates of freight were continually reduced. In modern ocean carriage size means cheapness, the transport of a given weight of cargo being cheaper in a single vessel than in two vessels each of half the size. For not only does this concentration of carrying power effect economy of officers and crew, with their wages, provisions and accommodation space, but in ship- building also size makes for cheapness. Thus, if, for example, two steamers each carrying 2000 tons will cost together say £40,000, a single vessel of equal carrying capacity can be supplied for £35,000. Or, put another way, if for £40,000 two steamers can be built to carry between them 4000 tons, for the same sum a single vessel can, it is stated, be provided to carry 4700 tons. Consequently, the size of vessels is continually on the increase, and no sooner is a navigable channel at much cost made deep enough for the great vessels knocking at the door of the port, than still larger are constructed, and shipowners complain anew that the harbour depth provided is insufficient. The constant demand for greater depths resulted in the production of mammoth dredgers of which, also, the size and power arc continually increasing. At the present time it is the navigable depth of ports and canals, and the need of adequate dry docks, rather than the obtaining of cargoes, which are the controlling factors in the size of great ocean vessels. But the heavy interest on the capital cost of these vessels and their working expenses call for the utmost despatch in their loading and discharge, and with the simultaneous arrival of several vessels of large tonnage, the question of prompt discharge is one of great and increasing difficulty. For many modern steamers will carry 10,000 tons of cargo, and some a great deal more; so that, with old-type railway trucks carrying ordinarily only about 8 tons, it not infrequently happens that the discharge of the ship, equipped though she be with remarkable facilities for landing her cargo and assisted by discharge into barges, is impeded owing to deficiency of shore clearance. If 8 tons be taken as the capacity of an ordinary railway truck and 30 trucks be allowed to a train, it will be obvious that a single modern cargo ship will require a vast procession of rolling stock to clear her cargo. A single cargo of 10,000 tons, for example, will require some 1250 railway trucks for its removal; or, allowing 6 yards’ length to the truck, 7500 yards of rolling stock, without engines and vans. And, in fact, congestion of shipping owing to delays is frequently the cause of bitter complaint in the case of certain ports. Trucks of much increased capacity are now being introduced, but for various reasons their adoption is very slow. In port polemics the argument is sometimes heard that the backwardness of this or that port will result in the trade being driven elsewhere: the ships, it is said, will remove it. But the ship is but the blind instrument of trade, to come and go where and as trade calls it. The ship will, however, sooner or later require a higher rate of freight for ports of slow despatch, and this increased expense in transport will undoubtedly operate in favour of rival ports. For the ports themselves are but stepping-stones to or from a market or industrial centre, and the market will always select the cheapest route for its trade.