FINANCE, TRADE, AND TRANSPORTATION

XI. FREIGHT TRANSPORTATION BY RAIL

THE ORIGIN OF RAILROAD TRAFFIC ASSOCIATIONS

THE performance of the transportation services necessitates the co-operation of carriers. When the government owns and operates the railroads of a country they are managed by a single authority, and the different parts of the railway system are fully co-ordinated; but when the railroads are operated by a large number of independent corporations, co-operation can be secured only by means of traffic associations composed of representatives of the railway companies, and intrusted with the power of making arrangements affecting joint traffic, and settling questions involving the interests of two or more companies.

Two distinct causes brought about the establishment of railway traffic associations. The first cause was the necessity of co-operation to facilitate the joint business of connecting lines. Through tickets, joint fares and rates, through bills of lading, the interchange of cars between connecting roads, and the settlement of joint accounts led to the establishment of co-operative freight lines, car-service associations, claim associations, and various other general and local organisations for the promotion of the joint transportation business.

The other cause of co-operation among the railways was the necessity of regulating competition. This cause first became potent after the process of consolidation had brought about the formation of numerous large railway systems, and had inaugurated the violent competition which led to discriminations in transportation charges, rate wars, and the other evils which have combined to produce "the railway question." The competitive struggles of rival railway systems began to be violent shortly after 1867, and soon led to the formation of railway traffic associations, with enlarged powers. The classification of freight, the determination of rates on competitive traffic, and the apportionment of that traffic, or of the earnings from it, among the competitors became functions of the associations.

THE WORK OF ALBERT FINK

The man who did more than any other person to develop traffic associations and to promote the co-operation of competing railroads was the late Albert Fink. It was his master mind that organised and put into successful operation in 1876 the Southern Railway and Steamship Association. The following year Albert Fink succeeded in organising the great trunk lines connecting the North Atlantic seaboard and the States north of the Ohio River. Though smaller traffic associations similar to these two organisations had been previously established where but few obstacles had to be overcome, it was Fink who first organised traffic associations including all the competing railroads serving large sections of the country.

In discussing the work of traffic associations, which are to-day concerns of really enormous magnitude, railway pooling and the classification of freight especially demand consideration.

RAILROAD POOLING

Railroad pools are agreements entered into by competing carriers, by which the railroads provide for the division with each other of their competitive traffic, or of the earnings from that traffic in accordance with stipulated ratios. Thus there are traffic pools and money pools. During the decade preceding 1887, the year when the present interstate commerce law was enacted, most traffic associations had the pooling feature, and most of the competitive railway traffic was pooled, thus eliminating all competition in rates.

Pooling agreements have never been legal in this country. Being illegal by the common law, they could not be enforced in the courts. Section 4 of the interstate commerce law made it unlawful for the carriers subject to the act to pool their freights or the earnings from their freight traffic, and made it necessary for the traffic associations to reorganise without the pooling agreements. Until March 22, 1897, it was supposed that the associations, without pooling agreements, were legal; but, on that date, in the case of the United States *vs.* the Trans-Missouri Freight Association, the United States Supreme Court held that the law of July 2, 1890, popularly known as the Sherman anti-trust law, applied to railways, and made it illegal for railway companies to contract with each other to maintain rates. Thus at the present time traffic associations are permitted neither to contain a pooling feature nor to provide arrangements for the enforcement or maintenance of rates, although the charges may be reasonable and be sanctioned by all the carriers interested. The associations may now legally exercise those functions which are connected with the joint business of their members, and they may act as bureaus

of information regarding the competitive traffic. They have no power to make or to maintain rates.

TRAFFIC ASSOCIATIONS INCLUDING POOLING SHOULD BE LEGALISED

The best performance of the service of transportation by rail requires the fullest possible co-ordination of the different parts of our transportation system and the largest attainable measure of co-operation among the agents who perform the service. Section 4 of the act of 1887 and the law of July, 1890, as far as the latter relates to railways, are based on an unsound theory. Provision having been made for that kind and measure of governmental regulation of railway rates that will insure reasonable charges, the railways should be permitted to co-operate in rate-making and be given power to pool their competitive business.

CLASSIFICATION OF RAILROAD FREIGHT

There are thousands of varieties of freight offered to the railroads for transportation. If each class of commodities were charged the same freight rate per ton per mile, the charges upon many articles of prime necessity, such as coal, lumber, and grain, would be so high as to prevent their being moved, while the rates on goods of high value per bulk would be much lower than they could readily pay. Classification must precede the fixing of rate schedules. The railroads are interested in adjusting their charges to services performed in such a manner as to insure the greatest possible amount of traffic at rates that are properly remunerative. The public is interested in having the necessary revenues of the railroads so levied as to make the burdens as light as possible. To

accomplish this a careful grouping of commodities is necessary.

The goods are usually classified in five or six large divisions. The official classification referred to below has six classes. The first class consists of articles of high value, the sixth class of bulky commodities of low value, such as iron ore, lumber, grain in bulk, etc. In practice, however, the number of classes is at least doubled. Goods of especially high value are made to pay once and a half, double, treble or quadruple the regular first-class rate. A commodity is also frequently placed in more than one class, the rating of classification being lower for car-load lots than for less than car-load shipments. The classification is further extended by omitting certain articles from the list of those classified. Live stock and coal are illustrations of articles to which so-called "commodity," as distinct from "classification," rates are given. The individual shippers are constantly endeavouring to have their goods given commodity rates, and the effort of the railroad companies is to reduce the number of articles excepted from classification. Commodity tariffs have been a fruitful source of unjust discrimination.

From this description of freight classifications it will be perceived that the main basis upon which the grouping of commodities rests is the relative value of the goods. The gradations cannot, however, be made strictly according to value. The goods are frequently put into a lower class than their value would warrant in order to stimulate their production and shipment or to develop the industries depending upon those articles.

At first each railroad worked out a classification of its own, and there were practically as many classifications as there were railway systems. The disadvantages of this soon became apparent with the development of long-

distance traffic. The multiplicity of classifications made it difficult for shippers or purchasers to ascertain in advance what the charges on consignments would be; there was a constant tendency to increase the number of commodity tariffs, and unjust personal and local discriminations were in consequence made more numerous. It became evident that there would be great advantages in having one uniform classification for the whole United States. This ideal has not been reached yet, but the number of classifications has been practically reduced to three — the official, applying to the traffic north of the Potomac and Ohio and west of the Mississippi; the southern, in force among the railroads in the Southern States, and the western, which obtains in the territory west of the Mississippi River. This amalgamation of the classifications has been brought about chiefly by the traffic associations and as the result of the enactment of the interstate commerce law. In order to avoid the discriminations prohibited by that law it was necessary to abandon the system of a separate classification for each railway. It is to be hoped that the attainment of the ideal of uniform classification will not be long delayed.

THE CONDUCT OF THE FREIGHT BUSINESS OF RAILROADS—TRANSPORTATION PAPERS

The manner in which the freight business is conducted affords a good illustration of the high degree of development to which modern business methods have attained. Freight is accepted by each railroad for shipment not only to all points on its own system, but also practically to every railway station in the country, and even to many foreign cities.

A waybill containing the initials of the number of the car used, the name of the consignor, the name and ad-

dress of the consignee, the description and weight of the articles sent, the freight class and rate of the goods, and the total amount of freight charges, accompanies each shipment and is delivered to the agent at the place to which the goods are shipped.

For the goods thus accepted for transportation, manifests, or "bills of lading," are issued to the consignor, which, like other representatives of property, may be transferred by the owner or may be deposited in a bank subject to draft. Bills of lading are of two general kinds —"straight consignment bills" and "order bills." When a straight consignment bill of lading is issued the goods must be delivered to the consignee or to the person to whom he may order them delivered. An order bill of lading is one that may be transferred upon indorsement. The following concise description of an order bill of lading is taken from the "Book of General Instructions to Freight Agents," issued by the Pennsylvania Railroad Company:

> When freight is consigned to "Order" it is, as a rule, for the purpose of securing the payment at destination of a draft for the value of the property. The draft is usually attached to the bill of lading and sent through a bank for collection from the party at destination, who is to be notified of the arrival of the freight. The payment of the draft secures to the payer the possession of the bill of lading, which must be indorsed by the party to whose order the property is consigned.

FINANCE, TRADE, AND TRANSPORTATION

XII. RAILROAD RATES

TRANSPORTATION charges have such a general and vital relation to industrial and social welfare that the problem of the just and equitable distribution of their assessment is one of paramount economic and political consequence. A consideration of the main factors which influence the railway companies in fixing charges should precede a discussion of the regulation of transportation by the government.

GENERAL FACTORS WHICH DETERMINE RAILROAD RATES AND FARES

The factors which have most weight in fixing schedules of rates and fares are what it will cost to perform the several services, what the services are worth to those for whom they are to be rendered, and the extent to which there is competition among rival carriers to secure the traffic concerned. Though on the face of things it would seem that the railways should fix the charges for their various services in accordance with the costs of performing those services, it is neither practicable for them to do so nor is it desirable from the standpoint of public welfare

that such a criterion should be adopted. It is impracticable for the railroads to base their charges upon cost of service, because it is impossible to determine accurately the elements which enter into the cost of performing the particular transportation service. The modern railroad is a very complex mechanism, employed in the performance of a multitude of different services. No railroad official is able to say just how much of the company's total expenses are to be charged against any one particular freight or passenger service.

The cost of service would be an undesirable basis of rates, because the railroads would derive such a small part of their total necessary revenues from the carriage of goods having a high value in proportion to bulk and weight, that they would be obliged to charge much higher rates than they now do upon the cruder products of the farm, forest, and mine. These products are the basic materials of industry, and the lowest possible rate for their transportation is essential to social and economic progress.

VALUE OF SERVICE AND VALUE OF COMMODITIES

Value of service is a more desirable basis for rates and fares than cost of service. By charging according to value of service is meant that the shippers of commodities and the passengers who travel shall contribute to the railroad's aggregate expenses in proportion to the value which they derive from the transportation service. The rates and fares may cover a part or all of the value of the service obtained. In either case they are fixed with reference to that value and not with regard to the cost involved in performing the work of transportation. The levy of rates and fares in accordance with this theory, which is usually called "charging what the traffic will bear," is considered by most people to distribute transportation charges properly, because it is claimed that the true measure of a shipper's or a passenger's ability to pay for a desired service is the value which he will thereby derive. That this theory, nevertheless, does not afford an altogether satisfactory basis of charges, particularly in the freight traffic, may be readily shown.

While it is true that the amount of value added by transportation to goods of low value is less for each unit of weight or bulk than the amount of value which is acquired by an equal weight or bulk of high-priced commodities, yet the *percentage* increase in value is greater in the case of the goods of low cost. Expensive articles can be carried long distances without adding very much to their cost to the consumers. Measured in their percentages, then, the value of the service of transportation is relatively much lower in the case of the higher-priced commodities. The freight charges on wheat range from twenty to forty per cent. of its farm value, while the rate on shoes is possibly two per cent. of their factory price. That these charges are levied in accordance with the real ability of the articles to pay would be hard to establish.

A PARTIAL THEORY OF RAILROAD FREIGHT RATES

Without attempting in this connection to formulate a complete theory of freight rates, it may be said that there are three factors to which weight should be given in fixing charges: First, *the cost of service.* The total costs of transportation, including a fair return on invested capital, must be covered by total receipts. Furthermore, the minimum rate charged any particular class of commodities ought to be sufficient to pay the operating expenses incurred in transporting the goods. Second, *the value of the service.* This fixes the maximum rate that may be charged. Were the railroads to charge more than the

service is worth to the shipper the service would not be desired. Third, *the value of the commodities.* Between the minimum rate fixed by the operating expenses and the maximum charge determined by the value of the service actual rates may vary through a wide possible range. In determining what rates within this range will be theoretically most just and least discriminatory, consideration should be given both to the value of the service and — more than is the case at present — to the value of the articles transported. By doing this rates will be paid by the various articles of freight more nearly in proportion to their ability to pay.

THE EFFECT OF COMPETITION ON RAILROAD RATES AND FARES

Whatever theory of rates may be accepted as ideally best, it cannot be strictly adhered to under the existing conditions of active competition obtaining in the United States. Actual charges have to be fixed and revised to meet the varying circumstances under which railway traffic is conducted. This competition takes several distinct forms. One is that between railways and waterways. A large part of the domestic traffic of the United States has the choice of transportation by rail or by water on the great lakes and the tributary canals, by the navigable rivers, or by one of the many ocean routes followed by our coastwise commerce. There is also the competition of rival railways connecting common termini or serving the same cities. These forms of competition are the ones most frequently noted; but they perhaps exercise a less potent influence over rates than what is known as competition through the markets or through the channels of trade. The competition between rival centres of commerce and industry — between the

Atlantic cities and the gulf ports, for instance, or between the manufactures of New York and Philadelphia and those of Chicago or Cincinnati for the markets of the Southern States, to cite another example — is a force that must be considered in making rates and fares. Even towns served by only one railway and by no waterway enjoy the benefits of this industrial competition. Unless the railroad can give the industries in these local towns rates that will enable them to market their products, the industries will decline and the railway will lose its traffic.

An interesting result of the competition of roads connecting common termini or joining a common industrial region with seaboard points is that the road whose line is the longest and whose expenses of transportation are greatest is obliged to charge the lowest rate. The short lines can charge more because they compete for traffic under more favourable circumstances. The lower charge of the longer line is called a differential rate, and it is customary for the shorter or "standard" lines to agree to allow the "differential" line a stipulated differential rate. This is the concession which the standard lines are obliged to make to temper competition and to prevent rate wars. The Grand Trunk, running from Chicago to Boston by way of Montreal, is a good example of a differential line, and the New York Central is a good instance of a standard line.

GOVERNMENTAL REGULATION OF RAILROAD TRANSPORTATION

It is a maxim of common law that transportation charges must be reasonable, and the exaction of an unreasonable rate by a public carrier is a common-law misdemeanour punishable by the courts. But when, as the result of severe competition of railroads with waterways and with

each other, unjust discriminations between persons, between places, and as regards classes of traffic — the abuses which constitute the railway question — became prevalent, the common-law provisions applying to railway charges were given statutory form and were supplemented and extended by such legislation as the circumstances peculiar to the situation seemed to demand. The comprehensive railway- and canal-traffic act passed by Great Britain in 1854 has been the model adopted for much of the railway legislation in the United States.

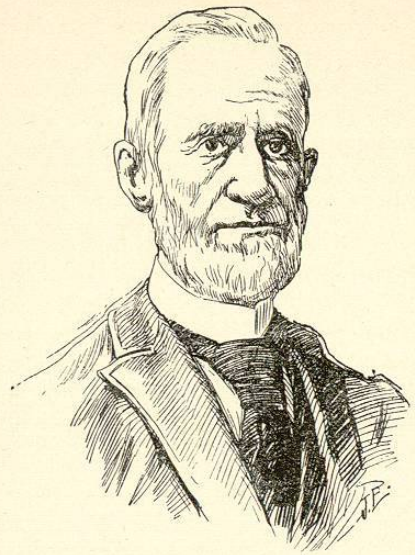
The Constitution of the United States gives Congress power to regulate commerce "among the several States," but the jurisdiction over intrastate traffic lies with the State governments. The States began to pass general laws for the regulation of railroads fully twenty years before Congress acted, and two thirds of the States have established commissions to administer those laws.

THE INTERSTATE COMMERCE LAW

After fifteen years of agitation and investigation the existing interstate commerce law was enacted in 1887. The law prohibits unreasonable rates and unjust discriminations between persons, places, and classes of traffic, prohibits pooling agreements, provides penalties for the violation of the law, and establishes a commission of five men to administer and enforce the statute. Fortunately for the commission and for the country the first chairman of that body was the eminent jurist, Thomas M. Cooley, whose master mind did much to give vitality to the law.

During the first five years after the law was passed it secured a fairly efficient regulation of interstate railway commerce, but recent decisions of the United States Supreme Court have so weakened the law that at present the commission has very little power. The commission

can investigate complaints and make reports, it can collect statistical information, it can and does informally ad-



Judge Thomas M. Cooley.
(First chairman of the interstate commerce commission.)

just many differences between shippers and carriers; but, to quote from the last report of the commission, "it has ceased to be a body for the regulation of interstate carriers." Legislation to amend and strengthen the interstate commerce law is urgently needed.