

## RAILWAY TARIFFS AND THE INTERSTATE COMMERCE LAW.

WHEN Solomon de Cause first advanced the idea of employing steam as a propelling power, in 1615, he was shut up in the mad-house as a hopeless maniac. Two centuries later, in 1812, when Colonel Stevens of Hoboken proposed to build a steam railway at far less cost than the projected Erie canal, he was regarded as absurdly visionary and somewhat demented. And yet to-day, within the short span of a human life, we have the vast network of over three hundred thousand miles of iron roads covering the civilized world. It is the central factor of recent economic development. Little wonder, then, that the weighty problems of railway management in its relations to the owners, the employees, and the public, should engross the earnest attention of legislators and publicists throughout the world.

The Interstate Commerce law of 1887 is the first serious attempt at governmental regulation for the whole of the United States. It may be well, therefore, to discuss the provisions of the act in the light of general principles. We shall confine ourselves primarily to a consideration of the railway tariffs, and attempt to ascertain the underlying doctrines and their limitations.

Railway tariffs may be regarded from two essentially different standpoints, — the private and the public. In so far as a railway is a business corporation, it is a private matter. It may fix its prices in accordance with general business principles. It will endeavor to subserve primarily the interests of its owners. It will strive for the greatest possible profits. Its course is legitimate and praiseworthy. But in so far as the railway forms our public highway, it is a public matter. The objective point now is the general welfare, the interests of the community. It

aims not at the greatest possible profits, but at the greatest possible benefits. It looks not at the interests of its owners, but at the interests of the public. The one point of view is individual, the other is social. The modern railway corporation shares both these characteristics. Its nature is hybrid. To subordinate the public to the private element is plainly inadmissible. To entirely engulf the private in the public element is equally unfair, as long as the railway is not owned by the state. Given the private corporation, the question is: How shall the two elements be reconciled? It is the problem of railway legislation and corporate regulation.

The inequality of railroad charges forms the pith of the complaints usually made. It is the crucial point of corporate management. On the one hand we have the anti-monopolists, who liken the common carriers to the feudal barons of old, using the mediæval weapons of unjust privilege and ill-gotten power to carry out their ends of rapacity and favoritism. On the other side we have the railway managers, who exultingly exclaim, in so far as charges are concerned: All that is, is just. Where now is the truth of the matter?

The principle commonly advanced by the antagonists of the railways, as well as by the would-be reformers, is that of cost of service. Charges should be regulated in accordance with the cost of the particular transaction to the company. This is certainly not the actual method. Is it the correct method? Let us see.

Railway expenses are divided into two great classes,—fixed charges and operating expenses. By fixed charges is simply meant the interest account, the sum necessary to meet the periodically recurring interest on the mortgage debt.<sup>1</sup>

<sup>1</sup> In Europe, not only the interest on the funded debt, but also the dividends on the capital stock are sometimes included in the "fixed charges." This is manifestly fallacious, as it is not legitimate to class as expenses what are really profits. Rates are nowhere determined by the prospective profits, but *vice versa*. Cf. Nördling, *Die Selbstkosten des Eisenbahntransports und die Wasserstrassenfrage*, (Vienna, 1885,) S. 206–210. The matter is, however, of less importance from the fact that with us railways are generally constructed on the proceeds of the mortgage bonds, not of the capital stock, as in Europe. The interest, hence, far exceeds the dividends. In 1885,

The proportion of fixed charges to operating expenses varies, of course, with each line. A careful calculation on the different branches of a single road found the interest charges to vary from 26 per cent to 59 per cent of the total expenses.<sup>1</sup> But in a rough way it may be said that fixed charges amount to from forty to fifty per cent of the entire expenditures, not alone with us, but also in Europe.<sup>2</sup> In other words, well-nigh half the expenses are constant or invariable. They do not change with the amount of business transacted, but are independent of the traffic. They remain the same whether there be much, little, or no additional traffic.

On the other hand, the operating expenses may be divided into several categories. No uniformity has as yet been attained in the classification of expenses, although the national commission has been empowered to prescribe a uniform system. One method is to divide the expenses into: (*a*) maintenance of road, buildings, and general expenses; (*b*) station expenses; and (*c*) movement expenses. Class *a* will in general be but very slightly affected by the amount of business transacted. Considerable variations in the traffic may take place without a proportionate, if any, increase in the expense involved. They may therefore likewise be set down as constant or invariable expenses. Class *b* will vary, but only in part, with the business transacted. A certain organization must always be maintained, whether the traffic be heavy or light; but after a definite limit is passed, more men must be employed to do more business. These expenses are thus only partially constant. Class *c*, finally, fluctuates almost in proportion to the business transacted. The less trains, the less expense.

The proportion of each of these three classes to the whole will

*e.g.*, 186 million dollars were paid in interest, 77 millions in dividends. Cf. Poor's Manual for 1886, p. i. For European figures, see Loisel, *Annuaire spécial des chemins de fer belges*, 1886, pp. 246 *et seq.*

<sup>1</sup> Fink, *Cost of Railroad Transportation* (1882), table A, p. 4, for the Louisville and Nashville Railroad.

<sup>2</sup> See the tables in Sax, *Die Verkehrsmittel in Stats- und Volkswirtschaft*, (1879), Bd. II, S. 368. For France in particular, Baum, *Annales des ponts et chaussées*, *Mémoires*, 5<sup>me</sup> série, t. i, p. 422.

of course vary with the widely different characteristics of each line; but in general it may be affirmed that about one-half of the operating expenses are constant or invariable.<sup>1</sup>

The total constant expenditures of a railway are thus the fixed charges plus one-half the operating expenses. In other words, a large majority of railway expenses are irrespective of the amount of business. They remain the same, notwithstanding an increase or decrease of the traffic.<sup>2</sup>

This distinction between constant and fluctuating expenses is of vital importance to a correct understanding of the principle of railway rates. It leads to certain conclusions which form the fundamental explanations of actual tariffs.

It is unnecessary to explain the wide disparity of cost of carriage on different lines, or for individual transactions. Certain characteristics affect the roads themselves, such as the grades, the curves, the weight, and speed of the trains, the cost of construction, the quality of the supplies, the changing conditions under which the service is performed at different seasons, *etc.* These alone would show how difficult is the task of accurately determining the cost of carriage for any one service. But the task is complicated by other difficulties. It is apparent that the cost of transportation per ton-mile must vary with the tons and the miles, *i.e.*, with the quantity of the freight and the length of the haul. But these differ widely in each case. On one line the greater portion of the freight is carried over its whole length; on another the local business far outweighs the through

<sup>1</sup> Manager Haines, of the Savan. Fla. & W. R. R., divides operating expenses into five classes, and makes a careful calculation that 53 per cent of such expenses do not increase with additional business. Report of Senate Select Committee on Interstate Commerce (1886), App., p. 138. We shall hereafter speak of this as the Cullom report.

<sup>2</sup> Mr. Fink's calculation varies but slightly from the above. He asserts that upon an average of \$1 earned in the roads of the United States, 40 cents are required to pay  $4\frac{1}{2}$  per cent interest on bonds and stock, 35 cents to pay the movement expenses, and 25 cents to pay maintenance and general expenses. Cullom Committee, Test., p. 95. The New York commission divide operating expenses into maintenance, general and transportation (including station) expenses. But the result is the same. For Europe, see Ulrich, *Das Eisenbahn-Tarifwesen* (1886), S. 40, but corrected as to Germany in *Archiv für Eisenbahnwesen*, 1887, S. 253.

traffic, so that the capacity of the rolling stock is not fully utilized. On one line the traffic moves in great part in one direction, and the number of empty cars returned is abnormally large; on another there is far more back-loading and a more even distribution of the traffic. On one line the trains are started with full loads, on another they are half empty. The proportion of paying to dead weight, or the amount of the tare, is of paramount importance.<sup>1</sup> All these causes influence both the tons and the miles, and thus affect the cost per ton-mile.

Logically, the cost per ton-mile is resolvable into two portions, — that which corresponds to the constant or fixed expenses, and that which corresponds to the fluctuating or variable expenses. The former portion is ascertained simply by dividing the constant expenses by the total ton-miles. It will therefore vary inversely to the traffic.<sup>2</sup> But as the constant expenses form by far the larger portion of the whole, the rate per ton-mile will be determined by this corresponding portion. We conclude then that the cost tends to vary almost inversely to the traffic — the more traffic, the less the cost per ton-mile; the less traffic, the greater the cost per ton-mile. That is to say, even if it were feasible to construct a tariff based on the cost of service of each particular transaction, — in itself a work of gigantic magnitude and infinite difficulty, — such a tariff would be of very slight avail unless the amount of freight remained an unalterable quantity. So soon as the volume of traffic changes, the cost of service is necessarily altered. The rate would no longer be based on cost of service.

<sup>1</sup> The *average* gross weight of freight cars of all classes in the United States is eight tons per car. The average load they carry is five tons. Hence, 59 per cent of the weight hauled in freight traffic is non-paying or dead weight. In passenger traffic the non-paying load is almost 90 per cent, because the cars are not so fully packed. In Germany, in 1880, the dead weight was: for freight cars, 53 per cent (or taking only the loaded cars, 27 per cent); for passenger cars, 76 per cent; for baggage cars, 97 per cent.

<sup>2</sup> Suppose the constant expenditures for transporting seven and a half million ton-miles amount to \$75,000. Then —

if there are 7,500,000 ton-miles, cost =  $\frac{75000}{7500000} = 1$  c. per ton-mile;

if there are 10,000,000 ton-miles, cost =  $\frac{75000}{10000000} = 0.75$  c. per ton-mile;

if there are 5,000,000 ton-miles, cost =  $\frac{75000}{5000000} = 1.5$  c. per ton-mile.

Furthermore, the amount of traffic itself depends to a large extent on the rate. Low rates produce large traffic, high rates make little traffic. This has led to the paradoxical conclusion that cost of service depends on the rate, and not inversely that the rate depends on cost of service. We thus have a curious interaction of cause and effect. But of course this is true only within certain limits, and subject to serious qualifications. The success of a decrease of rates in attracting additional business will operate only up to that point where increased traffic does not imply disproportionately increased expenses. If the additional business necessitates large expenses, like a double track, it may cost more than it is worth. Low rates do not always increase net profits. Again, the success of a decrease of rates will diminish with every successive diminution of the rates. There is a certain limit beyond which the efficacy of reduced rates as a financial venture becomes very problematical. The business is not expansible. On this account the railways rarely reduce charges simultaneously on all kinds of traffic, but experiment gradually with special classes or kinds of business, and even then are often unwilling to undertake the reduction at all.<sup>1</sup>

But if it is even partially true that cost of service depends on the traffic, and therefore on the rate, it cannot be wholly true that the rate depends on the cost of service. The two principles are mutually contradictory. We are thus logically forced to the conclusion that railway charges are not and cannot be based on cost of service alone.

Cost of service does not fix rates. It forms in the long run only the minimum limit of rates. A well-managed road will not consciously continue a losing business, unless, indeed, it be

<sup>1</sup> In regard to freight traffic, the above statement is notoriously true. In regard to passenger traffic, *cf.* the history of third-class traffic in England. In 1844 the railways had to be compelled by law to run cheap trains for third-class passengers, their opposition being silenced only by exempting these trains from the passenger duties. But before long these very trains resulted in immense profits, and to-day constitute by far the most lucrative portion of the passenger business. *Cf.* also the strenuous opposition of the New York elevated railroad to the five-cent bill, while to-day the profits are immensely increased by the voluntary reduction.

operated by the state as a tax on the community, and no serious thinker has yet proposed this method of running railways. Differences in cost of service between two roads result not in proportionate differences in rates, but simply in different profits. Differences in cost cannot imply corresponding differences of rates. The principle is as applicable to portions of the same line as to different lines, since no two parts of the same line have the same cost of service, and hence if the principle were consistently applied, it would be necessary to make a different rate for each mile of every road, which is absurd. But if rates are fixed according to the *average* cost of service for the whole line, they may equally well be fixed for the average cost of services on all business, in which cases the element of difference of cost for each particular transaction is entirely eliminated. No freight is ever shipped at the average cost of service.

It would hence be foreign to our purpose to attempt an exact mathematical computation of the cost of service. Not only would it be necessary to ascertain the exact percentage of fixed to variable expenses in each particular case, but further to calculate the exact proportion of increase of cost to increase of traffic. Numerous endeavors have been made, but no two agree.<sup>1</sup> And even if successful they would, as we see, be of very slight practical utility.

The cost of service principle is neither practised nor practicable. The attempt to base rates solely in cost is a pure chimaera. Well-nigh every expert, whether scientist,<sup>2</sup> official, or legislator, and every parliamentary commission, from the early English to the late Italian and American, absolutely discards it as a principle.<sup>3</sup> But although the rule is impracticable, it is

<sup>1</sup> Cf. the works of Chanute, Morehouse, Fink, Kirkman, in America; of Fairbairn, Gordon, Lardner, in England; of Garke, Scheffler, Schüller, Schübler, Nördling, in Germany; of Baum, Jacqmin, Gournerie, Brière, in France; of Brioschi, Genala, Calvori, in Italy.

<sup>2</sup> Even Wagner, the great apostle of state railways, comes to the same conclusion in his last edition. *Finanzwissenschaft*, 3. Ausg., I, 760-763.

<sup>3</sup> "The movement of a commodity by rail is determined by considerations wholly independent of and not affected by the cost of the service to be performed." Cullom *Com. Rep.*, p. 184. For Italy, cf. *Atti della Commissione d' Inchiesta sull' esercizio*

asserted by some to be the only just, the ideal method. Before discussing this, let us ascertain the actual principle according to which tariffs are arranged. Only then shall we be able to answer the question of the relative justifiability of the two principles.

How, then, are rates actually fixed? The object of a railway is to make the greatest possible net profits, *i.e.*, to increase its traffic and to decrease its expenses. This it finds can be best attained by lowering the charges on certain classes of goods, or on the same classes to different localities. In other words, what decides the manager is not so much the *cost* of the service as the *value* of the service. This practice has been called "charging what the traffic will bear," an unfortunate expression and liable to much misconception. Charging what the traffic will bear, correctly understood, simply serves as an excuse for reducing rates on the low-class traffic, because it cannot bear higher rates. The phrase is a bad one, because it may be interpreted into meaning that the greatest possible charges on high-class goods are also legitimate. Correctly understood, it justifies lower charges on certain kinds of business; incorrectly understood, it seems to justify extortionate charges on other kinds of business.<sup>1</sup>

Charging what the traffic will bear, in its strict sense, does not fix rates; it determines only the maximum limit of charges, just as mere cost of hauling fixes the minimum limit. Between these limits the rate varies with the value of the service, or, as is sometimes said, is made to conform to the requirements of trade. It becomes a commercial question, and subject to the law of supply and demand. In so far it is a purely private

delle ferrovie italiane (1881), Parte II, Riassunto, II, 932-953. For England, *cf.* Joint Select Committee on Railway Cos. Amalgamation (1872), pp. xxxiii and li. For France, see Rapport de Waddington (1880), in Picard, *Chemins de fer français*, t. 5 (1884), p. 128. *Cf.* also the statement of the advisory commission on differential rates to the seaboard (Thurman, Washburne, and Cooley) in Proceedings of the Joint Executive Committee (1882), p. 29.

<sup>1</sup>The celebrated phrase of M. Solacroup, the French railway director, is hence regrettable: "En matière de tarification de transports il n'y a qu'une seule règle qui soit rationnelle; c'est de demander à la marchandise tout ce qu'elle peut payer. Tout autre principe est arbitraire." Professor Villey calls it "une phrase vide de sens." *Traité d'économie politique* (1885), p. 206.



matter. But the railway is also partly a public institution : hence the necessity for important qualifications of the private business principle, for serious limitations of the law of supply and demand. These qualifications and these limitations have often been completely ignored by the railways, because of their mistaken assumption of being purely private enterprises. Let us study the limitations as well as the principle.

Charging according to what the service is worth results in the two fundamental principles of classification and discrimination.<sup>1</sup> Classification is due to the fact that the same service has a varying value when rendered to different commodities. Discrimination (*i.e.*, local discrimination) is due to the fact that the same service has a varying value when rendered to different places. Whether the same service has a varying value for the freight of different persons, and may thus give rise to personal discriminations, is a question to be treated by itself.

*Classification.* Value of service influences classification in a double way : it puts the same articles into different classes ; it puts different articles into different classes. It puts the same articles into different classes according to the methods of transportation, and makes a distinction between slow and fast delivery. With us this takes the form of freight and express traffic. Our general classification applies only to freight traffic. In Europe, where separate express companies are unknown, the rates are graduated according to this distinction—goods and parcels rates, *petite* and *grande vitesse*, *Frachtgut* and *Eilgut*. Such a classification is of course perfectly legitimate, whether from the standpoint of value or from that of cost of service. The better service benefits the goods and increases the expenses of the railway.

<sup>1</sup> The word discrimination is not always used in the same sense. Some use it to imply any variation from the cost of service, and make it include classification, which is to them a discrimination between articles as opposed to a discrimination between persons or places. But this is misleading. A classification as between two articles may be due to a difference in cost of service, in which case there would be no discrimination in the above sense. To make classification of this kind a part of discrimination is illogical. It is far preferable to separate the two terms completely, defining discrimination as is done on page 236.

Far more important, however, is the classification of different articles into different categories. The primary element here again is value of service. Cost of service, indeed, influences classification to a minor extent in so far as the articles differ in bulk, shape, risk, direction, or regularity of shipment. By bulk is meant the proportion of dead to paying weight. One car may be filled with 2000 lbs. of baskets, another with 30,000 lbs. of iron or sand, and yet the cost of moving the cars may not appreciably differ. Manifestly, the charge per 100 lbs. on baskets should be higher than on iron or sand. The tare becomes an important factor of the cost. Actual computations again have demonstrated that the shape of the articles influences the cost, especially the terminal expenses, far more than might at first appear. The risk, when incurred by the railway, is also a legitimate ingredient of cost, and varies greatly with the nature of the article. The question of direction involves that of back-loading and affects articles differently on each particular line. Finally, some articles are sent intermittently in small lots, while others are shipped with great regularity and in such quantities that the railway can easily accommodate itself to the traffic. Every shipment has its own peculiarities, and it thus happens that articles of equal value may be put into different classes.

But actual rates are mainly fixed not by cost of service, but by what the service is worth. Classification depends only in a subordinate degree upon cost. The controlling element is value, not cost. Cheap goods must be charged less than dear goods although the cost of service may be greater. The main point is the development of the traffic. The goods must not be charged so high rates as to render their transportation impossible or unprofitable. We must keep in mind the distinction between the fixed and the variable expenses. If the freight can be secured at rates which will more than cover the variable expenses,—the actual hauling and a proportionate part of the station expenses,—it will pay the road to take this freight, because an addition, however small, is thereby made to the fixed expenses. These would have to be met at all events, whether

that particular freight were taken or not. A small contribution to fixed expenses is better than none at all. The choice is between freight at a rate slightly above mere cost of operation, and no freight. Yet to apply this low rate to all commodities would of course render it impossible to meet the fixed expenses or earn profits. In other words, it is profitable for a railway to transport certain classes of freight at rates which if extended to all business would ruin the company. Classification of freight is not only necessary, but justifiable and beneficial. The meagre surplus over hauling expenses in the cheap goods contributes, if ever so little, to the fixed expenses, and diminishes to this extent the amount which it is necessary to raise from the remaining traffic. The higher-class goods can be transported at rates which are lower than would otherwise be the case. If we had no classification, not only would we not have cheap wheat or cheap meat, but the charges on all the other articles would be raised per ton-mile. It reduces the rates on the cheap goods immensely, and the rate on the dear goods moderately. Classification is based, in the main, on the principle of value of service. An advance of ten cents per hundred pounds on coal would soon make its influence felt, and might double or treble its value; a similar advance on silks or dry goods would exert but an inappreciable influence on their value.<sup>1</sup> The same rate which would prohibit the transportation of one commodity may scarcely be felt by another. The principle of classification is the first corollary from the distinction between fixed and variable expenditures.

To uphold the legitimacy and necessity of classification is, however, quite another thing from maintaining the justifiability of all actual tariffs or from attempting to palliate undeniable abuses. The early roads started with but little classification. The first English charters indeed contained statutory maxima for a number of articles. The Stockton and Darlington Railway act prescribed three classes, the Liverpool and Manchester

<sup>1</sup> Articles are thus classified primarily and chiefly according to their value; but the classification is modified by the tare, *i.e.*, proportion of dead to paying weight, and in exceptional instances by the other considerations of cost.

act five classes.<sup>1</sup> These were based chiefly on the old canal acts. In the United States very few of the state charters fixed either maxima or classification.<sup>2</sup> The result was a very simple system. It was found, however, that a gradual modification and differentiation of the charges conduced not only to a development of the traffic, but also to a growth of business prosperity. But the matter of classification with us to-day is in a well-nigh chaotic state. It is made to depend on the numberless exigencies and conditions of business life. It is lacking in uniformity, in stability, and very often in justice. The tariffs of the present day on our main lines are a great advance upon those of several years ago, but there is still enormous ground for improvement. The point to be noticed is that these wide powers of fixing the classes are put in the hands of private individuals as sole arbiters. While the principle of classification is perfectly just, the liability to abuse of the principle arises from the fact that the authority is given to only one of the parties in interest. It is this which arouses the indignation of the public and emphasizes the necessity of public control.

But we must be careful not to let our indignation carry us too far. The abuses of classification are on the whole the lesser abuses of railway management. They take place only within narrow limits, because it is the interest of the railway manager to charge those rates which tend to develop the traffic. Exorbitant charges for any class will lead to decreased shipments. Mistakes may be made, but when the railway is honestly managed the mistakes will be rectified. The great advantage of the traffic associations or pools is that they minimize the danger of dishonest management in any single road, and bring about a greater uniformity and stability. The dressed-beef controversy is a case in point.<sup>3</sup> We do not

<sup>1</sup> Some of the earliest toll and maximum rate clauses are reprinted in Grierson, *Railway Rates* (1886), pp. lxx-lxxii. Also, more fully, in Report of Select Committee on Railways (1881), part ii, app. no. 55.

<sup>2</sup> For a good collection of the earliest charters, see G<sup>me</sup> Tell Poussin, *Chemins de fer américains* (1836), pp. 211-271. See also W. P. Gregg and B. Pond, *The Railroad Laws and Charters of the United States*. (Boston, 1851.)

<sup>3</sup> See Proceedings and Circulars of the Joint Executive Committee, Freight De-

imply, with many of our eloquent railway officials, that there is a necessary identity of interests between the railways and the people. Our past history unfortunately does not bear this out. It would be absurd to depend on this imagined harmony as a remedy for actual abuses. But it is equally foolish to go to the other extreme with popular demagogues. Classification should indeed be supervised by public authorities, but the demand for a rigid law prescribing all details, would impute to our legislators a knowledge which they cannot possess. And those who advocate state management in the United States forget to think of the havoc that would be created by the simple political influence of our law-makers. A congressman represents a district noted for the production or manufacture of certain articles; what more simple method of appeasing the clamor of his constituents than by changing the article in question from class 3 to class 4? Were the state to own the railways under our actual political system, the claims upon our legislators for spoils would be increased a thousand-fold. To cure the abuses of classification by letting our congressmen fix the classification would indeed be jumping from the frying-pan into the fire.

An escape from the dilemma seems to be outlined in the principle of advisory boards or consultative councils akin to those lately instituted in Europe. The German local councils<sup>1</sup> are elected by the chambers of commerce and agriculture, and it is incumbent on the railway officials to consult with them on all important questions affecting the tariffs. True, the decision lies ultimately in the hands of the railway authorities, but these are public, administrative officials. The system has worked admirably. In Italy, where the law of 1885 has prescribed eight uniform classes for all the lines, a council with subordinate divisions composed of railway and state officials as well as representatives of commercial interests

partment, for 1884, (N. Y. 1885,) pp. 90-95, 161, *etc.* Cf. also the recent unification of east and west bound trunk-line tariffs to six classes, in place of four and thirteen.

<sup>1</sup> Bezirke-Eisenbahnräthe.

supervise the actual charges.<sup>1</sup> In France, where nothing similar exists, notwithstanding the ministerial *homologation* or approval of rates, the state is still struggling with the railways in the endeavor to bring about a simplified classification. England's condition is almost as chaotic as ours.<sup>2</sup> Of the attempt to suppress all abuses of classification by the heroic step of abolishing or restricting classification itself, as in the compromise or car-space system of central Europe, we shall have more to say later on. Classification *per se* is legitimate.

As opposed to classification a *discrimination* may be defined as an inequality in the charge for hauling a like quantity of similar articles for an equal distance in the same manner. The definition includes four points. The quantity, the articles, the distance, and the manner of transportation must be the same.<sup>3</sup> If a railway charges in one case one cent per ton-mile for wood between Hartford and New York, and in another case two cents, this is a discrimination. It may take place because two different persons sent it from Hartford or because in the one case the wood was shipped at Hartford and in the other at Boston. All discrimination is hence either personal or local. A personal discrimination is called a preferential rate; a local discrimination is called a differential rate.<sup>4</sup> Let us analyze each.

<sup>1</sup> Consiglio per l' esame delle tariffe ferroviarie.

<sup>2</sup> Lord Stanley's bill of 1887, § 24, like Mundella's bill of 1886, provides for a revision of the classification by the Board of Trade, to be ultimately enforced by law. This is a step in advance, — perhaps too great a step.

<sup>3</sup> To haul one ton for 2 cents and two tons for 4 cents; to haul coal for 2 cents and wood for 4 cents; to haul coal one mile for 2 cents and two miles for 4 cents; to haul wood for 2 cents by slow freight and for 4 cents by fast freight or express, is thus no discrimination. In each case one of the four elements of the definition is lacking.

Hadley, Railroad Transportation (1885), p. 108, defines discrimination as a difference in rates not based on corresponding difference in cost. This is manifestly incorrect. The cost of service per ton-mile from A to B may be  $1\frac{1}{4}$  cents, from A to C, a station further on, only 1 cent (since cost decreases with distance). This difference in charges to B and C is a discrimination against B, although based on a corresponding difference in cost. It may be a valid discrimination, but it is a discrimination, and is everywhere regarded as such. The same holds true of personal discriminations, which may sometimes be proportional to cost of service. Then, again, Professor Hadley makes discrimination include classification. But, as we have seen, classification may be partly based on cost of service.

<sup>4</sup> This nomenclature, although exact, is not always followed. It is used in the

*Personal discrimination.* Differences in rates based on classification we found to be essentially legitimate. It is difficult, however, to find any principle on which to base distinctions between two or more shippers for a similar service. Personal discriminations are beyond cavil the most flagitious abuses of arbitrary railway management. Concessions made to large shippers do not, up to a certain point, come within this general condemnation. Allowance for quantity or making a distinction, *e.g.*, between car-loads and less than car-loads is within certain limits defensible, and is practised in some shape in every country. But this is really a matter of classification; and may be upheld by the advocates of cost of service in the same way that classification into slow freight and express is defended. A well-filled car costs undeniably less in proportion than a half-filled car. But the difficulty is to select the unit of classification above which the rates shall be the same for all persons. Shall it be the pound, hundredweight, ton, or car-load; or shall there be no unit at all? No country has as yet adopted the pound as a unit. In England we have the "smalls" carried at lower rates, and other distinctions made in the mineral and special classes. With us the common unit is the hundredweight, because of the diversity of our car-loads, which vary from 20,000 to 60,000 lbs. The classification, however, generally specifies the minimum weight which entitles to car-load rates. Distinctions between ordinary and car-loads are everywhere permitted, and one of the fundamental principles of the "natural" and "reform" tariffs in Germany is that rates should differ with the quantities of freight (up to ten tons). Of course it costs

English Select Com. (1881) Evid. qu. 13302. Some make "differential" rates cover all discriminations, so that a preferential rate would be a differential rate. Others again call all discriminations preferential rates. But this is confusing. In the United States "differential" rate is sometimes used in a peculiar sense. The rate from Chicago to New York, *e.g.*, is taken as a basis. A certain number of cents are added to or subtracted from this rate for all stations west or east of Chicago. These variations are termed *differentials* and are based to some extent on distance. The effect of these "differentials" is thus to attain an approximate equality of charge per ton-mile, while a differential rate as commonly understood in European practice and in scientific works all over the world amounts simply to a discriminating rate or an absence of equality of charge. The latter method is more logical and scientific.

less to transport car-loads than single lots, but that is due only to the amount of the tare. If the single lots are packed closely, so as to fill the car, their dead weight would be greatly diminished. At all events it is almost impossible to fix the exact difference of cost, and in very few instances do the differences in cost warrant the actual discriminations.<sup>1</sup> So that, even if we adopt the principle of cost of service, the distinction between car-loads and smaller shipments is only partially justifiable and may often work injustice to the small shipper. The attempt, however, to make the pound the unit of shipment would still be premature, although it may be the ultimate outcome of the controversy. Allowance for quantity below a moderate limit excites but little complaint and increases the efficiency of the railway.

But if this comparatively unimportant difference — which is in reality a species of classification — be in itself only partially justifiable, what shall we say of those vastly greater discriminations which cannot even claim cost of service as an ostensible reason? Such a practice is indefensible on any theory whatsoever. To build up one man's business at the expense of another can never be acknowledged a legitimate function of the common carriers. To give this power to private corporations would be to strike at the root of commercial prosperity. Such discriminations are sometimes defended on the plea of allowance for quantity. But allowance for quantity not based on cost of service is robbed of all pretext for existence. Whether a train-load is hauled for one shipper to one consignee, or for ten shippers to ten consignees at the same point makes very little difference in expense to the carrier. Furthermore, the matter rarely arises in this way. In almost every case of concessions to large shippers but few cars are in fact forwarded at a time. The favored shipper's freight is hauled in the same manner as that of his competitors, and the special rates are granted only because of the contract to forward a larger number of cars per

<sup>1</sup> See a typical case of rates on base-ball bats to Council Bluffs, where the difference between ordinary and car-load rates amounted to 157 per cent, thus crowding out the small shippers. Cullom Committee Report, Test. (Wicker), p. 759.



month or year.<sup>1</sup> The cost to the railway is not appreciably smaller, but the advantage to the large shipper is obvious. The special rates enable him to control the market, the control of the market secures him the special rates. It is a see-saw working both ways. Allowance for quantity of this kind can hence not be justified even in the partial way that the distinction between car-loads and ordinary freight can be upheld. The cost of service principle cannot be invoked.

Reduced to this extremity, the advocates of personal discrimination are wont to assert that a business firm makes wholesale rates less than retail and gives special figures perhaps to every customer. Why is not the same principle, they ask, applicable to the railroad business? They utterly fail to perceive that a railway is not simply a business corporation, but something far more; that it is a public trust and forms to-day our public highway; that a merchant is not bound to treat his customers equally and may favor his friends without violating any law of business ethics, but that a railway is a body of delegated powers; that it exercises public functions, is invested with public rights, and therefore has public duties. This is the important qualification of the principle that the question of railway rates is a mere commercial question. To make concessions for large shipments is to arrogate powers of wide-reaching potency; it is a claim which cannot be acquiesced in or defended. The wholesale principle or allowance for quantity when carried to this extreme becomes utterly untenable.<sup>2</sup> And

<sup>1</sup> Cullom Committee Report, p. 191.

<sup>2</sup> The report of the Hepburn committee is thus open to question: "The principle of wholesale rates enters as legitimately into railroad carriage as into any private business." But this is qualified by the clause: "Where additional quantity ceases to lessen cost of carriage, or be of pecuniary advantage to the road, the differences should cease." Report, p. 65.

An interesting discussion of the principle of wholesale rates as applied to jobbers and retailers may be found in the report of the Iowa commissioners, an exceedingly able body. The celebrated case is *Merrill & Keeney vs. Chic. & N. W. &c.* See Report, 1883, pp. 678-686, and further discussion in Report, 1884, pp. 71-77: The commissioners go too far in the defence of the wholesale principle and err in making classification and differential rates depend upon this principle. They depend on the contrary on the distinction between fixed and variable expenses. Only in so far as allowance for quantity depends on cost of service, is it legitimate. The wholesale

the claim is in fact no longer upheld by our best railroad men.<sup>1</sup> But although no longer theoretically defended, such discriminations are still actually practised. Not only concessions to large shippers, but what is worse, personal discriminations resting on no other basis but pure favoritism, are yet of common occurrence. The revelations of the New York assembly investigation of 1879 are fresh in the minds of all. A great improvement has indeed taken place in the eastern lines, but secret rebates or substantially similar favors are by no means a thing of the past.<sup>2</sup>

Personal discriminations then cannot be defended upon any theory of railway rates. They must be stopped at all hazards. But how? The common law forbids them, but the inhibition of the common law has been of little efficacy. The fear of incurring the displeasure of the railways has acted as a serious check to the institution of suits. To rely on free competition as a panacea is absurd. Personal discriminations are most glaring when competition is most active. Cut-rates and rebates are never so common as during the railway wars. The surest method of preventing personal discriminations is just the opposite, *i.e.*, universal combination or monopoly, in other words state ownership. This in fact was one great reason why the

principle *per se* is not applicable to railroads. Cf. Test. of Manager Haines, Cullom Com. Rep., App. p. 143. Notwithstanding the report of the Iowa board, the distinction between jobbers and retailers was abandoned. Of late there has been a movement to abolish even car-load rates. But the arguments of the board have thus far prevented it. Report, 1885, pp. 45-53; 1886, pp. 31-46. From the railway standpoint the wholesale principle is indeed a "fundamental truth," as the commission says; but from the public standpoint the "fundamental truth" vanishes. Railway profits, as we shall see, are no excuse for inequality of charge.

<sup>1</sup> Cf. Fink in Hepburn Com. Rep. Exhibits, p. 149, and *The Railroad Problem and its Solution* (1883), pp. 10, 41. — Cf. Cullom Com. Rep., Test. of Blanchard, p. 159; Firth, p. 466; Furber, p. 333; Kimball, p. 1238; Mink, p. 437; Wistar, p. 516. [The only two exceptions are Ackerman, p. 604, and Meek, p. 1049.] Also Jewett and Vanderbilt in Hepburn Com. Rep., Test., pp. 1481 and 130. So Alexander, *Railway Practice* (1887) pp. 21, 59.

<sup>2</sup> Cf. the testimony of a railway official: "I have been doing it myself for years, and had to do it." Referring to the effort to get the business of a number of millers from another company, he adds: "I can accomplish my purpose better by picking out one, good, smart, live man and giving him a concession; . . . let him go there and scoop the business. I get the tonnage, and that is what I want. . . . You can take hold of one man and build him up at the expense of the others, and the railway will get the tonnage." Cullom Rep., Test. (Wicker), p. 778.

railways were bought up by the Prussian government.<sup>1</sup> But state ownership is out of the question at present in the United States. With our actual political conditions and our unreformed civil service, the abuses would be intensified, not lessened. There are only three methods, or combinations of methods, which can settle the question, — judicial regulation, legislative and administrative regulation, development of the pooling policy. The history and merits of each, as well as the method pursued in the Interstate Commerce law, may be left to the following essay. But preferential rates cannot in any sense be upheld as a corollary of the principle of value.

*Local discrimination.* Quite different from preferential rates are differential rates. Differential rates may arise in two ways: through the desire of the railway to develop its traffic, or through the action of competitive centres. The road may wish to extend its traffic in commodities coming from a distance. If they are to be carried at all, they must be transported at less than the regular rates. A commodity which comes from a point a thousand miles distant cannot afford to pay the same rate per mile as one which comes ten miles. The traffic will not bear it. To charge the same rate per mile from Kansas to New York as from New Jersey to New York would simply put a stop to the Kansas traffic. Hence arises the necessity of a distinction between local and through rates. Goods coming from a distance must be treated in the same manner as cheap goods. Local discrimination is like classification. The distant freight is the cheap freight, the near freight is the dear freight. The underlying principle again is value of service. The act of transportation adds far more to the value of the distant than to that of the near freight. Annihilation of distance is proportionate increase of value.

But secondly, local discriminations may arise from competition in the centres of traffic, whether the competition be due to railways or waterways. Two lines meet, *e.g.*, in Buffalo. The old line wishes to retain its business, the new line wishes to

<sup>1</sup> Cf. the argument for state railroad ownership (a translation of a Prussian parliamentary document of 1879), New York, 1880, pp. 43 *et seq.*

develop a new business. Rates from Buffalo to New York will immediately fall, and the competition may be carried so far as to reduce rates to or below the level of mere transportation expenses. Local rates may remain unaffected. The result will be a disproportionately small charge to the point of competition. The number of competitive centres in the United States is immense,<sup>1</sup> the quantity of local discriminations is hence correspondingly large. A lower rate to the competitive centre is the sole condition of the retention of the competitive traffic. Increase of charges means a destruction of the business.<sup>2</sup>

From the standpoint of the railway, therefore, the principle of differential rates is beneficial. It is due in the last instance to the distinction between fixed and variable expenses. Any rate on the through business above mere operating expenses is *pro tanto* profitable. The surplus goes to defray the fixed expenses. Rather than not get the traffic at all, the railway will take it at reduced rates, and yet these reduced rates if applied to all business would be ruinously unprofitable. The charge per mile on the longer haul may be less than the charge per mile on the shorter haul. How much less it may be is of no concern to the railway, as long as operating expenses are paid. The only endeavor is to retain and extend the traffic.

From the standpoint of the public the principle of differential rates is also justifiable—as a principle. The element of competition would in itself not be a valid justification. Whether the freight is carried by one route or another, *ceteris paribus*, makes no difference to the shipper, except indeed that public interest might oppose competition of foreign railways. But the long-haul consideration is of vital importance to the public. It becomes the question of having the goods transported at the lower rates, or not having them transported at all. The industrial progress of the nineteenth century is due to cheapened methods of production. Whatever tends to reduce

<sup>1</sup> In 1886, of the 33,694 railway stations in the United States, 2778 were junction points. Chief of Bureau of Statistics quoted in Congressional Record, Jan. 12, 1887, p. 562.

<sup>2</sup> Cf. Michaelis, *Die Differentialtarife der Eisenbahnen*, Bd. I. (1873); Boinvilliers, *Des transports à prix réduits sur les chemins de fer* (1878).

the cost of transportation and to eliminate the element of distance in so far increases national prosperity. Only under a system of differential rates does this development become possible. Without local discriminations the growth of our country would be set back many decades. They form an indispensable condition of national prosperity.

The legitimacy of the principle of differential rates may be inferred from considering the effects of their abolition. The opposite of a differential rate, *i.e.*, a different charge per mile, is an equal mileage or *pro rata* rate, *i.e.*, the same charge per mile. We pass over the absurd inconsistency of those who in the same breath advocate cost of service and *pro rata* charges. One of the plainest principles of railway economics is that cost of service becomes relatively less as the distance traversed becomes greater. To transport an article twenty miles does not cost twice as much as to transport it ten miles. Only a portion of the expense increases with the distance. The greater part is independent of distance, so that the cost of service diminishes with every additional mile. The separation of terminal charges, which are of course utterly irrespective of the distance traversed, from pure hauling expenses, would diminish, but by no means remove the objection. Hence to base equal mileage rates on the principle of cost of service is illogical. Even according to the doctrine of cost, differential rates are perfectly legitimate. Rates absolutely proportional to cost of service would be differential rates.<sup>1</sup>

But omitting the question of logic, what would be the effect of *pro rata* charges? Here both theory and practice come to our aid. The theoretical conclusions have been well formulated in various governmental commissions, the practical illustrations have been afforded by the working of our Granger laws and, in a greatly modified extent, by the experience of some European railways. Nowhere, perhaps, has the matter been more tersely put than by the English parliamentary committee of 1872:<sup>2</sup>

<sup>1</sup> This has led to the sliding scale and zone systems — mileage rates decreasing with distance — in various parts of Europe, and even in the United States.

<sup>2</sup> Joint Select Committee on Railway Cos. Amalgamation, 1872, Rep., p. xxxii.

(a) It would prevent railway companies from lowering their fares and rates, so as to compete with traffic by sea, by canal, or by a shorter or otherwise cheaper railway, and would thus deprive the public of the benefit of competition, and the company of a legitimate source of profit.

(b) It would prevent railway companies from making perfectly fair arrangements for carrying at a lower rate than usual goods brought in larger and constant quantities, or for carrying for long distances at a lower rate than for short distances.

(c) It would compel a company to carry for the same rate over a line which has been very expensive in construction, or which, from gradients or otherwise, is very expensive in working, at the same rate at which it carries over less expensive lines.

In short, to impose equal mileage on the companies would be to deprive the public of the benefit of much of the competition which now exists or has existed, to raise the charges on the public in many cases where the companies now find it to their interest to lower them, and to perpetuate monopolies in carriage, trade, and manufactures, in favor of those rates and places which are nearest or least expensive, where the varying charges of the companies now create competition.

In like manner, the New York commission concludes, after a comprehensive review of the whole subject, that *pro rata* charges are absolutely injudicious and impracticable.<sup>1</sup> The Senate committee of 1886 does not even consider the proposition worth a separate discussion. The late French and Italian commissions hold the same views.<sup>2</sup> American experience is no less emphatic. The first Granger law, enacted in Michigan in 1871, prescribed equal mileage rates — with a slight modification for short distances. Even as changed by the law of 1873 these rates were so utterly impracticable that they were disregarded by the railways with the tacit consent of the people. The com-

where the conclusions of the Royal Commissions of 1865 are simply re-formulated. The Select Committee of 1882 reprints the conclusions and discusses them at length. Report, pp. ix *et seq.*

<sup>1</sup> Report of the Board of Railroad Commissioners on the *pro rata* bill (1884), p. 125. Also the annual report for 1884, App. 63. *Pro rata* laws are described as "straight-jackets, preventing perhaps some positive evil, but dulling the energy and cramping the development of business. They hamper legitimate efforts at expansion."

<sup>2</sup> "È altresì un fatto incontestabile che il sistema delle tariffe differenziali ha contribuito a rendere più forti e migliori le industrie nazionali," *etc.* Atti della Commissione d'Inchiesta (1881), Riassunto, II, 832. For France see the report translated in the English Select Com. Rep. (1882), App., especially p. 450.

missioner pronounced the duties imposed upon him impossible of accomplishment.<sup>1</sup> The fixed-distance tariff of Iowa, according to the law of 1874, proved to be so unequal and unjust in its operation that it was repealed shortly after.<sup>2</sup> The results of the Potter law of 1874, in Wisconsin, and of similar enactments in Minnesota and Illinois, were equally convincing. They proved to be rather a burden than a relief. The demand for equal mileage rates is an emanation of crude ideas; the outcome of a laudable demand for equality, which would in actual practice result in glaring inequality and in an abandonment of the greatest benefits conferred by railroad transportation. Differential rates or local discriminations form a necessary part of all railway management.<sup>3</sup> They constitute the second corollary from the distinction between fixed and variable expenditures.

The principle of value of service may thus be analyzed into the two constituent elements of classification and local discrimination. But now the question arises: Is value of service indeed a just basis for railway charges? Should not cost of service be preferred? We leave the domain of practicability and come to the field of justice.

Let us first ascertain whether the value-of-service principle is indeed so novel in transportation charges as the anti-monopoly league and others maintain. This assertion may be categorically denied. The old turnpike tolls in England, as in America, whether for vehicles or animals, were not the same for all, but were divided into different categories. The English turnpike acts fixed higher rates for coaches than for dray wagons; according to the doctrine of cost of service they should have done the opposite. In France the charges on the highways varied not only from road to road, but frequently from day to day, keeping pace with the intensity of the traffic.<sup>4</sup> The charges on the canals again were nowhere based on cost of service; not only were differences of charge made according to the value of the

<sup>1</sup> Cullom Committee Rep., p. 109.

<sup>2</sup> Eighth Report of Iowa Board of R. R. Commissioners (1885), p. 35.

<sup>3</sup> Cf. Aucoc, *Les tarifs des chemins de fer* (1880), p. 43.

<sup>4</sup> De Foville, *Transformation des moyens de transport* (1880), p. 63.

commodities transported, as on the American and English canals, but in many instances differential rates were charged, although no one thought of opposing them in principle.<sup>1</sup> So the earliest railway acts were based unconsciously on value of service. In the charter of the first English steam railway—the Stockton and Darlington—among other charges which deviate from cost of service we find that rates on coal destined for exportation are fixed at 4*d.* per ton-mile, but on all other coal at  $\frac{1}{2}$ *d.* per ton-mile. Similar distinctions may be found in most of the early charters. In the United States these provisions were not so common, simply because there were very few charter-maxima for freight. But at all events these examples prove that the cost of service principle was by no means avowedly followed. What has been called, even in the official documents the “outrageous principle” or the “audacious plea” of value of service<sup>2</sup> is thus not a new departure. The principle is as old as the improved methods of transportation themselves.

Moreover, the value theory is not so opposed to the cost theory as is frequently imagined. We know that lower rates for cheap (or distant) goods increase the traffic and thus diminish the cost of service. The value of the articles thus affects traffic and cost. And since the reduction of rates for cheap goods leaves only a small surplus above operating expenses for fixed charges, while higher rates affect the dear (or near) goods very little, there is no valid reason why the latter should not be made to bear a proportionately larger share of the fixed charges. From the standpoint of justice no exception can be taken to the principle of value, even regarded as a product of the principle of cost.

But is the doctrine of cost of production itself universally applicable as the foundation of prices? What the railway produces is transportation; its cost of production is cost of service. It is claimed that the utilities produced by the railway, like all

<sup>1</sup> On the Pennsylvania canal there were 12 classes, the rate varying from 0.6 to 4 cents per ton-mile. For Europe, *cf.* Sax, *Die Verkehrsmittel* (1878), I, 180; Jacquemin, *De l'exploitation des chemins de fer* (1868), I, 368.

<sup>2</sup> Report of Mass. R. R. Com. (1885), p. 35. *Cf.* the minority view of English Select Com. of 1882, Rep., p. liv.



utilities which are the subject of exchange, should be regulated by cost of production. This, it is asserted, is the only just law. But such a conclusion is of doubtful validity. Even granting that cost of production forms a just basis for prices, no one claims that actual business prices of each particular commodity vary with the cost. The application to railway rates is plain. The cost of service theory might logically demand that the sum total of charges should vary with the cost, but not that the price of each individual transaction should be fixed by its cost of service. Even were this practicable,—which we have seen is not the case,—it would not be theoretically defensible.

The principle of value of service has a firmer foundation. Railway charges cannot, indeed, be fixed like prices in general, simply by demand and supply. This is the mistake of the railway officials who attempt to justify all charges.<sup>1</sup> Railway transportation is more than a simple business; it is a semi-public occupation, a public trust. Hence the necessity of restricting the inequalities of every-day commercial practice. But to oppose the abuses of a principle is quite another thing from demurring to the principle itself. The value-of-service doctrine, correctly understood, simply applies the methods already followed in certain public relations. It fixes charges according to the ability to pay—the same principle that is recognized in taxation. Charging what the traffic will bear is a rough way of stating that the charges are proportioned to the capacity or ability of the articles that compose the traffic. It will not be questioned that the endeavors to develop traffic can be realized only by making lower charges for the cheaper (and distant) goods. But the element of justice is introduced as soon as we show that such a method graduates charges according to ability. Of course it does not follow that all rates actually charged are just rates. The inference simply is that the principle of value, as a principle, is not open to the objections often

<sup>1</sup> So de la Gournerie, *Études économiques sur l'exploitation des chemins de fer* (1880), pp. 118, 119; Grierson, *Railway Rates* (1886), p. 68; and most of the American writers.

urged. The ability of an article to pay, its capacity to contribute to the payment of the expenses, is an undeniably valid basis for rates. As it is well expressed by the Cullom Committee:

The capacity of each commodity to contribute to the payment of the fixed charges is measured by the extent to which the cost of its transportation fixes its market value and determines the question of its movement. In the case of commodities like coal, stone, ore, beef, corn, lumber, *etc.*, the freight charge constitutes the principal item of cost to the consumer; however small may be his contribution to the general burden, it is relatively greater than that made by the consumer of high-priced articles, such as clothing or dry goods, *e.g.*, the selling-price of which is not appreciably affected by the freight charges, even though unreasonably high.<sup>1</sup>

And what is true of the cheap goods is true of the distant goods. For the purposes of transportation they stand on precisely the same footing and are subject to the same conditions. The principle again applies equally well to passenger traffic. Even in the United States there are virtually different classes, and the higher fares for the better service may be upheld on the principle that the passengers in the higher class cars possess more ability to pay large fares than those in ordinary or emigrant cars. The value of service principle is based on supposed ability to pay.

But now the difficult question arises. We have shown that the low-priced wares possess less ability to pay than the high-priced wares. Does it follow that the more valuable wares, by reason of their greater ability to pay, should be charged higher rates than the average, or than would otherwise be the case, in order to compensate for the lower rates of the cheaper goods? Does the principle of value imply this compensating action, and is this principle of compensation valid and just? This is the puzzling question. To give a precise answer is not so simple as it might appear. We may, indeed, assert with decision that difference in value implies a difference in ability to pay, but it is rather arbitrary and hazardous to assert exactly what relation

<sup>1</sup> Report, p. 185.

there is between value and ability. Shall an article of double the value pay twice the rate; and if not, why not? The difficulty, in fact, is exactly the same that is met with in the problems of taxation. One of the fundamental principles of equity in taxation is that contributors should pay taxes in proportion to their ability. A rich man ought to pay more than a poor man; the difficulty arises when we must determine exactly how much more he ought to pay. Is the difference of ability proportional to their property, or to their income, or to their expenses? Or, again, should the difference of ability be measured not by a proportional, but by a progressive, scale of taxation, — should there be a progressive property, or a progressive income, or a progressive expense tax, rather than a proportional tax? None of these questions can be declared definitely settled by the science of finance. The answers are necessarily vague because of the relativity in the test of ability.

Exactly the same considerations are applicable to railway tariffs. Difference in value implies difference in ability. The cheap articles possess less ability than the dear goods, and should thus pay lower rates. But to determine how much higher rates the others should pay is not a self-evident proposition. The question is a relative one, and the rates may vary within wide limits. It is precisely because the question is a relative one that the many abuses of railway management have arisen. This relativity, the possibility of making undue differences within the limits of the just principle, becomes therefore a strong argument in favor of some form of public regulation.<sup>1</sup> The unhampered railway management may pursue the correct policy of charging what they think the service is worth, but their opinions may vary within wide limits. There is, in other words, such a possible elasticity or flexibility in the methods of fixing the details that the actual charges may be far from adequately satisfying all demands. This fact above all others has earned for the doctrine of charging what the traffic will bear the deserved

<sup>1</sup> Cohn, *Untersuchungen über die englische Eisenbahnpolitik*, Bd. iii (1883), S. 84, concludes that the railways must therefore be owned and managed by the state. But such a conclusion is not at all necessary.

epithet of "hap-hazard" estimate.<sup>1</sup> The doctrine of free competition and uncontrolled liberty does not follow from the principle of value of service as the foundation of railway tariffs.

But at all events one point has been gained. The principle of value, within these wide limits, is a principle which not only does determine railway tariffs, but which, although liable to abuse, is a correct principle. It is just because it is founded on the principle of ability. It is neither new nor "outrageous." It is not only a just principle, but, as we have seen, the only practicable principle. The cost of service doctrine can no longer put forth the exclusive claim of justice as the basis of railway tariffs.

One exaggeration, however, must be avoided. The principle of value, we said, implies the doctrine of compensation. But this does not imply that the higher charges on the dear goods or local traffic are higher than they would be if there were no lower charges on the cheap goods or through traffic. Were the rates on the cheap or long-distance traffic to be raised, it would not be transported at all; and since its contribution to the fixed expenses would fall away, the whole expense would necessarily be borne by the dear and short-distance traffic. The rates on the latter would have to be increased to make good for the loss of the former; the dear and local freight would pay even more than it pays now. Those who object to the principle of value because it unduly raises the charges on high-class and local business thus utterly fail to perceive that in many cases it produces just the contrary effect. The principle of value often lowers the rates on the dear goods, and renders possible the transportation of the cheap goods. It is the long-distance traffic which has enabled the American railways to reduce their charges, through as well as local, far below the level of European tariffs. *Pro rata* charges, or even rates based solely on cost of service, would give us tariffs much higher than those in actual use; they would level up, not level down.

Classification and differential rates are thus legitimate and necessary expedients: legitimate, because based on value; neces-

<sup>1</sup> Sir B. Samuelson, Report on Railway Goods Tariffs, *etc.* (1886), p. 20.

sary, because without them railway transportation would become vastly less efficient. The same analysis would show the illegitimacy of personal discriminations, even in wholesale transactions. Classification and local discrimination reduce rates for the traffic which is less able to pay; personal discrimination reduces rates for the traffic which is better able to pay. Reduced rates to large shippers increase the advantages of the strong; rates fixed according to value tend to diminish the disadvantages of the weak. Preferential rates are wrong because not based on the principle of value; differential rates are right because following the doctrine of value. Preferential rates invert the considerations of ability; differential rates maintain the principle of ability.

But we must not be misunderstood. While the principle of charging what the traffic will bear is essentially just and legitimate from the railway standpoint, from the public standpoint it must be regarded as a subordinate principle. Value of service puts into the hands of the railways practically a power of taxation. It is indeed not entirely an arbitrary power, since the charges are partially regulated by water competition. But in its essence it is a power of taxation—a taxation often cunningly masked in the methods of classification and discrimination. From the public standpoint we maintain the great principle of equal treatment for all persons and all business. This is the general rule; the principle of value must be viewed as a legitimate qualification of the rule of equal treatment. But it must be shown in every particular case that the service is of varying value. From the public standpoint in other words the burden of proof must rest on the railways. Charging what the traffic will bear is just, but its application is so elastic that the justice must be demonstrated in each instance. To leave the application of the principle to the discretion of the railway results in the chaotic, almost barbaric, condition of actual charges during railway wars. The only rational method to reconcile public and private interests is to lay down the rule of equal treatment for all persons and places, and to admit the principle of value as a necessary infraction of the rule. But the necessity of the in-

fraction must be shown before its legitimacy is accepted. The principle of differential rates is just; all differential rates are not just.

The question hence arises: How far are these differential rates allowable; to what extent should local discrimination be practised? We are confronted, in other words, by the problem of the long haul versus the short haul, the through traffic versus the local traffic. If we take a line with its two termini as competitive centres, and a third point intermediate between the two, and not subject to the same competition, we may have three principal forms of differential rates:

1. The rate per ton-mile from New York to Buffalo may be less than the rate per ton-mile from New York to Rochester, and yet the aggregate charge to Buffalo may be greater than the aggregate charge to Rochester.
2. The rate per ton-mile from New York to Buffalo may more than cover mere movement expenses, and yet be so much less than the rate per ton-mile from New York to Rochester that the aggregate charge to Buffalo may be slightly less than the aggregate charge to Rochester.
3. The rate per ton-mile from New York to Buffalo may be so low that it will not even cover actual movement expenses, and the aggregate charge to Buffalo will be considerably less than the aggregate charge to Rochester.

The third case occasions but little embarrassment. Such a practice manifestly cannot be defended even from the standpoint of sound railway practice. For new or through business, as we saw, any rate above the additional cost of the new business is a paying rate. It is defensible on the theory of value, because it contributes to the fixed expenses and thus diminishes the burden or rate on the old business. But if the rate falls below the expense of the additional business, it undoubtedly becomes a losing rate. It contributes nothing to fixed expenses, but actually requires an additional charge on the old business to make good the fixed expenses. The justification of differential rates thus entirely falls away. No theory of value

can require one shipment to be charged unduly high rates in order to transport another shipment at less than actual cost. This would carry the principle of compensation beyond all reasonable bounds. The only possible exception from the railway standpoint would be to reduce rates temporarily below cost of service in order to build up a certain locality, and thus ultimately develop paying traffic. The present loss may create a future gain. But from the public standpoint this would be inadmissible. To raise local rates in order to decrease rates to competitive points below additional cost of the new business is theoretically indefensible. The minimum rate should never fall below the movement expenses. Any differential rate below this point is illegitimate, and, we may add, comparatively rare, because disastrous to the railway.

We come to the second case, where a higher aggregate charge is made for the short haul than for the long haul. At first blush such a practice seems a flagrant offence. We are tempted to exclaim: This inverts the natural order of things; it must be stopped at all hazards. But the matter is not quite so simple.

It is maintained that lower charges on short hauls remove the geographical advantages of localities, and since the termini of a road are generally larger cities, tend to unduly increase the advantages of the large as against the small places. The same argument, however, is applicable, although in a slighter degree, to any differential rates. They all discriminate against some localities in favor of others. For the purposes of the argument we may treat all differential rates together.

It may indeed be confessed that differential rates do sometimes remove geographical advantages. But it does not follow that such a practice is always reprehensible. There is no such thing at a natural, inviolable geographical advantage. There are no vested rights in situation. One town may be connected with the coast only by a turnpike; another town further distant may have the good fortune to see a railway built through its limits. Has the former any cause to complain because it is robbed of the benefits of its hitherto advantageous situation? A village ten miles distant from a metropolis has been supply-

ing it with garden-produce. Is there any essential injustice in allowing villages forty or fifty miles distant from competing for the same market — a competition possible only through differential rates? In fact, the object of all improved means of transportation is to annihilate distance, to minimize the differences of situation. Maintenance of original differences of situation implies equal mileage rates. It would render impossible all but local business in the vast mass of commodities; it would again turn our western fields into barren wastes. Differential rates widen the field of supply; they increase the specialization of wants, and create the possibility of satisfying these wants, so characteristic of modern industrial society. Opposition to local discrimination arises from viewing solely the interests of the producer; rational economics lead us to consider also the consumer. Opposition to differential rates is based on the supposed welfare of a particular class or section of producers; a wise national economy will ponder over the interests of the whole community, over the prosperity of the entire country, irrespective of sectional jealousies. If differential rates are so arranged that distant producers are enabled to compete with local producers, the latter indeed may see their profits curtailed, but the former will see their profits increased, and the consuming public as a whole will evidently gain.<sup>1</sup> There is no absolute proprietary right in situation.

The charge, again, that differential rates increase the advantages of large cities may be admitted, but without any necessary imputation of injustice. It may be urged that differential rates do not at all differ from preferential rates; that all personal discriminations are wrong because they increase the advantages of the large shipper, and that all local discriminations are wrong because they increase the advantages of the large city. But such an analogy is essentially defective. Two or more shippers have a positive right to equal treatment. A common carrier must not assume the privilege of deciding between them. The common law and common justice demand

<sup>1</sup> Cf. the recent complaints of California producers and manufacturers at being shut out of Eastern markets by the operation of the Interstate Commerce act.



equality of treatment for similar services. But in the case of localities there is no such indefeasible right. Differential rates which increase the advantages of large cities are due simply to the fact that these cities are competitive centres. The discrimination is the result of the competition. To avoid the discrimination, you must avert the competition, whether by rail or water. The building of an additional line temporarily increases the advantages of the terminus,<sup>1</sup> for every new railway alters in some degree the relative advantages of situation. The local points simply pay the penalty of not being competitive points, and to accord all local points the same benefits as competitive points would be to invert the normal development. Differential rates in such cases maintain the natural advantages of situation, while *pro rata* charges would here invert the geographical advantages. Equality between persons is rightfully demanded because the services are similar; equality between places is not always necessary, because the services are sometimes dissimilar. The ability of long-distance freight to bear the charges diminishes faster than the distance increases.<sup>2</sup>

But of course this view does not justify all differential rates. The abuses have often been outrageous, the methods undeserving of palliation. Local interests have been disregarded, and the discriminations so conducted as to ruin whole businesses or towns in order to build up others. It is not necessary to ascribe illicit motives to the railway managers, although even such examples have not been wanting in our history. They

<sup>1</sup> Temporarily, *i.e.*, until some combination is effected between the rival lines; and such a combination is sure to ensue in the shape of a pool, an arrangement, or a consolidation. If there is water or foreign competition, the effect may be permanent instead of temporary.

<sup>2</sup> The English courts at first interpreted Cardwell's Traffic act of 1854 in the above sense. The clause reads: "No company shall make or give any undue or unreasonable preference or advantage to, or in favor of, any particular person or company, or any particular description of traffic in any respect whatsoever." The courts held that this demand for equality of treatment applies only to persons; but that nothing prevents the railways from favoring one class of traders, or one town, or one portion of their traffic, provided the conditions are the same for all persons, and for the benefit of the railway. See the decisions in Shelford, *Law of Railways* (4th ed.), I, 166-174. Cf. also the English Parliamentary Report for 1872 (Joint Select Committee on Railway Companies Amalgamation), p. xiii.

have often been forced into unjust discrimination by the stress of competition and the instinct of self-preservation. But railway officials commit a great mistake in calling all local discriminations just because they are the effect of competition, precisely as the demagogues err in opposing undeniably valid discriminations and at the same time upholding competition. Competition is made to cover a multitude of sins. From the standpoint of railway profits, all actual differential rates, unless where railways carry at less than hauling expenses, may indeed be defensible; but from the public standpoint of national prosperity and the equitable development of all sections, many of them may easily be convicted of injustice.<sup>1</sup> Railway profits and public interests do not always go hand in hand. The possible diversity of interest renders some form of governmental supervision absolutely imperative. Untrammelled liberty has been tried in the balance and found wanting. Private actions which so materially affect public interests must be subject to review and correction at the hands of some public authority.

The main limitation on the practice of differential rates hitherto has been the enactment of short-haul laws.

The short-haul system admits differential rates, but prescribes that the aggregate charge to any intermediate point shall not exceed the aggregate charge to the final point; the entire distance must never be charged less than any part of it. As a principle, it is in itself legitimate. It tends to check the undue extension of the practice of differential rates. For although, as we have seen, there is no vested interest in geographical advantages, it becomes an anomaly to charge to a way-station the rate

<sup>1</sup> Thus Alexander, *Railway Practice* (1887), p. 14, says: "The competition which gives birth to such discriminations determines also their sizes, or the extent to which they must go. What are the rates to intermediate points has nothing to do with the case." Expressed in this general way, the principle is manifestly indefensible, for it would justify transportation to competitive centres at less than actual hauling expenses. It must be remembered that railway profits are no excuse for injustice to the public. So Fink, *Argument before Senate Committee on the Reagan Bill* (1879), p. 20, claims that competition would justify a charge of \$1.50 a ton from A to B, and of \$3.00 from A to an intermediate point, C. It is these exaggerated claims that arouse the ire of the public. For the claims of the railway antagonists in England, see Pope, *Railway Rates and Radical Rule* (1884).

to a competing point further on, plus the additional rate from the competing point back to the way-station. This amounts, in fact, to making an extra charge for *not* transporting the goods to a more distant place.<sup>1</sup> Put in this way, the hardship is apparent. As a general rule, the short-haul principle should be followed.

But a categorical and absolute prohibition of charging more for the short-haul would be of dubious value. If the law could be applied to all media of transportation, waterways as well as railways, foreign as well as home railways, then the matter would be simplified. But as long as such competition exists, the anomalies cannot be entirely removed. The attempt to do so by law would simply decrease the profits of the railway without improving the condition of the public. New York and New Orleans are connected by water as well as by rail. The railway charges cannot exceed the water rates by more than a definite amount, even though such charges only give a slight profit above movement expenses, and by no means cover the total cost of service. The charges to New Orleans are less than to an intermediate point, X. What would be the effect of a short-haul law? Rates to X would be lowered, or New Orleans rates would be increased. If rates to X are lowered, the profits of the railway will be seriously curtailed, and it is questionable whether it could defray its expenses at all. The railway will hence far prefer to raise the New Orleans rates, as on the whole less injurious. If New Orleans rates are raised, the water lines will take all the traffic, and the rates to X will have to be increased still more. For the railway will now have no New Orleans business to contribute to its fixed expenses, and will have to meet these by the proceeds of the local business alone. The local discrimination would hence be increased, for actual rates to New Orleans by water remain as before. No one will gain except the steamship company.

What is true of New Orleans is true of all points subject to water competition, or influenced through their connection by water competition. The same considerations apply to the com-

<sup>1</sup> Cf. Adams, *Railroads, their Origin and Problems* (1879), p. 124.

petition of foreign railways. A short-haul law applicable to the United States but not to Canada would simply transfer the profits of the American railways to the Canadian, without decreasing the local discriminations.

Here again the principle is correct, but the exact application a matter of difficulty. It is a conflict between railway profits and impartial justice. If the short-haul principle in any given case decreases profits, but not to such an extent as to virtually ruin or handicap the railway, then it may safely be applied. In many cases the lowering of local rates would not have this baneful result, for the reason that the main traffic of the railway is the through traffic. This explains why many railways are now reducing their local charges. The short-haul principle will not materially affect their earnings. But in many other cases the above examples will hold good. The through rates will have to be advanced, and the railways will suffer without any benefits to the public, or, in fact, to any one but the rival transportation agencies. Both railway officials and railway antagonists are hence wrong. The demagogues are wrong because they fail to see the limitations of the short-haul principle; the railway officials are wrong because they set forth competition as a reason for all existing infractions of the principle. Competition becomes a valid reason only where the short-haul system implies a necessary choice between ruinous curtailment of profits and complete loss of the business. The limit is an elastic one, and precisely on this account do we need some public authority to define the justice of the limit in each particular case. But an inflexible law, enforcing the short-haul principle in all cases, would be neither wise nor successful.

Prior to the enactment of the Interstate Commerce act, several states already had short-haul laws on the statute books. According to the Commutation of Tonnage act of 1861, a contract between the state of Pennsylvania and the Pennsylvania Railroad Company, the short-haul provision was agreed to. But neither this agreement nor the law of 1883, which incorporated the same principle, was ever thoroughly carried out.<sup>1</sup> The

<sup>1</sup> Cf. the testimony of Pennsylvania shippers in Cullom Rep., Test. (Norris), pp. 530-535, (Welsh) p. 460, (Wood) pp. 478-480, etc.

Granger movement of 1870-1875 resulted in the passage of very stringent laws in the Western States, some of them being virtually *pro rata* laws. Many of the specifically short-haul laws, as that of 1873 in Ohio, remained dead letters, while the more stringent laws, which absolutely fixed rates or empowered the commissioners to fix rates, were enforced so literally as to produce a revulsion in public feeling and a speedy repeal of the laws.<sup>1</sup> The same is true of the more recent short-haul laws in the North-west, as, *e.g.*, the Doane law of 1881 in Nebraska. The railways enforced it so strictly by raising local rates that the public began to regard it as a burden, not a relief. As a result, the law is now practically a dead letter.<sup>2</sup> Several of these laws were, however, something more than mere short-haul laws. They provided, in general, that a shorter distance should not be charged more than a longer distance on the same line, while according to a true short-haul law the shorter distance must be included within the longer distance. This distinction was well expressed in the Massachusetts law of 1874, which reads as follows :

No railroad corporation shall charge or receive for the transportation of freight to any station on its road a greater sum than is at the time charged or received for the transportation of the like class and quantity of freight *from the same original point of departure* to a station at a greater distance on its road *in the same direction*.<sup>3</sup>

But this law, as the phraseology denotes, applies only to hauls from a terminus to the way-stations. It does not apply in the other direction, *i.e.*, from the way-stations to the terminus. Possibly on this account, but probably because of the smaller degree of competitive traffic in the state, it has been found possible to enforce the law strictly.<sup>4</sup>

The New York commission made a careful study of the principle in 1884. Their conclusion is expressed in these words :<sup>5</sup>

<sup>1</sup> So in Wisconsin, Iowa, Michigan, Minnesota.

<sup>2</sup> Cullom Committee Report, Test. (Rosewater), pp. 1133-34.

<sup>3</sup> Public Statutes, chap. 112, § 190.

<sup>4</sup> Railroad Commissioners' Report, 1885, and 1886, p. 35, *in re* Housatonic Railroad Co. See also Cullom Rep., Test. (Russell), p. 305.

<sup>5</sup> Report on the *pro rata* bill (1884), p. 120.

Railroads should not as a general rule charge more between a terminal and an intermediate point, for a like class and quantity of freight, than is charged between such terminal and a more distant point, even though at such more distant point there may be railroad or water competition, unless railroads can affirmatively establish such circumstances governing such competition as justify the higher charge for the shorter distance.

This is a conservative and judicious conclusion, which shuts out on the one hand the extravagant claims of the railway officials, and on the other the short-sighted demands of the professional reformers. Each case must be judged on its own merits. Thus in *Moon vs. The New York, Ontario and Western*,<sup>1</sup> competition with a rival railway was held not sufficient to justify the infraction of the principle. In *Foot et al. vs. The Utica and Black River*,<sup>2</sup> it was held that higher charges might sometimes be made to intermediate points, but that the peculiar circumstances were not sufficient in this case. In *Harding and Hollis vs. Rome, Watertown, and Oswego*,<sup>3</sup> water competition, which would have given the business to foreign companies, was held to be a valid reason for the infraction of the rule. The short-haul principle as administered in New York is thus no hard and fast rule.

European experience all tends to the same result. In France the short-haul principle is known as the *clause des stations non dénommées*, and has been in force since 1864. The railway tariffs must be submitted to the administration, and in virtue of this power of approval or *homologation*, the government has procured the insertion and maintenance of the short-haul principle.<sup>4</sup> But this is applicable only to the general tariffs, and is perfectly enforceable there because of the almost utter absence of interior competition — a fact due to the existence of territorialization or division of the field among the separate companies. The principle is not applicable to any case where

<sup>1</sup> N. Y. Railroad Commissioners' Report (1885), pp. 73-76.

<sup>2</sup> Report (1884), pp. 94-131, especially pp. 106 and 119.

<sup>3</sup> Report (1884), p. 160.

<sup>4</sup> Aucoc, *Conférences sur le droit administratif* (2<sup>me</sup> éd., 1882), III, 748. Cf. Picard, *Chemins de fer français* (1885), II, 444; III, 587.

there is any danger of foreign competition. The *tarifs de transit*, or through tariffs for goods passing through France on the way to another state, and the *tarifs d'exportation*, or through rates for goods destined for exportation, are exempted from the application of the principle, so that greater charges are permitted to intermediate points. This, it must be remembered, is allowed by public authority and in the public interest.<sup>1</sup>

In Germany, where the railways are almost exclusively owned by the state governments, and interior competition thus minimized, there is likewise no hard and fast rule. The short-haul principle, or *Princip der hintergelegenen Stationen*, is accepted as a general rule in Prussia, but exceptions may be admitted by the minister of public works.<sup>2</sup> The Bundesrath of the empire also enunciated the same principle, but expressly inserted the proviso that particular circumstances might justify an infraction of the rule.<sup>3</sup> These exceptions are of frequent occurrence.<sup>4</sup> The short-haul principle does not apply to through-transit rates, to import or export tariffs, or to any competitive centres where the competition is caused by waterways or foreign railways. After the purchase of the Prussian railways by the state a few years ago, the attempt was made to enforce the short-haul rule strictly, but it ignominiously failed.<sup>5</sup> The *Seehafen-Ausnahme-Tarif*, and a large number of other special rates permit charges in derogation of the short-haul principle. Even the earnest defenders of state railways confess that numerous exceptions are indispensable.<sup>6</sup>

In Switzerland the short-haul principle is maintained in a recent report of the Diet, but exceptions are permitted in the

<sup>1</sup> The accounts of European practice in the New York Commission Report on the *pro rata* bill are inexact and untrustworthy.

<sup>2</sup> Cf. the ministerial rescripts in Krönig, *Die Differentialtarife der Eisenbahnen*.

<sup>3</sup> Bundesrath, Sitzung vom 6. April, 1877.

<sup>4</sup> "Ziemlich häufig" is the phrase used by a prominent German official in a letter to me. The matter is decided in every case "auf Grund der jedesmal vorliegenden thatsächlichen Verhältnisse."

<sup>5</sup> Cf. especially the test. of Forbes in English Select Committee Rep. (1882). Evid. 169 *et seq.*

<sup>6</sup> Ulrich, *Eisenbahn-Tarifwesen* (1886), pp. 150-152.

case of foreign competition.<sup>1</sup> In Austria the short-haul clause is inserted in many of the railway charters, but both in the state and in the private lines the exceptions are exceedingly numerous.<sup>2</sup> In Belgium and Holland, where the laws literally interpreted enjoin mileage rates, the vast majority of actual charges are arranged according to special rates, many of which permit greater charges for the shorter distances.<sup>3</sup> In Italy similar special rates may be approved by the government.<sup>4</sup> Thus in no country where the tariffs are fixed by the state or subject to public control is the short-haul principle an absolute rule.

In England, indeed, the short-haul principle has been affirmed by the courts,<sup>5</sup> and the railway commission has of late gone even further in its opposition to differential rates. In the celebrated Broughton and Plas Power Coal Company case it was held that the charge for the longer distance must not only be greater than for the shorter distance, but must actually more than suffice to cover the total cost of the extra service.<sup>6</sup> But these decisions have had very little influence on the actual arrangements of tariffs in Great Britain, and have been severely criticised in the parliamentary commissions.<sup>7</sup> The decisions, moreover, are by no means uniform, and in a very recent case it was held by the court that differential rates are perfectly legitimate if in the one case the rate is a local rate, and in the other simply a portion of a through rate.<sup>8</sup> It is not "under sub-

<sup>1</sup> Bericht des Bundesrathes an die Bundesversammlung, Nov. 23, 1883; in Hürlimann, *Die eidgenössische Eisenbahngesetzgebung* (1887).

<sup>2</sup> Schreiber, *Das Tarifwesen der Eisenbahnen* (1884), S. 181, 191, 199. Cf. Nördling, *Die Selbstkosten des Eisenbahntransports* (1885), S. 219.

<sup>3</sup> Jacqmin, *Étude sur les chemins de fer des Pays-bas* (1882), p. 87; Nicolai, *Les chemins de fer de l'État en Belgique* (1885), p. 29.

<sup>4</sup> Agreements of 1885 with the Mediterranean lines, cap. 4, § 39, 44.

<sup>5</sup> Cf. *Budd vs. London and Northwestern Railway Co.*, 36 L. T. N. S. 802. This was a case of sea competition. The decision was opposed to the principle of the older decisions under Cardwell's act.

<sup>6</sup> Railway Commission, Tenth Report (1883).

<sup>7</sup> Select Com. (1882), Evidence, pp. 71, 89; especially the celebrated cases of *Evershed* and the *Denaby main*.

<sup>8</sup> *Hull, Barnaby and West Riding Junction Railway vs. Yorkshire and Derbyshire Coal Co.*



stantially similar circumstances." Lord Stanley's bill of 1887 in fact expressly provides that the justice of differential rates should be measured by the necessity of securing the traffic.<sup>1</sup>

We are thus prepared to pass an opinion on the Interstate Commerce law. The short-haul clause reads as follows :

That it shall be unlawful for any common carrier subject to the provisions of this act to charge or receive any greater compensation in the aggregate for the transportation of passengers or of like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line, in the same direction, the shorter being included within the longer distance. . . . Provided, however, that upon application to the commission appointed under the provisions of this act, such common carrier may in special cases, after investigation by the commission, be authorized to charge less for longer than for shorter distances for the transportation of passengers or property ; and the commission may, from time to time, prescribe the extent to which such designated common carrier may be relieved from the operation of this section of this act.

It is improbable that the commission will interpret the act in the sense that the words "under substantially similar circumstances and conditions" justify all existing differential rates due to competition. This would practically emasculate the law. But on the other hand an analysis of the principles of rates and the results of European experience have shown us that any attempt to apply the law in all cases would be ruinous. A strict enforcement of the short-haul clause would most certainly result in general discontent and a speedy repeal. The safety-valve consists in the discretion afforded to the commissioners, and upon them the success or failure of the law depends. The act is an expression of a correct principle, but the limitations of the principle are no less obvious. The country is to be congratulated on the legislative recognition of the rule ; let us trust that there may be equal cause for congratulation on the official recognition of its limitations.

Our preliminary conclusion may now be formulated. Under a system of free competition among private railways the

<sup>1</sup> Railway and Canal Traffic bill, § 25, sec. 2.

principle of value of service or charging what the traffic will bear is the only rational method, calculated to give the most efficient service and the greatest profits. But the existence or possibility of the abuse of power requires the restriction of this unlimited liberty in the public interest. The reconciliation of the railways and the public can take place only through the interposition of public authority. The public authority must lay down the rule of equal treatment as the fundamental doctrine, but must recognize the principle of value as a reason for departing from the doctrine in any individual case. Omission of either duty necessarily entails injustice or inefficiency. The short-haul clause is a partial recognition of the demand for equal treatment; the discretion given the commission is implicitly a partial recognition of the theory of value. The Interstate Commerce act thus accepts the principle and concedes its limitations; in this respect at least it is a wise and judicious measure. For the commission to ignore the limitations in the attempt to realize the principle would be an act of consummate folly.

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*(To be continued.)*

## HOW CUSTOMS DUTIES WORK.

A PECULIAR change has of late come over the character of the never-ceasing controversy as to what is the wisest system of customs duties. Not only do we see the free-trade party in this country becoming bolder and more persistent in their attacks on our protective policy at the same time that a sentiment in favor of imitating that policy has begun to raise its head in the land of Cobden and Bright; but American protectionists, who have always appealed to the marvellous advance of the United States in the last quarter of a century as an argument worth more than any theories of political economy, now seem more inclined to prove the logical correctness of their views than to show their practical effect, while free traders are turning from theory to fact, and begin to claim that the logic of events is on their side. The transformation cannot be without cause, and the most obvious one is a fact which has been freely conceded only by a few — that economic conditions vary inevitably in different countries, and are constantly changing with the progress of time. Oblivious to this, the advocates of either cause go on threshing out the same old chaff which was once wheat, repeating arguments that are now as applicable to the situation as would be a discussion of the feudal system in an effort to settle the labor question.

Forty-five years ago, English public sentiment had been so fully convinced of the need of encouragement to manufacturing industries, that English statesmen resolved to withdraw the protective barriers against foreign breadstuffs which had kept up the price of domestic produce and thus insured high rents to the landlords. Twenty years later, after a period of modified free trade, we began to carry out a radically different fiscal policy; due to a variety of causes perhaps, but if not in the first instance the outcome of a definite economic conviction, certainly