5-8-1941

The Iron Horse: A General Survey of the Railroad Problem

Harry L. Showalter
Ursinus College

Adviser: James Boswell

THE IRON HORSE

A General Survey of the Railroad Problem

A Thesis

Submitted in partial fulfillment of
the Requirements for Department Honors

By
Harry L. Showalter, Jr.
Ursinus College
Collegeville, Pa.

Approved by James H. Boswell
Department of Economics
May 8, 1941

Table of Contents

The Iron Horse

A General Survey of the Railroad Problem

***

From small beginnings in 1830 when the first railroad was constructed, the railway industry has played a major part in the development of the United States, knitting together its far flung and remote quarters. It has surmounted mountain barriers, traversed deserts, plains, and prairies, and spanned mighty rivers. It has enabled the free interchange of the various products of nature and man's own creation. Today the railroads in the United States occupy one of the highest pinnacles of our industrial life. They have rightly been called our "twenty-percent industry", because they normally purchase that much of the basic products of the country each year. Since they do constitute one of our major industries, events of an economic or political nature soon have their repercussions on railroad balance sheets; and, in turn, their prosperity or adversity has its profound effect on the welfare of the nation.

Today these railroads are facing a definite crisis. It is the purpose of this paper to trace the legal and economic history of the roads, to make a statement of what the writer conceives to be their present condition, to clear up a few of the popular misconceptions that seem to exist concerning their problem, and finally to offer some authoritative suggestions and predictions as to their future. To this end I have made liberal use of comprehensive statistics that are available, of the reports of various investigating bodies, and of the critical surveys and evaluations by economists, political administrators and railroad leaders themselves.

I. Public Demand in the 70's and 80's for Federal Railroad Legislation.

Section 8, Article 1 of the Constitution provides that: "The Congress shall have power...to regulate commerce with foreign nations and among the several states and with the Indian Tribes...and to make all laws which shall be necessary and proper for the carrying into execution of the foregoing powers and all other powers vested by the Constitution in the Government of the United States or in any department or office thereof."

The constitution did not, of course, interpret itself, so in due course the phrase "to regulate commerce" came before the Supreme Court for interpretation in cases arising from disputes among the states. There is a long line of leading cases in which the Court upheld the complete power granted to the Federal Government to regulate interstate commerce.

During the first eighty years of the Government's existence Congress did not exercise its power to regulate the conduct of railroads engaged in interstate commerce. Its first regulation was passed in 1866 and authorized railroad companies chartered by the states to carry passengers, freight, etc., from one state to another and to receive just compensation therefore, and to connect with roads of other states so as to form continuous lines for transportation of the same from shipping point to destination. In 1873, an act was passed regulating the transportation of livestock over common carriers.

In the same year Congress authorized the appointment of the Windom Committee to report upon the subject of transport-

ation between the interior and the Atlantic seaboard; and later, in 1886, the Cullom Committee was appointed to make certain recommendations, out of which grew the Act to Regulate Commerce, establishing the Interstate Commerce Commission as the governing body for the railroads.

While Federal legislation dealing with interstate commerce came at a later date, in the development of the country, transportation, in one phase of another, has been the subject of almost continuous public discussion and governmental consideration. It was a matter of Congressional consideration long before the railroad development had reached a stage that entitled it to be considered an important factor in moving the commerce of the country. During the period 1800-1830, when transportation was largely by means of turnpikes and canals, serious consideration was given to using federal funds for a plan which contemplated a protected waterway from New England to South Carolina, along with canals, canalized rivers, and wagon roads to connect this waterway with the Ohio River and the Great Lakes. Such was the crying need for transportation.

Meanwhile, railroad building and construction, which started in the 1820-1830 decade, had been rapidly expanding until there were many small disconnected lines in all parts of the country. With the abandonment of the promoting ~~of the promoting~~ of internal improvements in canals and turnpikes by the Federal and State governments, attention was turned to the development of the new form of transportation, the railroad. In this the governments took a minor part by furnishing credit; but it was left primarily to private enterprise to construct the new channels of communication, although assistance was given by both Federal and State authorities in the

form of grants of land, tax concessions, and subscriptions to bonds to encourage railroad building. By the year 1870 it was substantially a complete private enterprise.

In the process of the development, local systems were connected to form trunk lines extending from the Atlantic seaboard to the central west. As a result of improvements in agriculture, the farmers in this newly developed territory produced large surplusses of foodstuffs, much more than was necessary for domestic consumption, and which could find an outlet only in the export market. Since they depended upon railroad transportation to get their products to the seaboard, the question of finding a successful market hinged upon the rates charged for such transportation. Consequently, then, as now, the freight rate was a matter of importance and concern. As new lines were rapidly being built, and intense rivalry for traffic developed, and rates were highly unstable. Rates were often higher for shorter than for longer hauls, and when farm prices fell the ratio of freight rates to their selling prices became unballanced. Complaints of extortion and discrimination grew.

Since the railroads were owned largely by Eastern and European capital, the feelings against them were intensified, as shippers in the farm belt looked upon them as absentee owners and complained that they took too much away from local communities. The situation finally culminated in what was known as Granger legislation. This body of law established a system of state control by direct statutory regulation, which prohibited extortion and unjust discriminations and prescribed schedules of maximum rates. Gradually the powers over rates were transferred to commissions which had previously

been concerned with accident prevention, the collection of statistics, or seeing that the railroads complied with the laws creating them.

When the Granger legislation got into the courts, which it inevitable did when the railroads resisted attempts tofix their rates, the courts decided that the states had ample power to regulate rates and charges for any business affected with a public interest, either through direct legislative enactment or through public service commissions. Earlier decisions of the Supreme Court had upheld the right of the legislatures to fix rates conclusively, but later the Court reversed itself and provided that such rate fixings should be subject to judicial review. While the states exercised control over local traffic and rates, the great preponderence of commerce was interstate, and no control was vested in any Federal authority to hear complaints or to curb abuses, since Congress had not acted on this subject.

In the early 70's the problem of transportation as it affected the public interest was in a large measure related to what were thought to be unreasonably high, and at times, even exorbitant charges for service, a condition which was largely the result of demands for transportation services developing more rapidly than the growth of facilities to keep pace with the increasing needs of commerce. The railroad industry was looked upon as having a monopoly in the transportation field and hence in a position to charge as it saw fit without regard for fairness to the public which it served.

In response to the public demand for relief from this condition, a committee of the Senate, chaired by Senator Windom, was appointed in 1872 to investigate and report to Congress

possible remedial legislation. The findings of this committee issued in 1874, were substantially that the remedy was more competition. It contained a recommendation that Congress should foster this competition by further development of its waterways and likewise should give consideration to the purchase of one or more of the existing East and West railroad lines to be operated in competition with lines similarly situated but under private management. Here was the first suggestion of a governmental "yardstick" to check on public utility prices.

Had these recommendations been adopted they would undoubtedly have produced chaotic results and would probably have brought the same disastrous consequences that resulted from the intensive competition which was later to arise within the industry itself. The chief cause for dissatisfaction was not in the size of the rates but in what were looked upon as discriminations. Thus competition was the source of the alleged abuses. In addition, the car supply was largely in the hands of private companies. The public, who had no dealings with their agents, but who were in contact only with the railroads, believed the latter to be the cause of many objectionable conditions arising from car service.

New and speculative railroad building in the late 70's and early 80's resulted in an expansion far beyond the transportation needs of the country and reversed the situation existing in the prior period when facilities were far below the demand for transportation services. This development proved to be a sufficient remedy for the complaints raised to date. Nevertheless, it brought with it consequences quite as disastrous from the public point of view as those which resulted from the claimed exorbitant rates; and it thus served to make

clear the fact that public opinion was not so much concerned with the specific level of rates as they were with protection from rebates and practices involving discrimination in both rates and services.

The principal causes held responsible for the conditions at that time (1886) are exceptionally well set forth in answers to the questionnaires of the Cullom Committee, submitted by W. G. Raoul, than President of the Central Railroad and Banking Company of Georgia. He said in part:

"The discriminations complained of by the public are the results of competition...We have taught ourselves to rely on competition for relief from monopoly and extortion, but we are seeking relief when we in reality need none, and the means adopted for relief had brought us face to face with and evil of immense magnitude and out of all proportion to the imaginary one of monopoly and extortion. In the nature of things extortion would have cured itself or have been dealt with by legislation...Its satisfactory solution involves, in my opinion, the entire elimination of the principles of competition in the sense that we now understand competition, i.e., a competition in rates. Just to what extent we can modify competition, to that extent we can decrease discrimination. Therefore, in my judgment, the first step in the case is the study of the question of competition and the devising of some plan for its modification."*

The Collom Committee had been appointed by the President of the Senate March 21, 1855, under the authority of a resolution adopted by the Senate and reading in part as follows:

---

* Cullom Committee Report. 1887. p.128.

"Resolved, that a select committee of five senators be appointed to investigate and report upon the subject of the regulation of transportation by railroad and water routes in connection or in competition with said railroads in the hauling of freight and passengers between the several States..." *

---

*Ibid, p. 1.

II. A Brief Review of Federal Regulation of the Railroads to 1940.

While the states through their legislatures had endeavored to regulate the fares and practices of the railways, in a case which reached the Supreme Court in 1886, that of the Wabash, St. Louis, and Pacific Railroad Co. vs. Illinois (118 U.S. 557), we find the court holding that the regulation of interstate commerce is confined to Congress exclusively. The import of this decision was that since a majority of commerce was interstate, and since Congress had not yet exercised the powers granted to it, there existed no regulating agency. The realization of this, together with the complaints regarding the railways, finally culminated in the passage of the Act to Regulate Commerce of 1887.

The primary objective of this legislation was based upon the theory that the paramount evil chargeable against the operation of the transportation system in the United States was the unjust discrimination between persons, places, commodities, or particular descriptions of traffic. It was hoped that these discriminations could be prevented by declaring them unlawful, by adding to the common law remedies already available for the securing of redress, and by requiring the greatest practical degree of publicity regarding rates, financial operations, and the methods of management of the carriers. Thus all rates were to be just and reasonable, and the pooling of traffic or revenues by competing roads was declared unlawful. Charges were to be equal for like service, and traffic was to be interchanged with connecting lines without discrimination in rates; and it was made unlawful to charge

or receive a greater compensation for services given for a shorter distance than were received for a longer distance over the same line in the same direction under similar conditions and circumstances. The Commission was given authority to determine when departures from the law were permissable.

The law was largely a statement of principles and objectives, but it nevertheless recognized and reaffirmed the right of all users of transportation service to be uniformly treated, both in matter of rates and service, and provided for such procedure as seemed necessary at the time to accomplish these purposes. In declaring that rates should be uniform and not discriminatory for comparative service, and further declaring that such rates, regardless of the competition, should not be exorbitant in intent or general effect, they tended to minimize the effect of competition so far as maximum rates were concerned, and recognized the principle that competition in service alone is in the public interest. Although the provisions for enforcement of the Act were later to prove inadequate, the findamental soundness of the legislation was generally recognized and especially noted by the Interstate Commerce Commission in its first report to Congress.

An appraisal by the Commission of the effect of the regulation in rate making on the railroads after ten years of the Act found that the railroads were left free to make their own rates. The Commission had never claimed the right to prescribe a rate in the first instance but held that its power in this respect was to determine whether a specific rate imposed by a railroad was for any reason in conflict with the law. Accordingly, it had exercised authority to modify or reduce rates fixed by the railroads or to prescribe lower rates

for the future only when they were found upon investigation to be unreasonable or unjustly discriminatory. But Court decisions in 1896 and 1897 had taken away the power the Commission had assumed it had under the original act. Congress failed to act on their recommendation to remove these obstacles to the enforcement of the law; therefore, while the most flagrant abuses were done away with, discriminations continued.

Not until 1903, with the passage of the Elkins Act, was the Commission given authority to correct this major abuse; and, significantly enough, the railroads supported the legislation. This Act made the published tariff filed with the Commission the standard of lawfulness. Departures therefrom were punishable by penalties, and convictions were made applicable to the railroad corporations, as well as their agents, and the shippers involved.

The next amendment came in 1906 with the passage of the Hepburn Act. This gave to the Commission the ratemaking powers which the Court held had not been granted under the original act. The Commission was given authority, on complaint and after due investigation, to declare existing rates unjust or unreasonable and to determine and prescribe just and reasonable maximum rates for the future. No authority, however, was vested in the Commission to prescribe minimum rates. The amendment likewise brought under the Commission's jurisdiction express companies, sleeping-car companies, and pipelines used in the transportation of oil or other commodities, excepting water and gas. The Commission was also given authority to prescribe the reasonable maximum charge to be paid by carriers to the owners of property transported or any service rendered or any instrumentality furnished by such owner in connection with the transportation

of his property. The railroads were likewise prohibited, with certain exceptions, from transporting any commodity in which they had a direct or indirect interest, except for their own consumption. The Act also conferred on the Commission authority to set up a strict supervision of accounting and statistical practices.

The Mann-Elkins Act of 1910 amended the long and short haul clause so as to clarify the provisions for its enforcement in response to the interpretations which the courts had placed upon it. It added the aggregate of the intermediate rates rule and provided that where a carrier reduced its rates to meet the competition of a water transport it could not restore them to their former level upon the elimination of competition, but only as a result of other changed conditions in addition to the elimination of the competition. The Amendment likewise conferred upon the Commission the power to suspend proposed rate advances pending investigation. It also recognized the authority of the Commission to establish and enforce just and reasonable freight classifications.

Other acts supplementary to the Interstate Commerce Act were passed by Congress from time to time. In 1893, the first of the Safety Appliance Acts was enacted, followed by the Block Signal Resolution of 1906, the Hours of Service Act of 1907 (prescribing the hours of duty for employees), the Ash Pan Act of 1908, the Transportation of Explosives Act of 1908, the Locomotive Boiler Inspection Act of 1911 (the Automatic Train Control provisions passed in 1920). In 1912 the Panama Canal Act prohibited railroads to continue ownership or engage in the operation of water lines to lessen competition. Railroads were required to give equal treatment to water lines and to provide

through connections and rates for rail-water movements.

In 1913, the Valuation Act was approved providing for the authoritative valuation by the Interstate Commerce Commission of all common carriers subject to the Act, a task which it took over twenty years to complete at a cost of some $200,000,000. with provisions for furnishing information to enable the Commission to carry on a continuous inventory of railroad property.

The year 1910 really marks the inauguration of an effective system of Federal regulation of railroads. By this time the Commission had been given the powers that many thought it was intended to have when the Act to Regulate Commerce was passed in 1887, but which the court held had not been granted. The abuses about which the public had complained were corrected, but it soon became apparent that the users were not sustaining an adequate transportation system. The rates were not sufficient to provide a margin between revenues and expenses sufficient to sustain credit.

During the period 1900-1910 the railroads enjoyed good credit that enabled them to finance themselves mainly from surplus earnings or sale of capital stock. It is true that during this time there were some receiver-ships and weak places in the system, but on the whole the industry moved foreward. The public enjoyed reasonable rates without discriminations, and competition between railroads as to service was encouraged. The destructive and demoralizing competition in rates of earlier years largely disappeared during this period, but since the Commission had no authority over minimum rates, at competitive points, where one carrier lowered the rate, all had to follow suit in order to participate in the traffic.

The Act to Regulate Commerce forbade pooling. When rail-

roads formed joint associations or used other means to secure economies in operations, the Courts had removed such agencies from the field through the Anti-Trust Acts. There were many purchases and mergers of lines; but these were, for the most part, end-to-end consolidations. Few combinations were made after 1904 of competing lines, since the Anti-trust Laws could be invoked to prevent them.

In June, 1914, the Supreme Court in the Shreveport case (234 U.S. 342) decided that the Interstate Commerce Commission had the power to control intrastate rates maintained by a carrier under state authority to an extent necessary to remove the resulting unjust discrimination against interstate commerce arising out of the relation between such intrastate rates and interstate rates which were reasonable in themselves.

From 1900 to 1910 the price level was on a gradually ascending scale, and with the outbreak of the European War in 1914 there was a very sharp increase in the cost of conducting railroad operations, so that in 1916 another Congressional investigation was commenced by the Newlands Committee to seek a remedy for the than ailing transportation industry. The Interstate Commerce Commission had denied or only partially granted rate increases sought by the railroads, and the two-cent fare law in a number of states restricted increased passenger fares. In order to overcome inconsistencies in the regulation due to variations in the state and Federal laws it was proposed at the Newlands hearings that Federal incorporation of the railroads be ordained in order to remove them under one central regulating authority.

Following the United States' entrance into the World War, the carriers were taken under Federal control by Proclamation of the President on December 26, 1917. Federal control contin-

ued until March 1, 1920, at a standard return to the owners based on the three-year average, 1915-1917, known as the "test period". While the war ended in 1918, Government operation continued until the later date, as the properties were run down and business and industry had not been stabilized. The railroad situation was again surveyed by a Congressional Committee, the studies of which culminated in the Transportation Act of 1920. This Act further extended the principles laid down in the Act to Regulate Commerce, which since 1920 has been termed the Interstate Commerce Act, and attempted to provide means of insuring continued private operation of the railroads.

Accordingly, the Commission was given a mandate to see that for carriers as a whole or in the aggregate in rate groups, under honest, efficient, and economical management, the level of rates was sufficient to provide a fair return on value of properties. The Act originally fixed for a two-year period a return of 6 percent, and in 1922 the Commission reduced the rate to 5 3/4 percent.

In determining the percentage the Commission was to "give due consideration to the transportation needs of the country and the necessity...of enlarging such facilities in order to provide the people of the United States with adequate transportation." Recognition was given to the fact that under the then existing corporate set-up there would always be strong and weak roads, that under uniform rates in a given territory this inequality would continue and some roads would earn more than a fair return while other roads less favorably situated would earn less than a fair return. The legislation provides for the recapture of excess earnings during any one year and

the payment of one half of the amount to the Interstate Commerce Commission to be used as a revolving fund for loans to weak roads and the retention of the other half in a reserve fund to be kept by the carrier.

The Transportation Act of 1920 also provided that the Commission should formulate a plan of consolidation for all the railroads in the country into a limited number of systems. Consolidations not in accordance with the plan were prohibited, except that the Commission had the power to modify the plan at any time. In preparing the plan the Act directed that competition was to be preserved as fully as possible; and wherever practicable the existing routes and channels of trade and commerce were to be maintained; and, most difficult of all, systems were to be so arranged that the cost of transportation ~~were to be so arranged that the cost of transportation~~ as between competitive systems and as related to the values of the properties should be the same, so far as practicable, so that the systems could employ uniform rates in the movement of competitive traffic and earn substantially the same rate of return upon the value of the properties. Pooling, while still prohibited, was to be permitted, subject to the approval of the Commission, where it was in the interests of better service to the public or economy in operation, where it would not unduly restrain competition, and where carriers involved assented to the plan. To extend further the power of the Commission over rates and to prevent unwise competition in rates, the Commission was given jurisdiction over intrastate rates where they interfered with interstate rates. To attract more capital to the industry and to prevent abuses, the Commission was likewise given authority over the issuance of securities. Extent-

ions and abandonments of railroads were required to be approved by the Commission in an endeavor to prevent unwise expansions and to insure the public adequate transportation service.

The Act placed the wages and working conditions of employees under an independent board to be known as the Railway Labor Board, definitely dividing the responsibility for wage levels on one hand and rate levels on the other, thereby creating a situation fraught with difficulties from the managerial standpoint. This was superceded by the Railway Act of 1926, establishing a procedure of arbitration in case of wage disputes. This Act was later to be amended without altering the anomalous situation here mentioned.

When the Transportation Act came before the Supreme Court, the Court again held that the Commission had "full power and duty to raise the level of intrastate rates when it is found that such rates are so low as to discriminate against interstate commerce and unduly burden it" (257 U.S. 563). In making divisions of joint rates between groups of carriers it was held that the Commission might "in the public interest consult the financial needs of a weaker road in order to maintain it in effective operation as a part of our transportation system and give it a greater share of such rates if the share of the other roads was adequate to avoid a confiscatory result." (261 U.S. 184)

Some had insisted that the power to regulate commerce was limited to the fixing of reasonable rates and the prevention of those which were discriminatory, and that when these objectives were attained the power of regulation is exhausted. Answering this contention the Supreme Court said: "To regulate in the sense intended is to foster, protect, and control the commerce with appropriate regard to the welfare of those who

are immediately concerned, as well as the public at large, and to promote its growth and insure its safety." (263 U.S. 456)

The experience of the railways between 1920 and 1930 is well known. During this decade, with the exception of the first few years, the railways together with business generally enjoyed prosperity, although at no time were they able to earn so much as the 5 3/4 per cent set as a "fair return" on their valuation. An intensive development took place in the railroad plant in an endeavor to furnish adequate transportation service. Over eight billion dollars of gross capital expenditures were made, which, after retirements, added six billion dollars to the investment account with an increase in capitalization of only a billion dollars of capital stock and a billion and a half of funded debt.

During this period the decline in exports, particularly products of agriculture, and changes in the coal industry placed many railroads at a disadvantage, so that when the depression came in 1929 they were poorly prepared to weather a prolonged and severe business recession. New modes of transportation had appeared which made it even more difficult for the railroad industry to hold its position.

As the depression grew in intensity, railway revenues continued to fall until at the bottom in 1932 there was a 50 per cent reduction from what they had been in 1929. Sweeping measures were taken by railroad management to maintain solvency, but one by one major railroads went into bankruptcy until one-third of the mileage is now in the hands of receivers or trustees. Wage reduction was resorted to, and a vast scale of economies in conducting operations took place, and expenses were reduced almost to the same degree as the decline in revenues. But the steadily dwindling net income

brought about the realization that something had to be done about the railroads if they were to continue in private hands. A pooling plan for the collection of surcharges on certain commodities was instituted, and funds thus obtained were loaned to needy roads under prescribed conditions. This was carried on until the plan was permitted to expire in October, 1933. In 1935 the plan was revived and continued until the end of 1936 with some modifications. Then proposals for a general rate increase were filed, parts of which were granted in 1937 and 1938. In the meantime, as the railways had lost to a large extent any means of securing funds from private sources, monies were provided, under certain conditions, for capital expenditures and to pay operating expenses, through the Reconstruction Finance Copporation.

The Emergency Transportation Act of 1933 amended the Interstate Commerce Act in certain particulars, repealing the unworkable recapture clauses and changing the rule of rate making. It removed the mandate to the Commission to approve rates that would insure a fair rate of return on the value of the property. It provided that the Commission should give consideration to the effect of rates on the movement of traffic, to the need in the public interest of adequate and efficient railway transportation at the lowest cost consistent with the furnishing of such service, and to the need of revenues sufficient to enable the carriers to provide such service. The Act likewise provided for the office of Federal Co-ordinator of Transportation, whose duty it was to eliminate competitive wastes, but whose action was restricted by the provision that any order entered into by the Co-ordinator should not reduce the number of employees below that prior to the Act. In

addition to being opposed by labor, the co-ordinator, Joseph B. Eastman, found himself confronted with the opposition of both the security owners and more particularly the railway management, as many of the co-ordinations proposed had been considered previously by the management and rejected a impracticable. While a great many studies were made and recommendations suggested, no important ones were effected. The office was permitted to expire in June 1936.

III. Present Condition of the Railroads: What It Is and What It Is Not.

What briefly is the condition of the railroads at the present date? For an answer to this question, let us look first to a terse statement by a railway executive.

"This is a day of change for all business. Partly by reason of government intervention -- I do not say interference, though doubtless many of you would prefer that term -- partly because of normal, natural, evolutionary processes, methods of conducting business have undergone and are undergoing great changes. Whether this process of change is enforced by the injection of outside influences, such as increased taxes due to social security legislation, or radical changes in practices dealing with labor, such as caused by the Wagner Labor Act, or whether the change is imposed by the entrance of new factors arising from the invention of new machines, it must be faced by business of every character and recognized as a vital factor in the business structure. Nowhere has this process of change been working more vigorously than in transportion.

"In the 25 years just passed the transportation picture has completely changed. No longer have the railroads a monopoly of land transportation. With the arrival of the bus and the truck, competition in transportation has come to stay. Then, in the last few years there has been a brand new element affecting passenger and mail transportation; and, in a less degree, also express and freight. I refer to the airplane. And, thanks almost wholly to government subsidy, even water transportation recently has enjoyed a renaissance. Thus, today, far from enjoying a monopoly, the railroads are faced with as

fierce and well directed competition as has challenged the initiative, the intelligence, and the energies of any industry. It is up to the railroads...to meet this competition by new and constructive methods." *

After this fairminded and aggressive summary the speaker went on to say that the railroad industry was doing just those things. What he says of the present capacity and future possibilities of his industry will be dealt with later.

In an equally terse and thoughtful summary of what they conceive to be the condition of the roads at the present time, The Interstate Commerce Commission sets forth, in effect, the following information:

The "railroad problem" is not peculiar to our own time or our own country. It is more accurately a "transportation problem". Every nation and every time has had one. Our own particular problem is paralleled in Great Britain today, and similar problems exist all over the world. The background is the fact that the railroad industry has been one of our greatest institutions here in America. Upon the transportation it has furnished, the nation has built. Billions have gone into the industry, to a very great extent on the belief that it was a place where savings could be invested safely. Directly or indirectly, the larger part of our population has a financial interest in it. Eighteen years ago it gave employment to as many as two million persons. It has been one of the great consumers of raw materials and manufactured products.

---

*Address by Matthew S. Sloan, Chairman of the Board and President, Missouri-Kansas-Texas Lines, before a Joint Luncheon of the Trans-Missouri Shippers' Board and the St. Louis Traffic Club, At Hotel Jefferson, St. Louis, Missouri, March 7, 1939.

At the present time, railroad companies operating about 31 per cent of the total mileage are in bankruptcy or receivership. Of the remainder, only a fortunate few are paying dividends. A considerable number have been saved from bankruptcy for the time only by Government loans. Less than a million persons are now employed. A considerable mileage has been abandoned, and many more abandonments are in prospect. New construction is practically at a standstill. Purchases of materials, supplies, and equipment have been curtailed drastically. Adequate maintenance of properties has in many instances been sacrificed.

Those who put their faith in the industry, including both investors and employees, are disheartened. Among the investors who have suffered severely are insurance companies, savings banks, and other fiduciary institutions. The curtailment of railroad purchases has been one of the important factors tend- to intensify and prolong the general industrial depression. These conditions have generated the widespread demand that somebody "solve" the problem. *

All of these facts could be set forth in the form of indictments. They are charges against the railroads, charges that must be faced and faced straightforwardly. Nobody realizes this more acutely than do the nation's railway executives. Many of these charges have been faced. Many answers have been given. Some of the blame has been honestly shouldered by railroad leaders themselves. Other conditions have been charged off by them to other causes. With these answers by railroad

---

*52nd. Annual Report of the Interstate Commerce Commission, Nov. 1, 1938, p. 1-2.

and administrative leaders we shall deal; but first let us clear up some popular misconceptions, that we may be able to face the issue squarely and without prejudice or misunderstanding.

Railroad difficulties are not due to any inherent defect in their method of doing business. They are today carrying the major part of the commerce of this country for an average of about one cent per ton-mile, and average far below that for any other form of transportation. Moreover, the railroad has not the privilege of selecting its traffic. It must haul anything, anywhere, any time.

Rail difficulties are not due to a deterioration of service, for the service today is faster, safer, more dependable, than it was in the years of greatest railroad prosperity.

Rail difficulties are not due to a decline in efficiency, because by every indication they are operating more efficiently today than ever before. To take only one figure of the many that could be cited, the mass output per hour of transportation service by freight trains, less than twenty years ago, averaged around 7,000 ton miles. Last year it averaged nearly 13,000 ton miles. Lesser gains in other industries would be greeted as nothing short of spectacular.

Rail difficulties are not the results of overcapitalization. The recorded investment in road and equipment at the beginning of 1938, according to the Interstate Commerce Commission, was $26,598,000,000. This figure does not by any means represent all the money invested in railroad property. Large sums invested in the past have been written off as a result of numerous receiverships and also as a result of retirements, abandonments, etc. The recorded investment, representing the money which is

invested in existing facilities, and equipment, amounting, as stated, to $26,598,000,000 at the beginning of 1938, exceeded the total par value of all stocks, bonds, and other railway securities in the hands of the public by $7,684,000,000. or by 40 per cent.*

Rail difficulties are not the results of an increasing burden of capitalization, contrary to much loose talk on the subject; for it has not increased. In the days of greatest railroad prosperity stocks and bonds together amounted to $987.00 for each thousand dollars invested in railroad property. Last year they amounted to $721.00.

Rail difficulties are not due to an increasing burden of debt. In the years of railroad prosperity, railroad debts amounted to about 60 cents for each dollar of investment. Last year the debt amounted to only 44 cents for each dollar invested.

Neither are rail difficulties due to an increase in the burden of fixed charges as compared with revenue. In 1937, fixed charges, which is interest paid or due on bonds, amount-to 15.3 cents out of each dollar of rail revenue. This figure is lower than in any of the prosperous years of the Rails' existence.**

---

*(Incidentally, the cost of valuation work undertaken by the I.C.C. to the close of 1938 was $50,589,000 to the Federal Government and $156,651,000 to the railroads, -- a total of $207,240,000 or 43 times the amount estimated by the chief sponsor of the valuation bill.)

**All figures hereinabove cited are from the 1939 Edition of A Yearbook of Railroad Information, Committee on Public Relations of the Eastern Railroads, New York.

So much, then, for what is not the trouble with the railroads. What positively are the underlying difficulties that have put the roads in their present condition? The man, woman, or child with a conclusive answer to this question and adequate suggestions for its remedy could undoubtedly reap a fortune. But there are many basic difficulties facing the railroad industry that are readily apparent to the layman upon a little investigation. These I shall discuss now, and where remedial suggestions are apparent or in order I shall make them.

IV. Some Answers to the Railroad Problem

The last year in which the railroads as a whole earned as much as five percent of the money invested in them was in 1916. Last year the railroads handled almost the same amount of business as they did in 1916, and handled it far better, largely because of improved plant and methods made possible by the investment of millions of dollars of new capital since that time. But here is what happened since then: Railroad wages have more than doubled, whether they are calculated in cents paid for each hour worked, or in dollars earned each week or each year. The burden of railroad taxes has more than doubled. Then, too, there has been a substantial increase in the prices of almost everything railroads must buy and use. But the revenue railroads receive for hauling a ton of freight a mile is only about one-third more than it was in 1916, and the revenue from carrying a passenger a mile is actually less than it was then.

This condition in railroad earning power is essentially a matter of rates and brings to light a suggestion that has been made in all recent committee reports to Congress or to the President,* and in reports and suggestions from the railroads themselves.

The rate-making clause needs revision. The Government should reiterate its intention to support a system of railroads that will continue to be adequate to meet all needs of commerce and national defense, and should support that declaration by such changes in the present statute as are necessary to accomplish the purpose so declared. I shall not undertake

---

*Report of the Emergency Board to the President, Sept. 1938, p 38-40; and Report of Committee Appointed Sept. 20, 1938 to Submit Recommendations Upon the General Transportation Situation, Dec. 1938, p.14-15.

to state the precise changes that should be made. It is clear, however, that they should be in the direction of restoring to the railroads the power to decide for themselves all questions that are essentially managerial in their nature instead of leaving such questions to the determination of a regulatory body which assumes no responsibility for the results of its action. Probably the best way to bring this about would be to revise the rule in such a way that all reference to the effect of rates on the movement of traffic would be eliminated, and to place greater emphasis on the right of the railroads to earn a fair return upon the value of their properties, subject, of course, to the continued authority of the Commission to deal with individual rates to the full extend necessary to see that they conform to the statutory requirement of being reasonable and free from unjust discrimination.

The above change in the rate-making clause are adjudged necessary, because with years of experience and a wealth of information the Commission has been unable to arrive at a rate making standard of any sort that is varied enough or flexible enough to furnish a square deal to the majority of the nation's railroads. This is no indictment of the fairness or the intelligence with which the Commission has attempted to carry out the present provisions of the Act. The railroads are so heterogeneous and their markets of such varied capacities that it is impossible to set up any sort of rate classifications that will be fair to all railroads, even for a small area. This the Commission must attempt to do now. Therefore, the provisions of the Act which impose this hardship must be altered.

It is generally agreed by railway leaders and admin-

istrators alike that Congress and the state legislatures should refrain from passing laws which create additional and unnecessary expense in the guise of safety. Such, for example, are the so-called full crew and train limit bills, which have been proved by the most experienced and expert testimony to result in greater hazard and actual danger to life and limb than already exists. Moreover, in judging the practicability and necessity of any new appliance or regulation, the legislative body should take into prime account the testimony of railroad and administrative experts as well as the high pressure salesmanship of the manufacturer or interest group.

It would also be very helpful if the Reconstruction Finance Corporation were authorized to loan money to the railroads without the imposition of highly restrictive conditions with respect to security. Especially should the Interstate Commerce Commission be prevented from denying loans to those companies which it deems needy of reorganization, except in extreme cases where the capitalization is inordinately high and needs to be taken through the wringer. That these bars can be safely lowered is indicated by the fact that loans to the railroads after the World War and those already made under the R.F.C. have been repaid at the maturity dates with interest in a manner comparing very favorably with other businesses.

It is especially necessary and desirable that these barriers to loans be lowered because of the peculiar public status of the railroad. Because it is adjudged to be in the "public interest" the railroad is not allowed to earn sufficiently in good times to accumilate a surplus for depression

times. Its rates are so set in prosperity that it is able to earn a mere working margin, while in depressions such as this one it is not allowed to alter such rates upward but must run at a loss if necessary in order that service be provided. For this reason, as an aid to recovery and to sustain employment, a certain amount of money should be loaned to the railroads in times of depression to be devoted to maintenance of both roadway and equipment, and such loans should be on very easy terms, both as to interest and repayment of principle.

The land grant statutes, which have long since served their purpose and have been highly remunerative to the Government, should be repealed. And the Government should not ask, as a matter of legal right, to have its traffic transported for any less rates than are paid by its citizens.

In the early days of the railroads land was given rather freely by the Federal Government to induce them to build into the unsettled West. Some 132,425,574 acres have been given to the railroads in this way. The value of such lands to the railroads is questionable and varies from road to road. Questionable also is its value to the government at the time given. Hibbard has estimated that the total value of all such lands at the time was no more than $162,000,000, and that whatever additional value accrued to them came as a result of the railroads themselves. In return for such land grants the railroads so constructed are bound by old statutes to carry Government mails at 80% of their regular rates and other Government freight at 50% of the usual rates. It is variously estimated that the Government receives anywhere from $5,000,000 to $7,000,000 each year in reduced rates. Economist Duncan, who is the most conservative, estimates that the Government gets repaid for its land grants at least every thirty-two

years. Therefore, it can readily be seen that the Government has been repaid several times in this manner as well as in the increased value brought by railroad building to the public domain.*

For the above stated reasons, I feel that the Government should no longer place this unjust burden on an overburdened industry.

We have for some time sought to create so-called "cheap transportation" by lifting from the user and placing on the taxpayer a large portion of the cost of producing service on waterways, highways, and airways. If this resulted in really cheap transportation there would be economic grounds for and no logical criticism against such a policy. But if such transportation were economical, the users should be willing to pay what it costs, including not merely the cost of moving the vehicle but the cost of providing the maintaining the ways upon which the vehicle moves. The fact that we no longer collect tolls on our improved inland waterways, as we once did, is a clear indication that such service exists only through the unwitting bounty of the taxpayers throughout the country.

The same might be said of the highways. The forms of transportation using these ways contribute only a part of the upkeep through their license and tax fees. Railroads, on the other hand, pay huge taxes each year, taxes which go into all of the normal services and functions of government. In addition, they maintain their own ways out of revenues. The disadvantage at which railroads are placed in competition with these forms of transport is obvious.

---

*D. Philip Locklin, Economics of Transportation, Chicago, Business Publications, Inc., 1938, p.69.

Facts and figures on the actual amounts of maintenance cost for the highways that comes out of the public pocketbook are difficult to obtain and tabulate with accuracy. For waterways, however, this is not true, and they serve as typical evidence for both. Look at the New York Barge Canal for instance: It cost the taxpayers abour $340,000 a mile to build, and is costing more than $5,000 per mile each year for its maintenance. Compare this with the average cost of about $61,000 for building a mile of railroad, and the average of $1,700 in annual cost for maintaining it. The New York canal is, of course, an artificial waterway; but so, for that matter, varying only indegree, are most of our improved inland waterways. To make them usable for commerce they have to be built and maintained. Take the Ohio River, which is said to be the most successful of such long distance projects. To build that river has cost the taxpayers more than $140,000 a mile, and to maintain and operate it is costing them about $4,000 per mile each year. And this is by no means the most costly. The improvement of the Missouri River between St. Louis and Kansas City has cost $195,000 a mile for construction and is costing nearly $3,000 per mile each year to maintain. The upper Missouri has cost, so far, $228,000 per mile for construction and $2,300 per mile each year to maintain.*

In view of these veiled costs, amounting to government subsidies, and the unfair nature of this competition with the railroad industry, I suggest that highway and water transport be required to pay their way. Highway transport should pay

---

*Above data adapted from an address by Earnest E. Norris, President, Southern Railway System, Ill. Chamber of Commerce, Chicago, Ill., Oct. 5, 1938, p. 5.

for the use of said highways a fair proportion of their construction and maintenance cost, as well as a proper share of those general taxes which go to support the ordinary functions of government.

Commercial transportation on improved inland waterways (other than harbors and the Great Lakes) should pay tolls sufficient to meet the cost to the taxpayers of constructing, maintaining, and operating such improved waterway facilities. Unfair subsidation, real or effectual, should be discontinued.

Furthermore, in connection with this proposed "square deal" among the various forms of transportation, I should suggest equal regulation by the same public body or bodies for all forms. I suggest that either the I.C.C. be expanded to allow its assuming the function of regulating all three or that such regulations as those pertaining to rates, services, valuation, and accounting be lumped under the Commission for all three while another body be set up to handle securities issues, consolidations, constructions and abandonment, etc. for all. This would co-ordinate such regulation and further aid in promoting fair competition and fair play among them.

A great deal has been said about the economies which would result from consolidation of the railroads and from co-ordination. It is my belief that while there do exist opportunities for economies in co-ordinating the existing facilities in the hands of parallel and competing railroads, it is a matter of extreme difficulty to bring it about, because it ordinarily involves a virtual surrender by one line of its competitive facilities which have been created at at great expense and through long pioneer effort. This is asking too much of human nature.

The question of consolidation, however, presents an

entirely different problem and picture. Consolidation ordinarily means no surrender of the advantages which nature, ingenuity, or foresight, and financial sacrifice have created, but a blending of all these upon a basis which properly considers the past record of each of the units which will comprise the consolidated company. Consolidation has been going on in the railroad business from its inception. As an example, there follows a recapitualtion of a number of the existing large railroad systems with the number of operating railroads which have from time to time been consolidated into the existing system:

New York Central Railroad (since 1900)	82
Pennsylvania Railroad	360
Southern Railway	60
Southern Pacific Co. (West of El Paso)	87
Union Pacific Railroad (since 1898)	32 *

It is a fact that while there was free play these consolidations were occurring constantly, and it is equally true that since the passage of the Transportation Act of 1920, with its provision for a rigid plan, there have been no consolidations of moment.

The present law which requires such a plan should be repealed and in its place there should be a declaration by the Congress favoring consolidation, authorizing the railroads to present to the I.C.C. any consolidation which they might favor, and empowering the Commission, after full hearing and consideration, to approve or disapprove, the public interest to be the sole criterion. The Commission has several times recommended to Congress that the provision for a prior plan be repealed.

---

*Ibid, P.6.

There are certain natural limitations on the type of co-ordination that should be allowed and the amount of mileage a single railroad should be permitted to control. Co-ordinating holding companies having as their sole objective a desire to grab into their net as many roads as possible for the purpose of draining them dry of profits naturally should be stringently prohibited, as they should be in business anywhere. But this need not mean that where operating economies and managerial efficiencies can be achieved by co-ordination, the co-ordination will not take place because of the size of the resulting company. So long as there is a possibility for reasonably close-touch, personal management and a sound economic basis for any consolidation, nothing but the public interest should prevent its being consummated. And the railroads will be highly productive of such plans for further co-ordination if given a freer rein then they now have.

These, then, are the major problems confronting the railroads which their executives refuse to shoulder or accept. They are the problems on which the railway leaders demand action, not always, however, the action herein recommended. These are conditions that must be faced if railroading is to become an efficient and revitalized industry. My opinions on the methods of facing those problems have just been set down. I feel that if these legislative remedies are properly effected, the remainder of the "railroad problem" rests with railroad leaders themselves and the general business conditions for industry as a whole. It is my opinion that railroad executives and others associated with them, on the basis of their past performance during these depression years, will face the remaining burden squarely. I have talked with many

railroad leaders personally, and they are practically unanimous in their desire to build their industry. They have attacked the situation against seemingly unsurmountable odds. They have already begun to shoulder the remaining burden squarely. It is my opinion that they have made great progress; and even discounting the equitable changes that should come from legislative sources, I hold that there is a real future for the industry. That future I shall attempt to set forth, with an attempt to give proper perspective to the many extraordinary circumstances that do now and will continue to plague the normal development of any business enterprise in these times.

V. The Future of the Railroad Industry.

Every one of us has a real and direct interest in the smooth functioning and successful operation of our transportation system. In these days when transportation costs bulk so large in the consumer's budget, when the various production areas of our country are so scattered, when even vertical integrations of the same industry are connected only by a long transportation chain, and when a large part of our population spends much in travel from place to place, -- when these conditions prevail, it is of prime concern to every citizen of this country whether his transportation system is currently adequate, efficiently operated, and sufficiently flexible and farsighted to meet the demands of the future. And the backbone of that vital transportation system is today, as in the past, the American railroad.

The outlook, so far as I have been able to learn, is that railroads will continue to be the basic mass-transportation chain for the American continent. This is true because only on rails is it possible to combine the convenience of the individually loaded and unloaded freight car, which can go anywhere on this continent at any season of the year, with the economy of mass transportation in trains.

One of the great achievements of American industry is mass production, the production of great quantities of desirable goods which can be sold at prices in reach, not merely of the few, but of the millions. Much has been said and written of mass production, its techniques and its accomplishments, but it has been pretty generally overlooked that underlying that distinctively American achievement, tying the whole thing

together and making it possible, is the mass transportation of American railroads.

The great importance of the railroad industry to American industrial life is self-evident. We have traced the economic and legislative background of the roads that indirectly led to and produced the present problem. We have stated, with no attempt to conceal, the real difficulties with which they are currently faced. We have tried to explain away misconceived troubles of the roads, and then to set forth what is wrong with them that is beyond their control. We suggested remedies for conditions that cannot be charged against the railroads themselves and promised to look briefly to their future. This we shall now do.

But to discuss the future to those aspects of railroad development remaining, one must turn to the logical factor on which that development is going to depend. I have told you what of the situation railroad management disowns. I shall now take up that part of it directly dependent on management. And I can think of no better way to take it up than to allow railroad leaders themselves to state and answer those aspects of the future of the roads that rest with them. I might say also that in these answers I find not the slightest degree of partial or prejudiced treatment. Railroad executives are perfectly willing to recognize the shortcomings of their industry and of themselves, and they do not mince terms in replying to these self-imposed charges. In fact, I have found this to be generally true of railroad information, and I have discovered that reputable writers of textbooks and other scholarly pieces are quite willing to quote from railroad, executives, lawyers, or economists.

The best example of the type of discussion that we seek took place before sixty-seventh annual dinner of the New York Railroad Club at the Hotel Commodore, December 7, 1939, attended by nearly 3,000 representatives of railways, railway supply firms, and other industries. A group of transportation experts here contributed their best thinking to a symposium covering the various important phases of the railroad situation. What follows will be an adaptation of their remarks, so set forth as to give a clear insight into the future of the roads.

Willard F. Place, Vice-President in charge of Finance, New York Central System, opened with a discussion of his field. Said he, in effect:

Credit is a variable, subject to rapid change. This applies to railroad credit in a typical degree, for it has been seen to change several times, even within the last few years.

With the rapid decline in the revenues of the railroads which occurred from 1930 to 1933, reuslting from the first impetus of the depression at that time, railroad credit disintegrated and values of railroad bonds and stocks sank to levels not thought possible. Aid had to be obtained from the government to assist in meeting maturities as well as, in many cases, current charges. Even with this aid many companies were unable to carry on and were forced to take refuge in the courts. The years 1932 and 1933 were desperate and trying to the industry.

Yet, within the space of another three years, railroad credit had to a large degree re-established itself. By the end of 1936, bonds had risen to a point where new issues were marketed and loans from the government repaid by many companies. Buyers were again acquiring bonds at high prices which but a short period before were not considered at much lower prices.

The recession in business, which started in the latter part of 1937 and continued into 1938, again affected the credit of the roads. But the basic ability to float security issues evidenced during this semi-prosperous period is still present. All the roads need is a fair measure of business recovery and they will again be able to secure capital necessary to their financial security and development.

W.M. Jeffers, President of the Union Pacific Railroad, dealt generally with his conception of railroad trains for tomorrow. He held that they will show additional advancement in air-conditioning, more improvement in riding qualities, greater reduction in train noises, and the application of new refinements in appointments and comfort facilities.

The passenger train of tomorrow will consume less over-all time between terminals, although it will not necessarily operate at greater speeds between intervening towns.

The freight train of tomorrow will incorporate new discoveries in design and materials, will have better riding qualities resulting in greater protection for commodities being transported, and will operate at higher average speeds with heavier pay loads over improved track structure.

The shipper will have the benefit of simplified tariffs, earlier deliveries, better coördination with auxiliary highway transport, a resultant further reduction in inventories necessary to proper conduct of business, further expansion of the merchandise car and over-night service to the end that all towns within organized zones will have such service available.

The railroad traffic departments of tomorrow will show greater development in aiding the shipper with his problems in packing, loading, and routing to the end that service generally

will be more satisfactory to the shipper and that further reduction may be made in loss and damage claims.

All these things will be made possible by reason of the fact that thinking will be from the bottom up rather than from the top down, that greater reliance will be developed from the combination of the practical with the technical, that everybody will be working for the elimination of waste and duplication, and from a continuance of reduction in expense of distribution, and generally in lowering the cost of mass transportation, both freight and passenger.

The program for bringing about these desirable objectives deals primarily with fundamentals. These may be summarized as follows: reduction of dead time at stations and in yards, further elimination of grade crossings, reduction of curves and grades, and the greater use of the advanced reliability of motive power permitting longer distances with continuous operation.

In discussing the relations of the railroads to the public, A. N. Williams, Executive Vice-President of the Lehigh Valley Railroad Company and Chairman of the Committee on Public Relations of the Eastern Railroad Presidents Conference, admitted the bad financial straits of the roads and conceded that they were the objects of adverse public opinion. However, he went on to add that this basic public misunderstanding of the railroads' condition must be eliminated from the public mind. He pointed out that over the period 1932-39 the railroad industry failed to earn interests and fixed charges by only about fifteen million dollars. During this same seven-year period they paid more than eleven and a half billion dollars for wages and two billion to the government in taxes, in addition to about four and a half billion for fuel, materials, and supplies.

In short, while the railroads were passing through the worst depression in history, they made an important contribution -- more than 18 billion dollars -- to the national economy. Such facts as this Mr. Williams would present to the public through and intelligent publicity campaign, stating fairly and accurately the real conditions in the railroad industry. This, I might add, is being very capably carried out by the Committee of which he is the chairman.

Walter S. Franklin, Vice-President in charge of Traffic, Pennsylvania Railroad, had instructive comment to make concerning improved railroad service.

Recently the railroads have had the opportunity to demonstrate their ability to cope with one of the severest tests which the industry has ever experience -- a 45% increase in freight traffic crowded into a relatively short interval. Yet during this period there was no accumilation of freight. The normal flow of traffic has been maintained, and the nation's car supply was at all times ahead of total demand.

That the railroads were able to give such a good account of themselves is chiefly due to the continuous progress that they have made through the ten years since 1929. This has been a period, not of expansion or extension, but of intensive improvement and refinement, both in facilities and methods of operation. Although the country has been passing through an unprecedented depression, the last five years have witnessed some of the most important advances in railroad history.

To mention a few achievements: Freight train schedules have been quickened, and practically all trains now operate on a scheduled basis. The loads per car and per train have increased greatly. Over-night delivery of merchandise has been

extended to 400 miles or more. The adoption of "pick-up and delivery" has given the merchandise shipper the advantage of complete door-to-door service under full railroad responsibility. These improvements have materially decreased the time in transit, resulting in reduced inventories and tremendous savings to many industries and merchants.

In spite of the increased rates of wages, increased material cost, and taxes, the general level of freight rates has declined from 1.076 cents per ton mile in 1929, to 0.983 cents per ton mile in 1938.

With all the improvements in service and equipment that have been made available to the traveler, passenger fares have been reduced and are drastically lower than when this era of improvements began. Special forms of reduced rate tickets, many of them based on graduated scales, with the cost per mile decreasing with the distance, have proved added inducements to travel.

Hale Holden, Jr., Vice-President of the Pullman Company, entertained the group to what was new in pullman car design and service. I present a full adaptation of it here to show the real constructive development of which the roads are capable, even in depression times. This to me is an excellent inducement for an optimistic view of future expansion.

With the advent of lightweight equipment, began an era of new interior designing. This included many types of new accomodations to which the public responded immediately.

The Section, comprising lower and upper berths, shared in the march of improvements through the convertible feature. This provides ample dressing space through simple, ingenious arrangement whereby half the bed folds upward without

disarrangement, letting the passenger prepare himself for the night or morning in comfortable privacy. The bed is easily lowered or raised by the occupant, or it can be done by the porter while outside the curtains. A shelf and mirror are provided as additional facilities.

The Room accomodations constitute the greatest advance in the design of the latest cars built. All modern Pullman rooms have closets for the storage of clothing and luggage, full toilet facilities, and individual regulation of light, heat, and ventilation.

The Roomette is one of the latest developments and one of the most popular. Although the smallest of the rooms, it has ample space for one passenger, night and day. In the daytime the bed folds up into one wall and the passenger is provided with a sofa seat. If he wishes to lie down during the day, he can lower the bed with ease.

Another single room is known as the Duplex, the rooms being in two tiers, "upstairs" and "downstairs." The large daytime sofa converts into a spacious bed. A table that folds against one wall permits letter writing and the like. Some of the downstairs rooms are en suite through sliding partitions.

The Double Bedroom has accomodations for two persons, the long daytime sofa constituting one bed and the upper berth another. Wash basins and toilets fold inconspicuously into cabinets when not in use. Some of the bedrooms are separated by folding partitions, permitting their use as units or as one large room for family or other parties.

The latest Compartment is a model of compactness with additional comfort obtained through rearrangement. A transverse sofa becomes a bed at night, and there is an upper berth above

the window. In addition to the sofa, daytime facilities are increased by a lounge chair.

Without absorbing additional area in the car, marked spaciousness is attained in the new Drawing Room. As air-conditioning no longer makes it necessary to provide toilet rooms with windows, this facility has been moved to the aisle side. This new arrangement permits two large windows in the drawing room and the utilization of all the most desirable space for sleeping and daytime occupancy. By day the occupants have an actual living room, the sofa and two lounge chairs affording unusual comfort. By night a longitudinal bed folding into one cross wall has been substituted for the former fixed couch; the section seats by the windows have been removed and a long transverse sofa substituted. This is convertible into a bed by night, and above it is another berth. At night the folding bed is at right angles to the others, giving plenty of space for dressing and easy access to the annex, clothes closet, and aisle door.

The Master Room is the ultimate in Pullman accomodations. By day it is a large living room with four movable lounge chairs, while at night two folding beds emerge from the walls, at right angles to each other. There are no upper berths. The toilet annex, in addition to being unusually convenient, has a shower bath. Adjoining the master room is a Double Bedroom which can be thrown en suite, if desired.

In addition to the new lightweight streamlined cars, with the new and improved types of accomodations, a number of older type cars have been rebuilt and remodled to conform with the modern ideas of comfort, color, and speed. Such cars are included on the Capitol Limited of the Baltimore and Ohio Railroad,

and the Forty-Niner of the Northwestern, Union Pacific-Southern Overland Route.

In designing and constructing new cars and remodeling the older ones, the Pullman organization has employed all of the modern materials, such as aluminum alloys, corrosion-resistant low alloy tensile steel and stainless steel, which have been developed in the past few years -- and, also, all the recently developed fabricating processes in car construction.

While not so in the beginning, new lightweight streamlined trains are now generally made up of cars designed to interchange with the conventional rolling stock. Pullman also pioneered in this development.

Service meetings of all classes of Pullman employees are held three times annually, when all are informed of the latest developments in the operating practices, how to meet emergencies, and the requisites of safety.

After this eulogy of Pullman advancement came the speech of R. E. Woodruff, Trustee and Chief Executive Officer of the Erie Railroad Company. This speech stands in healthy contrast to the one that preceded it. Mr. Woodruff discussed progressive railroad operation, and his loyalty was to his subject.

The railroads, like other businesses, are concerned with the training of supervisors and foremen. All railroad officers agree that this is desirable and most are trying to do something about it, but not nearly enough is being done. On a railroad, frequently, a man from the ranks is made foreman or supervisor without previous training in the art of foremanship, and he never really gets such a training, although it is expected that he will in some way acquire the training, and it is hoped by his superiors that someone will pay enough

attention to him to keep him out of trouble.

Other industries have gone much deeper into the problem. In many cases, groups representing management have studied ways and means of getting better results from their staffs and supervisors. Training begins at the top, and their methods are passed down the line through the medium of conferences until each foreman has the benefit of such training and information. This puts the foreman in a strong position to handle work properly; it enables him to know just where the management stands on many questions of policy; then he is able to decide upon and to represent his own views in dealing with the management and in dealing with the men under his jurisdiction. Such training and information is really the backbone of good public relations. More of it is needed in the railroads.

This training in supervision cannot cure all railroad ills, but there is much to be gained by studying industrial methods and applying them to railroad problems. This will not detract from further research work in improving engineering details, but it will be necessary for the progressive survival of the railroad industry.

John J. Pelly, President of the Association of American Railroads, discussed a topic of great current interest, namely, railroads' preparedness for future emergencies. We are all well aware that events here and abroad have focussed attention on a very important question: How well are American railroads prepared to handle peak loads of traffic?

Early last summer the railroads asked themselves that question. They made a careful analysis of their plant and operations, and they concluded that they could then handle at least 25% more business. By repairing cars and locomotives not

needed at the time, they estimated that they could handle 50% more business.

Backing up their prediction with action, the railroads launched a far-reaching program which, besides providing for the immediate restoration of servicible conditions of thousands of freight cars and hundreds of locomotives, included the ordering of such new equipment as the demands of traffic warranted.

The railroads' estimate of capacity was soon put to the test. Virtually overnight, the railroads were faced with a sudden and unprecedented demand for cars. Loadings were heavier than in any period since 1930, jumping from 667,409 carloads in a week ending September 9 to 891,198 carloads in the week ending October 21, (1939) -- an increase of 29% in six weeks.

How the railroads, with the cooperation of shippers and receivers, turned in the most remarkable transportation performance of recent years is now a matter of record. Not only did it exceed the 25% estimate, but in one week handled 45% more business than they were handling when the predictions were made. The job was done without congestion, delay, or a general car shortage; and there was even a surplus of available equipment.

Here it might be well to consider a parenthetical note furnished by the studies of M. J. Gormley, Executive Assistant in the Association of American Railroads and a renowned railroad economist. Mr. Gormley attributes the present ability to step up service without congestion to the following:

The present embargo and permit system for handling freight, developed since 1920 and operated through the Association of

American Railroads, insures that freight cars shall be used for transportation and not storage. Freight is not permitted to be to be loaded on cars unless it is known that it can be unloaded at the destination promptly. The same principle has been adopted by the appropriate agencies of the government for the movement of government freight, thereby insuring against the sort of congestion that caused so much difficulty in 1917 and 1918.

Still another development of importance, which cannot be measured statistically, is the organization of shippers for co-operative purposes into the thirteen regional Shippers' Advisory Boards. These boards were organized in 1923 to work closely with the Car Service Division of the Association of American Railroads. Head-quarters of the various boards are in Boston, New York, Pittsburgh, Detroit, and Atlanta. Their work has been very effective, and in times of stress has been invaluable.

One effect of better shipper co-operation in the use of equipment is that railroad cars are used more efficiently than they were twenty years ago, not only by the railroads themselves, but also by the shippers -- and a freight car spends as much or more time in the shipper's hands, being loaded and unloaded, as it does in the hands of the railroads.* A more graphic idea of the systematic centralization and planning of this and other railroad service operations can be gained from the charts herein inserted -- the charts being some of the many in Gormley's book.

---

*M. J. Gormley, Railway Capacity and Traffic Control, Washington, D. C. Association of American Railroads, 1939. (Avove paragraphs are an abstract of the detailed substance of the book.)

CHART 16

ORGANIZATION CHART - ASSOCIATION OF AMERICAN RAILROADS

- NOVEMBER 1939 -

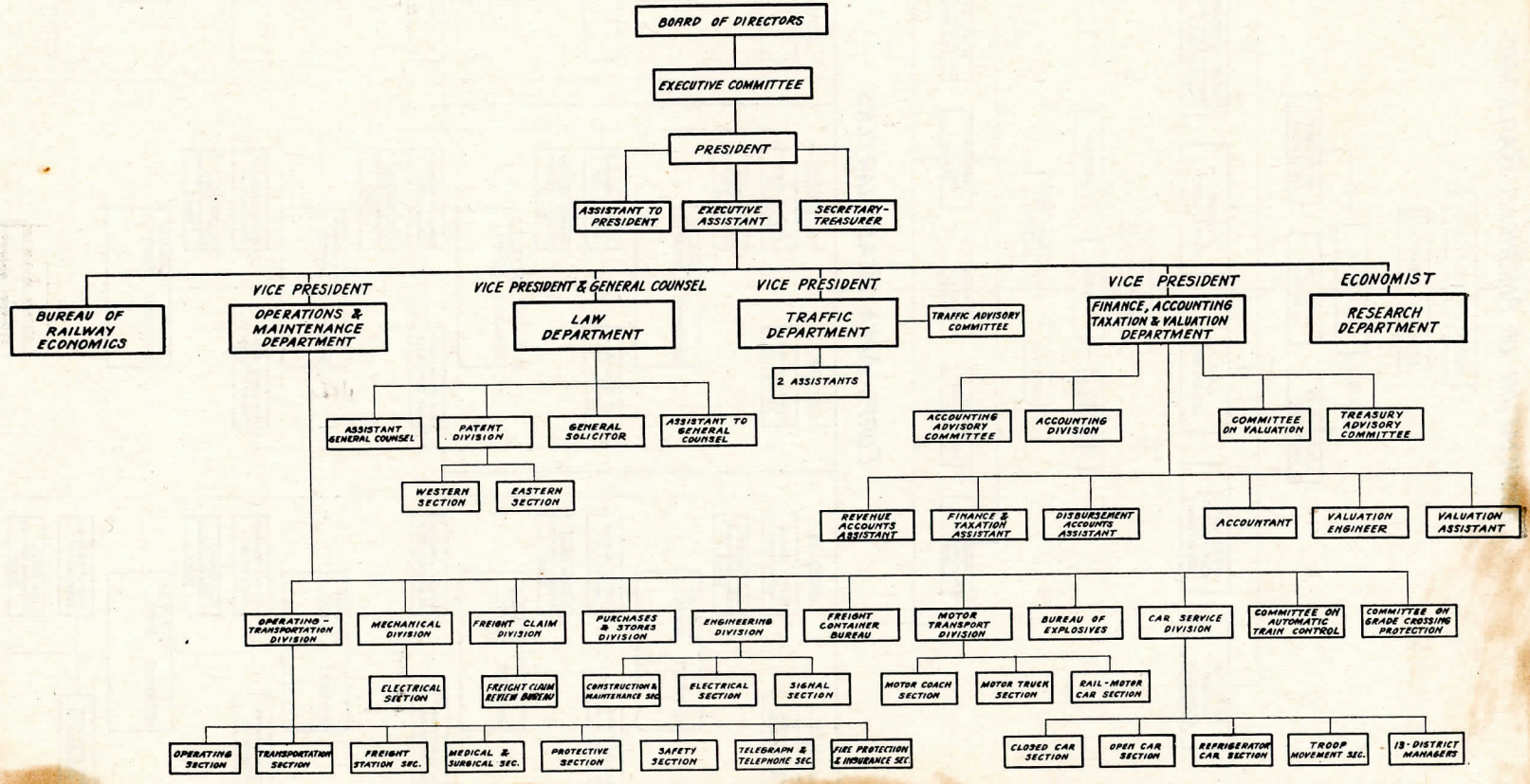
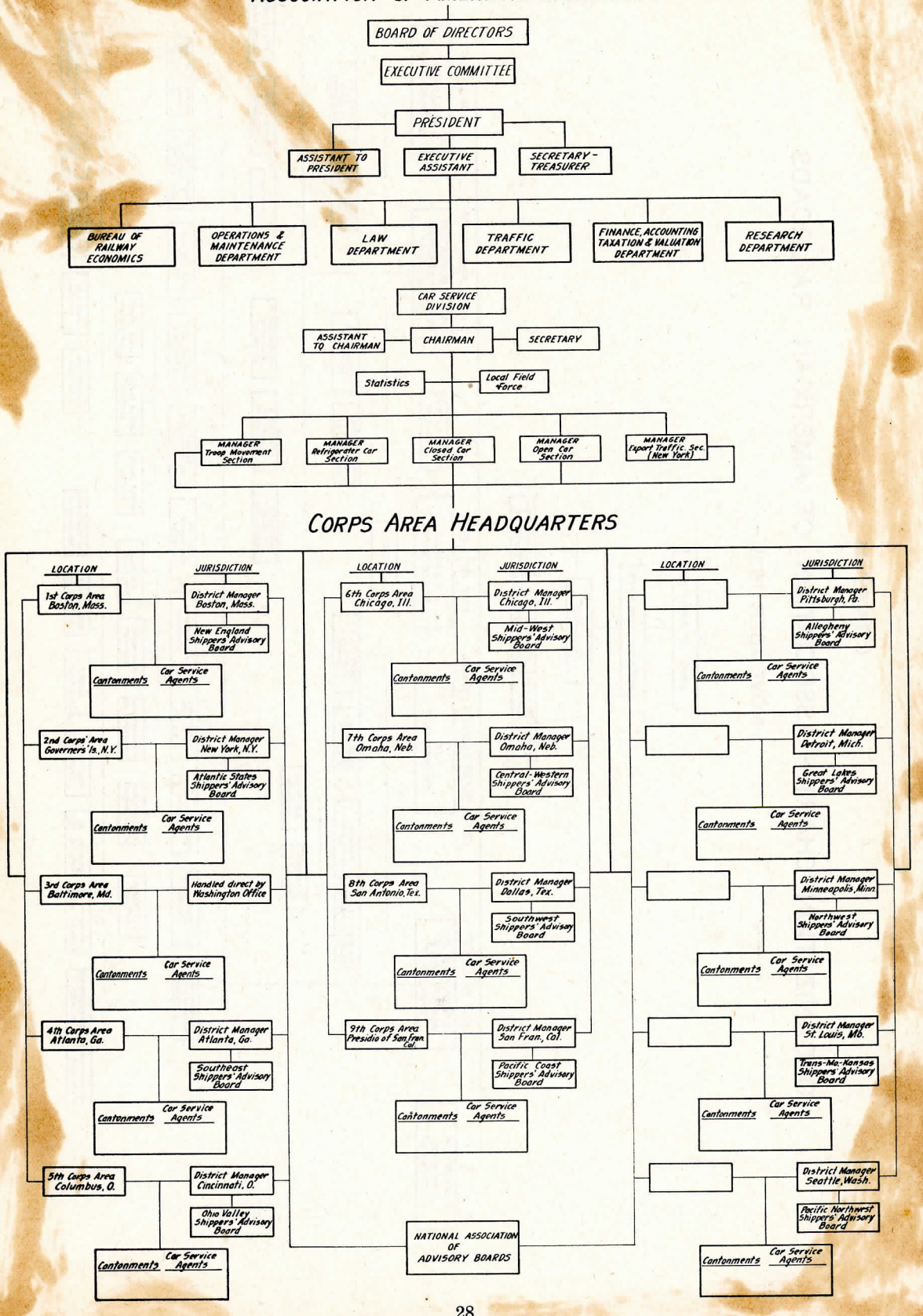


CHART 17

ORGANIZATION OF THE CAR SERVICE DIVISION ASSOCIATION OF AMERICAN RAILROADS



This task undertaken in 1923 has been done, and well done. The increased capacity necessary to handle any anticipated increase in business, and to do it smoothly and efficiently, has been built into the railroads of today. What cars and power ~~that~~ are necessary to take care of this advance in capacity and efficiency will be provided by the roads in advance of the nation's needs.

Perhaps the most significant comment on the present capacities and future servicibility of the railroads was voiced by Louis Johnson, Assistant Secretary of War, at the dedication in Union Station in Washington, D.C., of a bronze tablet in commemoration of the Railroad War Board of 1917. What I shall review of the proceedings is an abstract from Railroad Data, April 26, 1940. However, leading newspapers in New York, Philadelphia, and Washington gave space to recounting similar phases of the ceremony.

In introducing Mr. Johnson, J. J. Pelly stated that the Assistant Secretary of War and the Assistant Secretary of the Navy, Louis Compton, who was also present, compose the Army and Navy Munitions Board, which is charged by Congress with the responsibility of making plans for use of the nation's economic power should the United States again become embroiled in war.

Assistant Secretary Johnson began his address by saying that the War Department has "full confidence in the innate capacity, in the co-operative spirit, in the ability, and in the patriotism of our railroads to cope successfully with the transportation problems that any grave military emergency would involve."

This confidence, he continued, is based on the capabilities of railroad management and on the many improvements that

the industry has initiated. The railroads, he maintained, "have created and perfected an organization to meet the demands of war under private individual management."

Stating that the mistakes of 1917, particularly those which caused congested terminals and the blocking of tracks for miles, will not be repeated, Mr. Johnson emphasized that wartime transportation plans "do not contemplate the regimenting of the railroads."

Mr. Johnson held that other transportation agencies have their place in the economic life of America but that "the railroad still predominates" and can never be replaced.

"We must, therefore, keep the railroads financially sound and physically strong," he asserted. "They are the blood stream of American life in peace and in war."

I say again that testimony such as this has added weight in view of the fact that the railroads have made many of these improvements while under the handicaps imposed by the depression and by the other conditions set forth earlier in this essay.

It is well to add, also, that although Louis Johnson has left the counsels of the present Administration, this point of view concerning the railroad industry and national defense has changed but little. Since he made the significant remarks set forth above conditions abroad have become progressively worse. Our national defense preparations have taken a violent upward swing, and we have become "an arsenal for democracy." But the only action the Government has taken toward the railroads has been the placing of a representative of the Association of American Railroads in the Office of Production Management. The unspoken thought seems to be that the railroads as currently constit-

uted are adequately prepared to meet any national emergency merely by co-ordinating their functions with the remainder of the program.

My only point in conclusion is a move that we reconsider the various facts and problems I have been able to deal with very briefly in this paper. I would urge that the American public inform itself more fully concerning the various phases of the railroad problem. I would urge the railroads to expand their efforts even more elaborately to meet an inquisitive public half-way with accurate facts and figures fairly drawn and set forth. Railroads and public alike should be unsparing in their efforts to clear the log-jams and rubbish from the physical and financial structures of our railroad system. They should join in a resolute effort to urge upon Congress and upon the Interstate Commerce Commission remedies aimed at restoring to the roads a just portion of sovereignty, while at the same time implementing certain specific restraints that are obviously in the public interest. A few of the general possibilities in this field have been discussed above.

Above all else the American public should make a determined effort to understand the railroads. Grant them an understanding and sympathetic public, fair and equitable legislation dealing with all forms of transportation alike, and a decent chance to secure capital and develop along present lines -- grant these things, and the railroads will retain and fortify their place in our national life. All they ask is the chance to prove themselves, in competition, the vital element in our national economy that they really are.

Bibliography

Books

Bunnell, E.H., The Development of Railroad Transportation in the United States and Its Application to the Present Transportation Condition, Washington, D.C., Association of American Railroads, 1939.

Duncan, Dr.C.S., The Answer to Highway Propaganda, Washington, D.C., Association of American Railroads, 1939.

Gormley, M.J., Railway Capacity and Traffic Control, Washington, D.C., Association of American Railroads, 1939.

Jones, -- and Vanderblue, -- Railroad Cases and Selections, N.Y., MacMillan Co., 1925

Locklin, Philip D., Economics of Transportation, Chicago, Business Publications, Inc., 1938.

Locklin, Philip D., Railroad Regulation Since 1920, N.Y., McGraw-Hill Book Co., 1928.

Morris, Ray, Railroad Administration, Chicago, Business Publications, Inc., 1930.

Parmelee, Julius H., A Review of Railway Operations in 1938, Washington, D.D., Association of American Railroads,1939.

Paxton, Edward T., Railroad Receiverships and Reorganizations, N.Y., Prentis-Hall, Inc., 1933.

Ripley, William Z., Railroad Rates and Regulation, N.Y., Longmans, Green, & Co., 1924.

Rohlfing, Carter, Hervey, and West, Business and Government, Chicago, Foundation Press, 1935. (Chapters 12 and 13).

Tippetts, C.S. and Livermore, S., Business Organization and Control, N.Y., D. Van Nostrand Co., 1932. (Part III)

Showalter, H.L. Davidson Service Manual, Greencastle, Pa., The Echo Pilot Press, 1939.

Splawn, Walter M.W., Government Ownership and Operation of the Railroads, N.Y., MacMillan Co., 1928.

Splawn, Walter M.W., Consolidation of Railroads, N.Y., MacMillan Co., 1925.

Wilson, G. Loyd, The Transportation Crisis, Chicago, Foundation Press, 1933.

Periodicals and Reports

Fifty-Second Annual Report of the Interstate Commerce Commission, November 1938.

Railroad Data, Issues from January 5 to May 10, 1940.

Railway Age, January 7, 1939. (Annual and statistical outlook number)

Report of Clement Committee, December 23, 1938. (Committee appointed by the President Sept. 20, 1938, to submit recommendations upon the general transportation problem)

Report of the Emergency Board, October 29, 1938. (Committee appointed by the President Sept. 27, 1938, under Section 10 of the Railway Labor Act to study railroad labor relations and employee utilization)

Addresses

Beatty, E.W., Logical View of the Railroad Situation, Before the Board of Trade and Service Clubs, Vancouver, Sept. 4, 1934.

Davis, J.M., Railroads and the New York World's Fair, Before the New York Railroad Club, December 7, 1939.

Fletcher, R.V., Future of the Railroad Industry, Before the Commercial Club of Chicago, Chicago, December 9, 1938.

Franklin, W.S., Improved Railroad Service, Before the New York Railroad Club, December 7, 1939.

Gormley, M.J., Railroad Capacity, Atlantic States Shippers' Advisory Board, Newark, N. J., October 5, 1939.

Gormlet, M.J., The Taxpayer and the Freight Bill, Before the American Association of Railroad Superintendents, Chicago, June 7, 1939.

Gormley, M.J., Who Should Pay the Freight?, Before the Pacific Railway Club, San Francisco, March 23, 1939.

Gray, C.R., The Railroad Situation, Before the Economic Club of Detroit, October 17, 1938.

Hall, Fitzgerald, Transportation for the Current Emergency, Before the Associated Traffic Clubs of America, Chicago, Nov. 6, 1939.

Henry, Robert S., Before the Mutual Transportation Committee, Atlanta, September 23, 1938. (Remarks general. No Topic.)

Holden, Hale, Jr., What's New in Pullman Car Design and Service?, Before the New York Railroad Club, December 7, 1939.

Jeffers, W.M., Railroad Trains of Tomorrow, Before the New York Railroad Club, December 7, 1939.

Norris, Ernest E., America's Railroad Crossroads, Before the Transportation Section of the Illinois Chamber of Commerce, Chicago, October 5, 1938.

Pelly, J.J., American Railroads' Preparedness for the Future, Before the New York Railroad Club, December 7, 1939.

Pelly, J.J., The Railroad Outlook, Ohio Chamber of Commerce and Associated Trafic Clubs of America, Cleveland, Oct. 24, 1938.

Place, Willard F., The Railroads' Financial Situation, Before the New York Traffic Club, December 6, 1939.

Sloan, Matthew S., The Railway Situation, Before a joint luncheon of the Missouri-Kansas-Texas Shippers' Board and the St. Louis Traffic Club, St. Louis, March 7, 1939.

Williams, A.N., Railroads and the Public, Before the New York Railroad Club, December 7, 1939.

Woodruff, R.E., Progressive Railroad Operation, Before the New York Railroad Club, December 7, 1939.