THE RISE AND SUPREMACY OF THE STANDARD OIL COMPANY.*

The rise and progress of the Standard Oil Company, from its inception in 1865 till its control, in 1878, of 95 per cent. of the oil business of the United States, has presented itself to different critics in somewhat different characters; certain conservative writers think it was largely the result of discriminations in freight rates, extorted by more or less questionable practices from the easy virtue of the railroads. But just why the railroads found it expedient to grant such unusual favors, and why this particular group of men, above all others, proved best able to extort such favors, no one has satisfactorily explained. Corruption of the railway officials has been vaguely suggested; but it has not been shown whence this group of men had the means to suborn the railways, and no writer has been able to point to a piece of precise evidence, found by any court or investigating committee in the United States, which proved such subordination of railway officials, though it is not inconceivable that some evidence may exist. Congressional and legislative committees, on the other hand, and the more cautious writers on Trusts, have been equally put to it to find in those acts of the railways which eventually made the Standard Oil Company supreme any self-interested motives. The fact of the discrimination in freight rates seems to account for the supremacy of the Standard Oil Company. But why those refiners identified with the Standard Oil Company, instead of some other group of refiners, should persistently have obtained the best rates, has been, to these investigators, a baffling mystery.

The secret of this strange success with the railways is not, however, completely insoluble. If the episodes in the progress of the Standard Oil Company from 1865 till 1877 be carefully studied, the motives of every act, both of the company

* This paper won a Bowdoin Prize in Harvard University during the year 1900-01.

and of the railways, will certainly be revealed. The materials for this study are not lacking. A vast amount of evidence showing the ability of the Standard Oil Company to turn these possibilities to advantage has been gathered by various commissions and investigating committees. With such sources of information as these available, an intelligible narrative may readily be put together. Not only may each act of the company and of the railways be authenticated, but also, at each step in the progress, the increasing efficiency and importance of the company may be estimated, and the momentary opportunities of railway and industrial conditions may be gauged. And so in what seems at first sight an unaccountable and suspiciously rapid growth may be discerned signs of inevitable development,— the operation of motives which are, at any rate, explicable.

I.

1865–70.

In 1865, when Mr. John D. Rockefeller began in a small way to refine petroleum at Cleveland, Ohio, the oil industry was in a singularly inchoate state. With the success of Drake's oil well at Titusville, Pennsylvania, in 1859, refiners had been released from the necessity of distilling coal into petroleum before refining petroleum into kerosene; and at the same time the sources of petroleum were shown to be enormously greater than they had ever before been guessed. This discovery stimulated consumers to increased use of lubricants and burning oils and in this way rapidly increased the demand in the arts for the refined product. In even greater measure it encouraged the production of crude petroleum. Within a year after Drake's success, wells had been sunk all around Oil City and along the Allegheny River. In 1864 had occurred the Cherry "run," followed by the Benninghoff and the Pioneer "runs," and the sensational exploitation of Pithole Creek. While Mr. Rockefeller was erecting his little refinery, Pithole City — now a field sown with wheat — had a post-office nearly as large as that of Philadelphia. From Manitoulin Island to Alabama and from Missouri to Central

New York, wells had been bored for oil. So rapid had been the increased demand for the products of petroleum, and so unexpected had been the increase of supply, that in 1865 existing refineries proved quite inadequate to the business suddenly thrust upon them.

The difficulties besetting refiners in 1865 were chiefly such as could be cured by an increase of capital. In 1861 the best wells had been thirty miles from the railroads. Because of the lack of barrels and the difficulty of transportation, petroleum had fallen from $20 a barrel to almost nothing. By 1863 boats had begun transporting petroleum down Oil Creek, and small pipe-lines and branch railway lines had been built. In 1866 a more efficient cylinder refining-still was invented, casing and torpedoes were coming to be used in drilling, the tank-car began to replace the clumsy flat-car with its wooden tubs, and pipe-lines regularly transported petroleum from the wells to the railroads. To secure these economies in refining, small concerns must either increase their capital to about $500,000 or else combine into this larger and more efficient unit of production. Mr. Rockefeller was among the first to see the exigency; and in 1867 he united into the firm of Rockefeller, Andrews & Flagler the refineries of William Rockefeller & Co., Rockefeller & Andrews, Rockefeller & Co., S. V. Harkness, and H. M. Flagler. The reasons for this union, as he afterwards stated them, must even then have been evident: "The cause leading to the combination was the desire to unite our skill and capital, in order to carry on a business of some magnitude and importance in place of the small business that each had separately heretofore carried on." *

With the reorganization of the firm of Rockefeller, Andrews & Flagler, in 1870, into the Standard Oil Company of Ohio, with capital stock of $1,000,000, the first period of the oil industry may be said to close. No company had sought, or, indeed, has since sought, to control the oil fields. So far as may be known, no refiner had yet organized the pipe-lines to his exclusive advantage or exacted of the railroads better freight rates than were granted to his competitor. The trans-

* *Report of the Industrial Commission*, 1900, p. 799.

portation of oil by rail and by pipe-line was left to independent companies, and it was only by the competition and by the improvements of such companies that the cost of the transportation had been reduced. Till 1870 the competition of refiners was solely concerned with efficiency of production; and, since this was to be gained only by refineries of $500,000 capitalization or more, there was concentration among the stronger concerns and extermination of the weaker. By its process of concentration, and solely on account of its superior efficiency, the Standard Oil Company of Ohio became in 1870 larger than most of its competitors, and produced 4 per cent. of all the oil refined.* After 1870 the progress of the oil industry, generally, and the precedence of the Standard Oil Company, in particular, was to lie in the direction of cheaper transportation exacted of the transportation companies by the refiners.

II.

1870–74.

Though the progress of the oil industry from 1865 till 1870 be said to have determined the most efficient unit of production, and though the advance of the next seven years be said to consist in cheapening the transportation of oil, yet it must not be forgotten that a considerable advance in

* Evidence as to the capacity of the Standard Oil Company of Ohio in 1870: — B. B. Campbell (a prominent opponent of the Standard Oil Company) (*Investigation of Trusts*, Congress, 1888, 116): —

"*Question*. How large at that time [1870] was the interest of those who now represent the Standard Oil Trust?

"*Answer*. Not *much* larger interest, I should judge, than some of their competitors."

Charles T. Morehouse ("*Hepburn*" *Report*, New York, 1879, 2624): —

"*Q*. Now tell us what was their [the Standard Oil Company's] capacity then [1870] as compared with other works at Cleveland and other points?

"*A*. Not as large as some of the other works, . . . but comparing very favorably with such works as Charles Pratt & Co. and three or four in the oil regions."

Lewis Emery (at present the most prominent opponent of the Standard Oil Company) (*Report of the Industrial Commission*, 1900, 646): —

"Mr. H. M. Flagler swore they had a capacity of six hundred barrels per day of crude oil in their refinery, the production at that time [1870] being about sixteen thousand barrels a day. That would give them 4 per cent. of the refining business at that time. At that time there existed in the oil country, spread from Louisville, Kentucky, to Portland, Maine, more than two hundred and fifty refineries."

refining took place in this later period. Large refineries soon began manufacturing for their own use barrels, tin cans, boxes for enclosing cans, paint, glue, and sulphuric acid. By experiment the process of distillation was made applicable to qualities of petroleum which previously had been almost useless. By improvement in the details of refining, more durable machinery, tanks, and pumps were constructed, and a better illuminant was produced at less cost. In 1875 a method had been devised of utilizing the residuum of crude petroleum left after the manufacture of illuminating oil; and, after the example of the shale works of Scotland, the process of refining lubricants and paraffine wax from the waste that previously was used as fuel had been adopted in the larger refineries. These improvements, however, were by no means so considerable in the period from 1870 till 1877 as the advantage from the control of transportation; and, though they rendered unprofitable those refineries which could not buy better machinery or utilize their residuum, they were quite too generally adopted by large refiners to account for the growing pre-eminence of the Standard Oil Company.

From 1870 till 1877, then, the struggle of the refiners was chiefly for transportation facilities. Until the issuance of the so-called "Rutter Circular," in 1874, the advantage they sought lay chiefly in discriminating freight rates. From 1874 till 1877 the large refiners sought both to obtain special rates from the railroads and to organize into systems for their own advantage the bewildering network of pipe-lines that had been building since 1869. By surpassing skill in both regions of activity the Standard Oil Company grew in seven years from a concern controlling 4 per cent. of the refined oil output into one controlling 95 per cent. Organization of the pipe-lines came late, because of the excessive amount of capital it demanded. Opportunities for discriminating freight rates, however, presented themselves early. How the Standard Oil Company availed itself of the unique railway conditions and of the practices common in the freight traffic of that time is one of the most sensational episodes in the history of American railroads.

By 1871 the New York Central, the Erie, and the Pennsylvania Railroads had completed connections that afforded them entrance to Chicago, and the great struggle for the traffic of the West had set in. The roads were so poor, and the necessity for revenue so great, that rate wars had begun as early as 1869, when the New York Central and the Pennsylvania roads had secured connection with Chicago. With the entrance of the Erie road, and, in 1874, of the Baltimore and Ohio, into Chicago, the competition for traffic throughout the region of the trunk lines became more imbittered. During the years from 1869 till 1873 the agents of the roads met annually at New York to agree upon freight rates; and afterwards, in order to get traffic, they regularly broke their agreement. Every year during this period fourth-class rates from Chicago to New York fell from about 80 cents per 100 pounds in December to about 25 cents in August and September. This reckless competition for traffic was extended to the oil regions. The Pennsylvania Railroad, which had the earliest and closest connection with the centre of petroleum production at Oil City, hauled oil to Pittsburg, a distance of eighty miles, and to Philadelphia, a distance of four hundred miles.

The Erie Railroad, which had no direct communication with the oil country, effected an entrance by a connection with the Atlantic & Great Western road, and hauled oil from Oil City to New York, a distance of five hundred and fifty miles. The New York Central Railroad entered Oil City by connections at Cleveland, and hauled oil to New York, a distance of seven hundred and forty miles. Just as agents of the roads had annually agreed upon a rate from Chicago to the seaboard, making the charge 80 cents by each road with a differential of 5 cents in favor of Baltimore and Philadelphia, so in the case of the oil traffic the same rate was charged by each road on oil moving from Oil City to the seaboard. The effect of this "group-rate" was naturally displeasing to refiners at Pittsburg: it deprived them of all geographical advantage, and enabled their competitors at Cleveland — among others, the Standard Oil Company — to ship oil seven hundred and forty miles by the New York Central Railroad at precisely the rate they were charged for a haulage of four hundred miles.

Clearly, this was a coincidence in rates not based upon any corresponding coincidence of cost, and as such constituted a case of discrimination. The competition of the railroads, however, was so fierce as to make no other adjustment practicable. In the practice and theory of railway rates, moreover, ample economic justification is to be found.

Because of the futility of basing rates on cost of service, a system of freight rates has arisen which favors certain classes of goods, certain localities, and certain individuals. By lowering rates on cheap goods, by lowering rates at competitive points, and by lowering rates to benefit growing concerns, the revenue of the railways is greatly increased with very slight increase in its expenses. By lowering rates in those three ways, then, and charging "what the traffic will bear," the railways may do business most cheaply, give lowest rates, and make the most profit. In pursuance of this principle, discriminations of the first sort have been practised from the earliest times. "Group-rates"— a form of the second sort of discrimination,— have been freely made since 1869, when the railways first made the rates uniform on all the routes between the competitive points of New York and Chicago. Similar "group-rates" have since been established in the coal traffic from the anthracite regions to the seaboard, and in the fruit traffic of California and Florida. The prominence of such "group-rates" in the pooling agreements of the trunk lines in 1873, 1875, and 1877, and in the "South-western pooling agreements" of 1879, show how general was their acceptance. So fundamental, indeed, have they become in American railway tariffs that the Interstate Commerce Commission has repeatedly sanctioned them.* Discriminations of the third sort were common throughout the period from 1870 till 1874, and by 1875 the "evening system,"— a form of the third class of discriminations which the South Improvement Company closely anticipated — had become especially prominent in the cattle business between New York and Chicago.†

* In the milk cases (*Report of the Interstate Commerce Commission*, ii. 273; vii. 97) the principle of the "group-rates" is interestingly discussed from the most conservative standpoint.

† The principle of the "cattle eveners' agreement" has been stated as follows: "The trunk lines leading to New York agreed upon a per cent. of the business which each road should receive, and appointed three cattle eveners,

These various sorts of discrimination, then, — special tariffs, "group-rates," and "evening systems,"— must all be regarded as practices inevitable in the railway management of the period,— as essential consequences of railway economy in its development.

In one way or another, every advantage obtained in rates by the large refiners at Cleveland, in the period from 1870 till 1874, may be classified under one of these three sorts of discrimination. As soon as oil became a prominent export, they benefited, with all other refiners, in the special rates on oil in barrels and in tanks. Under the "group-rates" on oil from Oil City to the seaboard, they enjoyed local discrimination,— a discrimination doubtless annoying to refiners on the shorter routes, but not essentially different from that of the "group-rate" from Chicago to New York, or those later enforced by pools and authorized by the Interstate Commerce Commission. And in 1872 they obtained from the railroads, under the abortive contract of the South Improvement Company, an "evening arrangement" that, whether wrongly or not, has since become a hissing and a by-word with every opponent of the Standard Oil Company.

Early in 1871 the advantage of Cleveland over Pittsburg, as a refining centre, had become evident. Cleveland not only enjoyed the same railroad rates that Pittsburg had, but also had water communication to the East by way of the great lakes and the Erie Canal. Pittsburg depended almost entirely for transportation upon the railroads. Cleveland, however, could at any time avail herself of the competition of rail and water transportation by taking to lake vessels whenever the charges of the New York Central Railroad were unsatisfactory.

Cleveland, as a competitive point, had the oil traffic of the New York Central at her mercy. Unless the refiners at Cleve-

whose duty it was to see that the shipments were made over all the roads in the agreed proportions; and for that service they were to receive $15 a car . . . on every carload of cattle shipped from the West to New York, no matter by whom shipped. . . . The commission was later reduced to $10. Now every man is made his own evener; *i.e.*, if he ships his cattle by the road he is requested to, he gets a certain price; if he ships contrary to directions, his price is made $10 higher; and this is said to work very well, the rates *via* all routes of course being the same." *Report of the "Hepburn" Committee*, New York, 1879, 69, 70.

land were allowed low freight rates, the New York Central must see its traffic directed to lake vessels. As the danger of such loss became more imminent, the New York Central was obliged to grant greater and greater favors to the refiners. And when, in 1871, an unexpected shift in the centre of oil production threatened the entire refining business at Cleveland, the railroads dependent on this business were stirred to unusual action.

Beginning in 1871, at the Clarion River, remarkable discoveries of petroleum had been made throughout Butler and Clarion Counties, in the region extending five miles beyond Antwerp, and south-westward a distance of fifteen miles to Millerstown and Greece City. "The development southward," says the editor of the *Oil City Derrick*,* "brought about conditions through which some of the most important railroads of the country might be deprived of a share of the oil-carrying trade. The Pennsylvania Railroad, however, was not affected by the transfer of activities from the Venango region to that of Butler and Clarion Counties. The northern railway lines — namely, the Erie and New York Central — were naturally affected by the transfer of operations to distant fields, which they could not reach with their existing connections. The first-named road was materially aided by the gathering lines of the Pennsylvania Transportation Company, operated by Henry Harley; but the New York Central and its connections were left without petroleum feeders of any description." As usual in new developments of territory, the increase in production due to the large capacity of the wells, the over-capacity of the pipe-lines in the older oil fields, and the overproduction of refining plants which had taken place in the last two years,— all these had conspired to make the transportation and refining of oil unremunerative throughout the petroleum country, and especially unprofitable at Cleveland.

To remedy this situation, a combination of the railroads and certain refiners was planned. "It had its inception," to quote again the editor of the *Oil City Derrick*,† "with cer-

* P. C. Boyle, *Report of the Industrial Commission*, 1900, 421.

† Boyle, *Report of the Industrial Commission*, 1900, 421. Mr. Boyle's impartiality has been questioned by opponents of the Standard Oil Company (see *Report of the Industrial Commission*, 1900, 398), but has never been disproved.

tain Philadelphia and Pittsburg refiners, with an agreement for co-operation with certain Cleveland refiners. But philosophical minds, viewing the subject from this distance, are agreed that it had its origin, as a matter of fact, with the railroad interests rather than with the oil interests." The form which this combination took was a contract between the railroads and certain refiners of Pittsburg, Philadelphia, and Cleveland organized into the South Improvement Company.

By an act of the Pennsylvania legislature on May 1, 1871, the South Improvement Company had been created and vested with all the powers conferred by the act of April 7, 1870, upon the Pennsylvania Company. The powers of the company included authority "to construct and operate any work or works, public or private, designed to include, increase, facilitate, or develop trade, travel, or the transportation of freight, live stock, passengers, or any traffic by land or water, from or to any part of the United States." * Of the 2,000 shares of this company, 900 were owned by Messrs. H. M. Flagler, O. H. Payne, William Rockefeller, H. Bostwick, and J. D. Rockefeller, who later were to become prominent in the Standard Oil Company.†

On January 18, 1872, the South Improvement Company effected the desired combination by completing contracts with the Pennsylvania, the New York Central, and the Erie Railroads. According to the contracts ‡ the South Improvement Company agreed to ship 45 per cent. of all the oil transported by it over the Pennsylvania Railroad, and to divide the remainder equally between the Erie and the New York Central Railroads, to furnish suitable tankage facilities for shipping petroleum and receiving it at its destination, and to keep records of the amount of petroleum and its products shipped over the railroads both by itself and by other parties. The railroads in return agreed to allow the South Improvement Company rebates on *all* petroleum and its products carried by them, to charge all other parties not less than the

* *Report of the Industrial Commission*, 1900, 607.

† Lewis Emery, *Report of the Industrial Commission*, 1900, 619.

‡ These contracts are printed in full in "*Hepburn*" *Report*, Exhibits, New York, 1879, 418-449.

full rates specified in the contract,* to furnish to the South Improvement Company way-bills of all petroleum or its product, transported over their lines by any parties whatsoever, and, finally, "at all times to co-operate, as far as it legally may, with the party hereto of the first part, to maintain the business of the party hereto of the first part against loss or injury by competition, to the end that the party hereto of the first part may keep up a remunerative, and so a full and regular business, and to that end shall lower or raise the gross rates of transportation over its railroads and connections, as far as it legally may, for such times and to such extent as may be necessary to overcome such competition." The aim of the railroads, as avowed in the preamble, was plainly an increase in traffic: "whereas the magnitude and extent of the business and operations to be carried on by the party hereto of the first part will greatly promote the interest of the party hereto of the second part, and make it desirable for it by fixing certain rates of freight, drawbacks, and rebates, and by the other provisions of this agreement to encourage the outlay proposed by the party hereto of the first part, and to facilitate and increase the transportation to be received from it, . . . the party hereto of the second part covenants and agrees." And for the attainment of that end, the railroads reserved the right to grant similar rebates and advantages to any other party who should furnish an amount of transportation equal to that furnished by the South Improvement Company, and equal facilities for promoting the petroleum trade.

* Rates and rebates according to contract: —

"ON CRUDE PETROLEUM.		
	Gross Rate (*a*).	*Rebate* (*a*).
"From any common point to		
Cleveland	$0.80	$0.40
Pittsburg	.80	.40
New York	2.56	1.06
"ON REFINED OIL, ETC.		
"From Pittsburg to New York	2.00	.50
"From Cleveland to New York	2.00	.50"

"This contract provided that the railways should increase the freight to about double what they had been charging on all oil shipped." M. L. Lockwood, *Report of the Industrial Commission*, 1900, p. 385.

(*a*) For each barrel of 45 gallons. "*Hepburn*" *Report*, Exhibits, New York, 1879, 422.

In general outline the contract was very like those subsequently made with the grain-elevator owners in the Northwest, and with the cattle-shippers of Chicago. Throughout this period it was the policy of the railroads to bind to themselves growing businesses, in which, as in the elevator and refining industries, considerable capital and much enterprise were necessary in order to succeed, and by granting to these concerns special rates to build up trade for the industries and traffic for themselves. By this form of personal discrimination the railroads entering New York had built up traffic for themselves and business for A. T. Stewart, who was competing for the market in the Central West with Field, Leiter & Co. of Chicago. Where the competition for traffic was keen, the railroads usually contracted with the strongest shipper or group of shippers to carry freight at a special rate, or else — as in the case of the large cattle-shippers at Chicago and the South Improvement Company in the oil regions — appointed the group "evener," and in return for a special rebate required it to apportion traffic among the roads according to a fixed ratio.*

Such are the economic grounds on which to judge this contract. Popular judgment, however, was much less deliberate. On January 18 the contract was signed; and, on February 27, the day after the contract went into effect, an excited mass meeting was held at Titusville and an organization to oppose the new company hastily effected. At once a complete embargo was placed on the sale of oil to the South Improvement Company. Committees were hurriedly despatched to the railway officials, to Harrisburg, and to Washington. On March 15 a resolution was introduced into the House of Representatives at Washington to investigate the South Improvement Company. On March 25, in an agreement signed by the independent refiners, the railroads publicly abrogated their contract with the company, and announced that "all arrangements for the transportation of oil after this date shall be upon a basis of perfect equality to all shippers, producers, and

*As to the frequency of such discriminations, see the "*Hepburn*" *Report*, New York, 1879, 48-71. The plan of the cattle eveners' contract is contained in the "*Hepburn*" *Report*, New York, 1879, 70; of A. T. Stewart's contract, "*Hepburn*" *Report*, 452, 808, 1597.

refiners, and that no rebates, drawbacks, or other arrangements of any character shall be made or allowed that will give any party the slightest difference in rates or any discrimination of any character whatever; * and, with this announcement, they issued new rates about 40 per cent. lower than those provided by the contract. On April 6, before it had the opportunity to do any business, the South Improvement Company was summarily deprived of its charter by the Pennsylvania legislature. The company has never since had an apologist. The Standard Oil Company, in spite of its part in the unfortunate combination, has always disapproved of the contract.† And the bitterest reproach which opponents of the Standard Oil Company heap against it is the taunt that the contract of the South Improvement Company was renewed with the Standard "alliance," which was then forming.‡

In the condition which led in 1872 to the formation and the contract of the South Improvement Company lies the fact that must decide economic opinion upon the company. Since 1867, competition in refining methods had ruined most of the smaller refineries. By 1869, all but fifteen had for this reason been obliged to sell out to more efficient concerns.§ In 1869 began the competition between railways that resulted almost immediately in personal discrimination in rates, and hastened

* *Investigation of Trusts*, Congress, 1888, 361.

† John D. Archbold, *Report of the Industrial Commission*, 1900, 540.

"I have no knowledge of any relations on the part of the Standard Oil Company succeeding to the South Improvement Company whatever. I have been an opponent of the South Improvement Company, as you well know. I have disapproved of it in theory, and practically disapproved of it to-day. I want to say that the statements that what was the South Improvement Company is continued in the Standard are not true: if they had been true, I would not have been in it."

‡ Such statements are made by H. D. Lloyd, *Wealth against Commonwealth*, 58-60; J. F. Hudson, *Railways and the Republic*, 70-71; E. C. Patterson: "*Hepburn*" *Report*, New York, 1879, 1693; W. T. Scheide, Ibid., 2766; A. B. Hepburn, *Report of the Committee*, Ibid., 42; B. B. Campbell, *Investigation of Trusts*, Congress, 1888, 364; Lewis Emery, *Report of the Industrial Commission*, 1900, 639-645; George Rice, Ibid., 694. No confirming evidence has been offered.

§ H. H. Rogers, ("*Hepburn*" *Report*, New York, 1879, 2605): —

"*Q.* Was the Standard Oil Company at that time [1872] a large producer? *A.* Oh, yes!

"*Q.* Was the Standard Oil Company at that time the largest producer? *A.* The largest refiner, yes.

"*Q.* Where? *A.* In Cleveland and New York, and I think they had some interests in the oil regions."

the extermination of such refineries as were already declining. Overproduction of oil in 1870 and 1871 had increased the depression, so that in 1872, when the centre of operations was shifted southwards, and ruin threatened the large refineries as well as the small, feeling throughout the industry was extremely nervous. According to their usual practice at that time the railways cast about for the strongest group of refiners with whom they might ally to protect their traffic. That the South Improvement Company was the strongest group of refiners has never been disputed. In 1872 the Standard Oil Company was the largest concern in the oil region, and the combined capacity of the refineries organized into the South Improvement Company far exceeded that of the unorganized refiners.* That the industrial efficiency of the favored company was superior to that of other refiners seems equally demonstrable. By the sheer superiority of its organization, and — so far as is known — quite unaided by unusual discrimination in rates, the Standard Oil Company had obtained in 1872 its pre-eminent position. By similar efficiency of capital and ability other members of the South Improvement Company had survived and grown, while their poorer competitors had suffered from depression. From the railway point of view, then, the situation in 1872 justified a special contract; and in the South Improvement Company was presented the fittest party to such a contract.

Whether the rebate provided by the contract excessively rewarded the company for its services as "evener" is a question of fact, not to be settled off-hand. The violent popular uprising, the quickness with which the contract was withdrawn by the railroads, the reticence and subsequent penitence of all concerned in making it, and the odium in which it has since been held by both friends and enemies of the Standard Oil Company may indeed be regarded as evidence that its provisions were unwarranted. The principle of the contract, however,— the combination of both the railways and the strongest refiners to restore profitable stability to traffic and indus-

*Digest of evidence, *Report of the Industrial Commission*, 1900, 148. "Mr. Emery insists vigorously that it would have been absolutely impossible for any one else to secure the amount of business necessary to meet this requirement of railways."

try,— was inevitable in the practice and theory of railway economics.

The panic caused in 1872 by publishing the contract of the South Improvement Company, though never more than fright, — for the contract was never kept,— still seemed to make the situation more acute. Under the stress of such difficult conditions, small concerns gave place to large, and large concerns combined into yet greater ones. Throughout 1872, 1873, and 1874 small refiners were driven into insolvency or forced into selling. The causes assigned for this are two. "The overproduction of 1873, 1874, and 1875," explains a leading opponent of the Standard Oil Company; "and the consequent almost entire destruction of petroleum values gave the Standard Oil Company, with its organization and capital, almost the desired monopoly." * Discrimination in freight rates in favor of the large refiners was the other and more aggravating cause. For, though they never resumed the contract of the South Improvement Company, nevertheless, at the solicitation of refiners who had signed the agreement of March 25, 1872, the railroads soon resumed the practice of increasing traffic by giving special rates to the large shippers; † and, though their

* Letter of the Delegation of Oil Producers, delivered to the Pennsylvania Railroad September 11, 1877. Quoted in *Investigation of Trusts*, Congress, 1888, 363.

† George R. Blanchard, of the Erie Railroad ("*Hepburn*" *Report*, New York, 1879, 3394): —

"I was then convinced . . . that the agreement of March 25 lasted less than two weeks, and that at an early date the Empire Line [later the great rival of the Standard] was receiving a large drawback or commission from the Pennsylvania Railroad, which was either being shared with the shippers or an additional amount was being allowed to them. . . . It is, therefore, clear that one of the largest shippers who signed that March agreement did not feel that it bound him to pay the rates he had agreed to pay; and he gave convincing reasons to believe that others, signers and parties to that agreement, did not pay them, and possessed equal or greater advantages by way of rival routes. . . . I opened negotiations to increase our traffic, which resulted in an agreement, with the concurrence of the Atlantic and Great Western, as follows: —

"ERIE RAILWAY CO.,
"OFFICE OF SECOND VICE-PRESIDENT,
"NEW YORK, March 29, 1873.

"MEMORANDUM.

"Between Mr. John D. Archbold [of the Standard], Mr. Bennett, and Mr. Porter, and Mr. Osborn and myself. Rate for March, '73, to be 132½ from Union [published rate, $1.65]. Rate thereafter to be $1.25 from same point as the maximum for 1873. If the common point rate is made from Titusville at any time in 1873, on *bona fide* shipments, Erie and Atlantic and Great Western will make same rate motives were — so far as evidence is shown — thoroughly self-interested,* they hastened the absorption of the small refineries by the larger, and especially the expansion of the Standard Oil Company, which was the largest of all. To profit by these discriminations, and immediately by the advantages of concentrated capital, the Standard Oil Company of Ohio increased its capital stock in 1872 to $2,500,000, and in the same year combined with the Standard Oil Company of Pittsburg, the Cleveland Standard Refinery, the Pittsburg Refinery, the Atlantic Refining Company of Philadelphia, and Charles Pratt & Co. of New York — all leading independent refiners — into the Standard "alliance,"† which ten years later was to be the basis of the Standard Oil Trust. "It was a union, not of corporations, but of their stockholders," says the solicitor of the Standard Oil Company. "The several companies continued to conduct their business as before. They ceased to be competitive with each other in the sense of striving to undersell each other. They continued to be competitors in the sense that each strove to show at the end of each year the best results in making the best product at low cost. From time to time new persons and additional capital were taken into this association. Whenever and wher-

from same date. With this rate the refiners agree to give us their entire product to New York for the year, and the preference always at same rate as actual shipment by other lines.

"(Signed) "JOHN D. ARCHBOLD.
"G. R. BLANCHARD.

... "I also learned at that time that this producers' agreement [of March 25] was exploded by the action of the Producers' Union before that time. ... These facts effectually refute the testimony of Mr. Patterson, that the agreement of March 25 continued more than two years, or any period beyond three weeks, at the rates it stipulated, and show that at least two of its signers did not feel bound to pay the rates it named, and that they and others by other lines endeavored immediately after it was signed to obtain, and did secure, reduced rates, as usual before its execution, and peddled oil among the railroads wherever they could secure an advantage, however small, over each other on the railroads."

*Mr. Paul de Rousiers has suggested that the motives of the railroad might have been mixed; that their act might have been inspired by inevitable railway policy re-enforced by bribes from the Standard Oil Company. No proven case of bribery is recorded, however, by any investigating committee, commission, or court.

†The official name of the "alliance" was the Central Association of Refiners, Mr. John D. Rockefeller, president, and Mr. Charles Pratt, secretary and treasurer.

ever a man showed himself skilful and useful in any branch of the business, he was sought after. As business increased, new corporations were formed in various States, in the same interest, some as trading companies, some as manufacturing companies." * The motives of the combination, as stated by Mr. Dodd, were all owing to conditions prevalent in the period from 1870 till 1874. "Railroad rates were excessive and lacking in uniformity. When refiners were able to combine and throw a large volume of business to any particular road, they would get favorable rates. The rebate and drawback system was then universal, and was not confined to oil. Undoubtedly, this fact had much to do with the combination of refiners above referred to, and which came to be known as the Standard. But it was by no means the only reason. The men in control of that combination foresaw that a business which had thus far been disastrous would require co-operation on a large scale." †

By early developments of its refining capacity, then, the Standard Oil Company had succeeded in 1870 in controlling 4 per cent. of the production of the oil regions. By 1871 it had so availed itself of the competition between the trunk lines as to enjoy rates equal to those of the refiners at Pittsburg. In the depression of 1872, it had unsuccessfully essayed, with other refiners, to act as "evener" for the railroads. Frustrated in this attempt, it had returned to its policy of concentration,—purchasing small refineries, uniting with large ones, and exacting of the railroads discriminations proportionate to its size. By 1874 the capital of the Standard Oil Company of Ohio had been increased to $3,500,000. The control of the Standard "alliance" had been extended over more than half the refining industry, and the combination was ready to enter upon the purchase of pipe-lines. The railroads had not conspired to cause this development,‡ neither could sharp practice in competition account for it. This remarkable increase since 1870 in industrial efficiency must be due to superior ability and capital. This still more striking increase in advantages of

* S. C. T. Dodd, *Combinations*. † Ibid.

‡ It has frequently been stated, though never proved, that railroad officials were financially interested in the Standard Oil Company.

transportation must be due to the same causes, coupled with peculiar opportunities of geographical location and railway conditions. Five years after this supremacy was accomplished, William H. Vanderbilt, in reply to a question before the Hepburn Committee, set forth what seems on the whole the true explanation: —

"*Question.* Can you attribute, or do you attribute in your own mind, the fact of there being one refiner instead of fifty now to any other cause except the larger capital of the Standard Oil Company?

"*Answer.* There are a great many causes: it is not from their capital alone that they have built up this business. There is no question about it but that these men — and, if you come into contact with them, I guess you will come to the same conclusion I have long ago — I think they are smarter fellows than I am, a good deal. They are very enterprising and smart men. I never came in contact with any class of men as smart and as able as they are in their business, and I think that a great deal is to be attributed to that.

"*Q.* Would that alone monopolize a business of that sort?

"*A.* It would go a great ways towards building it up. They never could have got in the position they are in now without a great deal of ability, and one man would hardly have been able to do it: it is a combination of men.

"*Q.* Wasn't it a combination that embraced the smart men in the railways, as well as the smart men in the Standard Company?

"*A.* I think those gentlemen from their shrewdness have been able to take advantage of the competition that existed between the railroads for their business, as it grew, and that they have availed themselves of it there is no question of doubt.

"*Q.* Don't you think they have also been able to make their affiliations with railroad companies and railroad officers?

"*A.* I have not heard it charged that any railway official had any interest in any of their companies, only that I have seen in the papers, some years ago, that I had an interest in it.

"*Q.* Your interest in your railway is so large a one that nobody would conceive, as a matter of personal interest, that you would have an interest antagonistic to your road?

"*A.* When they came to do business with us in any magnitude, that is the reason I disposed of my interest.

"*Q.* And that is the only way you can account for the enormous monopoly that has grown up?

"*A.* Yes: they are very shrewd men. I don't believe that by any legislative enactment or anything else, through any of the States or all of the States, you can keep such men down. You can't do it! They will be on top all the time. You see if they are not." [" *Hepburn* " *Report*, New York, 1879, 2605.]

III.

1874–77.

By its economies in refining — attained as early as 1870 — and in freight rates — the reward of its predominance in the industry in 1872 — the Standard Oil Company in 1873 escaped in great measure the depression which harassed its competitors. This depression, if continued, promised to be disastrous both to the newly formed "alliance" and to its dwindling competitors. In the interest of both parties, therefore, relief was sought in the restriction of the oil production. Throughout 1873 there was a disposition on the part of the producers outside the region of the great wells to suspend operations. In 1874, because of the small inducement to continue, there was an important shut-down in Clarion County.* But these methods of relief were unavailing. Throughout 1874 the weaker refineries were forced to sell to the stronger, who reduced the overproduction at once by dismantling their works, so that in 1874 there were "in the oil regions proper but few refineries, and those universally owned by the Standard Oil Company, those at Pittsburg being owned or controlled by that combination or by the Conduit and Empire lines.† By its supremacy in the oil regions, then, the Standard Oil Company in 1874 had added,

* P. C. Boyle, *Report of the Industrial Commission*, 1900, 427.

† B. B. Campbell *Investigation of Trusts*, Congress, 1888, 364.

to its economies in efficiency and in transportation by rail, the advantage of restricting overproduction, and in the period from 1874 till 1877 was ready to add the advantage of controlling the pipe-lines.

In 1869 the first extended system of pipe-lines — the Mutual Pipe Line — was laid in Clarion County. At the same time William H. Abbott and Henry Harley, with a capital of $2,000,000, were organizing into the Pennsylvania Transportation Company the five hundred miles of pipe centring at the Miller farm. Vandergrift & Forman were establishing in Butler County a system which was later to be the nucleus of the United Pipe Line System, and the American Transfer Company and the Empire Transportation Company were forming. Such systems, however, were rare until 1874. Most of the pipe-lines were scarcely ten miles long, and extended from Clarion River to some common point of shipment, where stated freight rates were given. Their over-capacity had become so excessive, their competition so ill-considered, and their solvency so much a matter of doubt that by 1874 most of them had been united into the system of Vandergrift & Forman, the Pennsylvania Transportation Company, the Columbia Conduit Company, or the American Transfer Company. Vandergrift & Forman at that time controlled 25 or 30 per cent. of the pipe-line traffic in the oil regions, and the five companies together controlled by far the greater part of the traffic.* Such was the situation when the Standard Oil Company took a hand in the business.

In 1874 the firm of Vandergrift & Forman was reorganized. Its name was changed to the United Pipe Line Company; and its officers were Mr. Vandergrift, president, and six officials of the Standard "alliance" among its nine directors.† In the same year the five great systems of pipe-lines agreed upon a uniform schedule of charges,‡ and the patrons of these systems were allowed to special discriminations by the railroads. This new adjustment contained in the "Rutter Circular" of September 9, 1874, raised the

* E. C. Patterson, "*Hepburn*" *Report*, New York, 1879, 1693.
† Ibid.
‡ W. T. Scheide, "*Hepburn*" *Report*, New York, 1879, 2769.

charges for transportation of oil nearly to the rates fixed by the contract of the South Improvement Company, and allowed a rebate of 22 cents on all oil coming from the five great systems of pipe-lines which maintained the uniform schedule of charges.* By this new tariff the organization of the remaining lines into one or another system was considerably hastened; and in this process of bringing order into the confused network of pipe-lines the Standard "alliance," the United Pipe Line Company, owned by the Standard Oil Company, and the great systems and their patrons are greatly benefited. With the railway companies the purpose was merely to put an end to the unreliable service of the small pipe-lines, and to secure for themselves a larger and more certain traffic. With the pipe-lines, however,—though each of the allied pipe-lines and every refiner who was served by them shared impartially in the rebate,†—the effect was particularly to build up the larger pipe-line and the larger refiner at the expense of the smaller. For this reason the economies in transportation by

* The "Rutter Circular" fixed the following rates on refined and crude oil:—

"The rates on refined oil from all refineries at Cleveland, Titusville, and elsewhere in and adjacent to the oil region shall be as follows:—

	Per barrel.
"To Boston	$2.10
Philadelphia	1.85
Baltimore	1.85
New York	2.00

"Net rate on Albany, 15 per cent. less, from which shall be refunded the amount paid for the transportation of crude oil by rail from the mouth of the pipes to the said refineries upon the basis of 14 barrels of crude oil to the refineries for every 10 barrels of refined oil forwarded by rail from them [the refineries] to the Eastern points named.

"Settlements of this drawback to be made on the refined oil forwarded during each month.

"No rebate on these rates will be paid on oil reaching refineries direct by pipes.

"On crude oil the rates from all initial points of rail shipments in the oil region shall be as follows:—

"To Boston, $1.75 per barrel.

"To New York, $1.50 per barrel (net rate on Albany 15 per cent. less).

"To Philadelphia, $1.50 per barrel.

"To Baltimore, $1.50 per barrel.

"From which shall be refunded 22 cents per barrel only on oil coming from pipes which maintain the agreed rates of pipeage. A barrel shall in all cases be computed at 45 gallons." . . .

Investigation of Trusts, Congress, 1888, 363.

† W. T. Scheide, "*Hepburn*" *Report*, New York, 1879, 2770, 2794.

rail and pipe-line effected in 1874 tended greatly to increase the predominance of the United Pipe Line Company and the Standard "alliance."

In the year following the United Pipe Line Company acquired, by purchase, the greater part of the pipe-lines which had not participated in the agreement. Combinations among the large systems — the United Pipe Line Company, the Columbia Conduit Company, and the Empire Transportation Company — gradually absorbed all the others. Meanwhile the pipe-lines enjoying the discriminations so abused their privilege by high charges that in 1875 competition from without and suspicion within broke up the agreement. In 1874 the Baltimore & Ohio Railroad had entered Chicago, and was making advances to the Columbia Conduit Company. The railway situation was uneasy; and when, in 1875, the Erie Railroad accused the Pennsylvania Railroad of granting secret discriminations to the Empire Transportation Company, the agreement among the pipe-lines was immediately broken. The Columbia Conduit Company attached itself to the Baltimore & Ohio Railroad; the Empire Transportation attached itself to the Pennsylvania Railroad;* and the United Pipe Line Company, through its owner, the Standard Oil Company, completed an agreement with the Erie and the New York Central Railroads, according to which it gave to each road 50 per cent. of its traffic, guaranteed to the Erie Railroad 27 per cent. of the entire oil traffic in the oil regions,— which was the proportion the Erie Railroad had received under the "Rutter Circular," — and received in return upon all shipments a rebate of 10 per cent.† The motives of the Erie and the New York Central Railroads were plain. Entering the oil regions by connections from the north, these roads depended entirely for their traffic upon the Standard Oil Company at Cleveland. Accordingly, for the guarantee that its oil traffic would not be diminished, the Erie Railroad could afford to pay roundly; and for the maintenance of the oil industry at

* A copy of the contract between the Empire Transportation Company and the Pennsylvania Railroad is contained in the *Investigation of Trusts,* Congress, 1888, 210.

† The details of this contract are contained in the "*Hepburn*" *Report,* New York, 1879, 175, 182.

Cleveland, and for the privilege of handling all its traffic, the New York Central Railroad was ready to grant a liberal discrimination. Therefore, throughout the rest of 1875 all the pipe-lines in the oil regions arrayed themselves with one or another of the three rival pipe-lines and their allied railroads;* and the armed peace thus maintained continued throughout 1876.

In 1877, with the aid of the Pennsylvania Railroad, the Empire Transportation Company secured control of a refinery at Communipaw, and began constructing others at Philadelphia. The roads in alliance with the Standard Oil Company were the first to discover the encroachment, and resented it before the Standard Oil Company had time to act. "Unless checked," said Mr. Blanchard, of the Erie Railroad, "the result would be a diversion largely of the transportation of oil from our roads. The New York Central Road and our own determined that we ought not to stand by and permit these improvements and arrangements to be made, which, when completed, would be beyond our control. We determined, therefore, to make the issue with the Pennsylvania Railroad Company." † At the suggestion of the railroads, accordingly, the Standard Oil Company, by ceasing on March 18, 1877, to send freight over the Pennsylvania Railroad, precipitated a war between the great pipe-lines and their allied roads.

The suddenness and fury of the war for the oil traffic which followed is explained only by the strained relations of the trunk lines at that time. Since 1874, when the Baltimore & Ohio Railroad entered Chicago, there had been a ruinous war of rates. Freight charges during this period from Chicago to the Seaboard had fallen from $1 to 10 cents. New York Central and the Erie Railroads had lost millions, and the Baltimore & Ohio and the Pennsylvania Railroads had ceased to pay dividends.‡ The struggle in the oil region was, therefore, merely part of a contest extending half across the continent. Beginning fully a month before the larger contest approached

*W. T. Scheide, "*Hepburn*" *Report*, New York, 1879, 2795; J. C. Welch, Ibid., 3673.

† G. R. Blanchard, "*Hepburn*" *Report*, New York, 1879, 1463.

‡ *Report of the "Hepburn" Committee*, New York, 1879, 33.

settlement, it continued bitterly for six months until the very last agreements had been signed. In this struggle the Columbia Conduit Company connected with a branch of the Reading Railroad, and controlled the traffic in the newly discovered Bradford district. The Empire Transportation Company meanwhile, aided by the Pennsylvania Railroad, sought by a tremendous effort to crush the United Pipe Line Company and the Standard Oil Company. The Pennsylvania Railroad carried oil at eight cents a barrel less than cost,* and ordered the refineries of the Empire Transportation Company to sell oil in the territory of the Standard "alliance" at any price. But the Standard Oil Company, with its high degree of mechanical efficiency, its well-organized united pipe-line system, and its firm alliance with the Erie and the New York Central Railroads, proved superior. On October 17, 1877, the Pennsylvania Railroad was forced to abandon the struggle, and to sign a contract which gave the Standard Oil Company practically the monopoly of the production and transportation of oil in the United States. According to this contract the Standard Oil Company was appointed "evener," to apportion oil traffic in the following ratio: 63 per cent. of the oil traffic was to go to New York City and 37 per cent. to Philadelphia and Baltimore; of the traffic going to New York City, the New York Central, the Erie, and the Pennsylvania Railroads were each to carry one third; of the traffic going to Philadelphia and Baltimore, the Pennsylvania Railroad was to carry 70 per cent. and the Baltimore & Ohio 30 per cent. By the terms of the contract the Pennsylvania Railroad was guaranteed an annual traffic of not less than 2,000,000 barrels; † and the Empire

* Digest of the *Report of the Industrial Commission*, 1900, 150.

† In a letter of October 17, 1877, Mr. William Rockefeller set forth this contract in five provisions, the last providing as follows for the remuneration of the Standard Oil Company:—

"We ask, in consideration of the above-named guarantee of the business upon which it is understood we shall pay such rates as may be fixed from time to time by the four trunk lines (which rate, it is understood, shall be so fixed by the trunk lines as to place us on a parity as to cost of production with shippers by competing lines), that you shall furnish us promptly all the transportation we may reasonably require, and that you shall allow to and pay us weekly such commission on our own shipments and the shipments which we may control as may be agreed to by your company and the other trunk lines from time to time. This commission, it is understood, has for the present been fixed at 10 per cent. upon the rate, and

Transportation Company was purchased for $3,000,000 by the Standard Oil Company and the United Pipe Line Company. * The Standard Oil Company, meanwhile, for its services as "evener" was remunerated in the following fashion: After May 1, 1878, when the contracts between the Pennsylvania Railroad and its shippers expired, the Standard Oil Company received a rebate of 10 per cent. on all its freight. In addition to this it was allowed, with other shippers, a rebate of 68½ cents in order that it might be on an equality with those refineries who shipped by the Erie Canal; and the American Transfer Company, which had now been united with the United Pipe Line Company, was allowed 22½ cents as its share of the through rate.

The Pennsylvania Railroad offered to carry oil for *all* shippers on these terms, except that for the 10 per cent. rebate it asked such considerations as the Standard alone could furnish; and, indeed, for those refiners who made all their shipments over its line, it continued to give rates as low as those of the Standard Oil Company. On December 8, 1878, how-

shall not be fixed at a less percentage, except by a mutual agreement of your company and ours; provided that no other shipper of oil by your line shall pay less than the rate fixed for us before such commission is deducted, and no commission shall be allowed any other shipper unless he shall guarantee and furnish such amount of oil for shipment as will, after deduction of commission allowed him, realize to you the same amount of profit you realize from our trade; that is, you will not allow any other shipper of oil any part of such commission, unless after such commission you realize from the total of his business the same total of profit you realized from the total of our business, except so far as your company may be compelled to fill certain contracts for transportation made by the Empire Line with refineries and producers, which contracts terminate on or before May 1, 1878,— a statement of which shall accompany your reply to the letter; such contracts to be fulfilled. We agree that all the stipulation herein contained shall be carried out by us for the period of five years from the date hereof." . . . *Investigation of Trusts*, Congress, 1888, 208.

* The motives of this act have been thus stated:—

"It was the desire on the part of the Pennsylvania Railroad to have a portion of our other business that induced them to bring about this negotiation with the Empire Transportation Company, and we yielded to their most urgent persuasions. We did not want the property, but they insisted upon it that we should buy it. We did finally yield to their persuasions, and purchased that portion of the Empire Transportation Company's property, meaning the local pipe-lines in the oil regions. We had stated in early discussions with representatives of the Pennsylvania Railroad that we were willing to buy the refineries owned by the Empire Transportation Company; but, as we were not interested in transportation at all, we wanted them to pay for the pipe-lines and own them themselves. But we yielded that point finally." H. M. Flagler of the Standard Oil Company, *Investigation of Trusts*, 1888, 773.

ever, when the Erie Canal was closed, the railroad ceased making such favorable rates for independent refiners; and on March 31, 1879, all payments of rebates ceased.*

In view of the bitterness of the war which it settled, this agreement was very favorable to the defeated party. The Pennsylvania Railroad had gone out of its way to strike at the power of the Standard "alliance," and after expensive fighting had been completely beaten and forced to sue for such terms as might mercifully be granted it. The Standard Oil Company, however, required of it only such favors as it already received of the New York Central and the Erie Railroads, and, in return, guaranteed its oil traffic, purchased its interest in the Empire Transportation Company, and advanced the money to buy oil-cans. It was, indeed, shrewd magnanimity; for, in advancing the money to complete the sale, the Standard Oil Company became the mortgager of the oil-cars of the railroad,† and by aid of the discriminations provided in the contract it was able, in a few months, to drive the Columbia Conduit Company into selling.‡ So that in 1878 and 1879 the Standard Oil Company owned or controlled by contract every transporting agent in the oil regions.

The achievement of this supremacy marks the close of the first phase of the Standard Oil Company. It owned the

* A. J. Cassatt, testimony in Commonwealth of Pennsylvania *v.* Pennnsylvania Railroad. Quoted in "*Hepburn*" *Report*, New York, 1879, 483–519. Summarized by Archbold, *Report of the Industrial Commission*, 1900, 1515.

Expressed statistically, the rates and rebates of May 1, 1878, are:—

Tariff rate on crude oil		$1.40
Allowance to American Transfer Company . . .	$0.225	
" " Standard Oil Company, 10 per cent. .	0.14	
" " Standard Oil Company	0.15	0.515
Net rate to Standard Oil Company		$0.885
Tariff rate on refined oil		1.90
Rebate to all shippers	$0.645	
Rebate to Standard Oil Company	0.455	1.10
Net rate to Standard Oil Company		$0.80
Net rate to other shippers		1.255

Mr. Cassatt testified that large independent refiners usually receive secret rebates, which sometimes equal those of the Standard Company.

† H. M. Flagler, *Investigation of Trusts*, Congress, 1888, 770–774.

‡ John C. Welch, "*Hepburn*" *Report*, New York, 1879, 3671.

terminal facilities of the New York Central for handling oil at New York. It leased the terminal facilities of the Erie Railroad at New York. It owned or leased almost all the oil-cars on the Erie, the New York Central, and the Pennsylvania Railroad.* Through the United Pipe Line Company and the American Transfer Company, it purchased, one after another, twenty-six pipe-lines that threatened competition.† And when, in 1879, the Tide-water Pipe Line Company was built to the seaboard, in order to evade the discriminations of the railways, the Standard Oil Company was able, after a struggle of four years, to defeat that, also. The dominance of the Standard Oil Company in the refining industry was even more striking. In 1879 it controlled 95 per cent. of the refineries in the oil region, and at one time during this period there were scarcely a dozen independent refiners in business.‡

IV.

An explicated narrative — such as this has pretended to be — should bear its own judgment upon the agents who accomplished the oil monopoly. That judgment — if the narrative has succeeded in logical clearness — runs somewhat as follows: Given the railway and economic conditions, the progress of the Standard Oil Company was quite inevitable. Since it showed at an early time bright promise of industrial efficiency, it readily acquired, after the fashion of the period, proportionate discrimination in freight rates. By getting control through discriminations of the means of transportation, it inevitably achieved monopoly. In support of this judgment it may be urged — as Mr. Paul de Rousiers boldly urges — that discriminations, "though important in the beginning, went into the background with the absorption of the pipe-lines, and, though very helpful in the creation of the Trust, were not indispensable to its continuance." Conditions alone, he continues, were such as to make monoply in some sort inevitable. "Historically, it is a fact; and one does not see how otherwise it

* Report of the "*Hepburn*" *Committee*, New York, 1879, 40.

† *Report of the Industrial Commission*, 1900, 101.

‡ Ibid., 95.

could have obtained, in so quick and complete a fashion, the result towards which it tended." If the Standard Oil Company were not the strongest refiner, its most powerful rival would certainly have seized the same control over transportation that the Standard Oil Company in fact secured. In the last analysis, monoply by the Standard Oil Company was, under existing conditions, inevitable, simply because it was most efficiently organized.

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