THE ANTHRACITE TRADE SITUATION.—THE PROBLEM BEFORE THE COMMISSION.

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English wars are said to have been wars of trade; the same may be asserted of all commercial actions at law. Before a legal question can arise in cases affecting commercial values, there must be a commercial dispute. The case of Coxe Bros. & Co. v. the Lehigh Valley Railroad Company, before the Interstate Commerce Commission and the United States Courts, is an illustration of a legal controversy growing out of complicated questions of trade. The firm of Coxe Bros. & Co. are owners and lessees of about 33,000 acres of land in the so-called Lehigh region of the anthracite coal section of Pennsylvania. The output of these lands in 1888 was a little over a million tons of hard coal. The annual output may vary from one and a half to two million tons, forming from three to four per cent. of the total production of anthracite. This coal reached the market in 1888 (when the proceedings before the Interstate Commerce Commission were begun) over the lines of the
Lehigh Valley, the Pennsylvania and the New Jersey Central Railroads. The tolls charged by these roads, from the junction point of Coxe's mine branches to tidewater at New York harbor, were, in that year, $1.80 per ton on the sizes of hard coal used for domestic purposes, $1.40 per ton on the sizes called pea and buckwheat, and $1.20 on the culm or waste.

The anthracite region of Pennsylvania, practically covering the whole supply of hard coal for the United States, contains about 470 square miles. Of the annual product of this region, amounting in 1891 to about 40,000,-000 tons, about one-fourth is mined by individual operators,—that is, by those who own or work the coal lands independent of the great carrying companies. The other three-fourths of the supply is mined by coal companies which are owned by the seven great coal railroads, these, of course, having the preponderating influence upon all questions of trade policy. Some of these railroads were originally started as mining corporations, and gradually extended their rail lines in order to find an outlet for their coal. Others bought lands, or bought control of coal companies owning lands, in order that their tonnage of coal might be forever secured to them. The Philadelphia and Reading Railroad, through its subsidiary corporation, the Philadelphia and Reading Coal and Iron Company, made extensive purchases of land as late as the decade 1870 to 1880. Out of the ownership or control of the limited acreage underlaid with hard coal have grown some perplexing questions. Coxe Bros. & Co. are the largest firm among the so-called individual operators. Their suit against the Lehigh Valley involved two principal points. One was, that the tariffs established by the railroads on anthracite were so high as to cause hard coal to be displaced by bituminous, or soft coal, for manufacturing and steam-producing purposes.

The average distance to New York harbor from all the mines in the Lehigh region is 149 miles. The average distance from the Snow Shoes bituminous region is 295 miles, and the tolls $2.25 per ton; from which it will be
seen that the railways carried soft coal at rates almost half those charged anthracite for a corresponding distance. A further fact is, that while anthracite has about doubled its output in the last decade, the bituminous production has been quadrupled. It was argued that these two facts explained each other, and that if lower tariffs were to be charged on anthracite by the carriers, hard coal would again supplant bituminous in the factories of New England and elsewhere. In spite of the rail charges, higher in the aggregate, though lower proportionately, the selling price at tidewater was about one dollar less per ton for soft than for hard coal. For steam purposes it is found that bituminous is about one-tenth better than anthracite. Moreover, during the ten years from 1880 to 1890 hard coal has been quoted at about the same price, allowing for fluctuations, but soft coal has declined one-third; further, the supply of anthracite is practically limited to the region of about 470 square miles in Pennsylvania, while bituminous coal is found over the greater part of the country, the area underlaid being estimated at over 200,000 square miles. This great disparity in the available supply would seem to indicate that nature had decided the question between these two coals for ordinary purposes, for the great and increasingly important use in the making of steam, whether in factory or locomotive boilers. For domestic use the hard coal is everywhere preferred, so that it may be said, because of the limited supply and valuable properties, that anthracite is a special fuel, a luxury, and that the better policy would be to treat it as such.

To this there is the technical objection that coal is coal, and that carriers have no right to discriminate between the two kinds, which, indeed, cannot always be told, the one from the other, even by experts. It is true that there is no dividing line agreed upon, separating anthracite from bituminous coal. Nevertheless, the distinction is real, and forms the practical basis of trade. Just so we find it hard to tell the precise point at which day becomes night, though of the propriety of the distinction we are assured.
The railroad systems of the United States differ in their policy toward these coals. The New England roads generally charge the same rate upon both; the roads of the Middle States distinguish sharply between them in their tariffs; the practice on lines west of Chicago varies. Upon closer analysis, however, it will be seen that these differing policies, in different parts of the United States, are not dictated by favoritism to either kind of coal as a commodity, but rest roughly on commercial conditions. The carriers, in short, charge what they think they can fairly and easily collect as between the two coals. In New England the total cost to consumers of anthracite is not materially affected by the same charge on both kinds, and, besides, the supplanting of hard coal by soft is not yet complete. On the other hand, at the West, where the high price of anthracite puts it out of competition with bituminous for ordinary uses, in the question of the proper railway rate, the supposed rivalry is very little, if at all, considered; the investigation of the traffic officer is limited to the problem, how much he can fairly charge on hard coal, without checking its consumption for the only purpose to which it is applicable, so far from the mines—that of domestic use. In some special cases it is also burned where factories are located in good neighborhoods, in cities, and where the smoke and smudge of soft coal would be too offensive.

The Interstate Commerce Act forbids, not mere discrimination, but unjust discrimination. The drawing of distinctions between the many articles carried by our railways, and the consequent sharing of railway expenses among these different articles according as these may be able commercially to bear them (which is the theory of railway classifications and tariffs), have been the cause, in great part, of the enormous development of our railway freighting business in the United States. We cannot now question the right of discriminating one rate or one article from another; the only point which should be considered is whether the discrimination is just. Our railways carry the raw material, wheat, and the manufactured product, flour, at the same rate, though, if warranted, they could
rightly put a higher tariff upon the manufactured article, as they do in other lines of trade. They at one time carried all grains at the same rate, though these, to a certain extent, are competitive products in our markets. Now corn is sometimes classed lower than wheat, and in time each kind of grain may have its own rate fixed upon, after considering its own separate merits and circumstances in our markets. That at one time or on some roads one tariff covered all breadstuffs, is not a good commercial argument against separate rates on wheat, corn, oats and barley, if trade conditions at any time require separate tariffs. So in coal. That at one time or on some roads anthracite and bituminous coals were charged the same rate, is not a good argument against a separation of tariffs, if such separation comes to have justification in existing circumstances. Such justification is apparently furnished by the quantity in the ground—so great and so widely distributed in one case, and so small in the other—and by the properties of the two coals which give to each its special fitness for specific uses. We cannot say whether the increasing use of soft coal induced the lowering of rates, or whether lower rates brought about the greater consumption; but we are reasonably sure that the result is an adjustment of rates to natural conditions, and is, therefore, correctly based.

Another point brought up in the case was the charge that existing tolls were unjust to the individual operators, because when prices were low the coal-mining companies lost money; but their owners, the coal-carrying companies, make large profits in transportation, with the result that the separate operators also lost money in mining, but could not recoup themselves—in short, that the railways discriminated unjustly against their individual shippers by making up the losses to their own mining companies from their profits as carriers. This complex situation grew out of the ownership of the greater part of the anthracite coal lands by coal companies, who were owned in turn by the carriers. The capital required to own and operate both railroad and mine companies was a certain sum. This varied with the different railways according to the different
circumstances of each. And, as is the rule in all combined businesses, the profits of both companies, in the course of years, tended to become such as would pay a fair return upon the capital invested in both, considered as a whole. Naturally, also, in the course of time the stockholders and officers looked to the profit of the year as a vindication of the management, so that the details—which of the combined companies lost and which earned money—would be considered of minor importance. This combined but not separately-stated result would all the more easily come to be the main consideration of the managers, because of the peculiar condition of the coal trade. The anthracite coal in the ground is a definite quantity; every ton mined is so much taken from the limited supply. It has been estimated that some of the coal fields will be exhausted before many years, and that before the middle of the next century there will be a decline in the quantity possible to be mined. Because of this fact anthracite ought, on this account, to be considered every year more and more as a special deposit and more and more valuable. Yet it is also true that the annual output of the coal lands could be much increased, and in some cases doubled, if such increased annual output could be sold. The seven large operating companies have never been able to agree, for any length of time, on the probable demand or on the proportion of the output to which each company should mine. In addition, these companies, when agreed among themselves, have not controlled completely the individual operators who furnish about a fourth of their tonnage. The result of these conflicting interests was to lead the stockholders and officers into the belief that the evils of the trade were almost incurable, and that the only way to realize a profit from the investment, as a whole, was to obtain it from that which they thought could be controlled more easily than the output, the tolls from transportation. These were generally (with occasional exceptions, of course) fixed (either directly or on a percentage of the tide-water price) at such a tariff as left large profits to the carrier, and figured out per ton per mile to be twice the
rates charged on other low-priced commodities by other railways. A profit was thereby assured, even though the mining itself should be unprofitable. But the success of the individual operator depended upon the profitableness of the mine, and not upon that of the transportation company. It was estimated by the Interstate Commerce Commission that the interest on the capital loaned by the Lehigh Valley Railroad to its subsidiary mining company was equivalent to a rebate of 10 cents per ton against Coxe Bros. & Co.'s coal. It was also the practice of the coal company to buy coal from other collieries, and, sending it to market over the railroad, to sell such purchased coal, as well as its own, at prices which sometimes yielded a profit and sometimes did not. This loss under cost at the mines, plus the published transportation rate, was considered by the Interstate Commission to be a discrimination against the individual operator and in favor of the subsidiary mining company, because such loss was finally made up to the mining company by the railroad. Altogether the Commission thought the discrimination amounted to 30 cents per ton on domestic sizes in 1888, the year of the suit. The exact amount of unfair discrimination in the tolls on anthracite to tidewater, as they were in 1888, must, of course, be purely an estimate. The Commissioners thought they were moderate in their proposed reduction. The accounts and policies for the carrying and mining corporations are so intermingled that no exact statement of their business can be had. The trouble is that, so far as three-quarters of the persons interested are concerned, no such statement is necessary. The complaining one-quarter are in a hopeless minority, and are confronted by a situation whose conditions have settled themselves on lines adverse to them. Apparently, therefore, they must soon have entered legal protest or have suffered loss of profits and finally of lands and capital.

As a theoretic solution of the problem, it may be well to consider it as a question of profit-sharing, as such it really is or ought to be. A small part of the coal goes to tidewater on a percentage basis, 40 per cent. of the tide-
water price being the usual toll in such cases. The general
toll was, in 1888, $1.80 per ton, reduced shortly afterward,
on domestic sizes, to $1.70 per ton from the mines to tide-
water. When the price of domestic coal averages $3.50 per
ton at New York (and it is sometimes lower), this would
leave the operator $1.70 per ton at the mines. The cost of
producing coal is a difficult question to answer precisely,
for it varies with circumstances and localities. For an
average we may put it at $1.45 per ton for wages and sup-
plies. To this must be added about 35 cents per ton for
average royalty (the royalty being the price paid the owner
of the ground by the operator), and 10 cents for commis-
sions on sales, a total, say, of $1.90 per ton, without consider-
ing interest on capital or depreciation. The capital of the
complainants, Coxe Bros. & Co., amounted to several mill-
ions of dollars. Altogether, and speaking in round num-
bers by averages, it is considered fair to estimate that the
mining operator or company makes no profit, in the true
sense of the word, unless a higher price than $2 per ton is
obtained at the colliery. On the basis of $3.50 per ton at
tidewater, allowing $1.80 for railway tolls, this calculation
would show a loss to the operator of 30 cents per ton. The
average cost of carrying hard coal from the mines to New
York harbor has been theoretically determined by the Inter-
state Commission to be 93 cents, and the cost of mining, as
we have seen, $1.80; deducting these amounts from $3.75, an
assumed possible average for coal at tidewater, we have 97
cents profit to be divided between carrier and operator.
Giving two-thirds of this profit to the carrier would be
equivalent to a rate of $1.57 per ton; if divided equally
between carrier and operator, it would give $1.42 to the
former, and $2.33 to the latter. These computations are, of
course, purely theoretical, and are inserted merely to show
what might be the prices if the business of mining were
separated from the carrying.
No doubt one result of a reduction in tolls on anthra-
cite would be to call the attention of the railway managers
again to an old problem in the coal trade—how to limit the
supply to the demand—with this difference, that whereas
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now their dividends are in a measure assured without forcing an answer to this old question of limiting the output, under a lower rate they would feel compelled to find at least a partial solution.

If we assume the theory to be correct which limits the proper use, broadly speaking, of anthracite to domestic purposes, leaving the steam market generally to bituminous coal, it follows that we thereby narrow the possible demand for hard coal. The quantity required for domestic or special purposes is small compared with the amount of all kinds of coal mined and consumed in the United States, and this required quantity of hard coal will increase from year to year but slowly, only as population increases and as a higher standard of home comfort obtains among us. As a matter of fact, the shipments of anthracite have increased for a decade in greater proportion than this theory would warrant, but there are explanations. In the first place, as before stated, although the contents of the anthracite fields are limited, and before half a century will probably show positive signs of exhaustion, yet the possible annual output now is greater than the actual, large as this latter is. Since railroad and individual operators have not been able to agree upon the proportion each miner is entitled to in any plan of restriction, the total quantity produced has been in excess of the demand for the purposes named. According to a well-known rule in manufacturing, while such over-production has often brought the price of coal at the collieries below cost, yet the operator, having invested capital in the outfit and employed his men, cannot stop operations because the price is not remunerative, since stoppage would usually entail a still greater loss. Hence, practically, the supply is not, and under existing conditions cannot be, strictly regulated to correspond to trade requirements. If the conditions, therefore, are allowed to continue, they must work themselves out by heavy losses to the weaker parties in the end.

Another explanation of the fact that shipments are larger than the domestic demand is to be found in the quantity of small coal sold. In mining the large sizes of
anthracite, there remains smaller sizes of coal called buckwheat, pea and culm, the latter being coal dust. On the ground that while the larger sizes were valuable and should pay higher rates, the smaller sizes were fairly a competing product with bituminous and should be charged less, the carriers generally have transported these small sizes at forty cents or sixty cents less per ton to tidewater. Owing to a variety of reasons not necessary to state here, these small sizes have not been entirely successful as against soft coal, but are so to a certain degree. Of the large increase in recent years in shipments of anthracite, a good part has been in these smaller sizes or culm. The increase in domestic sizes during the ten years was 18 per cent., while in the inferior product it was 139 per cent. In 1879 the small sizes and waste constituted but 17 per cent. of the shipments; now these make up nearly one-third.

The public have a real interest in helping to stop this waste in an important article, limited in quantity, like anthracite coal. It ought to be possible to arrange the coal output so that only as much should be mined as would suffice to supply the domestic and special demands; then our children would not be deprived of a luxury which this generation is enjoying and wasting. Such a plan requires the combination of some kind between the coal companies, so that some person or persons should decide for the whole trade what the output fairly should be, and what proportion should be allotted to each company. This would involve restriction, and this in turn would require that the quantity needed should return a fair profit to the miner. It is at this suggestion that the public may be expected to protest. But whether right or wrong on the general subject of monopolies and trusts, it seems clear that the public, in the matter of coal, would have no cause for alarm or complaint. The price of anthracite cannot be put extortionately high even though a strong combination be formed. Gas, oil and, more than all, cheap bituminous coal must always fix a limit beyond which the price of anthracite cannot go without stopping consumption. A luxury, such as we have assumed anthracite to be, is the first thing to be
given up if the cost should be too high, particularly if a number of other fuels, not so good for comfort and cleanliness, but nearly or quite as good for heating and cooking, can be had at much cheaper prices.

The point in this matter is, that since the people at large would not be injured but rather benefited by a better control over a special gift of nature, popular opposition to a moderate restriction of coal mining ought, when the facts become known, to die away.

In any plan for restriction the independent operators must be consulted. They control a quarter of the output, and could, by active mining, break down the market, no matter what the great companies decided without them. Altogether, a very small output and a correspondingly extortionate price upon anthracite are not possible. The possible thing is a little better arrangement about present output and wholesale prices, and this the public, in its own interest and that of succeeding generations, ought to support.

But the situation, it will be seen, is made difficult by the large profit now obtained by the carriers as compared with the small profit, or even the loss, of the mining operator. This breeds indifference to trade evils on the part of the railroads, their officers and salesagents. If a fair division could be agreed upon, either by negotiation or through the law courts—the legal complications of this latter course are great, though the economic facts are clear—then a way would be opened for a discussion of the further question on the part of all concerned of restricting the supply of anthracite to the proper demand for it. It would be a mistake to suppose that the case of Coxe Bros. & Co., if decided favorably to them, would solve all the trade problems. But since justice and law seem to be on their side, such an agreement or decision would be a long step toward a solution of these other questions.

Public opinion ought to sustain, and not condemn, any efforts made, or which may be made, to settle the complicated anthracite situation on a basis that shall be fair to the miners, the carriers and the consumers.