

## AMERICAN COAL FOR ENGLAND.

IN considering the question of American coal for the English market, it might be imagined that an article from the pen of an Englishman with interests in English collieries and English coal must necessarily be flavored, if not impregnated, with partiality, to say nothing of patriotism. Such an assumption, however, would be entirely erroneous, as business men at least must agree in accepting the principle that partiality must not enter into business, and in acknowledging the somewhat saddening fact that patriotism never does.

Starting from these premises, therefore, let us review the salient features of the new situation in the cold, calculating spirit of a business man who, having long been accustomed to buy from his brother-in-law, under the impression that he thereby gets bottom prices, is suddenly confronted by a quotation from his cousin, forty-two times removed, offering him a better article for less money. Not that the writer intends by any means to imply that the pleasing terms of this somewhat startling offer, in so far as it applies to American coal, may be swallowed whole as a preliminary to chewing the cud of reflection over the matter. Far from it. To change the metaphor, he intends to follow out the rôle of the aforesaid business man, who will assuredly allow a little verbal discount from all that is said to him as he weighs up the offer and passes it through his mental clearing-house.

As being the only fair method of dealing with the theorem advanced, the writer proposes to consider the subject under three aspects, those aspects applying to three widely divergent classes of coal, viz. : Gas coal, steam coal, and house coal. Before we enter into the matter, however, it will doubtless be advantageous to place before the general reader a résumé of the circumstances which have developed the idea embodied in the title of this article.

During past months, extending indeed to years, the prices of all classes of coal have been steadily advancing in the British market; and coal consumers have been viewing with apprehension, increasing

to alarm and approaching panic, the persistency with which shilling after shilling has been added to the cost of each class of fuel. Gas has been getting dearer all over the country, public works have been partially closed down, railway companies have been raising rates and fares on account of the increased price of steam fuel, and householders have been groaning beneath a 50 per cent advance on their coal bills, with the situation holding forth rich promise of further advances to come.

This being the position of affairs, it follows that any prospects which may afford a possibility of holding the cost of coal in check will excite universal interest among the coal consumers of Britain; and a cue has been given to the public by certain remarks made by Mr. Livesey, the chairman of the South Metropolitan Gas Company, at the half-yearly general meeting of the shareholders in August. In these remarks, and in a subsequent communication which he made to the "Times," Mr. Livesey hinted ominously, if somewhat vaguely, at the competitive value of gas coal from America; and a coloring of substantiality was indubitably given to these hints by the final, triumphant arrival of the "Queensmoor" with an actual cargo of real coal from that far-away clime.

Thereupon American gas coal, the first of the three classes we have set down for consideration, attracted a considerable amount of attention, if not investigation, from the general public. Then the daily press got to work, and a fine, large vein of prophecy was opened to meet the public demand. Phoenix-like, from the ashes of this famous cargo of gas coal there would arise many cargoes of all sorts of coal, and the glad news was blazoned abroad among a delighted populace for what it was worth. Apparently, it was not worth much, for on the first of October the cold-blooded announcement was made that Mr. Livesey had concluded contracts with English coal owners for 750,000 tons of Durham gas coal, at an average price of 16 shillings (\$4) per ton, f. o. b. Therefore, we shall not be doing Mr. Livesey an injustice if we conjecture that he was utilizing his epoch-making cargo of American coal not so much for producing gas as for setting up a bogie with which to terrorize the extortionate coal owner, it being, of course, an axiom — accepted by everybody with the exception of themselves — that coal owners form the most virulent and infectious type of extortionate beings in existence.

If we adopt a few obvious facts in connection with the South Metropolitan Gas Company's contract as a basis for comparison, we ob-

tain some deductions which shed considerable light upon the question in hand. Freight for the coal acquired under these contracts will probably be arranged at something like 4 shillings (\$1) per ton, which figure will bring the total cost of the coal up to 20 shillings (\$5) per ton delivered alongside the company's works. Now, it is said that the "Queensmoor" was fixed at 16 shillings (\$4) per ton freight between America and London; but it is certain that this tentative rate could not be repeated, and in all probability 19 shillings, or even 20 shillings (\$4.75 to \$5), would have to be paid. Unless, therefore, American coal owners are prepared to put their coal on board ship at a price which will be something fractionally less than 1 shilling (25 cents) per ton, they cannot expect to do much business with the London gas companies; and at that keen-cut quotation the most extortionate coal owner in America will fail to extort anything more than a very fine drawn margin with which to carry on the business of the official receiver in bankruptcy, or his counterpart in the United States.

On the other hand, however, the argument may be advanced that American coal gives such excellent results that it is worth fully 50 per cent more than English coal. Were this the case, it might be conceivable that an addition of 10 shillings (\$2.50) per ton to the price of American coal would not only be permissible, but that, as applied to gas coal peculiarly, it might actually be preferable to work a 50 per cent better coal at a 50 per cent higher price than to work the cheaper coal, on account of the saving of labor. This aspect of the case, however, would not be considered by any means an advantageous one so far as it would concern the London gas coal market, in which one of the chief requirements is a coal which will yield a plentitude of coke as well as rich results in gas, and where an increase in the yield of gas at the cost of a reduced output of coke would be counted a somewhat dubious gain.

But, in any case, the argument as to the supposed superiority of American coal would not be based on fact. Average American coal is very little, if indeed any, better in quality than average English coal; and even if we accept as a tangible basis of comparison the claim that each ton of American gas coal will yield 15,000 cubic feet of gas, which quantity has been freely cited as the prospective result, we cannot admit that the figure is exceptionally high when compared with English coals, as many of the best Durham and Yorkshire coals are fully as productive in their respective yields. This fact, therefore, places American and English coals very much on a par as regards

quality ; and, having seen that equality of price is out of the question, we fear we must put American gas coal completely out of court in respect of its feasibility and practicability for the English market.

In turning to the question of steam coal, we certainly find a much wider field for argument as to the prospects of American fuel finding a market in England. We even find, under certain circumstances and taking certain factors into account, some reasonable possibilities for such an issue being ultimately brought about. Some of these circumstances and factors have been indeed ruling for some time, and their possible continuance may afford enterprising American coal owners some excuse for making practical experiments in the matter, although under auspices which, to begin with, are not particularly encouraging.

Taking into consideration the most expensive steam fuel at present in the English market, viz., Welsh smokeless steam coal, for the purpose of eliciting the possibilities referred to, we find that prices for this class of fuel have ruled abnormally high for several months, both in regard to current quotations and contracts for future delivery ; coals on the Admiralty List having been sold at prices varying from £1 5s. to £1 5s. 6d. (\$6.25 to \$7.12½), free on board at Cardiff. Granting the very reasonable contention that Pocahontas and a few other American coals of this class are fully equal to best Welsh steam coal in quality, a considerable deduction must be made from the value of the Pocahontas class in recognizing the vast difference in the handling of the respective coals at the pithead. It must be remembered that the Welsh coal sold at the above figures is large screened coal, the small coal, or, as our Scottish colliery friends would call it, the dross, having been thoroughly screened from the coal prior to its removal from the collieries.

American coals, on the other hand, are usually sold as "run of mine," termed in English phraseology "through and through," or translated into pure Scotch, "triping." This condition implies the virgin state of the coal as it leaves the miner's tram, unscreened and deteriorating in size with each successive handling. Nor can this normal condition of American coal be very well overcome by the precautionary and expensive measure of having it screened, as American coal is so tender in its nature that even though it were to leave the colliery as "hand-picked" its condition after shipment and discharge would only be equivalent to "through and through."

These facts, therefore, render it imperative that we should treat

the comparative merits of Welsh and American coals only on the basis of both being "unscreened," on account of which a deduction of about 4 shillings (\$1) per ton must be allowed off the high prices previously alluded to as having been paid for Welsh coal, such deduction being the actual difference between Cardiff quotations for large screened Welsh and "through and through," respectively.

The following analysis of three approximate quotations for the London market may serve to give some idea of the handicapped conditions under which American coal would be forced to compete:

	WELSH LARGE SCREENED.	WELSH THRO' AND THRO'.	AMERICAN STEAM.
Coal, f. o. b. ....	28s. 6d. (\$7.12½)	24s. 6d. (\$6.12½)	12s. (\$3.00)
Freight.....	5 0 (\$1.25 )	5 0 (\$1.25 )	19 (\$4.75)
Quotation d. d.			
in Thames .....	33s. 6d. (\$8.37½)	29s. 6d. (\$7.37½)	31s. (\$7.75)

From the above table of comparison it would seem to be obvious that no advantage in the matter of price can be obtained from American coal; and on reflecting that in the question of quality we cannot assume all American steam coals to be rivals to Welsh, we believe that the disparity between the prices of lower class American steams and those of our cheaper hard steams from the midlands and north of England and Scotland would be so overwhelmingly against American coal as to admit of no serious thoughts being entertained regarding possible competition (in second-class steam coals) emanating from America.

In first-class steam coal, however, we admit, as has been shown, that America certainly possesses a chance of competing at such periods as its quotations for coal and freight may rule low simultaneously with the English market ruling high; but the juxtaposition of prices would need to incline a shilling or two more toward the situation on both sides of the Atlantic than the figures given above. Even then, with the difference of price removed, we should not say that the chief difficulty had been overcome. The conservative nature of English steam users would very probably militate severely against American fuel finding a spontaneous and abundant market in London at all events.

If, therefore, this conservative disinclination to adopt a new fuel should prove to be an obstacle to steam users, who, being business men, would surely recognize any advantageous feature of the Amer-

ican coal question, the difficulties in the way of introducing American coal to English householders, who are not likely to consider the subject from a business point of view, would be infinitely greater still. We feel disposed, therefore, to dismiss the idea of American household coal invading the English market as being purely visionary. Moreover, the present style of English grates and kitchen ranges has been designed for English coal, and no other kind of coal can be used in them. Coal of the anthracite class is chiefly used for house purposes in America, and this requires a special style of stove very different from the open grates so generally fitted in English homes. Thus, the substitution of American coal for English would involve extensive structural alterations which house owners could scarcely be expected to contemplate with equanimity.

It may be argued that as our calculations have been wholly based on the assumption that freights from America cannot be less than 19 shillings (\$4.75), a reduction of this estimate would change our conclusions. I think not. Even if American coal owners were to build their own steamers with the intention of running them at, say, 10 shillings (\$2.50) their difficulties would only be commencing. They would have to face the probability of bringing their boats home empty in ballast, seeing that the American tariff arrangements interfere with any volume of trade passing from east to west. It must also be kept in remembrance that the prices obtaining in the English market at the present time (October) are exceptionally high; the normal quotation for best Welsh steam coal being nearer 10 shillings (\$2.50) than 15 shillings (\$3.75), and for gas coal nearer 5 shillings (\$1.25) than 10 shillings (\$2.50), f. o. b. It would thus appear likely that any American coal imported into England during ordinary times would not repay the cost of working.

In the case of Continental ports American coal stands in a better position, as the difference in the rates of freight is not so great. For instance, taking Genoa as a typical port, large Welsh coal costs 25 shillings (\$6.25), f. o. b., plus 11 shillings (\$2.75) freight, totalling 36 shillings (\$9) delivered; through and through Welsh, 21 shillings (\$5.25), plus 11 shillings (\$2.75) freight, or 32 shillings (\$8), delivered; while American coal, costing \$2.50, f. o. b., plus \$5 freight, could be delivered at the lower figure of \$7.50. This advantage tends to disappear as the competition advances farther north, where English freights are relatively lower; but it is nevertheless obvious that for Mediterranean ports and coaling stations there is a very fair

chance for America competing, and competing successfully, *so long as present conditions last.*

It must not be forgotten, however, that English coal possesses such elasticity of conditions affecting price that it can fall some 10 to 15 shillings (\$2.50 to \$3.75) per ton before it reaches an unremunerative figure, and that on this account American competition must sooner or later break down. Supposing, too, that American coal is, ton for ton, fully equal to best Welsh, it will be necessary to convince consumers that such is the case; and so far the proselytizing of coal consumers to the cause of American coal has been a very difficult task indeed.

Summed up, the writer's conclusions are that there is little hope of American coal obtaining a footing in England, and that it can only secure a temporary tenure of some of the Continental markets. In these conclusions the writer has not allowed his connections with English coal markets and English sources of supply to give bias to his views, which are founded on careful analyses of figures and due consideration of reports from ship owners and others who have had opportunities of practically testing the respective merits of the coals of the two countries. The writer, indeed, feels almost inclined to express some sentiments of regret that his verdict is not more favorable to the land of the Stars and Stripes than it is, but he refrains from doing so because — there is no sentiment in business.

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## THE HIGHER EDUCATION OF WOMEN IN FRANCE.

THE Paris Exposition, marvellous in all its concrete detail, was still more marvellous for its revelations. It will stand eventually as the exponent of an idea, like the London Exposition of 1851, which showed England the industrial value of art training, or like the Chicago Exposition, which inspired us with confidence in our own esthetic ideals.

It was naturally supposed that France had little to fear from comparison with other nations on the industrial side; but recent events had made people skeptical as to the possibility of a favorable showing in regard to her political principles or policies. It is just here that the Exposition was a revelation: it gave the distinct impression of a national principle superior to the follies and errors of individuals. Especially was this the effect of the French educational exhibit, the most imposing exhibit of the kind ever displayed.

The system which it represented is an amazing work. It began in the hour of defeat; it was pushed with irresistible ardor; in a few years France was covered with free schools. A fund of \$23,000,000 was created for school-houses alone;<sup>1</sup> normal schools multiplied, an army of school officers, vigilant and determined, enforced school attendance; appropriations for education annually increased; in fifteen years the public expenditure for primary schools rose from twelve to thirty-four million dollars.<sup>2</sup> The work did not stop at primary schools; higher education was opened to the humbler classes; it was a campaign against ignorance and caste, in the conviction that these were the enemies that had humiliated France.

Special efforts for the higher education of women were begun cautiously, and have attracted little attention in the world at large. No part of the general movement is, however, more important, and nothing was more significant than the results shown at Paris last sum-

<sup>1</sup> Law of June 1, 1878, authorizing 120,000,000 francs for this purpose, 60,000,000 to be given to the communes as subventions and 60,000,000 to be advanced in loans.

<sup>2</sup> It was 61,640,893 francs in 1870, and 170,604,872 francs in 1895.