

ingly given, at an average of wages which we can assure them does not exceed in the best paid districts 2s. 8d. a day for men, 1s. 8d. a day for women, and 1s. 2d. a day for boys, that has enabled the population of Belgium to successfully to compete with England in the markets of Europe. We find Belgium now meeting us at every turn—a pushing and dangerous rival. We shall find her in no danger as a powerful rival as she receives fresh accessions of aid, and becomes endowed with accumulating power from increasing skill, so will the advance of our rivals become continuously more rapid, and the market for the labour of the British workman become from day to day narrower and less remunerative.

With these tabulated statistics, and the results which we have, we believe, correctly evolved from them in our minds, we have proceeded personally to visit the coalfields of Belgium and the ironworks which attach to them. The coal basin of Belgium consists of a large zone of almost entirely bituminous character, 57 miles in length by about 12 in breadth at its widest point traversing the kingdom from south-west to north-east. This zone as far as Belgium is concerned commences at Mons and ends a little beyond Liège. By the arrangement adopted by the department of the Belgian Government the basin is divided into two great sections—viz. the Western or Hainaut section which is subdivided into the Mons, the Centre, and the Charleroi districts, and a second section extending through the provinces of Namur and Liège and running into Rhinish Prussia. The total area of the basin constituted of these two sections is 331,392 acres of which as will be seen from the preceding tables, almost the entire surface has in some degree been operated upon. Almost not however be assumed from this fact that the basin is being exhaustively worked. On the contrary, production, far from diminishing in quantity or slackening in rate, is up to this moment exhibiting fresh vigour and making great strides in advance. Thus the extraction in the year 1894 exceeds that of 1893 by 570,270 in tonnage, and 3,272,470 in monetary value in France, while the year 1895 beat 1894 by 531,683 tons, and 10,222,523 francs. It has been estimated by M. J. Chaus, *Ingénieur en Chef Directeur des Mines* and his calculations seem accurate, that, in proportion to her population, Belgium is producing eight times as much coal as France, between twice and three times as much as Prussia, and only one-fourth less than Great Britain, and that her production is doubling every 15 years. Surely these facts deserve the attention not only of investors and men, but of Parliament and the country, and especially of those who are entrusted with the duty of inspecting and reporting upon the condition of our industries and the populations dependent upon them!

To us they appeared no less important than startling and strongly impressed with their extraordinary character we started for the coal district in the hope of discovering to what conditions and circumstances these results were attributable. Considering the peculiar situation of the basin—its length as compared with its breadth—it appeared to us that if the most convenient way of examining would be to go through it from end to end to make in our progress the respective centres of the subdivisions established by Government for the purposes of report as points of arrest and departure. This plan took us in the first instance, to Mons, which till within the last two or three years held the first place in productive power in the province of Hainaut. Later, however, Mons has been passed in the race by both the Centre and Charleroi divisions respectively by 18 and 21 per cent. against 1 per cent. This change in relative position is attributed chiefly to the immense and increasing demand for consumption on the spot at Charleroi, consequent on the extraordinary and progressive development of works of various kinds on the banks of the Sambre, and partly to the quality of the Charleroi coal, which, in consequence of its emitting very little smoke, is much sought after for domestic purposes.

Coming, as we did, directly from Staffordshire, the difference of aspect presented by the Belgian coalfields was very striking. There are few in our district things to a man who is not turning coal and minerals into gold than a drive through the Staffordshire district. The houses are black, the men are black, the sheep are black, the dogs are black, and between you and the sky, which you rarely see, is interposed a heavy and thick roof of burnt unbaked iron. One, shadowed by this roof you see on each side as you drive along the road—dark black—dwelling in every stage of ruin, from the promontory fissure, zig-zagging down the walls, to absolute rending asunder and tumbling to pieces, the result of capricious subsidence here and there of the surface. The Belgium basin presents none of these ugly aspects. On the contrary, after being whirled rapidly over a great flat, richly cultivated in wheat, but almost devoid of distinctive features, you enter suddenly upon a picturesque district, with the ground just sufficiently undulated about to give it character, a not unlike in some places the Stroud Valley. The sky is blue the atmosphere is clear, streaked only with jets of white steam, and groups of cottages dotted about on the slopes of the mounds and white washed to the attempt to make a picturesque scene that the eye dwells on with pleasure. There are differences however that it is not rest with capitalists or workmen to remove. They are the result of the natural difference between the two cases of coal beds. In Staffordshire the strata run horizontally, and the surface of the soil is consequently constantly subjected to alteration of level; in Belgium their direction is up and down, and they are either absolutely perpendicular or incline at an angle of a degree. The surface consequently is far more free from the disturbances which affect that of Staffordshire. In Staffordshire the coal is what the French and Belgians term *coke*, that is, it is non-luminous, and in combustion the waste is thrown off in the form of smoke. The coal of Belgium is bituminous, and the waste is evolved in flame and gas. The Staffordshire coal is also characterized with a considerable quantity of earthy

matter, which renders it absolutely impossible to apply to it any smoke-consuming process.

The coal bed of Mons extends into the Department du Nord in France, but it becomes very thin after leaving Mons, and at Douai all traces of it are lost. There are 52 pits in active work. They are situated about a mile and a half from the town itself, and almost the whole of the mining population live on the pits in one-storied cottages, with a room on each side of the entrance and they are white washed as only Belgians whitewash. This gives the traveller an idea of a cleanliness and comfort, but in truth, it is only the outside of the plaster that gets any attention paid to it, and the interiors are dirty and ill-smelling. We did not go down any of the pits in the Mons section, as there are no works as yet in connection with them, although there is one in course of construction, and we were advised to defer our personal investigations below the surface till we got to Charleroi, which we understood would afford us a better illustration of the system of mining and the nature of the coal formation, and where in addition we should have the advantage of being accompanied by M. Jules Hayez, the Government Inspector of the district. M. Hayez has in preparation a report upon the English coal mines, the result as in our own case of a personal visit. It will be a great advantage to have placed before us the views of an able and experienced foreigner upon our systems who brings to his enquiry a mind unbiassed by English controversies, and we are sure the publication of M. Hayez's report will be looked for with great interest on this side of the water.

On the day following that on which we visited Mons we proceeded to Charleroi. This is the most important town of the district—the most important, indeed, in the kingdom, as the centre of iron manufacture, situated as it is in the very centre of the coal basin, and just on the point where it attains its greatest breadth. Three branches of railways besides the river Sambre, and an excellent system of canalization afford extraordinary facilities for communication with other centres of industry and the radiation of its products throughout Europe. But we must defer till our next letter the account of what we saw and learnt during our visit there, as we could not, without extending this communication to an inconvenient length, give a description of even the coal pit of Poirier, as we had when we commenced writing intended to do.

W. HERRIES CREED
Brussels, Dec. 6. WALTER WILLIAMS, Jun.

F. W. HENSHAW'S ANNUAL ASHES CIRCULAR.

MONTREAL, JAN. 1, 1897.

WITH the close of the year 1896, I beg to furnish you with a few items of information which may prove interesting in respect to the Ashes trade of the Province. The first, perhaps, in importance, is the remarkable falling off in the manufacture of both P. and Pearl Ashes in the year just ended as compared with the one previous, amounting to 1124 barrels viz. 435 lots, and 265 Pears. This serious deficiency is in a great measure to be accounted for, from the fact, that the time best adapted for securing the raw material was almost unparalysed as a rainy season. In some districts large quantities of raw Ashes as well as black ash were entirely destroyed before they could be gathered causing many of the Asheries to remain almost if not entirely idle. Such is the testimony of many of the makers with whom I have correspondence. The high prices, especially in Pearls, which ruled throughout the year, in comparison with those of 1895 would naturally have forced a large supply to market, if the Ash had been in the country. When it is taken into consideration that the business of 1896 commenced with a stock on hand of 3418 lbs. (more than 1000 in excess of the previous year) the deficiency becomes even more striking. The average prices of each month, as shown in the annexed columns, are made up as correctly as possible, but they do not convey an idea of the extraordinary fluctuations of the market, which not infrequently took place to the extent of 50 cents to \$1 per 100 lbs in the course of 24 hours.

In the article of Pearl Ash, there was throughout the year a steady demand for actual consumption, and for the most part the demand was in excess of the supply. In P. Ash, on the other hand, purely speculative operations interfered to no small extent with the regular export trade, large stocks being withdrawn from the market and held at excessive prices. Legitimate buyers were forced to retire or as in some instances to submit to the demands, whereas had the trade been left to the fair operations of demand and supply, the probabilities are, that not a barrel would have been left in the country to be carried over to this year's account. The introduction of marlites which enter strongly into competition with P. Ash, serve as a check on that article, causing the demand to cease, when prices rise much beyond the cost of the substitute, and a total withdrawal of orders brings on for a time a heavy reaction, and a fall sometimes below the actual cost of production is the consequence.

Of the total shipments of Potash in 1896, say 22,373 bbls. it is estimated that not exceeding 500 bbls were sent to the United States for consumption there, being very considerably short of the previous year's export to that country, while in Pearls the shipments were more equally divided between Great Britain and the United States, the latter, however, taking the greater share.

For many years past efforts have been made to bring about a change in the system of fixing the rate of the barrel. In this country, as in the United States, it is believed that the actual weight of the empty barrel is the proper one to be reduced, while in England, the old system of deducting one-eighth from the gross weight of the cask when filled, is still persisted in, to the great injury of the Canadian shipper, who finding himself a heavy loser from this cause, in addition to

the great expense always attending the sale of his Ashes in Britain, rarely attempts a shipment, except under circumstances which do not often occur. He cannot hope, in any event, to escape with less than 10 per cent on the first cost of his Ashes in the shape of charges on account of sales. It seems therefore not unreasonable to expect on the part of our friends in England, some amelioration, even to the extent of altering their system of *taring* into conformity with that which universally prevails on this side of the Atlantic.

The different grades of Pot Ash inspected in 1896 are as follows—first sort, 1654 bbls., second sort, 3509 bbls., third sort, 12 1/2 bbls., Unbranded 259 bbls., and of Pearls there were, first sort, 3398 bbls., second sort, 3067 bbls., third sort, 60 bbls., unbranded, 4 bbls. The stock with which we commence this year consist of the following quantities: viz. P. Ash first sort, 1466 bbls., second sort, 15 bbls., third sort, 187 bbls., unbranded 42 bbls., total, 2000 bbls.; Pearls, first sort, 335, bbls., second sort, 139 1/2 bbls., total, 625 bbls.

P. S. Since making up the totals a slight error of about 60 bbls. was discovered, these must be added to the stock of P. Ash, and deducted from the Pearls.

Comparative Statement of Receipts of Pot and Pearl Ashes at Montreal, for the years 1893 and 1895, with average price of each Month.

Stock on	Pots.	Average		Pears.	Average		Total
		Price	\$		Price	\$	
1st Jan., 1895....	2410			1048			3458
January.....	2418	8 85	481	7 00	249		
February.....	1349	6 67 1/2	495	7 68	18 4		
March.....	1746	5 69	586	7 42	2131		
April.....	33	5 81	1 0	7 0	1583		
May.....	3229	5 00	365	7 65	3847		
June.....	2493	5 55	430	7 67	2622		
July.....	2401	6 44	846	8 12	3247		
August.....	1743	5 62	878	7 69	2621		
September.....	1288	6 92	776	6 87	2 63		
October.....	1747	6 81	833	7 00	2606		
November.....	1661	6 81	485	7 28	2 49		
December.....	652	6 80	520	7 38	1172		
Shipped 1895....	24373		7683		32056		
	22673		7165		29838		

Carried to 1896...	Pots.	Average		Pears.	Average		Total
		Price	\$		Price	\$	
	2400			1048			3448

Stock on	Pots.	Average		Pears.	Average		Total
		Price	\$		Price	\$	
1st Jan., 1895....	1412			1020			2432
January.....	2559	5 45	701	5 47 1/2	826		
February.....	1879	5 40	2 6	5 47 1/2	2684		
March.....	1842	6 25	201	6 46	2 51		
April.....	1357	5 25	223	5 50	1586		
May.....	44 5	5 35	1149	5 51	5594		
June.....	2465	5 29	835	5 45	4300		
July.....	3384	5 21	1267	5 37 1/2	4921		
August.....	2792	5 67 1/2	1621	5 32 1/2	4313		
September.....	1 84	5 37 1/2	1 31	5 58	3 15		
October.....	2253	5 45	1046	5 50	3290		
November.....	23 8	7 24	958	7 87 1/2	3826		
December.....	2222	6 70	743	7 23	3 65		
Shipped 1895 ..	22322		10778		453 0		
	22012		9 70		38882		

Carried to 1896...	Pots.	Average		Pears.	Average		Total
		Price	\$		Price	\$	
	2410			1048			3448

SHIPMENTS IN 1896.			
	Pots.	Pears.	Total.
January.....	137	107	244
February.....	22 8	14	252
March.....	174	703	2477
April.....	879	211	1090
May.....	341	410	4521
June.....	247	335	3283
July.....	164	576	2579
August.....	1266	54	1780
September.....	1251	556	18 7
October.....	2085	13 8	3234
November.....	2150	791	2941
December.....	600	530	930
	22373	7155	29528

SHIPMENTS IN 1895.			
	Pots.	Pears.	Total.
January.....	1687	203	1950
February.....	183	161	2684
March.....	1247	314	1601
April.....	511	218	729
May.....	6117	1677	7894
June.....	591	685	4576
July.....	449	1 07	5186
August.....	285	1310	3 95
September.....	2167	1687	3744
October.....	1167	1147	2814
November.....	1291	328	2454
December.....	2073	603	2756
	22012	6970	38882

HALIFAX TRADE REPORT.

HALIFAX, December 28, 1896.

BUSINESS has been exceedingly dull for the past week. Christmas generally causes a relaxation in our mercantile affairs.

RECAPITULATION.—We have no change of any importance to note. The demand for flour is not so active, and prices are less firm. But one lot has been offered at public auction since our last which realized \$8.87, but we have heard of several lots selling at \$9.55 off the wharf. A sale to-day of part of the cargo saved from the wreck of the steamer *Baltimore* in a damaged