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Millars, Sugar Refiners etc.

3 June 24th

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Note of Interview with Mr S. S. Schwartz of Pelham St., E:-

Mr Schwartz wrote asking someone to call. When I did so I found that he had little to say. The appearance of the building where I found him was a good indication of the condition of his trade. It is a large warehouse of five or six floors and at first sight appears to be totally dismantled and unoccupied. However with great difficulty I succeeded in finding an entrance, and at the top of the building in a small office I found Mr Schwartz with one clerk.

He told me that the depression in the trade, caused by the importation of bounty fed sugar came to a head in 1886. Up to that time his father had employed 600 men, who earned on an average 25/ a week. There were in the immediate neighbourhood four other refineries employing a large number of men. They are now all closed. Schwartz's do a small trade in fruit essences, but have long

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which he defines.

There are only two refineries in London which make any profit, Tate's and Lyle's. Tate has made his money out of his patent for cube sugar; Lyle manages to make about 4 p.c. on his capital by doing a large trade in Fruit Essence. Martineau's, formerly the largest refiner in London, has a receiver on.

4/-d
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June 24th

Extract from article in The Times of March 15th 1886 on "Out of work London".

"The condition of the East End has for many years been indissolubly connected with the sugar trade; and the collapse of this industry has produced far reaching consequences."

The manufacturers of animal charcoal, of filter bags, of casks, engineers and copper workers, gate and lamp makers, carriers and porters are all thrown out of employment by the closing of sugar refineries. "The firm of Fairclough, Cartwright and Cousins who almost monopolized the work for the sugar trade, would have had to discharge nearly all their men and all their horses had they not succeeded in securing a totally different outlet for their business, and thus saved 200 carters from losing their employment. Next door at the sugar refinery of the Geo. Martineau I found 56 sugar refiners working as builders labourers, doing taskwork since then out of kindness so as to postpone if not altogether avoid the necessity of discharging them.

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In England the consumption of sugar per head has increased threefold during the last 40 years, but the amount of sugar refined in this country has not increased in proportion: indeed for some years it has rapidly decreased. The cause is not far to seek, for it is unanimously attributed to foreign bounties. For instance, putting aside the fluctuations of the market, and taking a mean price, raw or unrefined beetroot sugar is sold at Hamburg for £13 the ton. Refined sugar in London is worth about £19 the ton. We have therefore a margin of £5 for the process of refining, profits of trade etc. The Americans take the Hamburg sugar to the States, there it is refined and sent back to Europe. The duty paid for duty on the imported raw material is returned by the American government when the sugar is exported in a manufactured condition, and £2 extra per ton allowed as bounty money. It is further generally believed in the trade that through various machinations practised at the American Custom House the exporters from the United States secure further

advantages equal to about 10/ in ton. Thus while the English refiner has only a margin represented by the difference in value between raw and refined sugar of £5 per ton to work upon, the American by the addition of the above mentioned bounty has a margin of £7.10.

A mutual agreement has been made by the five remaining and principal sugar refiners of London. The five firms can produce crystal and fine sugar to the extent of 4000 tons per week. They have entered on an agreement so to limit their collective output that in no instance shall it exceed 2850 tons. ..... On the other hand each Northern refiner about two tons per week: and the weekly output being thus reduced to the extent of 1250 tons this means the discharge of 625 men. But this is only the direct effect. To refine 1000 tons of sugar per week implies an annual outlay for working expenses, and without counting profits of some £60000, of which at most only £28600 goes to the wages of the 500 sugar refiners

engaged to produce the 1000 tons. The remaining £57,400 is spent in a manner that benefits other traders not so directly connected with sugar refining. With the works has not yet been told. The cut loaf and granulated sugar, which does not come under the agreement has also greatly fallen off, while the actual output of the other sorts of sugar does not come up to the limit established by the restrictions voluntarily ~~[illegible]~~ accepted. This very week Mr H. Duncan will close his refinery. This firm has produced 1800 tons of sugar in a week and in prosperous times employed 800 men. By the agreement it undertook not to produce more than 700 tons, and therefore reduced its staff to 350 hands. Now the works are totally stopped and these remaining hands discharged. Again the output of Mr Schwartz has reduced by the agreement from 1000 tons to 600; but the necessities of the case have brought about a further weekly decrease of 200 tons. Mr Schwartz tells us that during the last two years he has been gradually discharging men. One among them had rented

regularly at his work every morning for three months in hope of being reinstated: at the end of that time he disappeared: on enquiry it was found he had been sent to jail for house breaking. He had always been a sober steady contented worker, and bore an excellent character. Yet it cannot be said that at the best the lot of the sugar refiner is particularly enviable, for they generally work 10½ hours a day, Saturday included, and only earn 22/ a week.

The total imports ~~to~~ of sugar for January 1886 stood at 290644 tons as compared to 15562 tons in January 1885. Such figures readily account for the discharge of so many men, the closing of some of the works and the bitter outcry raised against foreign countries. Looking upon it in another light it may be reckoned that as our imports of sugar rose from 135179 tons in 1881 to 266503 tons in ~~1884~~ 1885, there is here a difference of 128724 tons, which if refined in England would have necessitated at the rate of ₹ 8000 per ann. for 1000 tons per week an outlay of some ₹ 200000 and would have kept at work 1550 sugar refiners.

July 1st.

Note of Interview with Mr David Martineau:-

Mr Martineau is the Managing Director of David Martineau and Son, Limited. In spite of the fact that the firm is now in liquidation he takes a cheerful view of the situation and is trying to get capital for reconstruction. He is convinced that there is still money to be made out of sugar refining in London. The bounties are not & now anything like so damaging to the trade as they were. Twenty years ago number of countries, and France especially, gave large bounties on refined sugar, with the result that the trade was gradually almost killed; now there are no bounties except on raw sugar, which is much more advantageous to the refiners, as when raw sugar is cheap, they can do well with all the lye products and manufactures, s.f. treacle and fruit syrups. Mr Martineau thinks that Tate and Lyle still make very large profits.

Mr Martineau gave me some figures as to wages, hours etc, but for details refer me

to his manager, to whom he gave me a card of introduction.

July 4th.

Note of Interview with Mr H. Lonsdale:-

Mr Lonsdale is Manager to Messrs. David Martineau.

In the first place he asked me to dismiss from my head any figures given me by Mr Martineau as utterly unreliable. Mr Martineau he says has done nothing in the business for some years and knows nothing about it.

Mr Lonsdale was very reluctant and at first refused entirely to give me any information. It appears that there is a deadly feud between Martineau's and Lyle's, their neighbours. Ever since Mr Lonsdale became Manager of Martineau's he has been fighting Lyle's vigorously, and they are exceedingly curious as to how Martineau's have carried their business on. Any publication of the facts in detail would be most detrimental to Martineau's, as they and Lyle are, with the exception of Tate, the only two refineries left in London, and Lyle's would know at once where the information must come from.

After some talk Mr Longpre told me that he had completely ~~reorg~~ reorganised the wage list of the business, and I gather that he lowered wages, as he said that he had to fight the men who struck without success. Though he would not give me details he gave me the following maximum and minimum wages, ~~for~~ but only on condition that nothing should be published on his information without being first submitted to him:

Wages:- Melting Men and Wash House Men 22/ to 30/ a week; Liquor Men 30/; Charcoal House Man 27/ to 32/; Packman 40/ to 50/; Warehouseman 24/ to 27/; Centrifugal Machine Man paid by the piece at the rate of 5/6 to 1/ per ton.

The Hours are 12 with two hours for meals.

Mr Longpre takes a less cheerful view of the position of affairs than Mr Martineau who he says has been grossly deceived as

"a sanguine ass". It appears that some years ago Martineau's had a great fire, and with the insurance money they were able to launch out. Among other things they secured a valuable patent which would enable them to produce spirit from rice infusion at a much lower rate than has been done before. With the aid of this patent, and with luck Mr Longfoot thinks that they might struggle against bounties if they get sufficient money for reconstruction. But in any case it will be impossible to carry on unless labour is prepared to take a lower rate of wages.

As to describing the process of infusion referring Mr Longfoot says that if he attempted to do so he would fill volumes.

Mr Longfoot thinks we are not likely to get anything out of Tate's who are sure to find good reasons for refusing any information.

July 5th.

Extract from Encyclopaedia Britannica on "Sugar Refining" :-

Sugar Refiners deal indifferently with raw cane sugar and beetroot sugars which come into the market, and by precisely the same series of operations. The sugar is first melted in charges of 5 or 6 tons in "blow-ups", i.e. cast-iron tanks fitted with mechanical and steam paddles for heating the water. The solution called "liquor" is brought to a certain degree of gravity from 25° to 30° Baumé, and formerly it was the practice to treat it, especially when low qualities of sugar were operated on, with blood albumen. The hot liquor is next passed through milled cotton bags spread in a meshing of hemp, through which the mixture is mechanically strained. From 50 to 200 of these filters are suspended in close chambers, in which they are kept hot, from the bottom of a perforated tank, each perforation having under it a bag. These bags have from time to time to be taken off for cleaning out and washing. From the bag filter the liquor

is passed for decolorizing through beds of animal charcoal enclosed in cisterns to a depth of from 30 to 50 feet, the sugar being received ~~in the~~ into tanks for concentration in the vacuum pan. In that apparatus it is boiled to grain, and the treatment is varied according to the nature of the finished sugar to be made. To make

Much crystals only are ~~found in~~ formed in the pan, and the premelter magma is run into steam jacketed open pans and raised to a temperature of about 180 to 190 Fahrenheit which liquefies the grains. The hot solution is then cast into conical moulds, the form of the loaf, in which the sugar as it cools crystallizes into a solid mass, still surrounded and mixed with a syrup containing colouring and other impurities. After thorough settling and crystallization a plug at the bottom of the mould is opened and the syrup allowed to drain away. To whiten the loaves they are treated with successive doses of saturated syrup, ending with a syrup of pure colourless sugar. These doses are poured on the upper side of the cone, and percolating

down through the porous mass, carry with them the impure green syrup which may still adhere to the crystals. The liquor which obstinately remains in the interstices is driven out by suction or centrifugal action: the loaf is rounded off, pared, and placed in a stove for drying. The syrup which drains from the loaves is sold as golden syrup. When refined crystals are to be made the contents of the vacuum pan are passed into the centrifugal machine: the syrup is then driven off by rotation, and the crystals purified either by adding pure syrup to the revolving basket or by blowing steam through it.

July 8th.

Note of Interview with Mr John Lyle of Moran Lyle and Sons:-

Messrs. Lyle will fill in our wages return and send it on, but they cannot classify the men according to the Census. With the exception of Barmen, who are the only men whose work can be called skilled, they employ few except lads.

Messrs. Lyle keep their work going at one level throughout the year, though they often have to take their season at a heavy loss.

The work is not unhealthy though the men suffer to some extent from the heat, and in summer they are liable to ~~die~~ diarrhoea from drinking too much oatmeal water.

In 1885 when the crisis in the trade came Messrs. Lyle reduced the wages on an average 2/ a week all round, but four years later they raised the wages to the old level. They do not think that a reduction in wages would make it

possible to carry on the industry successfully in England; labour though a large, is not the most important item in the expense. Nothing could ruin the trade except a ~~duty~~ countervailing duty on refined sugar. Such a duty on Cyle refiners would only raise the price of sugar to an almost inappreciable degree, and would scarcely interfere with its consumption. Even some of the largest consumers of refined sugar (e.g. Keiller) raise no objection to such a duty.

Messrs Cyle wish it to be understood that we are not to make use of their wage returns unless we have returns from other refiners, as they do not wish to be identified.

July 11th.

Note of Interview with Mr Quiddington:-

Mr Quiddington entered the Sugar Refining trade about 30 years ago, in the employ of Messrs Schwartz; since Messrs. Schwartz closed their Refinery in 1886 he and about six other men have remained on doing a little fruit essence, and treacle work.

Wages paid by Messrs. Schwartz, - which Mr Quiddington thinks correspond to those now paid in the few remaining Refineries - were for foremen of melting men about 32/ a week; of washhouse men 28/ a week; of liquor men 40/ a week: the ordinary men under these foremen got from 20/ to 24/ a week. In the charcoal house the men were paid 4/ a day, and stokers 30/ a week. The centrifugal machine men were paid 23/ or 24/ a week. Five Packers were employed, three of whom had two pans to attend to, two one to attend to: the former got 40/ and the latter 33/ a week. The average weekly earnings of men throughout the Refinery amounted to about 24/ a week.

Hours were 12 with two hours off. Overtime was sometimes worked and paid for in proportion to the wages.

Regularity. Nearly all sugar Refineries used to and still do turn out a fixed number of tons each week throughout the year.

Method of learning. With the exception of the Pannen the work is unskilled; but it was usual for those who wished to become Pannen to pay a certain sum to the head Pannen for a term of three years' apprenticeship.

In the Pan the liquor has to be boiled to a certain degree of thickness, and it requires a good deal of experience to know when it has reached the requisite point. A pannen who was not experienced might spoil tons of sugar.

Neither at Schwartz's nor elsewhere in London was any loaf sugar made.

Health. The work was very hot, but not otherwise unhealthy.

I asked Mr Quiddington if he could tell me at all what had become of his old fellow workmen, but he was unable to do so. All he could say was that when the crisis came they passed through a time of terrible suffering. If Dr Ben ~~x~~ here long learnt to hope that the trade can be ~~[illegible]~~ revived.

July 18th.

Note on visit to Silverton:-

I visited Silverton to-day in the hope of picking up some information as to Super Reppiers. I did not return quite empty handed but the result on the whole was very poor.

I went into a small and very dirty eating house just opposite Mentucci's gates, and found that the only men having a meal there was employed at Agle's. I was just beginning to get something out of him when his wife appeared from the kitchen and forbad him to tell me anything more. She said that not only did "John" know nothing about it, but that he did not always tell the truth being subject to fits. The real motive for her action was evidently the usual suspicion as to the object of the enquiries. John when interrupted had told me that few men with the exception of farmers ever earned more than 24/ a week, and that it took many years to rise to that sum. John having fished me another lady in the house volunteered to send out for a man who was playing an organ in the immediate neighbourhood.

His name was Alfred Wilson; he has been working in Swan Spencer all his life: first for Messrs. Duncan, and after they failed for Martineau's till last Christmas, when he met with an accident which crippled him, and was he says turned out at once without any compensation. He was not an easy man to get much out of, and from his appearance I should imagine that he is addicted to drink, so that I should not be disposed to place too much reliance on such little information as I obtained from him.

As to wages he says that Parsons get from 40/ to 50/ a week. Others get wages from 20/ to 35/

Hours are usually ten at actual work though some men only work nine hours. Work goes on night and day.

Regularity: Both at Ayle's and Yates the work is regular throughout the year. Hands are never dismissed for slackness.

Health. The work is unhealthy owing to the fearful heat, and from the same cause there is great temptation to drink.

Lyle's pay their men better than Tate, and treat them altogether better. Tate's men are usually known as "Tate's ghosts"

Prisons. Lyle have to-day sent in their wages return. From what Mr Lyle said to me I gather that they have classed as lads all who earn less than 20/ whatever their age.

July 22d.

Note of Interview with Mr J. J. Rogers.—

Mr Rogers whom I saw previously with reference to sugars gave me some information as to sugar Refiners.

He says that the ruin of the Refiners was by no means entirely due to Bounties indeed that they were not the chief cause. The main reason was that the refiners sold bad sugar and tried to bolster up their trade by protection. Up to 1874 when Gladstone took off the sugar duties the trade was protected. The Refiners used ~~to~~ handle anything but West Indian cane sugar, which was much inferior to the best sugar of the continent: their plant and machinery too was far behind that of the Continental refiners; as soon as the superior foreign sugar came in free the English sugar was at once driven out of the market and the refiners knocked down like a pack of cards. If they had moved with the times and spent capital on new machinery etc. they could easily have kept going. The bounties

of course had something to do with their failure, but in spite of the bounties Tate has managed to pile up the biggest fortune ever made in the sugar trade. Martineau's have been ruined not by bounties, but by mis-fortune.

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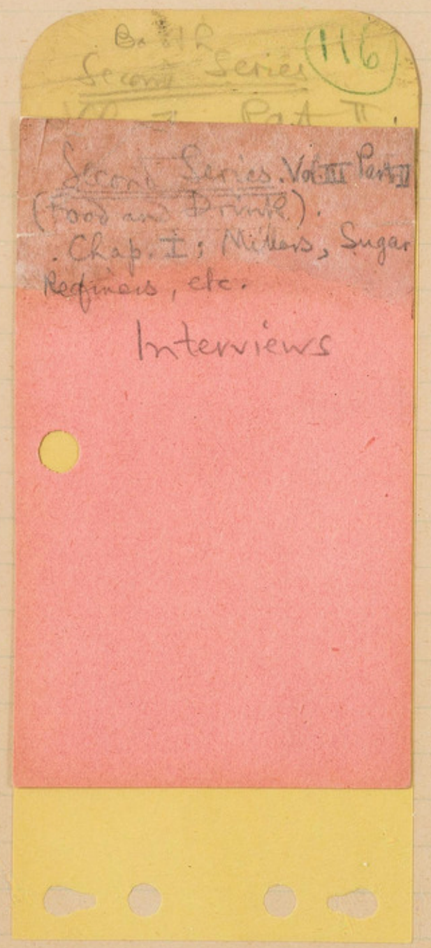
July 26th.

Note on Organ Boxes. :-

I have read a number of Blue Books and Parliamentary papers on the Organ Question. Of these [illegible] to read these :- viz :- (1) [illegible] Committee marked [illegible] Jeffries' Report in 1864 [illegible] Robert Jeffries's Report in [illegible]

[illegible] of Trade to try and [illegible] tion, but was told that [illegible] price rose. However [illegible] House of Commons ordered [illegible] Sir Robert Jeffries [illegible] the end of the year. [illegible] instructed to defer the further [illegible] Organ Reformers till this report is out, as [illegible] the very scanty information which I have been able to glean it is impossible to say what is really the condition of the trade

Railways for the Propaganda Railway
TF1497
Railway Gazette Feb. 21. 1936 p. 374. figs
Secretary



July 26th.

Note on Sugar Refiners:-

I have read a number of Blue Books and Parliamentary papers on the Sugar Question. Of these it is only necessary to read three:- viz:- (1.) The Report of the Select Committee marked A. (2.) Sir Robert Giffen's Report in 1884 marked B (3.) Sir Robert Giffen's Report in 1889 marked C.

I called at the Board of Trade to try and get some later information, but was told that at present they could give none. However during last session the House of Commons ordered a further Report which Sir Robert Giffen will probably write before the end of the year. If possible I should be inclined to defer the publication of the section on Sugar Refiners till this Report is out, as with the very scanty information which I have been able to get it is impossible to say what is really the condition of the trade

To bring the history of the attempts to deal with the question up to a later date it may be noted, that a further Conference was held in London in 1887 at which Germany, Austria, Belgium, Denmark, Spain, France, Great Britain, Italy, Holland, Russia, and Sweden were represented. On Oct. 20th the representatives unanimously signed a Protocol condemning bounties, and declaring that a system of manufacturing and exporting in bond was the only way in which bounties could be avoided. The Conference met again in 1888 and finally on May 30th a Convention was signed by the representatives of all the countries except France, Denmark, and Sweden, the convention to come into force from Sept. 1st. 1891. The important clause of the Convention is as follows:- "The contracting powers shall in order to exclude from its territory raw sugar, refined sugar, molasses, or glucose that has benefited by open or disguised bounties, take the measures necessary therefor, either by prohibiting their entries altogether or by levying thereon a duty which must necessarily exceed the amount

of the bounty, and which should not be levied on liquors not bounty fed coming from the contributing counties".

On April 11th 1889 a "Bill to enable her Majesty to carry into effect a convention made on Sep. 8th 1888, in relation to counties on the exportation of liquor" was read for the first time in the House of Commons. Among the bill met with considerable warm opposition from the Conservatives, and such hostility from the Liberals that it was kept to a second reading, and was withdrawn on Sep. 22nd. Since then the question has slept.

Millers.

Note of Interview with Mr Peter Mumford:-

Mr Mumford is one of the largest millers in London. I was not able to detain him long enough to get much detail from him, especially as he had a tendency to wander from the subject, and to discuss labour questions generally.

Wages in Mr Mumford's mill vary from 21/ to 30/ a week.

Hours are 54 a week with overtime paid in proportion to the rate of wage. Mr Mumford greatly dislikes overtime, and does all he can to discourage it, but the men like it. A certain amount of overtime in the trade is inevitable. Work goes on night and day, the men taking it in turns to do night work.

Regularity. The trade falls off to some extent in hot weather, but not to such ~~an~~

a degree as to necessitate the dismissal of any men.

The trade is healthy, and men go on to a considerable age.

Method of learning. There is no apprenticing. There is little now to learn, much less skill being required than with the old system of milling. The chief requisites for a man now are attention and interest in his work.

The trade has for some years been in a depressed condition owing to the enormous importation of foreign flour. Mr Taylor the largest man in the trade has closed one of his mills, and Ranford has at times been obliged to work short hours or to turn to work off the whole of one shift.

~~Dept~~

July 11th.

Note of Interview with Mr Seth Taylor :-

Mr Taylor is the largest miller in London, and has the reputation of being the shrewdest man in the trade. He was known too busy this morning to enable me to get much out of him. He appears to live in a constant whirl of telephones, and I found it impossible to fix him to any details.

Hours are 54 throughout the trade.

Regularity. No extra labour is now required, but it is often necessary to work overtime.

There has been no displacement of labour by machinery of late years; the great displacement took place about 20 years ago, when roller milling first came in.

Mr Taylor does not think that the number of hands employed in milling in the country or in London has decreased of late years.

but owing to the large importations of foreign flour the number has not increased. Though personally indifferent in the matter, as he is quite able to stand against foreign competition, Mr Taylor thinks that a duty on imported flour would not affect the price, and would of course enormously stimulate the milling industry in England. The raw material would still come in at low prices, and the competition among English millers would keep down the price of flour to its present level

July 13th.

Note of Interview with Mr H. Robinson, of Deptford Bridge Mill:-

Mr Robinson is a man of about 50 in a large way of business. He takes as a working miller, and has been right through the trade.

The chief grades of labour in a modern mill are the Rollerman, the Purifierman, ~~or~~ the Silkman, and the Smutterman.

The Rollerman and the Purifierman attend respectively to the Rolling and the Purifying machines, the Silkman dresses the flour, and the Smutterman cleans the wheat.

Wages. Mr Robinson could not give the exact details as to wages, as he pays no fixed rate of wages, but endeavours as far as possible to pay each man according to his capacity. Rollermen however generally get about 30/ a week, and other men from 20/ to 27/ a week.

hours. The Mill is worked in two shifts from 6 to 6, with intervals for meals amounting to about an hour and forty minutes. There is a certain amount of overtime, but not much, paid in proportion to wages.

Regularity. Mr Robinson seems has occasion to throw off any regular hands, but if work is very busy he takes on some extra men, who however are not millers, but merely ~~common~~ common labourers.

The sale of bread always falls off to some extent in the summer, and also when fruit and vegetables are ~~too~~ unusually cheap, and probably some masters find it necessary to discharge some of their staff in the summer. Millers too are always liable to be stopped in their working by a glut of foreign flour.

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Method of working. There is now no labour in milling which can be called skilled. The modern mill is automatic, and the men other than those engaged in loading and cart work have only

to attend to machinery. There is nothing to be done in a mill which cannot be learnt in a fortnight. In the old process of milling stone dressing was an exceedingly difficult operation, which required great skill and experience. No man could hope to learn it under three years. In London at all events there is now no apprenticeship, though millers like masters, take pupils of a superior class.

Health. The trade is generally healthy and much more so than it used to be. With the modern processes there is no dust in a mill: under the old milling the mill was full of dust, and men suffered much from lung disease. Mr Robinson thinks the modern processes have added ten years to the lives of the men.

Men now those who are employed in wheat cleaning are an unhealthy sickly lot, the dust given off by wheat being peculiarly unwholesome.

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There is no excessive amount of drink among the men, and certainly a good deal less than there used to be.

The vast majority of millers are countrymen by birth. Mr Robinson will not have Londoners if he can help it. Not only are they inferior workmen, but they are full of tricks, and thoroughly unreliable.

Mr Robinson has heard that there is a millers' Union, but has never been troubled by it. He does not know what are the Union wages and hours. If the Union were rude enough to call ~~it~~ his men out he has no doubt that he could fill their places at once

Mr Robinson thinks that there are probably as many men employed in milling in London as ever there were but if the old methods were still used the number of men ~~to~~ required to produce the present output of flour would be four times as great as it is.

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July 16th.

Account of the process of Miller's from Dodd's Dictionary of Manufactures (1868).

"A Flour Mill is at the present day an Example of machine operations on a very complete scale, presenting a striking contrast to the corn mills of old times. The successive operations are ~~almost~~ almost entirely automatic. The order of processes which varies a little in different establishments is substantially as it follows:-

Smut-Cleaning. A self acting elevator raises the corn to the top of the building, where it passes through the smut machine. A vibrating apparatus keeps the grain in agitation in a wire cage, while a blast of air is blown through it by a fan. This removes chaff, dirt, dust, and small particles, which would otherwise injure the whiteness and excellence of the flour; the refuse is carried away through channels to the outside of the building.

The Hopper. Another elevator transfers the cleaned grain to the hopper or funnel

shaped receivers which surmount the usual pairs of grindstones. Here a jipping or vibratory motion causes the grain to fall equally between the stones. In some mills a little bell keeps tinkling so long as the supply of grain continues, but stops when the grindstones want more food.

Grinding. The grindstones often very ponderous are so chiselled and grooved on the contact surfaces as to cut and grind the corn very effectually; the grooves act indeed like the meeting blades of numerous pairs of scissors. Very rapidity of rotation may be given to the stones: they are boxed in, alike to prevent waste, and to obviate accidents; and a blast of air serves at once to blow out the meal or flour, and to keep the stones from that degree of heating, which the friction would otherwise give them.

Dressing. The flour is taken up by a series of cups attached to an endless band, and conveyed to the dressing machine. This

consists essentially of a long, low hollow cylinder of fine wire gauze, or (for some kinds of flour) of fine silk gauze: the cylinder is inclined a little lower at one end than the other, and is made to rotate about 650 times per minute. The gauze varies in fineness at different parts of the length of the cylinder. Entering at the highest ~~end~~ end, which has the finest gauze, the finest flour passes through the meshes; then coarser flour of the next degree, and so to the end, when nothing is left but husks or bran. It is a question of choice with the miller how many kinds he will have of finest, seconds, pollard etc. according to the number of variations in the fineness of the gauze.

The Sacks. The dressing machines are so placed that the flour falls from them into sacks, and thus is completed the series of operations in which from first to last the hand scarcely ever touches the grain, the flour, or the machines which contain them.

July 26th

Note on Interview with Mr. J. Brazier.

Mr. Brazier was for three years secretary of the Millers' Union; he gave up the position three years ago and is now deputy manager of Seth Taylor's mill at Dockhead.

He tells me that the description of millers from Dodd's Dictionary is out of date; no miller of any standing now uses grind stones: all mills are on the rollers system: it would be impossible to give an adequate description of the process by word of mouth which ~~an~~ an outsider could grasp. The process is entirely automatic: the grain is shot into a machine at one end of the mill and after travelling two or three miles without being touched by hand is shot as flour into the bags. The sole duty of the men who would be described as millers is to attend to the machines.

Wages. Rollermen earn from 30/ to 36/ a

work. Men would get as much as the higher class.

Purifier men and kitchen men from 29/ to 29/.

Smatchmen from 25/ to 26/.
There is no union rate of wages, and they differ very much in various mills.

Hours in London mills are usually 8-9. Overtime is worked at the rate of time and a quarter.

Regularity. The work is quite regular throughout the year for millers. At work mills it is necessary at times to take on extra men for unloading wages etc.
At Dockhead at present they have about 40 such men at work. These men are merely ordinary labourers; they are paid 5/6 a day, and few of them either get or want a full ~~day's~~ week's work. Several of them have been offered a permanent job, but have refused it. Among actual millers in London there is seldom

any difficulty in getting work. ~~Work in the~~ The output of mills has been smaller for some years owing to American flour, but few if any men have been discharged.

Health. Men still to a considerable extent suffer from lung diseases.

Learning. No Bursaries were appointed for some years in the country, but apparently in London is now quite unknown. The mass of descent intelligence can learn to mind the machines in a week or two.

The Millers' Union was started soon after the Dock strike, and was for a time very active. Without any strikes they succeeded in getting the standard hours reduced from 61 to 59, and overtime paid at time and a quarter instead of at the ordinary rate. Almost without exception they induced the masters to raise wages from 5 to 20 p.c. The position of the men is in every way much

better than it was some years ago. Considering that their duties are quite unskilled the men seem now no reason to complain. Mr Drapier does not seem to know anything of the present position of the Union.

The trade at present is generally improving, as the importations of flour are less than they were.

Aug. 9th.

Note of Interview with Mr Arthur Parker:-

Mr Parker is Editor of "The Miller". He tells me that London millers are a very reticent and secretive lot, and that he feels sure that they will look on me as a "prying fellow." So far from the work being easy and unskilled he considers it most difficult and responsible, and wonders that men are prepared to do it for such small wages. The masters systematically underrate the position of the men, and in many cases do all they can to prevent them from learning their work thoroughly: a man is kept to one job, and it is as much as a gamekeeper's place is worth for him to attempt to learn the duties of a rollerman.

Mr Parker has promised to let me have an account of the process of Roller Milling.

Aug. 12th.

Note of Interview with Mr Mark Magson.

Mr Magson is a young man of about 25 with a mill in Battersea. He stood as the Radical candidate for Wandsworth, and alone among London millers seems to view matters to some extent from the men's point of view.

Wages. Mr Magson pays Rollermen 34/, Purifiermen 30/, and Siftermen 28/; Smutterman from 26/ to 30/.

He says that he pays higher wages than are usual in the trade. The Union have several times published a statement of his wages and the Master Millers' Association have expostulated with him for paying too much.

Mr Magson agrees with Mr Barton as to the difficulty of the work, and would be sorry to employ a man as a Rollerman with less than twelve years experience. He says it is all nonsense to talk about making a man a miller in a fortnight.

Hours in all London mills are now 54.

Regularity. Mr Mayhew's best customers are best bad payers and work is very slack from the end of July to end of September, but he never discharges any men. During slack season they are employed in cleaning, repairing machinery etc. He thinks it is most unusual throughout the trade to discharge any permanent hands.

Health. The trade as a whole is healthy, though men undoubtedly suffer to some extent from lung diseases. Though there is nothing like so much dust now as with stone milling there is still an invisible dust called in the trade "stive" always floating in the air: this is not flour but part of the husk of the grain.

Compared with many trades millers work on to a good age. Mr Mayhew has one man of 70 at work.

Mr Mayhew much prefers to get Londoners in his mill; they know their business better, and will work much harder than Londoners.

The Millers' Union is very badly managed and is in a very poor condition. For times it has consisted of scarcely anyone except the Executive. In 1860 they showed some activity, and it was owing to their representations that the hours were reduced from 61 to 58. They also did something towards getting mills generally better ventilated.

The competition is now so great that the small millers are being driven out, and the tendency is for the trade of the small mills round London to gravitate to the big London millers.

For about a year the English millers have been underselling the American millers,+

+ (in England)

and have got back a large part of the trade which is not likely to leave them again. Many of the American mills have had to be closed. But though the English millers are selling a great deal more flour they are actually making smaller profits, and for this reason: the American millers have been sent their 'offal' over here. The result was that the importations of American flour by reducing the output of English mills sent up the price of offal: the decline in American importation has sent down the price of offal by 50 p.c.: owing to the competition among English millers the price of flour has not risen and the profits of the miller are smaller than they were when he had to fight the Americans.

Aug. 16th.

Note of visit to Mr Mark Mayfen's Mill at Battersea :-

I to-day visited Mr Mayfen's mill and was shown all over it, but I fear too quickly to give anything like an accurate description of the process. How complicated that process is may be judged from the fact that not a sack of flour leaves the mill, some portion of which has not been through 100 machines. The difficulty of grasping the process was enhanced by the noise of the machines which made it almost impossible to carry on any conversation. Roughly known the order of the various processes was washing, cleaning, milling, purifying: each of these operations seemed to require an endless number of machines.

With regard to the Rollermen and Purifiermen Mr Mayfen explained to me where the necessity for knowledge comes in; the flour ought to leave ~~the~~ the roller or the purifiers in a certain state of fineness

and the workman must know when it is in the right condition, and be able to adjust his machine so as to produce the required result. By altering the adjustment of the machine the miller showed me an immediate change in the character of the product.

It appears that the number of men attending to the machines form quite a small proportion of the labourers in a mill. But the largest proportion are engaged in the absolutely unskilled work of wheeling barrows, the sacks of wheat or flour

Sept. 1875.

Note on Interview with Mr W. Salmon.

Mr. Salmon is the delegate to the London Trades Council of a branch of the Millers' Union.

Wages. Mr Salmon says that the wages of men throughout the mills do not average more than 21/. The wages paid vary greatly from mill to mill; the best paid men are those at Marriage's at Battersea where no men is paid less than 26/, the rate being 26/ for millmen, 28/ for grindermen, and 32/ for rollermen. In some mills some of the men do not get more than 18/. Peter Mumford has the worst reputation among millers. Hagger pays his rollermen as much as 40/ but men in the lower grades some of them get 24/.

The Union are endeavouring to get 26/ fixed as a minimum wage, and some months ago brought the matter before the millers' Association, which replied that the millers

prepared to deal with their own men individually.

In nearly all mills there is a good deal of overtime worked and men make from 2/ to 5/ a week in this way.

The Union was formed in 1889, and in 1890 asked for a general rise in wages which was conceded by all masters though not by all alike. Kennedy gave a rise of 2/ all round. Seth Taylor gave a rise of from 1/ to 4/ in proportion to each man's pay. The rise has not been by any means generally maintained as new men have usually been taken on at the old rates.

At the same time there was a general rise in the rate of pay for overtime, which previously had been in most mills at less than the ordinary rate. The higher rate for overtime has been generally maintained.

Hours. 59 are the recognised hours, though as a matter of fact the majority of men do ~~xx~~ 58 hours, as the majority of mills allow 40 minutes for breakfast, which is the

57 hour mills only. 30 minutes are allowed men who are not on the machines are allowed an hour for dinner. Those on the machines have to remain in their department the whole of their 12 hours and their meals are brought to them to take in the room; as a matter of fact they seldom have any difficulty in taking them in comfort. Their meal hours are counted as overtime.

The Union in 1890 got hours reduced from 61 to 57, and indeed ~~all~~ all masters to stop work at 1 on Saturday instead of at 4.

Mills as a rule now run from 6 a.m. Monday to 1 p.m. on Saturday, though some when they are busy start at 12 on Sunday night. Mr Salmon who is not too friendly to masters gives them credit for doing their best always to shut down at 1 on Saturday.

<u>Regularity</u>. The dismissal of men for slackness is very rare, but work is slack and there is less overtime in hot weather, and when

people are out of work in the summer. Mr Salmon thinks that trade is generally better when trade generally is depressed as so many people can then afford little else but bread to eat.

Method of learning. Mr Salmon thinks that an intelligent man would learn the business of milling as now carried on in about six months. It is most important that the tender of each machine should know the exact condition in which the grain ought to leave it.

Health. Mr Salmon admits that the trade is much healthier than it was, but still thinks that it is unhealthy. He says that few men work after 45, and that in his experience few millers live over 50. He only knows six men still trying to work over that age, and of these 4 are out of work. He the old millers he knows still living are in the workhouse. The work though not so hard

as it used to be, and fewer from death is more continuous; while a man is in the mill he has no rest whereas in old days he might do a hard job and then rest for half an hour.

In some mills the hours of men very commonly need shorter, but with the exception of the hours of very young men it is most unusual for hours to do any work.

The Union is at present in a poor way: there are about 150 members in London. In 1890 there were about 500. Mr Salmon thinks that a strong Union might very probably get better terms out of the masters, as they are not well organised, and are now doing well.

Sept. 16th.

Note on Interview with Mr J. Harris:-

Mr. Harris is Secretary of the Patterson Branch of the Millers' Union. He is I should think a more intelligent, and certainly a better educated man than Mr Salmon. He is a journeyman in Mr Wagner's mill.

The bulk of the information which Mr Harris gave me is contained in the various papers of which he gave me copies.

Wages. Mr Salmon's average of 21/ a week is too low.

With regard to the wages paid at fair and unfair houses probably the majority of millers approximate more nearly to the unfair scale. There is as a rule a good deal more overtime at the unfair houses, and the actual weekly earnings of men in the two classes of houses would not differ greatly.

Hours. Mr Harris denies Mr Salmon's statement

that there are mills in which the hours are 58. So far as he knows Marriage's is the only mill where 60 minutes are allowed for breakfast, and here they work till 2 on Saturday, thus making up the 58 hours.

Holidays. With the exception of Marriage who gives a week to each man no masters give regular holidays other than statutory, but Mayhew's men can often get a day or two off by asking for it.

The Union has steadily decreased in membership since 1869, and the numbers given in the Balance Sheet for 1874 are now excessive. Mr Salmon is convinced that a strong Union could get better conditions from the most of the masters with very little trouble; but the men are terribly apathetic and will not pay 3d a week. Millers are as a rule very ignorant, and lead the poorly animal life of eat, sleep, work. Some of the masters are strongly against the Union, but the best are quite in favour of it,

and even both Taylor, the honest man of Antrim among them has recommended his men to belong to the Union.

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