Oil Millers and Refiners.

July 15th.

Extracts from Mr Duckworth's note on Interview with Messrs. Knight and Sons:-

The oil mill is busy in winter and slack in summer, when oil cakes are not wanted: this summer (1893) is an exception: there has been so little hay that the orders for oil cakes have been continuous. Oil is made by crushing cotton seed, then heating it, and then pressing out the oil. On the oil being pressed out the cakes are left, and become oil cakes: the edges which have not been pressed are cut off by a special machine and then pressed again.

July 15th.

Extract from Dodd's Dictionary of Manufactures on Oil Mills:-

'The various seed & oils are pressed and purified by the following means:-

1. Screening: the seeds laid in a heap are lifted by a self acting elevator and conveyed in small baskets to a flat screen or sifter to shake out impurities

2. Crushing:- when thus sifted the seeds descend between two heavy iron rollers revolving in opposite directions. Some fruits and nuts require a tearing action instead of crushing

3. Grinding: the crushed seeds are laid upon a bed, and then ground by the action of two heavy edge stones, which both rotate on their axes, and revolve in a circle. Their adjustments insure the equal grinding of the whole mass, which gradually becomes an oily paste or dough.

4. Heating:- if the oil is to be hot drawn the paste is placed in a vessel heated by steam, and exposed to the action

of steam or hydraulic arms, which keep it in motion.

5. Bagging:- the paste when heated or not is transferred to bags made of strong cloth, and these are placed between other bags called Lairs, made of Horsehair covered with leather.

6. Pressing: the bags of seed are placed in piles in such a way that the action of the hydraulic press can be brought to bear on them. This pressure is enormous amounting sometimes to 300 tons. Under its influence the oil first separates from the paste, then passes through the cloth bags, then through the hair bags, and then through pipes into a cistern.

7. Stripping: after the paste has been pressed dry by the expulsion of the oil, the bags are stripped off from it and then remains a kind of board or plank of oil cake, available to the cattle feeder. According to the kind of seed fruit or nut, and the degree of refining required in the oil, some of the processes

may be modified, or others added to the number,
but the general venture is as here indicated.

July 16th.

Statement of Mr Alex Lambert of the Union Oil and Cake Mills:

Mr Lambert asked me to send him a list of questions. I append his answers

1. Various grades of labour with average rate of wages, and maximum and minimum in each case."

Answer:-

The workmen employed in the manufacturing part of this industry are usually divided into three classes, viz:- Pressmen, Moulders, and Porters.

The wages vary from a maximum of 5/6 to 4/ per diem. In addition to the hands actually employed in the manufacture of oil and cake, a considerable number of men are employed in the oil, cake and seed departments manipulating and delivering the products manufactured. These range from 5/, as a maximum, to 4/ per diem. When coopers can be employed the wages would reach a maximum of 2/6. The cooperage is also generally

attached to each crusher's mill. Wages for skilled hands 5/6 per diem. The above refers wholly to the wholesale trade in London. In the country wages would be much lower as a rule.

2. Are there any deductions from wages in the shape of fines or otherwise?

Answer:-

No deductions are made from wages.

3. Do the men have to wear any special dress or to buy any and what tools or implements out of their wages?

Answer:-

There is no special dress. Tools are supplied by employers.

4. Have the men any opportunity of adding to their wages by methods legitimate or otherwise?

Answer:-

Overtime affords the only means of adding to their wages.

5. What are the hours of labour?

Answer:-

35 In mills we work a 9 hour week
night and day by two shifts from 6 a.m. to 6 p.m
and vice versa. The machines being arranged to
turn out so many "ends" per hour the men in
addition to one hour per diem for meals have a
few minutes interval between each "set". This
materially reduces the actual amount of labour
during the hours of work.

Hand loom work 9½ hours exclusive of
meals

6. Is overtime worked? If yes at
what rate per hour?

In the mills there is no overtime,
but an extra payment is made if the number
of looms set is increased.

In other departments such as beaming and
delivering Oil and Cake overtime is paid at
rates settled by agreement; in some cases one
and a half in others double ordinary rates.

7. What interval an allowed for meals? Are they taken ~~Between~~ on or off the premises?

Answ:-

Half an hour is allowed for breakfast and for dinner as a rule, but the custom varies in different mills. As a rule men take their meals off the premises, but there are usually facilities for their taking them on the works if they wish.

8. Do men get any and what holiday or holidays during the year?

Answ:-

Only foremen as a rule have regular holidays, but men can take a few days off they wish by sacrificing their wages. Such an application is rarely made. There is no work on Bank or other Statutory Holidays and the men have one in addition for their Wakes Week.

9. Are there any and what seasons? If yes for what causes?

Answ:-

Has a rule the winter season September to April is the busiest season, the work becomes slack in the summer owing to the smaller demand for feeding cakes

10. Are men, and if yes what proportion of their numbers, thrown out during slack seasons?
Answer:-

Has a rule the work to be done is divided among the whole hands so that if not fully employed they may get say three days a week in slack times.

11. Do men thrown out during slack times generally take to any other trade?
Answer:-

They avail themselves of the numerous openings for unskilled labour in London docks and wharf work etc.

12. Has there been any displacement of labour by machinery?
Answer:-

Not little. In some operations labour saving appliances can be obtained; but generally as a whole there has been and is unlikely to be any material displacement of hand labour by machinery.

13. Do there any female, foreign, or boys' labour in the trade?

Answer:-

No female or foreign labour.

14. Do there any apprentices?

Answer:-

No apprentices. The work is on the border line between skilled and unskilled, and can be learnt by an intelligent man in a few weeks, though as in other trades it takes time to become a skilled hand.

12

15. What is the effect of the trade on health? Do there any special diseases from which the men suffer?

Answer:-

Dull hand work under favourable

condition of health. The mills are warm without being unhealthily heated: the oil is considered good for pulmonary affections. Females work under the same conditions as ordinary labourers. Certain kinds of steel hand are dusty, and the hands employed in manipulating them suffer from dust, but are very remote to taking precautions against injury.

16. Are men thrown out of work early in life, and if so for what cause?

Answer:-

So long as a man is able bodied there is nothing to prevent his continuing to work. No special strength or aptitude is necessary.

17. Is there any Union of or Association of workers or men? Are the relations of masters and men generally good?

Answer:-

There is no Union of masters. A Union of men exists or did exist but appears not to be an active body. (Private.

I am informed that quite recently a reduction of 10 % was accepted (even in old Hull in London without a strike).

18. What is the position of the trade in London? Is it advancing or receding, and from what causes?

Answer:-

Hull is the great centre of the crushing trade. London stands next, Liverpool third. It cannot be called an advancing trade: heavy ~~import duties~~ import duties on oil on the Continent and in America check the export of the article: on the other hand feeding cakes are exported from the countries which protect the industry and thereby seriously restrict the home consumption of feeding cakes manufactured in England.

Note. The observations are intended to be as general as possible, but the writer regarding chiefly his information mainly from his own experience. They apply only to linseed, cotton

Lead, and Rope Lead of which kinds of cordage
alone the writer has any experience.

July 22nd.

Note of Interview with Mr S. Kroeker:-

Mr Kroeker is partner in the firm of John Dunstall who are agents for the sale of oil cake.

He gave me the names of several firms who he thought might give information, but said he should probably have great difficulty in finding out much, as he thought that the relations of capital and labour in the trade were not good.

The trade generally in England is in a depressed condition, as America floods us with oil cake at an exceedingly low price.

Aug. 12th.

15

Note of Interview with Mr L. Darrell.

Mr Darrell would have communicated with us sooner had he not thought that we were connected with the Salvation Army. On finding out his mistake he kindly wrote and asked me to go to his works and lunch with him, as he had no time to see me during business hours.

I found that Mr Darrell's work consisted chiefly in oil boiling and refining and in the making of paints, enamels and varnishes.

Wages. The wages of oil ~~boilers~~ boilers range from 30/ to 50/ a week.

Millmen who ~~grind~~ attend to the paint-grinding machines earn from 28/ to 35/.

Men engaged in refining and making varnishes and paint earn from 24/ to 25/.

Hours. Mr Darrell has reduced the

Number of hours in his factory from 56 to 60 a week, and the men do not now begin work till 8 o'clock. He thinks that throughout the trade generally the hours are about 56.

Regularity. The trade is regular throughout the year; no hands are ever discharged.

Boys men are more respectable and drink less than they used to 20 years ago they do not do their work so well or nearly so fast as they used to

Mr Rounds has instituted a Mess Room for his men, where they get an excellent dinner at a cost of 5d per head.

Mr Rounds says that the trade in city and varnishes is in a prosperous condition in London, and is of anything increasing at the expense of other centres.

Sept. 17th.

Note on Interview with the Foreman of Messrs. W. and W. H. Stead of Blackwall:-

Mr. Stead, who was out of town, had left word that if I called his foreman was to see me.

There are two systems of cake making now in operation in England; under the old system more labour was required than under the new or Anglo-American system which is entirely ~~work~~ automatic and unskilled as far as the labour is concerned. At many mills both systems are in operation though the Anglo-American is becoming universal. Though fewer men are employed in the Anglo American the wages are higher, as one man will now turn out 20 cakes in the time in which he formerly made 12.

Wages. Under the old system the wages of Pressmen averaged 24/, of Grinders 22/, and of Pans 18/.

Under the Anglo-American system the

Wages average 32/ for Pressmen, 26/ for Moulders, 22/ for Grinders, and 20/ for Pans, who as a rule are lads.

Hours are 12 a day, less one hour for meals, though most mills close at 2 on Saturday, making in all 62 hours a week.

No regular holidays are given, but men frequently take a day off.

Regularity. From the beginning of September to the end of April is the season, and some men, usually the Gompsmen, have to be dismissed in the slack time. Nearly all mills keep some of their machines going in the summer, and some of the men are employed in cleaning the machinery etc.

Health. The work is not unhealthy, and the foreman denies the statement of Mr Adams before the labour commission that the mills are usually unbearably hot. It depends entirely he says on the construction of the mill, and

the facilities for ventilation. He took me into the mill, where the machinery was then at rest and showed me that it was lofty and admirably ventilated at the top.

Method of learning. It was usual under the old system to go through a year's apprenticeship but this is now unknown. Any man can be taken in from the street and taught his work in a few hours.

The Union. In 1869 some men formed the Dockers' Union, but few of any now belong to it.

The trade generally is in a bad condition, and it is impossible for English masters to compete with America, France, Russia, Italy and Egypt, all of which make cables. The French can deliver cable at Southampton £1 a ton cheaper than English manufacturers can supply it. This is due entirely to the greater cheapness of labour in France. The

French masters get done for 1/ work which in England costs 30/. It is very doubtful if the masters will be able to carry on much longer; those who are still prosperous make their money chiefly by jewellery in porcelain, and buying in advance.

Sept. 25th.

Note on Interview with Mr John Knight of the Kilnhouse Soap Works:-

Our information being scanty I had a further interview with Mr John Knight who is an oil miller as well as soap maker. Mr Knight crushes only cotton seed.

Wages Mr Knight pays on a wages return two years ago which he says is still substantially correct. He pays his men more than is usual in other mills

Hours are the same as in other mills.

Regularity. The difference between the slack and busy season is very slight at Knight's mill.

At the time of the Dockers' strike a number of Knight's hands joined the Union chiefly as the result of gross intimidation. Mr Knight told his men that if they could

paid another soap work or oil mill in the world where the wages were so high as here he would at once raise his wages to the same level: they were unable to do so and subsequently expressed themselves as satisfied with their position. Since then Mr Knight thinks that all the men who joined the Union have left it.

At that time wages were raised in many mills through the action of the Union, but Mr Knight believes that in most cases they have slipped back to the old level.

A great deal of the foreign competition from which the trade now suffers is the direct result of the strikes of that period; a large number of mills were built in Egypt, which now sends thousands of cakes to England.

The rate of profit is very small, and any attempt to raise wages any further would inevitably drive the trade out of the country. At the present moment however the Lebanon market is in

a quiet condition: the majority of the men
have seen the folly of their ways. The officials
are known making great efforts to stir up
further agitation, as their living depends on
keeping the Union going.

Sept. 29th.

Note on Interview with Mr W. E. Page Manager to Messrs. W. B. Dick and Co:-

Messrs. W. B. Dick are Oil Refiners, a trade of whom there are few representatives in London

Wages average for men 24/ a week. For the most part it is quite unskilled consisting only of filling and rolling casks Foremen, who must know something about the process of refining earning as much as 36/ a week. The men on an average earn 2/ a week from overtime.

Hours are from 6 to 6 with an hour and half for meals.

Regularity. The trade is quite regular throughout the year; no hands are ever discharged

Health There is nothing unhealthy in

the trade, and men often look on to a great age: Messrs. Dick have one man who has been at the work for 55 years

The men have never belonged to any Union and seem to be quite contented with their lot. There has never been any trouble between masters and men in the trade.

The chief business of the oil refiner is in ~~making~~ refining oils for lubricating machinery, and with this foreign competition has not yet seriously interfered. The refining of lighting oils has however been almost killed in England by the Standard Oil Trust of America.

Interview with Messrs. Hogarth and Co. of High St, Stratford.

Men - 4 Jam boilers. foremen in the Jam room, women carrying &c. under them. 2 fruit boilers - same class of work.
11 packing and carmen. Fixed wages 45/, 35/, 30/.

Women Piece workers - ~~Xxx~~ 30 earn 15/-
11 earn 13/. — Day workers - 10 at 10/ and 12 at 8/, the latter merely carry boxes &c. from filling rooms to carts &c. Others engaged at filling, labelling, varnishing tins for export etc.

The Export jam is all in tins except when purchasers take the risk.

Payment by piece work found more convenient than regular wage because there is no dispute about raising the wages. If a complaint as to earnings should arise the complainant is told that she should work quicker and so earn more. The 13/ to 15/ are "young ladies" the 8/ to 10/ are

Vb

"flatted"

Packing made of fine chips of wood nearly double the cost of straw and yet ~~dear~~ cheaper in the end.

Jam Making - Fruit in tins. S.f. apricots from France, Spain, Portugal and Italy also the Balearic Isles - said to come from California too, but cost more and considered not worth the difference. These apricots have been merely boiled and sent out in tins. They are placed in the boiling pans, heated by steam and sugar added. In the soft fruit season crowds of women employed picking stalks for whole fruit jams. For ordinary jam a machine is used to separate stalks and stones from the softer substance.

Pickling. Better pay than jam making because fewer hours, especially in winter when vegetables, which have to be kept out in cold, are handled with vinegar which stings the chapped hands. Pilling bottles with mixed

pickles is better paid than filling bottles with onions or cabbage. The mixed pickles have to be artistically arranged with same proportions of each kind in the dressed bottles. Onions are more expensive to pickle - consequently in a bottle of pickles ~~the~~ every onion is always visible from the outside though perhaps a cabbage may fill up the middle - an onion is never allowed to enjoy obscurity.

Busy all year round because Export trade to the Cape and Australia in ~~N~~ September summer.

Sweet making - in pans on fire, the steam process used in jam making is not powerful enough for sweets. Busiest time in winter: when hot weather sets in people prefer to spend their pence on sherbet and drinks.

Bottles made in France and Belgium. Large bottles made in England because freight smashes them. Curious superstition that magnesia must be in blue bottles, no reason for

it except people won't buy it if in any other bottle.

Lime Juice and Lemon Juice - former is bright and latter cloudy. Sometimes people ask that lemon juice should be clear. As matter of fact the juice of a lemon is bound to be cloudy. Thus some makes advertise "Our lemon juice is not bright". Another advertises "Our lemon juice is the only bright juice in the trade".

Interview with Messrs. Hazzard Bros. Kensington Road.

Busy season. Oct. March and April for pickling, sauces etc. Same number of hands generally all the year round. In slack season work faster, in busy season a little extra push. The workers prefer to work ~~rather~~ harder rather than risk the competition which extra hands might create.

Men 17 including labourers (15) earning from 10/ to 25/; those at 18/ to 20/ are mere lads. One director and chemist of foods, 1 foreman, a cooper and superintendent of brining.

Pickling. The vegetables are washed and then placed in casks of salt and water, the process of brining which is carried on at the Salamander works near the river. After this the vegetables are placed in vinegar, then washed and cut up, and again sprinkled with

vinegar. They are then ready for bottling.

Women. The regular wages for piece work among the pickles. 5 girls employed at piece work filling packets of pickling powder and cooking powder.

30 fillers, pickers, and sauce finishers at 10/ to 12/.

Pickle fillers' wages most skilled and slight difference in wage among them owing to length of service.

21 at 7/ to 9/ washers, pairers and cutters up.

1 forewoman at 13/.

2 girls at 5/ tying up parcels or on errands.

Boys. 12 at 5/ to 15/.

A large trade in penny bottles of curry powder, ketchup, glycerine etc.

Some thousands of gross of these penny bottles sent out in a year. Just under 3/4d is paid for a 1/2 bottle to the maker.

23

In the picking department or rather the finishers room I noticed they were labelling the bottles with a Salvation Army label. The Army Stores in Clerkenwell Road obtain their pickles from here, and insist on their labels being affixed. I asked if H. Boss did not object to having their pickles so labelled they replied it was a matter of patience and to keep their custom with the Army they were willing to put on any labels they pleased.

Curious development among the women is their habit of borrowing. One pay day the foreman the Boss paid the wages and noticed groups of the women outside and other women not their workers. Discovered that the strangers had come to collect their loans and had been lending 1/- each 2d out in the 1/. The Boss to check this offered to lend small sums only charging 1d in the 1/, and the workers borrowed in all some £10 19 of their friendly taking advantage of the offer. As soon as the capital sums had been

repaid the interest they had paid meanwhile was restored to them, but upon receiving this they immediately started another loan of 5/ or 6/ as if they would not allow themselves to be free from debt. This habit of borrowing seems to be mostly among the married women. The Boro still continues this lending scheme in order to save the workers from the professional money lenders, but he returns them the interest they have paid when he thinks it may come in useful to them.

Interview with Cross and Blackwell:-

Pickles. Work on factory or rather certain rooms with foreman. Very reticent. Saw women pickling. The pickling room merely - also the room where the stoppers are made for pickle bottles. These stoppers are made by six or seven women each working a different process for her portion of the manufacture. Young Mr Blackwell told me that ch have employed at 7/- per week, and the higher wages in the slack season is due to fact that best hands are retained.

R. D. Most unsatisfactory interview. They evidently intended that I should see and learn as little as possible. Mr D. just back from his holiday, and unable to give any reliable information.

see Index on last folio

Index.

Page 1. Interview with J. Knight.
" 2. Extract from Dodd's Dictionary.
" 5. Statement of Mrs Ann Lanhut.
" 14. Interview with Mr. E. Brooks.
" 18. " Mr. E. Burnell.
" 17. " Freeman to Messrs. Stead.
" 21 " Mr J. Knight
" 24 " Mr. W. E. Page.