The Textile Mercury

A Representative Weekly Journal for Spinners, Manufacturers, Machinists, Bleachers, Colourists, and Merchants, in all Branches of the Textile Industries.

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Current Topics.

SUB-EMPLOYER IN A COTTON MILL; WHO SHOULD BE RESPONSIBLE FOR THEIR INJURIES LAW?

The question of protected hands working during meal hours is receiving particular attention from the inspectors supervising the cotton industry. In the spinning branch of the cotton trade there is a considerable amount of employment in relation to this particular class of workpeople, but this perhaps perhaps more applied to the spinning than to the carding departments. In the former there are those known as "little pieces," who are, as a rule, engaged and discharged by the minder-spinner, although the employer, through his foreman, claims the right of exercising authority over them, and if an edict from him be not obeyed, then the minder places his own position in jeopardy. But the factory inspectors hold the employer directly responsible in cases of this kind for any breach of the Factory Act. Even if he post notices in his mill forbidding work during meal hours, and conveying the intimation that minders are held responsible for pieces being employed contrary to his orders, inspectors all the same hold him responsible, unless, as they say, he satisfies them that he has taken every possible means to prevent a breach of the Act indicated, not only in forbidding work in meal hours, but by having some authorised person on the premises to see that the minders do not set the little pieces to do any manner of work, nor that they do it of their own accord. Under such conditions one need not evince surprise that a magistrate recently expressed the opinion that "he did not think the owners of cotton mills could possibly prevent boys and girls cleaning machinery during meal hours," inspectors, however, contend that employers can, if they are so inclined, put a stop to the practice. And thus the position stands. There are instances not wanting, however, where employers have proved to the satisfaction of the magistrates that the law has been observed, and in such cases the minder has been summoned. Now this was a proper course to take, and one to which the slightest objection could be raised. But employers, as a rule, aided of goodness of heart, or for some other reason, have paid the penalty and costs in which the operative was muddled. In this manner they have laid themselves open to the charge of having practicallyconnived at breaches of the law and been accessories after the fact. No greater mistake on their part could be made in this respect, because it gives people the impression that they are waltzing at law-breaking. It has, moreover, another and more serious effect, and that is, that they lose caste in the eyes of the operative, and also lose control over him. Under present conditions, it would appear that the practice complained of is difficult to stamp out, and the treatment of it touches upon the important question as to the time which should be allowed for the purposes of cleaning and oiling the machinery. This subject has been before the Oldham Employers' Committee, but we believe it was relegated to the United Cotton Spinners' Association for treatment, as it was felt that its bearing had more than a local application. With the settlement of the matter on liberal lines, much may be done towards putting an end to the employment of protected hands during meal hours, and thus preventing misunderstandings between employer and employed.

LAMENTATIONS FROM NOTTINGHAM.

We are accustomed by this time to hear Nottingham people complain, and that, too, in a very forcible manner, with regard to the staple industry of the town. So used has the public ear become to these lamentations that it would be a matter for surprise if they ceased. Nottingham, apparently, is "hooked" for a long spell of depression. Whether the circumstance is due to the lack of knowledge, taste, or enterprise amongst its manufacturers we do not care to say. If one accuses a Nottingham man of inferiority in comparison with Calais or Flanes he will reply that those centres are complaining quite as loudly as is his own. In the instance of course, that the suggestion of inferiority falls to the ground. Your true Nottingham man resents with scorn and indignation the idea that he is in any way behind the foreigner. But the periodic lamentations with which he assails the ears of the world, ever seem to remind us that something is wrong. If we examine into the statements now made by the Nottingham manufacturers in the industry of the Midland metropolis, we hear it declared that the state of trade has never been so bad in living memory, not even in the years 1857 and 1858, for at that time the small amount made was sold at a profit, but to-day there is neither demand for nor profit on any kind of lace. The great difficulty against which Nottingham has to contend now is unfair competition from small machine holders, who work their own machines, and who then refer to in particular are in the lace districts surrounding Nottingham—take their week's produce to the lace markets on Fridays and Saturdays, sell it before coming away at some price, and pay their wages with the proceeds. Cotton spinners, factory owners, and machine owners must take their chance; the probability is that they will remain unpaid, as usually when an estate of this kind is wound up there remains nothing to pay with. Having obtained an article in this way, warehousemen will not give legitimate traders a larger price, and they must work on these unreasonable terms or stop altogether, and by doing so lose a connection.
which may have taken years of labour to build up. The difference in price of lace made by the hand, as the trader and the first-mentioned is, when reckoned in a dozen of lace, very small, and the prices obtained for the finished article warrant the increase. As yet, notwithstanding the activity of lace-making, the recently-formed lace concern of Darvonne and Co., Limited, Calais, is able to declare a dividend of seven per cent. on its £200,000 capital.

THE PRINCESS OF WALES'S COLLECTION OF LACE.

The handicraft of lace-making, which once flourished in Buckinghamshire and Devonshire in this country, and in several places in Ireland, has now shrunk to small dimensions, and will probably in the next generation entirely disappear, unless the efforts being made in Ireland are successful in postponing the event a generation or two longer. It is very rare, however, when an industry has been reduced by competition to the point of becoming an object of philanthropic benevolence, for it to get up its feet again. What is wanted to maintain an industry in health is that the public shall purchase and wear lace, consuming the lace we wear. When this ceases the outlook for it is not good. Once upon a time, say during the last century, lace-making flourished, because lace dress in costume, or could, but very soon after the invention of the lace machine and the application to it of Jacquard's invention, it began to decay, because the mass of the upper and middle classes, who had all been consumers of hand-made lace, contented themselves with the mechanically-made substitute. This left an insufficient constituency of consumers destined of having enough and being able to pay the high prices necessary to procure the genuine article and to maintain the industry in a healthy state. Owing to this great shrinkage has taken place in this country, which has, indeed, proceeded to the verge of its extinction. Hence the execution of very high-class work in lace is now very rare, if indeed it be possible. Good lace has, therefore, become very scarce, and its possessors look upon every piece as a rarity likely to increase rather than diminish in value. Such are, therefore, carefully placed in cabinets for exhibition, rather than worn, consumed, and replaced with new. This, of course, whilst very interesting from an antiquarian point of view, does nothing for the present industry. The leading collection of early old lace, if we may believe a paragraph which is on its journey round the press, in the Princess of Wales. When Her Royal Highness was married to the King of the Belgians a wedding present of rare and valuable old lace, worth it is estimated, £200,000. This the Princess has made the basis of a collection that is stated to be now worth £500,000, which she has collected in the interval. The pursuit is essentially a lady-like one, and does honour to her sex, and at the same time it honours her axe, this being especially the fruit of woman's industry.

A LACE EXHIBITION.

Though the handcraft lace industry has almost disappeared, at least from this country, its great and successful rival, the machine-made article, is not always in demand, nor is the present lace industry always in a state of prosperity. The very power—that of cheap production—which enabled it to drive the handcraft jewels out of the field, is causing renewed action in the cause of its neglect. Whenever public taste shows a disposition to bestow favour upon lace, and the article becomes fashionable, its degradation by almost universal adoption is very near. Cheap imitations of the best stuffs are turned out in such vast quantities that lace specifically becomes everybody’s wear, and of course the upper sections of society then abandon it. The certain result is that lace, in common of feminine wear, has a long season of neglect in front of it, and the makers, of course, correspondingly suffer. It is during such periods when we sometimes think the art which made good times might have been hard-pressed to be reinstated if the trade were to inaugurate an exhibition of the most tasteful designs produced by the best lace looms of Nottinghamshire. To make all the more successful in drawing the ladies, it might be possible to get the loan of the contents of the best lace cabinets of the country, including those of H.H. the Princess of Wales. Laces having interesting historic associations, as well as the choicest specimens of the art, would possess great attraction, and might be usefully introduced. This is a suggestion that we think may be commended to the consideration of those interested during the duller sessions of their trade. The benefit likely to accrue would not be confined to the business demand that might result from those who have visited the exhibition; if they succeeded in giving lace the vogue, “all the world” would wear it, and then would be the harvest time of its manufactory. If the demand was so great that they would speedily assuage themselves, it might not be of long duration.

“INDUSTRIAL COLONIES” IN IRELAND.

Nearly twelve months ago the newspaper public was surprised to learn that a plan for establishing industrial colonies in Ireland had blossomed at Boston, and was almost on the point of being put into practice. As need hardly be said, the Boston was that of Massachusetts, not Lincolnshire, and there was, of course, a political motive at the bottom of the proposal, with which we have nothing to do. The idea was to form a company with a large capital in shares of small amount, so as to set up factories to give employment to industrial tenants, and to find a sale for the articles produced among all sympathisers with Ireland’s alleged wrongs in other parts of the country and elsewhere—goods in general demand, house andabloe clothing and under-ware, being the first to be taken in hand. Other benefits, such as the good example set to Irishmen in Ireland by seeing people busy at work, and the education and methods of work, business and manufacture, were to be thrown in, and, on the whole, a radical change and good times coming were hopefully anticipated. Now that some notable-and by no means unsatisfactory agreement of action, some sceptical folk are getting as incredulous about the plan as Boytig Prig was about the reality of Mrs. Harris: they “don’t believe there’s no such a plan with any prospect of being carried out. Journals formerly favourable begin to write about the matter in a derogatory way, and to mention Ulusia in complexion therewith, while gentlemen whose names have been linked with the affair appear eager all at once to deny all knowledge of its existence. But the Irish National Colonist published in Boston, through which information was first given to the public, is still unmoved, still sanguine, and continues to speak of the plan in the present tense. Full details of what is being done “cannot be given out yet, but they will probably be developed in the course of a few weeks. The men who are promoting the scheme recognize the fact and in a way for them to attain success in it is to show their personal interest by going across themselves, and getting operations fairly started. The whole party might consist of fifty men, and lumber for factories will probably be taken from Newfoundland. These men are principally sons of Irish tenants, who were forced to come to this country from twenty to thirty years ago... They have made some good workmen, and others that have had good general, practical business training. These are all the particulars yet reached to its benefit. We must wait for the appeal of the men who appear to be skilled mechanics but not good workmen, and for those that accompany them, who will bring with them that inexplicable lumber for buildings from Newfoundland, and then we shall see—what we shall see.

CARPET MANUFACTURING IN FRANCE.

Private enterprise in carpet manufacturing is hampered somewhat in France, by reason of the Government establishments of the Gobelins and Aubusson producing a considerable quantity of carpets of the very best quality in their own peculiar style; the number of private factories therefore is not large. The chief centres of the manufacture, exclusive of the Government ones are at Aubusson, and in the department of the Nord. Carpets of almost every conceivable kind are made, but the quantity manufactured of the first two of quality is slightly less than that of the others. The demand for Oriental carpets is steadily increasing, and vigorous efforts are being made by several French houses, who have contributed to perfection of the best examples of this style ever placed on the market. Foremost among these enterprising manufacturers is M. Ferdinand Leborgne, who has an important establishment at the department of the Nord. It is impossible to obtain any reliable figures as to the number of looms in the different French establishments; there are no official statistics, and the manufacturers invariably decline to give such information in response to private inquiries. The relative number of hand and power looms in use depends on the extent of the establishments in which they are found, but as a general rule the hand looms are in the proportion of about four to one power loom. The number of men employed in the manufacture of carpets is very considerable, the main number being alone having about sixteen hundred or two thousand of them, distributed amongst ten or twelve different houses, while a large number of hands are also employed at the Gobelins and in Aubusson. It may be remarked in conclusion that, though Paris is the centre of great industrial activity, it is far from taking the first rank for the manufacture of carpets. Wages fluctuate from time to time, but since the last quarter of a century they have risen a very great deal, especially in Paris. At present wages rise more quickly in the provinces than in the capital, but in spite of this the Paris workmen are far better paid than their provincial brethren, as the following table will show:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Wage (in sous)</th>
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</thead>
<tbody>
<tr>
<td>Foremen</td>
<td>250</td>
</tr>
<tr>
<td>Overseers</td>
<td>220</td>
</tr>
<tr>
<td>Workmen above 21 years</td>
<td>120</td>
</tr>
<tr>
<td>Workmen from 15 to 20 years</td>
<td>90</td>
</tr>
<tr>
<td>Women</td>
<td>50</td>
</tr>
<tr>
<td>Boys</td>
<td>20</td>
</tr>
<tr>
<td>Girls</td>
<td>10</td>
</tr>
</tbody>
</table>
for female labour is always considerable, the wages given to women and girls show few signs of increasing in the same proportion as the men’s, which is explained by the great abundance of the supply of female labour.

CARPET MANUFACTURING IN GERMANY.

In carpet manufacturing small factories are the rule in Germany, although at Duren the firm of Schiller Brothers have a shed consisting of 5,000 looms and employing 1000 operatives. In this factory, Brussels, velvet and tapestry carpets are produced. The Barame carpet factory has about 45 looms, and its chief colours are reds, wine and blue. A roll (87 by 355) costs 40.10s. or 80s. (Darmstadt). While the Moquette stuff is only made in one quality, the saddle-bags are produced in two—viz., a fine Moquette and a coarse Courbe. Notwithstanding the fact that the former is the dearer of the two, it is far more saleable. The following statement of the weekly wages paid in Geno in an abstract from the ‘Monthly Statistical Register’ of one of the principal establishments, and may be considered as correctly representing the wages paid in all factories:

- Weavers of ordinary carpets, hearth covers, &c., 18s. 10d. to 15s.
- Weavers of table covers, 18s. 10d. to 13s. 10d.
- Weavers of superior quality carpets, 19s. 10d. to 15s.
- Spinners, women, 15s.
- Drawers, women, 12s. 6d.
- Tins, women, 10s.
- Carpet cleaners, women, 11s.

The hours of labour are from 6 o’clock in the morning until 7 o’clock in the evening, excepting thirty minutes for breakfast, an hour and a quarter for dinner, and thirty minutes for vespers.

THE JAPANESE SILK TRADE.

Japan, it is well known, is one of the most important fields of production of raw silk, and would seem to be rapidly displacing China in that respect. The protected American silk trade seems to find Japanese silk the most suitable for its requirements, and has consequently secured itself in the hands of the largest parts of the crop, as will be gathered from the following statistics of the silk trade of the country for the last 12 years, which were issued in Yokohama after the close of the last season, 30th June. The figures exhibit some curious features. The trade is practically confined to the port of Yokohama, the export from Higo being only a trifle over 1000 bales, and that last year was 26,250. In 1897, the export was 38,500; and in 1898-9, 41,264 bales, so that in 1899-0 there was a decline; but the expansion in the trade in recent years has been remarkable. Prior to 1887-8 the export never reached 20,000 bales and sometimes even less than 10,000. As for the destination, an average of 20,000 bales during the last three years went to the United States, the remainder being distributed between Germany, 16,000 and 17,000 bales to the Continent of Europe, including Great Britain, to which not one bale was sent directly last year, although 570 bales came in 1898-9 and 3,735 in 1897-8. Some of the shipments to the Continent, however, ultimately came to London. Another curious feature of the trade is that the shipments to Japan are declining, showing that the efforts of the Japanese Government to foster a ‘direct trade,’ i.e., a trade wholly in Japanese hands, are not successful. In 1898, the shipments to Japanese account were 2,800 bales; in 1891, 2,400; in 1893, 3,938; in 1893-4, 2,800; in 1895-6, 2,800; and last year 2,000 bales, the year before last. Although the total export in the same time has risen from 22,841 to 35,958 bales.

IMPROVEMENTS IN THE PRINTING OF WALLPAPERS.

The process employed in the production of wall papers so closely resembles those of calico printing, that many recent developments in the trade may not be out of place. We are indebted for the information hereinafter presented, to Messrs. Walker and Currier of Orchard-street, who have a large number of machines and employ about 200 hands. It was Mr. Walker’s father, we believe, who first produced washable hangings from engraved rollers, and an average step of advancement, but the surface roller until quite recently could not be employed, strictly speaking, for the printing of these articles. As the colouring given by this method is considered superior to that of the engraved roller, paper hang manufacturers endeavoured to discover a process for producing similarly “washable” by the surface cylinders. This has now been accomplished, and is referred to, who are turning out an immense variety of styles and patterns in self and mixed colours without the gloss effect that has hitherto been the great drawback to the multiple surface roller washables. High-class decorations, as a rule, contain mixtures of animal size, which is unfortunately subject to atmospheric influence, producing decomposition and natural action, contaminating the surrounding air. Many obnoxious effluviums, the cause of which is frequently ascribed to faulty drainage, arise in reality from wall papers, of which this animal matter forms a component part. By the new process referred to above a resistless substance is employed in the place of the objectionable animal size, and a further advantage is secured in that the glossy effect has hitherto been the great drawback to the multiple surface roller washables.

THE PROTECTION FOR FRENCH SUGAR-REFINERS.

The commercial and financial relations of France have been approved by the noble army of protectionists, a grand manifestation of the subject having taken place on the 10th inst., at the Hotel de Ville, Avignon, under the presidency of M. Berenger, who has taken a senator for La Drome. We need not reproduce the list of those present at the meeting, but it may be stated that amongst them were included a goodly sprinkling of dignitaries and senators. Few facts in addition to those already known came out at the gathering, previous claims being simply repeated. The growers demand a duty of half a franc per kilogramme on fresh cocoons, 1 franc on dry cocoons, 7 francs on raw silk, and 10 francs on thrown. The arguments of the president, M. Berenger, who opened the proceedings with a long discourse, have, however, taken a somewhat different direction of late. The low price of cocoon is no longer brought forward as a plea, for the minister to the contrary say that 4 francs as a minimum price is absolutely necessary, that figure having already been largely exceeded without the stimulating aid of protection. M. Berenger is now on another tack and says as follows:—"Oats, wheat, and maize are protected. Why, therefore, not protect cocoon also?" To this Lyons replies that it is easy to explain the partiality which prevails. M. Berenger is at present on a mission to Germany and says that the raw material required in a great industry such as that of silk, whose products are exported very largely, on the contrary, are subject to the very large source of its prosperity. The Lyons织 between the two orders of things, and only argues that the desire of protection to protect and encourage industries. But if, in the application of this principle, two interests find themselves ranged on opposite sides, ought not the claims of the more powerful to give prior attention? Our contemporary further asks whether in considering such a question one can hesitate between the claims of the silk manufacture, which adds from 30 to 200 million francs per annum to the wealth of France, and that of silk culture, which only adds from 50 to 90 million francs? It certainly looks as though protection would be more logically carried out if the exception "which proves the rule" were made in favour of Lyons.

GENERAL EDOUARD "CONVERTED": A CURIOUS PHENOMENON IN SOCIALISM.

That nebulous sentiment which for want of a more accurate name has been called Socialism, and which is in many countries the precursor of various forms of government, and in others the forerunner of revolution, has at last found itself a popular champion in France. The man who has done this is General Edo, a convert from the Salvation Army. The "General" has been wonderfully successful in dealing individually through his different agents with the populations of
various countries, but this process is evidently too slow and it has apparently determined to save society wholesale. It is announced by a correspondent of the Manchester Guardian that 'the General has been converted to Socialism.' Mr. W. T. Stead and a few others, and that he had been led to his present conclusions before he really knew where he was. That statement, however, we cannot consider as being disposed to believe that the head of the greatest religious movement of this century is a man head and shoulders cleverer than his allegedly mentors. If General Booth goes in for Socialism, it will be one more Gerald cross that is dimly outlining itself in the imaginations of the adherents of this modern movement. In the latter Socialism is little more than a belief that it is proper to consanguine as soon as possible all property and wealth from its present possessors.

Those who intend shall be done with it is not clear to their minds, nor even to those of their leaders, but there need be little hesitation in affirming that there would be a general scramble for its possession or as much as each could get. O'Conner's book, however, apparently other designs, for it is stated he intends appealing for a million of money to purchase lands and institute agricultural training by the miserable taunts of his book would scarcely influence himself.

This looks like a second edition of Robert Owen's plan, except that charity is substituted for self-help. But where Robert Owen and even his book is difficult to conceive that 'General Booth will succeed,' unless he retains autocratic power in his land, and this will, we suppose, be abhorrent to his disciples who ought and will demand to share equally in the power of disposing of what is required. If 'General Booth,' in his earlier days, could not get along with a committee in carrying into effect his philanthropic schemes, we fear that his failure in the position he now seems to be seeking will be still more signal. He, however, possesses a knack of turning an honest penny in his benevolent schemes, and we may rely upon that if he should get a full response to his appeal he will take care to keep a firm hand over the money, however unphilanthropic philanthropists may decry against his doing so. Perhaps, too, he may be trusted to make a better use of it than they, uncontrolled, would do, for with a democrat, and an ignorant democrat, the despots may be regarded as an unmitigated blessing.

Extremes will thus once more meet, as they did under the reign of the late Empire in France.

THE SILVER ACT AND PRICES OF RAW SILK.

Without any qualification, Mexico has been called the country with a great future; but, though that is, perhaps, too positive a prediction, it may certainly, without exaggeration, be described as a country of considerable possibilities. There are many disadvantages to countervail the magnificent endowments of Nature. Without mentioning the regular drought common to minor American Republics, as to whether a political revolution may not be in full force next month, next year, the day after tomorrow, to-morrow, to-day, now there is the climate to be reckoned with, especially on the coast, a mixed population, and, as it may be regarded as an unmitigated blessing. Extremes will thus once more meet, as they did under the reign of the late Empire in France.

COLLAPSE OF LOMBARD'S MILK MILL, DERBY.

One by one the old landmarks of industrial history steadily disappear. In connection with the textile trades hardly a more interesting one could be found than Lombard's Silk Mill, Derby, built in 1778, that is 15 years before John Kay invented the fly-shuttle. Lombard's story is well known to all students of typography (The Textile Mercury, July 23rd, 1889), accompanied with an illustration of the mill. The latter was to be built upon a small island in the Derwent at Derby, was the basis of a movement that revolutionized the English silk trade. It has long ago ceased to be used for its original purpose, and has for a considerable time been in a more or less unsatisfactory condition. A few years ago several hundred pounds, we believed, were expended in making it secure, in preparation to dismantling it. Of late, however, it has required further assistance of like kind, and

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international commerce, or by the considerations which actuated the dislocations of the cotton yields of Yokohama and Shanghai, when there is an alteration in the value of silver. These small growers, scattered about in the up-country districts by and by the cotton manufacturers, then at a fixed rate in native currency—receive for their silk. The middlemen selling to the shipping firms can only look forward to concessions after the lapse of a considerable period. The circumstances would have been different if the great Chinese buyers in direct contact with the European markets had had the crop in their own hands at the moment of the rise in exchange. The leading feature just now is undeniably the firmness of the Oriental markets, which uphold European quotations not only for Asiatic supplies but for European goods as well.

RUNNING WITH THE HARE AND HUNTING WITH THE HOUNDS IN THE COTTON TRADE.

It will be perceived from a paragraph which appears under our Kidderminster news this week, that an auction sale of 1,300 pieces of Bouchain is to be held at 10 o'clock in the town on Saturday. Catalogues and invitations have been sent to various wholesale firms in this city, but it is doubtful whether any of our large merchants will care for the low price. In the Kidderminster manufacturers have been going direct to the retail for some time, although when taxed with distressful prices. First a position on the market or at any price, and to those who have succeeded in doing so successfully, and no one ever will, not even the carpet manufacturers of Kidderminster. Whole

Article:

THE NEW LABOUR MOVEMENT, AND WHAT IT MEANS TO THE WORKER.

The introduction of socialistic principles into English trade-unionism has completely transformed the character of the latter as far as the admixture has taken place. It is now unrecognizable in its objects, aims, and the means it is using to attain them when compared with the trade-unionism of only ten or fifteen years ago. The workers themselves have become the masters of their trade, and the trade-union movement is now a powerful force in the country, and the power of the trade unions is now being exercised in a more enlightened manner. The trade unions have been able to obtain the results they desire for the benefit of the workers, and they are now being conducted with a view to the general welfare of the community.

THE OLD AND THE NEW TRADES UNION.

We call the following from a speech of Mr. John Burns, addressing a large meeting of workmen outside Price's Patent Candle Factory, Battersea, which was convened to support the newly-formed Factory Operators' and General Labourers' Union. We quote from 'The Times' of Tuesday last.

The Trades Union Congress holds its sitting in Liverpool during the coming week, and it will be instructive to read the reports of the meetings and proceedings; and if we mistake not it will be evidencing as well to capitalists and employers. Referring to
services and neglected the wages and hours of the rank and file of the unions—these men, he believed, who take a back seat. They would, he thought, be told in unmistakable language by the trades unions of the middle and upper classes, must be less of sick and burial schemes and much more for the widows and orphans when he was dead. (Cheers.) They must, by their wages and hours, and by their higher and more comfortable standard of life, enable him to live—to prevent his dying so young. (Cheers.)

The old trade unions should have done this, and if they had done it, they would have been able to attract not only the best of business men, but the best of business men. If they had done it, they would have been able to attract not only the best of business men, but the best of business men. (Cheers.)

WHAT THE NEW TRADES-UNIONISM PROPOSES TO DO.

Continuing his observations in the same speech, Mr. Burns said that in his opinion the new trade unions would be more in the position of the employers' Liability Board than the employers' Liability Board. They did not want the employers' Liability Board to give sums of money to the relatives of men who were killed in the course of their trades. They required that the employers' Liability Board should do this now, not because it was just, but because it was necessary. They required that the employers' Liability Board should do this now, not because it was just, but because it was necessary. (Cheers.)

The employers' Liability Board they asked it to do. They did not want the employers' Liability Board to give sums of money to the relatives of men who were killed in the course of their trades. They required that the employers' Liability Board should do this now, not because it was just, but because it was necessary. (Cheers.)

Letters from Readers.

The Kötter does not necessarily endure the epigones of his correspondents.

THE DANGEROUS ELEMENT IN WINTER.

(Signed.)

To the Editor of The Textile Mercury.

Sir,—It has been often said that it is a fault of our national character that we are slow to recognize the importance of taking action in good time when the weather is likely to be severe. We are apt to neglect it until the worst has passed, and then it is too late to act. We are apt to neglect it until the worst has passed, and then it is too late to act. (Cheers.)

Boycotting.

As we shall see from an extract given above, boycotting is a perfectly proper and legitimate act when committed by a trades-unionist, but it is a very different matter when the employer accepts the position, and the dearness of the absorption into the ranks of remunerative industry of the labourers, with defects and idles to which he referred. (Cheers.)

Designing.

NEW DESIGNS.

A CLAY TARTAN.

There is every prospect that the clay tartans will become fashionable for winter wear; indeed the manufacturers and weavers are making arrangements for the production of new designs in this class of goods that are likely to become popular. Among these is the Macquon of Macquon (Glasgow), who is at present engaged in making up for the trade. He is of course in fashion, and his new designs are already in great demand. The Macquon of Macquon is well known for his tartans and tweeds, and his new designs will doubtless meet with success. (Cheers.)

We have not yet been able to obtain samples of these new designs, but we learn from our correspondent that they are all of high quality and of a rich and varied colour. Some are in shades of blue and green, others in shades of red and yellow, and all are of the finest quality. (Cheers.)

We trust that the manufacturers and weavers will continue to produce such designs as these, and that they will continue to meet with the success that they have already enjoyed. (Cheers.)
above particulars as a basis for cotton, but no doubt silk, worsted, wool, and linens will also be used in the production of these beautiful patterns.

GAUZE FABRICS (Continued).

Before continuing our remarks on Figure C, given in our last issue, we would just point out to our readers who have failed to find coincidence of pegging plan, draft, etc., that inadvertently Figure A has been placed wrong side up, and Figure B has been placed in such a position that weft takes the place of warp, and vice versa. We trust that with these corrections the true relationship of fully-sketched pattern, dressing plan, plain, and pegging plan will be fully realized.

Proceeding to the consideration of Figure C (which we reproduce for convenience) the structure of the principal gauze effect first claims consideration. Notice first that there are two stationary threads, round which the deep thread passes. Then notice that though the pick leaves the plain gauze in series of five, this order is completely broken up in the principal gauze effect in which repetition occurs at the twelfth pick; thus it is evident that to a very considerable extent the pick and thread in a gauze pattern may be made to open out, leaving almost a clear space, or to close up, forming a couple of checks, such as deeply illustrated in Figure C, patterns which in effect almost equal embroidery. The sketch is not exactly true, some little divergence of the weft picks occurring, as shown at the top of the sketch, the reasons for which shall now claim attention.

The essential condition for the production of a gauze effect is that the crossing thread should pass to the right side of the stationary threads and then to the other. No crossing can be formed unless this condition is observed, for if the pick be only lifted at one side of the stationary threads it will continue its course through the cloth as an attachment to that particular side, unless lifted over a pick on the opposite side. Having, then, decided that for the production of a gauze, a lift on first one side and then on the other side is essential, we may now give attention to the grouping of the picks, which at once evident that this depends wholly on the action of the deep thread.

We have prepared five sketches, 1, 2, 3, 4, and 5. In the drawing for the two stationary threads with the deep changing position every three picks. Now, the effect of this arrangement would be to pass all three threads together, thus most of the deep thread would be seen on the opposite side of the fabric.

Returning now to the pattern under consideration (Figure C), it will be seen on examination that the crossing three picks pass over three picks on the left-hand side of the stationary threads, thus isolating these three picks from their companions. Then the crossing thread takes place, and the count thread is worked for 17 picks on the right-hand side of the stationary threads, thus leading to bring these 17 picks together, leaving a space between them and the other three, which is taken advantage of for the formation of the age figure. The construction of the pattern will be now readily grasped, so that we may now briefly call attention to the heading plan. It is evident at first glance that more than one deep do will be required, since the two centre deep threads are working the same figure as the deep thread on either side on quite a different lot of picks. Thus, two deeps and two shafts to work in combination with the deeps will be requisite for the formation of the centre gauze strip. Then again, there are four other crossing threads of finer yarn, which edge this stripe and mark it off from plain. To work these another deep and shaft will be required, which we have not indicated in the heading plan, since what we especially desired to show was the formation of the principal gauze strips, and the introduction of the third deep and shaft would possibly lead to confusion.

In comparing the pegging plan and heading plan note that the arrows on the hand and arrow indicate the direction in which the pegging plan acts upon the heading.
THE "BATES" SPINDLE.

In The Textile Mercury of March 1st last, there appeared a short description of this new spindle, extracted from an American contemporaneous to which we appended an editorial notational of its supposed superiorities to other spindles. In response to this request, Mr. Stockton Bates of Philadelphia, has kindly forwarded us a copy of a report just made by a sub-committee of the Franklin Institute, awarding him for the invention of the spindle, the Elliott Cresson Gold Medal, and giving in an appendix the results of tests made by Mr. Samuel Webber, author of "Mechanical Power." We accordingly print below the report and appendix, which will doubtless be of interest to many of our readers.

ON STOCKTON BATES’ SUPPORT FOR SPINNING SPINDLES.

(Report of the Committee on Science and the Arts)

[No. 1, 94.] Hall of the Franklin Institute, Philadelphia, June 30, 1880.

The Sub-Committee of the Committee on Science and the Arts, constituted by the Franklin Institute of the State of Pennsylvania, to whom was referred for examination, STOCKTON BATES’ PATENTED SUPPORT FOR SPINNING SPINDLES, respectfully report that:

They have carefully examined the same and investigated the state of art under which the invention was made, and find as follows:

That the invention is the subject of Letters-Patent of the United States, No. 516,920, and No. 10,629, both dated Dec. 3rd, 1879, and granted to Stockton Bates, Edwin E. Shaw, and George M. Vos Canella.

That its purpose is to furnish a better support in which spinning spindles revolve, and whilst supporting the spindle, so as to diminish and avoid the inaccuracies in the rotation due to the springing from unequal tension of the driving bands, to also furnish more durable wearing surfaces, easily and cheaply repaired when worn, and to provide an efficient means of constant lubrication and exclusion of foreign substances from the wearing surfaces. In addition to these features, the bearings, by reason of their construction, require less framing to support them and are entirely self contained, and hold their several parts in correct relative position to each other, irrespective of any changes which may occur in the shape of the supporting frame of the machine.

In order that the features of importance and value in this invention may be more clearly understood, your committee desirous in brief to describe how such spindles were herebefore supported in pre-existing machines for the same purpose, and also to show the beneficial effects which may reasonably be expected from their introduction into use.

The functions of spinning spindles are twofold. They twist a filament or sliver of roving or carded cotton, which has been stretched out, but not yet twisted, and wind it upon a tube placed upon the spindle, forming what is known as a card.

In the spinning of yarn, as practised in ancient times in every household, the spindle revolved with the fingers or frame, bearing keys, each one of which the yarn passed to the spool on the spindle continually with a slighter or greater velocity, and this difference produced the winding effect.

In the ordinary winding spindle the weight 1 is placed on a support bearing on each end; the speed attainable by foot-power was limited and never brought out any text of &dquo;instantaneous&dquo; results.

In machine spinning, on the other hand, the spindles are vertical or nearly so.

Power spinning machines may be classified as follows: Throttle spinning, which resembles the method of the spinning wheel, using a fly and bobbin; tube spinning, in which a certain length of sliver is paid out by replaceable stretched and spun, and then wound upon the bobbins; and ring spinning, in which a spindle, revolving rapidly, turns a bobbin with it, inside a ring having a rim or lip, upon which a small loop of metal called a traveller, and guides the yarn, as it is twisted, from a sliver of roving, which is steadily stretched and paid out by a series of rollers in the upper part of the machine. The frictional resistance of the traveller upon the ring causes it to turn more slowly than the spindle and bobbin, and as a consequence the yarn winds on the bobbin. The rate of winding is regulated by the weight or size of the traveller.

The ring and traveller have a slow up and down motion during this operation which causes the spindle and bobbin must be concentric with the ring or else a tightening and loosening effect is produced.

It is obvious that any warping or springing of either of the rails must impair the alignment of the bearings of the spindle, and such impairment of position of the bearings impairs the efficiency of the spindle, and retards the motion and causes both a diminished quantity and poorer quality of the yarn. Such bearings are exposed to direct contact and require frequent lubrication.

The invention under consideration is designed to avoid the possibility of such defects and is hereinbefore stated, to secure perfect cleanliness and automatic lubrication in the bearings and to require frequent lubrication. (See illustration.)

The Bates’ spindle support consists of an upper section (7), which fits from below, on opening in the single rail (2) of the machine frame, resting with a shoulder against the under side of the rail, being drawn up and held in position by a nut (5) upon the upper part. An oil receptacle (4) is formed around the central portion of the upper part of the bearing, within the shoulder, which receives an absorbent packing, and is divided into compartments, and with an outlet in the central cavity, containing the upper bush or bearing (6). A lower section (4) is screwed into the bottom of the upper section containing the lower bush or bearing (7) and the shaft or end cap (8). A cotton cloth, or felt, in the upper section (5), which is bored out concentrically with the screw and shoulder already referred to, is inserted in the upper bush or sleeves (6), extending downwardly into a chamber (10) formed in the upper side of the whorl (2). A steel plate (11) is inserted in the bushing (6) on the side resciving the draft of the driving band, with a wooden strip (12) between them.

The whorl (2) has apertures (13) made through it, reaching from the upper cavity (10) into the lower cavity, through which oil can descend, but cannot be whirled off by reason of the lower rim (4) of the whorl, extending into a chamber formed in the lower part of the support. A bushing (7) removably fitted into the lower part of the support serves to centre the lower end and a hardened steel plate (8) beneath the spindle supports the weight. The bushings (5) and (7), which form the bearings, are not made with continuous journals, but with interrupted ones between the bushing and the casing.

Below the hardened steel bearing (9) there is a cavity (7), into which any foreign substances in the oil can subside without injury to the bearing (8), and an unobstructed space afforded for admission of lubricants.

The bearings being thus filled with an abundant, saturated with oil and the oil maintained in a constant circulation by the rotation of the bearings, and is caused to circulate freely.

The portion of the bearings of the whorl is formed with curved pillars and intervening open spaces so as to permit easy access to the whorl for renewal of the oil, and to afford opportunity for inspection. An inclined plate of metal (50), secured by a screw to the upper part of the bearing at the roar, and extending across the upper surface of the whorl, with a protruding end at the front, acts as a brake when pressed against the whorl, so that the motion of any spindle can be arrested without affecting that of any other.

It will be seen upon inspection that the spindle is supported through a large portion of its length, down to the portion which is in contact with the hand strains upon the whorl, and cannot therefore be sprung or vibrated by hand. The oil is guided steadily from the top to the bottom of the bearing, so that the oil chambers are sufficient to retain oil for several weeks’ running. As a matter of fact, these spindles have been run for six weeks at full speed with only one oiling, and the bearings with a lubricating deposit of the last week. It is found to be safe practice to oil them once per fortnight. Ordinary spindles require oiling at least every two or three days, and are not as uniformly and evenly oiled.

The loadings in the upper and lower parts of the bearings are easily removed and replaced, and being finished with their internal and external surfaces, are always perfectly clean.
terial surfaces cesteric, they cannot be wrongly adjusted. From their form they are cheaply made accurately interchangeable, so that one set fits the other without adjustment. A single flange, or a setting frame, to which a low cost, be kept in best efficiency for an unlimited time. When two or more adjusted concentrically with the flange, or flanges of the spindle to which they are attached, except the upper shell and nut, may be removed without injuring the spindle bearings. The spindle may be interrupted without the work of confining spindles.

The speed to which these spindles can be run with the bearings fit, and there is a freedom of motion of the spindle supports as far as fit concentrically and axis alignment is thus enforced. The bearings of the spindle are such as to allow the spindle to be made at low cost, and can, therefore, be made at low cost, and the parts subject to wear, to be used, the bearing area of the spindle is easily fitted or finished at slight cost.

Your Sub-Committee have examined many other spindle supports and spindles, and have found nothing comparable with the construction of the Whitin spindle. The proportions and combinations of its several parts are as well arranged, that in repeated trials, a spindle was found running smoothly at the speed of 1000 revolutions per minute for a period of three weeks, or 180 hours, at 12,000 revolutions per minute, without having the bearings marked or the spindle ground down, and with the only oil supplied at the outset. All parts of the spindle are of the same size, and observations and tests made by Mr. S. Webber, which, while not entirely satisfactory for reasons which Mr. Whitin has been careful to explain in his postscript, are of interest to those familiar with the action of machines, as indicating that not only could the accuracy of the spindle, but the waste of material, and greater capacity of machine could be produced, but that an economy of driving power should result from the use of the invention.

The tests made at work by your committees, appears to be simple and effective, of great durability, of easy adjustment, and of comparative cheapness of manufacture. For this reason, together with the high speed at which it can be satisfied, the invention indicates the possibility of the machinery to the limit imposed by the properties of the material. Practical experience with such a uniformity of spinning and weaving by reason of its accuracy of motion, that the least possible quality of product could not come from the most sophisticated quantity in a given time, without requiring any additional labour. Thus the invention economizes cost of product, and the advantages for such reduced cost for labour in proportion to the product, and such improvement in product, are followed by better wearing and better quality of cloth, with diminished cost, the invention may be fairly considered as a most valuable accession to the comfort of mankind in their second great want—clothing. The cost only taking precedence. In view of these facts, the award of the Elliott Crown Medal appears to be merited.

(Signed) M. L. LeClair (Chairman).

APPENDIX

TO REPORT OF SUB-COMMITTEE NO. 1544—CONFERENCE ON THE TEXTILE MACHINES, MADE BY MR. SAMUEL WEBB.

PHILADELPHIA, March 16, 1850

Messrs. LeClair, Poulter, Cheseb, Leyten, Roell, Bell, Wright, and Webber, Committee.

GENTLEMEN—I have carefully attended to

the duty to which you have assigned me, to test the "Bates spindle," and beg leave to submit to you the following report: I must first premise that the spindle was tried, and fairly tested, having run only about three months, while my experience has taught me that it takes at least six months to wear a spindle, but it was usually made to the proper bearings. In proof of this I would refer you to the statements of a Boston firm of Excelsior spindles at the Stark Mill in Manchester, N. H., in 1876, as follows:

The frame of spinners, who have been using about three months old, the spindles weighing about nine and one-half ounces, at 4,785 revolutions per minute with a three-inch ring, required in August, 1878, 328 pounds per spindle, or at the rate of seventy-four and one-half spindles per horse-power.

The same frame, removed in November, at 3,800 revolutions per minute made 5,341 foot-pounds per spindle, the frame and spindle were then worth three dollars and a half each.

The record of these tests will be found on pp. 70 and 71 of the "Manuel de l'Electricité," published by me in 1876, as well as other notes showing the difference due to the tension of the frame.

In the first set of tests of the Bates spindle, at Callaghans' mills, at Angora, on Thursday, March 16, 1850, the average weight of 3,500 spindles, and the average of 3,000 spindle revolutions per minute, 100,000 foot-pounds per spindle, the average number of spindles per horse-power,

Revolution of first roll, counted 500

Average power in foot-pounds per spindle

Average number of spindles per horse-

power

Average horse-power per frame

The tests were made with both full and empty bobbins, and averaged, but the total difference between full and empty bobbin was only 125 foot-pounds for the frame of Bates spindles, while it was 150 foot-pounds with the frame of Whitin spindles, showing that the friction of the former was less than the latter. The test of the White spindle almost exactly duplicated similar tests at the mills at Manchuso, Mass., in September, 1877, at nearly the same weight on nearly the same number of bobbins, and in both cases the frames were in the best running order. On Monday, March 17th, a similar set of tests was made at the Gloucester mill, under the direction of Dr. G. W. G.激起, the consideration being made between the Bates and the Excelsior spindles, both built by the Bingham Manufacturing Company, and, as before, the Bates' spindles had been running only about three months, while the Excelsior had been running since July 1841.

These frames were both running on No. 50 yarn, and the tests show as follows:

Bates' Sp. Excelsior

102

107

120

100

80

100

2,050

2,000

2,050

2,000

100

100

150

Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

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Spindles per horse-power, bobbins

Spindles per horse-power, bobbins

The greatest advantage of the Bates spindle is the fact that it is not expensive to maintain, and commands all persons to make their fires of wood. That the anti-smoke movement after nearly 100 years, and has not yet succeeded, is evident to sight, taste, smell, and touch, in any manufacturing town on working days. Manifestly, either means of prevention have not been discovered, or our legal procedure is at fault.

A glance at any manufacturing town on a Sunday, and again on a working day, proves at once that the smoke is not coming from the dwelling-houses; and in this paper I am dealing only with manufacturing smoke especially from large horizontal boilers.

Smoke arises from a furnace both when the supply of air is admitted for the complete combustion of the fuel, and when a sufficiently high temperature to effect combustion is not maintained, this being frequently the result of endeavours to prevent smoke by admitting an excess of cold air.

I have tried and the various methods of dealing with the problem, and the latter is the reason for the failure of many of them, especially forms of smoke dampers.

Contrivances for admitting air, either heated or cold, by steam injectors, fans, by special tubes through the flue, through many hollow bars, and so on, to various parts of the boiler, have been invented, and have been tried thousands of times. This is a matter worth incurring upon, because someone is always making himself a nuisance by claiming to have solved the smoke problem, and exhibiting upon an already surfaced public method that has been known for many years. I have only tabulated a few of the methods, which may be regarded as types of the rest.

With regard to splitter bridges, one which works admirably is that of Houston, of Bolton, and well illustrates the necessity for a provision of a movable door. In this apparatus the door is supposed to be kept closed. The result is that the boiler begins to smoke when it is time for firing, a cloud of dense smoke appears, but if the door is open the air rushes through the white-hot bridge and ignites the chimney top getting clear in a few seconds. Smoke can be turned on again at pleasure by closing the door, and again stopped by opening it. If, however, the door remains open constantly until next firing time, it will have lost its power—the fact being it has cooled down. The draught through the fire at the same time, is increased by the amount of air passing through

*The full text is before the Public Health Section of the British Medical Association.
### Table I—Appliances for Supplying Air, EitherHeated or Cold, to Various Parts of the Boiler.

<table>
<thead>
<tr>
<th>Date and Name</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1805—James Watt</td>
<td>By admitting air through furnace door, and directly facilitating the fuel on a large head plate.</td>
</tr>
<tr>
<td>1806—Hobart</td>
<td>By admitting air through furnace door, and admitting the fuel in front of furnace.</td>
</tr>
<tr>
<td>1809—W. Thompson</td>
<td>In front of furnace over the fire on a wide pipe, on the side of which is a fan-shaped casing, receiving steam injectors; the fire dome turns steam on, which, passing through mouth of tube, causes a current of air on the fire.</td>
</tr>
<tr>
<td>1812—Seventy-fourth Bridge</td>
<td>Air forced by means of steam injectors through the door.</td>
</tr>
<tr>
<td>1820—Joseph Parker's Silt Bridge</td>
<td>By three appliances an increased amount of air can be admitted after firing.</td>
</tr>
<tr>
<td>1830—Charles W. Williams</td>
<td>With injectors, the opening of the furnace door on the injectors and it is stopped automatically.</td>
</tr>
<tr>
<td>1835—Green's Patent</td>
<td>These are similar in principle to Woodman's patent, patented in 1835.</td>
</tr>
<tr>
<td>1845—Coast</td>
<td>Through the Bridge.</td>
</tr>
<tr>
<td>1846—Hunt</td>
<td>Through the Bridge.</td>
</tr>
<tr>
<td>1852—Joseph L. Jones</td>
<td>Air forced into the boiler by means of air injectors at a perforated bridge.</td>
</tr>
<tr>
<td>1864—Donaldson</td>
<td>This is the end of the boiler.</td>
</tr>
<tr>
<td>1865—Robertson</td>
<td>The air in first heated in the side flues, and forced by a fan into a large air chamber at the back of the bridge, and thence mixing with the puffs from the fuel, it impinges upon a series of zig-zag passages, the surface of which is at a great heat.</td>
</tr>
<tr>
<td>1866—Elliott's Anchorbridge</td>
<td>Patent for a pipe running along the flues and supplying air to the bridge.</td>
</tr>
</tbody>
</table>

### MISCELLANEOUS METHODS:

<table>
<thead>
<tr>
<th>Date and Name</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1699—M. Deluc</td>
<td>Downward draught.</td>
</tr>
<tr>
<td>1715—Mr. Parker</td>
<td>Plan for blowing air down a shaft upon fuel.</td>
</tr>
<tr>
<td>1841—J. C. March</td>
<td>Patent for blowing air upon surface of fire instead of through firebars.</td>
</tr>
<tr>
<td>1843—Hawkins</td>
<td>Erecting Thomas's plan. With this method the difficulty is to raise force, unless of course, must be absolutely prevented, as there is no dissipation going on.</td>
</tr>
<tr>
<td>1851—Cox and Bailey</td>
<td>Patent for drawing smoke by means of a fan and forcing air through firebars.</td>
</tr>
<tr>
<td>1852—Juchet and Bailey</td>
<td>Patent for forcing smoke through the furnace bars a second time.</td>
</tr>
<tr>
<td>1853—Collins</td>
<td>Patent for evoking smoke by passing through a second furnace, where air is admitted in large quantities.</td>
</tr>
<tr>
<td>1855—Hedges</td>
<td>Downward draught, produced by a fan.</td>
</tr>
<tr>
<td>1856—Hedge</td>
<td>Evoking smoke through firebars by means of a fan.</td>
</tr>
<tr>
<td>1857—Elliott's Anchorbridge</td>
<td>Smoke return by means of a fan.</td>
</tr>
</tbody>
</table>

### Table II—Mechanical Stokers.

<table>
<thead>
<tr>
<th>Name and Date</th>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1610—Josiah Edison</td>
<td>Coal supplied to the fire by means of a movable sliding box, the end of which is lifted by a cam and jerked by means of a spring as to project the coal on the fire.</td>
</tr>
<tr>
<td>1850—Henderson's, Prudden, Britten, Whiting, and Others</td>
<td>The three, six-wheeled, and multivector stokers are now generally used with mechanically moved fire bars, and consequently produce much less smoke.</td>
</tr>
<tr>
<td>1864—Koosher</td>
<td>Travelling bars which receive fuel at front of furnace and deposited the cinder at the back.</td>
</tr>
<tr>
<td>1870-1882—The Carl Furnace</td>
<td>Patent for having fire bars arranged in an endless chain which revolves gradually round, carrying the fuel which is slowly coked at the front and depositing cinder at the back. This plan practically solves the problem for external fire bars, but cannot be applied to internal solid burners.</td>
</tr>
<tr>
<td>1863—Vicar's Furnace</td>
<td>The fuel is conveyed from a hopper on to a large plate, where it is coked by the heat from a fire brick at each side of the fire.</td>
</tr>
<tr>
<td>1864—Beecher</td>
<td>The fuel passes through a hopper, from which is conveyed to the internal fire bricks.</td>
</tr>
</tbody>
</table>

### Other Definitions:

**Spray-atomizing stokers:** Steam-or-water stokers constantly throw small quantities of coal upon the fire. Smoke observations on boilers with these applications are given in the tables, which prove that dense black smoke is emitted for 20 minutes per boiler per hour and moderate smoke almost constantly.

**Internal stokers:** Sprayer stokers with moving bars. This type is used on the machines of Mr. Horatio Fitcher's, at Alton, for thirteen years, and is absolutely successful. Any similar stokers with bars fitted to exactly, blast, but have shorter fire bars and probably require more time and fuel to tend the fire. **Vicar's Furnace** is amongst other places used at the London Hydraulics Power Company's, the Liverpool Hydraulics Power Company, the Millers' Coast, and the Gas Companies, and others, all of which are practically successful.
the hollow bridge, and smoke is emitted pretty much the same as if it were not there.

With this apparatus the heat would be maintained better by having a series of fire-brick reverberatory arches beyond the bridge. The most modern arrangement on this plan is Sasham and Kirk's. In this system, the air is heated in the side flues and forced by a special pipe along the fire to the back of the bridge and there mixes with the smoke, passes over a series of zig-zag plates of special construction, and the smoke is burned.

Most of these methods depend upon the attention of the stoker and the quality of the coal. For the best success, six cwt. per hour is a fair duty, and Oldham made indications into the best means of abating the smoke nuisance, and both approved of the mechanical stokers only. Several cooking mechanical stokers have already been in Oldham with satisfactory results. At the West End coal-mill observations of an hour's duration, before and after, during which the smoke was emitted, gave an average of 44 minutes, 16 seconds, and during which the smoke was not emitted, 42 seconds, since of an hour's duration given average of 24 seconds.

The West End New Mill the same furnace has been applied, and the smoke reduced from an average of 7 minutes, 49 seconds, per hour, and, in to-day's mill Eight observations, before, 3 minutes, 40 seconds, and after, 2 minutes, 40 seconds, the smoke has been almost absolutely no dense smoke has been emitted.

It is, therefore, for want of means to control the smokes that the anti-smoke movement has been so unsuccessful. The fault lies at the door of the sanitary authorities, who, in the past, have shirked their bounden duty under the Public Health Act, in not specifying the means of abating this nuisance when dealing with it under that statute.

The first part of the section of the Public Health Act defines as a nuisance, "Any fireplace or furnace which does not, as far as practicable, consume the smoke arising from the fire therein burned, and which is used in any manufacturing process whatsoever." The same section directs in its last paragraph, that the Court shall dismiss the complaint if it is satisfactorily to be shown that such furnace is constructed in such a manner as to consume, as far as practicable, the smoke. If these words have any meaning, when applied to ordinary boilers, they mean, if they are idled, the smoke is not consumed, and not nuisances.

That the authority must specify the means of abatement is quite plain, since Mr. Justice Mathew and Mr. Justice Smith delivered themselves so strongly on this point in the case of Rego v. Weavers. Mr. Justice Smith's words are:

'This point has frequently been involved in the definition of a nuisance in former cases, and has not yet clearly decided, so that we are not bound by any authority. I agree with my brethren that the necessary effect of the section is that the order must specify the means by which the nuisance shall be abated. It appears, section 91 must state a time for abating the nuisance, and the things to be done. If any of the requisites are not complied with, section 52 may be summoned before the Justice. That section would not have been included in the act, if as the particulars were not to be specified in the notice of the nuisance. I also think that the forms given in the schedule show that these particulars must be part of the order, as was said in Rego v. Weavers. At all events, owning the Council being to withdraw, the authorities there now specify the use of a mechanical stoker as the means of abating.

must, but I doubt whether this notice is good. How much better it would be to take the new order on its merits and specify the means of abatement, instead of taking shelter behind vague phrases, and one must conclude that it might be necessary to consult a specialist.

Perhaps the new society for testing smoke prevention issues is the one to which the ordinary mechanical boiler the specification of taking mechanical stokers, with which the use of the machine is most certain, and one may say, to a nuisance which is a disgrace to our valued sanitary progress and civilization.

BLEACHING, DYEING, PRINTING, ETC.

NEW COLOURING MATTERS.

During the past two months several new dye-stuffs have been introduced black, which I have to thank the manufacturers of same for placing samples at our disposal for the testing of them, and now give readers of The Textile Magazine the benefit of the result of our tests with these new and interesting materials.

RHODAMINE S EXTRACT.

Rhodamine must be a time well known to most dyers as a colouring matter capable of dyeing very bright reds, and fast, especially on silks. Lately a new brand known as Rhodamine S Extract, being sufficient to impart a red shade of pink to fibres, whilst with 1 per cent. very full shades are obtained. On cotton it can be dyed by simply boiling in a bath of 24 per cent. acetic acid, but faster and blue shades are got on tannin-mordanted cotton. On wool and silk it can also be dyed, but not with the same success. The shade is in the form of a dark grey crystalline powder, readily soluble in water to a crimson solution. The solution in alcohols and acetic acid have an orange fluorescence. Dilute acid has no action on the aqueous solution, and alkalies discharge the colour and gives a colour of the base. It is a strong colouring matter, 1 per cent. will give a bright shade.

The chief advantage of rhodamine is that it is not perfectly fast to light although they resist it pretty well. Strong acids turn the colour yellow, acetic acid turns it slightly more scarlet, and boiling to soap almost discharges the colour, while alkalies completely decolourise the dyed fibre.

PALATINE SALT.

This is a new dye-stuff for wool, on which it is dyed in the usual way. It gives good, and bright shades of scarlet, which are fast to light but not to soap, the latter almost discharging the colour. Alkalies have no action but alkaline treat the colour much more readily.

PALATINE RED.

A similar dye-stuff to the last. It is dyed in the same way, and gives crimson shades; as fast to light and acids, while alkalies turn the shade brownish, and boiling in soap causes the colour to bleed slightly on the surface.

AZO GREEN PASTE.

This is a dye-stuff belonging to the new series of azo-acrids—the isodiphenylene-dihydrazides. As the parent compound has been named. To judge from the properties of the one now under notice, they have subordinate-antipode properties, i.e., they are capable of forming dextro and laevorotatory shades. Azo green is sent out in the form of a
paste of a bluish green colour, not soluble in water, but soluble in alcohol and acetic acid. Acetic acid is a part of the solution, which is formed on diluting the paste with water, red-dish brown; while alkalies have no action. On working the wool, it is of the usual way, but faster and better shades are obtained if the wool be protected from the air. An amount of 5% of the weight of the fabric is sufficient of fantast and acetic acid. The shades obtained are brilliant and very much brighter than can be from the direct application of the mineral salts or the colour amber, or reddish; acetic acid has no action; and caustic soda has no action when the wool is dyed. Boiled with soap the colour loses much of its depth, but there is no bleaching or staining the white. Boiled with soda the colour is turned yellowish, and there is some loss of depth. It is fast to light and air. On paste it may be dyed without mordant; on silk with a little acetic acid.

BRILLIANT AZURINE 5 G.

This is the latest of the well-known azurines. It dyes in a neutral bath on unmordanted cotton very fine bright shades of blue. The dyestuff itself is sold in the form of a greenish black powder, soluble in water and alcohol to a reddish blue solution. In the aqueous solution hydrochloride and acetic acid are precipitated and caustic soda turns the colour of the solution crimson, while acetic acid is precipitated on being dyed on cotton in a bath of (Glauber's salt, and phosphates, and alkali, although it gives good results with caustic soda and soap are used. The shades obtained are fast to acids, strong nitric acid only affecting it and turning it red. Alkalies also turn it red, but the colour in soap bleeds slightly, and the shades are excellent. Caustic soda and shades are found much greener and more resistant if after drying the goods are passed through a bath of copper sulphate.

On wool in a neutral bath brilliant azurine gives richer shades than on cotton, but in a bath slightly acid or alkaline, and with caustic soda, grey or navy-blue shades are obtained. The dyebaths are very much stronger, and only about half quantities of materials are required for each subsequent bath. But, once the dye is well on silk, either in an acidiolated bath or in a broken soap bath. For half killing it will prove very useful, as it dye the color and the silk the same shade, a fine, bright navy-blue. We regard brilliant azurine as likely to be one of the most useful colours that has been placed on the market for some time.

+ AGERINE GREEN.

This is a new basic green dyestuff sent out in two shades, BO and GG, blue and yellow shades. Of all green colouring matters this dye is the best. It dyes moderately cotton in the usual way, BO giving deep blue shades, GG giving shades of grey and black. The shades are very fast to alkalis, acetic acid, and alkalies. For very deep fast greens some green will be very useful. It is recommended for printing or painting on cotton with a colour made of acetic acid, tannin, and thickening, in the usual way.

STANDARDS IN COLOUR MIXING.

Every colour mixer to a calico printer knows what standards are, or, at all events, should know; but what many do not know is the right way to use them, for like every other good thing they are liable to be abused.

It is well known that a colouring matter will give a great variety of tints or shades— it is a pity that dyers and calico printers mix up these terms so much—according to the proportion of colour used. Thus, a yellow dye-stuff while the very faintest tint of yellow water lately gives a very nice yellow when from 1 to 10 per cent, is used, and an amount is used. Practical calico printers are well aware of this, and they take advantage of this fact to produce a variety of shades and tints. The best way of making a standard colour of a dyestuff is to get a paler tint which makes other shades from this, varying quantities of thickening. Thus an allumine red standard can be made as follows:

A GERMAN firm of colour makers are introducing a new chrome mordant for dyeing on cotton, thus opening up a prospect of being able to obtain new fast shades in that fibre.

According to Professor Church, Indigo as a pigment is quite unsuitable for the purpose of permanence. Two years of exposure causes a loss of from 50 to 60 per cent. of its properties by indigo used as a pigment is so fugitive and when used as a dye is so permanent it is a puzzle.

The following composition is given in a German contemporary for a soft, durable colour on cotton goods:

For 100 litres of composition use 120 kilos, 635 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods. For 148 litres of composition use 175 kilos, 175 kg., of 95 per cent. of indigo and 300 grams, 300 g., of 100 per cent. of cotton goods. For 148 litres of composition use 200 kilos, 200 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 250 kilos, 250 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 300 kilos, 300 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 350 kilos, 350 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 400 kilos, 400 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 450 kilos, 450 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.

For 148 litres of composition use 500 kilos, 500 kg., of 95 per cent. of indigo, and 300 grams, 300 g., of 100 per cent. of cotton goods, 300 grams, 300 g., of 100 per cent. of cotton goods, and 300 grams, 300 g., of 100 per cent. of cotton goods.
keep for one hour at from 90° to 100° Fahr., is then washed, dried, and passed into a bath of soap and soda, then into a boiler bath containing 1 lb. of saltpetre, 1 lb. of soda, and 1 lb. of saltpetre. This process is repeated until the finished yarn has a lustre and has been ground and washed. The yarn is then used for the next process, which is the dressing and finishing of the yarn.

J. J. CHEVALIER describes a new process of dyeing silk fibres with mordants and insoluble resins. The process consists in immersing the yarn first with a solution of ammonium carbonate, then with a solution of potassium permanganate, then with a solution of chromic acid, and then with a solution of aniline. This process is repeated until the yarn has the desired lustre and finish.

As our cotton manufacture is diversified and the production of finer fabrics increases, the importation of cotton goods into this country also increases. This is particularly true of the manufacture of cotton goods in the southern states, where the demand for finer goods is increasing.

The textile industry is one of the most important industries in the United States, and its development has been rapid. The manufacture of cotton goods has been a chief factor in the growth of the textile industry.
The Textile MERCURY.

News in Brief.

From local correspondents and contemporaries.

England.

Accrington.

In connection with Messrs. Howard and Belmarsh's works at Accrington is a large room measuring 100 by 60 feet, and 12 feet in height, which the proprietors have devoted to the purposes of technical education and the exhibition of their works. The top of the workmen's new building, and it has been decided to have it suitably decorated. The designs and plans were obtained from some well-known firms, and those of Mr. H. W. Cuscalfe, of 31, Church-street, Blackburn, have been selected. The competition, which was a severe one, was decided upon its merits, and when completed the room will be one of the handsomest in the country. - Evening Express.

Ashtead.

The cotton spinning mill belonging to Messrs. T. and H. A. Arrowsmith and Co., Ashtead, commenced to run full time at the beginning of the week.

Becup.

The Roxendale Industrial Co., Limited, have placed a large order with Messrs. J. T. Fothergill and Co., manufacturers of the Roxendale loom and securing the steam engine foundations at their Mill, Necope, with Messrs. Fox and Williams, of Manchester, to be done with their patent furnace mechanism. The work will be carried out during this week end, and will be ready for running at the usual hour on Monday morning.

Blackburn.

On Saturday, the weavers employed at Messrs. Birtwistle and Thompson's, Standley-street, presented Mr. John Holden, their late overlooker, with a marble timespiece, on the occasion of his leaving.

Boothtown.

A late overlooker at Commercial Mill, was, on Saturday, presented with a handsome easy chair, by the weavers employed at the mill.

Bolton.

At Bolton Police Court, on Saturday, Margaret Macdonald, John Merrison, and Hannah Merrison were charged with having a series of ostentatious robberies from baskets, the Boulton Hair Company. Both the female prisoners had been employed there, and the male prisoner was found in possession of a quantity of property, which was identified as belonging to the basket. On examination the male prisoner's a large number of baskets was found. All the stolen property is not yet recovered. The prisoners were remanded. They were again refused bails, and were brought up to the Magistrate as before. The本领 was adjourned for Monday, June 3rd, and Mr. Donald was sentence of six months with hard labour.

Bury.

Boothtown Mill, the property of Mr. Henry Yates, is to be sold every Saturday and Monday for a month hence on account of the sickness of the trade.

Bradford.

We regret to announce the death of Mr. Leopold Publiva, senior partner in the firm of Schuster, Publiva and Co., staff merchants, which he joined at the age of 39, at Glassport, Bradford, on Wednesday. He was born in 1855, his native place being to the right of the town, and was a member of a leading family of property in the town, who were found in the trade of the same and the male prisoner's a large number of baskets was found. All the stolen property is not yet recovered. The prisoners were remanded. They were again refused bails, and were brought up to the Magistrate as before. The本领 was adjourned for Monday, June 3rd, and Mr. Donald was sentence of six months with hard labour.

Bury.

The annual holidays commenced at Bury on Saturday morning. All the mills and principal workshops were closed on Friday night, and work was stopped on Sunday. On Monday, many thousands of persons visited the town for Bank Holiday, moonlighting, and other purposes, by the illustrations given in various tradesmen, about 10,000 altogether being brought, while the operations of various tradesmen will be continued at various times, but now come to a close on a uniform date by arrangement between employers and workpeople.

Drighlington.

On Monday evening, the watchman at the Bag Mill, Drighlington, belonging to Messrs. Middleton, was killed by a spark. About 30 years ago, when working in the engine house, he was sitting in the dry-room near the boiler-house, when a spark from the works fell on his head. The fire kept burning for several hours and the smoke and flames were suffocating. The boiler-house was totally destroyed. The damage is estimated at £1,500.

Gorboule.

About 200 fresh homes are being erected in Messe, Halliday licensed home, in the police force. The number of places that have been taken out is 20.

Great Yarmouth.

Plans for the new dermatology for Messrs. Pepe were adopted at a meeting of the Local Board, held on Monday.

Halifax.

The third session of the Technical Institute commenced on Wednesday evening, when a good number of students present themselves. A number of new and improved machines have been added to the workroom, several powerful engines by eminent makers, and a new engine of the Campbell type, and there have been generally provided by Messrs. Cuthbert Clayden.

Hippurpolis.

On Monday the death occurred, at the age of 52, of Mr. Robert Ross, retainer of the Hippos, at Hippurpolis. Mr. Allart, a cousin to his wife, has died of consumption. Mr. Ross was a successful business as a solicitor, and subsequently added to it the business of wood-working at Heals.

Hurst.

The marriage of Miss Catherine Mabel Rowley, youngest daughter of Mr. A. B. Rowley, J.P., D.L., of the firm of Messrs. A. Whittaker and Co., Hurst, to Captain Alfred R. N. Grey (Madras Regiment), was solemnized on Saturday afternoon at St. John's Church, Manchester, the ceremony being performed by the Rev. Dr. C. Carroll, father of the bride, assisted by the Rev. H. D. Bucknall, M.A., Vicar.

Keighley.

On Monday evening, a fire was discovered on the premises of Messrs. W. Simmonds and Sons, machine makers, Conisley Lane, but the flames were extinguished before any serious damage was done. The damage is estimated at about £75.

Kildonan.

Messrs. H. H. Willcox and Co., of Worchester Cross Carpet Mills, have issued a catalogue to their customers, announcing a special rate of stock of Brussels and Wilton carpets. The catalogue has only had an annual circulation of 20,000 copies, but on the present occasion they intend placing the whole stock, consisting of about 3,000 pieces, without reserve under the hammer. The sale takes place in the large show-room on the floor on September 15th, and 20,000 buyers are expected to attend. With the catalogues Messrs. Willcox also issue a similar to their friends' announcements, stating the prices which the buyers are expected to make in return for the business and attention they intend to make to the quality of the goods they will in future manufacture.

Leeds.

The joint board of representatives of the Leeds Chamber of Commerce and of the Leeds Trades' Council have appointed Mr. W. Lockwood, president of the Chamber of Commerce, and Mr. W. L. Kitchin, president of the Trades' Council, respectively as vice-president and vice-president of the newly-constituted Leeds Board of Conciliation, and Messrs. W. B. Galvors and John Ainslie, son, of the Board. A code of rules has been framed, which specifies that the Board shall limit its action to trades disputes in Leeds; that the Board shall not interfere in disputes where there is any machinery of conciliation in existence; that a settlement in any likely the Board shall initiate the parties of most interest, that the settlement shall be by a strike being taken by this Board unless both parties agree to the strike, and to other courses. Other formal rules are appended.

The death is announced of Mr. William Fitch, of Dudley Road, Leeds, who was killed at a railway crossing on the Wigan line on Monday morning at his Scarborough residence, Belvoir Villa. The deceased was in his 30th year, and had been in the course of his long life was identified with many public undertakings. He was a native of Leeds, but after leaving school he was employed in the firm of Messrs. A. and Horne, and Co., Bradford, and on the death of his father was named as a partner in the business. It was in this firm that he was instrumental in forming the firms of Mr. Fitch and Co., and Mr. Fitch and Co., and had houses in Leeds, Manchester, and other places, and had a large connection.
in America. The name of Mr. Firth, however, is mainly associated with many of the railway projects of the day. He quickly appreciated the importance of having the various commercial enterprises and financial bodies connected by railroads and although several of the schemes were instrumental in bringing to a successful issue many not worth while, he never lost faith in the future of railroads. The railways which he was most intimately connected with were the Bradford, Westminster, and Leeds line, of which he was the chairman; the Leeds, Bradford, and Halifax Junction Railway, of which he was a director; and the Grimsby Railway, which he helped largely to promote. For 20 years, Mr. Firth was a director of the Great Northern and Lancashire and Yorkshire Railways, and his company, the Grimsby, was merged into the Great Northern and Lancashire and Yorkshire Railway in 1892, when Mr. Firth was appointed to the board of directors.

Oldham

Mr. Wm. Smith, manager of the Hopkin Mill, has been appointed to a similar position under the Clough Spinning Company.

Mr. John Hirst, manager of the Clough Mill Company, has been appointed manager of the Albion Mill Company, Holmebrook.

A new boiler is being put in at the New Union Mill Company during the stoppage next week for the week's holiday.

Mr. J. Robinson, late of the Industry Mill, has been appointed to the Albion Spinning Co.

The steam engines of the Deal Mill Company, Chaylor, were started for the first time on Saturday. Cotton is being passed through the machines in the preparatory process of spinning. Mr. Williams, engineer, at the Hopkin Mill, has, after a short illness, recovered.

Mr. Brook, manager of the Albion Spinning Company, Holmebrook, has been appointed to the board of directors of the Albion Mill Company.

Messrs. Urmon and Thompson, engineers, at Ashton-under-Lyne, Oldham, have been engaged with the carrying out of the repairs in the connection with the steam engines belonging to the Broadway Spinning Company.

The Neville-street Mill is working up preparatory to stopping and being taken over by a limited company which is in course of formation for that object. The mill is fitted up to contain about 1,500 spindles. Possibilities will be tendered shortly after the Oldham Wakes holidays, which commence tomorrow.

We understand that the question of widening the New Mill of the Sun Mill Company so as to obtain larger and more spacious machinery is to be again raised. When the question was up previously no decisive steps were taken regarding it, but the 'new blood' on the Board are now pushing the matter forward, so that something is likely to come of it shortly.

About 30,000 spindles at the mills of the Macclesfield Spinners Company are likely to be stopped for several months. This is necessitated in consequence of the excessive alleviation which is in contemplation of the mill owners, in which the lengthening of the mule, re-arrangement of the machinery, and the placing in of a pair of steam engines, etc., is contemplated.

On Friday last week the mills in Oldham and Ashton were stopped for the next three weeks or more. The opening of the mills this week will commence, and there are few changes on the English and Welsh coast but will recover visits from them, as well as the Continent and the Isle of Man, while the Baltic trade and the south coast will be patronised very largely, especially the former.

Mr. James Heathcote, salesman of the Duke Spinning Company, and chairman of the Deal Mill Company, has been appointed to the vice-chairmanship of the latter concern, in place of Mr. Bradbury, who has accepted a similar position under the Textile Mill Company. Mr. Frederick Beattie has been appointed earlier at the Duke Spinning Company, in the vacancy created by Mr. W. V. Hancock, who has accepted a situation abroad.

A dispute has come to a conclusion with the new water lodge arrangements of the Goodwick Spinning Company by which the blocking of the old lodge were stopped, and the employment of the mill for two or three weeks. A new lodge was being made and the company say there are twelve workers. Since the accident, however, it has been suggested to make both lodges into one, which will give a saving of 1,500,000 bales of wool. The lodges have been stopped by the directors, but the accident is being remedied as quickly as possible.

At the meeting of the shareholders of the Goodwick Spinning Company, on Thursday night, the chairman (Mr. S. Littledale) stated that the directors were assured the work in connection with the making of the lodges would be completed to allow of the mill recommencing work immediately after the Wakes holiday.

The plans and elevation of a new spinning mill which it is proposed to erect in Preston, in the neighborhood of North Hallam, have been prepared by Messrs. Scott and Row. The plans and elevation of the mill are to be of the best kind. The plans and elevation of a new spinning mill which is proposed to erect in Preston, in the neighborhood of North Hallam, have been prepared by Messrs. Scott and Row. The plans and elevation of the mill are to be of the best kind.

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The textile markets of Great Britain continue to show little sign of recovery. The war has not yet been entirely overcome, and the demand for cotton goods is still very limited. The demand for woolen goods is also still weak, and the prices are not very high.

The following are the official quotations from the same sources as before:

<table>
<thead>
<tr>
<th>Country</th>
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<th>Price</th>
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<td>No. 1</td>
<td>1.00c</td>
</tr>
<tr>
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<td>No. 1</td>
<td>1.50c</td>
</tr>
<tr>
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LEEDS.

Both home trade and shipping houses have been quickened of late. For export specimens orders were placed a short time ago, and, until deliveries are made, trade will remain brisk. During the past few weeks, certain house students have been bought by the large department stores in such attractive designs that hopes are entertained of a considerable improvement in this section of the trade. Medium sizes and overcoatings are strong.

GLASGOW.

Mens, Hamsey and Co., in their report dated 25th August, say—

Wool.—Since the public auctions last week there has been little, if any, new business passing in the wool market. The tone, however, is steady and recent prices are maintained.

The supply continues a full average, and largely of good sorts. An active competition is maintained, prices are firm.

FIAX AND JUTE.

DUNDEE TRADE REPORT.

Wednesday, 7th August, 1890.

Yesterday there was a better feeling in our market than of late, and manufacturers opened their contracts for further concessions in price.

Jute is quoted at 3½d. per lb., say 35, a ton of an advance. Bids for shipment, September-October, seem more generally accepted by Dundee.

Yesterday, therefore, spinners were unable to make any higher prices for their yarns, except as far as new orders compelled to take a few. For 5lb. cop the price is 1s. 5d., with buyers over.

Hatters. Manufacturers say that there is now no margin of profit. High wages, easy costs, and charges, compel them to increase their weaving rate, and they say that it is not possible to make hatters without loss. For common Dundee, 10½ oz., 65½, the price is 1s. 5d., and only the best goods bring a higher rate. For fine Hatters, Dundee prices are paid, especially in the wider widths.

Flax is firm, and is, while not higher in quotation, not quite so easy to buy. This remark applies especially to St. Petersburg brown flax.

Flax yarns are not lower, but it is difficult to get any rise in price. Wet spins are indeed firmer, but this is not an important branch of the Dundee trade.

Tow yarns are still very cheap, especially common white.

Linters are quiet, but the feeling that the bottom price is not yet reached is strong. Dundee fancy jute goods are in fair demand, and makers of cords and taffies are all very busy.

MANCHESTER.

The demand for flaxen articles suitable for the extensive trade, which sets in during the period immediately preceding the harvest, has commenced, although not as yet to any considerable extent. The demand section is one of the first to feel the impulse arising from this demand, and manufacturers have prepared home demands excellently in anticipation of the season’s requirements. Floral and geometrical effects are as heretofore to the front, but in detail important changes have been made. The range of plain, flowers, and even crests, upon which the designers have drawn for inspiration, is vast, the chromolitho, the piano, the shamrock, together with wheat and barley, being included among the woven patterns to be seen in the pattern books. Great hopes are entertained with regard to the trade this season.

Manchester.

SILK.

LONDON.


THREE TIMES.

THE TEXTILE MERCURY.

153.


COTTON COMPANIES DIVIDENDS.

North Moor.—Profit, £1,450. Dividend, 10 per cent.

Gloucester (Padiham).—Profit three months, £940. Dividend, 1s. 4d. per £4 of paid-up capital, which will bring the dividend up to 6s. 8d. per £4.

Loans, 450, 500. Spindles, 8,000, 884. (1,000 shares, and 66,406 shares.) Plant three months ago, 66,100. Company formed in 1892.

India Mills Spinning Company, Darwen.—The report on the past half-year’s working of this company shows a profit of £2,500, which, after allowing £1,500 for advances to the company, leaves £1,000,400 available for the purchase of new shares. The investment of £1,000,400 in the company has been made in 6s. 8d. shares, and the company has been thoroughly reorganized.

HONESTY AND LACE.

NOTTINGHAM.

Yarns are being bought but sparingly, as some manufacturers have insufficient orders on their books to justify them in laying up stock. Booms have been sold to American buyers, but factories are not busy, and the whole, are dull. The Lovers’ department, with which we have been concerned, has been closed, and there is no expectation of new orders from the United States.

The silk and cotton mistresses known as “out-agents,” and which are used for men’s ties, are selling largely. They are made in Macleodland, but the principal portion of the demand is supplied by German manufacturers.

FITTING AND LACE.

LEICESTER.

The wool market is firm. The aggregate turnover is not heavy, but the number of small transactions gives the market a more cheerful tone, while brokers are indifferent to business unless their demands are satisfied. Linters and demister wool of the finest growth are most in favour and firmest in price. Heavy speculation is avoided, and the operations are sound, regular, and healthy. Colonial wool sells well at the most actual requirements, and prices are more regular. The yarn market is in a fairly healthy condition, and although new contracts are at low rates, spinners find more business offering. Cashmere yarns sell steadily, and a more satisfactory trade is doing in Leslie wool. The hosiery trade improves steadily all round, whilst in some of the leading branches much greater activity prevails, and there is every indication of a full autumn and winter trade. The best and slow trade is much better, deliveries are increasing and production is being extended. Electric web sailcloth sells freely for homes, and American and Continental for export.

THE KIDDERMINSTER CARPET TRADE.

The tone of this trade is generally better than for some weeks back, but business continues somewhat slack. During each rather more of the enquiries have come to hand from home buyers, but it is too early yet for transactions of importance to be carried out, and business resulting is simply in the nature of trials. At the present time only a few traders are out, but in another month all of the firms will be represented on the road, and buyers will then have a better chance with all the new samples and patterns before them of making their selections. In the shipping department of the trade, orders have been arriving rather lately, and some good consignments are being made to the Scandinavian market. Trade is still far below the average compared with other years, and, taken all round, the failure of the South American trade and the very material falling of the demand for Australia, the present season has been the most disappointing for several years.

In the wool market, although there is not much request, prices remain firm, and the feeling seems to be that with an increase in transactions values must advance. Spinning machinery is keeping fairly well without much requisite. Up to the present manufacturers in the main have contented themselves with the few orders that have been placed.

Cotton yarns are exceedingly firm at top rates, and spinners talk of a further advance before long, and this is tending to a little business.

Gazette News.

ADDITIONS.

Edward F. Malsby, London-road and Padsey-street, Liverpool, has removed to 7, Molyneux-street, Manchester.

Bonde Crossley, residing at Woodborough-road, lately residing at Sim’s factory, Shrewsbury-street, Nottingham, is now manager at Haslingden.

ERECTING ORDERS.

Phillipson, Brocks, Morepens, Outlane, near Rochdale, and Holdredge, Fulwood, Lancaster, are erecting upholsterer's factories.

Vaux, B. Wallis, Upper Wellington-street, Long Eaton, lace manufacturer; Derby.

Bonde Crossley, residing at Woodborough-road, lately trading at Sim’s factory, Shrewsbury-street, Nottingham, lace manufacturer; Nottingham.

PARTNERSHIPS DISSOLVED.

Dawson and Co., Padfield Mill, Burnley, also manufacturers.

Brown and Priestley, Bradford, wool and worsted dealers.

Winding-Up Notices.


Patents.

APPLICATIONS FOR PATENTS.

The names in italics within parentheses are those of Communicators of Inventions.

Where Complete Specification accompanies Application, the text is omitted.

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The new edges of the old服用 are extended with metal strips, which are riveted to the fabric or to a wooden or metal base. The new edges are then stitched to the old服用, creating a smooth and neat appearance.

**Specifications Published:** 1909.

1. **1909.**
   - **Wincoke (Fur猟服)\textsuperscript{1}**: Coloring matters. 6d.
   - **Dyed Wool washing machines.** 6d.
   - **Grosgrain.** Spinning, etc., machines. 6d.
   - **Claymore.** Coloring matters. 6d.
   - **Stewart.** Coloring matters. 6d.
   - **Pearl.** Coloring matters. 6d.
   - **Chen.** Coloring matters. 6d.
   - **Chenille.** Coloring matters. 6d.

**Second Edition.** 1909.

1. **1909.**
   - **250.**
     - **Schott.**
       - **Looms.** 8d.

**Abstracts of Specifications:**

1. 1909.
   - **350.**
     - **March 28, 1909.** Cutting west-pile fabrics, W. I. C. D., Manchester, and D. B. D., M., Manchester. 6d.
     - **April 3, 1909.** Cutting west-pile fabrics, W. I. C. D., Manchester, and D. B. D., M., Manchester. 6d.

**The Textile Mercury.**

8. 1909.

1. 1909.
   - **April 3, 1909.** Cutting west-pile fabrics, W. I. C. D., Manchester, and D. B. D., M., Manchester. 6d.

**Abstracts of Specifications:**

1. 1909.
   - **March 30, 1909.** Cutting west-pile fabrics, W. I. C. D., Manchester, and D. B. D., M., Manchester. 6d.

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   - **April 3, 1909.** Cutting west-pile fabrics, W. I. C. D., Manchester, and D. B. D., M., Manchester. 6d.

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