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### THE WOOL MARKET: IS A FALL IN PRICES COMING?

The action of Messrs. Willis, of Kidderminster, in issuing a reduced price list for carpets has created a considerable amount of comment amongst other manufacturers, who appear to have become alarmed at the prospect thus held out of a downward break in prices, following upon a period of severe trade depression. In reply to a question on the subject the other day a local merchant said that in his opinion Messrs. Willis were quite justified in their assertion that the character of the commercial situation justified them in saying that 5-frame Brussels can be safely offered at lower rates than those which have hitherto been asked. "Wool will be down to per cent. before long," said our informant, "and manufacturers can afford to drop their quotations." The ideas of buyers and sellers are proverbially at variance, and we give the opinion quoted for what it is worth. The view is, at any rate, worthy of notice. The world's supply of wool has increased at a very rapid rate during the past ten years, and should the clips of the coming season prove as large generally as is expected in the case of the Argentine a fall may not be far distant. There was a heavy surplus in the Colonial and River Plate clips last year, and the woollen industry had to deal with enormously increased supplies under rather unfavourable conditions. Put in round numbers, the augmentation of the Colonial and River Plate production was 306,000 and 63,000 bales respectively, or about 18 per cent.—an increase never before equalled in quantity, although proportionately it has been surpassed. The superabundance of machinery set up in Germany and elsewhere on the Continent during the flush times of 1888-89, enabled the trade to absorb the increased quantities of raw material offered them. That expansion, however, has been temporarily checked, and yet the output of wool appears to be steadily on the increase. Under the circumstances it does not seem unlikely that a condition in the woollen market similar to that now prevalent in the cotton trade may be seen before long as the result of abnormally large supplies. The following tables, drawn up for the purposes of explaining our remarks, speak for themselves. They shew how enormously our supplies from all parts of the world have grown in volume. The figures are in 1,000's, and the quantities represent bales:—

IMPORTATION OF FOREIGN AND COLONIAL WOOL INTO THE UNITED KINGDOM SINCE 1882.				
	1891.	1890.	1885.	1882.
Australasian .....	1,380	1,226	1,027	999
Cape .....	316	283	182	191
Total, with other ..	2,186	1,941	1,569	1,553

### THE DAWN OF REASON AMONGST TRADES- UNIONISTS.

A close watch upon the proceedings of Trades-Unionists during the last seven years had led us to despair that they would ever become sensible again. For many years they had made steady progress—a progress with which we sympathised to the full. But after the attainment of political power by the working classes, as they gradually began to gauge the influence it conferred upon them with professional politicians, they departed to a corresponding extent from the paths of reason, flattered and fooled thereto by political adventurers and noisy and blatant individuals in

their own ranks. Any calm, unbiassed person of average intelligence, looking upon the various industries of the country and the conduct of the workers therein, could come to no other conclusion than that the whole of them had quite lost their reason and were so acting as to destroy all hope that they would ever recover it. And as yet we find very little to change this belief. The only hope we had was that employers and others who had invested their capital in our industrial establishments would thoroughly recognise the same fact and be induced to organise their power for self-defence, so that when unreasonable attacks were made upon them they might be in a condition to repel the same. After much advocacy of this line of conduct, both by this journal and many of the most intelligent members of the cotton trade, some fairly successful efforts to organise their power have been made, and, as a result, some of the most arrogant pretensions have been successfully resisted, whilst others again are being now fought out. It is probably owing to this fact that we are indebted for the appearance quite recently of certain gleams of returning reason in one centre of trades-unionism. Mindful of the old adage that one swallow does not make a summer, we let the first pass away unrecorded, hardly believing that it was not some visual illusion. It was a statement in a recent report of the Oldham Operative Cotton Spinners' Association inculcating moderation. We are pleased to have, and gladly avail ourselves of, an opportunity of bringing another instance before our readers. In the current monthly report of the Oldham Operative Spinners' Association appears the following passage:—

"We have faith in the good sense of the operatives that they will not use their power of combination for the mere purpose of extortion, but will be guided in their action by all the surrounding circumstances pertaining to the industry, and to the particular cases required to be dealt with from time to time. In other words, neither the employers nor the operatives can afford to make demands, and to carry them into practice, which are not justified by reasonable evidence, as being necessary and equitable between capital and labour. With such a desire permeating the breasts of employers and operatives there will be no need to fear the spread of unionism or the principle of federation which is making such progress in all parts of the country, both amongst the workmen and their employers."

The report then goes on to say that there are a number of questions in the cotton trade which "remain to be put on a satisfactory footing," and enumerates the following:—Spinners list requires altering and improving, so as to meet requirements of the finer counts of yarn, in which compensation for quick speeds does not apply—in this case, it says, scale of wages requires increasing; twining branch wants list of wages and conditions to govern the industry, as also do the roller coverers, and under-engineers, and stokers, and cop packers. "The workers," therefore, it adds, "require to be true to one another and stand by the unions and those who are elected to guide them." Everyone will agree with the sweet reasonableness of the unity of the interests of employers and employed set forth in the above, even though the faith we have in the good sense of the operatives may be lacking. Our belief is that the operatives will have just the amount of common sense their leaders endow their own proceedings with, because, in the mass, the operatives themselves have little or nothing to do with the proceedings taken in their name. All they have got to do is to obey orders and pay their money. This simplifies the task somewhat, as the conversion of a very few persons to the recognition of common-sense principles would effect a great reform. It is for this we welcome the dawn of reason in a leading trades-unionist centre, and hope that the elements of sanity will find a lodgment in othe

instances from which at present they appear to be entirely absent.

**THE SMOKE NUISANCE AND ITS REMEDY.**

Mill-owners in Lancashire, and more particularly in Oldham and Bolton, are constantly being annoyed with prosecutions on account of smoke. Whether the complaints be reasonable or otherwise the annoyance is the same, and it cannot but be aggravated by reflection upon the fact that all smoke, whether brown or black, is so much waste of hard-earned money. When thus badgered and baited, the spinners of Oldham have, on several occasions, asked the bench of magistrates to name some appliance, the use of which would be regarded as a *bona-fide* attempt to overcome the smoke difficulty, but the only response is an "order to abate." On the numerous alleged smoke-consuming appliances in the market, it would hardly be appropriate for a bench of magistrates to adjudicate, but what they refrain from doing may very properly be done by a technical journal devoted to the interests of mill-owners. We therefore once more call attention to the fact that the smoke difficulty has not only been successfully overcome by the invention of Mr. Greaves, which was first described in the columns of *The Textile Mercury*, but that the use of same results in a saving of from 20% to 30% in the consumption of coal; that it is cheap, easily fixed, durable, and requires no attention; and that with its universal use smoke prosecutions would be unknown. We have watched its working under various conditions for the past two years, and are confirmed in the opinion we first expressed regarding it—that it has actually solved the smoke problem, and done so with the incidental advantage of ensuring a marked reduction in the coal bills of those who adopt it.

**THE BOARD OF TRADE RETURNS FOR FEBRUARY.**

The Board of Trade returns for the past month point to the same conclusions as have those of several months past. In one respect they are even less favourable than they look, for it must be borne in mind that last month had 25 working days as against 24 in February, 1891. The imports are valued at £34,877,931, an increase of £1,566,577, or 4.7 per cent.; and the exports of British and Irish produce at £19,328,753, a decrease of £1,141,868, or 5.5 per cent. Thus, allowing for the extra day, the imports are about equal to those of February, 1891, whilst the exports are nearly £2,000,000 lower. The increase of the imports is to be found in articles of food, and cereals in particular. Other articles which show an increase are oils, chemicals and dye-stuffs, paper-making materials, timber, and cotton seed. As regards raw materials for textile manufactures, the total value of all kinds is £579,116 below that of February, 1891, although flax, jute, raw and waste silk, and sheep's wool, are higher both in quantity and value; but raw cotton has fallen off by 335,682 cwt. in quantity and £1,381,714 in value, the decrease in quantity being 16.4 per cent. and in value 25.3 per cent. For the two months the imports of raw cotton are still in excess of those of last year by 88,000 cwt., and the lower prices of the raw article are reflected in those of the exports of cotton yarn and piece goods, as in the former there is an increase in quantity of 4.5 per cent. but in value a decrease of 10.4 per cent.; and in the latter an increase of 4.7 per cent. in quantity, but in value a decrease of 2.4 per cent. As regards the exports, with the exception of small increases in the value of living animals and apparel all other classes of goods are below the level of last year. The increase of cotton yarn is due to the exports of gray yarn, Japan, China, and Turkey having

each taken much larger quantities of this article. These three countries also took more piece goods, and in addition, Chili appeared last month as a large buyer, the quantity sent thither being 12,835,500 yards, compared with 2,663,100 yards. From these returns it would appear that there is a decided recovery in the exports of woollen and worsted goods to the United States. Of worsted tissues 500,000 more yards were sent; of woollen tissues the quantity was about the same, but of carpets more. Below we abstract particulars of the imports and exports of textiles, etc., for the month:—

**I.—IMPORTS OF FOREIGN AND COLONIAL MERCHANDISE FOR FEBRUARY.**

Principal Articles.	Quantities.	
	1891.	1892.
Cotton, raw .. .. .	Cwt. 2,042,926	1,707,744
Flax .. .. .	" 131,304	167,727
Hemp .. .. .	" 181,569	161,421
Jute .. .. .	" 10,047	25,688
Silk, raw .. .. .	" Lb. 180,855	157,666
Wool, sheep and lambs' ..	" 41,200,577	59,016,303
Woollen stuffs .. .. .	" Yds. 7,508,482	7,857,305

Principal Articles.	Value.		Increase or Decrease per cent. compared with Feb., 1891.
	1891.	1892.	
Cotton, raw .. .. .	£ 5,457,001	4,075,487	-16.4
" manufactures .. .. .	242,629	234,850	-3.2
Flax .. .. .	256,723	284,452	+10.9
Hemp .. .. .	322,379	226,758	-30.0
Jute .. .. .	236,827	471,217	+99.2
Silk, raw .. .. .	108,883	102,827	-5.5
Wool, sheep and lambs' ..	1,894,400	2,222,019	+17.4
Woollen stuffs .. .. .	645,773	653,531	+1.2

**II.—EXPORTS OF BRITISH AND IRISH PRODUCE AND MANUFACTURES FOR FEBRUARY.**

Principal articles.	Quantities.	
	1891.	1892.
Cotton Yarn and Twist ..	Lb. 21,297,800	22,266,200
" Piece Goods .. .. .	" Yards 423,178,500	443,180,800
Jute Yarn .. .. .	" Lb. 2,880,100	2,139,000
" Piece Goods .. .. .	" Yards 20,991,100	19,725,500
Linen Yarn .. .. .	" Lb. 1,213,000	1,121,500
" Piece Goods .. .. .	" Yards 15,140,300	14,411,600
Wool, sheep and lambs' ..	" Lb. 1,235,200	1,217,400
Woollen and Worsted Yarn ..	" 3,231,400	3,123,800
" Tissues, heavy and light, broad and narrow ..	" Yards 5,244,990	5,125,100
Worsted Tissues, heavy and light, broad and narrow ..	" 15,131,900	13,722,700
Woollen Carpets .. .. .	" 1,070,000	1,098,700
" Flannels .. .. .	" 1,183,700	1,169,300
" Blankets .. .. .	" Pairs 139,679	140,265

Principal Articles.	Value.		Increase or Decrease per cent. compared with Feb., 1891.
	1891.	1892.	
Cotton Yarn and Twist ..	£ 1,018,561	912,337	-9.8
" Piece Goods .. .. .	4,691,391	4,575,212	-2.4
" Other Manufactures ..	650,794	543,849	-16.0
Haberdashery .. .. .	179,863	105,843	-41.2
Jute Yarn .. .. .	30,130	24,077	-20.3
" Piece Goods .. .. .	210,281	205,898	-2.1
Linen Yarn .. .. .	68,623	63,917	-7.0
" Piece Goods .. .. .	337,994	323,044	-4.4
Machinery and Millwork ..	1,187,414	1,153,048	-2.9
Silk Manufactures .. .. .	170,242	165,301	-2.9
Wool, sheep and lambs' ..	51,515	49,546	-3.9
Woollen and Worsted Yarn ..	312,613	286,557	-8.3
Woollen Tissues, heavy, light, narrow, broad ..	651,027	630,689	-3.1
Worsted Tissues, heavy, light, narrow, broad ..	920,654	847,712	-8.0
Woollen Carpets .. .. .	110,514	117,159	+6.0
" Flannels .. .. .	43,887	42,337	-3.5
" Blankets .. .. .	56,887	56,859	-0.1

**A COTTON SPINNING COMPANY PURCHASING ITS OWN SHARES.**

Our Oldham correspondent writes:—"Several points interesting to persons concerned in limited liability companies are likely to arise out of the liquidation proceedings of the Bankside Spinning Company. It appears that a few years ago the board of directors purchased a number of shares on behalf of the company, but the persons who sold the shares have been served with notices to make them responsible for the liabilities on the same. It appears that about 620 shares, representing a value of some £1,600, are involved, and that 31 persons have received intimations in the matter. In local circles the point here raised is being watched with great interest. The parties concerned have decided to defend the action." We are inclined to think that in coming to such a determination the parties interested have not decided wisely. It is our impression that under the law a company cannot, unless in very

exceptional cases where the power to act thus has been secured in the articles of association, purchase its own shares. And this is a very necessary provision for the protection of the public. Did this law not exist, there would be nothing to prevent a board of directors using the form of a company to swindle the trading public, or when a company by unsuccessful trading had become hopelessly bankrupt, shifting all its responsibilities upon its creditors; or rather by paying out every penny of its assets to its shareholders in purchase of its shares, it would leave nothing but an empty shell for the creditors. The law endeavours to prevent this by maintaining a genuine constituency of responsible proprietors. Hence, too, a shareholder who disposes of his shares is not free from liability for twelve months after, should the transferee be unable to meet same. The people who have received these notices had better, therefore, carefully reconsider their position before they make matters worse by entering a contest that would involve a considerable further expenditure and might fail to relieve them of their liabilities. We would advise shareholders never to sell their shares to the issuing company if they wish to be free from subsequent responsibility.

**"DELIVERY AS REQUIRED."**

The heavy fall in cotton quotations has naturally proved a source of loss to those manufacturers who made contracts for yarns a long period ahead of current requirements. Under the circumstances consumers not unnaturally regret their action in having effected purchases when quotations were so much higher than is the case to-day; and it is not surprising to hear that many manufacturers are postponing deliveries as long as possible—which means, for as long a period as the patience of spinners will hold out. It is as well to remember, however, that purchases for "delivery as required" cannot be put off indefinitely at the will of the buyer just because he may happen to have speculated on the wrong side. It has been held on more than one occasion in the courts that yarns, or for the matter of that, other goods so purchased, must be accepted within a reasonable time. This was the gist of a recent County Court decision in Nottingham, when a spinner sued a manufacturer who wished to delay the delivery of yarn on account of the high-priced contracts on hand. The defendant pleaded that the term "as required" implied that they were not compelled to receive the yarn until they were ready to do so, but the judge ruled as indicated; and although leave was given to appeal, the opinion is that the decision will not be reversed. If it could be shown that the manufacturer required no yarns whatever, they could not be forced upon him; but most probably he was purchasing elsewhere on lower than contract terms, so that evidently he was desirous, like hundreds of others in similar circumstances, of indefinitely postponing the execution of the contract. If the spinner ran no risk one could sympathise with the consumer; but in these speculative transactions the risk is as great on one side as on the other, and it would be unfair to the one in whose favour the market happened to turn, to deprive him of the benefits of his foresight by placing such an interpretation upon the term quoted at the head of this note as would enable the second party to safeguard himself against loss, while the other ran the usual risk attendant upon such commercial speculations. The decision we have quoted indicates in effect judicial disapproval of a "heads I win, tails you lose" contract. In the lace districts there are, we understand, still many unexecuted high-price contracts for lace and hosiery cotton yarns, the existence of which embarrasses manufacturers. Such a condition of affairs is the fortune of business, and as the

spinner would be held to his contract had prices risen instead of fallen, so ought he to enjoy the advantage of his good fortune when the reverse is the case, without having to go to law about it.

#### DECIMAL COUNTS FOR YARNS.

Mr. M. Blair, of Glasgow, has made great progress with his proposed plans for the adoption of a universal system of decimal counts for yarns. Originally intended for application to silk yarns only, it is now proposed to apply the system to other branches of the textile trades, and the matter was discussed at length recently at a meeting of the Macclesfield Silk Trade Association, when Mr. Blair, Glasgow, Mr. Pullar, Perth, Mr. T. Wardle, Leek, and several local silk manufacturers attended. After reading the minute of the previous meeting relating to this subject, the Secretary, Mr. Snow, remarked that owing to the pressing importance of other business on a former occasion, the proper consideration of the subject was crowded out, and a decision was recorded on the minutes that inasmuch as the proposal to establish a decimal system of counts would not apply to cotton or spun silks, it was inadvisable to make any change in connection with pure or net silk in the definition of counts, etc. When this appeared in the newspapers, Mr. Blair wrote at once to the secretary that he feared that some misapprehension of the whole subject had been arrived at, as the Silk Association of Great Britain did advocate the same system to all yarns, both cotton and silk, and asking that before finally sending this decision to the parent society a hearing might be accorded; and hence by the sanction of the president and vice-president the present meeting was called together. Mr. Blair then addressed the meeting, and explained that, in the first place, his proposals to establish, if possible, a decimal system of counts for yarns, as propounded at a meeting of the Silk Association of Great Britain, held in Coventry, would have the effect of doing away with the present complicated and varied systems by which the various textile yarns were designated and calculated, and would greatly facilitate the manufacturer in making his calculations, and especially so where different classes of material were used in the same fabric. In comparison with Continental countries, England, Russia, and Denmark are the only countries where the decimal system is not used, and consequently a great confusion of arithmetical calculations prevails in these countries. The adoption of the cotton scale would not obviate this difficulty: one hank being 840 yards, it does not move in 10's, and therefore is not decimal. Another alternative would be to adopt the metric system, but as this would involve the calculations to be made by kilos, and metres—units of weight and measurement as yet not recognised in our English standards—he feared that until such time as the metric system was international and universal it would only cause confusion to introduce it into any special industry. He therefore advocated taking the units we have actually in use, the yard and the lb., and a system of reckoning by 10's or decimals on these standards, thus preparing ourselves for a more universal decimal system. Further, as the metric system has never been applied to net silk, even on the Continent, he was anxious to have such a scheme as would commend and adapt itself to the product of the silk-worm from its raw to its thrown state, as also to the by-products of spun silks and other textiles. In his proposals before the Silk Association of Great Britain he laid down three principles of discussion, and to which he also invited the discussion of the present meeting:—(1) To adopt such a system of counts as could be made universal to all textiles; (2) whether such

counts to be reckoned on the single or double thread; (3) whether the number of folds (or plys) should precede or follow the count number. Mr. Blair thinks that by taking decimal principals on the units of weight and length we have now in use, the way would be prepared for a universal system, metric or otherwise, later on. Mr. Wardle pointed out that some of the manufacturers of sewing silks felt that there were in their own particular system of counts some great differences of opinion and practice which it was desirable should be overcome. Many of these difficulties occur through the system of weighting silk, the count of some thread being thus altered according as it is sold in the gum, or as pure boiled-off, or dyed and weighted conditions. How the variations in the treatment of silk should be met, presented itself as a difficulty to Mr. Wardle, but Mr. Blair explained that there was a difference between thickness and count, and he did not propose to regulate any differences as to thicknesses of the thread.

#### A GENERAL DECIMAL SYSTEM.

In bringing this question of decimal counts to the front the Silk Association has performed one of the most useful acts accomplished since its foundation. Mr. Blair's tables of counts, published a few years ago, are already recognised as having been of great practical value, and the hope expressed at the Association meeting that other trades might be inclined to follow any example set by the silk industry will probably be verified should any substantial result be accomplished. The difficulties presented in assimilating the present division of silk in drams or deniers with the new counts proposed, have been fully discussed, and it now rests with Mr. Blair to formulate his system of counts and submit them to the judgment of the trade. If satisfactory the matter will probably receive attention at the hands of other commercial bodies besides the Silk Association, amongst the first of which, it is to be hoped, will be the Manchester Chamber of Commerce. We may add in parenthesis that the Macclesfield Silk Association has now been affiliated with that of Great Britain and Ireland, the members having agreed to pay a guinea subscription to that body.

#### RAMIE SPINNING IN GERMANY.

An article by Herr J. D. Fischer, who was one of the first to introduce ramie manufacturing into Saxony, supplies a few interesting data about the manufacture of this textile in that part of the Continent. The first ramie factory, which went by the name of the "First German China-grass Factory in Dresden," came to grief in consequence of litigation about the use of water: as after some years no decision was arrived at the business was dissolved, and the machines sold. As ramie continued to be used in Saxony, it had to be obtained again from France, which still supplies large quantities. Presently a new spinning factory was established at Baden, which was followed two years later by one in Bregenz. The former has long since tripled its number of spindles, and both works are so busy that they cannot meet the demand. It is an undoubted fact that the use of ramie is increasing. All branches are employing it, but this is more especially the case in regard to furniture-stuffs and fancy goods. Herr Fischer, however, is not so enthusiastic as were the first ramie spinners, who fondly imagined that since ramie in many cases is a suitable substitute for silk, but is about 60 per cent. cheaper, this 60 per cent. would go into their pockets; nevertheless he considers it to be an undoubted fact that ramie spinning is at present most remunerative. So much progress has now been made, both in the preparation and in the spinning of the fibre, as to make it desirable that intelligent men should take more interest in this depart-

ment of textile manufacture, and carry it to perfection. Saxony, which, according to Herr Fischer, can claim to have been the cradle of ramie, is at present lagging in the rear, whereas he thinks it ought to be in the van.

#### THE PRINT TRADE.

Although the home-trade houses are showing attractive collections of English and Scotch prints in lilacs and other varieties, the demand generally is still poor. The goods now shewn include pinks and various descriptions of light fancies. Navy and white effects are, however, favourites, although coloured woven goods have interfered considerably with these and other descriptions of prints, the Oxford and Harvard shirting trade having assumed large proportions at the expense of the products of British printing machines. Oxfords in fair qualities can now be bought wholesale at very little over 3d. per yard, and they are used for various purposes besides shirtings. The foreign demand for prints is still small, and so depressed is the trade that we hear with some surprise that the Radcliffe Printing Co. has taken over the disused works at Whaley Bridge. Messrs. Scattergood and Warrington, of New Mills, who have secured the contract for re-building in accordance with the plans of the new owners, have, we observed during a recent visit to Derbyshire, commenced active operations. An offer by auction of a copper roller engraving works at Pendleton recently failed to produce any buyers.

#### THE RUSSIAN COTTON TRADE.

The Russian ministry of Finance has made arrangements for the return of the duty on the materials used for cotton manufactures in the case of exports. This measure, which will very greatly affect the manufacturing districts of Moscow and Lodz, has, of course, been already more or less noted and discussed by the Russian papers. A newspaper published in Riga has supplied, *apropos* of this question, an interesting series of data about the cotton industry of Russia. The number of persons employed in the Russian cotton industry is estimated by this authority at 257,000. At present, Russian exports in this branch of industry are insignificant, although there are several kingdoms bordering on the Russian Empire in which cotton manufacturing is unknown or only very weakly developed, namely, the chanates of Central Asia, Persia, China, and parts of the states on the Danube. In 1890, the exports at the European frontier of Russian manufactured goods constituted only 2.6 per cent. of the total exports, and at the Asiatic frontier not more than 7.6 per cent. This state of things is accounted for by the relative inferiority of the industrial activity of Russia to that of the great states of Western Europe, and by the heavy duties imposed by the Russian authorities on raw materials and on machinery. At the present time Persia is the most important district for the Russian export trade. Russian goods reach central Persia principally *via* Rescht and Meschedesser, and get to Western Persia *via* Astara and Dschulfa. Goods from foreign lands go mostly by Trebizond and the ports of the Persian Gulf. The length of the journey is much the same, whichever of the two routes—the Russian, or that adopted by other nations—is followed; but Russia has the advantage, as far as cost is concerned, for the Western districts. Nevertheless, as it is sorrowfully admitted, the influence of Western European manufacturers is exceedingly strong in Persia. In 1889 cotton goods were imported into Persia from Western Europe to the value of 12,000,000 roubles, whereas the cotton goods imported from Russia represented only 1,560,000 roubles. The second place in the list of cotton-

buying countries is taken by the states of Central Asia, especially Bokhara. This district is more promising than some regions, because the troublesome English cannot get to it so easily, their goods having to be forwarded by the inconvenient and dangerous route of Afghanistan. Other countries in which it is thought possible that Russian cotton manufacturers might do a greatly enlarged business are Turkey, Roumania, Servia, and Bulgaria. It is true that no cotton goods at all were despatched from Russia to the two last-mentioned countries in 1889, but there is believed, by some persons at any rate, to be reasonable ground for hope as to the future. In Turkey, too, the prospect seems by no means brilliant to any eyes but those that read success in what others call failure, for in 1889 Russian imports amounted only to the value of 66,000 roubles, whereas the imports from England represented 28,000,000 roubles. Clearly the difficulties in the way of marked success abroad on the part of the Russian cotton manufacturers are very considerable.

#### FORCE VERSUS FORCE.

For some time the question of whether or not "force is no remedy" has been a debatable one. We really don't see why it should ever have been affirmed or contested in a general way. Force is no remedy for some things and is a capital remedy for others. When one or more persons are engaged in wrong-doing and resist all appeals to their reason to desist, the application of sufficient force to compel them is an excellent remedy. The appropriateness of the prescription of force as a remedy entirely depends upon the matter to which it has to be applied. For instance, the tyrannical proceedings of the trades-unionists, in which they have discarded every particle of reason from their own conduct and refuse to listen to a particle of it from others, and proceed to enforce other people to do their bidding, is a case in point where force of a high order and degree would be appropriately applied. Force when mischievously employed is an evil to be reckoned with; therefore force in a greater degree directed to the overpowering of the first volume of force, would be a proper and appropriate remedy. We are pleased to see that some force of this character has been developed and is likely soon to be brought into effective work. The arrogant demands being made upon employers throughout Lancashire by the trades-union leaders to enforce the dismissal of non-unionist operatives from their employment or to compel them to enter their union is a case in point of the application of force in an unjust manner, because directed against people who have neither the moral right nor the legitimate power to do what is requested. We pass by at present the question of the tyranny sought to be exercised upon the non-unionist workers. The matter to which we wish to confine attention is the attempt of the unionists to make employers the tools whereby they can effect their purposes. To submit to such an imposition as is attempted to be put upon them by the trades-unionists would on their part be an unspeakable degradation, and we are glad therefore that the three considerable firms at Bury who are being subjected to these dishonourable demands regard them in the same light. We are further pleased to know that the new Federation of Employers' Associations, before whom the matter has been laid, concurred in their views and decided to afford to all the employers of Bury the necessary support in defending themselves from this gross attack by closing all their mills in the event of the employes who had given notice to leave at the three mills referred to carrying their intention into effect. This

matter might not have demanded such an extreme step as a general lock-out in the town provided the unionist operatives would be content with leaving their work. But abundant experience in the past has shewn, and current experience now transpiring in various districts in Lancashire continues to shew, that this is not what trades-unionists mean when they leave their work: what they do mean is that they will neither work themselves nor permit other people to do so. They would prevent the three mills in question obtaining new staffs of workers by intimidation, outrage, and boycotting, such as they have for a considerable time past practised at every strike, and such as they are practising now at Stalybridge and Nelson. This therefore justifies the employers in bringing force against force, and we have no doubt whatever that if properly applied it will prove a very efficient remedy. The time is rapidly approaching when it must be decided to whom really our industrial establishments belong. Since writing the above, we learn that at all the three mills in question the notices to leave work have been unconditionally withdrawn. Thus a little force judiciously applied has already proved a remedy, and one which the Employers' Federation may take credit for as the first-fruits of their organisation. There are more such victories in front of them if they keep on in this path.

#### THE NON-UNIONIST QUESTION AT BURY.

The non-unionist question at Bury has been settled at the eleventh hour by the unconditional withdrawal of the notices by the operatives. But it has not passed by without leaving its lessons behind. The Employers' Association made a right and proper stand when they declined to accept *en masse* the notices of the operatives from the secretaries of the operatives' associations, but why that line of policy was not adhered to in relation to the withdrawal of the notices it is difficult to understand. It is high time something was done in the way of checking the demands of officials whose only thought seems to be one of fighting the employers, and seizing every opportunity which presents itself to be as annoying as circumstances will allow. The decision of the Federated Associations of Employers to support the Bury masters in their determination to resist coercion on this question, and if a strike took place to shut down the whole of the mills in the town, struck alarm through both the leaders of the operatives and their dupes; and that our surmise is a correct one is proved by the fact that the said leaders proceeded with alacrity to see if they could not by hook or by crook prevent a trial of strength on this matter, presumably because they knew that right was certainly conspicuous by its absence from their councils. But the most interesting study afforded by this dispute is the facility with which the representatives of the operatives can make assertions, and their sloth when called upon to afford proof of their truth. We mentioned last week the assertion that Leesbrook, Tonge Vale, Olive, Albany, Townley, Ash, Thornham, Britannia, and Sinkinson's Mills had been successfully dealt with in regard to the non-unionist question by the Oldham operatives' officials, and had made their submission, and that Mr. Andrew, the employers' secretary at Oldham, had given a complete denial of that statement. On Friday, March 4th, Mr. Andrew Buckley, secretary of the Bury Federation of Operatives, wrote Mr. Jones, secretary of the Oldham Cardroom Association, as follows:—"Mr. Enoch Jones.—Dear Sir,—You stated to me and Aspin on Saturday last that 'Leesbrook Mill, Tonge Vale, Olive, Albany, Townley, Ash, Thornham, Britannia, and Sinkinson's Mills had been visited by you, and told that if the non-unionists employed there

did not become members of their respective Associations your members employed there would refuse to work with them, and that in order to avoid a strike the employers in each case advised the non-unionists to pay to their Associations, as they would not have a stoppage on their account, and that some of the employers had (through their overlookers) threatened to discharge those who did not comply, the consequence being that all workers in the above mills (spinning and card-room workers) had become members of their Associations without any strike taking place. You also said that a host of other mills had been successfully dealt with through the influence of the operatives and the officials of the Association. We have placed your statement, believing it to be truthful, before the employers here, and they state—'That after making enquiries (from Mr. Andrew, Oldham) your statement is given an unqualified denial.' Will you kindly say by return of post whether your statement is the correct one, as we have acted on the same, and are sorry it has been challenged by anyone? Trusting you will reply to me by return, etc." Notwithstanding the urgency of this important epistle, Mr. Jones was not heard from until Monday night, and even then a reply was only got from him through a telegram being sent him asking for a reply, owing to the sender having to meet the employers that night; even then all he says is, "My statement is correct." Not a word of explanation of his inattention to the urgent epistle given above, or the seriousness of the charge which the refutation of his statements brought upon him! However, the correspondence, slight as it is, has been sufficient to shew the speciousness of the information certain gentlemen give to their brothers-in-arms. We are inclined to think it demonstrates the truth of our remarks of last week, especially when it is noticed that the operatives' organ makes a point of referring to the operations which have been commenced at Ash Mill, and saying that on the Tuesday notices were given to the manager "to come out on strike unless the non-members were either discharged or made to pay to their trade union in the meantime." This is an interesting corroboration of Mr. Andrew's refutation of Mr. Jones. Mr. Buckley's letter, if it has done nothing else, has given the masters a clear statement of what Mr. Jones said, and it may be proper to suggest to the officials of the Employers' Association that the statements contained in the letter be probed to the bottom, and the result made known, as disingenuousness seems to be one of the principal means by which these organisations are maintained. To the truth of this affirmation our pages during the past few months have borne ample testimony. All the organisations seem to be in the possession of a lying spirit, that ought to be exorcised as soon as possible.

#### RUMOURS OF FAILURES.

Since the fall in cotton commenced the strain upon the financial resources of many Liverpool concerns has been very great, and it is not surprising to hear of various rumours as to the inability of some houses to meet their engagements. A few large fires in Liverpool would no doubt come as a boon and a blessing to some of our friends there. A conflagration or two has already taken place, and as a portion of the vast supplies of cotton now stored in the Mersey city lie on waste ground, in sheds and other places outside the regular warehouses, which are crowded, the danger of fire is greater. Extra attention is, however, being devoted by the police to the watching of the valuable property which now lies stored at Liverpool,

the action being due to the suggestions of the insurance companies. There has been a rumour afloat during the week to the effect that a very large house in the export trade is in difficulties, and that the liabilities amount on a rough estimate to £150,000. A north country creditor is said to be interested to the extent of £30,000. It would be premature to say more at this juncture, but we trust that the impending disaster will in some way be averted. The fact that lists of creditors have been shewn, would seem to indicate that matters have arrived at a dangerous juncture. With reference to the absent Tasso, nothing has yet been heard as to his whereabouts. It appears that the absconding debtor, shortly before his disappearance, borrowed a sum of money, said to be something under £50, from a firm with which he had transactions, promising to repay it immediately on his return to the office. With this sum Tasso is supposed to have paid his passage to the East, where he will, presumably, be now posing before his fellows as a successful commercial man. His example will no doubt encourage others of his countrymen to pitch their tents in our city, with the object of accumulating a fortune by methods more speedy than those which slower men adopt. To employ a favourite phrase, Tasso "has not left a stick" behind him, and the prospect of the £60,000 he owes ever being repaid, in whole or in part, seems to be very remote.

#### THE BELFAST LINEN LAPPERS AND THEIR GRIEVANCES.

The problem of Ireland's troubles is solved! Politicians and statesmen have for centuries been at their wits' end to discover means of keeping the people from flying at one another's throats. But, and quite incidentally, the solution has been discovered. "And faith, sure enough, it is a dose of trades-unionism that has done the trick." We have during the past few months recorded the origin and progress of the dispute with the linen lappers of Belfast, which has been going on now for a considerable time. The whole trouble seems to have arisen from the intrusion of one of those meddling and fussy bodies self-styled Trades Councils, which has taken under its wings the interests of the linen lappers. These are a class of workers who lap and make up the various kinds of finished linens of the finer makes that are sold to drapers in the piece, such as diapers, frontings, etc. They were once a fairly numerous body, but of late years, owing to changes in the trade, there has been a considerable tendency for them to diminish. The present set of workers hardly knew they had a grievance until the Trades Council took them in hand. But in this respect they were quickly posted, and then rapidly carried the leaven of mischief into their respective lapping rooms. One of these emissaries of mischief in the large establishment of Messrs. W. Ewart and Son interfered so frequently with his fellow-workmen as to the quantity of work they should do for a day's task, that he had to be placed in a part of the lapping room where he would be continuously under the supervision of the foreman at his desk, in order that his meddlingness might be the more easily repressed. He had, however, eventually to be discharged, and this action on the part of the firm has been distorted into the victimising of a trades-unionist, the fact being that the firm at the time had no knowledge of who were or were not unionists amongst their workpeople. This, however, is now one of the principal grievances of the strike as it now exists. We may add that changes are taking place in the trade in regard to the lappers, arising from the extension of the making-up trades amongst

wholesale firms, which prefer to take their goods without lapping, as they can get them correspondingly cheaper. The curious effect of this particular dispute to which we have referred above is well seen in the report of a meeting to support the strikers that took place on Saturday last, which we extract from the *Times*:—

A great labour demonstration was held in Belfast on Saturday afternoon to express sympathy with the local linen-lappers in their present struggle for increased remuneration. Representatives of every trade took part in a procession, which marched through the leading thoroughfares, displaying banners and trade emblems, and accompanied by upwards of 30 bands. For the first time in the history of the city, men of every creed, Conservative and Liberal, Orangeman and Nationalist, met and marched together hand in hand, all working for a common object. This being the first labour demonstration, which has taken place in such peculiar circumstances, it created naturally a great deal of interest. The streets were crowded with spectators, most of whom were working people, but amongst them were many of the leading manufacturers and merchants. At about four o'clock p.m., the procession, which numbered about 10,000 artisans, assembled at the Linen-hall, and, headed by a brake containing Mr. Samuel Monro (president of the Belfast United Trades Council) and other prominent trades-unionists, went on its way through the city. A feature of the demonstration was the splendid order which the processionists observed throughout, and the unanimity which prevailed amongst so many people holding very different creeds and politics. Shortly before six o'clock the procession halted at the Custom-house, where two meetings were held and numerous addresses delivered by trade-unionists and others. A resolution was adopted condemning the tyrannical conduct of the linen merchants, pledging the meeting of the various trades to contribute weekly to the support of the linen-lappers pending the settlement of the dispute, approving the principles of trades-unionism, and recommending Mr. Burt's Bill to amend the Employers' Liability Act. The demonstration ended without any breach of order. The phenomenon attending this "demonstration" is really worthy the attention of statesmen. They may possibly evolve from it some good ideas for the government of Ireland. Who knows?

#### THE GREAT COAL QUESTION.

It is beginning to be generally admitted that the country is receiving a series of valuable object-lessons in the matter of the relationship between employers and workmen, between the various bodies of the latter themselves, and between all of them and the public generally. Perhaps the particular one that will carry off the "cake" for its effectiveness is that raised during the past week or two by the colliers, and which they are beginning to put into force to-day by the inauguration of an almost general stoppage of coal-getting in the country: a stoppage co-extensive with the influence of their leaders. We need not enlarge upon the cruel consequences that have already issued from the mere threat of this movement, and which have fallen upon the poorest classes of our population most heavily of all. The fear as to the supply of coal not proving adequate to serve the requirements of the manufacturing industries of the country and domestic consumption led to a scare and a wild rush upon such stores as were above ground, and with such results as might have been expected. Those who had most means to purchase and most room to store coals have got the largest share, and have naturally induced a scarcity, with the result that those classes with least means to purchase and to store in have had and will continue to have to pay famine prices or go without in the bitter, inclement weather we are having. And who are these classes? Emphatically the workers themselves all over the country, in every village, town, and city in the land. It is easy enough to suppose, and probable enough, too, that the supplies may run so low as absolutely to deprive many hundreds of thousands of poor homes of the possibility of maintaining a fire at all. And these homes will contain women and children, young and old, and a large number of feeble or

invalid persons, upon whom the consequences of the deprivation of fire and warm food will be inexpressibly disastrous. For any sufferings and losses that may arise in this respect those who have them to bear will have the trades-unionist leaders of the colliers to thank—not the capitalist or employing classes, who have made no move whatever in the matter. The action of the colliers is one of entirely unprovoked aggression, for to save themselves the possible prospective loss of two or three pounds on the year in wages, they are throwing away at the present moment a sum equal or nearly so in wages to that they propose to save by their action. Men of plain common sense would ask before doing so where the benefit was to come in. But the wisdom of trades-unionists is so profound, and lies so deep below the surface, that no collier in search of coal has ever yet gone down nearly so far, even in the Pendleton or Ashton Moss deep pits. But the public might hear all this with equanimity were the consequences of the men's action confined in any respect to themselves. Unfortunately, however, such is not the case, as the most disastrous consequences will fall upon the large consumers of coal in our industrial establishments: our textile mills, machine shops, iron-works, printing and bleaching works, paper mills, and every other industrial establishment in which steam is used to any extent as a motive power. But even this will not exhaust the enumeration of the mischief. There cannot be any lengthened stoppage in the supplies of fuel before our railways and steam fleets will suffer from an interruption of the supply, for although the South Wales collieries may keep at work, many of these will not be within reach of their supplies when their stores run out. The disorganisation of industry and the cost resulting from it will entail a loss of many millions of money upon the country, such as will not easily be compensated in the present unsatisfactory state of trade.

In these circumstances it is only natural that employers and principals in large establishments, looking at this objectless and wanton attack upon the employing interests of the country, which owing to depression in trade have long been trembling upon the dividing line between profit and loss, should take such steps as will minimise its effects to themselves. On almost every hand therefore they have given notice that their respective works will be closed concurrently with the stoppages of the collieries. So far, therefore, they will be right. But in the case of others who have not taken this step, a question may arise whether they will not be legally held to be responsible to their workpeople for the enforced stoppage and liable to compensate them for any loss that may accrue. It will not surprise us to see the attempt made, as it will be quite in keeping with the temper and distorted sense of equity that exists in nearly every instance amongst the prompters of this and kindred fatuous movements. But the general public are utterly defenceless against this new manifestation of trades-union tyranny, and every poor man's wife, mother, and children will have to suffer, if not in silence, as best they may, and without the faintest hope of compensation from any source.

It may not have struck the Pickards, the Woods, and their confrères in this movement, that this is a game at which employers as well as men can play, and that circumstances are rapidly forcing the capitalists of the country to the conclusion that they may be compelled to adopt it. How would such a movement be received if started for the purpose of reducing wages in the textile, engineering, iron, and coal trades, and for the purpose of breaking up and

exhausting the funds of the unions? By the workmen allowing themselves to be manipulated like troupes of marionettes by a lot of ignorant and noisy charlatans, they are rapidly driving the various industrial interests of the country to the conclusion that some very drastic treatment will have to be meted out in order to repulse the senseless aggressions directed against them. The present condition of trade in many of these industries, and especially in the textile trades, would justify such a step, and it may be much nearer than at present any one would suspect it to be. A general shut-down all round might do something towards reviving the demand for the productions of Lancashire, which sadly need it, and which low prices have failed to stimulate. The non-effect of low prices to induce better trade is a fact that deserves serious consideration, as it may be that the present consuming markets to which we have admission are comparatively incapable of taking more than they have done, even at low rates, and if this should prove to be the case there are only two courses that can be taken, namely, a considerable reduction of wages, or a general stoppage of work until the markets are cleared. These are considerations that are increasingly engaging the attention of men's minds as necessities of the early future, which only the most discreet and considerate course of action on the part of working people will help to stave off. It cannot, however, be affirmed by the most favourably prejudiced that they have in any section of industry manifested such consideration for a long time past.

MAX DOLLFUSS, the son of a well-known Alsatian textile manufacturer, who ascended shortly before attaining the age for military service, ventured recently to return, but found that a paternal government remembered his shortcomings, and he has therefore been compelled to resume his life in a foreign land.

## Designing.

### NEW DESIGNS.

#### DRESS GOODS AND CORDS.

*Design 1* may be made in 24's twist for warp, 24 dents per inch, 3 in a dent; weft 16's soft cord, 50 picks per inch; warp all dark shades. For pronounced checks, 36 light violet, 36 cream; weft 72 picks per inch, pattern same as warp. Another variety: 36 dark buff, 36 bleached white; weft pattern the same; also 36 cardinal, 36 white; weft pattern same. A good combination would be 36 light pink, 36 claret brown. All the spring colours, with creams, light straws, fawns, dove, &c. can be very advantageously combined. Finish 30 inches wide.

#### LACED ZEPHYR STRIPES.

In plain weaves, 40 dents per inch, 30's twist for warp, 80 picks per inch of 30's weft. Warp pattern: 40 dark blue 2 in a dent, 1 thread of 2 white, 2 red, slack twist, making 4,200 yds. to the lb. This compound thread in one dent, 36 white, reeded as follows: one dent empty, one white in one dent, one dent empty, 3 white in one dent, 2 white in one dent, and reeded in this order until the 36 ends of white are completed, the repeat pattern commencing with the 40 of solid blue. There are many ways of diversifying this class of zephyr pattern by reeding and colour, the weft in all cases white, or one shuttle of some light tint, equal in colour to one of the warp stripes. The solid blue may be altered for shrimp or very light brown. We will endeavour to produce a few patterns of these fancy colours in a short time.

#### CLAN TARTAN.

"Lamont of Lamont," on 6 shafts, 3 up, 3 down, straight draft, 40 dents per inch, 2 in a dent, 30's warp twist, 80 picks per inch of 30's weft. Pattern: 40 light blue for centre, 4 black,

4 blue, 4 black, 8 blue, 32 black, 40 dark green, 4 white, 40 dark green, 32 black, 8 blue, 4 black, 3 blue, 3 black, and repeat from 40 light blue; weft pattern the same.

#### VELVET CLOTHS.

*Design B* is a suggestion for a new cotton cloth, velvet or cord, producing small square tufts of pile, 24 to the round on 5 shafts; if the squares are required to be larger with the same reed let the number of warp threads and picks be increased. For cords the intermediate picks of weft may be dispensed with, so that the weft will bed close.

*Design C* is another suggestion for a two-stripe velvet fabric, one stripe warp, the other weft. There is nothing original about the idea, but as a demand for this class of goods is made, no apology is required in giving the design, which may be useful to makers of this class of goods, or others desirous of commencing. If properly finished and dyed well in the piece or bleached, sales can be effected and good business done. Care must be taken to make the warp stripe denser, that is, 3 in a dent, the weft stripe 2 in a dent. To make a really good cloth it will be found an advantage to use two beams; where this is not convenient let the yarns in each stripe be a balance in counts, the warp one to have a finer grit of yarn in proportion.

#### DRESS CORD.

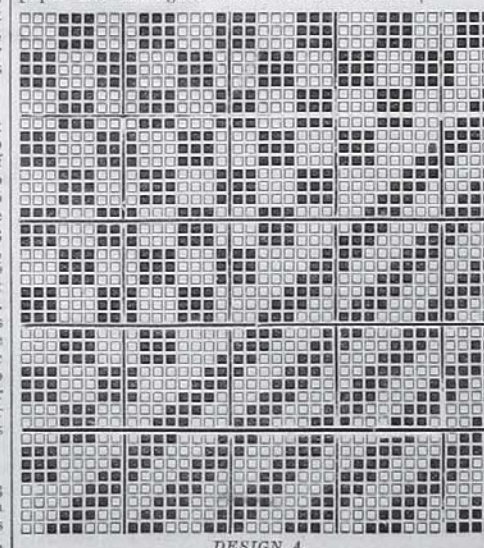
*Design D* is for dress goods, a thickset-cord uncut on 6 shafts, straight draft, 9 to the round. This is a fine cord effect, one of the least in plush that can be made, and it is only within the past few months that it has been brought to the front for dress goods, jackets, vests, etc., as a light uncut cord. The back is similar to a velveteen. We might not be far from the mark in saying that a 30 reed with 16's twist for warp, single count, would be a good sett; of course the quantity of weft is easily determinable, because no more is necessary than to give a clear well-defined vertical cord.

### THE ANALYSIS OF PATTERN.—VI.

#### FIGURED FABRICS.

##### WARP AND WEFT WEAVE FIGURES.

This class of figured textiles is very extensive, embracing fabrics designed for coatings, ulsterings, mantle cloths, and dress fabrics. *Design 16* is a small example demonstrating the principle of constructing these figures, the usual method being as follows:—Having decided upon the extent and form of the figure, the designer pencils the required form—in red or blue—(any transparent colour will do)—on the design paper, as indicated in *Diagram 11*. He now proceeds to put the ground weave on to the white part of the design paper and the figure weave on the coloured

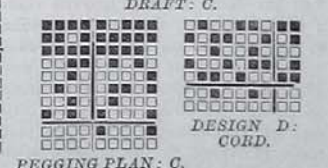
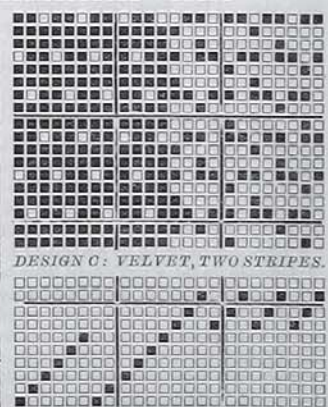
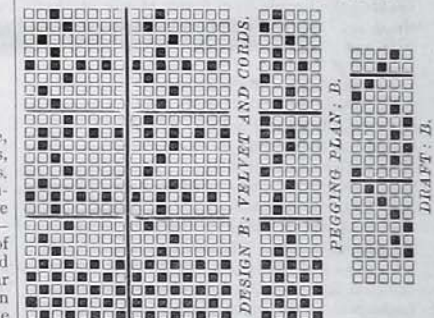


part, having previously found the best relative positions of the two weaves. This is very simple, and the only difficulties to be overcome in analysing such cloths are (1) the various weaves combined and (2) the extent of figure. The first difficulty we have previously dealt with under the headings "Stripes, Checks, Twills, etc.," the principle of finding the weave being exactly the same in each case. Having found the weave, the extent of figure may readily be ascertained by placing the piece-glass on the face of the fabric and counting the number of repeats of the figuring weave in the figure: thus, for example, in *Design 16* there are four repeats of the 2-and-2, and 4 x 4 = 16 threads, the extent of pattern in the thickest part. A sectional view, from which a similar demonstration may be made, is given in *Diagram 12*; thus it is evident that the examination of the curvature of the threads and picks may be of aid in clearing up both the above-mentioned difficulties.

##### EXTRA WARP AND WEFT FIGURES.

Fabrics figured on either of these principles may be divided into two classes, viz. (1) those in which the extra material simply flushes on the surface as a spot figure, as shown in *Diagram 13* and *Design 17*, and is tied on the back when not flushing on the face; (2) those in which the extra material flushes as a weave on the surface of the fabric and is tied on the back when not flushing on the surface, as shown in *Diagram 14* and *Design 18*; or if the fabric is required for very light goods it is allowed to flush on the back and is cut off in the finishing process.

The analysis of the first class is evidently very simple, the only points requiring attention being, firstly, the extent of flush, which may readily be ascertained by counting the repeats of ground weave as previously explained; and, secondly, the ties binding the extra weft or warp to the back of the ground fabric, a



thorough comprehension of the principles of tying doing away with all difficulties in this case as before.

The analysis of the second class is of course much more difficult, for the extra weft or warp may interweave with the ground threads in any and every order. For example, it is no extraordinary thing to find leaves and flowers developed most beautifully by means of the extra weft interweaving with the ground warp, or *vice-versa*. Under these circumstances the method of development adopted should be carefully examined and the figure be carefully sketched on design paper (as will be explained hereafter), and developed as nearly as possible according to the original, irrespective of minute examination by the piece-glass—though of course this may be occasionally used to confirm the surmise of the analyst. The extent of the figure may often be decided, as previously indicated, by the number of repeats of the ground weave, while the ties, should any be required, must be inserted strictly according to principle.

List VI. indicates the capabilities for floral, etc., development furnished by the various principles of introducing extra warp or weft.

DOUBLE-CLOTH FIGURES.

A means of figuring largely adopted in almost every branch of the weaving industry is that obtained by weaving two plain cloths together and allowing them to change places for the figure. The simplest method of effecting this is shown in Design 19, a useful set for a mantle cloth figured on this principle being—

- Warp.*  
1 thread 30 sk. black; 1 thread 30 sk. white.  
12's reed 4's.
- Weft.*  
1 pick 30 sk. white; 1 pick 30 sk. black.  
48 picks per inch.

A fabric made to the above particulars with Design 19 would consist entirely of a black and white cloth, which simply changes positions from back to face and *vice-versa* for the figuring, thus obtaining the designation "figured reversible."

By means of Design 20 a double 2-and-2 twill cloth is produced, while Design 21 produces a small figured double plain cloth, one cloth being as coarse again as the other. Other systems there are, but our duty is not to demonstrate the construction, but rather to indicate the means by which the construction may be ascertained. It is evident, then, that in their ordinary form these cloths may be analysed, so far as weave is concerned, as ordinary double cloths. To find the extent of figure is rather a more difficult task. The curvature of the threads may often prove of service here, but perhaps the best method of obtaining this is by means of the weaves used, these being first found; but it must be remembered in analysing these or any cloths that a knowledge of the principles of cloth construction is half the battle.

LIST VI.

Order of Warping or Wefting.	Possible Colours.	Type of Cloth.
(1) 1 thread ground (black)	Black and red	Dress Goods.
1 thread figure (red)	Black and red	Waistcoatings, etc.
(2) 1 thread ground	Black, red, and green	Waistcoatings, etc.
1 thread figure (red)	Black, red, and green	Figured silks, etc.
1 thread figure (green)	Black, red, and green	Figured silks, etc.
(3) 1 thread ground	Black, red, and green	Waistcoatings, etc.
1 thread figure (red)	Black, red, green, and blue	Figured silks.
1 thread figure (green)	Black, red, green, and blue	Figured silks.
1 thread figure (blue)	Black, red, green, and blue	Figured silks.
(4) 1 pick ground	Black, red, and green	Dress Goods, Shawls, etc.
1 pick figure (red)	Black, red, and green	Dress Goods, Shawls, etc.
1 pick ground	Black, red, and green	Dress Goods, Shawls, etc.
1 pick figure (green)	Black, red, and green	Dress Goods, Shawls, etc.

Note. A combination of 3 and 4 is adopted for the production of Paisley Shawls, etc.

FIGURE ANALYSIS.

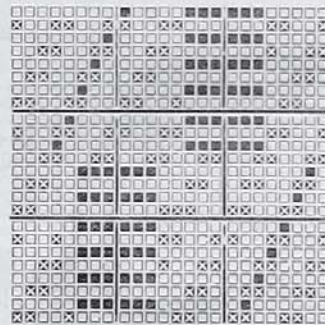
In the case of figured textiles, the finding of the weave is only part of the work to be done; the unit or repeat of the figure has still to be

ascertained. Should a full repeat or more than a repeat of the pattern be obtainable, several methods may be adopted. A simple plan, largely resorted to by professional analysts, is to place the pattern on cardboard and prick with a needle round its edge, thus obtaining a representation, in outline, of the figure. The repeat must then be enclosed in a square or oblong and this be divided into squares representing 8, 16, or 24 threads and picks as required, Diagram 15 illustrating this system.

Another system is to paste the cloth upon cardboard and divide it into spaces by wrapping threads round it, equidistant from each other, as shown in Diagram 16. Other modifications of the same principles are in use according to the fancy of the particular analyst. Whatever system, however, be adopted, it should be remembered that what is required is simply the

division of one repeat of the figure into squares or oblongs, each representing a certain number of threads and picks on the design paper.

When only a portion of a pattern is obtainable the difficulties are greater, since no further advance can be made unless there is sufficient of the figure to decide the method of arrangement adopted, and even then the analyst can go no further unless he is thoroughly conversant with the various systems of arrangement in vogue.



DESIGN 17.

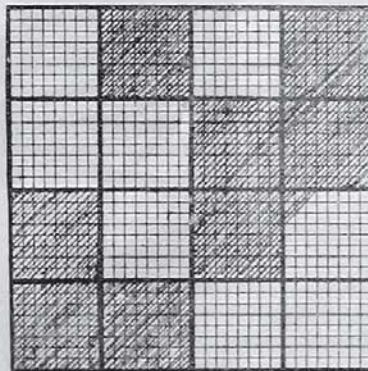
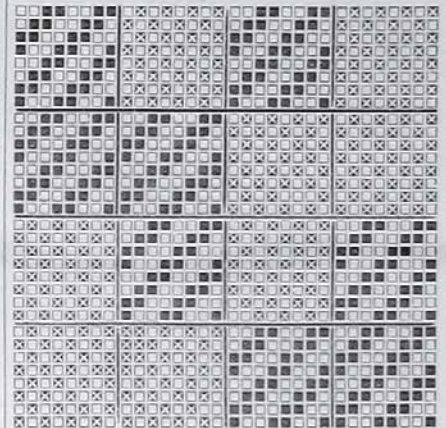
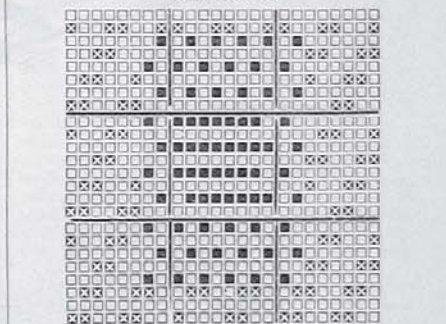


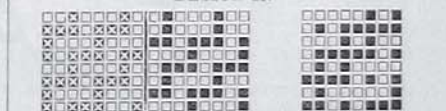
DIAGRAM 11.



DESIGN 16.



DESIGN 18.



DESIGN 19.

DESIGN 20.



DIAGRAM 12.

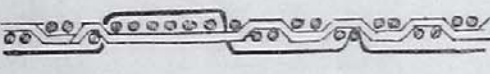


DIAGRAM 13.

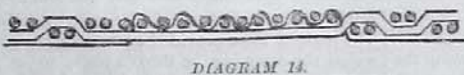


DIAGRAM 14.

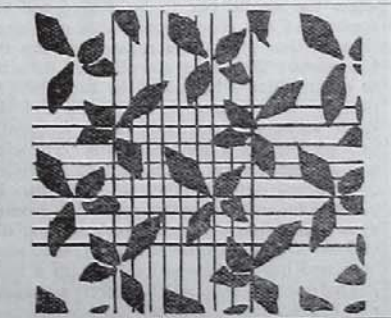
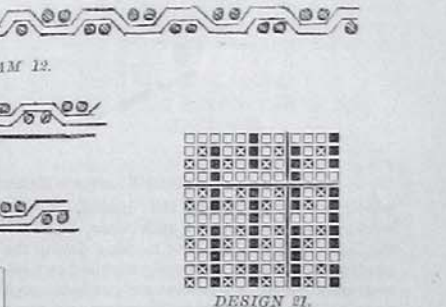


DIAGRAM 16.



DESIGN 21.

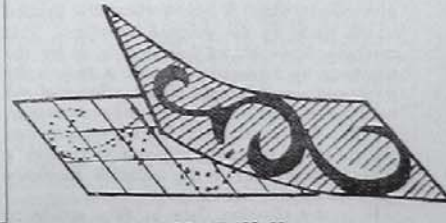


DIAGRAM 15.

## Machinery and Appliances.

### IMPROVED KNITTING MACHINE. (LAMB'S PRINCIPLE.)

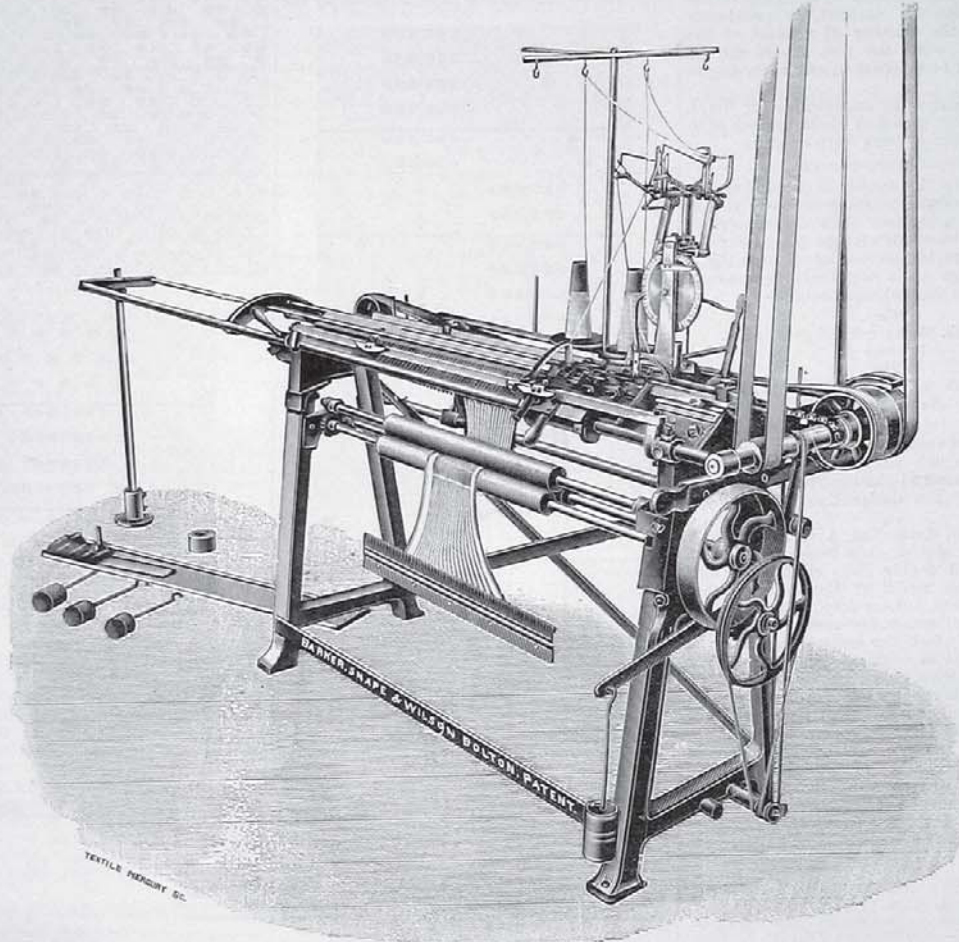
MESSRS. BARKER, SNAPE, AND WILSON,  
PHETHEAN-STREET WORKS, BOLTON.

Whether it is owing to lack of enterprise on the part of English hosiery machinists, or the result of keen competition from abroad, the fact remains that the majority of the knitting-machines on the "Lamb" principle, used in this country, are imported. These machines,

English firm in existence who intend, if possible, to alter this unsatisfactory state of things. This young and enterprising firm, whose address we give above, have entirely remodelled the "Lamb" machine, and made several very valuable improvements, which make the machine, in its entirety, more satisfactory and presentable to the English manufacturers, and bode well for its general adoption by the trade. They have considerably simplified the machine, and, while dispensing with some of the superfluous mechanisms, have substituted several motions that are both more effective and reliable.

Before describing the most important improvements applied to this machine we will

is distributed over a greater surface, and thus the life, so to speak, of this part of the machine is prolonged. The formation of the needle bed has also undergone a change, and, as now made, the knitted fabric is free to fall clear of the needles without injury to its surface. Special attention is called to the driving of the cam box, inasmuch as it gives the latter a uniform movement, and is also so arranged as to be readily altered from a long to a short stroke according to the width of the fabric in course of manufacture. The necessary reciprocating motion has hitherto been given to the cam box by a crank and connecting rod and two link chains, but a motion of this kind is objectionable as it is irregular, and the length of the stroke



IMPROVED KNITTING MACHINE.—MESSRS. BARKER, SNAPE, AND WILSON, PHETHEAN-STREET WORKS, BOLTON.

which are employed in the manufacture of vests, pants, and general underwear, in which the fashioning and shaping is done during the progress of knitting, are mostly supplied by German machinists, partly direct and partly through agents. To the Germans, therefore, we must admit that much credit is due for having introduced into the "Lamb" machine many improvements which it lacked when first handed to the trade by the original inventors. This machine, however, as delivered to us by the Germans, by no means presents a technically good and scientific appearance. Some of the motions are obtained in a very indirect manner, and in a way contrary to English custom, and the machine generally appears to possess a superfluous amount of the material necessary for a machine of this class.

It is our pleasing duty in this article to inform our readers that there is at least one

briefly refer to several of minor importance. The makers have provided an arrangement by which the cams can be thrown back, so as to allow the needle bar to be cleared and the removal of any obstruction which may from time to time get in the spaces between the two parts. The cams are all fixed on a lid or cover, which is hinged to the cam slide, so that by being immovable the studs and the small slides hitherto used, which frequently become loose, are dispensed with. The wing and accessory cams are each fixed in milled grooves and supported their entire length. In place of the ordinary square rods with grooves upon which slide the carriage or cam box, the makers of this machine substitute round steel bars, and the carriage is formed with a solid journal 7 inches long, which entirely surrounds it. The advantage claimed for this improvement is that the wear and tear of the slide

is not so easily changed. In the machine under notice the motion employed is obtained from a short cross shaft at the end of the machine, upon which are a fast and a loose pulley and also a small chain pulley, the latter in a direct line with the cam box. Motion is imported to the cam box by means of an endless chain which passes over a counter shaft at the opposite end of the machine. The return motion is given to the cam box by an arrangement similar to the reversing gear of an ordinary planing machine, which by the aid of a crossed strap and small pulley on the counter shaft causes the chains to move in the opposite direction. This motion, although somewhat widely described, is very simple and positive in its action, and is effected by the use of a simple 1½-inch strap. The length of stroke or movement of the cam box is regulated by the adjustment of two stop fingers. Thus it will be readily understood



that when changing from broad to narrow fabrics the cam box is never carried farther than is absolutely necessary. This method of driving enables the power to be brought direct to the cam box, without intermediate connecting links and other gearing usually employed.

The mechanical stop motion, however, which Messrs. Barker, Snape and Wilson apply to this machine, is perhaps as important as any of the improvements above enumerated. It is very ingenious and automatic in its action, effecting a stoppage of the machine when the yarn breaks, if a knot appears in the yarn, or when a given length of fabric has been knit. We will endeavour to give briefly some idea of its construction and its manner of action. When the yarn leaves the bobbin it passes through a stationary eye and through a knot detector lever, thence through a loop in a tension lever, which is held at the opposite end by a light spring. From this tension lever the yarn passes direct to the needles. Pivoted to the frame which carries the stop motion is a bell-cranked lever, with a projection formed at its lower extremity, into which a hammer is latched when the yarn is intact. This hammer is pivoted at the other extremity, and upon the same pivot is a spring which presses the hammer downwards. Beneath the hammer is a horizontal lever which oscillates on a pin in the centre. This lever is engaged at one extremity with the knocking off lever. When an end breaks or a knot appears in the yarn, the knot detector lever or the tension lever, as the case may be, liberates the bell-cranked lever, which in turn releases the hammer and by the action of the spring mentioned, the hammer strikes the horizontal lever and liberates the knock-off handle, which simultaneously disengages the chain from the cam box. The measuring motion applied is somewhat similar to the usual, but in this machine it is coupled up with the stop motion in such a manner as to ensure a stoppage of the machine when the stipulated length of fabric has been completed.

The makers apply a very simple but effective taking-up motion. It is driven by friction instead of gearing, and thus all wheels, catches, and levers are dispensed with.

In conclusion we would add that the machine, although lightly built, is rigid and durable, and all the parts work without undue strain, and breakages of needles, so prevalent in German machines, are reduced to a minimum in consequence of the accuracy displayed in preparing the needle beds. The firm have put down a special plant of the most modern tools for its production, and we understand that they have in hand several large orders for Lancashire firms. To all interested in this class of machine we specially commend an inspection of it.

## Bleaching, Dyeing, Printing, etc.

### TURKEY-RED OIL.

De Milly was one of the first who, several years ago, succeeded in the industrial saponification of fats and oils by means of steam. The operation had been tried in laboratories and partially succeeded, but before De Milly the decomposition was not nearly so complete as when working on the large scale. De Milly overcame these difficulties in a very ingenious manner, the principal difficulty to be contended with being the treatment of the mixture containing the fatty matter and the water. The author has utilised De Milly's process for the preparation of sulpho-ricinoleic acid, or, rather, ricinoleic acid.

The chief advantage consists in the possibility of utilising the glycerine, and doing away with

the washings, which always cause a loss of a certain quantity of matter; another advantage is the doing away with the sulphuric acid. According to the experience of the author, it is sufficient to imperfectly saturate the ricinoleic acid with soda, to obtain a product which gives every satisfaction. Thus, a mixture of fatty acid with a quantity of caustic soda, corresponding to 2.5% of anhydrous soda, gives a very acid soap, which is precisely the body suitable for Turkey-red dyeing. The contents of the above paper give an indication of the subject the author has in view in trying to obtain ricinoleic acid by the decomposition of castor oil by means of steam. He did not, however, fail to observe that it was not normal ricinoleic acid which he obtained by this process, but an acid having, from a chemical as well as from a tinctorial point of view, different properties from those of the normal acid. The diminution in the capacity of saturation was the evident indication of a molecular condensation. On titrating with ammonia, using phenolphthalein as indicator, the titration of the normal acid took place with precision. That of the ricinoleic acid, condensed or polymerised, took place properly as long as the polymerisation did not pass beyond di-ricinoleic acid; but in going further the acid properties of the fatty body tended to become weaker. The addition of ammonia produces solutions which become more and more milky, whilst the normal acid and those acids the molecular weights of which are not too high, give perfectly clear solutions with ammonia.

The fatty acid resulting from the saponification of castor oil by water, at St. Denis, in the July of 1889, had the following properties:—Its capacity of saturation was in the proportion of 27, against 44 of the normal acid; and its molecular weight 480, against 298, that of the normal acid. The tone of alizarine pink was bluer with polymerised acid than with the normal. On sulphoning it, the compound obtained gives a yellower shade than the unsulphonated one; it is, in other words, the same as the normal acid, the sulphonated derivative of which gives a yellower shade than the normal acid.

Generally speaking, the following are the results of the author's researches:—The product obtained by the introduction of the sulphonic group gives a yellower brightening effect than the unsulphonated acid. The polymerisation of the acid gives a bluer brightening effect than the normal acid. The treatment with sulphuric acid has the effect, not only of introducing the sulphonic group into the ricinoleic molecule, but of polymerising that acid. The same reactions are obtained when treating castor oil with sulphuric acid: sulphonation and polymerisation take place. It is to be supposed that when the sulphuric acid has combined with either the fatty acid or with the castor oil, a sulpho-ricinoleic acid, sulphonated and polymerised, is formed. The action of the water has the effect of partially decomposing it, in proportions which vary according to the quantity of the water used for washing and the temperature. It is for this reason that oil for red contains a sulpho-poly-ricinoleic acid, soluble in water, holding in solution poly-ricinoleic acids insoluble in water, but dissolved by the former, and not containing any sulphonated compound. One could confirm these facts by adding to the sulphonated acid a certain quantity of pure fatty acid, free from unsulphonated bodies, "which have been extracted by means of ether." The solution thus obtained, hydrated by a mixture of water in any desired proportions, reproduce Turkey-red oil; this is, in fact, a synthesis of Turkey-red oil. The author has already observed that the sulphonated derivatives, the acid properties of which are more distinct than those of the unsulphonated bodies, can be titrated by using litmus as indicator, whilst the unsulphonated acids give results only with phenolphthalein, which allows one to titrate the two bodies whilst they are together, as in Turkey-red oil. When one saponifies the polymers of ricinoleic acid with soda, they do not undergo any modification. Their soap, precipitated by sulphuric acid, reproduces the polymer unaltered. When, on the contrary, the saponification takes place on prolonged boiling, or, better, in an autoclave, at

a temperature above 1000, the normal is reproduced with its general properties. In order to obtain a sulphonated compound, giving a brightening effect as yellow as possible, it is necessary to avoid polymerisation. The ideal would be to have to do with the normal acid sulphonated, whilst one has, in Turkey-red oil, polymers of which the bluish brightening properties partly destroy those of a yellowish brightening effect, owing to the introduction of the sulphonic group into the molecules.

### CALICO BLEACHING.

There have been many patents taken out for rapid bleaching, such as that of Du Motay and others, by the use of permanganates of potash and other salts, but the results, although good, and the process rapid, cost very much more than by the older methods. Numerous patents have also been taken out for quick bleaching by steaming cloth saturated with caustic soda and various other materials, but the best results have not been attained at a moderate price. Bleaching, in truth, requires a certain time to do it well, and any saving or hurry is usually at the risk of damaging the material or increasing the expense out of all proportion to the advantage gained. Bleachers who desire to push goods quickly should have relatively smaller kiers, and more of them in preference to large kiers, although large kiers produce the cheapest bleaching. Thus, if one bleacher has four pairs of kiers, each holding 4,000 lb. of cloth, while another has only two pairs of kiers, holding 8,000 lb. of cloth, each of them can produce the same quantity per week; but the former sends up four deliveries of cloth in the same time as the latter sends up two deliveries. Very large kiers sometimes take one day to fill, another to boil, and a third to empty; while a small kier may be filled, boiled and emptied, all within the 12 hours. Calico printers require most of their cloth madder-bleached, which is understood to be the most perfect kind of bleaching. Their cloth requires not only to be white, but clean, and everything to be removed from it that can be, leaving it practically pure cotton or cellulose.

Some kinds of cotton are much harder to bleach than others, Egyptian being the most difficult, and ripe American the easiest. Spinners now generally mix several brands together in the making of yarn, and frequently the selvages of some cloths are entirely Egyptian, while the rest of the piece may be American or Indian. Such cloths must, therefore, undergo a process sufficient to bleach the most difficult part, even though it be detrimental to all the other parts of the piece. Selvages are now made of extra hard-twisted yarn, and are extra finely woven to give strength, so that it is a difficult matter to bleach correctly low cloths that have what are called tape selvages.

### BLEACHING LINEN YARNS AND TISSUES.

Mahieu's process consists in mixing benzine with the solutions of carbonate of soda used in the different bleaching operations, or with the baths of chloride of lime or other bleaching chlorides. This application of benzine in the yes has the effect of dissolving and removing the vegetable colouring and resinous substances contained in the textile matters. Taking, for instance, 1,000 kilos. linen to bleach, the way of operating after this method is as follows, viz.: In a sheet-iron kier or other boiler containing 200 litres water, 50 kilos. soda, "preferably Solvay soda," is heated for fifteen minutes at about 100°C., when 1½—1¾ litres benzine is added and heating continued for ten minutes, the mixing operation taking up 25 minutes in all. After standing for ten minutes the mixture is let out into another kier placed under the first, containing 5,000 litres hot water and 12½ kilos. lime. This lime-water bath is prepared one hour in advance and heated to 90—100°C. This new mixture is heated for another hour, and then left to stand for twelve hours before using it. The 1,000 kilos. linen

being placed into a proper tub, and the prepared lye run in, it is boiled for three hours under 2½ lb. pressure, instead of five hours as usual. This process applies to the whole course of operations, which are more or less often repeated according to the degree of bleaching required, as the following scheme of bleaching operations shews:—

1. Benzine lye as above indicated.
2. Rinsing in running water.
3. Chloride of lime bath.
4. Rinsing.
5. Neutralisation of the chlorine.
6. Rinsing.
7. Grass bleach.

Benzine is also added to the chlorine bath, thus: Mix 8 kilos, benzine with 60 kilos. Solvay soda, and let it boil up; run this mixture into a cistern containing 4,000 litres solution of lime, or about 4% benzine. Then the chlorine baths are prepared, as stated, to the required strength, and the yarns or linens are laid down in them for a suitable period. This process renders all the ordinary bleaching operations more active and at the same time shortens them, maintains the fibres at their original strength, and yields a considerable saving in steam and chemicals. Of course, exceptional care must be taken in working with such inflammable materials as benzine.

#### INDIGO.

The chief source of natural indigo is the various species of *Indigofera*, especially *Indigofera tinctoria*, which are cultivated in India, China, and South America. It is also contained in European woad, "*Isatis tinctoria*," and a few other plants, the cultivation of which for the production of indigo was a flourishing industry from the ninth to the 16th century, and further, one which, thanks to the decrees of the ruling powers in England, France, and Germany, was the cause of delaying the introduction of the "devouring devil's colour," as the Indian indigo blue was formerly called. The cultivation of European woad is to-day almost an extinct industry, although up to the commencement of the 17th century it was a source of considerable revenue both in France and Germany. The colour is not contained in the free state in these plants, but as what is called a glucoside, to which the name of "Indican" has been given. In this glucoside the indigo is held in combination with a kind of sugar-glucoside—which former undergoes decomposition under certain well-defined conditions, with the separation of indigo blue. It is the *Indigofera* plants of India, China, and South America, especially the first of these, from which the colour is now prepared. The method of its preparation is very simple, although considerable attention is paid to the treatment of the soil previous to the planting of the seeds. Ten to 14 days suffice for the first appearance of the shoots above the soil, after which they continue to grow rapidly. Shortly before flowering, or about three months after sowing, the plants are cut off close to the ground, and are then ready for the extraction of the colour. After cropping, the plants are again allowed to grow, until they are sufficiently mature to admit of a second cutting. Occasionally a third and even a fourth crop is made, but each of these contains successively less and less of the indican. The cut plants are at once placed in large stone cisterns, or fermenting vats, called "steepers," where they are covered with water and kept in position by means of boards and heavy stones.

**ANILINE DYES IN BRITISH INDIA.**—Large quantities of aniline and alizarine dyes continue to be imported, and the value of the trade in 1890-91 increased to 3,539,900 rupees. By far the largest part of these dyes come from Belgium and other Continental countries.

**HERISON AND LEFORT** obtain a perfectly neutral bleaching liquor by mixing the solution of chloride of lime with the equivalent quantity of Glauber's salt. The chloride of lime is first dissolved in water, then the solution of Glauber salt is added and allowed to settle, and the clear only is used. For each kilo. chloride of lime, 1 kilo. Glauber salt, and to each is added so much

water as to make a complete solution. The material is simply laid down in the clear liquor, and finally well washed without first acidifying it. Better results are claimed than are obtained with chloride of lime alone or with hypochlorite of soda prepared from soda crystals.

**M. GRANDSIRE** has made the grand discovery that it is profitable to dye indigo blue upon a bottom of aniline gray, and of course has obtained a French patent for the long-known process, which is practised everywhere. He works 100 kilos. cotton for one hour upon a cold bath of 1,000 litres water, 2 kilos. aniline oil, 8 kilos. hydrochloric acid, and four kilos. chromate of soda or of potash; washes in two waters, centrifugates, and immediately enters the vat. Or he dyes only for ½ hour upon the cold bath, and raises the temperature during another half-hour to 60°, washes, and for the rest proceeds as above. In the former case a verdigris colour is obtained, which after washing turns violet, and in the latter case a dark gray.

## Foreign Correspondence.

### TEXTILE MATTERS IN THE UNITED STATES.

BOSTON, Feb. 27.

"SAUCE FOR THE GOOSE," ETC.

Manchester merchants, and Lancashire manufacturers generally, will hear with amusement that the detailed information required as to the cost of products shipped to Brazil, under the new reciprocity treaty, has brought forth protests from American exporters. And yet the information asked by Brazil is similar in character to—certainly not more full and precise than—that which foreign shippers to this country had to provide. Most probably the Brazilian law, whose application has produced such dissatisfaction here, was copied from that which owes its origin to Mr. McKinley; and now the McKinleyites cry out because Brazil proposes to favour them with a dose of their own medicine. It is said that the execution of the reciprocity treaty with Brazil has been deferred until May 1st, on account of the protests of American exporters against the enforcement of the objectionable clause. They are naturally receiving no sympathy from the opponents of McKinleyism, who have a splendid opportunity for holding them up to ridicule.

#### SECRETARY FOSTER'S TRIP.

The Secretary of the Treasury, who went on the *Spreck* yesterday en route for Bremen, looked very well prior to his departure. His cheerful countenance and elastic step tend to belie the report that his visit is for health's sake. Mr. Foster was asked if he did not feel some uneasiness in leaving the country just now on account of the gold shipments. He replied that he felt no uneasiness whatever. He thought the country could afford to let some of its gold go to Europe without endangering our business interests. Of course, whatever gold went abroad would have to be paid for. He said further that notwithstanding all talk to the contrary the Treasury Department had been able to pay the demands on it, and expected to keep on paying such demands. The Department would not hesitate to use all means at command to maintain a gold standard, and there was no good reason for any fear of financial disturbance at this time.

#### DRY GOODS.

The condition of the Southern States, as indicated by the recent demand for dry goods, does not appear to be so depressed commercially as recent reports would have us believe. In some sections there has been an improvement and moderate parcels have been booked with more freedom. The New York mills make of wide sheetings has been advanced 2½ per cent. Plain Osnaburgs, of Eastern manufacture are quoted at 6½c.; 4 yards wide Southern makes are 5½c. Glove-finished cambrics are 3½c. and 3½c. for 64 squares and 56 + 60's respectively. For printing cloths a fair demand has prevailed the past week in view of the fact that there are

no stocks with mills, and the chief wants being supplied through weekly deliveries. The stocks at Fall River and Providence amount to 24,000 pieces, against 634,000 pieces the same date last year, 350,000 pieces in 1890, and 5,000 pieces in 1889. The prices for middling uplands cotton for the respective dates were 7½c., 9c., 11 5-16c., and 10 3-16c., and of 64 square printing cloths 3½c., 3c., 3½c., and 3 15-16c.; which shews that supply and demand govern values irrespective of the cost of cotton. For 64 square spots and near deliveries quotations are firm at 3½c., and for April contracts and later months 3 1-16c.; also at 2½c. for 56 x 60 cloths and 2½c. for 60 x 56's. The reported stocks at the several centres for the week ending February 20th, with comparative figures for the corresponding weeks in the previous two years are as follows:—

	1890.	1891.	1892.
Fall River manufacturers ..	34,000	278,000	13,000
Fall River speculators ...	—	—	—
Providence manufacturers ..	316,000	356,000	11,000
Providence speculators ...	—	—	—
Total .....	350,000	634,000	24,000

In European dry goods, novelties have been bought freely. In silk, bengalines have met with enquiry. Printed silks, taffetas, and sarahs in black and colours, have been bought. Spielmann and Co., display some of the handsomest printed silks in the market. The ground-work is tricot-lange pongee with satin stripes, and in the latter are most beautiful printed figures, representing wild roses in full bloom. The fabric in all respects is a work of high art, and conveys an idea of the extreme elegance that can be produced where technical skill of the highest order superintends the execution of fine designs, whether woven or printed.

Mr. Springer's Free Wool Bill appears to be regarded more in the light of a political move than as a serious measure, and there is a general opinion that it will not pass. In an interview with an authority, the *Dry Goods Economist* quotes the following remarks:—

In producing a piece of 22 ounce goods costing, at this side, 2.50 dols. per yard, all that makes up that 2.50 dols. is cost of material and working expenses. The material being the same in price to an American manufacturer as to an English manufacturer, with the exception of the import duties on wool, the advantage of the one must be made up to the other in added Customs duties. All the difference of cost is in working expenses. To make 22 ounces of cloth costing 2.50 dols. per yard, 27 ounces of raw scoured wool is required. This 27 ounces of wool costs each manufacturer the same, with the exception of the duty the American manufacturer has to pay, say 17c. in London or 67c. in New York, duty paid, so that 27 ounces cost 28½c. to the European, and 1.13 dols. to the American. All above 1.13 dols. to the cost of the piece per yard, 2.50 dols., is working expenses, amounting to 1.37 dols. per yard. The working expenses being only half in Europe of what they are in America, these would amount to 68½c. per yard, or make the total cost of the European goods 1.26½ dols., or with free wool the cost of the American goods 1.95 dols. per yard, so that for the imported goods to pay 40 per cent. *ad valorem* duty, as proposed by the Springer Bill, would mean that they could be imported at a cost of 1.76½c. dols. against 1.95 dols., the cost of the American goods. As fixed charges remain, whatever the tariff rates, this difference would have to be met by a cut in wages.

In the case of the particular class of goods mentioned it appears, therefore that even free wool and 40 per cent. on cloth would not suffice to enable the domestic manufacturer to compete with the European.

But the moves made by Bradford houses to retain their hold upon this market have been closely watched, and criticisms not always fair are to be found in the columns of the protectionist journals, who hold a "watching brief" for home manufacturers. The time is looked forward to when English firms will "tire of paying out money to retain this market." Bradford, we are told, has not only gone deep into her pockets and freely paid out money to hold her American trade, but has taken food out of the mouths of her operatives and robbed the fabric to an extent beyond the limits of common prudence. The charge conveyed in the last sentence contains the gist of the argument put forward by the calumniators of English producers and English products. The consumers will of

course have such remarks brought under their notice, and it would be as well if your Yorkshire readers noted.

Some of your readers may have heard of a "drive" in the dry goods trade of this country. Nothing exactly corresponding with this institution is known in England, although it is of course nothing more than a large or special sale. A "drive" took place on Thursday, at the store of the H. B. Claffin Co., New York. There was greater activity in the store than has been seen in any one spot for some months past, the occasion being a "drive" in Golden Rod and Troubadour suitings in gingham styles. These covered a good assortment of Bedford cords, Bourette stripes, and a variety of plaids in spring colourings, the price being 5½c. by the case, and 6c. by the piece. The floor was crowded with buyers, who kept up a continuous struggle with each other, and with the salesmen who were engaged in filling outside orders. The opening of each fresh case was the signal for some lively scrimmages, in which the usages of polite society were more honoured in the breach than in the observance. This house also cleaned out yesterday a stock of percale zephyrs at 6c. per yard, previously jobbed at 9½c. In the dress goods department it is also offering excellent value in cotton warp Henriettas, 42 inch goods being put on sale at the low price of 22½c. per yard, and 38 and 39 inch at 20c. per yard; a brisk movement to-day being noted as the result.

There is a cotton manufacturing Manchester in Texas as well as in New Hampshire. A report from the Texan town says that "The Manchester cotton mill turned out more cloth last week than in any week since it started business. It made 6,500 yards per day for several days, and finds a ready market in Texas for most of the product. Some shipments were made to Salt Lake City. Each bolt is branded 'Manchester Mills, Fort Worth, Texas.' Preparations are being made for extensive improvements at an early date."

Recently engineer Sheldon went to Fitchburg, Mass., to locate the 12,000-spindle mill of George P. Grant and Son, of Central Falls. It will have the English carding.

An interesting analysis of the Commissioners of Labourers' Report on the cost of production of woollens and worsteds in the United States and abroad will be found in another column.

## News in Brief.

### ENGLAND.

#### Accrington.

A correspondent writes:—"The report circulated that Mr. Thomas Birtwistle, of Accrington, had been appointed sub-Factory Inspector under the Steaming Act is officially contradicted."

#### Ashton-under-Lyne.

On Tuesday night a serious fire broke out in one of the finished rooms of the Ashton-under-Lyne Technical School, which is now in course of erection. The whole of the furniture and fittings were completely destroyed, the roof fell in, and a great amount of damage was done.

#### Bury.

Mr. Haworth's Victoria Shed, Elton, has been stopped on account of his water supply having been diverted by the workmen engaged in cutting the new railway siding to the Elton Gas Works for the Bury Corporation. About 130 workpeople are affected by the stoppage.

The condition of the cotton trade in Bury is anything but bright. One or two mills are working short time, and at others there seems to be a scarcity of warps, while the Egyptian Mills, Woodhill Mills, and the California Mills are stopped for the carrying out of repairs. Altogether the outlook is not very encouraging.

The Federation of Master Cotton Spinners' Associations having determined to support the whole of the cotton spinners of Bury on their closing their mills to resist the action of the workpeople in striking at some of the mills because the employers will not discharge the non-unionists or compel them to join the operatives' union, the proposed strikes have collapsed.

The promoters of the New Vulcan Spinning and Manufacturing Co. have met with encouraging success. The Co-Operative Society have taken up 500 shares,

the present owners of the site and buildings upon it have also taken up a large number of shares, and the promoters think that they have now obtained sufficient support to enable them to go forward with the scheme. When completed, the mills will be one of the best equipped concerns in Lancashire.

At the Bury County Police Court on Monday, Messrs. James Kenyon and Sons, woollen manufacturers, of Pilsforth, and also of Bury, were fined 5s. and costs in one case, and ordered to pay costs in four other cases for employing young persons during meal hours on the 3rd ult. It appears that the females were on piece work, and, not being dependent upon the machinery, they went to and fro at their own sweet will. They have now been ordered to work only during "legal hours."

It is with regret that we record the deaths of two gentlemen who have long been connected with the cotton trade of Bury—Mr. Arthur Openshaw, of the firm of Messrs. J. A. Openshaw and Bro., of Pimhole Cotton Mills, Bury, and Alderman Benjamin Barrett, of Hollins View, Bury. Mr. Openshaw died at Southport at the age of 60, and was interred at the Bury Cemetery on Wednesday, on which day the mills were closed. He had for a long number of years been prominently connected with the firm, and even lately he was a frequent visitor at the mills. Mr. Barrett died on Sunday at the age of 75. He began work at the age of seven as a piecer in a woollen mill, and was afterwards for 30 years blacksmith at a Pimhole cotton mill. He was for about 20 years Chairman of the Bury and Elton Spinning and Manufacturing Co., and vice-chairman for many years of the Bury and Heap Commercial Co. He was a well-known figure on the Manchester Exchange. He twice refused the honour of mayoralty, and several times refused to be nominated a magistrate—the refusals being on account of his age. The funeral took place at the Bury Cemetery on Thursday, and was of a public character.

#### Bradford.

On Thursday the funeral took place in Vienna of the late Mr. Edward Hoefer, a partner in the firm of Messrs. E. Pössel and Co., stuff and yarn merchants, of Bradford, who died somewhat suddenly at Bielitz, in Austria, on Saturday last. Mr. Hoefer left England, on the business of his firm, a few weeks since, and has since been upon the Continent. He was in the forty-sixth year of his age, and leaves a widow and two children.

At the Borough Police Court on Monday Mary Boland (68) and Mary Boland (38), mother and daughter, were charged under the Worst Act with embezzling unfinished worsted goods, the property of Messrs. James Drummond and Sons, Lumb Lane Mills, Bradford. Inspector Greenwood, employed by the Worst Committee, stated that on Saturday last he went to the house of the elder prisoner and there found a number of unfinished piece ends upon a bed in the room. The younger woman was also found to be wearing a petticoat made from similar material, also belonging to Messrs. Drummond. On being charged with the offence the mother admitted having been in the habit of taking such material for years past. She had worked for the firm for fourteen years and the younger prisoner for ten years. The goods were worth about 15s.—Some doubt existing as to the complicity of the younger prisoner, she was discharged, and Mary Boland, senr., was fined £1 and 14s. costs, or in default fourteen days' imprisonment.

A very interesting lecture was given yesterday week in the Bradford Technical College before the Society of Dyers and Colourists by Mr. E. Lodge, of the Technical School, Huddersfield, on "The Action of Hypochlorous Acid on Wool." The president (Mr. Henry Sutcliffe) occupied the chair. In his opening remarks the lecturer mentioned that Mercer, many years ago, was the first to notice the action of chlorine on wool, but by his process, using rather strong solutions of bleaching powder, the wool was turned yellow, and acquired a harsh feel. At the same time the fibre developed an increased affinity for colouring matters. After treating the fabric by this process Mr. Lodge, by his experiments, proved that wool when treated with very dilute solutions of bleaching powder is only slightly affected either in colour or handle, and the great affinity for colouring matter is still maintained. This was illustrated by patterns dyed with various colouring matters on wool in the ordinary state, and also after the special treatment with bleaching powder. The lecturer also gave his views regarding the chemical action underlying the process.—A discussion, in which Messrs. Slatter, Wilkinson, Rawson, Hickson, Whitaker, and Sharp took part, followed.

#### Bolton.

Messrs. McConnel and Co., Limited, of Manchester, have just placed an order with Threlfall's, of Bolton, for a number of mules to replace those recently destroyed by fire.

Mr. William Henry Hoyle, son of Mr. James Hoyle (manager, Messrs. Barlow and Jones, Limited), Chorley New-road, was married on Wednesday after-

noon to Miss Annie Elizabeth Jackson, only daughter of Mr. John Jackson, Mill House, Weston-street, Great Lever. The presents, which were numerous and costly, included gifts from the workpeople at the Prospect and Egyptian Mills, the Edgworth Vale Spinning Mills, and the Albert Mills.

Messrs. Ormrod, Hardcastle, and Co., Limited, Flash-street Mills, were proceeded against at the Borough Court, on Monday, for permitting a smoke nuisance on their premises. Mr. Holden, for the defence, said that there was not a chimney in Bolton with the same number of boilers, and the same amount of work to be done, that turned out less smoke in the course of a week than Messrs. Ormrod, Hardcastle, and Co.'s. It was one of the cleanest chimneys in Bolton.—The Bench made an order for abatement of the nuisance within three months, and to pay costs.

The marriage of Mr. Henry Allen, of Firwood, third son of the late Major Allen, of Somerset, who for some time sat as a member of Parliament, to Mabel, youngest daughter of the late Mr. Potter (Messrs. Edmund Potter and Co., calico printers, Dinting), cousin of Mr. E. P. Potter, chemical manufacturer, Little Lever, took place at the Church of St. Marylebone, London, on Saturday. Amongst the numerous gathering of friends at the interesting ceremony was Mr. Frank Hardcastle, M.P., with whom the bridegroom is a partner in the firm of Messrs. Thos. Hardcastle and Son, bleachers, etc., Firwood. Mr. and Mrs. Allen are spending their honeymoon in the South of France.

Messrs. Winder and McKean, of Great Lever, were charged at the County Police Court, on Monday, with two breaches of the Factory Act on the 5th of February.—Inspector Tinker said when he visited the mill on the above date at 5-50 p.m. he found two lads working, whereas work should have ceased at 5-30 p.m.—In defence, Mr. T. H. Winder said this was one of the instances which happened at all works, delays taking place in consequence of spinners being late in taking their yarn to the warehouse. In this case the lads were late, and that kept back the yarn, but the boys had been forgotten, and were not ordered out. They regretted the occurrence, and it was not likely to occur again.—A fine of 5s. and costs in each case was imposed.

The official report on the explosion which took place in January at Messrs. T. R. Bridson and Sons' works is just to hand. By the bursting of a cylinder used for the purpose of drying cotton cloth, Ernest Young, a son of the manager, was slightly injured. Referring to the nature of the explosion the Board of Trade Inspector (Mr. G. W. Buckwell) says that nearly half of the outer ring was blown off, and a small piece of the inner one, which was also cracked in several places, several parts being broken and part of the cylinder house being knocked down. The explosion was due to the alternate heating and cooling of the cylinder, causing expansion and contraction. The Assistant Secretary of the Marine Department of the Board of Trade remarks that the cylinder appears to have been 37 years of age, and that neither safety-valve nor pressure-gauge was fitted, and unless fit for the boiler pressure such vessels should always be supplied with these fittings. The ordinary working pressure of the boilers that generate the steam for the works is 65 lb., but at the time of the explosion it was only 55 lb.

#### Barnsley.

A profound sensation has been created in Barnsley this week on its becoming known that Mr. Henry Spencer, youngest son of the late Mr. John Spinks Spencer, linen manufacturer, Barnsley, had shot himself at Beech Grove, Locke Park. Deceased, who had suffered from influenza, had been depressed. The family, who are large bleachers, are highly respected.

#### Brighouse.

In connection with the strike of silk pressers at Messrs. Ormerod Brothers, Limited, on Tuesday, the Rev. A. J. Sherwell, Wesleyan minister, arranged in the forenoon for an interview between the employers and the workmen who are out on strike. The interview took place at the offices at Alexandra Mill, a deputation of workmen, accompanied by Mr. Sherwell, meeting Mr. C. J. Ormerod (the senior partner in the firm) and one of his sons, Mr. Charles Ormerod. Mr. Sherwell expressed the hope that an amicable understanding would be arrived at. The interview lasted for some time, but neither side seemed disposed to give way, Mr. Ormerod stating that the state of trade would not justify the old standard of wages for silk dressing being paid. He shewed Mr. Sherwell the order-books of the firm, which proved that the present price for certain qualities of spun silk was 6d. per lb. less than was the case last year. The interview, which was of an agreeable nature on both sides, terminated without any satisfactory basis of settlement being arrived at.

#### Blackburn.

The members of the weaving class of the Bolton Technical School paid a visit on Saturday to the extensive works of Messrs. H. Livesey, Ltd., Daisyfield,

Blackburn. The warping and sizing machines, the fitting-up rooms, the joiners' rooms, the moulding shop, and the grinding-room and smithy were each visited. One of the most interesting portions of the visit was when Mr. Crompton, the teacher, explained Wright Shaw's patent motion for the loom. The loom that gained the first prize at the Paris Exhibition was examined, as also was the one that had been at the Jubilee Exhibition at Manchester. The bobbin shed was the last to be visited, the pupils having been about two hours in the works.

At the County Court, before Judge Coventry, John Gillibrand, recently a four-loom weaver at Messrs. Smith and Forrest's Hole House Mill, sued that firm to recover 30s. wages in lieu of notice. Plaintiff said he worked up to 4.30 on Wednesday, January 13, and then to the Tuesday evening following. On going to work on the Wednesday morning the manager said he could not start as he was five minutes late, and while they were talking two women passed through the watchhouse and commenced work. Plaintiff told the manager that he should sue for wages in lieu of notice. He then left, and as he was going down Kenyon-street the six o'clock blower at the chemical works went off. The defence was that plaintiff had continually gone late to work, and that he had been warned respecting it both by his tackler and the manager. His Honour held that when a man persistently went to work late his employer was justified in discharging him without notice. Verdict for the defendants.

#### Colne.

The *Cotton Factory Times* understands that the question of weaving plain goods in check looms has now been referred to the Northern Counties' Association of Weavers "to thrash out."

#### Farnworth.

Mr. Eli Dyson, junr., nephew and manager of the senior gentleman of that name, has just been the recipient of a handsome timepiece as a mark of esteem from the workpeople.

#### Halifax.

At the Borough Court yesterday week Alfred Payne, a weaver, was fined £5 and costs on a charge of assault. The proceedings arose out of a strike at the works of Messrs. John Houldsworth and Co., Shaw Lodge Mills.

Alderman James Booth, ex-Mayor, has been appointed chairman of the Halifax Board of Conciliation, Mr. J. H. Beever vice-chairman, and Messrs. J. Roberts and J. Tattersall, secretaries. The board consists of equal numbers of employers and employed, and the object is to offer advice on the outbreak of a trade dispute, and by conciliatory courses to promote agreement. Trade disputes have unfortunately been numerous in the neighbourhood for some little time, and it is hoped the new board will at any rate be useful in preventing their developing into lengthened strikes.

#### Haslingden.

On Monday evening a disturbance took place in Blackburn Road, where a large crowd of factory operatives assembled, and on the arrival of some of the non-union operatives from Hazel Mill they followed them, shouting, yelling, and calling them "knob-sticks," and but for the presence of two police officials violence would no doubt have been used. It will be remembered that three weeks ago the operatives' federation brought out all the operatives at Hazel Mill on strike because the directors dispensed with the services of the mule spinners. Since then 100 operatives (non-unionists) and nearly 16,000 ring spindles and other machinery have been in full time work, and the federation members now find themselves unemployed.

#### Hebden Bridge.

A weaving company has been formed here. Part of the premises at Waterside have been rented, and a number of looms put down. It is intended to run about 150.

#### Heywood.

Messrs. Richard Kay and Co., Limited, are having a number of new ring frames, which will be supplied by Messrs. Howard and Bullough, Limited, Accrington. These, of course, involve new ring bobbin reels, and the order for same has been placed with Mr. Joseph Stubbs, the well-known maker of this class of machinery, of Mill-street Works, Manchester.

#### Leeds.

On Wednesday evening, under the auspices of the Bingley and District Liberal Association, Mr. J. W. S. Callie, the editor of the "Financial Reform Almanack," delivered a lecture in the Oddfellows' Hall, Bingley, on the subject, "Free-trade versus Fair-trade or Protection." The lecture was announced as a reply to the one given a short time ago by Colonel Howard Vincent, M.P., in support of the objects of the United Empire Trade League. Mr. F. Skirrow presided, and on the platform, amongst others, were Mr. S. Rushforth, Mr. N. H. Walbank, Mr. A. Parker, Mr. J.

Roberts, Mr. J. Crabtree, Mr. J. Stephenson, and Mr. Crilly. There was a very good attendance. The lecturer, who spoke for nearly an hour and a-half, was listened to very attentively. The following resolution was passed, with three dissentients:—"That this meeting regards any attempt to introduce Protection as inimical to the best interests of the community, and insists that the best way to develop trade is to give access to the natural opportunities of the country."

#### Liverpool.

A fire broke out early on Saturday morning in a block of six-storey warehouses in Birchall-street, Bootle, and was not extinguished until the roof had fallen in. The warehouse was full of cotton, and the damage was considerable.

A great demonstration will be held in Hengler's Circus, Liverpool, on the evening of the 15th inst., in support of the locked-out linenlappers of Belfast city. The meeting will be held under the auspices of the Liverpool Trades' Council. In the advertisement of the meeting, mention is made that the linenlappers have been locked out for the past three months, and an appeal is sent out to all workers and fair-minded people in Liverpool to assemble in their thousands for the purpose of supporting their Irish fellow-workers. Mr. Sexton, M.P., will probably be one of the speakers.

#### London.

The *City Press* says: So long ago as the year 1879, Mr. H. G. Porter, of St. Paul's Churchyard, was compelled, through adverse circumstances, to call his creditors together and make a composition, the payment accepted being 14s. in the pound. Fortune has happily smiled on him, and he is now once again basking in the sunshine of prosperity. Mindful of his moral—although in no sense legal—duty to his late creditors, Mr. Porter the other day paid up the balance of 6s. in the pound, together with a further 50 per cent. in lieu of interest. Needless to say, this action—though it was by no means unexpected—has given the greatest gratification to his many friends in business circles.

#### Manchester.

On Monday the weavers employed at Messrs. Simpson and Godlee's mill, The Deans, Swinton, resumed work after ten days' play in consequence of the employers refusing to grant them a 10 per cent. advance in wages. Stocktaking is at present in progress at the mill, and the employers have consented to give their demand full consideration when it is completed.

The annual report of the directors of the Manchester Royal Exchange states that there is available for distribution a balance of £26,859 13s. 2d. The directors recommend a dividend of 8 per cent. (free of income tax) which, on the paid-up capital of £297,000, will absorb £23,760, leaving a balance of £3,099 13s. 2d. Of this sum it is proposed to carry £1,500 to the reserve fund, and to carry forward £1,599 13s. 2d.

The death occurred last week of Mr. Richard Jones, an old and respected citizen of Manchester. He was born in the year 1820, and at the age of 23 became a partner of the firm of Messrs. Andrew and Jones, velvet and velveteen dyers, of Manchester. He took a lively interest in political, ecclesiastical, and social matters. During the cotton famine from 1860 to 1865 he was most active in relieving the distress. In 1878 he became a member of the firm of Middleton, Jones, and Co., and was appointed chairman of the board of directors, which position he held up to the time of his death. He was a Conservative and a Churchman, and was a warm supporter of local philanthropic institutions.

#### Nottingham.

A first meeting of the creditors of Mr. Henry Smith Cropper, a magistrate, and until recently an alderman, of the borough of Nottingham, was held on Tuesday. The debtor is the well-known inventor of the lace and printing machines bearing his name. The statement of accounts shewed gross liabilities of £53,000, and an estimated surplus of £5,000, the latter being mainly dependent upon realization of the value of certain land. The debtor made no offer, and was adjudicated bankrupt.

#### Oldham.

The directors of the Holly Mill Co., Royton, have appointed Mr. John Moxton, of the Royton-lane mills, as the first engineer of the company.

The directors of the Oak Spinning Co. have entrusted the work of triple expanding the engines at their mills with the firm of Mr. Benjamin Goodfellow, of Hyde.

Mr. Samuel Truscott, of the Park and Woodend Mills, Shaw, has been appointed carder at the Shaw Spinning Co., vice Mr. Thomas Boardman, who has occupied that position under the company for over 13 years.

Mr. John Platt, who for several years has been the manager of the Higginshaw Mills and Spinning Co., has been appointed manager of the Holly Mill Co., Royton, whose new mill will shortly commence spinning operations.

Last week notices were tendered at the Ash Spinning Co. by the unionist operatives to strike work against the non-unionists in the employment of the company, and were to have terminated this week. The non-unionists, however, have thought proper to enroll themselves members of the trades organisation, and so have averted a strike, the notices being withdrawn on Monday morning.

On Tuesday a fire broke out at the Park and Sandy Lane Spinning Co.'s Mill, Royton. The mill is fitted up with the Witter sprinklers, and thereby the fire, which had assumed alarming proportions, was almost immediately extinguished. Within 30 seconds of the first alarm one of the sprinklers was shedding a copious flow of water on the burning pile of cotton beneath, and was quickly followed by four others.

#### Rawtenstall.

The results of the County Council election shew that, in the Eastern Division, Mr. Rowland Rawlinson (C), cotton manufacturer, has been elected, and in the Western Division Mr. R. Hargreaves (L), cotton manufacturer, who had a majority of 278 over Mr. William Mitchell, cotton waste bleacher.

#### Rochdale.

Rapid progress is being made towards the completion of the Ellen-road Spinning Company's Mill, Milnrow. The first delivery of machinery was made last Saturday. Both card and spinning machinery is being supplied by Messrs. Platt Brothers, of Oldham. Mr. Cottam is the manager.

#### Stalybridge.

At the Stalybridge Police Court, on Monday, John Jones, Joshua Marland, Joe Bain, Patrick Lawler, and Sarah Davis were summoned for disorderly conduct in the neighbourhood of the mill, on the 3rd and 4th inst. The evidence shewed that they had attempted to break through the cordon of police drawn around the mill for the purpose of protecting the workpeople.—The cases were proved, and the defendants were each fined 5s. and costs, or fourteen days.

Matters in connection with the dispute at the Stalybridge Spinning Co.'s mill continue in much the same state as reported last week. The majority of the new hands continue to be conveyed to the mill in cabs and other vehicles, and some of them sleep on the premises. On Sunday night an attack was attempted on a cab which was being driven to the mill, but the police were on the alert, and the attempt was frustrated, an ugly weapon, in the shape of a pair of tongs, being taken from one of the attacking party by one of the operatives, and subsequently handed over to the police. At the Borough Court, on Saturday, a picket named John Delaney was charged with being disorderly in Bridge-street on Friday night. The bench fined him 10s. and costs, or 21 days.

#### Wigan.

Fuel is being stacked wholesale at the cotton mills at Hindley. These mills will not be stopped during the "holidays" at the collieries, unless the period of play be protracted beyond what is anticipated—a week or a fortnight.

#### SCOTLAND.

##### Dundee.

In accordance with the notices posted in about a dozen works in Dundee, the short time movement began on Saturday, and will continue for six months. The majority of the mills, however, will not close on Saturdays until the 25th inst.

A strike has taken place among the coarse sacking spinners in Ward Works, Dundee, occupied by Messrs. A. and J. Nicoll. Eighteen of them attended at the offices of the Operatives' Union, and explained their grievance to the Rev. H. Williamson. The complaint was regarding the material they worked, which caused them so much hard work and worry that they could not stand it. Mr. Williamson advised them to return to their work, and this they agreed to do. They, however, soon afterwards went back and explained that they had been told they would not be allowed to resume. Mr. Williamson himself proceeded to the works to endeavour to negotiate with the masters on behalf of the women, but was told that the women were not wanted back.

"A. T. G." writes to the *Dundee Advertiser*:—"Sir, —Our spinners and merchants are always bewailing the fact of receiving their jute in a damaged condition. Some time ago it was agreed amongst them to give a small gratuity to those captains who delivered their cargoes in good condition. This is a very wise decision, and one which amply repays our spinners, etc. Many of them give the halfpenny per bale quite freely, but there are others who decline to do so, on the ground, I presume, of loving the halfpenny too much themselves. One of the jute ships which recently arrived put out, as is admitted by all, the finest cargo landed this season, the captain of which, I understand, has not received anything in the shape of a gratuity. No captain is compelled to devote extra care to his cargo, and surely

those who do so are in some tangible manner to be encouraged in their good work."

A few months ago Mr. A. B. Crichton, of the firm of Messrs. A. B. Crichton and Co., manufacturers, Dundee, introduced into Dundee an industry entirely new to the city—namely, the manufacture of manilla. This fabric, which has an enormous sale in English as well as foreign markets, has hitherto been a monopoly of the Germans, and is manufactured by them principally in the State prisons, although numerous factories throughout the Empire are devoted to its manufacture. The fabric is woven on a loom different from any of those presently used in Dundee, but similar to those which are known in England as "hair-loom," one feature of which is that the shuttle of an ordinary loom is replaced in it by a book. The hair-loom is, moreover, worked by hand. Some months ago Mr. Crichton resolved upon giving the manufacture of manilla a trial in Dundee, and accordingly he fitted up a small factory in Guthrie-street with 30 looms similar to those employed in Germany. The factory was started about three weeks ago, and is now in full swing. Necessarily the workers, who are all females, are not yet skilled in the manufacture of the cloth, but Mr. Crichton is confident that when they have become properly acquainted with the working of the machines, his female employes will be able to turn out in a week of 56 hours as much as the German females can at present turn out in 66 hours per week.

**Galashiels.**

The death occurred last week of Mr. John Murray, senior partner of the extensive firm of Messrs. Sanderson and Murray, Limited, wool merchants, here. Deceased was a J. P. for the county and an ex-president of the South of Scotland Chamber of Commerce, and in politics was a Unionist. He was a generous benefactor to the poor.

**Glasgow.**

The following table gives the value and destination of the exports of cotton and linen goods from the Clyde for last week, and also the totals to date for the year. The first line refers to cotton goods, and the second to linen:—

	India and China.	U.S. and Canada.	W. Indies & S. America.	Australasia.	Africa and Egypt.	Continent.	Totals.	Totals for year to date.
£4,973	13,180	3,432	—	—	—	280	64,965	890,744
211	21,334	293	—	—	—	—	21,738	213,379

The following are the total values of the export for the same ten weeks of last year:—Cotton, £842,141; linen, £215,842.

**IRELAND.**

**Blarney.**

Mr. Timothy Mahony, J. P., one of the proprietors of the Blarney tweed factory, died on Monday.

**Miscellaneous.**

**COST OF WOOLLENS AND WORSTEDS.**

(From the *New York Daily Commercial Bulletin*.)

REPORT OF THE COMMISSIONER OF LABOUR ON THE PROPORTIONS OF MATERIAL AND LABOUR TO TOTAL COST IN UNITED STATES AND ABROAD.

The forthcoming annual report of the Commissioner of Labour will contain exhaustive tables giving the cost of production of woollen and worsted textiles in this country, together with similar information gathered from Great Britain and the Continent of Europe. The compilation of these has been completed on a cost per yard basis. This method of calculation robs the tables of some of their value, as exact comparisons are not possible under it, the cost per yard of a single article not being comparable with any other, owing to the differences in width, weight, the numbers of yarn used, warp and weft, and the number of threads of warp and picks of weft per inch. The Commissioner recognizes this, however, and is endeavouring to calculate the cost per pound of woollen goods, and so arrive at a result which would allow of fairly accurate comparisons.

The tables cover the cost of goods produced at various times from 1888 up to last year inclusive. They give the width, yards per pound, numbers of yarn, threads of warp and picks of weft per inch and the descriptions of wool used in particular productions. The costs are divided into materials (net cost), labour officials

and clerks, supplies and repairs (including fuel and lighting, oil and other supplies), taxes and water power where necessary; but do not take into account insurance, interest, depreciation of value of plant, nor charges for freight of product to place of free delivery. The cost per yard is thus elemental cost of production only.

Taking the home manufactures in order as they are given in the returns, blankets come first. The figures are based on the productions of last year, one make weighing .57 yards to the pound, and the other .64 yards. The cost of production of the first was \$1.5642, and of the second \$1.1446. In the first the cost of material formed 64% and labour 22%; in the second, material 55% and labour 28%. In the manufacture next taken up, cassimeres, the makes covered are 27-inch, 25-inch, 54.50 and 55 inches wide, varying in weight from .62 to 1.23 yards per lb. Of the 54-inch goods 1 yard to the pound, the cost ranged from .7541 cents per yard to \$1.5343, and in heavier makes from .9939 cents up to \$2.5414 per yard. In the following table are given the various grades in weight per yard, with average cost of material, labour, and the total:—

Yards per lb.	Material.		Labour.		Total cost.
	Dols.	Dols.	Dols.	Dols.	
1.00	.7761	.2810	.4561	.13731	1.3731
.94	1.1729	.4561	.16622	1.8319	1.6968
.91	1.0622	.4456	.1218	1.7178	1.4096
.89	1.1218	.4323	.9570	1.2608	.9939
.80	.9570	.3553	.8581	20.752	.9808
.73	.8581	.3003	.5262	1.941	2.4086
.68	.5262	.3101	1.4137	.4776	1.1305
.67	1.4137	.4776	.7054	1.941	1.2828
.65	.7054	.1941	1.5760	.5870	1.7874
.62	1.5760	.5870	1.07	.2925	1.0375
1.07	.7399	.2925	1.00	.8784	1.3076
1.00	.8784	.3012	.71	1.1939	.3990
.71	1.1939	.4405	1.10	.7874	.8372
1.10	.7874	.2220	.67	.8600	1.1528
.67	.8600	.3751	1.23	.2665	1.1467
1.23	.2665	.1005	1.14	.5239	
1.14	.5239	.1455	1.07	.8452	
1.07	.8452	.2342	1.03	.7903	
1.03	.7903	.2681			

\*27 inches wide.

The above table shows sufficiently closely for present purposes that in the production of cassimeres the cost of material made up 67% and labour 24% of the total, leaving some 9% to cover officials, clerks, supplies, repairs, taxes, etc.

All manufacturers of chevots referred to in the returns use foreign wools to some extent. There are six of these, and the fabrics dealt with are 54 to 54.50 in. wide, varying in weight from .70 yards to 1.15 yards per lb., and ranging in cost from .6540 cents to \$1.4937 per yard. The following table gives results as in the instance of cassimeres:—

Yards per lb.	Material (net).		Labour.		Total cost.
	Dols.	Dols.	Dols.	Dols.	
1.14	.8959	.2787	.4237	.12928	1.2928
1.10	.4237	.1538	.6181	.6540	.9174
1.07	.6181	.2325	.5888	.8729	.8313
1.03	.5888	.2292	1.00	.1882	1.1219
1.00	.5070	.1882	.73	.7230	1.0786
.73	.7230	.3734	1.70	.6690	.9324
1.70	.6690	.3317	.15	.5815	
.15	.5815	.2583			

These figures give the proportion of cost of material at 65% and of labour 27%, leaving 8% for other expenses.

In flannels, plain and twilled, and flannel shirtings, a low range of cost is found, from .1427 cents per yard up to .2733 cents per yard, the average being .1960c. The average cost of material was .1545c., or 79%, and of labour .0313c., or 16%, leaving 5% for other expenses.

In ladies' dress goods, worsteds, four establishments are reported from in the United States, Great Britain, and the Continent of Europe. The United States covers makes from one yard per lb. to 4.23 yards, the former costing \$1.0616 per yard, and the latter .2838c. per yard. The British makes are 1.09 yards, 1.33 yards, and 2.30 yards per lb., and the Continental 4.47 and 4.05 yards per lb., costing respectively .6985c., .7574c., .3917c., .2052c., and .1907c. per yard. The following table gives the percentage in cost of each and total cost. The last in the table was the only cloth returned in which foreign wool was used:—

Yards per lb.	UNITED STATES.		Total cost.
	Material.	Labour.	
4.23	.64	.23	.2838c.
3.77	.69	.21	.3004c.
3.50	.74	.15	.2655c.
3.55	.69	.17	.3078c.
2.91	.63	.24	.2557c.
2.56	.68	.22	.3048c.
1.00	.74	.19	1.0616c.
GREAT BRITAIN.			
1.33	.68	.13	.7574c.
2.30	.61	.26	.3917c.
1.90	.64	.24	.6985c.
CONTINENT.			
4.47	.74	.19	.2052c.
4.05	.65	.29	.1907c.

The above comparisons, while not conclusive proof of the relation of the component cost of production in the various countries, favour the view that in a greater degree than has been conceded by upholders of a high tariff, the increased cost here is due to a higher percentage of cost of material and less to increased cost of labour, even where only native wools are used, and that abroad, in the particular class of goods just referred to, labour is as great a proportionate item as it is here. It may be put in another way. The average value per yard of the various fabrics reviewed in the last table is .3971c. for the United States, of which labour secures .0807c. per yard. In Great Britain the average value is .6159c., of which labour secures .1249c., and on the Continent .1979c. of which labour secures .0478c., the percentages being United States and Great Britain each 20 and the Continent 24.

In the important branch of overcoatings, the cost of production in the United States only is given. Kerseys, 54 in. wide, cost at one yard per lb. \$1.6669 per yard, and at .59 yards per lb. \$1.6532 to \$1.9706 per yard. In the former material costs \$1.2312, or 73%, and labour .3209c., or 19%, and in the latter an average of \$1.2676 for material, or 69%, and labour .4171c., or 23%. Three makes of melton overcoatings are covered. One, 1.14 yards per lb.; one, .70 yards per lb.; and one, .66 yards per lb. The first ranges in value from \$1.1702 to \$1.2513 per yard, averaging \$1.2113 per yard. In these the average cost of material is .8593c., or 71%, and of labour .2590c., or 21%. In the second division the cost ranges from \$1.2539 to \$1.9210, averaging \$1.6365 per yard, material costing \$1.1872, or 72%, and labour .3452c., or 21%. In the third, the cost is \$1.8309, of which material \$1.2434, or 67%, and labour .4383c., or 24%.

An important division of the tables is devoted to worsted goods, returns being given from this country, Great Britain, and the Continent of Europe, but from the causes previously explained close comparisons are again impracticable for definite results, while further difficulties are in the way in shape of certain items of expense being unavoidably included in the foreign returns, which are not taken into account in American. The following table gives the weight, etc., of goods, with cost falling under \$1.00 per yard in the United States:—

Yards per lb.	Material.		Labour.		Cost per yard.
	Dols.	Dols.	Dols.	Dols.	
2.45	.2072	.1475	.226	.3926	.3588
2.26	.2251	.0975	.544	.0393	.1547
5.44	.0887	.0393	.525	.0921	.1633
4.38	.1912	.0441	.84	.1410	.5447

The average cost of the above is .3130c. per yard, and of this material averages .1924c., or 61%, and labour .0856c., or 27%. The descriptions of wool used in these goods are not given except for the last, which is New Jersey wool. Another division, including makes costing from \$1.00 to \$2.00 per yard, gives the following table:—

Yards per lb.	Material.		Labour.		Cost per yard.
	Dols.	Dols.	Dols.	Dols.	
1.33	.9400	.2015	1.00	.1862	1.1862
1.00	1.3439	.4346	1.00	.19518	1.9518
1.00	1.3719	.4128	1.00	.16654	1.6654
1.00	1.3800	.2383	.94	.4160	1.9669
.94	1.4056	.3895	.88	.2154	1.7406
.88	1.2154	.2760	1.10	1.3300	1.6716
1.10	1.3300	.3894	1.00	1.3007	1.9680
1.00	1.2315	.3066	1.04	1.3000	1.6645
1.04	1.3000	.3787			1.7258

The average cost of the above is \$1.7486 per yard, of which material averages \$1.2879, or 73%, and labour .3443c., or 19%. Treating the last division, in which the cost is above \$2.00 per yard, we have the following:—

Yards per lb.	Cost per yard.		
	Material. Dols.	Labour. Dols.	Dols.
1.10	1.6010	.3687	2.0781
1.00	1.5722	.4391	2.1793
.92	1.5159	.3500	2.0660
.91	1.4445	.4531	2.0719
.89	1.4427	.4289	2.0240
.73	1.0217	.3805	2.4990
.70	1.8559	.4078	2.4493
.67	1.7659	.5993	2.5535
.62	1.7230	.6595	2.6379
1.10	1.5224	.4027	2.1430
1.00	1.6772	.4227	2.3287
.70	1.4473	.5247	2.2953

The foregoing gives the average cost per yard \$2.2631. Of this material costs \$1.5407, or 68%, whilst the labour costs .4523c., or 20%. So far, therefore, as the cost per yard basis can be used it shows that labour constitutes no greater proportion of the cost of higher priced fabrics than it does of the lower, but in some instances the reverse.

The costs of production in Europe are given for cashmeres, merinos, serges, etc., but in each of these instances the labour item is minus the cost of finishing, and on that account of much modified value only. If it were possible for the Commissioner to obtain complete returns, and make comparisons of home and foreign fabrics more nearly alike than given in the returns under notice, with comparison of costs on a "per lb." basis, the information would be very valuable; more especially as from the general indications of the above there would be much clearer evidence that the disadvantages our manufacturers are labouring under arise more from first cost of material than from first cost of labour.

#### THE ASSOCIATION OF CHAMBERS OF COMMERCE.

The 32nd annual meeting of the Association of Chambers of Commerce of the United Kingdom was begun on Tuesday morning at the Hôtel Métropole, London. Colonel E. S. Hill, C.B., M.P., presided, and there was a large attendance. There were 43 subjects upon the agenda paper.

The CHAIRMAN reviewed the position of trade. Looking at the

##### BOARD OF TRADE RETURNS FOR 1891,

he said it would be found that the total value of the volume of our imports and exports had decreased from the preceding year by 4½ millions only, or not quite ¼ per cent., leaving, however, an enormous trade of £744,760,145. An examination of the details of the returns, however, was not quite so satisfactory, as a very considerable decrease had taken place in almost every item of our exports, the deficiency being chiefly balanced by a very large increase in the importation of food. How far this decrease might be attributed to hostile tariffs, or how far to an overstocking of the market, it was not easy to determine. There could, however, be no doubt that the political and commercial complications amongst the South American countries were very largely to blame. Inasmuch as the United States tariff was the only one which had come into operation, and that from July only (*sic*), it must be concluded that the present capacity of the world's markets to receive had been reached, as indeed must naturally be the case sooner or later. Evidently, competition was becoming more keen; but, on the other hand, the world's trade was continually expanding, and the prospects of peace, which was the great factor in such expansion, appeared to be most satisfactory. Doubtless the protective duties in other countries would tend to increase their cost of production, while we possessed the advantages of free importation of our raw material, of abundant capital, of cheaper food, and of workpeople whose natural abilities had been assisted by a system of technical education. Whether we held our own in the markets of the world depended to a very large extent upon the enterprise of our capitalists in seeking new markets, and the unhampered and exerted skill and energy of our workpeople. The maintenance of amicable relations between

##### CAPITAL AND LABOUR

was a matter of the greatest importance to our commercial future, and it might be hoped that the thorough investigation which the subject was receiving by the Labour Commission would tend to this desirable end. Both sides must see that if we failed to be able to dispose of our surplus products in the world's markets,

our position would become very serious, especially as regards our working population. While the Chambers fully sympathised with the legitimate desire of the working men to improve their position by making the best terms they could for the sale of their labour, both as regards wages and hours, it must not be forgotten that, if such demands were pushed beyond legitimate bounds, so as to impair the effective superiority of British labour, the result must be fatal to the prosperity of working men and disastrous to the nation. It was a gratifying sign to find that this position was seen and appreciated by many of the best friends of labour, and especially by the workers in the great textile and other industries in the north. The situation appeared to him to demand the exercise of wise thoughtfulness and sympathetic forbearance on both sides. The

##### TRADES AND TREATIES

Committee had sat a good many times, and had furnished her Majesty's Government with seven reports, some of which had been published, and also with confidential information. Ambassadors, colonial agents, representatives of chambers of commerce and of various industries, had been interviewed and corresponded with, the most careful attention having been paid to the valuable information they had been able to afford. Some regret had been expressed that the French tariff should have become law without any modification of the clauses to which serious objection was made before the committee, but it must be recollected that her Majesty's Government had had no opportunity for negotiation. The French Government seemed determined to pass the tariff (as they thought in the interests of the French nation) and to wait and see what would be the result. He believed they had made an error, and that public opinion in France would necessitate a reconsideration of this policy of isolation and uncertainty which could not but be injurious to her commerce. Should this happen, overtures would probably be made for a new treaty of commerce, and then her Majesty's Government would enter upon the negotiations fully armed at all points. Meantime it might be noted that other nations appeared to hold the same view, inasmuch as only one, Sweden and Norway, had made any overtures to the French Government in respect of the new tariffs. It might be observed that in the meantime England enjoyed the *minimum* tariff. Spain appeared inclined to adopt a less peremptory policy, and was disposed to open negotiations, in which it was to be hoped that her Majesty's Government might be able to demonstrate to that country that it would be to her advantage to conclude a satisfactory treaty with us. The treaties between Germany, Austria, Belgium, Italy, and Switzerland were of considerable importance, and it was satisfactory to know that this nation would enjoy the advantage of any mutual benefits these treaties might offer under the "most-favoured nation" clause. On the subject of

##### COMMERCIAL IMPERIAL FEDERATION,

the president said that, viewing the injurious and sometimes exclusive nature of the tariffs which protection was setting up on the Continent and in America, it was but natural that our thoughts should turn more eagerly to our great colonies, extending as they did all over the globe, to seek, if it was possible, to tighten the bonds of our commercial intercourse to the general advantage of the Empire. Our colonies were now our best customers, and with their varied climates were capable of furnishing us with all the food and raw material we required. Were it possible to develop their resources in this direction, they would be able to buy more largely from us, and be glad to receive in much larger numbers that surplus population the future of which caused so much anxiety to thoughtful statesmen. Since the Associated Chambers last met, Bills had been passed embodying schedules of

##### MAXIMUM RATES

of charges and classification in respect of nine of the principal railway companies. A joint committee of both Houses listened very fully to the arguments brought forward by the traders and the companies, and it was to be hoped that the results would tend to the advantage of all interests. It was much to be regretted that it was not found possible to proceed with the

##### RATING OF MACHINERY BILL

last Session, but he hoped better fortune would attend it at the present time. There seemed to be some misunderstanding as to its effects. It was opposed by the agricultural interest from a fear that it would lessen their rating area and so tend to increase their taxes, while some representatives of labour looked at it as a motion in favour of the capitalist. In the meantime the matter had perhaps been more ventilated. All that was sought was an affirmation of the present existing law, while to tax tools, whether moved by steam or by hand, must be injurious to the interests of labour. On the question of the decimal system, he said they ought never to rest until our country was rescued from the position of being the only one which condemned its inhabitants to exclusion from the advantages of the decimal system. (Cheers.)

##### TRIBUNALS OF COMMERCE.

Mr. W. GORDON (Bradford) introduced the question of tribunals of commerce, and reviewed at some length

the history of the agitation in favour of the establishment of such tribunals. He said he was supported by the Leeds, Halifax, Wakefield, Dewsbury, Cleckheaton, Heckmondwike, Keighley, Morley, Batley, Birstall, and Yeadon Chambers in bringing the subject before the gathering, and the motion proposed was in the following terms:—

"That this meeting regrets that no adequate steps have yet been taken to carry out the recommendations of the committee of the House of Commons appointed in 1871 to consider the question of the establishment of tribunals of commerce, and affirms that there is no abatement in the general dissatisfaction found by that committee to exist amongst the commercial community at the manner in which justice is administered in commercial cases in the High Court. That, as the executive of the Association of Chambers of Commerce has been unable to obtain adequate parliamentary support to the measures dealing with the subject which they have from time to time advocated, it is now desirable that efforts should be made to secure the carrying out of the recommendations of the Judicial Commission of 1872, that the 'County Courts—as constituent parts or branches of the High Court—should have jurisdiction unlimited by the amount claimed, whatever be the nature of the case,' and that the status of the Judges of such Courts should be raised. That, with a view to meeting the difficulty referred to by the before-mentioned committee of 'the frequent inability of the Court to try the case and the consequent reference of it to arbitration,' the right should be given to either party to an action to obtain the appointment of assessors who would sit with the Judge and have an equal voice with him in the decision of all questions of fact arising in the action."

Colonel MATREY (Wakefield) seconded the motion, which was agreed to by a large majority.

##### FOREIGN INDUSTRIAL PRODUCTS.

Mr. MOORE, for the North Staffordshire Chamber, introduced the subject of foreign industrial products, and moved—

"That the council of this association be requested to represent to the Government, by deputation or otherwise as the council may think fit, the great advantage it would be to manufacturers throughout the country if her Majesty's Consuls abroad were empowered to collect and send home, from time to time, specimens of industrial products, other than British manufacture, representing the peculiar requirements of the various markets within their respective districts, and if such specimens, on arrival in this country, were classified and distributed for exhibition in the museums of the localities to which they might be severally kindred—*i.e.*, hardware for Birmingham, pottery for the Potteries, etc."

Mr. HARVEY DAW (Plymouth) seconded the motion, which was supported by the CHAIRMAN, and carried unanimously.

Mr. HOOPER, for the Bradford Chamber, introduced the subject of certificates of origin, and moved—

"That in the negotiation of any fresh treaties of commerce with foreign countries—with Spain especially—it is highly desirable that her Majesty's Government endeavour to secure provisions:—(1) empowering British chambers of commerce to issue certificates of origin in respect of goods exported from this country; (2) that such certificates should be accepted as sufficient without a Consular *visa*; and (3) that no declaration other than that of the exporters themselves be required."

In the discussion which ensued, Sir ALBERT ROLLIT remarked that the time had very much gone by when Ambassadors were sent to "lie abroad for the benefit of their country," and what was required now was a commercial almost more than a diplomatic representation. He had recently introduced a deputation to the new Spanish Ambassador, which urged upon his Excellency the desirability of inducing the Government to assent to the introduction of the Italian system. His Excellency promised to do everything he possibly could in this direction.

Eventually the motion was adopted unanimously, with the addition of the following paragraph:—"And that her Majesty's Government be requested to endeavour to obtain the acceptance of certificates of origin drawn up in the language of the country of origin and the language of the country to which the goods are sent in parallel columns."

##### A NATIONAL LABOUR BUREAU.

SIR STAFFORD NORTHCOTE, for the Exeter Chamber, introduced the subject of a National Labour Bureau, and moved:—"That in view of the embarrassment and loss of trade and the inconvenience suffered by many of the working class, resulting from the absence of a general system of communication between employers of labour and the unemployed in the various branches of industry throughout the kingdom, it is desirable that labour bureaux or labour registries be organized wherever practicable; and that the attention of the Royal Commission on Labour be invited to this subject, with the suggestion that they obtain information as to existing agencies of the kind, for the purpose

of formulating a plan for the establishment of a National Labour Bureau."

Mr. STEWART seconded the motion, which was cordially supported by MR. GROSSER (Plymouth), and carried unanimously.

The association discussed the subject of conditions of affreightment, and adjourned until Wednesday.

The members of the Association of Chambers of Commerce reassembled on Wednesday morning at the Hôtel Métropole, Whitehall, Colonel Hill, C.B., M.P., presiding. The attendance was again a large one.

#### TRADE IN CENTRAL AFRICA.

Mr. JEPHSON, Mr. Stanley's lieutenant in the Emin Relief Expedition, addressed the association on the prospects of trade and necessary work in Central Africa. He remarked that when the expedition was marching down to the coast its members constantly came across vast stretches of country which had been laid waste by the action of the Arab slave-traders, and the sights made a deep impression upon him. The only true civilization and pacifier of any country was trade and commerce, and he was assured that if Englishmen would stop the slave-trade in Africa they must do so by building up a legitimate trade in its place. The scenes he had witnessed had determined him to attempt to interest English people in the matter when he got back, and he knew that a Bill was then about to be introduced into Parliament giving aid to the British East African Company. He came to the conclusion that the best course to adopt was to address the various chambers of commerce all over the country with a view to interesting traders in the trade possibilities of Central Africa. The reason people did not take as great an interest as they might in Africa was that they did not know very much about it, and the majority of people believed that it was either a huge forest or a vast sandy desert. He knew both these regions well, but there were also vast grassy plains, where the soil was very fertile and merely waiting for cultivation. There was also a large negro population waiting to change the articles of native growth for manufactured articles. The land was not one flowing with milk and honey, but it was one with vast capabilities, and would develop into a fine country if people worked hard at it. At present the eyes of Europe were turned to Uganda, which was becoming popular from its being healthy to Europeans and because it commanded a very extensive waterway round the Victoria Nyanza right down to the White Nile. This waterway opened up a very fine and important country in Central Africa, and there were great prospects of trade. Coffee of indigenous growth grew wild; tea would grow very well; ivory was a very important feature; tobacco of excellent quality was grown by the natives; and a great source of wealth would be the production of cotton. There was a large supply of india-rubber, which was growing wild; and a large trade might be created in ostrich feathers, for large flocks of the ostriches ran wild. Copper had been found about the head waters of the Nile, and there must be a considerable supply of this substance, while Emin told him that some years before he was there large quantities of gold-bearing quartz had been sent to him from country east of the Nile. Emin expressed himself as confident that there were large quantities of gold to be found in that country, and that it would one day be developed. As to imports, printed cottons would be one of the great imports, and light linen and calico goods would be much wanted in Central Africa. The natives would sell almost anything they had for woollen goods, blankets, &c. But the great difficulty was that of transport. At present the attempts at the suppression of the slave trade were confined to the coast, but before the heart of the trade could be reached the railway must be established. Slaves were made merely for the purposes of transport, and the establishment of the railway would do away with the *raison d'être* of the slavery. The Government need not spend any additional money to stop the slave trade, for it was only necessary to divert a portion of the money at present annually spent in the suppression of the slave trade, which money, for all the good it did England, might be thrown into the sea. (Cheers.)

The CHAIRMAN tendered the thanks of the association to Mr. Jephson for his interesting and important address, and drew attention to the presence of Sir Michael Hicks-Beach, whose entrance during Mr. Jephson's address had been greeted with warm cheers. Colonel Hill remarked that the presence of the President of the Board of Trade was particularly welcome just at the moment when the association was about to discuss the important question of coast communication. (Cheers.)

#### MORTGAGES ON FACTORIES.

It was next agreed, on the motion of Mr. STEIBELL:—

"That a mortgagee of a freehold or leasehold factory ought not to be entitled, as against the other creditors of the mortgagor, to enforce his mortgage security against any fixtures or fixed plant of the mortgagor upon the mortgaged premises (other than

the fixed motive powers and fixed power machinery and the pipes as enumerated in section 5 of the Bills of Sale Act, 1878), unless such mortgagee's security has been duly registered in accordance with the requirements in the case of an ordinary bill of sale. That the attention of Parliament be directed to the subject with a view to early legislation."

#### LANDLORDS' PREFERENTIAL CLAIMS FOR RENT.

Mr. CLAYDEN (Oldham) moved:—  
"That the Executive Council be again requested to take such steps as they may deem most expedient to get the laws of distress altered so as to give effect to the recommendations comprised in the resolution passed at the last two annual meetings of the association, which resolution was as follows: 'It is the opinion of this association that during recent years new conditions have arisen in the conduct of certain trades and manufactures which cause the landlord's present right of distress for rent to operate most unjustly towards the tenant's other creditors. This association therefore recommends—(1) that landlords should not be allowed to distrain for rent in advance, nor for more than 12 months' rent in arrear; (2) that landlords should have power to distrain for rent of land, tenements, and hereditaments only, but such power of distraint should not extend to any sum contracted to be paid for the supply of steam or other motive power, nor for the hire of machinery, nor for any other sum other than for rent as hereinbefore defined in this paragraph.'"

The motion was carried, but not by a sufficient majority to allow of any action being taken.

The Chambers discussed questions of fire insurance, and adjourned until Thursday.

#### ANNUAL DINNER: SPEECH BY SIR M. HICKS-BEACH.

In the evening the annual dinner of the Association of Chambers of Commerce of the United Kingdom was held in the Whitehall Rooms, Hôtel Métropole, when about 130 noblemen and gentlemen sat down. Col. Hill, M.P., president of the association, presided. After the usual loyal toasts,

SIR M. HICKS-BEACH, in responding to the toast of "Her Majesty's Ministers," said that in recent years the association had been good enough to receive as their guests men higher in office and abler than himself, who had responded to this toast, such as the Prime Minister and the Chancellor of the Exchequer, but there were none who desired, either by virtue of his office or by his own sympathies, to be more thoroughly in touch with the Associated Chambers of Commerce than he was. (Cheers.) The association had at their meetings for many years past expressed their dissatisfaction with the Board of Trade, and had passed resolutions, he believed, unanimously in favour of a Minister of Commerce. He never could see what a Minister of Commerce could do that could not equally be well done either by the President of the Board of Trade or by the Commercial Department of the Foreign Office. Nevertheless, that had been their view, and on the agenda paper for the present year he observed a resolution, proceeding from a quarter as important as the Chamber of Commerce of Birmingham, which to some extent expressed why they desired a change. It ran as follows:—"In view of the depression of trade, caused by the great falling-off in our exports and the activity of foreign nations in making treaties of commerce inimical to our interests, it is essential that a Minister of Commerce should be appointed to protect English industries." Now, he questioned the premises of the resolution, and he did not understand the conclusion. (Laughter.) He was far from denying the importance of the fact that during the last few months the exports of this country had considerably diminished. But it was too soon to speak of that decrease in the way in which it was alluded to in the resolution. A very slight glance at the returns would show that the total of our exports for 1891 were £247,000,000 against £263,000,000 in 1890. That was a considerable diminution, but they were only £2,000,000 short of our exports in 1889, and in each of these three years the total of our exports showed a very material increase on any year in the preceding ten. (Cheers.) Therefore it was too soon to look upon the decrease of the past few months as one which would lead to any portentous results to the trade and commerce of this country. But, further, the resolution alluded to "the activity of foreign nations in making treaties of commerce inimical to our interests." The most important treaties of commerce that have been made within the last year had been distinctly favourable to our interests—those that had been negotiated between the Central European Powers—because in those treaties this country had the advantage of the "most favoured nation" treatment. He granted that there had been certain reciprocity treaties made on the other side of the Atlantic which might affect our trade to some extent, but that was nothing, if they looked at the figures of our commerce with Brazil and Cuba, as compared with the interests which were involved in the commerce with the European States to which he had alluded. What he had suffered from, as had been accurately defined by the president in his address the previous day, was the

general distrust which was engendered by the South American collapse. (Hear, hear.) That had been the main cause of the diminution in our exports. There had been other causes. The McKinley tariff had been a cause to a very much minor extent, but we were recovering, as anybody who went into details would see, the effects even of the McKinley tariff. He could give—it was not the time to do so now—the most remarkable figures as to our export of tin-plates to the United States, which showed how those exports were month by month growing up to their old level before the tariff came into force. We might also suffer, though to a less extent, from the tariff which had recently come into force in France. He wished to say, if they would bear with him, a word upon that subject, because the resolution pointed at a feeling that there had been some negligence on the part of the Government of this country in permitting that tariff to become law. Well, anybody who considered the question, he thought, must see that it was notorious that for reasons sufficient to themselves our neighbours in France had made up their minds to build up a wall of protection against manufactures coming from foreign countries, and that for us to complain to them, while they were building up that wall, that it was likely to keep out manufactures, would merely have been to encourage them in the task they had undertaken. (Cheers.) There were symptoms already in France that they were beginning to see that in their own interests they had made a mistake. (Hear, hear.) The Board of Trade would watch that feeling most carefully, and when they saw the faintest chance of approaching the French Government with the hope of a satisfactory result, depend upon it they should not lose the opportunity. (Cheers.) Coming to the conclusion of the resolution—"it is essential that a Minister of Commerce should be appointed"—he asked, to do what? "To protect British industries." He did not know what that phrase meant. If it meant that a Minister of Commerce was to inaugurate in this country a tariff something like the McKinley tariff in the United States, and to bargain with foreign countries for reciprocity treaties in the same manner as the Transatlantic Power had been doing—well, that was a policy which he thought should be carefully considered by the Chambers of Commerce before they recommended it to Her Majesty's Government. (Hear, hear.) In his opinion, it was not a policy of which the people of this country were likely to approve. (Cheers.) What could they do? There was something they could do at present. They could do what he had told them the Government should do in regard to France. They could do their best to secure an improved commercial treaty with Spain. That was the immediate object before them. In 1886 Spain made a treaty with us which had been of considerable advantage to both countries. We reduced our wine duties to the advantage of Spanish wines; they gave us not any special advantage, but "most-favoured-nation" treatment for our goods. Spain had denounced that treaty, and it would come to an end next July. If it should come to an end without any fresh arrangement being made, from one point of view, he could conceive that the result would not be entirely unsatisfactory to the Chancellor of the Exchequer, for in that arrangement we give up a considerable amount of our duties upon wine, and probably, under present circumstances, no Chancellor of the Exchequer would be indisposed to welcome such an addition to our duties as a restoration to the old scale would bring into his coffers. (Hear, hear.) But they were told by the Spanish Government that Spain was prepared to negotiate fresh commercial arrangements with the object of protecting and fostering intercourse with friendly nations, and of maintaining and, if possible, rendering still closer the good relations that exist with them. That was the spirit in which Her Majesty's Government should conduct those negotiations. They knew that the treaty of 1886 had been of advantage to both countries. They should hope to secure such an improvement on that treaty as might still further unfetter trade between Spain and England, and in that policy he believed they should have the cordial co-operation and good wishes of the Chambers of Commerce. (Cheers, and a voice, "How about the Colonies?") With regard to the Colonies, all we wanted was to trade with our Colonies as much as our Colonies would allow us to trade with them. (Cheers.) We opened our markets as freely as they could wish; let them do the same. (Cheers.) But let them not come to us asking for bargains for Colonial goods when they would not treat us on as good terms as their own manufacturers. (Cheers.) In conclusion, the right hon. gentleman proposed the toast of "The Association of Chambers of Commerce of the United Kingdom," and, in doing so, remarked that, since the Associated Chambers had become, as they now were, a power in the land, commerce had immensely profited, trade had been advantaged, and that general good understanding had been fostered between the Government and those who were engaged in the promotion of individual enterprise, which must be to the good of the country. Her Majesty's Government were strongly convinced of the difficulties under which our trade

laboured through those high tariffs which had become the fashion in so many civilised countries. They had been anxious to do anything they legitimately could to promote the commerce of this country in comparatively unexplored regions by maintaining British influence and keeping open those channels of communication with the interior of great continents, which our commercial navy enabled us to adopt. They hoped they might have done some good to British trade by the policy they had pursued in East and South Africa, and it rested with them, the merchants of this country, and those whom they represented, to take advantage of those opportunities. (Cheers.)

The gathering of the Association was resumed and brought to a conclusion on Thursday, Colonel Hill, C.B., M.P., again presiding.

It was unanimously agreed, on the motion of Mr. STIEBEL—

"This association is of opinion that the law with regard to the rating of hereditaments containing machinery is in a most unsatisfactory state, and regrets that the Bill introduced during the last Session of Parliament to define the law failed to pass; that her Majesty's Government be again requested to give facilities during this Session for the passing of an Act to define the law upon the subject."

For the Sunderland Chamber, Colonel ROBSON moved—"The council of the association is requested to continue to press on the notice of the Government the desirability of an early introduction into this country of a decimal system of coinage, weights, and measures."

Mr. ROWLEY seconded the motion, which was carried unanimously.

The meeting of the association was brought to an early close with a vote of cordial thanks to Colonel Hill for his presidency.

THE COAL QUESTION.

The cartoon in *Punch* this week refers to the grave situation in the coal trade, and represents the out-of-work working man and poor clerk remonstrating with the out-on-play miner. Under the heading "A Little Holiday!" are some verses, from which we extract the following:—

Out-of-Worker to Out-on-Player:—  
 Who talks of "Solidarity of Labour,"—  
 A favourite shibboleth in these our days?—  
 To recognise one's duty to one's neighbour  
 Is that which all—in theory—will praise.  
 And Unions are upheld, and "Blacklegs" scouted—  
 Friends of Fraternity their heads must break  
 To prove their loyal brotherhood undoubted!—  
 But here there seems to be some slight mistake.  
 Going on Play, mate, you of the broad shoulders?  
 Take holiday awhile from pick and lamp?  
 Well, your hard toil impresses all beholders,  
 Sweating amidst black seams and choking "damp."  
 A "holiday," for rest and recreation,  
 None would begrudge you. But at the expense  
 Of every other worker in the nation?  
 I don't quite see it! Maybe I am dense.  
 Must fight for your own hand? Oh, ah! precisely.  
 Only that's ISHMAEL, after all, right out.  
 Maybe that for yourself you're acting wisely,—  
 Though even that seems open to some doubt,—  
 But if your self-advancement means a smasher  
 To mill-hand, poor mechanic, clerk,  
 Without a fire to fry his slender "rasher,"  
 Fraternity's outlook still looks rather dark.  
 If Miners and Mine-Owners pull together  
 To raise the price of Coal—well, it may suit  
 Both them and you. But, in this bitter weather,  
 Your "Solidarity" brings us bitter fruit.  
 When our pinched fire dies down to its last ember,  
 The picture of you "making holiday" 'tis  
 Won't warm our wives and kids. Strike! but  
 remember  
 That what is "Play" to you means death to us!

"BLACK-LISTING."—At the Sheffield County Court, on Thursday, an important judgment was delivered respecting the right of employers to issue a "black list" of workmen. The plaintiff was a journeyman tailor, and the defendants were the president and secretary of the Sheffield Master Tailors' Association. In 1891 a serious dispute arose between the journeyman tailors and the masters' association respecting the employment of female and out-door labour, and the masters issued a list of workmen whom the master tailors were requested not to employ. The plaintiff was one of the men included in this "black list," and he claimed damages for conspiracy, and also sought to obtain an injunction to restrain the defendants from continuing their alleged wrongful acts. Judge Ellison held that the contest between the two parties was simply a trade struggle. He quoted the case of "Peto & Apperley," and said he agreed with Mr. Justice

Jeuca that what was done in furtherance of the objects of a trade-union was not illegal. No doubt the issue of a "black list" might have injured the plaintiff, but it was done entirely for trade purposes, and to defeat and counteract the purposes of the men's union. Judgment was accordingly given for the defendants. Notice of appeal was given.

Textile Markets.

COTTON.

MANCHESTER, FRIDAY.

Our market continues, generally speaking, in the same unsatisfactory condition that has characterized it for a considerable time past. The "bull" party in the cotton markets has been so completely beaten from pillar to post and from post to pillar again, that all spirit appears to have been knocked out of it. It is now generally retiring from the battlefield of the present crop to take up new quarters on that of next season. All round it now seems to be admitted that the present crop is bound to reach, if not exceed nine million bales, a figure we have for many months maintained in this report would be the outcome. The efforts of the defeated party are now centred upon maintaining or advancing present rates by bringing forward the bogey of a restricted production of the next crop. This is so problematical a matter, and one on which so much can be urged on both sides, that spinners will not be wise who allow it at the present time to influence their actions to any considerable extent. The difficulty of organising uniformity of action over an area of country many times larger than that of the United Kingdom ought to be obvious to everyone, and even were it possible, there are still the factors of individual distrust of what each man's neighbour may be doing, which would certainly do much to destroy mutual confidence. Little therefore need be feared of any results that may accrue in the distant future from this source. The only thing that will limit production of cotton will be absolute inability of growers to work, owing to the depleted condition of their means. That this is not likely to have come about already with one season's low priced crop, the burden of which has not all fallen on them, must be regarded as an assured certainty. Spinners and manufacturers will do well, therefore, to endeavour to improve the prices they can get for their productions rather than heed the implied invitation to give more for cotton. As to the chances they may have in that direction we leave them to form their own opinion. Not very long ago we gave a brief resumé of the conditions and prospects of the markets of the world, and since then it can only be said that matters have gone from bad to worse in many places, whilst hardly in one can an improvement be recorded. We would far rather chronicle the appearance of brighter prospects, but regard for truth and the interests of our readers compels us to continue in this strain.

COTTON.—The week opened on Saturday with an easier tendency, which was not long in becoming very accentuated. There was a distinct decline in values in spots, and other growths were mostly dull and irregular. Futures opened weak and continued so to the close, when a fall of 3 to 3½ points was registered. On Monday the market lost more of what little strength it possessed. The attendance of the trade was very small, and their purchases were only of the most retail character. The business transacted was on the basis of Saturday's prices. Spot cottons and all other growths were neglected, and the turn towards ease. Futures were very inanimate all day, closing with a partial loss of ½ a point for near positions, and a gain of ½ a point for distant ones. Tuesday brought an increase of depression. The demand from the trade was small and disappointing, and led to a reduction of ¼d. in the official figures. All the other growths were easier and irregular in price, Broach being officially reduced ¼d. Futures made a loss on the day of 2 to 2½ points. On Wednesday a slightly better tone prevailed owing to a little increase in the enquiry for spot cotton, but later on this subsided. Other growths were dull, and Egyptian brown declined ¼d. After some slight fluctuations futures closed easy at a decline for almost all positions of 2 points. Yesterday the depression of the previous few days eventuated in an almost general reduction in the official quotations, excepting Americans, which had not gone down quite far enough to justify a reduction in the official figures. Futures made a descent of 2 points, but afterwards regained from ½ to 1 point.

The following are the official quotations of the Liverpool Cotton Association:—

	G.O.	L.M.	Md.	G.M.	M.F.
American.....	3½	3½	3½	3½	4½
			M.F. Fair.	G.F.	
Pernam.....	4½	4½	4½	4½	4½
Ceara.....	4½	4½	4½	4½	4½
Paraiba.....	4½	4½	4½	4½	4½
Maranhã.....	4½	4½	4½	4½	4½

	Fr.	G.F.	F.G.	F.G.	Gd.
Egyptian.....	4½	4½	4½	5	
Ditto white.....	4½	4½	4½	5	
	Fr.	F.F.G.F.	F.G.F.	Gd.	F.G.Fine.
M.G. Broach ..	—	—	—	3½	3½
Dhollerah....	2½	2½	3½	3½	3½
Oomra.....	2½	2½	3	3½	3½
Bengal.....	—	—	2½	2½	3½
Tinnivelly....	3½	—	3½	3½	—

\* Nominal.

The following particulars of the business of the week are from the official report issued by the Liverpool Cotton Association:—

	Import.	Forward.	Sales.	Stock.	Actual Export.
American	68,816	60,537	44,250	1,468,920	5,728
Brazilian ..	65	694	1,580	45,730	—
Egyptian ..	22,552	5,211	1,580	133,090	700
West Indian	2,333	287	350	29,990	56
East Indian	—	1,121	1,350	40,790	286

Total .. 83,766 .. 67,850 .. 49,110 .. 1,718,520 .. 6,770

The following are the values of futures at mid-day on each day of the week—American deliveries—any port; bases of middling: low middling clause; (the fractions are in 64ths of a penny):—

PRICES OF FUTURES AT 1.30 P.M. EACH DAY.

	Satur-day.	Mon-day.	Tues-day.	Wednes-day.	Thurs-day.	Friday
March ...	3-43 44	3-43 44	3-40 b	3-40 b	3-37 s	3-30 b
Mar.-April	3-43 44	3-43 44	3-40 b	3-40 b	3-37 s	3-30 b
April-May.	3-45 46	3-45 46	3-41 42	3-41 42	3-38 39	3-40 41
May-June.	3-48 49	3-48 49	3-45 s	3-44 45	3-41 42	3-43 44
June-July.	3-51 52	3-52 s	3-48 b	3-48 v	3-45 v	3-47 b
July-Aug.	3-55 s	3-55 s	3-51 52	3-51 52	3-48 49	3-50 51
Aug.-Sept.	3-58 s	3-58 b	3-54 55	3-54 55	3-51 52	3-53 54
September.	3-60 61	3-61 v	3-57 58	3-57 58	3-54 55	3-56 57
Sept.-Oct.	3-61 61	3-61 v	3-57 58	3-57 58	3-54 55	3-56 57
Oct.-Nov.	3-63 64	4-0 s	3-60 61	3-60 b	3-57 58	3-59 60
Nov.-Dec.	—	—	—	—	—	—
Dec.-Jan..	—	—	—	—	—	—

Price of Mid. American.	3¼	3¼	3 11-16	3 11-16	3 11-16	3 11-16
Estimated Sales including Spec. and Export.	7,000	8,000	7,000	10,000	8,000	7,000
	2,000	1,500	1,500	2,500	3,000	2,000

YARNS.—The trade of last week in yarns was somewhat varied in character, some producers succeeding in closing a fair weight of transactions, whilst others did less than the average. Prices were exceedingly unsatisfactory, and probably the lowest on record for yarns. Monday opened not only without any improvement, but with a distinct loss of tone. Little business was forthcoming in any department of the market. On Tuesday yarn was distinctly worse to sell, and spinners who had not succeeded in obtaining much relief during the past ten or fourteen days strongly complained of the condition of the market. Prices were decidedly lower, and for stocks or very early delivery buyers could do well. In every section of the yarn market matters were in much the same condition. On Wednesday matters remained without improvement, and yarns of every description were flat. Yesterday yarns were again heavy in every department, and low prices were accepted where business was done. Stocks are in many cases burdensome, and buyers have no difficulty in finding cheap lots.

CLOTH.—The moderate demand for cloth on Eastern account that has prevailed for the past few weeks was continued to the close of the past one, though in somewhat diminishing volume. The remainder of the market hardly shewed any change. Monday was a very quiet day throughout, and Tuesday shewed a distinct ebb in the demand for cloth, most buyers on Eastern account having apparently for the present satisfied their requirements. The business transacted has placed most makers of the better grades of shirtings moderately well under contract. Other Eastern goods are much in the same position, which enables producers to shew a steady front. Other goods, without being depressed, are only the recipients of a slow and dragging demand. There has been little change in any respect from this position during the week. There are a few offers for India still to be met with for distant delivery, but in hardly any instance are the prices such as to justify acceptance. A very quiet feeling prevailed in the cloth market yesterday, but there was no particular amount of depression, the recent business having enabled manufacturers to offer a moderately steady front to buyers. The demand, however, is now here urgent.

To-day, cotton is steadier. In yarns the market is very quiet, whilst in cloth there is business offering for distant delivery, but prices are too low for extensive acceptance.



**WOOLLENS AND WORSTEDS.**

**BRADFORD.**—The piece trade is still very dull, and many looms keep unemployed. The demand from the United States is slow, and manufacturers find it difficult to keep up their turnover. Many looms are idle. The worsted trade with the States is slow, and there are few hopes of immediate recovery. The demand for plush keeps small.

**HUDDERSFIELD.**—The number of looms idle in the district does not, unfortunately, decrease, and there is much dissatisfaction at the course affairs have taken. Fancy dress goods are slow, and no fresh contracts have been received.

**ROCHDALE.**—The flannel trade is steady. Orders from the home houses are not satisfactory. Prices are irregular.

**GLASGOW.**—Messrs. Ramsey and Co., wool brokers, in their report dated 8th March, 1892, say—*Wool*: Business in the wool market is still somewhat restricted. Users only operate to cover immediate requirements, so that transactions are limited. A fair quantity, however, continues to be taken for export. Prices are nominally firm, but are not strong. *Sheep Skins*: The supply is still a full average, and largely of good sorts. There being no relief on the outlet, competition is somewhat slow and irregular.

**HOSIERY AND LACE.**

**NOTTINGHAM.**—The lace trade does not improve. Business in most departments keeps very slow, and although hopes are held out of an improvement, there are only a few signs from Paris which go to justify such an opinion.

**FLAX AND JUTE.**

**DUNDEE, WEDNESDAY.**—The market is depressed. Seldom has there been a period when so little business is being done. Holders of *Jute* are still confident that later on the pinch will come, and that they will then be able to command their own terms. They are therefore not disposed to give way in their prices, but there is no business in jute to report this week. Spinners are now willing to work at a loss rather than disorganise their works by stopping machines; but it is difficult to effect sales at present. For 8 lb. cop, done a week or two ago at 1s. 10½d., 1s. 9½d. would now be taken, even thereat buyers are shy. For the best warps there is still some demand, but warps of the second class can now be bought at 1s. 10½d. At these prices it is manifest there is a sharp loss. The condition of the jute cloth market is even less satisfactory. Common Hessians are met by Calcutta goods in New York, and Dundee common Hessians are unsaleable except under cost. The future of the Calcutta competition seems full of peril to the Dundee trade. The Calcutta men, by clearing their own market, even at a loss, secure for their manufacturers in their own protected markets higher prices for the bulk of their productions. It is true that there is no tariff to protect them, but the shipment and baling of the jute to Scotland precludes the possibility of Scottish goods being sold in Calcutta against Calcutta-made goods, while by clearing their own market by shipments of surplus goods to New York, Calcutta depresses prices and makes the trade in common goods profitless. In the finer special goods Dundee men hold their own, and to the few makers of choice goods the trade remains, and they are well engaged at rates altogether out of comparison with the usual 10½ oz. Dundee Hessian, which can be done to-day for 2½d. to 2¾d. *Flax* is firm without change. Good tows creep up 5s. to 10s. a ton again, and the impression grows that they are still further to advance. Linen yarn is firm at the recent advance, especially the best warps. Tow yarns are difficult to sell at the advance asked, as in the meantime buyers are "well bought." There are looms, however, being put off jute goods and put on tow fabrics, so that the consumption of tow yarns is increasing. Linens are in good demand, all the looms being well engaged. Arbroath continues dull, prices for canvas yarns and for canvas being still very low. The Dundee fancy jute trade is depressed, only the very best makers with their choice patterns are busy, and looms are being stopped or changed to other fabrics. Twines, cords, and rope are all in excellent demand.

**DRY GOODS.**

**MANCHESTER.**—There has been a steady movement in the home trade this week. Several special sales have been held, and buyers have attended in fair numbers. The demand for fancy goods has not, however, been active. Woollens are slow, and although there is a fair demand for certain qualities, the general demand gave rise to feelings of much dissatisfaction. There is only a small demand for linens, which, in the

opinion of some mistaken buyers, are dearer than they ought to be. The prices of jute goods are not lower naturally. Heads of departments profess to find grounds for complaint in the situation, but as a matter of fact the condition of the market for raw material does not warrant the statements now being put forward in these quarters. A reference to the condition of the print trade will be found under the heading of "Current Topics." The carpet trade is quiet. Prices are disorganised, and it is not known whether the action of a Fifehire linen house will be accompanied by an all-round reduction or not. The demand for silks is steady.

**Joint Stock and Financial News.**

**NEW COMPANIES.**

**MANCHESTER HAIR-SEATING COMPANY, LIMITED.**

Registered by Pearce and Sons, 8, Gitspur-street, E.C., with a capital of £3,000 in £5 shares. Object, to acquire the undertaking of a hair-seating manufacturer, now carried on by Messrs. Hargreave and Co., at Manchester, and to carry on and extend the same in all its branches. Registered without articles of association.

**YORKSHIRE FELT COMPANY, LIMITED.**

Registered by Jordan and Sons, 120, Chancery-lane, W.C., with a capital of £5,000 in £10 shares. Object, to carry on business as manufacturers of felted goods, woollen and worsted and union cloths, dyers, scourers, bleachers, extractors, and finishers. With slight modifications, the regulations contained in Table A apply. **HIND AND LUND, LIMITED, PRESTON.**

Capital, £10,000 in £1 shares. Object, to acquire the undertaking of a millwright and mechanical engineer, now carried on at Preston, under the style of Hind and Lund. There shall not be less than two nor more than five directors. The first (and sole) directors are T. F. Hind and R. Lund. Qualification, £500. Remuneration not specified.

**LONDON SODA WORKS AND TRADING COMPANY, LIMITED.**

Registered by A. E. Goodchild, Gresham House, E.C., with a capital of £10,000 in £5 shares. Object, to carry into effect an agreement made between M. C. Herbert of the one part, and this company of the other part; generally, to carry on business as soda manufacturers in all its branches. There shall not be less than three nor more than five directors. The first are the first signatories to the memorandum of association. Qualification, holding shares. Remuneration to be determined by the company in general meeting.

**KINDER PRINTING COMPANY, LIMITED.**

Capital, £35,000 in £10 shares. Object, to carry into effect an agreement expressed to be made between W. H. Wilson of the one part and this company of the other part, for the acquisition of the undertaking of a calico printer, now carried on by W. H. Wilson (under the style of the Kinder Printing Company) at Hayfield, Derbyshire, and at 74A, Mosley-street, Manchester, and to carry on and extend the same in all its branches. **Shares.**

- R. A. Gartswire, Manchester..... 1
- B. Depledge, 3, Gracechurch-street, E.C..... 1
- A. C. Wilson, Clifton Bank, Urmston..... 1
- W. Cippin, 48, Faulkner-street, Manchester.. 1
- T. H. Campbell, 44, Bloom-street, Manchester 1
- E. Mason, 91, Mosley-street, Manchester... 1
- J. A. Wilson, The Limes, Heavily, Stockport. 1

The first directors are to be elected by the signatories to the memorandum of association. Qualification, £250. Remuneration to be determined.

**Gazette News.**

**PARTNERSHIPS DISSOLVED.**

W. J. Biggs, A. Deas, and T. Smith, Farringdon-street, and Brushfields-street, London, twine manufacturers.

J. and J. Ward, Blackburn, Dobbie and Jacquard Machine makers; as regards John Ward.

A. Wilson and J. F. Burnley, woollen cloth manufacturers; as regards J. F. Burnley.

A. Georgiades and Co. and W. A. Pearson, trading as W. A. Pearson and Co., Manchester, grey cloth agents and merchants.

J. Jack and W. A. Bois, Fenchurch-street, London, hemp and fibre brokers; as regards W. A. Bois.

J., E., and A. Haydock, Limbrick-in-Blackburn, reed and heald manufacturers; as regards J. Haydock.

**Patents.**

**NOTICE OF REMOVAL AND CHANGE OF FIRM.**

**E. K. DUTTON & CO.**  
(Late DUTTON & FULTON)

**CHARTERED PATENT AGENTS**

Removed from 1, ST. JAMES'S SQUARE, to QUEEN'S CHAMBERS, 5, John Dalton St., MANCHESTER.

**SPECIFICATIONS PUBLISHED.**

Each of the following Specifications may be purchased at the Sale Branch, 38, Cursitor-street, London, for the price of 8d., or may be ordered on the Postal Request, price 8d. (Patents Form C). This Form is now on sale at all the principal Post Offices in the United Kingdom.

1891.

- 3,601. VANOURYVE and LEPAINTEUR. Chenille, etc., threads.
  - 4,313. LLOYD and Naylor. Looms.
  - 4,337. JAMES. Knitted web.
  - 5,142. BOWKER and others. Self-acting mules.
  - 5,375. ROBINSON, J. and R. Cap spinning and twisting frames.
  - 6,026. REDDAWAY. Woven driving belting.
  - 6,027. REDDAWAY. Woven driving belting.
  - 6,821. PVE. Moistening, etc., factories.
  - 17,642. SAMSON. Obtaining fibre from rhea.
  - 21,947. BECKER. Cutting fabrics.
  - 22,721. SCHOLTFELD. Cotton speeder frames.
  - 22,824. BROWN. Table linen, etc.
- 1892.
- 338. WHITTALL. Carpets and rugs.
  - 620. SHANNON. Wood graining machines.
  - 629. THOMPSON (Wendell). Ironing machines.

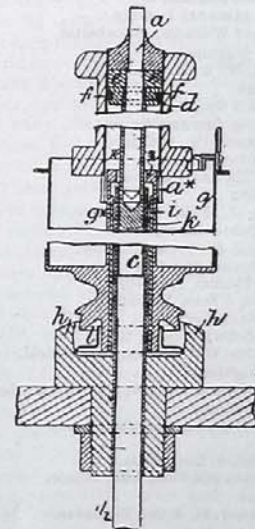
**ABSTRACTS OF SPECIFICATIONS.**

**13,965.** September 5, 1890. **Spinning.** K. T. SUTHERLAND, 39, Pritchard-street, Chorlton-upon-Medlock, and G. ESDALE, The Old Rectory, Rusholme, both of Manchester.

Long staple fibres such as China grass, flax, etc., are artificially shortened to adapt them for being worked on cotton or woollen machinery. The stalks, denuded of leaves, are decorticated or not as desired, and then cut into convenient lengths by means of a jig-saw or other suitable cutting machine.

**13,966.** September 5, 1890. **Spinning.** J. W. BULLOCK 128, Frog-lane, Wigan.

*Flyer spindles.*—Improvements on the invention described in the Specification No. 19,053, A.D. 1889. The shell *a*, which carries the bobbin rests on a ring or flange *d*, mounted on the dead spindle *e*, and provided on its periphery with a split ring *f*



to prevent the shell from being withdrawn when doffing, suitable washers *k* being placed between the flange *d* and the shell *a* to obtain the necessary drag. The shell *a* is extended downwards at *ax* to receive a coil of yarn previous to doffing. The tube *gk*, which extends upwards and forms part of the cup-shaped flyer *g*, is provided at its upper end with an inwardly projecting flange *\** to retain the oil as it rises from the oil cup *h*, and causes it to take between the long collar or bolster *i* upon which the flyer *g* revolves and an internal tube or shell *k*, the bolster *i* being rifled internally or otherwise formed to facilitate the passage of the oil back to the cup *h*. The oil is prevented from being thrown out of the oil cup by a washer *l*. The tube *k* may be extended below the bolster rail, the spindle being driven, and the drag being obtained by means of a flange on the spindle, which may form the base of an oil cup, and which takes on to

suitable washers on the lifting rail. Or the tube *k* may be dispensed with and the holder prolonged downwards below the holder rail *i*; or the tube *k* and the holder *i* may both be prolonged below the holder rail. The footstep may be in the form of an oil cup provided with a cover and so arranged that the oil cup on the holder rail is replenished from the footstep at each lift of the spindle rail. The flyer, instead of being cup-shaped, may be an ordinary inverted flyer, and it may be provided with any angled limbs similar to an ordinary presser flyer.

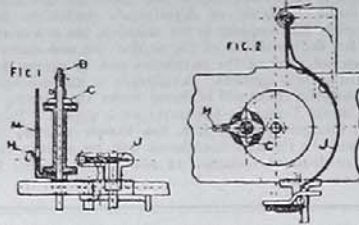
**13,935.** September 1, 1891. [Date under Sec. 103 of Patents Act, Feb. 25, 1890.] **Spinning.** J. A. ROUGE, Remiremont Dep. des Vosges, France.

**Ring spindles.**—A small ring is removably fixed on the end of the spindle, and is carried round with it, the thread passing through a traveller on this upper ring before passing to the usual ring. The former ring may be dispensed with, a special traveller being in this case mounted on the end of the spindle.

**14,015.** September 6, 1891. **Ropes and cords; braiding.** W. T. GLOVER, Bridgewater-street Iron Works, Salford, and W. E. SAN GARON, Acrrington.

In machines for making cable laid cords, or plated cords, or flat tapes, tension is put on the yarn used, by springs C, or by a weight at the upper end of the spindle, or by a spring beneath the bobbin. The spring presses a washer, either plain or roughened, against the bobbin. A stop motion is provided, which consists of a ring-dropper H. The yarn coming from the bobbin passes through the hole M, then through H, and on through a hole at the top of the flyer to the hole B. Should the yarn break or the bobbin become empty, the piece H falls and

comes in contact with the knock-off lever J and stops the part of the machine affected.



**14,242.** September 10, 1891. **Spinning.** W. L. WISE, 46, Lincoln's Inn Fields, London.—(Ritter, Kilmeyer and Co. Graz, Austria).

**Ring frames.**—The threads are prevented from becoming entangled through ballooning by gratings or openwork partitions or frames fixed on the ring rail between the spindles.

**14,216.** September 10, 1891. **Treating fabrics.** D. GASTILLO, Lyons, Rhone, France.  
Silk or mixed silk fabrics are treated to imitate China crape by submitting them, in the state in which they come from the dyer

or weaver, to the action of a steaming column at high pressure, an intermediate cloth blanket, or lining of similar close mesh, being wound upon the column at a suitable tension. Goffered mixed silk fabrics may be treated in the same manner.

**14,302.** Sept. 11, 1891. **Dyeing.** T. INGHAM, 12, Johnson-street, Chichester, Manchester.  
Relates to the dyeing of cotton woven fabrics or yarns in the open state a good black. Consists in first passing the material through a bath of logwood, or a mixture thereof with other dye wood liquors, and a mordant consisting of sulphate or other salt of copper boiled with acetic acid. After drying, the material is next passed through an oxidising bath containing bichromate of potash or soda, or the like.

**14,372.** September 12, 1891. **Dyeing, etc.** J. ROBERT-SHAW, Simpson-street, Rochdale-road, Manchester.

**Hank machines.**—Relates to reversing gear for giving to the hanks in dyeing, sizing, and washing machines, a certain number of turns in opposite directions alternately. *Drawings.*

## PATENTS.

**W. P. THOMPSON & CO.**

Agents for procuring Patents and Registering Trade Marks and Designs.

**6, Bank St. (Exchange), Manchester.**

6, Lord St., LIVERPOOL; and 223, High Holborn, LONDON.

Largest Patent Agency in Great Britain.

"Facts for Inventors" (Pamphlet sent free on application)

## TEXTILE MACHINERY, APPLIANCES, &c.—DIRECTORY OF MAKERS.

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Rushton, Edward, and Son, Blackburn, and Manchester.  
Salisbury & Hamer, Blackburn and Manchester.

**Bandings, Tape and Tubular:**  
Hart, Thomas, Blackburn.

**Belting:**  
Fleming, Thos. Son, & Co., Halifax.  
Reddaway, F., and Co., Pendleton.  
Rossendale Belling Co., Manchester.  
Sampson and Co., Stroud.

**Bobbins, Spools:**  
Dixon, John, and Son, Steeton, near Keighley.  
Kay, John, Rochdale.  
Livesey, Henry, Limited, Blackburn.  
Wildman, T., & Co., Caton, Lancashire.  
Wilson Brothers, Limited, Todmorden.

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Fernihough, J., & Sons, Stalybridge.  
Galloways, Limited, Manchester.

**Braiding Machinery:**  
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**Calenders:**  
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Hoyle, E., and Sons, Limited, Halifax.  
Riley, J. H., and Co., Bury.

**Card Clothing:**  
Sykes, Joseph, Brothers, Huddersfield.  
Wilson & Ingham, Liversedge.

**Card Grinding Machinery:**  
J. Jones, Dukinfield.

**Cement, Mineral Fusible:**  
Fox and Williams, Manchester.

**Chaining Machine:**  
Hurst, W., & Co., Rochdale.

**Cop-Tubes:**  
Jagger & Co., Oldham.

**Cop-Tubing Apparatus:**  
Jagger and Co., Oldham.

**Cotton Driving Ropes:**  
Hart, Thomas, Blackburn.

**Crystoleine:**  
Wells, M., & Co., Manchester.

**Doffing Comb Motion:**  
Brooks & Doxey, Manchester.

**Driving Ropes, Bandings, &c.:**  
Hart, Thomas, Blackburn.  
Kenyon & Sons, Dukinfield.

**Drying Machinery:**  
Hall, Robert, & Sons, Bury.  
Whiteley, Wm. & Sons, Huddersfield.

**Electric Lighting:**  
Woodhouse & Rawson, United, Ltd., London.

**Emery Filleting:**  
Dronsfeld Brothers, Oldham.

**Engines:**  
Goodfellow, Ben., Hyde.  
Musgrave and Sons, Ltd., Bolton.

**Fire Hose:**  
Reddaway, F., & Co., Pendleton.

**Fire Pumping Engines:**  
Worthington Pumping Engine Co., London and Manchester.

**Fustian Cutting Machines:**  
Lockwood and Keighley, Huddersfield.

**Humidifiers:**  
Mathews and Yates, Manchester.  
Parsons, P., Blackburn.

**Hydraulic Presses:**  
Dickinson, Wm., & Sons, Blackburn.  
Hall, Robert, & Sons, Bury.  
Livesey, Henry, Limited, Blackburn.

**Hydro-Extractors:**  
Broadbent, Thomas, and Sons, Huddersfield.  
Watson, Laidlaw & Co., Glasgow.

**Indicators:**  
Orms, G., and Co., Oldham.

**Jacquard and Card Cutting Machinery:**  
Ayrton, Wm., and Co., Manchester.  
Devoe & Co., Manchester.  
McMurdo, James, Manchester.

**Knitting Machinery:**  
Harrison, W., Manchester.  
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**Lattices, Pegs, Jacquard Slips, &c.:**  
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**Looms, etc.:**  
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Hacking and Co., Bury.  
Hall, Robert, and Sons, Bury.  
Hutchinson, Hollingworth, and Co., Dobeross, Oldham.  
Livesey, Henry, Limited, Blackburn.  
McGowan and Hadwen, Manchester.  
Platt Brothers and Co., Limited, Oldham.  
Tattersall & Holdsworth, Burnley.

**Machinery (Bleaching, Dyeing, Printing, &c.):**  
Hawthorn, John, & Co., New Mills, Stockport.  
Dickinson, Wm., & Sons, Blackburn.  
Hall, Robert, & Sons, Bury.  
Klauder-Weldon Dyeing Machine Co., Huddersfield.  
Mather and Platt, Manchester.  
Whiteley, Wm. & Sons, Huddersfield.

**Machinery (Cotton Preparation, Spinning, Doubling, etc.):**  
Ayrton Wm., and Co., Manchester.  
Bethel, J., Manchester.  
Brooks & Doxey, Manchester.  
Coulthard, T., & Co., Preston.  
Curtis, Sons, & Co., Manchester.  
Dobson & Barlow, Ltd., Bolton.  
Guest and Brookes, Manchester.  
Hetherington, John, & Sons, Ltd., Manchester.  
Hall, Robert, & Sons, Bury.  
Howard and Bullough, Ltd., Acrrington.  
Lees, Asa, and Co., Limited, Oldham.  
Lord Brothers, Todmorden.  
Platt Brothers and Co., Limited, Oldham.  
Stott, J. H., Rochdale.  
Stubbs, Joseph, Manchester.  
Tattersall & Holdsworth, Burnley.  
Taylor, Lang and Co., Stalybridge.  
Threlfall, Rd., Bolton.

**Machinery (Flax, Tow, Jute, &c., Preparation and Spinning):**  
Fairbairn, Naylor, Macpherson & Co., Leeds.

**Machinery (Sewing and Card-lacing)**  
Singer Manufacturing Co., London.

**Machinery (Thread):**  
Ayrton, Wm., and Co., Manchester.  
Brooks & Doxey, Manchester.

**Machinery (Silk):**  
Brooks & Doxey, Manchester.  
Coulthard, T., & Co., Preston.  
Dobson & Barlow, Ltd., Bolton.  
Guest and Brookes, Manchester.  
Hall, Robert, & Sons, Bury.  
McGowan and Hadwen, Manchester.  
Platt Brothers and Co., Limited, Oldham.  
Stubbs, Joseph, Manchester.  
Sykes, John, and Sons, Huddersfield.  
Taylor, Lang and Co., Limited, Stalybridge.

**Machinery (Sizing, Filling, &c.)**  
Dickinson, Wm., & Sons, Blackburn.  
Hall, Robert, & Sons, Bury.  
Livesey, Henry, Limited, Blackburn.  
Whiteley, Wm., & Sons, Huddersfield.

**Machinery (Soaping, etc.):**  
Mather and Platt, Manchester.

**Machinery (Woolen and Worsted):**  
Brooks & Doxey, Manchester.  
Coulthard, T., & Co., Preston.  
Curtis, Sons, & Co., Manchester.  
Dobson & Barlow, Ltd., Bolton.  
Guest and Brookes, Manchester.

Hetherington, John, & Sons, Ltd., Manchester.  
Hall, Robert, & Sons, Bury.  
Lees, Asa, and Co., Limited, Oldham.  
Platt Brothers and Co., Limited, Oldham.  
Stubbs, Joseph, Manchester.  
Sykes, John, and Sons, Huddersfield.  
Taylor, Lang and Co., Stalybridge.  
Tattersall & Holdsworth, Burnley.  
Whiteley, Wm., & Sons, Huddersfield.

**Needles for Hosiery, &c. Machinery:**  
Ellis, Philip, Lenton, Nottingham.

**Oil:**  
Wells, M. & Co., Manchester.

**Oil Cans and Oilers:**  
Jagger & Co., Oldham.

**Oilcloth Machinery:**  
Ayrton, Wm., and Co., Manchester.

**Patent Agents:**  
Dutton & Fulton, Manchester.  
Thompson, W. P., & Co., Manchester, Liverpool and London.

**Pickers:**  
Bromley, Thomas, Bolton.

**Pistons:**  
Lancaster and Tonge, Pendleton.

**Pulleys:**  
Richards, Geo., and Co., Broadhead.  
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Worthington Pumping Engine Co., London and Manchester.

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Hall & Sons, Bury.  
Kay, John, Rochdale.  
Livesey, Henry, Limited, Blackburn.  
Wilson Brothers, Limited, Todmorden.

**Shuttle Swells:**  
Hall, Robert, & Sons, Bury.  
Livesey, Hy., & Co., Ltd., Blackburn.  
Whalley, J., Blackburn.

**Sizing and Filling Preparations:**  
Adley, Tolken, and Co., Blackburn.  
Eastwood, James, Manchester.

**Smoke Consumers:**  
Automatic Smoke Prevention Syndicate, Ltd. Manchester.  
Greaves, W. McG., Manchester.

**Sprinklers, Automatic:**  
Dowson, Taylor & Co., Ltd., Manchester and London.  
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**Steam Traps:**  
Lancaster and Tonge, Pendleton.  
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Hetherington, John, and Sons, Manchester

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Mathews and Yates, Manchester.  
Parsons, P., Blackburn.  
Pickup, J. H., & Co., Ltd., Bury.

**Warping Machinery:**  
Bethel, J., Manchester.  
Hall, Robert, & Sons, Bury.  
Livesey, Henry, Limited, Blackburn.  
Stott, J. H., Rochdale.  
Whiteley, Wm., & Sons, Huddersfield.

**Waste (Cotton) Picking Machinery:**  
Brooks, Samuel, Manchester.

**Wool Extractors:**  
Jarman & Son, Huddersfield