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Notices.

Correspondence and items of interest bearing upon the Textile Industries, Technical Education, or other questions treated in this Journal, are solicited. Market reports, or notes respecting the position and prospects of our Irish industries, will be specially acceptable. Correspondents should write briefly and on one side of the paper. Foreign readers are invited to send reports, and to point out any facilities which may exist for promoting the interests of Irish manufacturers.

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All remittances to be made payable to the Proprietor, F. W. SMITH, 7, Donegal Square East, Belfast.

The *Linen Market*, published every Saturday, at the above address, deals exclusively with the Irish linen trade in all its branches. Annual subscription, £1 1s. The *Irish Textile Journal* and *The Linen Market*, if ordered at the same time, will be supplied by post for £1 4s., or if within the City delivery for £1 2s. 6d., per annum.

The *Home and Foreign Linen Trade Directory* is now ready. Limp cloth, 2s. 6d.; boards, 3s.



The Belfast Technical School.



On the 21st ult., Mr. J. H. Reynolds, secretary and director of the Manchester Municipal Technical School, delivered a highly instructive and interesting lecture in Belfast on Technical Education, on behalf of the local school. He gave a descriptive sketch of this education movement of late years in England, referring to the great efforts made to pull up in the race with Continental countries which

spend such lavish amounts in aid of their industrial schools. He pointed out that the Royal Commission of 1881—which visited all the great centres of trade on the Continent—found that everywhere the English workman excelled in skill, energy, and producing power, but at the same time it was evident there was a marked inferiority in the English foreman, manager, and employer as compared with a similar class on the Continent. It was just here the difficulty arose. A better scientific and technical training on the part of those who directed the industries was needed; our capable men must understand the principles of the arts they practise; and this trained intelligence the technical school was designed to afford in aid of the practical work carried on in the mill or workshop. As a member of the deputation which visited a large number of Continental schools on behalf of the Manchester Corporation—before the erection of their new school building was decided on—Mr. Reynolds was able to give a graphic account, illustrated by a series of splendid lime-light views, of the many costly institutions for art and industrial education which he saw in France, Germany, and Switzerland, concluding his lecture by

the following reference to what Manchester was now doing in furtherance of this important question.

In 1890 the Technical Education Act was passed, the object of which was to enable local corporations to assist in providing their workers with a proper scientific training, a training which would enable them to cope with the foreigner. This Act had been taken advantage of by Manchester, and the rate of 1d. in the £1 had realised something like £12,000 or £13,000, and this, with a special grant obtained from the Government funds by the Town Council in company with other local bodies given for the same purpose, made the sum altogether £25,000. But being desirous of having that matter in their own hands, the Corporation were now going to erect a new Technical School at a cost of £120,000 or £130,000. The Manchester Town Council devoted £3,500 towards evening classes, and all the local institutions were taking active steps in the direction of encouraging scientific and technical education. Why had the Belfast Corporation not followed in the footsteps of that of Manchester? Because the ratepayers had not brought pressure to bear upon it. It certainly was not in keeping with the dignity of Belfast or its prosperity to have such a technical school as at present existed there, and he hoped that the outcome of his visit and his lecture would be to bring the people of that city to realise the importance of technical education to the maintenance of their present prosperity and the success of their local industries.

We earnestly hope it will, and that steps may soon be taken to build a suitable school in Belfast.

Uneasy Feeling throughout Germany.

In *Kuhlow's Trade Review* of the 4th inst., the present political situation of the country in regard to military service is discussed at some length; and as the article is an interesting one, we give a short extract indicating its scope.

All present indications point to the conclusion that a serious political conflict between the Government and the people of Germany is impending—a repetition of the struggle which took place in 1861-64 between King William and Count Bismarck on the one side and the Prussian Liberals on the other. But on this occasion the arena is so much wider, and the conditions in many respects so greatly different, that no prudent onlooker will venture to assume that a like termination to the contest is inevitable or even probable. The Emperor William, as his grandfather did before him, has made a demand on his subjects for an increase of their burdens in the way of personal military service and military expenditure, with which a large proportion of them are exceedingly unwilling to comply. The King of Prussia, thirty years ago, was able, however, to pursue his projects from the vantage-ground of a regal authority that was, to all intents and purposes, despotic. His subjects enjoyed only the shadow, and nothing of the substance, of constitutional self-government. Their national history and glory, nay, their very existence as a nation, were identified in a peculiar manner with the fortunes of the reigning House. The King was served, moreover, by a Prime Minister of unequalled force of character, audacity, and fertility of resource, whose antagonists in the Parliamentary arena were singularly wanting in political experience and practical statesmanship. Add to this that Count Bismarck enjoyed exceptional opportunities of so moulding external events as to make them strong arguments in his cause, and it is not surprising that he should have been more than a match for the Prussian Liberals.

The pressure of the existing military system upon the people is well-nigh intolerable, and they would not be easily convinced that an increase of these burdens is indispensable for their future safety. The issue could not be placed before them in a clear and simple form, and their verdict would be influenced by innumerable side questions and local considerations. Arguments which may seem overwhelmingly cogent to a military scientist wear a very different aspect to the heavily-taxed civilian, and are regarded with cold scepticism by the peasants and workmen, who of late years have become more and more strongly imbued with the ideas of Social Democracy. Just now, there seems to be a very considerable likelihood that the new Army Bills will not be accepted either by the Reichstag or by the constituencies in any state that the Government will deem satisfactory. And this prospect is in reality a serious danger to the continuance of European peace, for it may tempt the Emperor and his advisers to invoke in their support the stern argument of necessity, and to hasten rather than hinder that great international conflict which almost every Continental statesman believes to be sooner or later inevitable.

PROGRESS OF BELFAST.

The following statistical summary of the valuation of the city has been published. The number of new buildings was less in 1892 than previous year, in consequence of the long-continued strike in the building trade.

	NUMBER OF NEW BUILDINGS ERECTED.		INCREASE IN VALUATION.	
	1892.	1891.	1892.	1891.
Antrim side	1,253	1,430	£15,110	£18,253
Down side	859	785	8,903	8,923
	2,112	2,215	£24,013	£27,176

Total valuation of city on 1st January, 1892, after settlement of appeals, £716,502. Total valuation of city on 1st January, 1893, £740,515. Total valuation of borough on 1st January, 1862, £279,087. Total valuation of city on 1st January, 1893, £740,515. Increase in valuation in 31 years, £461,428.

During the above period (31 years) there were 41,371 new buildings erected in Belfast.



Industrial Peace and Goodwill.

HERE are clouds on the commercial horizon, and, although the sky overhead is as yet tolerably bright and clear, the most weatherwise of mercantile men—the “old tars” of trade, as they may be considered—are of opinion that storms are brewing. Keeping to the nautical illustration, it may be added that too often trade mariners have to face the worst weather with a discontented crew. This is, perhaps, not to be wondered at, much as it is to be regretted. Workmen, although much better educated now than aforesaid, and lacking nothing in intelligence, are not in touch with market movements, cannot be expected to have business knowledge or foresight, and are, naturally enough, inclined to be sceptical when profits are asserted to be nearing or to have touched vanishing point, and the necessity for a reduction in wages is insisted upon. It is not easy to impress the crew with the knowledge that the ship is in danger, although it must be obvious that, in case of disaster, all must sink together.

It is something to be thankful for that there are signs, few and slight though they may be, of an improvement in the relationship between employer and employed, although “the industrial affiliation of Capital and Labour,” which some people hope for, may yet seem to be remote, and possibly impracticable. But that there is a positive development of pacification may be confidently affirmed, even in the teeth of the great cotton trade conflict, and other disquieting but less serious disturbances. With the end of the year, those engaged in the good work of reconciliation will be summing up the results of '92—how many disputes have been settled by arbitration, how many operatives were affected, the number of Conciliation Boards which have been established as offshoots of Chambers of Commerce, and the number of trades unions which have fallen in with the movement. This may be considered as an attempt to take stock in the goodwill department of industry, with peace for profit, and, except for occasional failures to bring contending parties to agreement, with, we may hope, no loss in strife *per contra*. We may all most earnestly desire that this may become an annual event of increasing importance, with a balance on the right side progressing by the “leaps and bounds” of familiar phraseology.

Full of promise and altogether acceptable though this movement may be reckoned, its methods still seem too official and inflexible for complete success. It must not be forgotten that the principle of arbitration has long ago been adopted by the State, and that it received in 1824 the impressive acknowledgment of a special Act of Parliament. Legislative consent was again given to it in 1867 by “An Act to establish equitable councils of conciliation to adjust differences between masters and men,” and, once more, by the Masters and Workmen (Arbitration) Act of 1872. That these three statutes should have been so severely let alone is very significant. In each instance action was to be optional, but any settlement arrived at could have been enforced. There appears to be an aversion on both sides to have industry regulated by hard and fast measures. Without some elasticity in application, and unless with mutual agreement through both parties giving way to some degree, attempted conciliation or arbitration is only waste of time, and under conditions of manufacture and trade circumstances constantly changing, it is generally useless to try and impose limitations of work or wages for any stipulated length of time. Where there is an earnest desire for an honourable truce, if not absolute friendliness and harmony, there conciliation as at present practised gives an award in which both sides can cheerfully acquiesce, and which carries with it no sting of defeat or sense of injury. Whenever and at what place these amicable measures prevent all the acrimony and bitterness of a lock-out or strike, there is a distinct gain and advantage, as there is an absolute benefit in averting loss of wages and trade. It is in no spirit of disparagement that the opinion is expressed that the true value of conciliation is not yet realised, not really known, where any dispute goes so far as to be referred to and investigated by a public Board appointed for the purpose. It is not well for contention to reach the point of bringing employers and

employed into open opposition to one another. For them to meet at all is, of course, infinitely preferable to open rupture, and settlement by adjudication is, beyond all question, more desirable than for readjustment only to be brought about by the exhaustion and defeat of one party or the other. We want to prevent dissension rather than to cure it.

The term conciliation, as generally used, is misapplied. It is made to cover a modified form of arbitration, but is more correctly defined by Mr. Crompton as “doing before the fact that which arbitration accomplishes after.” It has been proved that this is not an unattainable ideal, but quite as possible as digging or spinning. There is no reason why it should not be more completely, effectually, and consistently carried out in industrial life, nor is there any just cause or impediment why single mills or separate industries in towns should not each have their own conciliation committees for the internal regulation of their own affairs, and for full and satisfactory control of all differences and grievances, as well between different workers as between some or all of the workers and their employers. In this the example of Chinese workers, as they settle all vexed questions of the kind in their own country or wherever they may have settled, is worth making a note of:

With regard to the method of settling differences between masters and men, a great deal may be learned from the Chinese. When a matter involving a conflict of opinion arises, the question is first argued at length by the master and his workmen. Should no satisfactory arrangement be arrived at, a deputation of workmen waits upon the master, and the facts are again discussed. If the dispute is not then settled, the party aggrieved has the option of calling together what is known as a “Ki Fong,” that is, he issues invitations to some of the principal Chinese in business in the city, who meet at an appointed place, hear the parties, and, after weighing the arguments, at once settle the matter by a vote of the majority. Their verdict is in all cases final, and is seldom, if ever, appealed against or disregarded.

The “Ki Fong” has frequently been the means of preventing very expensive law proceedings and prolonged conflicts between employers and employed. In selecting its members, preference is always given to the most highly educated and intelligent men, who rarely refuse to adjudicate when called upon, as it is regarded as an honour to be so selected. It is worthy of note that no witnesses are called, the verdict being based upon the statements of the contending parties alone.

If masters, as they are and must remain, could in such manner meet, not occasionally but regularly, with their men, it would be better for both. There would be a great breaking down of suspicion and prejudice, and a great accession of confidence and mutual respect. Open discussion of matters resented or felt irksome would generally lead to revision and amendment, and end in satisfaction all round, in place of smouldering hostility. The employer is often completely in the dark as to the feelings or desires of his men until discontent has in some way been fanned into an open blaze, while many of the men only know their employer by sight, and have all sorts of erroneous ideas about him. There has been no opportunity of give and take, or of looking at a contentious question on both sides, and no chance of reconciliation in the right place—before a quarrel instead of after.



Influences affecting the Industries of a Country. To the Editor of the Irish Textile Journal.

The chief agents contributing to this end are the textile press and textile schools, working together for the higher development and extension of technical knowledge. The school is powerful, the press mighty, and both merit the earnest support of the manufacturer and operative. A technical school stands unrivalled as a means of acquiring an exact and scientific proficiency in the industrial arts; but many, I may say the majority, of our workers in textiles must of necessity continue to look to the textile press as their preceptor and guide.

Time was, in the not distant past, when years of servitude, of arduous duties diligently performed, from the lowest rung of the ladder to the top, could alone qualify for a position in any of our factories. To no one could the young man of my early days go for reliable information or assistance; but, thanks to the enterprise of the textile press, these jealously-guarded secrets are now revealed, the mysteries are unlocked, and the pages on manufacturing lie open for all who wish to look; the plea of ignorance is no longer admissible. Judicious conservatism is commendable; yet men are still to be found who act as clogs to the wheels of progress, and are content to jog along in the old track. This extreme degree of reticence is now useless, and it might be interesting to learn whether such a class of men would actually know a good thing if they did see it. Our acknowledged superiority in manufacturing is due to the interchange of ideas as presented to us from time to time through the medium of Textile Journals and Technical Schools. J. L.

Practical Instructions in Linen Weaving.

II.

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much has been written on plain and fancy weaving that it is rather difficult to say anything that may not seem more or less of a reproduction. In an endeavour to give information which may not have been already supplied, I trust many of the readers of this Journal will take into consideration that they did not at all times know what I now write about. Many of our practical weavers believe that in making a piece of cloth of a given design and putting it on the market well finished is sufficient. This, in reality, is manufacturing pure and simple; but there is a risk, for if the taste of the buyer does not appreciate what has cost so much to produce, then it must be sold at a sacrifice. Successful manufacturing, therefore, involves a study of the popular taste. It is, perhaps, good business for a time to follow a class of goods that "take," but there comes a time when so many follow the same course that the market gets overstocked. Here comes the opportunity for practical men to show their ability, and they soon discover the fact that there is much more required than just to know how to make one kind of fabric. The truth is, we cannot know too much; the art of manufacturing cloth is never finally learned, there being always plenty of scope for study. Styles may be changed in the loom from a check to a stripe, with the same warp pattern; desirable changes may be made in the weave; a little coarser weft, less picks per inch—thus increasing the production and in no way altering the appearance of cloth—are matters of importance well worth consideration. I strongly advise those who are responsible for introducing designs and weaves to make them as little complicated as possible, and with a due regard to effect. The essential part is to exert all you know to increase the loom's production by using every resource in your power; do not aim at results about which you are not certain.

I will now give a few stripe patterns in a plain weave, which I think will be found suitable for the spring and summer seasons. In doing so let us keep in view the useful and profitable.

Striped Zephyrs, 30 inches wide when finished, of fast colours, 80 threads per inch of 60 lea linen yarn, same counts for weft, 72 picks per inch. These quantities may be varied; the balance can be kept by making weft picks equal to warp 80 per inch. A very neat selvage is of consequence in the sale of these, or indeed any class of fabrics. The shuttle must not be permitted to rebound in the box—hand-loom weavers are careful in this respect—and the weft must be free from flushing off the bobbin, linen being more prone to this than any other fibre, being rigid and very inflexible. Further, the yarns for making these goods must be neatly sized, so that the colours will not be sullied by an inferior compound. Hand-loom weavers could make this fabric in perfection, but I am giving what I consider the best method for its production in a power-loom. Let the back rod be put in by lifting the two front heads so that it will divide the warp in splitfuls, or two under two over the two front rods; the ordinary lease, one under one over, can be put in by raising the first and third healds for the one rod, and the second and fourth for the other rod. These remarks may be considered trifling, but I know too well that they are important in making a perfect cloth. For instance, if a catch takes place behind the third rod, there is less stretching and clouding in the cloth of the warp yarns, a blemish that cannot in any way be repaired without waste of material. Two rods may suit coarse, open reeds, but are risky in fine, close-woven goods. We may now give the warp pattern, which will be found worth reproducing:—1 of dark navy blue, 1 bleached white for 45 times, making 90 threads; 16 threads of the lightest pink, 3 white threads in one heald of 40 lea, 16 light pink, 3 white in one heald of 40 lea, 16 mid pink, 3 white in one heald of 40 lea, 16 rose; 3 white as before; 16 light marone; and repeat this pattern from the first 90 threads of blue and white, weft all bleached linen yarn of the best quality.

Second stripe pattern—180 turquoise blue, 3 white, 40 lea, 3 in a heald; 16 white bleached, 3 white, 3 in a heald; 4 red, 4 green, 4 white, 2 blue, 4 white, 2 blue, 10 white, 4 red, 4 dark green, 4 red, 3 white, 3 in a heald; 16 white, 3 white, 3 in a heald; 16 blue, 3 white, 3 in a heald; 16 white, 3 white, 3 in a heald: and repeat from the 180 turquoise blue; weft all white.

Third stripe pattern same as the second, with these changes in colours—dove for turquoise blue, dark seal brown for red.

Fourth pattern—80 China blue, 16 white bleached, all two in a heald, one heald per split or dent; 12 China blue, 80 light buff, 12 China blue, 16 white, two in a heald, and repeat from 80 China blue; weft all drab, the lightest shade possible. Perhaps it would be as well if the weft for these patterns was finer in counts, because it would not tend so much to diminish the brightness of the colours in the intersections, and there is greater length in finer yarns.

These patterns are suggestive, and may create fresh ideas. Beautiful colours in harmonious shadings will always enhance the value of goods. On this subject of colour contrast and harmony, as connected with

textiles, I shall have something to say in future communications. This is an age of originality, and those who have the faculty of evolving good crisp ideas without so much of the "rule of three" will succeed. No matter how limited may be the means at our disposal, a purpose can be effected which will tell if we exercise judgment and taste.

In selecting yarns for manufacturing purposes, no greater mistake can be made than the preference of indifferent to good yarns because of the small difference in price. This practice is generally attended with increased waste of material and faulty cloth. Yarns to be used with economy should be adapted for the work. Fine yarns for heavily picked textures, in close reeds, should be of the best quality; in fact, all fine yarns for any reed.

The tension of a warp in the loom is a factor deserving of more than a passing notice; the very best yarns may be injured by over-tension as well as by length of stretch. The excellence and beauty of a fabric depend upon the warp being properly weighted; unequal or under-tension imparts to cloth a raw, raspy, slack feel; over-tension causes breakage of the yarns and undue wear and tear of healds and reeds. The length of the "lay's" stroke and depth of shedding vary according to the nature of the fabric; but in any case there must be sufficient spring allowed to the warp threads under the action of shedding; the distance of the lease rods behind the healds, or the entire distance from the cloth to the rods, must be regulated according to circumstances or kind of work under consideration, and with reference to the material and weave. These are points well known to good hand-loom weavers, who make the best use of such knowledge by making better goods and obtaining larger earnings than those who never study these small though important details. In the power-loom it is just as necessary to use the same judgment. The strain in motion is not only in proportion to the space travelled through by the warp yarns in a given time, but also to the angle formed. The action, therefore, of a large and plunging shed is directly injurious to the warp threads: it is productive of undue breakage more than all other causes combined. The good old hand-loom weaver's advice is worth everything in power-loom weaving: "Let your shed be as small as possible, if it will just permit the shuttle to get through." It is, however, not enough that the strain or size of the shed must be diminished—there is the strain arising from the speed at which a shed is raised suddenly by the tappets or other treading motions. Sheds in the power-loom are formed upon the principle of saving time for the passing of the shuttle from side to side. Before the shuttle enters, the portion of shed raised ought to be two-thirds of the entire depth, a pause taking place in the velocity when the shuttle is about half-way through the warp shed. This pause is generally proportioned by the width of the warp in the reed; one-third of this width is a good rule for the duration of the pause; the depth of the shed during the pause, as said before, should be only sufficient to clear the shuttle's progress. The crank of the loom has two unequal pauses, the highest velocity being between these two pauses. If these two forms of motion in shedding are properly timed (every good overlooker has this knowledge), then no oscillation or swinging about of the healds can possibly take place. The complete rising and falling of the shed takes place from the time the reed strikes the pick home till the *lay* returns again. The tension or strain on the warp is eased by the *lay* striking the cloth, and this is the exact moment of time to start the shed and clear the healds before the yarn resumes its normal position.

There is another question well worth notice—healds ought to be specially adapted for fabrics. It is not an uncommon practice—supposed to be true economy—to use any kind of healds that may have been employed for other fabrics. If finer than the reed of cloth intended to be produced, the casting-out process takes place—that is, leaving a number on each shaft empty. Now it may serve the purpose for short lengths or experiments, but where the order extends to perhaps hundreds of pieces there is no possible advantage. The healds may be dirty or stained by weaving coloured yarns, or not sufficient in depth for the shedding of the goods required; and if coarser yarns are passed through, the constant friction will very soon end the life of a set of healds, perhaps almost worn out to begin with. It is not pleasant to be obliged to cut out a set in the middle of a warp and dislocate everything, so that the warp may be taken out of the loom to be redrawn in a fresh set. The loss of time and expense in cases of this kind, which do occur, is a fair proof of a penny-wise-and-pound-foolish economy. I will enter more fully into the loom motion in due time, and will conclude this paper by giving a few choice check patterns for next spring in simple or plain weaves.

The Zephyr Plaids, 30 inches in width when finished—86 threads per inch, two in a dent of 70 lea line warp and weft, 86 picks per inch. This makes a perfectly plain fabric or a balanced cloth. Tow weft cannot be used in this class of goods, even if it could be got sufficiently fine in count. Warp pattern and weft checking the same—72 dark cream, 24 dark terra-cotta or dark heliotrope, 72 dark cream, 2 terra, 12 cream, 4 terra, 10 cream, 8 terra, 8 cream, 12 terra, 4 cream, 16 terra, 2 cream, 72 terra, 2 cream, 16 terra, 4 cream, 12 terra, 8 cream, 8 terra, 10 cream, 4 terra, 12 cream, 2 terra, and repeat from the first 72 dark cream; total of one repeat, 300 threads; two shuttles, same colours as warp. Variations of colours in this pattern—pale blue for terra-cotta, very dark blue for terra-cotta, and light cream for dark; dark buff for terra-cotta, and pure bleached white for cream; dark heliotrope for terra-cotta, with light lilac for cream; Havana brown for terra-cotta, with dark

eau de Nile for cream. These variations, along with the original, will give a group of really handsome samples. The main points to be observed are—good materials; even distribution of the warp by allowing the reed to be movable, so that split markings may be avoided; a good soft calender finish; no stiffening with salts, &c.; and clear knife-edge selvages.

The following pattern, same reed, counts, etc., will be found an elegant arrangement:—12 cream, 4 dark olive, repeated 16 times; 6 red, 86 dark olive, 6 red, repeat the pattern from the first 12 cream; weft same colours and checking, 3 shuttles. Green may be substituted for red, also orange, or royal blue, mid blue, or Napoleon—in fact, all the arrangement may be altered according to taste and true harmony.

A class of shirtings is in vogue, especially for the export trade, which it may be as well to notice. Colours of cotton in warp and weft—72 ends per inch, 60 lea linen, all two in a heald, blue cotton single in heald, 40's for warp, 36 picks per inch of 35's tow weft, and 40's cotton weft.

Warp pattern—32 very light cream line, 2 red cotton, 32 light cream line, 2 blue, 8 cream, 2 blue, 8 cream, 2 blue, 8 cream, 2 blue, 8 cream, 2 blue, repeat from first 32 light cream; weft pattern the same, to square if possible with the warp pattern, which may be done by the numbers of picks per inch. There is very little diversity in patterns or colours, and the fabrics are made in a sort of happy-go-lucky manner—in fact, it appears to me and others that they are a blunder which has successfully hit the taste of purchasers; a coarser quality is much fancied for "sweet-heart" aprons, etc. My space is exhausted, but in the next article I will furnish a few apron cloth styles, and advance to twills, etc., with other information up to date in connection with fancy goods for export trade.



The Woollen Manufacture in the North of Ireland

(From a Correspondent.)



THE woollen industry of the North has been touched on in these columns from time to time, and now, at the beginning of another year, it will be interesting to note its progress.

Ten to twelve years ago the trade was a comparatively unimportant one in our province, the Lisbellaw Mills near Enniskillen (Messrs. Henderson & Eadie), and the Old Green Mills, Kells, near Ballymena (Mr. John Dinsmore), were the two largest concerns in the North; and these two were largely employed in manufacturing the wool for the growers. It is well to find they have not only held their own, but have both largely increased their output, and are making a variety of excellent cloth and other goods. The old established firm of woollen manufacturers at Bailieborough, Co. Cavan, are at present reconstructing their works with a view to increased trade.

Let us now look at other places which have started since the time mentioned, taking them as near as possible in the order in which they began.

First, about ten years ago, the Caledon Woollen Mills Co. (Messrs. Sherrard, Smith & Co.) commenced working, and have ever since steadily increased their machinery, until at the present time it ranks as the fourth largest woollen factory in Ireland, their goods commanding a ready market at home as well as in the Scotch and English centres, where sound and well-made material, from pure wool, will always command a sale. This extensive firm card and spin their own yarns, and sell to wholesale houses and shippers.

Next in order comes the Convoy Woollen Mills Co., Limited, in Co. Donegal. This concern has also a very creditable record, working for the county trade, and also on contracts. They also card and spin their own yarns.

Next come the woollen mills at Crumlin, County Antrim, known as the Ulster Woollen Co., Limited. This is a well-laid-out mill, and after five or six years' working has several times increased its output. The Company card and spin their own yarns, and their goods are sold in the wholesale market.

Fourth in order is Messrs. Ross Brothers, at Durham Street, Belfast, the Belfast Wool Spinning and Tweed Company, who are rapidly making headway, turning out a great variety of excellent goods for home and shipping use. This firm card and spin most of the yarn used, selling to the wholesale trade.

Fifth in order is the North of Ireland Woollen Company, Lara, near Castleblayney, who manufacture woollens and worsteds for the wholesale trade.

Next, we believe, comes the Shamrock Woollen Company, Larne (Messrs. Boyd & Co.), who turn out some really first-class rugs and superior tweeds. We understand their yarns are chiefly purchased from Scotch and English spinners.

Seventh—The Bunbeg Woollen Company, County Donegal, which produces serviceable homespun goods.

Next and last come Messrs. Bullick & Sons, of Coleraine, who have secured very suitable premises at Mullon Mills, County Monaghan, which they are at present fitting up, and have lately begun to weave and finish goods which, we believe, will be second to none in the trade. We wish them success in their new venture. Messrs. Duff Brothers, of Coagh, have also been successful in their make of sound goods from pure wool.

A movement is on foot among the merchants of Downpatrick to establish a woollen factory in that town. This is a step in the right direction, and an example which might be followed in other northern towns with advantage and profit, seeing that the concerns already referred to have year after year gone on increasing their trade. Having regard to the depressed condition of agriculture is all the greater reason for developing our manufacturing industries, and there is room for many more woollen mills throughout Ireland. Labour is cheap in many districts, water-power abundant, and the peasantry very quickly learn.

A report lately appeared in the Dublin papers respecting a woollen factory being started by the Lady Superior in connection with a Convent in Foxford, County Mayo, where nothing of the kind previously existed. We sincerely trust her efforts will be successful, and that some of the poor peasantry in that wild and congested district will in the near future be able to earn their daily bread at this manufacture. Many thousand pairs of blankets, and thousands of webs of flannel and rough dress goods, come yearly from Yorkshire and Scotland to supply our workhouses and other Irish institutions, part of which at least might be made by our own people, giving employment to many workers, and at the same time educating them for making a better class of goods. Why cannot an effort be made to revive and extend the woollen trade, which in days gone by was a flourishing industry, especially in the South and West?

In looking back for the past ten years, there is every reason to be hopeful of the future of this manufacture, which has increased well-nigh ten-fold, and all our mills are doing fairly well. To take one example of progress, we may mention the mills of Sherrard, Smith & Co., at Caledon. This firm, we understand, has for several years been favoured with direct orders from Her Majesty the Queen and the Royal Princesses for costume cloth, which the firm supplies, and they now hold the Royal warrant as "Makers to Her Majesty." The demand for this peculiar class of costume cloth which Her Majesty patronises has increased so much that the firm have lately doubled their producing capacity, and the manufacture of this beautiful home-spun cloth has become a speciality with them. The patronage of royalty was quickly followed by a considerable demand from the aristocracy; for we understand that during the present season the firm have manufactured costume cloth for nearly one hundred ladies of title, indicating the success of this excellent material in the world of fashion. Some of the new samples are in various shades of green, blue, and heliotrope mixtures, the novelty and peculiar blending of the colours leaving nothing to be desired. The special feature of this home-spun material is that it is suitable for hard wear, and is much sought after for costume and coating purposes.

In another paper we shall refer to the specialities of other firms which of late years have taken well in the market. On the whole, the woollen trade of the North is in a sound and healthy condition, and bids fair to materially extend; and we may with confidence predict a good future for it. Without manufactures of some class spread over the country, a large proportion of our people cannot improve their position; and if only more attention were paid to the development of industries and less to politics, there would soon be far less discontent in many a home.



The Making-up Trades.

The Apron and Pinafore Spring Trade.

IN the various branches of the making-up trades a very satisfactory amount of business is passing. Since the first series of spring orders were booked by the apron and pinafore makers two months ago, chiefly for holland goods of various kinds, further orders have been coming forward freely. Almost as quickly as the manufacturers have been able to put successive ranges of samples before the trade, buyers have been making their selections and placing their orders. Indeed, in this respect, they have this season acted with a promptitude they do not always display. As a result, the factories generally are working up to the full extent of their productive power, some difficulty being met with in procuring a sufficiency of workers. In the light of the difficulty that, in this respect, is experienced in all the industries in Belfast where female labour is employed, the expression given utterance to by a local newspaper lately of the necessity for the establishment of fresh industries to provide employment for the rapidly increasing population of Belfast reads strangely enough. There is a considerable run upon prints, and leno and fancy goods are again coming into favour. Lawns are in growing demand, in this department the factories being much served and convenience by the extensive stocks of white goods now kept in this city by several leading English manufacturers.

Shirt and Collar Factories.

The principal manufacturers are now well engaged on orders for the English warehouse trade, for delivery within the next couple of months. A good deal of buying has resulted from the advance in prices in the

cotton market, there being a general feeling that, however the present labour dispute in Lancashire may end, values are not likely to go back to the very low level of three months ago for a considerable time to come. Collars, cuffs, and fronts, in the ordinary lines, are selling steadily, though it is regretful to find the old complaint of cutting prices again cropping up. Ladies' shirts and blouses, the manufacture of which has so largely increased the turnover of the factories for the last few seasons, are again in request, and are still likely to "go" for some time to come.

Where is the Merchandise Marks Act?

In a recent issue of this Journal I stated that, as regards the alleged sale of goods manufactured from unions as all-linen, no such thing could be general; that no buyer was under any misapprehension as to the nature of the goods he purchased; and that no maker-up had any interest in deceiving the purchaser as to the nature of the material from which his goods are manufactured. All that is, I am assured, in the main correct, and the bulk of the trade of the making-up houses is honestly and uprightly carried on. Nevertheless, I am informed that one or two manufacturers have been endeavouring to find their profit in being exceptions to the general rule. For the present I will refer to only one of these, merely premising that my information is derived from reliable and responsible sources, and merits the consideration of the Linen Merchants' Association. It is stated positively that considerable quantities of fronts or "dickies"—in the manufacture of which a substantial amount of fine linen ought to be used—have recently been made and sold, of which only the surface of the fronts—a small part of the whole—is linen, and the remainder cotton or union, the entire article being stamped "all linen." The stamp is placed upon the linen portion of the garment—a very poor attempt to evade the provisions of the Merchandise Marks Act. It is alleged that the action of the manufacturers was done at the dictation of the buyer for a leading wholesale house in England. The names of the alleged offenders have been given to me in confidence, but I think the matter should be followed up by the Association, and, if the case be as stated, that steps should be taken to stop the practice.



The Irish Woollen Trade.

The Present Position.

THE new year upon which we have just entered finds the Irish woollen trade occupying a stronger and more stable position than it has done at any past period of its history. Manufacturers, as a rule, are working entirely to order, a gratifying state of trade that has prevailed throughout the year just ended, a year which, favoured by the low rates ruling for wool, must have been very fairly remunerative to makers generally. They have also been fortunate in escaping the interruption to trade that has so sadly inconvenienced many of their Yorkshire brethren, for whose shoddy-woven fabrics a large part of the raw material consists of imported rags. Upon the importation of these an embargo was laid during the prevalence of the cholera scare, the result of which was to interfere considerably with the even course of business in several of the principal English woollen manufacturing districts. Ireland has never been a shoddy manufacturing country, though frequently the adoption of that inferior branch has been urged upon our manufacturers by unwise friends, and, consequently, the trade in this country has gone on steadily and undisturbed throughout.

Another trade development that has been of signal benefit to the woollen manufacturers of Ireland has been the demand in the ready-made clothing business for garments of a superior quality and greater cost than were generally produced in that trade some years ago. Ready-made clothing, especially in the large towns across the Channel, is now being purchased by a class who would not have dreamt of so doing a few years ago, and, indeed, for whose wants no attempt was at that time made to cater. This demand for something better in the made-up end has led to a corresponding demand for Irish tweeds and serges, which are most admirably suited for the higher qualities of ready-made goods. This outlet for Irish woollens has not been, however, sufficiently looked after even up till now; careful attention to it would within a very brief period bring the demand for Irish woollens up to a point far beyond the present possible power of supply. All these various circumstances have tended to place the Irish woollen manufacturing trade at the beginning of this year in a much more favourable position than that enjoyed by their competitors in any other district in these kingdoms.

Superior Quality of Irish Woollens.

None of the circumstances above-mentioned, nor all of them together, would, however, be sufficient to account for the prosperity of the Irish woollen trade, though they have been valuable aids to it. The true basis of that prosperity is to be found in the genuine excellence and superior quality of the goods themselves, covering in this description the whole ground of make, texture, colouring, design, and finish. It is highly creditable to the Irish woollen manufacturing industry, and furnishes a remarkable instance of trade progress, that whereas a dozen years ago our manufacturers were content to aim at attaining the degree of excellence prevailing in the manufacturing districts across the Channel, they have

since then, as a matter of fact, so far surpassed their competitors in those districts, that English and Scotch woollens are at the present day frequently sold by unscrupulous merchants as Irish. And with some, at least, of our manufacturers the improvement continues. Several of our leading manufacturers, and notably the Belfast Wool Spinning and Tweed Company, are now producing tweeds of great perfection of texture, and of marked excellence of design and finish, that are an improvement upon anything they have produced in any previous season; and I have recently seen serges by Dinsmore of Kells that, as regards quality and appearance combined, are unapproached by anything that is being produced across the Channel. No one likes to earn the reputation of being a "croaker," but I should like to repeat the very necessary warning given in previous issues as to the necessity of giving increased attention to novelty of design and to finish. The designs of some of our manufacturers—whether these know it or not—are being anything but admirably spoken of in the home trade warehouses on both sides of the Channel. The reputation of some of our best houses, as manufacturers, has been slowly enough built up; having gained a fair reputation, it would be regretful to see such injured by want of enterprise, or continued carelessness in the matter of designs. An "established reputation" will remain established just so long as there is continued merit to sustain it.

Stamping of Irish Woollen Goods.

The practice of stamping or sealing Irish woollens with the names or trade marks of the makers at intervals of a few yards on the back of the cloths, has been regarded by many persons well competent to judge as being one of the chief factors in maintaining unassailed the high reputation for durability and soundness they have always merited, and as having contributed in no small degree to the present prosperity of the trade. The practice was a wholesome and convenient one for all concerned. The maker had an interest in maintaining the standard of quality, and in securing to himself the repute resulting therefrom; the wholesale merchant used it as a ready evidence that the goods he was selling were really what he represented them to be; the retailer—say of Irish serges—could point to the four-leaved shamrock of the Mahonys, or other Irish trade marks, as his justification for asking for them somewhat higher prices than for other equally sightly but inferior fabrics; while the wearer, to whom durability was a desideratum, bought without hesitation or misgiving the goods upon which he saw the Irish seal. And thus the fame of Irish woollens has each season grown with their increasing consumption, every fresh transaction enhancing their reputation for that durability which they have undoubtedly always possessed, whatever else they may have excelled or failed in.

It is therefore a matter of both surprise and regret to find that a considerable degree of laxity has recently crept into the Irish woollen trade as regards the vitally important practice of sealing. Some manufacturers have begun to seal or not to seal, just as their wholesale customers may dictate, and are, in so far, adopting about as suicidal a policy as their worst enemy could devise for them. The majority of wholesale houses, including by far the largest buyers, still receive the goods sealed on the back, and ticketed on the ends of the pieces. Some, however, will only take them with loose tickets attached to the ends, and unsealed; a few others will not receive them if the maker's trade mark be attached in any way, either by seal or ticket. And, indeed, of the two latter courses, the attaching of loose trade-marked tickets to goods otherwise unmarked as Irish is by far the more objectionable. It provides unscrupulous salesmen—and the existence of a small percentage of such may be reckoned upon in an age that has found the Merchandise Marks Act a necessity—with an easy means of transforming into Irish tweeds and serges goods that have never been made in this country at all.

Stamping from the Warehousemen's Point of View.

One of our leading manufacturers, in conversation recently, stated that, however much he regretted it, the sending out of unstamped woollens to some of his customers was forced upon him by their refusal to receive them otherwise, and that, in this regard, the chief lead was taken by two or three of the Irish wholesale houses. Now, I take leave to say, as a matter affecting the trade generally, such action on the part of Irish warehousemen is highly injudicious. A worse policy, from their own standpoint, could hardly be imagined. Some of them are now doing a substantial business across the Channel, and the sole and only pretext for the presence of their travellers there is that they come to offer goods manufactured in Ireland. It is their direct interest to preserve, not only the seeming, but the reality of Irish manufacture in the fabrics they sell. The warehousemen who at present are making so strong a point of having their woollens undistinguished by any mark or seal doubtless mean to act with perfect straightforwardness and honesty, and their only object in having the goods unsealed may be to prevent retailers making too easy a comparison of prices, as to which latter it would be easy to show that stamping has little effect one way or other. But as to honest dealing with the goods—selling only as Irish what is Irish—they ought to remember that if one house can get its goods unstamped so can another. It is the weakness of almost every buyer to suppose that something special will be done for him that would be done for no other buyer; but it is a delusion, and not always a harmless one. The question fair-dealing warehousemen have to consider is, if the sale of Irish woollens unstamped become the rule, what protection would they have against less honest

The Belfast Linen Trade Report.

DRAWN UP BY THE LINEN TRADE BOARD, APPOINTED UNDER THE SANCTION OF THE BELFAST CHAMBER OF COMMERCE.

TOWARDS the close of last year an improved feeling sprung up in trade circles, and although usually at this period business is slow, there is now a slight improvement, compared with the dull condition, especially of the home market, for some months previously.

FLAX.

The Irish markets are closing up much sooner than usual, as the supplies of last year's crop are getting exhausted. An estimate just published by the Flax Supply Association gives the yield of 1892 crop as 9,822 tons against 12,433 in 1891, a decrease in the Irish supply of 21 per cent. The following market reports give the prices obtained by farmers at open sale, but it should be added that buyers all through the season were always picking up the best lots they could secure at the various scutch-mills, and at prices ranging from about 8/- to 10/- per stone.

December 31st.—BALLIBAY—3 tons of milled, prices from 5/6 to 8/6, and 3 tons of hand-scuthed, which varied from 5/- to 6/6; market well attended by buyers. BALLYMENA—17 tons of milled, prices from 5/9 to 8/6; usual quality; market fairly attended, and demand firm. COOKSTOWN—10 tons of milled, varying in price from 5/9 to 8/9. *January 3rd.*—ARMAGH—1 ton of milled, which sold from 5/9 to 8/6. MONAGHAN—11 tons of milled, prices from 5/- to 8/4, and 3 tons of hand-scuthed, prices ranging from 3/10 to 6/4½; quality mixed. *4th.*—RATHFRILAND—13 tons of milled, prices from 5/6 to 7/6. *5th.*—BALLYMONEY—61 tons of milled, prices from 50/- to 70/-; full attendance of buyers; demand very brisk, and all flax quickly bought up. NEWRY—11½ tons of milled, varying in price from 5/6 to 7/-; market fairly attended, and demand steady. *6th.*—BELFAST—1½ tons of milled, which sold from 5/9 to 8/9 per stone. *7th.*—BALLYMENA—12 tons of milled, prices from 6/- to 8/9; usual quality; good attendance, and demand brisk.

YARNS.

Since last report there has been a steadily improving demand for yarns, increasing from week to week, so that at the present time spinners are very slow to enter into any fresh engagements, even at the extreme rates now required. Stocks of all kinds have been reduced to a very low point in spinners' and merchants' hands, and the tendency of prices is strongly in favour of sellers. Foreign yarns have advanced so considerably in price that buyers here cannot follow them.

BROWN POWER AND HAND-LOOM LINENS.

An improved demand has lately appeared for light bleaching linens, the coarser setts having most attention; power-looms are now well engaged, and prices much firmer. For the medium and heavy grades a very steady business is doing. In the hand-loom end Ballymena cloth has been freely bought lately, and prices, except in the finer setts, are higher than last month. County Down makes share in the improvement, and prices are fractionally increased. Stocks of all kinds of hand-loom linens are now much less in manufacturers' hands. Cloth for dyeing is still quiet, and rates unchanged. Roughs have come in for more attention, and supplies are light, prices showing a much firmer tone. More inquiry has appeared for drills, and in union glass-cloth, towelling, and sundry goods of union make a very considerable trade is doing, stocks of all con-

tinuing in small compass, and prices tending higher. In linen handkerchiefs, both power and hand-loom, demand is still slow; but in the latter there is perhaps a little more doing. Cambric cloth and handkerchiefs have very much improved, compared with their previous condition, and prices are stronger. The damask branch also appears to have come in for more inquiry, and orders for both power and hand-loom goods are somewhat larger.

BLEACHED AND FINISHED LINENS.

Home Trade.—Since the first of the year there has been a better tone in this branch of trade, and a few more orders are now coming to hand. At the same time there is room for considerable improvement, as the dulness has been of long duration.

Continental.—Very little change to note since last month, quietness being the ruling feature with these markets. Germany and Italy have taken larger supplies for last month, but there is a falling off with France, Spain, and the Canaries.

United States.—Reports continue of a gratifying nature regarding season's business, and the outlook for the new year is encouraging in many respects. According to the Board of Trade returns, the shipments of linen piece goods from the United Kingdom were upwards of 16 per cent. over the corresponding month of 1891.

Other Markets.—The year's trade with the Foreign West Indies was quite equal to previous year, and this market shows an improving tendency of late. With the Argentine Republic a very large increase is officially reported. British North America was also a larger customer; but with Brazil, Mexico, the Philippine Islands, and Australasia there is more or less of a falling off in the shipments.

For the year ended 31st December, 1892, the total quantity of linen piece goods exported from the United Kingdom shows an increase of 7.4 per cent., and values of 4.7, compared with 1891, which, having regard to the great depression that affected the general export trade of the kingdom, must be regarded as a very satisfactory result of the year's trading.

EXPORTS OF BRITISH AND IRISH PRODUCE AND MANUFACTURES.

TWELVE MONTHS ENDED 31ST DECEMBER.	1891.	1892.
Animals, living,	£671,312	£696,540
Articles of food and drink,	10,699,290	10,427,066
Raw Materials,	21,332,224	19,328,935
Articles manufactured and partly manufactured, viz. :—		
A. Yarns and Textile Fabrics,	105,996,484	100,065,975
B. Metals and Articles Manufactured therefrom (except Machinery),	39,210,022	33,057,739
C. Machinery and Mill Work,	15,817,515	14,798,716
D. Apparel and Articles of Personal Use,	11,331,470	10,419,142
E. Chemicals, and Chemical and Medicinal Preparations,	8,877,712	8,587,506
F. All other Articles, either manufactured or partly manufactured,	32,203,658	28,676,725
G. Parcel Post,	1,095,463	1,001,880
Total value,	£247,235,150	£227,060,224

Prices Current for ordinary Line and Tow Wefts. January 13th, 1893.

LEA NOS.	14	16	18	20	22	25	28	30	35	40	45	50	55	60	65	70	75	80	85	90	100	110	120	130	140	150	160							
Line Wefts	—	—	—	7/6	6/9	5/9	5/3	5/-	4/7½	4/4½	4/3	4/1½	3/10½	3/9	3/9	3/9	3/9	3/9	3/9	3/9	4/-	4/1½	4/4½	4/6	4/9	5/-	5/3							
Tow Wefts	5/9-	5/1½	4/10½	4/9	4/7½	4/6	4/4½	4/4½	4/3	4/1½	4/-	3/10½	These prices are per bundle of 60,000 yards of grey Yarn, subject to the usual discount for cash.																					
																							120 threads 24 yds.—1 lea				12 leas—1 hank				16 hanks 8 cuts—1 bundle			

competitors who would offer Scotch and Yorkshire goods of similar make and design as Irish? and if the distinctive markings of Irish woollens be done away with, where would then be the *raison d'être* of their cross-Channel trade?

The whole question demands the early and earnest consideration of the Irish manufacturers. They can deal with the matter easily, and, in doing so, will have the co-operation of the more far-sighted and reasonable of the warehousemen—if they deal with it in time. It has hitherto been treated without sufficient consideration, and in a spirit of opportunism. The longer such prevails, the more difficult will any satisfactory action become.

Belgian Linen and Cotton Industries.

From exchanges to hand we find it stated, at a meeting of the Ghent Town Council on the 29th ult., that the trade of the town had come to a standstill of late, as these two principal industries had made little or no progress. It is also mentioned that the Chamber of Commerce of Courtrai had petitioned the Government against Article 4 of their bill of 13th December, which would reduce the hours of labour for women and children, and such a course the Chamber considered would be most injurious to the linen trade, as well as depriving the workers of part of their living.

Exports of Linen Yarns and Linens from the United Kingdom for the Month ended 31st December, 1892; and in the Twelve Months ended 31st December, 1892, compared with the corresponding periods of the Years 1890 and 1891.

COUNTRIES.	MONTH ENDED 31st DECEMBER.						TWELVE MONTHS ENDED 31st DECEMBER.					
	Quantities.			Declared Value.			Quantities.			Declared Value.		
	1890	1891	1892	1890	1891	1892	1890	1891	1892	1890	1891	1892
LINEN YARN.	Lbs.	Lbs.	Lbs.	£	£	£	Lbs.	Lbs.	Lbs.	£	£	£
To Germany,	225,200	211,206	255,500	19,475	16,669	22,937	2,778,100	3,217,000	2,801,200	228,278	260,857	237,725
Holland,	146,000	198,000	213,300	5,415	6,613	7,382	2,184,600	2,216,400	1,892,200	78,274	77,487	68,825
Belgium,	144,200	109,400	153,900	11,238	9,784	11,379	1,859,800	1,640,700	1,492,800	142,204	140,772	118,863
France,	93,200	158,900	121,200	10,665	16,295	12,764	1,402,300	1,566,000	1,319,300	148,575	171,622	147,306
Spain and Canaries,	303,400	238,200	229,800	10,929	8,334	10,083	3,860,700	3,659,000	4,900,000	138,361	133,330	182,267
Italy,	45,600	42,200	19,100	2,420	2,106	1,043	511,100	432,800	368,600	24,771	20,936	17,494
United States,	16,600	12,700	46,900	799	647	1,304	1,074,900	875,200	532,900	28,242	14,229	17,406
Other Countries,	148,700	182,200	253,500	7,638	7,965	11,660	1,641,100	1,752,800	2,170,800	77,688	79,793	99,290
Total,	1,122,900	1,152,800	1,293,200	68,577	68,353	78,552	15,312,600	14,859,900	15,477,800	866,393	899,026	889,176
LINEN MANUFACTURES.	Yards.	Yards.	Yards.	£	£	£	Yards.	Yards.	Yards.	£	£	£
To Germany,	213,700	265,500	324,900	11,277	13,162	16,483	3,234,400	3,581,900	3,594,400	155,929	172,434	175,732
France,	240,900	209,600	96,600	11,619	8,874	4,656	2,738,700	2,149,600	1,894,500	123,832	94,590	86,637
Spain and Canaries,	86,400	82,600	49,400	3,496	3,214	890	1,307,500	1,487,000	1,378,500	48,693	54,383	54,546
Italy,	69,800	61,900	74,500	3,223	2,622	2,950	915,400	841,800	930,800	39,189	37,053	41,417
United States,	6,994,900	7,640,100	8,872,600	163,365	162,803	188,477	98,226,600	80,603,900	96,474,300	2,103,926	1,720,133	2,012,825
Foreign West Indies,	1,569,500	1,373,200	1,023,100	28,257	26,824	18,441	24,053,900	18,081,100	17,748,700	451,030	345,278	339,829
Mexico,	215,500	210,600	153,300	4,341	4,596	4,200	2,436,600	2,225,100	1,683,600	58,996	52,679	42,182
United States of Colombia,	399,100	258,800	285,500	6,778	4,334	4,305	3,776,000	3,484,600	3,450,500	63,073	60,623	57,829
Brazil,	340,200	132,000	233,000	10,406	4,876	7,144	3,540,000	3,416,300	2,885,100	119,336	112,869	83,210
Argentine Republic,	27,900	16,900	142,700	1,083	646	5,503	996,500	540,000	1,236,200	28,288	13,389	39,095
Philippine Islands,	145,500	98,000	34,000	2,292	1,342	419	975,100	1,016,800	397,100	18,898	17,545	6,760
British North America,	627,700	832,900	1,041,800	13,080	16,003	22,765	6,596,200	7,310,500	8,766,100	138,343	144,376	177,047
British West India Islands & Guiana,	207,400	145,000	167,100	4,094	2,896	3,081	2,257,600	2,007,000	1,905,200	46,362	39,923	33,604
Do. East Indies,	218,300	218,000	255,400	6,315	5,596	7,257	3,265,400	3,041,100	2,911,800	93,102	84,522	81,760
Australasia,	1,260,200	1,784,600	999,200	33,327	49,704	29,417	12,484,100	13,625,600	10,817,900	355,659	375,725	293,414
Other Countries,	1,326,600	1,385,600	1,351,500	31,453	27,862	26,448	17,235,800	16,045,400	15,244,900	410,268	383,442	352,466
Total Plain, Unbleached, or Bleached,	12,473,200	13,574,700	13,545,100	288,682	301,643	301,659	165,498,900	144,416,700	156,303,900	3,739,513	3,263,463	3,449,287
Total Checked, Printed, or Dyed, and Damasks or Diapers,	1,236,500	936,300	1,305,400	35,153	24,297	29,956	14,859,300	11,807,600	12,100,200	353,131	301,279	300,483
Sail Cloth and Sails,	234,300	204,300	234,100	11,071	9,414	10,821	3,681,600	3,233,400	2,916,000	162,280	144,227	133,583
Total of Piece Goods,	13,944,000	14,715,300	15,084,600	334,906	335,354	342,436	184,039,800	159,457,700	171,320,100	4,254,924	3,708,969	3,883,353
Thread for Sewing,	257,400	213,100	218,500	31,813	26,756	28,111	2,949,000	2,474,100	2,457,700	353,985	309,626	309,338
Other Articles, .....	.....	.....	.....	84,562	69,854	76,005	.....	.....	.....	1,101,259	1,013,601	974,604
Total Value of Linen Manufactures, .....	.....	.....	.....	451,281	431,964	446,550	.....	.....	.....	5,710,168	5,032,196	5,167,295

Importations of Flax—Dressed, Undressed, and Tow or Codilla of:

COUNTRIES.	MONTH ENDED 31st DECEMBER.						TWELVE MONTHS ENDED 31st DECEMBER.					
	Quantities.			Value of Imports.			Quantities.			Value of Imports.		
	1890	1891	1892	1890	1891	1892	1890	1891	1892	1890	1891	1892
From Russia,	Cwts.	Cwts.	Cwts.	£	£	£	Cwts.	Cwts.	Cwts.	£	£	£
From Russia,	123,953	102,513	74,288	172,950	138,387	105,020	1,333,138	1,140,988	1,214,998	1,720,854	1,499,803	1,589,275
Germany,	3,492	1,305	3,765	4,977	1,840	6,043	29,998	46,793	52,983	46,168	62,500	60,141
Holland,	7,686	9,519	13,804	20,485	23,805	28,643	98,463	87,104	100,631	266,274	219,929	215,287
Belgium,	28,947	42,016	44,527	74,672	113,848	114,625	288,296	324,534	297,065	759,812	893,196	754,001
Other Countries,	3,450	2,915	3,501	4,668	3,599	5,612	50,574	81,806	45,467	63,168	99,761	55,067
Total,	167,528	158,268	139,885	277,752	281,479	259,943	1,800,469	1,681,225	1,711,144	2,856,276	2,775,189	2,673,771

IRISH FLAX AND YARN PRICES.

Lowest and Highest average Prices of Irish Mill-scuted Flax, and Quotations for 100's Line Weft and 25's Tow Weft Yarns, from 1852 to 1892.

Year.	Acreage under Flax in Ireland. Statute Measure.	Irish Flax, per stone.		100's Line Weft, per bundle.		25's Tow Weft, per bundle.	
		Lowest Average	Highest Average	Lowest Quotations	Highest Quotations	Lowest Quotations	Highest Quotations
1852	137,008	6/6	8/9	3/10½	4/3	4/3	4/6
1853	174,579	8/6	9/3	3/10½	4/3	4/6	4/10½
1854	150,972	7/4½	9/1½	3/4½	4/-	4/9	5/6
1855	97,106	7/4½	9/3	3/4½	3/10½	4/6	5/3
1856	106,826	8/4½	9/3	3/6	3/10½	5/1½	5/4½
1857	98,074	8/-	9/4½	3/6	3/10½	5/4½	6/4½
1858	91,646	8/-	10/1½	3/6	4/6	5/4½	6/7½
1859	136,282	9/-	10/9	3/9	4/6	6/1½	6/10½
1860	128,595	7/7½	9/-	3/9	4/3	6/1½	6/4½
1861	147,866	7/3	8/10½	3/9	4/3	5/3	6/3
1862	150,070	7/3	8/9	3/9	6/-	5/3	8/-
1863	214,099	8/6	8/10½	4/3	4/10½	7/-	10/6
1864	301,693	7/3	8/10½	4/7½	5/7½	8/3	10/4½
1865	251,534	7/3	11/-	4/7½	7/3	5/9	8/10½
1866	263,507	10/3	11/6	5/6	7/3	6/9	8/6
1867	253,257	10/-	10/9	4/3	6/4½	5/4½	7/-
1868	206,446	9/9	10/3	4/3	5/1½	5/7½	7/1½
1869	229,178	8/9	10/9	4/-	5/-	6/-	7/1½
1870	194,893	7/3	8/9	3/6	4/-	5/9	6/3
1871	156,883	7/6	9/6	3/6	4/9	5/9	6/10½
1872	122,003	7/9	9/6	4/9	5/1½	6/9	7/6
1873	129,432	7/10½	9/4½	4/6	5/4½	6/9	7/-
1874	106,886	7/1½	8/6	3/10½	4/6	6/4½	6/9
1875	101,248	7/-	9/3	3/9	4/4½	6/3	6/9
1876	132,878	7/9	9/3	3/7½	4/4½	6/-	6/9
1877	123,362	7/4½	8/3	3/6	3/9	5/9	6/3
1878	111,808	6/7½	7/4½	3/3	3/7½	5/3	5/9
1879	128,004	6/10½	8/3	3/3	5/-	4/9	6/3
1880	157,534	7/-	8/3	8/9	5/-	5/1½	6/3
1881	147,085	6/9	7/3	3/4½	3/9	5/1½	5/4½
1882	113,484	6/4½	6/9	3/3	3/6	5/-	5/1½
1883	95,943	6/4½	6/7½	3/3	3/3	4/9	5/-
1884	89,225	5/10½	6/9	3/3	3/6	4/9	5/1½
1885	108,147	6/6	7/3	3/3	3/9	5/1½	5/10½
1886	127,890	5/8	7/-	2/10½	3/3	5/3	5/3
1887	130,284	4/8	7/3	2/9	2/10½	5/-	5/1½
1888	113,613	4/10	7/7½	2/9	3/-	4/9	5/1½
1889	113,652	4/11½	7/9½	3/3	3/7½	4/6	5/-
1890	96,896	4/5	7/-	3/1½	3/7½	4/1½	4/4½
1891	74,665	4/8	7/6	3/3	4/1½	4/6	4/10½
1892	70,642	4/10	7/9	4/-	4/3	4/6	4/6

EXPORT TRADE IN LINEN YARNS AND LINENS.

The following statistics show the Export Trade of the United Kingdom since 1875.

Year.	Linen Yarns.		Linens.	
	Quantity. Lbs.	Value. £	Quantity. Yards.	Value. £
1875	27,887,681	1,885,684	204,573,172	7,272,920
1876	22,278,259	1,449,513	162,968,988	5,620,636
1877	19,216,001	1,291,729	177,766,527	5,834,443
1878	18,473,800	1,213,025	160,801,700	5,534,776
1879	17,428,800	1,075,967	160,310,600	5,473,127
1880	16,477,500	978,318	164,966,600	5,836,019
1881	18,250,200	1,057,799	174,011,400	5,846,361
1882	18,156,400	1,037,379	176,451,100	5,968,606
1883	17,678,300	1,057,912	162,256,100	5,489,569
1884	19,533,700	1,135,787	155,317,000	5,180,038
1885	16,600,200	986,538	149,468,600	4,961,093
1886	15,891,700	935,225	163,773,200	5,259,182
1887	16,380,900	939,763	164,511,400	5,454,715
1888	14,696,900	886,918	176,731,600	5,552,441
1889	13,944,700	849,263	180,630,200	5,777,465
1890	15,312,600	866,393	184,039,800	5,710,168
1891	14,859,900	899,026	159,457,700	5,032,196
1892	15,477,900	839,176	171,320,100	5,167,295

Note.—The value in this last column includes thread for sewing and "other articles."

IMPORTS AND EXPORTS, BELFAST.

Imported into and Exported from the Port of Belfast from 1886 to 1892, per Harbour Board Returns.

	IMPORTED.					
	1886. Tons.	1887. Tons.	1888. Tons.	1889. Tons.	1890. Tons.	1891. Tons.
Flax ...	12,118	18,365	21,455	24,806	21,458	26,709
Linen Yarns	2,678	2,911	4,113	3,789	3,393	3,607
Cotton "	2,612	2,632	2,774	2,683	2,879	3,633
Jute "	21	24	23	15	77	201
Linen Goods	1,518	1,997	2,035	2,298	2,363	2,513
EXPORTED.						
	1886. Tons.	1887. Tons.	1888. Tons.	1889. Tons.	1890. Tons.	1891. Tons.
Flax ...	2,823	2,835	2,181	2,575	3,997	3,803
Linen Yarns	7,853	7,876	8,174	7,613	8,763	8,860
Cotton "	76	85	72	90	143	149
Jute "	—	—	—	—	—	5
Linen Goods	26,834	28,942	30,259	31,248	34,506	33,699
Cotton "	498	471	457	564	592	937

Southern Notes.

(From a Correspondent.)

Industrial Art Work.



ALTHOUGH this Journal is identified with the textile industries of Ireland, it is interesting to note from time to time the growth of industrial work in other departments, more especially those in which art occupies a prominent place. Some time ago attention was drawn to the establishment of a colony of artistic workers in the ancient and historic town of Youghal (Co. Cork), where, through the enterprise of a firm of art workers in wood, stone, metal, and stained glass, whose head-quarters are in London, a branch was formed in this southern town. After much labour and the expenditure of capital, this interesting industry has attained a very creditable headway. The firm of Messrs. Cox, Sons, Buckley & Co., who for many years had a portion of their art work done at their branch house in Bruges, find that their Irish establishment is able, after the training which they have given to their hands, to turn out work which will favourably compare with anything of a similar kind produced either at their London establishment or abroad.

At one time there was a large and flourishing cabinet and carved furniture factory founded by a family named Blackall in Youghal, which existed to the "famine" years of '48 and '49. Some beautiful pieces of antique furniture, such as book-cases, sideboards, chairs, &c., still remain in the country, of the "Sheraton" style of work, and produced in Youghal. A large quantity of coarse flannel was also woven there years ago; but all trace of such textile industry has long since disappeared. It is still famous, however, for its lace, which has already attained high rank on account of the design and beauty of its workmanship. The improvement in lace is to some extent due to the teaching and models from the authorities of the Kensington Museum. The success of the special art work now referred to is due to the taste, skill, and trained knowledge on the part of the artists and artisans of this London firm, which is able to successfully compete with German and other foreign firms, who previously made a "happy hunting-ground" of Ireland for orders. Through the encouragement and patronage received from both Protestant and Catholic Churches, this art colony is now steadily advancing and daily gaining in repute, thus keeping for home distribution a considerable sum of money which would otherwise have been spent abroad. The following are amongst some of the most recent works executed at Youghal:—

A marble font for Berehaven Church, the capacious bowl of which, hewn out of a block of white marble, is supported by pillars of Irish coloured marbles, with exquisitely carved capitals, resting on bases of Cork polished limestone. The font, surrounded by a well-wrought railing, is a fine specimen of Irish carving, and a great ornament to the church.

At Iniscara Church, Co. Cork, there has just been erected a beautiful stained glass window, which was designed and executed in the workshops at Youghal. The window is divided into three lights, the central one representing the parable of the "good Samaritan," the side lights being filled with ornamental tracery. The design is perfect, and the tones of colour excellent and harmonious. This window has been erected in memory of the late well-known Dr. Barter, of St. Ann's, near Blarney.

In Shandon Church, Cork, the chancel has been artistically decorated (under the direction of Mr. Hill, the architect) by this firm, the decorative details being treated in "Renaissance" types, which are appropriate to the classic style of the edifice. The interior effect is most pleasing, and worthy of the church of the far-famed "Bells of Shandon."

In the Church of Glynn, Co. Antrim, another fine work from the Youghal studios, namely, an "ambon" pulpit, is worthy of attention. Its sides are arcaded with "Tudor" arches, the carvings in the soffits being of the same type as seen in the lovely chancel of Holy Cross, of Tipperary. At the angle, under the book-rest, is a figure of an angel in "linden" wood, in an attitude of rapt attention, the hands being clasped in prayer. This work is made in oak and walnut woods, and is a good specimen of the carver's art.

Some months ago a very fine specimen of Irish carving and joinery was erected in the historic church of Carrickfergus, in the shape of the new pulpit, which was designed and executed in the workshops of Messrs. Cox & Buckley, in Youghal. The style of this pulpit is of the best period of the "Renaissance." It is executed in harmony with the fine mausoleum of the Chichester family, which stands in the north transept of the church. It is all made of Irish oak, walnut, and yew, grown on the banks of the Blackwater, and is most beautifully carved in excellent taste.

These are only a few of the recent orders carried out by the firm. Some months ago reference was made to the work they executed at the private chapel of Belfast Castle which gave so much satisfaction. Industries like this are specially deserving of encouragement, and it is to be hoped that, now this art colony has become firmly established in the South of Ireland, it will receive continued and increasing patronage from Irishmen.

THE IRISH COTTON TRADE.

Cotton Yarns.

THE sales of cotton warps during the past month show a considerable falling off as compared with those effected in the months of October and November. This, however, was to be expected, not only on account of the higher prices demanded, but also owing to the extensive purchases made immediately preceding the strike, as well as to the holidays and general stocktaking operations at the end of the year. Besides, the demand for most classes of union fabrics lately has not been such as to induce manufacturers to go on producing extensively, and thereby increasing their present existing stocks, more especially at the enhanced rates demanded for yarns. Some makes of cheap union crashes for export find a ready enough sale, but the low prices ruling leave an extremely small margin of profit to the manufacturer, so that he would gladly curtail the production of this article if better paying goods were in request. Union roughs and creams have been only selling sparingly of late, so that the turnover in these goods has been considerably restricted, and the same may be also said of the heavier household makes. Shirting unions have been likewise in only feeble request, but the general opinion is that the worst has been got over, and that a brisker trade is in the near future. The demand for union handkerchiefs is practically *nil*, dealers confining their purchases to the pure linen or the pure cotton fabrics. In face of the above facts, it is not surprising that the sale of cotton warps has fallen short of the average. Raw cotton, which now stands at about 5½d. per lb., maintains a very firm tone, and is still further fortified by the recent reports of the cotton crop, which is estimated not to exceed six million bales—a great diminution as compared with that of last year. In Manchester, all classes of yarn are getting scarcer day by day, and there is a growing feeling amongst spinners that it is about time that the strike should end, and that masters and men should again resume work.

Cotton Goods.

There has not been much doing in cotton cambrics since last report. Cotton handkerchief printers and makers-up have been only moderately busy, and stocks on their hands are not moving off as quickly as could be desired. Buying in consequence has been limited to a few sets required for assorting, and to keep the hands employed. For these small lots the principal part of the advance has had to be paid, holders refusing to part with the goods at old rates. Besides, there are increased inquiries from the great Eastern markets for Manchester goods as well as from some of the smaller European markets, and these have tended to stiffen prices all round. The outlook for Irish printed cotton handkerchiefs is gradually brightening. A better demand for this article is springing up both in the English and American markets, and it is expected that in a couple of months or so things will have assumed a more animated tone.



(From our own Correspondents.)

Whilst we endeavour to obtain the most reliable reports from the best sources of information, it will be understood that we do not hold ourselves responsible for the views of our correspondents.

Irish.

DUBLIN.—The usual Christmas and New Year slackness pervades all the markets. Stocktaking and the balancing of accounts have occupied everyone of late, and no business of any importance is to be reported from any direction. Linens, woollens, silk, and poplin all show the same result on inquiry; and though the anticipations are hopeful, for the moment the actual state of all the markets is stagnant. For the staple article in woollens I can give approximate quotations only, as on inquiry the report received was:—Transactions of a merely hand-to-mouth character, and values more or less normal, with the following figures given as probable values, but with some reserve:—Down, 9½d.—10½d.; hoggets, 9d.—9½d.; ewe or wether, 8d.—8½d.; seaside, 8d.—8½d.; mountain, 7d.—8d.; Scotch, 5d.—6½d. Though not actually in my province, I may perhaps be permitted to call attention to a letter written by Mr. Archdale, of Co. Fermanagh, and published locally. He warns wool-growers against falling into the mistake he did. He sold three packs of unworked wool (Shrop) to an individual purporting to be the buyer for a large firm at Galashiels. The conditions were that a cheque should be forwarded as soon as the weight docket was made out; but though the wool was weighed, no money has been forthcoming. "I may add," concludes the writer, "I sold the remainder of my wool through Messrs. Ganly & Co. for 2½d. a-lb. more than I had agreed upon with Mr. ——— for the lot he got." Mr. Archdale gives the name in his letter. With regard to silks and poplins, as said already, the market shows no change. The new material, "Englandine," is an English silk of a soft and rich character, introduced by Messrs. J. & N. Philips & Co. of Manchester, and I understand it is sold retail for about 3s. per yard.

The Industries Association.

The financial results for the month of November have been made out since last issue of this Journal, and show payments amounting only to £91 8s. 6d., as against £200 for October. This amount, however, does not cover all expenditure in payments for the month, as the London depôt had made payments to the extent of £227 2s. 1d., and the Dublin Committee had also paid away for work "in hand" a further sum of £103 10s.; making a total of £422 paid from all sources for work purchased and work in hand during the month of November. Mrs. Browne, who presided at the meeting at which the financial statement was made, also announced that, in addition to the vestments ordered by Cardinal Gibbons and Archbishops Ryan and Fegan, they had received through Mr. Peter White an order for a complete set for Archbishop Ireland. This would seem as though a market for hand-embroidered vestments had been established in America; and no doubt, when the consignment at present being prepared reaches its destination, it will lead to further orders from other sources.

The Metropolitan School of Art.

As usual, an exhibition of the prize drawings by students at this school was opened to the public on St. Stephen's Day. In the designing class Miss Crowe has exhibits of a quilt, and also designs for Carrickmacross lace; while Miss Jacob shows designs in Celtic embroidery for window screens or blinds. These by no means exhaust the designs in reference to textile fabrics which are to be seen upon the walls, but are merely mentioned as instances. Nor should it be forgotten that many designs drawn in the Metropolitan School never go in for competition for the South Kensington prizes, but are executed to order of some of our lace schools, or are bought by such as soon as finished. On many occasions the enormous advance made, quite within the past year or two, in lace designing has been referred to in these columns, and the same creditable state of affairs is noticeable in those designs on exhibition this year. "Onward ever" is the motto of the Dublin Metropolitan School under Mr. J. Brennan's direction, and it must be added that the never-relaxing efforts of the head master are worthily seconded by the assiduity of his pupils.

The Mayo Hand-Weavers.

Mention was made last month of the hand-weaving industry started at Foxford, Co. Mayo. Further particulars have come to hand, and may prove interesting. The industry was started, under the auspices of the Sisters of Charity, by the Mother Superioress (Mrs. Morogh Bernard), and has prospered rapidly. At present there are forty-three permanent hands at work, and in addition there are some half-timers, these latter being taken from the National Schools in connection with the Convent, and also from the Male National School. They begin work at half-past six in the morning; at nine there is an interval of three-quarters of an hour for breakfast; work then goes on until two, when there is a similar interval for dinner, and at six p.m. work ceases. The factory includes six power-looms—the power used being water—and several knitting machines. The factory is complete in every detail, and from the small beginning a big industry has been built up. Amongst the customers of Foxford are the Export and Manufacturing Company, Messrs. Arnott & Co., M'Birney & Co., Ferrier Pollock, Pim's, and Clery's, besides a special order in hands from the Viceroy. There is a debt of £7,000 on the factory—due to the Congested Districts Board for a loan—and this the sisters are endeavouring to pay off; but the interest and sinking fund come to £700 per annum, and this is a big sum. Friends have hitherto helped generously, one anonymous donor giving £400, and Lord Zetland supplementing that with £200. Others will no doubt follow, and Mother Bernard, I fancy, need have no fear for the future of her energetic labours.

LURGAN.—Demand for hand-loom cambric goods for hemstitching has increased considerably; stocks of fine numbers are scarce in these goods, but demand for woven bordered cambric is still in want of animation. However, taking the trade all round, matters have improved a good deal, and the prospect of a reduction on goods going to the American market makes the outlook for the New Year just entered bright. Power-loom manufacturers keep fully employed, and are said to be pretty well off for orders. Hand-loom linen handkerchiefs (from boiled yarns) are still being made pretty largely, but it would almost take a magnifying glass to see the profit that accrues. Sheer cambric for embroidering purposes has been receiving a good deal of attention lately with a number of local firms. The turnout from hand-loom weavers has been considerable, but of course still a great deal short of other years at this season, which is always the busiest for these workers. Machine hemstitchers keep fully employed. Bird-eye diaper, fine damasks, &c., keep in good request.

English.

BARNSLEY.—The linen trade of this district, taking into account that it was the last month in the year, has been fairly good. The demand for table linens has been about on an average with the preceding months of the year, but taking the twelve months as a whole, this branch has been anything but satisfactory. Early in the year, makers of these goods turned their attention to the production of a lighter-weight fabric than they had usually produced, in order to compete with the Scotch makers; and although more orders were the result, still, on the whole, the change has not come up to the wishes of those interested, but hopes are enter-

tained that during 1893 an improvement will take place. In bed linens the demand has kept up to the average, and the same may be said of huckabacks and diapers. Domestic goods, including tea, pantry, toilet, and such-like cloths, have sold steadily, as have damask, bordered, twilled, honeycombed, and other towellings. Fine plain and fancy drills have had an improved inquiry, with fair orders. Prices of nearly all fabrics show no variation, but keep tolerably firm. Spring and summer patterns are now meeting with much attention, and manufacturers generally are preparing for the year 1893, in hopes of an improved business being done in all departments.

BRADFORD.—Taking into account that it was the last month in the year, business in this district, when compared with the preceding months of the year, has been satisfactory, and those engaged in the various branches of the textile trade are very sanguine of an improved state of things during 1893. Both English and Colonial wools have sold freely at very firm rates, the business done having been mostly for immediate requirements. Staplers generally hold their stocks firmly unless extreme prices are given, as they are hopeful of a further improvement in business. Spinners of nearly all kinds of yarns are well employed on contracts that will last for some weeks. Orders have been freely offered, and large numbers have been booked at firmer rates than were prevalent a few weeks ago, and generally, unless accompanied by an advance in prices, spinners have been indifferent about entering into new contracts. The piece branches have also shown a decided improvement, but in regard to prices, although better than during the preceding months of the year, manufacturers are not in quite as good a position as spinners. The export to America has again been more cheering, and on the whole, the outlook for business with the United States is bright, and especially is this the case for the coating manufacturer. Hopes are entertained of a speedy revision of the tariff, which will benefit this district.

LEEDS.—The worsted and woollen trade of this district has shown further improvement. The severe weather has had a beneficial effect in taking much stock off the hands of retailers and merchants, with the consequence that orders to replace it have been given out freely in many classes of goods, and especially for fabrics of the heavier classes. In the worsted branches the finer makes in fancies have met with more inquiry, whilst for medium and lower kinds a fair demand has been experienced. In woollens, fine goods have also sold more freely, and a decided improvement has taken place in lower qualities suitable for the ready-made clothing trade. The strike in Lancashire has had a depressing effect upon the latter trade, as large quantities of ready-made goods are sold in that county; but with a settlement of the difficulty, makers of these are in hopes of business improving considerably. Serges, both in plain and fancy styles, are selling very freely, and makers keep their looms in full work, much overtime being run. They are at present being made in various qualities, and are nearly all selling equally well. A rather better inquiry has been apparent for mantlings, in both woollen and worsteds, and makers, who for some months past have found business rather quiet, are hopeful of a better state of things during 1893. Prices generally are very firm, with an upward tendency.

MANCHESTER.—The market this week is disturbed by reports regarding the position of a firm here understood to be connected with the Dundee firm of Lipman & Co. There are a number of rumours afloat concerning the inconvenience caused by Lipman's collapse. The position of the jute trade has improved with the covering of contracts which shippers on the other side found it difficult to execute when it became known that certain bailers had defaulted. Manchester houses interested in the Calcutta trade have watched with some anxiety the efforts of their Eastern correspondents to cover these contracts. Hessian purchases have fallen off considerably, owing to the position of certain firms whose stocks it is expected will shortly be thrown on the market.

There is a prospect of eastward freights increasing. The regular liners have had a conference, at which it was decided to fix a minimum rate for dead weight, and to refuse offers of jute at anything below 10s. a ton.

It is reported here that Lipman's occasionally operated in the Calcutta market. They were occasionally induced by Indian firms to accept shipments of jute, but were not directly represented in the East.

With reference to the affairs of the Barrow Flax and Jute Company, I called this week at the offices of the firm in Manchester to inquire regarding the intentions of the directors. It will be remembered that a short time ago a disastrous fire occurred destroying about 3,000 tons of jute, which was then worth about £19 a ton. Subsequently prices receded to £11, and the company incurred a serious loss. The destroyed portion of the premises included the spinning department, the stoppage of which has placed the firm under the necessity of buying its yarn from Dundee. Reports have been current to the effect that the business might now be closed, but I am in a position to say that the report is premature. Nothing has been definitely decided yet, but it is hoped that the burnt-out section of the mill will be rebuilt. It may be remarked, however, that the experience of those who have endeavoured to establish the jute trade in England has not been an altogether satisfactory one. The Barking Jute Factory, for instance, had to close its doors, the machinery being sold. In England, wages on the average are rather higher than in Dundee, and this hinders the development of the jute trade south of the Tweed.

The home trade warehouses generally have been greatly handicapped during the past few weeks, owing to the inability of many of their customers to meet their liabilities. In this district a number of retailers have suffered considerably from the effects of the cotton stoppage, and the wholesale houses have had to grant extensions. With the prospect of an early settlement of the cotton trade dispute, a better feeling prevails in the market.

There appears to be a wide-spread belief in linen circles that the preferential duties with which Spanish linen manufacturers trading with Cuba are at present favoured will be abolished, but so far there has been nothing which could be regarded as confirming such a view. The South American houses have received largely increased orders of late. The improvement has been mainly in the demand for grey cloths, prints, and other descriptions of cotton goods, although there has also been a change for the better in the inquiry for drills for Buenos Ayres and Rio. Rio houses, after being for a long time extremely quiet, are again plucking up courage, and operating more freely than for some considerable period. There is room, however, for a further alteration in the same direction. As far as the linen trade of the North of England is concerned, it is not an easy matter to find adequate employment for machinery, although Belfast linen men stationed here, who have just returned from spending their holidays at home, have a much more pleasant tale to tell of the Irish trade.

The linoleum trade is in a healthy state locally, the consumption of jute foundations both amongst Yorkshire and Lancashire manufacturers having increased considerably. On the other hand, the consumption of linen and jute carpet yarns has been rather poor for some months, owing to the stoppage of a large number of looms.

Sellers of French and German spins of linen yarns are asking advances of 10 per cent. The movement appears to be general.

Fashionable tailors are again inclined to make a push with Irish frieze overcoats. Some of the larger manufacturers of the higher class ready-made clothing are also paying closer attention to the material. One firm has a special range of frieze overcoats, which are offered at very reasonable prices, considering the quality of the material. Bristol and London houses have given a good deal of attention to the fabric, with satisfactory results. Locally, ready-made houses have had rather an unsatisfactory experience lately, a good deal of machinery having been unemployed or running short time. This has been due to the disastrous condition of the staple trade of the district.

The late Mr. Robert Pickles, of Burnley, was as well known in connection with his business of shuttle manufacturer as with anything else. He had a large connection in this department, his representatives having a good share of the orders placed on the Manchester Exchange. As many of your readers will know, Mr. Pickles was engaged in the linen trade, and had a mill at Belfast.

LONDON.—The new year, still in its infancy, has not yet given us an opportunity of foreshadowing what lies in store for the future. Ushered in in the midst of dense and choking fog, we spent the first week working by gas-light. It was hoped that at the beginning of the year the houses that have already been fitted up throughout with all the necessary appliances for electric light would have had the current switched on, but our city companies move slowly in such matters, and so we are obliged to make the best of the old light. In the streets, however, electricity has helped to solve the question what to do with our traffic during the fog, for there has hardly been one instance of a block in any part of the city where the electric light has been adopted. As the result of the fog, business in the dry goods quarters has remained dull, buyers from the provinces and suburban districts invariably remaining away at such times, for it is next to impossible to select goods. Among all the retail houses of the West End and outlying suburbs the same dullness has prevailed, and we cannot expect to see much improvement until the season of mists has departed. The distributing houses, most of whom have now completed stocktaking with very far from satisfactory results, have been replenishing their departments, and, with that thoroughly optimistic spirit which is characteristic of the dry goods man, buying in anticipation of a good season. Two of the drapery companies—viz., Devas, Routledge & Co., Limited, and the Fore Street Warehouse Co., Limited—have given an intimation of what dividend they intend paying. The former states that the net profits for the year ending 20th December, 1892, amounted to £11,183 2s. 5d., which, with the amount brought forward, £13,517 16s. 6d., makes the total available for dividend £24,700 18s. 11d. After making deductions from the year's profit, the June interim dividend, and a dividend at the rate of 7½ per cent. per annum for the half-year ending December 20th, and also income tax and other charges, they will carry forward a balance of £1,133 18s. 1d., making the total balance carried forward £14,651 14s. 7d. The Fore Street Warehouse Co.'s information was, at the time of writing, meagre, but they have intimated that, subject to audit, they will propose the payment of a dividend at the rate of 5 per cent. per annum, and carry forward, in addition to the reserve fund of £30,000, a balance of £4,462. The announcement of the Fore Street dividend had a favourable effect upon the shares, and there is no doubt that this company is rapidly regaining ground; its losses by bad debts, in comparison to the immense business which the company controls, have been remarkably small for the year, pointing to the carefulness with which the credits have been dispensed throughout a very depressed period.

In the Milk Street trade, the replenishing of wholesale stocks has given a gentle spurt to business, but the trade done can hardly be boasted of. The agents, however, are of the opinion that there will be a steady improvement as the year advances, but what the opinion is based upon I have not been able to get behind to my own satisfaction, for it is useless to try and lose sight of the fact that 1892 has bequeathed to us certain burdens which, before business brightens up generally, must be worked off. The Lancashire strike, for instance, is being keenly felt all over the country, and very much in London: but we must not despair; stocks, when the strike happily comes to an end, will require a great deal of overtime to keep pace with the demand. But I must not encroach further on Manchester preserves. A great number of changes have taken place in city firms since the 1st January, but as none of these are of importance to the Ulster manufacturers, I must close with the hope that the linen trade will greatly improve during the new year.

Continental.

LEIPZIG, Jan. 7.—The Yarn Exchange was better attended than on previous occasions at same time of the year. Spinners are foresold, and do not care for new contracts, even at full prices. At a meeting held at Berlin the end of last month, the German spinners concluded to increase the price of flax and tow yarns by 10 per cent. all round, beginning from 1st inst. Linen goods of every description were in good demand before end of the year, as an increase of prices for all articles after New Year was indispensable, and discounted as much as possible.

STATE OF TRADE IN GERMANY.

ALTHOUGH the general state of business in this country is deplorable, the textile industries are in a position to issue better reports than many others. They have been able, ever since June or July, to do a growing trade with the United States, which has fed particularly the business of Barmen, Elberfeld, and Crefeld, where ribbons and half cotton and half silk articles are manufactured. We have consequently very bright reports from these places, as well as from parts of Saxony, where a large export trade to the United States is carried on. It is illustrative of the high importance attached by this country to the United States, that very great efforts are made to have Germany well represented at the World's Fair at Chicago. The German textile trades, in any case, will do their utmost to be represented there in a manner becoming to their own interests. The idea seems to be in some quarters that it would be useless to dispute with France the supremacy as to costly material and fine taste; the efforts will evidently be concentrated in order to present a collection of solidly worked articles, attracting the larger part of the consuming public. We learn also that exports to Mexico, Argentina, Havana, and other foreign countries are improving. In this respect it would be a great boon if some invention would enable us to raise the value of silver. Very little in this quarter is expected from the monetary conference in Brussels. Greater attention is bestowed on the suspended proceedings of the India currency committee. Reports from Bulgaria and Servia speak of a growing sale of German-made manufactures, irrespective of the pending treaty questions. In Roumania, German textile goods are also gaining. The effects of the Austro-German treaty are little spoken of, and, in fact, do not change very much the position of the trade in both countries. Austrian manufacturers to a large extent enjoy a certain superiority of workmanship, whereas the German article is often cheaper. Austria's trade would be better still if her Government had known how to secure the Roumanian and Servian markets, which have, to a large extent, fallen a prey to Germany. With regard to Hungary, it must be pointed out that the textile industries are still comparatively little developed there, and that English or other foreign traders willing to study the chances for extending textile manufacturing in Hungary would find it worth their while to collect information on that subject. Exports to Italy are not particularly large, yet the amount seems to satisfy the moderate expectations of our exporters. The home trade is dull, and for many years business has not afforded so little satisfaction. Retailers ask constantly for price concessions.—*Kuhlows' German Trade Review.*

United States Market.

(From our Special Correspondent.)

NEW YORK, December 30th, 1892.



IN great contrast to this period of last year is the genuine winter weather, real American winter weather, that has prevailed for the past fortnight. Christmas week of 1891 was an utter failure for the mighty shopkeeping contingent that depends so much upon it for a grand round-up to the year's trading. Humidity was in the air for days, and on the day before the holiday rain fell in torrents and kept shoppers within doors.

This time we had a splendid series of days preceding Christmas. The temperature kept well below freezing point; the air was crisp and clear; snow fell lightly, just enough to give a finish to the

picture, and shopkeepers and shoppers alike made the most of the opportunity. So we had a white, cold Christmas, and the real holiday feeling that should go with it—that which opens hearts and pocket-books, and gives the merchant the right occasion for clearing out stock and making room for the opening business of the new year. This will be proclaimed by two events that will have a bearing upon the Irish linen interests, and they will be in progress early next week. One will be the annual display and sale of housekeeping linens, often alluded to in these letters, but always worth mentioning for the reason that there is a charm about damask displays something like unto a showing of pictures.

From certain private peeps at damask stocks, I have ascertained the fact that the long-reigning hold of flower patterns will be broken into somewhat by set patterns and mixtures of flowers and mathematical designs. The prettiest that I have seen is a centre of small *fleur-de-lis* embraced by a scroll arrangement having larger *fleur-de-lis* at each of the four corners. This has an outer border of leaf work, then another border similar to the scroll arrangement just mentioned, then a completing border of large leaf work—four borders in all, making a most beautiful ensemble.

The other event will be the great white shirt sale, participated in every January by the great dry goods bazaars, which will dispose of many thousands of dozens at prices that will bring them more glory than profit. The garments will be in the unlaundered state, which saves about four shillings per dozen on manufacturers' cost. They will be for the wear of the great body known as "the masses." Genteel wearers patronise made-to-measure shirts only, and look upon the cheap unlaundered garments as trash; and they are not far mistaken. Many of the advertised "all-linen bosoms" are composed of union, and a very large percentage is simply linen-finished cotton cambric.

Anent the question of shirts, an advance of ten to fifteen per cent. has gone upon all shirting and other muslins. This was anticipated by all the large shirt-makers, and contracts were placed that will supply factory wants well into next spring. Small operators with light credits will, as usual, be the sufferers. The effect will be to raise prices on all cheap shirts. Should the advance remain a fixture unto the preparation time for another, manufacturers who confine themselves to the best goods only will have to sustain the loss, as there are certain fixed prices for retail furnishers. *Appropos* of this, it is well to note that our Troy collar and cuff makers have been unable to make an advance on their wares, consequent upon the sharp advance they have had to pay for a year past on their linens. And staring them in the face is the fact that, unless Congressional legislation should interfere, all the linens they use will have to pay a duty of 50 per centum *ad valorem* on and after January 1st, 1894. All linen goods counting under a 37-inch glass 9 x 10, and upwards, remain at the old rate of 35 per cent. until that date. This embraces all counts required for linen collars, cuffs, and shirts; so the 50 per cent. handicap has been felt upon linings and cheap interlinings only. So much for protection to the "American linen industry," which is a prodigious failure. The Linen Trade Association and the Troy manufacturers are doing all they can to influence a total wiping out of the 50 per cent. clause. Nothing can be done during the session of the present Congress, which expires on March 4th, coming. The proposed calling of an extra session of the incoming Congress under the new régime is a hope looked forward to.

Troy has closed her accounts on the best year ever experienced in her collar-making history, and the preparations for the coming spring and summer are going on in a volume that looks to a still larger business. The fancy *négligé* shirt with laundered collars and cuffs will be the reigning feature of the coming summer shirt trade: linens and light woollens will not be "in it" when compared with the cotton textile. Mr. James Pedlow will succeed W. H. Wardell as manager here for Thomas Bell & Co. Erskine Beveridge & Co., of Dunfermline, are to carry stock in this market. Hitherto their trade was confined to taking orders on samples.

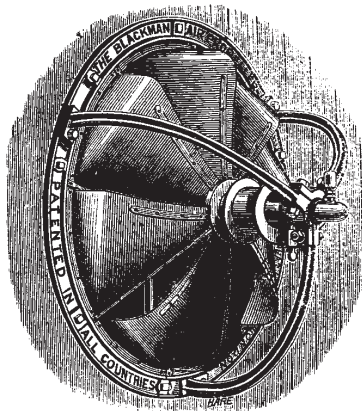


Book Notice.

House Lighting by Electricity. By Angelo Fahie, M.I.E.E. London: E. & F. N. Spon, 125 Strand, and J. Falconer, Upper Sackville Street, Dublin. Price One Shilling. In our last issue reference was made to this work, and since then we have been favoured with a copy. Without attempting to deal with the subject in its technical aspect, the author aims at giving a description of the practical application of electricity for public and private purposes, handling the matter in an able and popular way, which attracts and sustains the reader's interest right through to the close. Chapter I. deals with the generation of electricity, and this is followed by others descriptive of the arc and incandescent lamps, their uses and mode of management, &c. The cost of electric lighting is dealt with, and estimates are given for wiring houses and fitting them up with lights of the latter description wherever the local authorities have undertaken to supply the requisite current. A chapter is devoted to sundry devices for electric cooking and heating, and another to various domestic applications of electricity. Taking into consideration the many advantages and conveniences resulting from its adoption, it may be anticipated that very soon this powerful agent will be turned to extensive account, contributing in no small degree to the pleasure and comfort of our homes. The work deserves a very wide circulation.

The Ventilation of Mills and Factories.

WE are pleased to notice that the Blackman Ventilating Co., Limited, whose head offices are in London, and who are specialists in ventilation, warming, and drying, have opened a branch office and show-room at 5, Donegall Street, Belfast. In this show-room, which will be lighted by electricity, will be shown in operation all their various appliances, and manufacturers could not do better than give them a call. It is now a number of years since this well-known firm introduced mechanical ventilation in



the textile trades. The success which they have met with is amply testified by looking over a list of their customers, which embraces almost all the best firms in the flax and jute trades, as well as a number of users amongst our engineers throughout the shipping interest. Many people know the fan only as a ventilator, but it is used very largely for drying all descriptions of textile materials, from the raw flax, wool, or cotton, to yarns and cloth. Many bleachers also use the fan very successfully for removing steam. Before this system was adopted, it was the usual custom to have hoppers over each set of cylinders, the trunk leading out through the roof. While this arrangement acted fairly well in good weather, it was always objectionable on

dull and wet days, as there was a good deal of condensation, which caused damage to the material and plant. In the matter of drying, it may be pointed out that successful drying depends only on two conditions, viz., 1st, the quantity of air drawn through the material, and, 2nd, the dryness of the air used. The first of these conditions is cheaply fulfilled by the unequal capacity of the Blackman for moving air in volume, and any resistance offered by the material is well within its power. The second condition is obtained more or less easily according to circumstances. In many cases the air in the factory is sufficiently warm for the drying of the material. This arrangement is very desirable, as the air in the rooms adjoining the stove is being regularly changed, an effect which would be very desirable in many rooms. In other cases the air cannot very easily be drawn from adjoining rooms, or is not dry enough for the purpose. Steam pipes are then fixed at the inlet to insure a regular temperature. In some cases where a large quantity of material is to be dried, steam is very expensive or inconvenient as a means of warming sufficient air fast enough to do the work, and this need of something better has led to the development of the Blackman Air Warmer, which is a very efficient and economical appliance for warming air in quantity. As air is a bad conductor of heat, it cannot be warmed "in bulk," but must be divided up, and as it has to be warmed whilst in rapid motion it must be warmed quickly; and hence the necessity of keeping in close contact with the heated metallic surface all the short time it takes to pass through the apparatus, at most half-a-second. The Blackman Air Warmer is arranged for the use of coke or other suitable fuel, and is so constructed that the product of combustion cannot possibly mix with the warm air, which therefore passes into the drying-room as pure as when outside; the same air-tight construction also effectually prevents any additional fire risk. For *Cloth Tenting*, a great many Blackmans are used for removing the heated moist air after it has passed through the cloth, allowing the drying to be done at a much lower temperature, the advantages derived being that the cloth is softer and better finished than when scorched at a high temperature. We would strongly recommend any of our readers who contemplate improving the ventilation of their factories or the rapidity and quality of their drying to communicate with the Blackman Ventilating Co., Limited, 5, Donegall Street, Belfast, from whom they can depend on receiving sound and practical advice.

CO-OPERATIVE FARMING.—The thirteenth annual report and balance-sheet of the Western Counties Agricultural Co-operative Association shows that to some extent the farming community, like the operatives of the northern and some other towns, may be their own middlemen. The society, which is managed by farmers, and has its stores at Plymouth, Bristol, Truro, Exeter, Bideford, and Cardigan, conducts its business strictly on co-operative principles for the mutual benefit of the members. The business has extended during the past year, 523 new members having been enrolled, while an increased turnover amounting to more than £15,000 has been secured, the total now being over £200,000. This, we believe, the largest association of its class for the supply of agricultural requirements.

THE ADULTERATION OF FEEDING STUFFS AND MANURES.—The recently issued report of the committee appointed by the Board of Agriculture to inquire into the adulteration of feeding stuffs and manures shows the need of self-protecting societies like that just named. Among the witnesses examined were gentlemen who revealed the mysteries of a nefarious trade. One of them went to a manure factory to inspect his own heap of 100 tons of bone meal, and in the adjoining shed he saw a corresponding heap mixed with 33 per cent. of salt and gypsum, by the order, he was told, of a highly respectable firm. By co-operation and a proper system of testing by analysis these gigantic frauds may be prevented. There is a substance called "buffum," and all persons having stock to feed will do well to obtain genuine linseed cakes for the animals, instead of cakes mixed with buffum, for this is the ugly name given to all sorts of adulterating substances such as sand, dirty screenings, cotton-seed with the lint on, which has killed many a sheep and cow, mustard-seed, rapeseed, and many

other cheap seeds known at Hull, poppy-seed cake, sunflower-seed cake, cocoanut fibre, ground shells, and all sorts of worthless by-products obtained in the manufacture of corn flour, or of sugar made from maize, and largely used in brewing. But besides buffum, there are "bogus manures," by which the British farmer loses at least £900,000 a-year in cash, it is said, and loses his crops in addition. Putting the matter very briefly, the committee recommend analysis and legislation for the easier detection of fraud. Meanwhile, there is the protection of co-operation.—*Daily Chronicle*.

Dyeing Drab Recipe.

Fast drab, 90 pieces of linen, prepare a bath of 2 lbs. cutch, 2½ ozs. copper sulphate, and 6 ozs. logwood extract. Use at 40°C. or 104°F. for one hour, then to the same bath add 6 ozs. sulphate of iron, work all up thoroughly, and pass into a fresh bath at 60°C. of 1 lb. bichromate of potash. Or yarns may be treated at 40°C. with 4½ lbs. cutch, ½ lb. copper sulphate, 3 lbs. dry quercitron extract, 3 lbs. dry sumac extract, and 1½ lbs. logwood extract. After working, add to this bath 1½ ozs. sulphate of iron and 3 lbs. nitrate of iron, and darken by running the material through a bath of 1½ lbs. bichromate of potash at 40°C.

Chemicals and Dyes.

(Special Report by Messrs. SADLER & Co., Ltd., Middlesbrough.)

BUSINESS generally in the chemical trade is unquestionably dull, and there are few features of interest. Caustic Soda goes from bad to worse, and the competition between it and Ammonia Soda is very serious for the former. It is reported that several Alkali works will be laid off for a considerable period until stocks of Caustic are reduced. Soda Ash is moving off freely enough, but at ever receding prices; whilst Sulphate of Soda is difficult of sale at 25/- and even lower. Bleaching Powder is in better request, and producers are quoting 5/- to 10/- advance. Ammonia products are firm, and much business is being done in Sulphate at £10 to £10 2s. 6d. Muriate and Carbonate are also in fair request. Nitrate of Soda continues to improve. Bichromes are in good demand, and large business is being booked for next year's delivery. Oxalic Acid continues to hold its own, and 3d. is freely offered for it. There is more business being done in Dyes, but prices are miserably low. Dyers' chemicals are also suffering from severe competition. Tar products are generally quoted higher, but business cannot be said to be brisk. The combination of the large makers to control selling appears to be working successfully, as all the products they have yet taken in hand are undoubtedly realising higher prices, even if quantities delivered are not quite up to the mark. Carbolic Acid is much better, and the possibility of a recrudescence of cholera in the earlier spring will doubtless keep this effective disinfectant in large request at improving rates. Prices.—*Dyes*—Alizarine, 8d.; Aniline Oil, 6½d.; Aniline Salt, 6½d.; Magentas, 2/- to 3/-; Scarlets, 1/3; Chrysoidine, 2/-; Blues, from 3/-; Feric Acid, 1/-. *Ammonias*.—Liquid Ammonia, 1½d.; Carbonate of Ammonia, 2½d.; Muriate of Ammonia, £16 to £22; Sulphate of Ammonia, £10 to £10 2s. 6d. *Alkalies*.—Bicarbonate of Soda, £7; Caustic Soda (77), £10 10s.; Soda Ash, 1½d.; Caustic Potash, £19; Sulphate of Soda, 25/-; Soda Crystals, about £3. *Sundries*.—Tartaric Acid, 1/4; Citric Acid, 1/8; Oxalic Acid, 3d. less 5%; Tin Salts, 5½d.; Sulphate of Copper, £14 15s.; Bleaching Powder, £7 10s.; Borax, £27; Nitrate of Soda, £9; Carbolic Crystals, 8d.; Epsom Salts, £3.

Selected List of Applications for Patents relating to Textile Fabrics.

Compiled from the Official Records, by Messrs. W. P. THOMPSON & Co., Patent Agents, of 6, Bank Street, Manchester; 6, Lord Street, Liverpool; and 325, High Holborn, London, W.C.

G. BROWN, Galashiels, N.B., No. 21,729.—"Regulation of spindles of twisting and spinning machinery." 28th November, 1892.

D. D. LEITCH, Belfast, No. 22,326.—"Improvements in looms for weaving fabrics." 6th December, 1892.

A. J. KING, Bollington, near Macclesfield, No. 22,468.—"Improvements in the finishing of cotton or linen fabrics." 7th December, 1892.

A. W. METCALFE, London, No. 22,590.—"Improvements in hackling or combing machines for flax and other fibres." 9th December, 1892.

J. HOUSE, Liverpool, No. 22,604.—"Improvements in or connected with apparatus for drying cereals, cotton, hemp, flax, and other like substances." 9th December, 1892.

J. ORR M'CLEERY, Belfast, No. 22,781.—"Improvements in the bottom pressing rollers of wet-spinning machines for spinning flax and other analogous fibres." 12th December, 1892.

J. C. M'EWBURN, London (communicated by J. Cardon, France), No. 23,288.—"Improvements in machinery for breaking, scutching, and softening flax and other textile materials." 17th December, 1892.

SPECIFICATIONS PUBLISHED.

The specifications of the following patents have been printed and published during the month, and copies thereof may now be obtained at the uniform price of 1s., which includes postage.

1891.

J. WOOD, Allerton, near Bradford, Yorks., No. 21,311.—"Improved means for regulating the drag on the bobbins or spools in spinning machines." 7th December.

H. R. ROSS, Belfast, No. 22,777.—"Improvements in tappets or treading motions for looms." 29th December.

1892.

F. B. FREMEREY, Galveston, Texas, U.S.A., No. 5,646.—"Improvements in machinery for decorticating jute, ramie, and other fibrous plants." 22nd March.

R. DAWES, Philadelphia, U.S.A., No. 15,536.—"Improvements in traverse or building motions for spinning and twisting machines." 30th August.