Selected List of Applications for Patents

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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 Trish manufactures. Irish manufacturers.

Irish manufacturers.

The Irish Textile Journal is published on the 15th of each month. Yearly subscription, including postage, 11/6. Subscriptions payable in advance. Free sample copy sent to any address. Advertisers will find the Journal an excellent medium for announcements suitable to its pages. Terms may be known on application.

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The Making-up Trades

East, Belfast.

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 ls. 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. Price, Limp cloth, 2s. 6d.; boards, 3s.

A Souvenir of the Irish Linen Trade, being a series of 12 Views, illustrating the Cultivation of Flax, the steeping, drying, scutching (by hand and power), and preparation of it for market. The Spinning of Flax by hand on the old spinning-wheel, the reeling, winding, and warping of the Yarn. Weaving of Linen by hand, the bleaching and finishing of the Cloth, and the subsequent examination, lapping, and making up of the goods in the Warehouse, together with a view of the old Irish Linen Hall or Market in Dublin for the sale of the Linens. From original engravings in the possession of Messrs. J. N. Richardson, Sons & Owden, Ltd., Belfast—dated 1791

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#### The National Workmen's Exhibition.

National Workmen's Exhibition which is now running in London is a new and very praiseworthy departure. It has been organised to show what honest work can accomplish, and partly in answer to those who have complained about the deterioration of British workmanship. The Exhibition is not confined to either skilled mechanics, nor are Irish

exhibitors excluded, and amongst the stalls some of the most interesting are those occupied by examples of Irish cottage industries. To these we would here more particularly refer, having paid a general tribute to the general excellence all round of the Exhibition, and to the energy and intelligence displayed by its organisers. One of the largest stalls is occupied by two looms sent over by the Nuns of the Convent of Mercy, Skibbereen, which are at work; and they also show a large stock of the products of the industry, consisting of fine linens, lawns, and embroideries. Another Irish exhibit is that of the Foxford Convent Woollen Weaving Industry, and we are glad to know that in both these cases the contents of the stalls attracted the notice of their Royal Highnesses the Prince and Princess of Wales, who invested in linen dresses and woollen shawls, much to the benefit of the workers. Mrs. Ernest Hart is not an absentee from the Exhibition, but has some of her Donegal-made goods on view, consisting of home-spuns, laces, embroideries, and wood-carving.

Many who have been long interested in the Baltimore Fishing School will be glad to know that it also has recognised the value of the Workmen's Exhibition as an arena in which to show what can be done by the Baltimore boys, and a very excellent exhibit of mackerel and other nets woven and mounted by the boys is the result. It must not be forgotten that all these examples of Irish industry are being exhibited in the very heart of what has well been called the greatest industrial community in the world. Through the doors of the Exhibition, while it remains open, will pass not merely the Royal Highnesses and Lords-Mayor of the opening ceremony, but the representatives of the working-classes and commercial communities of practically all nations. Those who buy, those who sell, and those who themselves produce, will be those to see, to judge, and, we trust, to admire. The patronage of the rich and the exalted is all very well; but it has always been argued in these columns that Irish industries, to be placed upon a satisfactory basis, must be placed upon the basis of pure commerce-must be put before and introduced to the mercantile community upon their own merits, through recognised channels, and in the usual and accustomed manner. The greatest stride which has been made in the interests of Irish cottage and home industries has been made quite within the past two years, during which period this great fact has been more fully and generally recognised by those in control than it ever was before. Much has still to be done in this direction. There are centres of industry in Ireland which still cling to the old methods, which look to private patronage and not to free sales in the open market to bring them prosperity, failing to see that the powers of absorption of their wares inherent in what can at best be but a limited number of patrons must be limited, and that thus, under the never-failing laws of supply and demand, the output must be cramped instead of being stimulated. gladly admit that the number of industrial centres which have not yet taken to the new methods of working, but still hold fast to the old, is a small and a decreasing one. The fuller intercourse which now exists between the various lace and other schools of industry is working for the general good. No school need now-unless it is wilfully-be ignorant of what is going on in another; and as those which are behind-hand recognise the fact, they naturally make strenuous efforts to improve their position. We look for much good from such occasions as the National Workmen's Exhibition; they familiarise consumers with the producer, bring them into contact, and create new demands and new outlets for the products of loom or cushion, frame or needle. It is unnecessary here to refer again to what is going on in Chicago. The Irish Village at the World's Fair will do much to open up the American markets to Irish cottage workers; but it is equally important in their interests that the markets of Great Britain and the European Continent should also become acquainted with these goods. Our maximum of output has by no means been reached, though there are many who but a short time back would never have thought even the present amount as possible of attainment. Our workers have so far been fortunate in that the demand has increased with equal rapidity to the supply, and that it has done so we attribute entirely to the newer and more practical methods of management which have been adopted. There is no longer any fear of a relapse into the ancient and less vigorous methods of conducting the business; for a business it is, and as such it must be regarded and conducted. All that is necessary is to induce all concerned to act with the same vigour, each community of workers trying in friendly rivalry to surpass its neighbours in the excellence of its goods, and the energy and intelligence with which it conducts its commercial transactions.

#### A Curious Address.

One of the most curiously interesting addresses, in its way, that was presented to Lord Houghton during his present tour in the West of Ireland, was the one from the people of Foynes and the surrounding district of West Limerick. In this they pointed out that their "rivers were at present without shipping, their mills and factories were idle," and it is, the address went on, a "sad sight to see our beautiful Shannon (where all Her Majesty's fleet could safely ride on the estuary of its waters) without almost a ship of merchandise on its surface, on account of the general decay of our trade and com-We, therefore, would respectfully draw your attention to our excellent harbour, which was for years the station of Her Majesty's ships Frederick William and Valiant, as guardships of the western division of the Irish coastguards." In consideration, therefore, of the natural advantages of a secure anchorage; railway, postal, and telegraphic services; a pure water supply; facilities for

landing troops, and "a unique combination of mountain and river scenery," they trusted that his Excellency would again cause a guardship to be stationed at Foynes, which would be a great security to the trade and commerce of Limerick, and a financial advantage to the poor people of the district generally." The Admiralty may have some good reason for not placing a guardship at Foynes; but, failing such, we see no reason why the wish of the good people of that place should not be gratified. We fail, however, to quite follow their reasoning. Do they mean to say that the withdrawal of the two guardships is the cause of their mills and factories being idle? that there being no guardships is the cause of there being nothing to guard? If so, we cannot agree with them. Just fancy the prosperity of Belfast depending, or having depended in the past, upon the presence or absence of a guardship on the waters of the lough. Foynes and Limerick must look further for the causes which compel their mills and factories to idleness; which can be made accountable for the decay of their trade and commerce, and leave the estuary of the Shannon without almost a ship of merchandise on its surface. The re-stationing of an Imperial man-of-war at Foynes would no more make the district industrious and prosperous than has the unceasing flood of Imperial gold which has been poured for the best part of a century into the congested districts of the West made them either industrious, contented, or rich. The stationing of a guardship at Foynes might add a few more customers to those who already crowd the bars of the local publicans; beyond this it could do but little. As for its being a "great security to the trade and commerce of Limerick," the people of Foynes, as far as we understand their address, started by admitting there was none. Let them by all means create a trade and commerce, and when there are valuable industries and commercial interests to guard, the Imperial Government will be the first to see that they are not endangered, and will willingly place as many guardships as are necessary on the waters of the Shannon. A Government, like a higher authority, helps those who help themselves; and if the good people of Foynes and the western district of Limerick are so anxious to see a guardship back off their shore, we would suggest to them that a little activity in their now idle mills and factories would be the greatest inducement and strongest argument they could put forth.

#### What is Technical Education?

Why, everybody knows that, we hear the answer given. Do they? We very much doubt it, and doubt it all the more as this very question was put to the writer of these lines only the other day in all seriousness, and in the search after information. It certainly was rather a startling question, considering the strides which the cause of Technical Education has made in the British Isles during the past few years; but when one comes to think of it, how many persons would be able to answer the question off-hand? The popular idea is that technical education means the teaching of some particular trade or calling; that it has, and is intended to take, the place of the old apprentice system—in fact, there is an immense amount of popular confusion between what is known as technical education and special industrial training. The two are by no means the same thing, though under a proper system the one should go hand-in-hand with the other, and yet each be distinct. Technical education has been well defined as meaning that kind of education which directly keeps in view the work of after-life; and this meaning has been narrowed by usage to refer only to manual, agricultural, commercial, or mercantile life. Though the training for the professions must be as technical as for any other walk in life, yet by common accord "technical education" is not held to refer in any way to professional training. Hence, possibly, some of the popular fallacies upon the subject. If technical education is really that kind of training which is intended to develop dexterity—not merely manual dexterity—and intelligence, and a knowledge among workers of all classes of the why and the how of the work in which they are engaged, then surely by rights professional education and training come under the style and title of "technical." In one respect technical education in its broadest sense and technical education in its strictest and most limited sense are alike. Whether dealing with the acquirement of professional proficiency, or only with that knowledge which is imparted by art and science classes, industrially technical schools and institutes, or specialised departments of colleges, much of the work attempted must be lost unless there is a good foundation to work upon. It is this vital point which is so often overlooked in the many schemes one hears about. It is the omission to take this factor of the calculations into account which makes so many sceptical as to the national importance and value of

"technical education." They have watched, it may be, the poor results accruing from what was perhaps in itself an inherently faulty scheme of technical instruction, but which, even if devised on the best plans and after the best models, would have and must have failed from the fact that the material supplied to work upon was insufficiently prepared, and absolutely unsuitable from such want of preparation. This being the case, it is absurd, as is so often done, to accuse those who are strenuous promoters of technical education of being indifferent or blind to the paramount importance of the literary side of school training. The enthusiastic technical educationist, far from desiring to narrow the limits of school teaching, would wish to see them widened, and the whole system made less mechanical. He has recognised fully-more fully, if we may say so, than the ordinary educationist—the value of a comprehensive and intelligent study; a study which does not result in the mere acquirement of a certain amount of book-learning of a very probably evanescent character, but a study which, while giving the pupil the same amount of necessary book-learning, does so in a manner which precludes its rapid disappearance into the realms of forgetfulness, for it will have been acquired not mechanically but thoroughly, and with full understanding. There are still some who do not comprehend what technical education means, and do not understand what the promoters of technical education would accomplish. Their numbers, we are glad to know, are rapidly diminishing, and a still more gratifying fact is that equally rapidly are the numbers of those increasing who, having in after-life to look to themselves for self-support, are laying up in anticipation that security for, we might almost say insurance of, success which a sound technical education and training can alone give.

#### Belfast according to the "Chronicle."

The Daily Chronicle maintains its attack upon Belfast with characteristic rancour. It has, admittedly, a double purpose to serve, the interests of truth and the welfare of the Liberal party. Its Liberal affection is fresh, and was only settled after a long period of on-thefence consideration, so that it has to be justified by as much fervour as can be turned on for the cause. Its regard for truth is tempered by an intention to make its quarrel good, even at the cost of carefullyedited extracts and carefully-ignored facts. As we have pointed out, this love of truth can be combined with the elimination of a passage in Dr. Whittaker's last report, which showed that Belfast authorities were doing their duty, and that their officers were under strict injunctions to keep up regular inspection of the tipping stations; while an assertion on the opposite page, that "the city was never in a more cleanly condition than at present," was not taken account of why ?-because it disproved the repeated accusations of neglect and indifference laid to the charge of the Corporation. Dr. Whittaker's able and honest report is continually put in evidence against Belfast, as it fairly might be, if faithfully quoted. But the Chronicle regard for accuracy could sanction stress being laid upon the Belfast death-rate for '92 as being higher than that of any great town in England—this in further proof of scandalous shortcomings in the sanitary policy and administration of the city—and yet higher death-rates in the same table for the preceding year for six out of nine English towns were disregarded, and higher death-rates for the same year in Cork, Galway, and Dublin City were left out of count. Belfast was and is, according to the Chronicle, "a repository for typhoid in every back-yard;" but it is not mentioned that Dr. Whittaker's report showed that this disease has been declining since 1889, and offered other opinions that it has nothing to do with the filled foundations upon which so much blame has been built. What is truth? asked jesting Pilate. It depends upon what you want to prove, some people would reply. In more respects than one, that romancing writer in the Chronicle has lately had to shut up. The expression may be more forcible than elegant, but it exactly suits the compulsory stoppage of the voluble abuse which is that person's main stock-in-trade. Sir James Haslett left him without a word to say about tramway purchase, and put him speechless in a corner upon the question of cemetery accommodation. Now Sir William Quartus Ewart has given, in a letter to the Times, some explicit information as to the wages paid in Belfast mills, which is here copied:-

Wages paid in Belfast mills vary slightly in different districts. The follow-

Wages paid in Belfast mills vary slightly in different districts. The following is the result of some careful inquiries on my part in these districts:—

Spinning-room hands.—From 11 to 18 years of age, 4s. 6d. to 9s., average 6s. 10d. weekly; over 18 years of age, 6s. 6d. to 13s. 6d., average 9s. weekly. Weaving Department.—From 11 to 18 years of age, 4s. to 12s., average 7s. 9d. weekly; over 18 years of age (plain goods), 5s. to 14s., average 9s. weekly; over 18 years (damask), 7s. to 23s., average 11s. 8d. weekly.

These averages would be considerably higher if all unskilled labour were excluded from the calculations, and it should be further observed that I have

not included any wages of overlookers, tenters, linen-lappers, &c., which vary according to the nature of the work and the size of charge, from about 25s. to

42s. weekly.

A large majority of persons employed in our mills are women and girls whose husbands and brothers are earning good wages in other work. There are hundreds of families in or near Belfast whose united earnings are between £150 and £200 a-year. All visitors to Belfast are struck by the superior houses in which the working-class population live—a superiority shown by the fact that there are in Belfast only 17 houses rated at under £1, and 26,797 houses (more than three times the number to be found in Dublin) rated between £4 and £12. Living, too, is cheaper than in Lancashire towns, and, as already stated, work is plentiful.

The wage-figures here given do not differ materially from the rates quoted in the Chronicle, with the remarkable and very important exception that Sir William Ewart's average is made to look as though it were the maximum in the hands of the Special Commissioner. This disparity is not mentioned in the Chronicle's comments upon Sir William's letter, but objection is taken that "no allowance is made for loss of time, fines, or for the deduction of the phenomenon known as the bonus to which our Commissioner called attention." We have yet to learn that employment can be given to a multitude of people without some precautions against indolence or carelessness, and we may take it for granted that the Chronicle compositors do not attend at what time they choose. But all these marshalled set-offs would not appreciably affect the average wages as stated by Sir William Ewart, due regard being had to the circumstance that unskilled labour on the one hand, and highly-paid supervision and skill on the other, are left out of calculation; and now perhaps the Special Commissioner will substantiate his statement that "a great mass of the linen trade labour is obtained for a shilling a day or a trifle over." It will be noticed that Sir William Ewart's figures effectually dispose of such rant as that "a more piteous struggle for a bare and half-starved existence than that which goes on in Belfast can be found in no other busy and constantly-employed manufacturing town," and inferentially upset all the *Chronicle* inaccuracies—still keeping within Parliamentary limits of expression-about "the vast majority of the workers being dieted on bread and tea, with just a flavour of bacon or fag-end of meat occasionally." There is one other point which Sir William takes up for reply. With regard to the conditions of labour,

Her Majesty's Inspector reports that during the last year he has had no occasion to prosecute for any neglect to guard machinery; that in regard to sanitary matters, overcrowding, and ventilation, the district will bear favourable comparison with any Scotch or English district; and that work is plentiful.

What says the Chronicle to this official testimony? The proverbial cocked hat is symmetry itself compared with the "Sweated Ulster" articles after this shot is fired at them. What says the Chronicle? It does not retract, of course. Instead of that, it expresses some doubt as to Sir William Ewart's accuracy, or, as a second defence, insinuates collusion on the part of the Inspector. Here is the passage as it stands in the Chronicle leader: - "We sincerely hope Mr. Asquith will note Sir William Ewart's remark that the system of factory inspection in Belfast is 'efficient and rigid,' and that he will be able to see his way, in connection with the general overhauling of factory administration which he is undertaking, to test the extraordinary statement which Sir William Ewart attributes to Her Majesty's Inspector. We have taken the trouble to refer to the last report presented to the Home Secretary by the chief Inspector of Factories, from which it appears that no prosecution was instituted during the year 1892 against any of the linen manufacturers. What we should like to know is whether this is due to we 'efficiency and rigidity' of the inspection or to some other cause." We have taken the liberty of putting the few last words in italics, and so commend this specimen of Chronicle delicacy and courtesy for general consideration.

Irish Lace.

In connection with the tour of His Excellency the Lord Lieutenant, we learn that in passing through the town of Kenmare he took the opportunity of visiting the schools of the Convent of Poor Clares, and expressed himself as much pleased with all he saw, and was greatly interested in the beautiful lace and embroidery work designed by the art students, and so carefully executed at this Convent. He purchased a handsome point lace handkerchief, of a novel and chaste design, which had just been finished. Though it was late in the day when he passed through Kenmare, the day scholars all remained at the Convent in order to give His Excellency a hearty greeting. He witnessed the kindergarten exercises of the infants, and in passing through the schools of the higher classes the pupils sang "God save the Queen," as well as several songs. Altogether, the visit must have

been very gratifying to all concerned. We are glad to learn that already some good orders have come to this Convent for lace goods, as the result of the fine exhibits sent to Chicago, and that it is fully expected further orders will follow.

#### Temperance Reform.

Temperance reformers may well stand aghast when they read the figures of illicit drinking in Dublin as given to that city's Corporation by one of the Councillors-Mr. D. Tallon. There were, he said, at present in Dublin 56 clubs. He had a list of 38 of them, with a membership of 8,257 persons. These houses were only open when the houses of legitimate traders were closed. A club in Francis Street was opened on Sunday morning at six o'clock and closed at two o'clock, and during these hours 926 men entered. They opened again at seven o'clock and closed at midnight, and during that time 617 entered. The James's Gate Brewery-men's Club, Usher's Island, opened at six a.m. and closed at two p.m., and during that time 1,262 men entered, and from seven o'clock to eleven 315 entered. At the Labourers' Club, 55, Bolton Street, from six o'clock to two o'clock on Sunday 1,538 men entered, and from seven o'clock to twelve o'clock 641 men. Belfast's record is not nearly as bad as this, but none the less does this "club" question require earnest attention and prompt solution. Sunday-closing and Saturday early closing are all very well in their way, but alone they will be quite incompetent to deal with the evil of intemperance. The worst of it is that these "clubs" are supported entirely by the working men; and though far from wishing to "deprive the working man of his beer" (in moderation), it must be self-evident to all that if the working man is in his "club" drinking up to twelve o'clock on Sunday night, he cannot be fit for honest work at six a.m. on Monday morning.



Retrospect and Reflections on the Irish Woollen Trade.

and if a solid history of the subject were seriously taken in hand, there would needs be, in the opening chapters, an intolerable deal of assumption to a very poor pennyworth of circumstance. There would be, to begin with, an engaging array of references to bardic literature, and more sober but hardly less interesting passages from ancient legal institutes, all full of suggestions of people comfortably clad, and affording some glimpses of brighter figures proud, in Anno Mundi times, of the rank which the number of colours in their raiment denoted. There would be proof of some skill in dyeing, and indications would be found of spinning, weaving, and embroidery, through all the range of textile accomplishment. In

EW and far between are the facts relating to the

these hazy particulars, with some further evidence as to the high estimation in which the arts of clothing were socially and legally established, there would be all the materials for a brilliant picture. which the historian might fill in by inference, or leave in impressive outline, at his own sweet will. But, at the best, it would be unsubstantial; and then would follow a dreary lapse of time-centuries broad-without an incident and hardly a decent conjecture to relieve it, and so on until we find Irish merchants attending a fair at Cambridge with cloth for sale, and having all the air of regular and welcome visitors. Thenceforward, although mention of Irish manufactures occurs but seldom, and generally in a taken-for-granted kind of way which leaves much to be desired, there would be no long break in the narrative, and the references would admit of much interesting amplification. King John directs the Archbishop of Dublin to purchase a quantity of "scarlets" wherewith to make robes for presents to the King's liege men, natives of the kingdom, which might not only open up the question of progress in dyeing ingrained colours, and comparison in value between scarlet and other cloths, in sumptuary legislation as well as in the price per yard, but might also, for that matter, bring up a very pretty little opportunity of deciding what colour scarlet then was, and allow of an ad lib. digression into the stirring topic of national dress in Ireland. Then Irish fabrics

make a first appearance in Acts of Parliament in the 50th year of Edward III. cap. 8, and with an indulgence that No subsidie nor aulnage shall bee paied, levied, nor demannded of cloth called frise ware, which be made in Ireland, or otherwise in England of Irish wooll, brought within the realm of England, because those clothes do not conteyne the length and bredth ordained by the statutes, and forsomuch they ought not to be comprised in the estatutes late made of Ray clothes and coloured clothes. In the third year of Edward II, a much greater compliment, but more questionable privilege, was accorded to the industry in a "custom" or tax put upon all "Irish cloth, Galways, and worsteds" taken into Warrington, to assist in raising funds for the repairing of pavements and bridges in the town, just as a royal grant to Cambridge in 1840, for the paving of its streets, put an equal duty of 2d. per hundred (centena) on Irish cloth, with other unspecified canvasand worsted stuffs. Whither these extracts might lead the exhaustive historian is more than can be contemplated, and, for dear brevity's sake, we must be content to call attention to the interest and variety of one or two other entries in which Irish fabrics make an appearance.

It was a coat of Irish cloth, among other things, that brought a quarrel between Hamo le Stare and Walter Blowberme to the test of a duel in the reign of Edward the Third, and the event is of so much the more importance in that it was illustrated in a plea-roll of the period, so that it has been, in consequence, often referred to for its bearing upon the old authorised process of Trial by Combat. Defeat gave the decision in all such rough actions-at-law, and the penalty may be seen in the picture, where the hapless Hamo is hanging by the neck from a gallows in the background. Of quite another turn is the mention of Irish fabrics, much about the same time, in an old Florentine poem-

"Similimente passamo en Irlanda La qual fra noi e degna de Fama Per le nobile Saie che ci manda."

The paper in which the Earl of Charlemont brought this remarkable passage under the notice of the Royal Irish Academy in 1787 was little less than a revelation in Irish textile history, and it will always remain as conclusive testimony to the widespread popularity of Irish fabrics in the Middle Ages. Unsupported, the quotation would have but little weight; but, with independent proof that there was almost simultaneous imitation of Irish says-a thin woollen material resembling serge—by the woollen manufacturers of Catalonia, in Spain, there need be no hesitation in claiming a prominent place and distinguished reputation for Irish materials. It is curious that corroboration of the position which Irish woollens held in Italy should be found in an occasional entry in an old account-book, which, being interpreted, records payment For a piece of say of Ireland for clothing the wife of Andrea, as we find proof of the sale of Irish frieze in England at a later date through an item in the inventory of the effects of Mr. Harry Maunder, a merchant of Exeter, who died possessed of xiiij yardes of yrysse ffrysse at xd. the yard.

In such apparently insignificant trifles, as well as in affairs of such moment as to require the interposition of Parliament, is the history of Irish woollens to be traced; and it is greatly to be regretted that a subject of so much consequence should be left to make a section, generally on stereotyped lines and with hardly an attempt at original research, in the course of works of wider scope. Shadowy as are the fragments of information from the remote past, all overlaid as they are with rhetoric and tradition, there is still enough of substance to be proud of, and in later days there are woollen episodes, such as the endeavours, of Strafford first and Ormonde after, to plant the industry in the South, and the settlement of Huguenots and other immigrants in different parts of the country, in the hope of promoting fresh branches of manufacture, which would tax all the ability, but amply reward all the application of any devoted writer. There are many fabrics—blankets, shalloons, broadcloths, bays, and carpets, all at one time or another established in the country-which we have not noticed, all of considerable interest, with many minor enterprises which fully deserve full and honourable mention, each and all giving descriptive opportunities to an enthusiast. There would be, besides, the necessity of setting forth the truth, the whole truth, and nothing but the truth respecting the woollen transactions of 1698, which would, in the hands of a competent student and impressive writer, bear a very different construction to that usually, and too often maliciously, put upon them. And there would be, in conclusion, the more agreeable task of giving form and animation to the different enterprises which have in later years lifted the industry out of the Slough of Despond into which the financial troubles of the second decade of this century and the stress of foreign competition had brought it.

Now for a few words of practical application, since it has not been wholly with the idea of taking a pleasant little literary excursion that these few facts from Irish textile history have been brought before the reader, nor only for the purpose of suggesting what a capital book could be written upon the woollen industry. In the face of past prosperity or former fame, comparisons are inevitable. If such a book were written, not immediately perhaps, but some little time hence, would it be likely to put on record that the manufacturers of our day were fully alive to their opportunities, and quick to take advantage of them. In 1837, for a point of comparison covered by Her Majesty's reign, a Parliamentary return showed that there were 46 woollen or worsted factories in Ireland, "all situated at Dublin or in the southern counties." It was said in 1849 that although the trade retained its hold upon the country, as it well might indeed, it was still "not prosecuted to any extent commensurate with the obvious facilities naturally afforded for its cultivation." Could that be said of the industry as it is now? We venture to think that, though some progress of late years has been made, much more might be done to promote an industry so well suited to the country, and one with such an established prestige for excellence.



## Practical Instructions in Linen Meaving.

(SPECIALLY WRITTEN FOR THIS JOURNAL, AND ALL RIGHTS RESERVED.) The Hand-loom.



OR some of the finer classes of linen goods this original mode of weaving is superior to that of the powerlooms—in fact, hand-woven fabrics are increasingly pre-ferred at home and abroad. There is, beyond doubt, a decided difference in the operation of the hand-loom and power-loom, though the principal movements of the latter have been borrowed from the former. The shedding of the warp threads in a hand-loom is effected by the weaver's feet, which may be a gentle touch in accordance with the nature of the warp yarns; in the power-loom, the direct force of the treading tappet is uniform whether for "weal or woe." As the hand weaver gently depresses one treadle, the other is as gently elevated without a plunge, the lay is pushed back with an easy movement, and the shuttle thrown across with only a minimum of force;

in the power-loom, the force used to drive a shuttle would be sufficient to send it twice the distance required. Then there is the delicate touch in driving up the pick in a fine muslin on a hand-loom that cannot be obtained in a power-loom with all our mechanical improvements. I am now speaking of very fine fabrics, warp and weft. Again, the most important point of all is in the warp tension; the power-loom stretch is insufficient for perfection in this respect. It is well known, or ought to be, that the best position for the yarn in weaving is obtained in handlooms; the warp must bear a certain strain, and this strain must be as equally distributed as possible throughout the stretch. Yarn kept tight between two beams, and forming a straight line, makes this strain equal, whether at a minimum or maximum, among all the fibres: as the strain is in the direction of the warp line, it must be in the best possible position for making cloth. But this is not sufficient—it must also be in the direction of the lay's stroke.

Yarn can be, and is, injured by excessive tension, and also by too much stretch; hence a knowledge of strain in yarns is imperative to a practical weaver. The excellence of the cloth depends upon judicious tension, or a raw, lean, unfinished fabric will result from under tension, and constant breakage of threads by too much. This question of stretch is of some importance; tender, fine yarns can be very much injured by too long or too short a length in the loom; when too long, yarn is weakened, too short hinders the spring in shedding; of course the depth of a shed and the length of the lay's stroke will vary with the material and make of cloth required. A combination of skill and experience is the perfection in hand-loom weaving. In fine lawns, muslins, etc., the healds containing the warp threads require to be level and in the proper position in the stretch. The slabstock or cloth-rest is the fixed line for determining the level of the heald eyes. The distance of the healds from the cloth-rest is dependent on the strain of the yarn through the depth of shed and stroke of the lay: three inches is sufficient length for this stroke in fine yarns, and distance of healds from the cloth-rest about nine inches. The distance of the healds affects the yarn in shedding, by the angle at which it remains to the direction of the force; but the depth of the shed under any circumstances ought not to be above one inch, and shuttle one halfinch in thickness; the whip-roll about twelve inches at the back of the healds, the lease rods between whip-roll and healds about four inches away from the latter. In the backward sweep of the lay the shuttle is thrown across when the lay is as near the healds as it can be got.

The weft in fine linen fabrics offers very little resistance to the lay, so that the object aimed at by expert weavers is to gain firmness with a light action. For this purpose the lay swords are short and strong, and the race or shuttle-board with the under sole light. From the rail, commonly known as the "rocking-tree," to the race-board the leverage is sufficient at twenty-eight inches, the lay swords one inch thick and six inches broad, sole or bottom of race-board 1.5 inch by 1.5 inch. The firmness of the lay in striking up the weft depends to a great extent upon the rockingtree; its depth, therefore, ought to be equal to the breadth of the lay swords, and at least two inches thick. For broad cloths, the swords of The reaction of the the lay are increased in breadth up to eight inches. weft shot, so important in keeping a level cloth free from a cloudy appearance, is one of the main features that constitutes a good hand-loom linen weaver; the least difference in the force or a tremulous hand would spoil the weft delivery. Many weavers use a flighter or spring-cap for the reed in light thin fabrics; another contrivance, perhaps more suitable, is a cord to which the reed is attached, both ends being screwed up tight in the swords of the lay: this elastic cord permits sufficient rebounding to the reed, giving every advantage sought for by an indirect application of force: the evenness of texture is simply perfection, and these goods stand unrivalled in excellence, proving that the linen hand-loom weaver is without a compeer in any part of the world in the manipulation of his materials. The lay in good practice is set with the shuttle-race below the line of the warp, but only sufficient to permit the formation of the shed; the shuttle-race is bevelled towards the reed to prevent any unnecessary strain on the warp threads from the pressure of the shuttle in crossing over; and the shuttle has a bias, so that in running it will keep

Neat selvages are made by preventing the rebound of the shuttle-tip from contact with the driver or picker; in this case, though the weaver by a little practice can check the shuttle, yet very much depends upon the length of the picker spindles: this does not receive the amount of attention it ought to do, either in power or hand-loom. For ordinary widths sixteen inches is not too much, and for greater widths twenty inches, the shuttle from twelve to sixteen inches in length. or cloth-stretchers must never be set too close to the fell of the cloth, because this in itself will cause a density in the fabric at the selvages. The weft bobbins will affect the level aspect of the cloth if care is not taken; as the bobbin gets nearly empty, thin places occur in the weaving because of the increased tension; this is effectually prevented by the use of short bobbins all one length wound in the form of a cone.

The difficulty of hand-loom weaving increases with the fineness of the yarns; every small knot or bead will cause a breakage, because the splits of the reed are closer together. The dressing of the yarns also requires a considerable amount of practical experience, not only in the brushing and drying, but also in the preparation of the sizing materials. These remarks are perhaps sufficient to show generally the process of hand-loom weaving without going into further details; most of them are applicable to powerloom weaving, and of the latter I may say that the elasticity of linen warp-yarns is not sufficiently considered by many loom machinists, who follow too closely the construction of the models used for cotton weaving.

Linen has a strength and rigidity of fibre widely differing from cotton, and requires a greater amount of tension in the loom; further, the healds receive very little ease from any elasticity in the threads, therefore more In the weaving of fine goods by power, the smallstretch is necessary. ness of the shed and the size of the shuttle must be considered. the yarn from undue breakage, the one and only rule is that the shed must be commenced with the stroke of the lay at the moment of time when the shot is driven in to the fell of the cloth. The reaction from power-looms is irregular, and in the fabrication of linens the shafting ought to be heavy, more so than the ordinary method or rule for calculating the power required; hence loom shafting in many instances is made too light, vibration is the consequence, and the irregularities cause thick and thin places in the cloth, particularly where there is any amount of angular strain on the crank shaft.

The diameters of the pulleys on the looms and the drums on the shafting ought to be calculated, so that some allowance might be made

for the slip of the belting.

The overlooker or loom manager by power is really the weaver; he alone has the knowledge which will tend to the success of the production. His judgment consists in seeing that the materials in the looms do not suffer from unnecessary strains or other impediments. He places the warp in its proper position, and sees that it is maintained correctly throughout the weaving; that there is no more than sufficient space between the healds and the cloth; the shed right size, no more or less than for the passage of the shuttle; that all the motions are in proper succession to save time and material; in fact, he must be well up in the practice of good weaving and the capabilities of the machinery in his charge.

Practice and experience are necessary to fully understand the art of weaving all through—the changes that can be made in healds and harness to produce fresh designs or novelties. To produce definite figures involves variations of the shedding; it is possible with three heald shafts to have six heald sheds, and as the number of the shafts increase so do

the changes in shedding increase in proportion. A twill cloth does not permit the weft and warp to alternate as in plain fabrics; the warp or weft may predominate; in the three-leaf twill, which is the simplest of all, the weft or warp may pass successively over two and under one; the number of shafts being increased, the principle governing warp and weft is the same; thus with six shafts the weft may pass over the sixth thread of warp and under five, or over five and under one. To form a very intricate pattern, a greater number of sheds would be necessary; hence it is found economical to arrange various systems of drafting without, if possible, increasing the number of shafts; a weave which would otherwise require to be repeated on a large number of shafts, may be easily reduced to a comparatively small number. If a weave is drawn on separate shafts the number of threads forming a stripe may be increased indefinitely, and some of the most beautiful examples of weave and colour arrangements can be produced with ease. This section-drafting gives great advantages for the developing of colours; for instance, in the following particulars for a striped zephyr 30 inches wide 8 shafts can be used with effect, the four in front to carry the plain ground, and the four back ones

the fancy colours. The weave arrangement is shown by Fig. 1, no doubt simple enough, but it is the arrangement of the colours and size of stripe that gives a pattern commanding purchasers, and this is the object of a manufacturer. The margin of the weave plan Fig. 1 is numbered for reference to the draft and pattern without covering too much space. Then if 40 dents or splits per inch are used

space. Then if 40 dents or spins per inch are used with 85's line warp and weft, 80 picks per inch, a good fabric will result; the pattern 80 of bleached white on 1, 2, 3, 4 shafts, 2 in a dent; 4 black, 8 yellow on 5, 6, 7, 8 shafts, 4 in a dent; 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 possible to 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 2 light violet on 5, 6, 7, 8 shafts, 3 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 4 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 8 white on 1, 2, 3, 4 shafts, 4 light violet on 5, 6, 7, 8 shafts, 9 light violet on 5, 6, 7, 8 shafts, 9 light violet on 5, 6, 7, 8 shafts, 9 light violet on 5, 6, 7, 8 shafts, 9 light violet on 5, 6, 7, 8 shafts, 9 light shafts, repeating this portion of the pattern for 3 yellows and 3 light violets, commencing the full repeat of the pattern with the 80 white plain ground. Now as the 4 front shafts are 2 in a dent, and the 4 back shafts 4 in a dent, two warp beams would be requisite to keep an equal tension The peculiarity of these striped zephyrs is to give all the in the stripes. brilliancy possible to the coloured warp; hence the weft, which is always the same colour as the ground or plain stripe, is kept out of sight by the satin weave on the 4 back shafts, and the density of the warp threads assists in this object. This class of fabrics is always popular and in In fancy shirtings this feature in the weave also obtains, and may be carried out to perfection by a neat disposition of colour combin-I could give many examples, but having ation and size of stripes. pointed out how section-drafting on two, three, or more sets of shafts can be adopted for stripe combinations, I may be permitted to turn my atten-

tion to other weave systems.

The patterns shown so far, though commercially useful, are on a simple Looms are now so constructed that the most intricate patterns can be woven without an extensive harness; it only requires ordinary intelligence to become acquainted with the principal rules and requirements necessary to design what are called jacquard imitations, or all-over effects at once beautiful and in good taste. The construction of these weaves is extremely interesting to students as well as practical weavers, inasmuch as they can be produced to an unlimited extent without any great knowledge of drawing, which is a special acquirement for a designer of floral or jacquard ornamentation. The most simple weaves may be used by means of skip or fancy drafting, and in turn these arrangements may again be rearranged without stint or limit. I will give the foundation of this method of designing, and by the use of figures for the drafting will be enabled to save space, the student having a sufficient guide to form his own designs, which will not only be a most useful exercise, but will lead on to the most novel and surprising results possible to conceive. Of course, due attention must be paid to the extent of the floating spaces either warp or weft way, a too loose fabric being worse than useless, except for a very few special purposes, and rarely, if at all, in linen textures. Now, by the use of the different sub-divisions of a weave, together with a draft arrangement, it is comparatively easy to form a very intricate pattern extending to 64 warp threads and 64 weft picks from the ordinary four-leaf-twill; and if this is so, as will be shown by an explanation in the next communication, how much more extensive and how indefinite the range when we employ a 12 or 16 shaft harness with all the sub-divisions of twills, etc., which can be obtained from these numbers, if we only make use of a straight-over draught; but when this draft is varied in every possible way that the order of figures will permit, then the number of patterns (no two alike) which can be developed is beyond conception.

#### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* TRANSMISSION OF POWER BY PULLEYS.

THE importance of covering the face of pulleys with leather is not sufficiently realised by machinists. A greater amount of power at less cost can be obtained and "slip" prevented if pulleys are so covered. Leather belts used with the grain side to the pulley will not only give more power, but will last longer than when used with the flesh side to the The grain side is more compact and fixed, and more of its surface is brought into contact with the circumference of a pulley; the

# The Belfast Linen Trade Report.

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

HILST the spinning trade has maintained the strong position reported last month, and, in fact, shows signs of further tightness, in prospect of still dearer flax, it cannot be said that cloth has responded in the same measure. In fact, general demand of late has been very quiet, but the end of the half-year is usually a dull period.

FLAX.

Though comparatively little business has been done in flax of late, great firmness in prices with a further upward tendency has characterised the market. The opening rates for new flax (Russian excepted) are likely to be exceptionally high, having regard to the short Continental supplies, and the known extreme rates paid this season by Dutch and other buyers of flax on the foot. The Irish flax crop is, on the whole, reported as looking most promising, having been much improved by the recent rains.

VARNS

Though the buying of late has been mainly for sorting-up, it is not to be taken as any indication of a reaction in the condition of the market, as most manufacturers have been, in fact, only getting deliveries of heavy contract orders placed some time ago, so that the current business has been for numbers or qualities not embraced in these contracts. The prospect of continued high rates for flax in the near future makes spinners careless of booking further ahead, and causes them to insist on current rates for any new business done. Stocks in first hands are practically without change, and remain at the very low point touched of late. The tariff of last month is practically unaltered.

#### BROWN POWER AND HAND-LOOM LINENS.

The turn of improvement in demand for several makes of brown cloth, referred to last month, can scarcely be said to have been followed up; on the contrary, for the past week or two, there has been less doing, which is largely owing to the uneasy feeling just now in so many foreign markets. Bleaching cloth, though quieter, is still firm in price in both power and hand-loom makes, the increased cost of production checking any change in values. Stocks on the market are light, and in Ballymena goods, the production having greatly fallen off of late, supplies are much smaller. Dress linens have met with continued attention, a special demand having sprung up for goods of this class, owing to the warm summer, and prices are very firm for all makes. Roughs have been moving pretty freely also, the

fine season influencing demand from the making-up trades; prices show a hardening tendency. Glass-cloth, towelling, crash, and other goods of this class, both in linen and union makes, have met with a fairly steady demand for shipping purposes, and prices keep quite firm.

Cambric cloth has been in slowly-improving demand, but hand-kerchiefs are quiet. Linen makes are dull, and present production still limited, but values keep very steady and firm. Power-loom damasks move off tolerably well; but hand-loom makes are slow, and great difficulty experienced in getting the higher prices warranted by the large advance in yarns.

#### BLEACHED AND FINISHED LINENS.

Home Trade.—A very quiet tone has pervaded this branch of trade of late, and the anticipations of a revival in demand have not been realised. Financial disturbances in so many foreign markets of late have affected business at home, so that the outlook just now is anything but bright.

Continental.—Dulness seems the feature of business with these markets, and official figures for June indicate a further falling-off in trade for the half-year of 1893.

United States.—It is satisfactory to find the increased shipments to this important market have been well maintained, the quantities for the half-year showing an improvement of over 13 per cent. compared with the same period last year. Recent advices, however, indicate much quietness in all branches of trade at close of half-year.

Other Markets.—There has been a falling-off in the foreign West Indian trade, but previous months were good. With the markets of Mexico, Columbia, Brazil, Argentine Republic, and British East Indies more has been doing; but Australia, as might be expected, shows a smart decline on the half-year. The Canadian trade, though better than for the first half of the year 1891, has not come up to that of last year. In the group of smaller markets described as "other countries" in the Board of Trade returns, the volume of business shows an improvement compared with the same period last year. The shipments of "other (linen) articles" have also improved, whilst in sewing thread the half-year's trade was larger than for 1892.

The total value of linen manufactures exported from the United Kingdom for the half-year to 30th June last was £2,614,203, against

£2,552,897 last year, and £2,462,018 for 1891.

	Prices Current for ordinary Line and Tow Wefts. July 14th, 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 )	_			8/-	7/3	6/6	6/-	5/9	5/6	5/-	4/103	4/7½	4/6	4/41/2	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/3	4/41/2	4/7½	4/9	5/-	5/3
Wefts \ Tow \ Wefts	6/3	5/10½	5/9	5/6	$5/4\frac{1}{2}$	5/3	5/1½	_ ′	4/9	4/6	4/41/2			se price	s are 1	er bun	dle of oual dis	60,000 y scount	ards of	f grey	Yarn,			s≕l hā	ink	l lea oundle	

smoother the two surfaces are, the less air passes between; the more uneven these surfaces, the more tension to prevent the "slip" of the belt; for what is lost by want of contact must be made up by extra strain: in this way machines suffer undue wear and tear in their movements, and are worn out before their time.—LISTER.



#### The Krish Moollen Trade.

USINESS has continued good for a longer period during the present season than in almost any other corresponding period of recent years, so far as orders for immediate delivery are concerned. In ordinary years the summer trade is pretty nearly completed by May; but this year repeat orders have kept coming in on a fairly extensive scale up till a much later period—in

fact, almost up to date of writing. The result has been that the turnover of the six months ending June 30, so far from showing a falling off as compared with previous seasons, has been, it is believed, very considerably in excess of that of even last year. In the local warehouses the trade was exceedingly dull, comparatively speaking, in the earlier part of the season, but the long-continued spell of fine weather, and the consequent extension of the term of buying, has brought up the returns, and has kept the houses repeating almost weekly from the Irish manufacturers. One of the leading firms informs me that the trade of its wholesale woollen department has been larger for the last half-year than in any corresponding six months in the history of the firm; and further inquiry enables me to state that this satisfactory condition of the woollen business has been pretty generally experienced.

#### Irish Serges.

The splendid summer weather that we have been enjoying almost uninterruptedly for so unusually long a period has greatly favoured the Irish manufacturers in several ways. Naturally, the present has been a great season for serges, and in black, and especially indigo serges, the Irish woollen manufacturers still hold the lead almost unchallenged; that is to say, so far as the medium and finer qualities, in guaranteed fast colours, are concerned. Up to the present, good serges in medium weights are selling freely, and the warehousemen are almost daily writing

Exports of Linen Yarns and Linens from the United Kingdom for the Month ended 30th June, 1893; and in the Six Months ended 30th June, 1893, compared with the corresponding periods of the Years 1891 and 1892.

		MO	NTH ENDI	ED 30тн J1	JNE.		SIX MONTHS ENDED 30TH JUNE.								
COUNTRIES.		Quantities.		De	Declared Value.			Quantities.		Declared Value.					
	1891	1892	1893	1891	1892	1893	1891	1892	1893	1891	1892	1893			
LINEN YARN.	Lbs.	Lbs.	Lbs.	£	£	£	Lbs.	Lbs.	Lbs.	£	£	£			
To Germany,	336,000 185,500 189,200 114,800 352,700 30,600 29,200 127,400	195,100 140,800 155,000 100,100 1,685,800 59,900 57,900 127,100	293,000 130,000 161,000 106,200 361,600 14,800 48,900 178,700	26,836 6,517 16,744 13,178 12,216 1,492 1,044 5,423	16,393 5,336 12,149 11,297 56,570 2,587 1,676 5,238	22,579 5,309 12,392 12,744 15,958 705 1,584 7,869	1,733,300 1,122,900 879,200 700,000 1,968,300 204,600 198,600 838,600	1,409,700 944,100 687,000 690,300 3,298,000 248,000 245,000 907,300	2,502,300 1,156,100 1,141,500 665,300 1,733,700 159,200 252,400 1,315,300	142,144 38,965 73,566 77,556 70,682 9,968 7,692 38,261	117,727 34,693 53,956 77,640 116,511 11,251 8,117 39,448	187,009 41,548 80,475 75,666 79,119 7,417 8,733 55,793			
Total,	1,365,400	2,521,700	1,294,200	83,450	111,246	79,140	7,645,500	8,429,400	8,925,800	458,834	459,343	535,760			
LINEN MANUFACTURES.	Yards.	Yards.	Yards.	Ŀ	£	£	Yards.	Yards.	Yards.	£	£	£			
To Germany,	364,700 165,500 174,200 53,200 6,886,000 1,467,400 108,900	345,600 91,600 492 000 146.800 7,359,200 3,290,800 103,100	272,000 93,700 73,000 109,000 7,990,000 1,623,900 150,800	16,976 7,503 6,573 2,512 137,460 28,689 2,483	17,241 4,202 21,118 7,119 149,468 62,926 2,553	13,368 4,347 2,136 3,920 159,118 32,804 3,872	1,907,600 1,005,000 879,600 478,600 41,140,400 7,963,400 865,200	1,920,500 1,027,500 1,173,300 586,800 46,910,800 10,945,300 704,700	1,897,500 655,700 277,400 444,900 53,032,800 9,970,700 633,000	92,309 44,953 30,905 20,316 861,080 160,442 21,394	93,493 45,797 48,316 25,727 962,920 209,727 17,482	92,166 29,530 8,943 18,097 1,096,018 200,237 16,779			
United States of Colombia,	211,700	230,800	290,600	3,818	4,284	4,680	1,667,300	2,001,200	1,871,400	29,103	33,203	30,631			
Brazil,	322,500 84,100 50,500 493,000	238,600 115,400 2,300 690,200	274,400 287,500 23,300 671,300	9,668 1,582 658 8,759	6,122 2,951 82 13,372	8,640 9,694 815 12,669	1,896,700 305,700 640,900 3,937,800	1,190,000 298,300 210,800 4,249,300	1,472,200 693,200 222,500 4,117,400	62,137 7,115 11,443 77,602	33,682 8,907 3,796 80,855	43,816 23,509 5,611 73,405			
British North America British West India   Islands & Guiana	121,800	148,300	113,200	2,591	2,994	2,806	963,300	870,000	717,800	18,762	18,263	14,560			
Do. East Indies, Australasia, Other Countries,	318,600 1,442,700 1,205,700	178,400 1,086,700 1,291,300	307,300 795,600 1,412,300	8,625 40,921 31,200	5,623 30,564 31,731	7,660 22,155 35,607	1,531,200 5,845,300 8,110,000	1,528,800 5,779,300 7,752,500	1,803,500 4,082,000 8,918,500	44,471 168,353 193,076	42,404 155,777 178,931	47,707 110,454 194,493			
Total Plain, Un-) bleached, or Bleached)	12,178,000	14,512,200	12,757,300	272,598	324,409	276,086	71,192,500	80,057,800	81,478,300	1,607,464	1,751,658	1,769,331			
Total Checked, Printed, or Dyed, and Damasks or Diapers,	1,015,100	1,068,600	1,298,200	25,126	27,155	30,788	6,275,700	5,629,800	7,806,700	160,478	139,714	170,163			
Sail Cloth and Sails,	277,400	230,300	432,400	12,294	10,786	17,417	1,669,800	1,461,500	1,525,500	75,519	67,908	66,462			
Total of Piece Goods,.	13,470,500	15,811,100	14,487,900	310,018	362,350	324,291	79,138,000	87,149,100	90,810,500	1,843,461	1,959,280	2,005,956			
Thread for Sewing,	Lbs. 228,200	Lbs. 193,000	Lbs. 233,600	£ 27,346	£ 25,331	£ 27,441	Lbs. 1,251,700	Lbs. 1,235,700	Lbs. 1,266,400	£ 155,005	£ 153,901	£ 154,952			
Other Articles,	••••			79,853	80,957	73,574				463,552	439,716	453,295			
Total Value of Linen Manufactures,		•••••		417,217	468,638	425,306		••••		2,462,018	2,552,897	2,614,203			

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

		MON	TH ENDE	D 30тн JU	INE.	SIX MONTHS ENDED 30TH JUNE.							
COUNTRIES.		Quantities.		Val	lue of Impo	rts.		Quantities.		Value of Imports.			
·	1891	1892	1893	1891	1892	1893	1891	1892	1893	1891	1892	1893	
	Cwts.	Cwts.	Cwts.	£	£	£	Cwts.	Cwts.	Cwts.	£	£	£	
From Russia,, ,, Germany,, ,, Holland,, ,, Belgium,, ,, Other Countries,	7,767 106 474 1,338	6,408 228 418 753 154	13,140 863 555 596 145	194,731 2,754 24,292 77,683 9,081	173,581 5,740 17,294 39,408 3,192	423,761 26,987 9,940 28,416 1,337		40,539 1,922 3,485 8,903 1,152	32,040 2,614 4,093 8,559 539	912,412 42,749 151,018 516,699 79,894	1,050,988 42,143 160,562 469,433 25,368	1,004,139 71,635 155,310 429,050 12,796	
Total,	10,083	7,961	15,299	308,541	239,215	490,441	51,670	56,001	47,845	1,702,772	1,748,494	1,672,930	

or wiring for them from the manufacturers. There has been a demand this year for indigo serges in a coarser and heavier make than usual, but of pure wool and fast dye, and at a moderate price. Some of the Southern manufacturers have been specially successful in catering for this demand, and have brought out goods in both 27-inch and 54-inch widths that have taken well in the market. These serges are of strong, if somewhat coarse, wool, and will be certainly serviceable to the wearer. They are fairly sightly in appearance—sightlier, at all events, than Cheviot goods at similar prices.

Irish Tweeds and Coatings.

The tweed trade has been well maintained throughout, the trend of current demand having been altogether in favour of Irish tweed makers, so far as men's wear is concerned. Cheviots and Saxonies have been bought in increasing quantities both for the local and cross-Channel demand. Soft, "velvet-finished" tweeds are again coming into request, mainly in fine Cheviot qualities. Wide tweeds in small, neat designs, and of moderate weight, have been selling freely for deerstalkers and and of moderate weight, have been seiling freely for deerstakers and similar wraps. For the coming winter, orders have been pretty freely placed for tweeds of extra weights for overcoatings. Some of the earlier wholesale buyers have been looking up ranges of light weights in tweeds—10oz. to 11oz.—for the ensuing spring. These are mainly wanted for the English trade, and by those Irish houses doing business across the Channel; "spring weights" for this country's trade being very little lighter than those of winter. For the making-up trades the Irish manufacturers are selling in fair quantities six-quarter Cheviots at from 3s. 6d. to 4s. per yard. For the bulk of the making-up trade, however, Irish goods are too high-priced, and Yorkshire shoddy and printed tweeds are bought in by far the largest quantities.

A very steady and regularly increasing trade is being done in Irish coatings—called "doeskins" by the trade for some not very apparent reason, for they bear little resemblance to the doeskins in which so large a business was done in former days. Some of these are in special demand, chiefly in black, and having much the appearance of cloths suitable for clergymen, &c.; they are very fine in the twill and rather close cut in the face, and are bought in superior qualities in both narrow and wide widths. The cloths are very sound in quality, and are quite fast in colour, but are too heavy in texture for ordinary wear. The same thing in very much lighter weights, and at proportionately lower prices, should take well in

the ordinary merchant tailoring trade.

Friezes have been selling for the coming winter trade, but in very limited quantities compared with the sales at this period a few years ago. Napped friezes are still being bought, but the chief demand is for smoothfaced, soft-finished friezes.

#### Irish Dress Tweeds.

In some material respects the trade in Irish dress tweeds has received undoubted check. The increased width and different shape of the an undoubted check. skirt in costumes has to a large extent done away with the demand for cloth of the weight of the Donegal and Mayo tweeds, that have been so much in vogue during recent years and up till the present season. Heavy tweeds do not "drape" well in a wide skirt; and they are, besides, so difficult to make up, that the dressmaking departments have not been sorry to have an opportunity of giving them the cold shoulder. They seem, however, to be firmly established for sporting, seaside, and tennis costumes, and will be wanted for these in the best qualities and in suitable designs for some time to come at least. For this branch of business, however, the quantities that would be used would be comparatively small in volume.

A large demand exists for wide tweeds, very light and loose in texture, and effective in design, and in these a very large trade indeed might be A few Irish manufacturers are catering for it, and with considerable success both as to sales and profit; but to do the dress trade largely and successfully demands more rapid movement, and quicker appreciation of coming changes in fashion, than the bulk of the Irish makers have exhibited hitherto. A good many wide looms have been erected lately, however, and an improvement in these respects is to be hoped for. Wide widths, stylish and novel designs, and sound and comparatively thin textures, are what is wanted in dress tweeds at present, and what is expected to be in demand for some seasons to come.

## The Makingsup Trades.

### Apron and Pinafore Factories.

HE apron and pinafore factories experienced a time of moderate dulness towards the close of last month, but have now again begun to be fully employed. Representatives from nearly all the factories have been in London and Manchester since I wrote in this column a month ago, and have booked orders to a very satisfactory amount, upon which the workers are now fully engaged. These orders have been altogether for holland aprons, and, as was anticipated, those made from union pales have been bought more largely than So far as holland those manufactured from any other material. aprons go, Belfast manufacturers have taken quite their full share of the business of the season. The fancy goods of various kinds are now being got ready, and it remains to be seen whether they will largely increase their hold of this branch, as is pretty generally expected. Most of the makers will be showing their new designs almost immediately.

#### Fancy Pinafores.

The new fancy pinafore which I referred to in last issue as likely to revolutionise the trade has since been patented by the manufacturer. is a "patent spring-band pinafore," in which strings and tying are done away with altogether, the apron requiring only to be slipped on, and the spring-band acting automatically. By special permission of her Royal Highness, the aprons are to be called the "Duchess of York." The manufacturer will be able to bring out the new apron in a great variety of qualities, as he has been able to contract for the spring-bands on fairly moderate terms. A very handsome present of the aprons that are to bear her name was made by him to the Duchess of York previous to her marriage. The aprons are put up in very elegant perfumed boxes, tied with bows of white ribbon, the whole being enclosed in a handsome case. One of the handsomest of the aprons was made of pale heliotrope Irish poplin, trimmed with Duchesse lace, and with handsome belt covering the spring-band. The body was made full and puffed out, with lace hanging full over the front, and with ruching of silk and lace on neck, and deep Duchesse lace falling over the shoulders. Another was made of ivory satin trimmed with crimson satin, with folds of crimson satin on apron, full crimson front, fan-shaped, with ivory satin lappels, and crimson collar with deep silk lace. A third was of sky-blue Surah silk, with silver trimming down sides of apron, and ruching of silver across the foot, the body trimmed with silk ruching on each side, almost meeting, and extending half-way up centre of front, and joining lappel collar trimmed with silver; pocket in each side, one puffed with ruching, the other trimmed with silver. Of the remainder, one of ivory silk lace trimmed with satin, with crimson satin lappels and collar, and with full pleating of embroidered silk lace on satin happens and could, and with The Pattern Shoulder; and another of ivory Duchesse satin trimmed with Duchesse lace, deep collar puffed on shoulders, full lace front, and deep Duchesse lace falling over the sleeve, were the most noticeable. The set had a very effective appearance, the styles and get-up of the whole displaying very great taste indeed, as well as perfect workmanship, and its production certainly does credit to the apron industry of Belfast.

As regards the fancy linen garments referred to in last issue, it is too early in the season yet to say to what extent the goods are likely to go;

but, so far, they have been received with much favour.

#### The Shirt and Collar Trade.

The shirt and collar factories are having a prolonged season for summer goods, and orders for these in all varieties are still coming to hand. At the same time, the winter samples have now been before the customers for some weeks, and orders for future delivery of all kinds of wool goods have already been booked to a fair extent. The trade in white shirts is steadily increasing in Belfast, but here, as in the collar and cuff branches, great difficulty is experienced for want of sufficient hands for the laundries. Other classes of work of a less severe kind are plentiful in Belfast, and female workers for the laundries can now hardly be obtained. Some effort to relieve this difficulty has been made by opening laundries in Bangor and one or two other country districts, and the movement would soon become general but for some serious obstacles in the way, the greatest being the charges demanded by the railway companies for carrygreatest being the charges demanded by the railway companies for carrying the goods to and from the town factories. If the railway companies adopted a more generous policy, it would be to the advantage alike of themselves and the making-up trades.

#### The Irish Cotton Trade. Yarns.

HERE has been a very fair business doing in cotton yarns during the past three or four weeks, some respectable contracts having been concluded for warps in the numbers 8 to 16 since our last This little wave of business is to be attributed not so much to any great demand for union cloth (which, generally speaking, is more feeble than usual) as to the low rates quoted, the prices having fallen something like 1½d. per lb. from the highest level. It is difficult, however, to forecast what the effect of the silver question will be, but it will, no doubt, influence the prices both of the raw material and of the manufactured article. The financial difficulties in America have already had a depressing effect on rates, and the decline in the price of yarns above referred to is largely attributable to that circumstance. There is, besides, the new largely attributable to that circumstance. money legislation in India, which is likely to enter as a factor in the consolidation of rates, to be likewise considered. Manufacturers, however, are now pretty well covered, and unless a further decline takes place to stimulate them to fresh operations, not much new business is expected for the next couple of weeks. The demand for shirting unions has been extremely quiet of late, and very few orders of any importance are being booked. A moderate business is doing in union towellings and glasscloths and some other classes of domestic goods, but the output still keeps much in excess of the demand. Union hollands for dyeing purposes continue to receive a fair share of attention, but it is feared the bulk of the production is going into stock. Cheap union crashes are readily disposed of; but the manufacture of these goods leaves so very little margin of profit that manufacturers merely produce to keep machinery The demand for union handkerchiefs is practically nil, and their production has been, in consequence, almost completely suspended. financial troubles in Australia and New Zealand have materially affected the demand for creamed unions and union roughs; but as machinery must be kept in movement, their manufacture is being proceeded with, but within as narrow limits as possible.

#### Cloth

The imports of cotton cloth from Lancashire to this country have latterly fallen off materially, especially cotton cambrics and mulls. The Ulster handkerchief manufacturers, who print, bleach, and hem these goods, have been having but dull times of it of late, and find enough to do to keep their stocks within moderate limits, without thinking of increasing them still further. The United States is the chief outlet for this description of goods, but the money troubles in that country have almost paralysed the trade. There is besides the new tariff question, which is hampering sales and preventing anything like speculation. The heavier makes of goods for dyeing and finishing, as linenettes, have had a very satisfactory turn this season, and the demand for this article is being fairly well sustained up till the present. Heavy interlinings are in moderate request, but without any special feature to notice.



(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.

#### Frish.

DUBLIN.—But little to note in linens since last writing. has in no respects materially altered, and the general position is a quiet one. With woollens it is slightly different. The enfeebled tone of the home market, with a reduction of the demand for America, have The enfeebled tone of the engendered some discontent; but though this is more or less general, there would appear to be no serious apprehension for the future. The tone of the market for the raw material, though quiet, has been on the whole healthy, and the future prospects are, as a rule, most hopefully looked forward to. Prices are much as they were, with supplies moderate, and the trade, though tame, firm. Latest quotations for wools are:—Downs, 10\frac{1}{2}d.-11d.; hogget, 9\frac{2}{4}d.-10\frac{1}{4}d.; ewe or wether, 8\frac{2}{4}d.-9\frac{2}{4}d.; seaside, 8\frac{1}{4}d.-9d.; mountain, 8d.-8\frac{1}{2}d.; Scotch, 5\frac{1}{2}d.-7d. There is no doubt that the new monetary policy in India is seriously affecting all the English export markets, and is naturally reacting upon us here. ever be the eventual outcome of the endeavour to de-monetise silver in India—or perhaps I ought to say the endeavour to fix a definite ratio between it and gold—the present result has been an enormous depreciation in silver values, a depreciation which is affecting Irish markets alike with those of England and America. It is too soon as yet to say how in the end matters will arrange themselves; but I am very much afraid that the attempt to fix the value of the rupee at 1s. 4d. by stopping the free coinage of silver at the Indian mints, will, however much it may benefit the salary-drawing population of that country, be of very little advantage, if not positively the reverse, to the vast number of the people. The only result, so far, of the Indian Government acting upon the recommendations of Lord Herschell's Committee, has been to convulse the metal (precious) markets of the world—a result which has naturally and inevitably brought in its train a serious disturbance of most of the other commercial markets.

#### The Royal Wedding.

The happy event is over, and under the most auspicious circumstances. I only touch on it here in order to refer to one or two of the Irish With that one presented by the ladies of Ireland, and manufactured by Messrs. Walpole Bros., you in Belfast have more to do than I have, although the Walpoles are a Dublin as well as Belfast firm. The poplins, however, are specially in my department. These have been made by Messrs. Atkinson & Co., of College Green, and for some days attracted a large amount of attention while exhibited in their windows. One piece is pale green plain poplin in "Imperial" cord—a make of peculiar richness and lightness, which, I understand, is only turned out by Messrs. Atkinson. The other piece shows a bold design of arum lilies and foliage, brocaded in white on a chartreuse green background. This latter, which was specially designed, is of exquisite workmanship and finish, and the pattern will not be reproduced—at least for some considerable time to come. Another of the presents, though presented by the Countess of Aberdeen, is of Irish manufacture. It is in the form of an Irish cloak made of white Galway flannel, lined with white poplin, obtained through the agency of the Irish Industries Association, and, needless to say, the materials are the finest that can be produced. The cloak will be fastened by a gold clasp in the shape of an Irish "fibula," and an exact reproduction of the College fibula in the possession of Trinity College. To fasten the fibula to the cloak there are at either side two brooches of what is known as the "arbutus" pattern; fibula and brooches being manufactured by Mr. E. Johnson, of Grafton Street. The whole is unique, and is sure to form one of the most treasured of Her Royal Highness's bridal gifts.

LURGAN.—I cannot report business to be any better in the linen and cambrichandkerchief trade here than at last time of writing. This is always known as our dullest time of the year, especially in our home trade, one of the reasons being that 1st of month is generally stocktaking with a great

many of the large houses in London and Manchester. There is still a moderately good demand for cambric for hemstitched and embroidered handkerchiefs, and stocks are not allowed to accumulate; in fact, handloom goods are not to be found in stock in any quantity. The output from these looms is now very limited, and it does not take a big consumption to keep them used up. Power-loom manufacturers are well employed, and it is here the big volume of trade is done and is increasing; more looms being added and factories started. It is just possible that financial troubles in other countries are contributing to the dulness now experienced here, but it is to be hoped this will pass away, and if linen yarns were cheaper, this old industry might soon again be brisk. Machine hemstitchers are very busy, also blouse makers. Damasks, diapers, embroidered linen sheets, shams, tea-cloths, &c., are in fair request.

#### English.

BARNSLEY.—The production and sale of linens of most kinds have been maintained during the month, and, generally, trade is in a very healthy state. In the lighter makes of goods for hot climates, there has been an increased demand, that for both plain and fancy goods having recently increased. A rather quieter feeling has been apparent in the demand for sun-blinds, as the season for them is now nearly over; but a few repeat orders have come to hand. In bed material, a fair business has been done in most kinds of fabrics, those of the finer qualities having met with most favour. Damask table linens have shown no signs of improvement, the demand having been very quiet. In carpetings, stair coverings, and such-like goods, only a moderate business has been done. Coloured, bordered, and twilled towellings have sold well, especially those of the finer makes. Narrow goods, such as towels, toilet, pantry and domestic cloths generally, have kept in firm request. Drabbets, drills, &c., have shown no change. Hand linens have sold slowly, and prices have not changed.

LEEDS.—Business in this district has varied considerably; whilst some manufacturers are very busy, others have a difficulty in keeping their looms fully employed. Makers of fine worsteds, in fancy styles, have a fair number of orders on hand, but there are many complaints of the profits being small, and that a keen competition is the rule at present. Those engaged in the serge branches keep very busy on most classes of goods, fancy makes having been in much favour in nearly all qualities. In the tweed and cheviot departments, a fairly good business has been done in the fancy fabrics, but the plainer kinds are not eagerly sought for. The finer and medium classes of materials have been in most favour. Goods suitable for the ready-made clothing trade have had a demand about equal to last month, and the hopes entertained a few weeks ago by those engaged in this branch, that an early improvement in business would take place, have not so far been fulfilled. In the plainer kinds of fabrics a dragging business has been done, and especially has this been the case in heavier makes. Prices show no variation.

BRADFORD.—Early in last month a rather quiet feeling pervaded the markets. In wools, sales were slow, and mostly of a consumptive character. But, half-way through the month, a better feeling became apparent, and sales of the raw material increased considerably at fairly good prices. A firmer tone was given to the markets on the opening of the London sales, as wools were eagerly competed for at a fractional advance on the preceding sales. At the close of the month, wools all round were held very firmly, and the tendency of prices is now upwards. In yarns there is little new to note, fresh orders have come in slowly, but as spinners generally have been busy on old contracts, they seem as a rule content to wait for new work a short time, until their present engagements are nearer completion. The brighter yarns are still in most favour, those of English wools being chiefly sought after. Mohair yarns are also in much request, but spinners of these are asking such firm rates that buyers have not placed many orders. In piece goods, there is a fair run on novelties, but plain goods have been quiet.

there is a fair run on novelties, but plain goods have been quiet.

MANCHESTER.—The home demand for linens has displayed no features calling for special attention. The departments have not been so busily engaged during the past few weeks, owing partly to stocktaking, and partly to the quietness which has been forced upon the trade by the uncertain attitude of manufacturers. Amongst the specialities which have met with a fair demand during the season have been coloured linens in all the new art shades for costumes. The finish of these cloths is of a high class, and if they possess any fault, it is that they may wear too long. Linen dress foundations also continue to be pushed vigorously by certain houses making a speciality of this class of goods.

Owing to the depression in the Australian trade, some of our merchant houses having connections in the Antipodes have reduced their travelling staff. The necessity for this step is powerfully emphasised by a glance at the trade returns for the half-year, which show a remarkable shrinkage, extending, practically, all along the line, as far as textiles are concerned.

The working head-quarters of the Bimetallic League are here, and it is this body which is responsible for the recent meetings of M.P.'s called to specially discuss the situation. The rehabilitation of silver to the position it occupied previous to 1873 is an impossibility, and the fixing of a ratio between the two metals is made difficult because of unlimited supplies of the white metal, which may at any time flood the market should hasty legislation give an artificial value to silver for a time. An international scramble for gold, as the only alternative, would be equally deplorable; and, under the circumstances, monometallists hail with great

satisfaction the news regarding extensive deposits of gold in Western Australia. It may not be generally known to your readers that Archbishop Walsh has been enlisted in the ranks of the Manchester bimetallists, whose cause he has championed with special reference to the benefits the adoption of a dual monetary standard would have upon the condition of the peasant proprietors of Ireland.

A fortnight ago I passed a couple of days in Ghent, the important Belgian linen centre. It was my intention to proceed to Courtrai,  $27\frac{1}{2}$  miles away, but time would not permit of the detour. The large linen factory of the Société Anonyme de la Lys, situated on the banks of the Lys, close to the Canal de Bruges, employs about 3,000 hands. Lace, both of flax and cotton, appears to still furnish a considerable amount of employment for French labour, although Ghent's staple trades are now of a more modern kind. The shipping accommodation of Ghent has been vastly improved, two dry docks, one of which is 426 feet long, having been opened. Steamers of over 2,000 tons can now enter this inland port, thanks to the excellent system of canal communication with tide water. Mr. Hallett, the British Vice-Consul, whose offices are in the Rue Fiévé, states that 12,612 tons of flax and tow were shipped from Ghent last year to this country, out of a total for Belgium of 14,853 tons. In 1891 Ghent shipped 14,469 tons of flax and tow. Such returns as I have been able to gather concerning exports of piece goods from the town will be of little use, it is to be feared, in the form given. 2,693 tons of such goods (including linen, jute, cotton, and wool) were shipped from Ghent last year. The number of flax spindles in Belgium ranges from 300,000 to 350,000, and of power-looms the number probably does not exceed 5,000. Belgian railway fares appear to be decidedly lower than those of this country, the 3rd class rates being less than 1d. per mile.

LONDON.—It would be difficult to describe the state of trade during the closing part of last month, but I may say that it has been uneven, and, in a measure, unsettled; still the volume of business done will not be found to be much behind the same period of last year. Many of the city houses have completed stocktaking, and the results, so far as I have been able to glean, are satisfactory. Pawsons & Leafs (Limited) hope to pay the 6½ per cent which had been declared regularly for some years by Pawson & Co. (Limited) before that company's amalgamation with the house of Leaf & Co. (Limited), and it is not expected that there will be much change, if any, in the dividends paid by the remaining companies; indeed, it is a mystery to some how these concerns maintain their dividends in the face of the undoubted depression which has prevailed during the last year and a-half. For the first half of the present month the opening week commenced brisk, but the advent of the Royal wedding practically put a stop to business for some three or four days; but the citizens of London do not begrudge a few idle days upon such an eventful occasion. London never looked to better advantage, whilst the intense enthusiasm displayed by all classes can only be compared to the loyalty which was shown thirty years ago upon the occasion of the marriage of H.R.H. the Prince of On the first of this month, the National Workmen's Exhibition at Islington was opened by the Prince of Wales, but it has not received that support which its usefulness demands. There is some good work displayed in various industries. Unfortunately, however, the textile section is very sparsely represented. Ireland sends over a small stall of section is very sparsely represented. Ireland sends over a small stall of laces, handkerchiefs, home-spuns, &c., from which a Royal purchase was made. In the Milk Street trade, business is flat at the present time; but this is only temporary. When stocktaking all round is completed, some fair replenishing orders are expected. The rush on linen drills has considerably abated; but a big business must have been done, from the number of linen dreams which are being more based in all the statements. number of linen dresses which are being worn here, in almost every shade. A buff and chocolate linen costume seems a favourite. been a run also upon butcher and indigo blues. Brown hollands are also very much worn; but, speaking generally of linen in all shades, there is apparently quite a craze on in their favour which is not likely to die out soon, and ladies may be found at all classes of gatherings decked out in Irish or Scotch linen. Of the two, I am inclined to believe there is a preference for the former; the Scotch is much coarser in its texture, and hardly makes up so prettily. At the seaside, I am told that linen costumes are to be seen more than any other. A West-End house has been displaying a quantity of cuffs and collars marked "made in Austria," but it appears that the linen was purchased in Belfast; the prices are, however, considerably lower than we could afford to make them up at, no doubt the result of cheaper labour. In the handkerchief trade not much is being done, so far, in this month; inquiries are chiefly for white hemstitched of the commoner grades, but the demand is very moderate. A change is about to take place in the London representation of a Belfast house, and it is generally understood that a gentleman from the warehouse is to be sent over. The matter has been freely talked about in the city for the last few weeks, but there has been no official announcement made yet.

#### Scotch.

DUNDEE.—The general tone of the market is still of a dull character, and the financial difficulties in so many foreign markets add to this feeling. As regards supplies of flax the market is not so excited as it was, and the prospect of ample supplies from Russia has checked the advancing tendency, and the turn of the market at present is a little more favourable

expecting easier terms later on, in prospect of cheaper Russian flax, upon which this market so largely depends. Linens—Business is slow in all departments, but values remain unchanged and firm.

#### Continental.

LEIPSIC, July 8th.—The stocktaking in German flax spinning mills at the end of last month has shown a further reduction of stocks of yarns as compared with the returns compiled six months ago. Though a proportionately larger importation of foreign yarns, especially into the West of Germany, is reported, a larger amount than the production of homemade yarns, however, has changed hands, and spinners are at present engaged filling contracts. The value of raw material has made progress from week to week, and stocks are almost nil. The returns of this year's flax will, under such circumstances, decide the future price of yarns, in case the turnout should fail to satisfy the requirements of the trade. As these prospects are still of a doubtful character up to date, spinners continue to keep firm prices, and are not anxious to make sales.

LANDESHUT.—July 10th.—The Yarn Exchange on 5th inst. was very well attended. Several large contracts, at prices paid now for months, got perfected. Our leading spinners have given notice of another advance for line yarns, and limits at prices paid so far were refused. The tendency of the yarn market keeps very firm; there is no prospect whatever of a reduction in prices for some time, and the new flax crop gives little hope of being satisfactory to the spinner. Although we are now in the quiet season in the linen branch, all powerlooms in this district are fully employed. Hand-looms produce very little at present. There is no Exchange in August. The next Exchange will be held on Wednesday, September 6th.



#### United States Market.

(From our Special Correspondent.)

NEW YORK, June 30th, 1893.



HE general quiet of midsummer business has taken up the noiseless tenor of its way, and at this writing our linen goods importers are more concerned in the important matter of stocktaking than in looking for customers. The retailers' season has about ended, though an unusually cool summer has prolonged it beyond the normal period. This fact has not tended to assist the fortunes of our handkerchief men, however,—most of them remark in characteristic fashion that "things are as dull as dishwater." As noted in a previous letter,

that "things are as dull as dishwater." As noted in a previous letter, this has been an extraordinary year for holidays; and an old saying among trading folk is that a day lost is never made up for—which is a true one. To-morrow (Saturday) is only a half-day, anyhow; and as our immortal "Fourth of July" comes next Tuesday, Monday will be a closed day for business, and Wednesday will amount to little or nothing. So the handkerchief man's day is over for this half-year, and there will be little of an interesting nature to say about him for a month or two.

Considerable interest was manifested in 4/4 linens during last week and this week. Reports from your side concerning the tale that has been told to us so often of late of a continuous advance in yarns, seemed to throw all romancing out of the question, and to leave the matter one of absolute fact. Then we heard of the drought that prevails—and which may continue until the "Lammas-tide" of August—that will interfere with bleaching, and which has already reduced results at the greens one-half. So two or three very heavy contracts for 4/4 linens were placed by the valiant men of Troy, and two moderate ones by provincial shirt manufacturers. Of course these contracts were placed at prices just previously paid: it is the small man who must buy as his needs require that bears the first burden of an advance, and he is the profitable man for the linen

In the face of the above, is it not strange that a prominent cutter-up of white linens desired last week to cancel a contract he had placed with a Franklin Street linen importer two months ago? But such was the case. He had been offered and had bought a line of linens at a ½ cent. per yard less than the prices of May! There's no knowing what some men will do

The big drop in silver (and with both silver and wheat at the lowest prices ever recorded) has not affected the boys of our linen market to any appreciable extent. There are no "blanched faces," nor any despairing utterances—not at this writing—and, as all the world knows, the big rates of loan interest were lowered yesterday by the banks coming to the rescue. Nor have the long-pending Custom-House examinations in search of frauds annoyed them; and as for the vexed question of court decisions, and Treasury appeals from them, in the troublesome matter of hemstitchedand-embroidered and hemstitched and embroidered handkerchiefs, why, they await serenely the time when they will obtain their refunds from Uncle Sam—such of them as were wise enough to pay the wrongful 60 In the matter of the Irish linen exhibits at Chicago, attention will be given to the matter in next letter. It is reported that Barker, Ash & Waters will shortly dissolve, and that Mr. Barker will form a partnership with Nathaniel Warden, now associated with P. V. Meyers. James Mawha, deceased, who was manager here for Andrew Reid & Co., Dunfermline, has been succeeded by his son James Mawha. Information was received yesterday of the death, in Germany, of Mr. Hesse, of the firm here of Donald M'Leod & Co., well known in the Scotch linen trade. Mr. St. John Herd, of the firm of Fenton, Connor & Co., sails for home to-morrow; and Mr. Robert M'Bratney, manager here for York Street Flax Spinning Co., sailed for Belfast on the 28th inst.

#### IMPORTATIONS OF FOREIGN DRY GOODS.

NEW YORK, June 29th, 1893.

THE imports of foreign dry goods into the port of New York for the week ending June 22, 1893, and since January 1st for the last three years, were as follows:—

	1891.	1892.	1893.
Entered at port	\$2,048,675	\$2,041,439	\$1,871,210
Thrown upon market	1,803,671	1,882,681	1,737,560
Entered for consumption	1,526,489	1,474,478	1,385,453
IMPORTS OF DRY	GOODS SINCE	JANUARY 1.	
	1891.	1892.	1893.

Entered at port ... \$59,948,111 \$61,104,501 \$70,695,565 Thrown upon market 61,658,738 62,116,289 70,000,689 From the above it will be seen that the

From the above it will be seen that the imports of foreign dry goods at this port for the week amount to \$1,871,210, showing a increase of \$256,065 as compared with last week, and a decrease of \$170,229 as compared with the corresponding week last year. The total of goods marketed for the week has been \$1,737,560, or \$133,650 less than the imports. The total imports since January 1, 1893, have been \$70,695,565 against \$61,104,501, or an increase of \$9,591,064 for the same time in 1892, and an increase of \$10,747,454 as compared with the same period in 1891.

—Dry Goods Economist.

#### AMERICAN LINEN MANUFACTURE.

WE are frank to admit that nothing would be more pleasing if we could record the fact that our importations of linen for the past six or twelve months showed as large a decline as 25 per cent., and even 50 per cent. would probably please our merchants better. We should like to be able to base this decline in the importation of Irish linens on the successful growth of flax-culture in the United States, and the permanent establishment of several large linen factories on this side of the water, where linen fabrics equal to the best turned out at Belfast could be produced. But after years of study devoted to this question of flax-culture, and notwithstanding the enthusiasm this subject always arouses, we do not think that for many years to come Ireland is in any particular danger of losing so good a customer as the American dry goods merchant, who knows a good article when he sees it, and will send abroad for it when the same textile cannot be produced at home. We can only hope that the time is not far distant when the American people can wear home-made linen produced from home-made flax equal to that imported. Somewhere in the United States, with our endless varieties of climate and soil, some spot will be found where flax can be raised, the fibre from which will produce textiles equal to the best of those now imported. The proper retting machinery can be supplied, and men found who possess all the technical knowledge required to produce a fibre that will work up equal to the best produced in any part of the world. - Chicago Dry Goods Reporter.

#### NEW FLAX TOW MILL AT SIOUX FALLS.

A NUMBER of wealthy gentlemen of Sioux Falls, S. D., with one or two in Minneapolis, and several farther east who are interested in Sioux Falls real estate, have formed a corporation, and have applied for a charter under the name of the Sioux Falls Fibre & Manufacturing Co. The capital is not stated, but is ample. A fibre mill will shortly be erected in the neighbourhood of the linen mill, and will be in running order by August 1. The mill will handle all kinds of tow, from the finest for use in the linen mill to the coarsest which can be made into twine, burlaps, and upholstering tow. It is designed to supply the spinning plant in Sioux Falls, the penitentiary twine factory, and also fibre for eastern mills. It will consume from 30 to 40 tons of flax straw per day the year round, and will employ about 25 men. It is also expected that machinery for tow plants will be manufactured. The company, or those connected with it, will plant 750 acres with the finest grade of Belgian flax, and already a large quantity has been seeded. In addition, a large amount will be purchased from the farmers.—Textile Colourist.

#### NEW FLAX-SCUTCHING MACHINERY.

WE had the pleasure of seeing at work, on Saturday last, two very serviceable-looking machines designed for cleaning flax. They have been erected on the premises of Mr. Andrew Morrow, at his scutchmill, a very short distance from Lisburn. The one may be called a breaker, and consists of five pairs of rollers or cylinders following each other horizontally, with, of course, the usual feed and delivery boards attached; but the ingenious modelling of the rollers in detail, and a differentiation in the speed or number of revolutions in a given time, are

what mark the machine as almost unique; perhaps no better terms could be employed to describe this part of the mechanism so fully and correctly as those used in the specification:—

A very essential feature of our present invention consists in making the said radial projections, flutes, or blades (on the rollers) sit closely together at one part, and open or further away from each other at another part, the top roller being identical in this particular with the lower roller; and the two rollers are so mounted with relation to each other that only close-set flutes or blades on the one can intersect with identically close-set flutes or blades on the other.

This, as far as we can recollect at the moment, is the application of an entirely new principle—different-sized flutes, to speak in non-technical language, being found on one roller; this, it can easily be conceived, will prevent the possibility of the flax straw being nipped or crushed at regular intervals, a system which we are afraid too often leaves certain intervals or spaces in the straw practically uncrushed. It is more than likely, also, that this plan will enable one pair to execute the work of two or perhaps three pair of ordinary rollers, which will lead to a saving in the driving power—a very important consideration to the millowner.

Further improvements are introduced, but of a different nature; the third pair of rollers are revolving at a very high speed, say about forty times the speed of the first and second, and by this simple contrivance a large portion of the woody part of the straw is really removed from the fibre and driven off; another pair of large rollers follow to draw the now partially stripped fibre out, and pass it on to the delivery board in good condition for the next operation. It may be added that the pressure is

applied to the rollers by the usual spiral spring.

The scutching machine is of the type known as parallel beating machines, easily distinguished from those having radiating beaters. It will be easy to understand the form at the first glance, as the beating apparatus nearly resembles the side of an ordinary reeling frame; but the real advantage of this machine is that clamps or holders are entirely unnecessary, and clamping—at all times a clumsy and labour-making device—is set aside. The carriers are simply two ribbon saws placed with the teeth pointing upward, and adapted to the required work. They are fed by simply laying the handfuls of partially-cleaned flax across them at one end of the machine, and lifting and reversing each handful at the other, from which it returns to the starting-place thoroughly cleansed throughout. It would be impossible to describe the simplicity and effectiveness of this movement without drawings.

Both machines seem to be light to drive, simple in construction, and capable of turning out a satisfactory amount of fibre in a given time. The patents are in the hands of the "Fibre Manufacturing Co. (Limited) of London," and we understand when a sufficient quantity of flax-straw has been obtained, a thorough test of the machine will be made, open to any person who may take sufficient interest in the improvement of flax-

scutching machinery to attend.

# LISNAFILLAN BLEACHING, DYEING, AND FINISHING COMPANY.

WE understand that this old-established and prosperous Company, whose works are at Galgorm, Ballymena, have lately found it necessary to add still further to their extensive plant, by putting down a number of extra beetling engines, stenter frames, and singeing machines, as well as additional machinery for preparing and dyeing, so that they might be able to treat with despatch the increasing stocks of linen, union, and cotton goods sent in. A great variety of new and fancy shades are required at the present day, so that their dyeing department has been taxed to its utmost limits. The long experience and reputation for high-class work enjoyed by the firm will account for this steadily increasing demand on their resources, by a large clientèle not only in this country, but also across channel.

[We take this opportunity of asking our friends and subscribers to send us notes from time to time of alterations or extensions carried out in their premises, as it will give us pleasure to refer to same.]

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#### Southern Notes.

Death of Miss Augusta Goold.



HE death of this estimable lady, who was a daughter of the late Archdeacon Goold, Athea House, Co. Limerick, and niece of the late Countess of Dunraven, and of Lady Eglinton, took place at her residence, Sundays Well, Cork, on the 11th ult. She is much regretted by a large circle of friends, and

by the general public, who knew her through her acts of benevolence towards several charitable institutions in which she manifested a real and practical interest. The deceased lady was one of the first Irishwomen who came forward and took a leading part in the movement initiated by my late friend, Sir J. E. Eardley-Wilmot, for the development of Irish industries; and it was mainly owing to her exertions that, at a critical period, the Suffolk Street depôt for the sale of cottage industry products was enabled to pull through. On her father's estates in Co. Limerick she started a knitting factory that for many years, until her health began to fail, was very successful. It afforded employment to a large number of the tenantry. In the absence of her nearer relatives, who happened to be on the Continent

at the time of her death, the chief mourner was Captain Frederick Verschoyle, Castle Troy, Co. Limerick.

#### Messrs. Lyons & Co.'s Clothing and Shirt Factory.

This firm, which gives constant employment to 200 workers (150 women and girls and 50 men) is doing a very brisk wholesale and retail trade. They pay their workers at a high rate of wages—higher than is given elsewhere, so far as I know, in the South. While writing on the subject of shirt-making, I may add that, owing to the very inefficient character of the industrial training given in the National Schools, shirt-making is a factory and workshop, not a cottage, industry in Munster. When the pupils leave school, they find themselves obliged to serve an apprenticeship, instead of, as in the case of Ulster girls, being in a position to receive and execute orders forthwith. After the first six months they are paid according to a graduated scale. For this unsatisfactory condition of affairs the Board of National Education is solely responsible.

#### Cork Free Library.

This institution, which has been opened only a short time, appears to be making steady headway in public favour. Some gentlemen on the Committee, and others who applied to Mr. Elliott before its opening, expressed themselves grateful for the useful information given by the efficient and courteous Chief Librarian of the Belfast Free Library.

#### St. Anne's Hill Hydropathic Establishment and Baths.

This famous Irish Badeort, established many years ago by the late Doctor Barter—a distinguished physician—is frequented throughout the year by a constant stream of pleasure and health-seeking visitors from all parts of the world. The modern improvements to be met with in the best Continental Badeörter have been introduced here; and the resident German physician, Doctor Altoffer, has been very successful in the treatment of patients. The household arrangements and the cuisine leave nothing to be desired. St. Anne's is picturesquely situated in extensive and well-kept grounds. Scattered over the park are several pretty villas, which belong to the proprietors, and are let to visitors and others who wish to reside close to the baths. The famous Blarney stone is within kissing distance—just only a mile off—and, says a local poet, who evidently made its nearer acquaintance :-

> There is a stone there, That whoever kisses-Oh! he never misses To grow eloquent, &c., &c.

Northerners could not do better than come southwards this year for their holidays, and let politics "bide a wee." Amid the din and strife and contention of political côteries, words uttered fifty golden years ago in your city by the late Lord O'Hagan recur to my mind:—"We are sometimes tempted, by the freaks of bungling legislators, to wish that Parliament might go to sleep for half-a-dozen years, and let the country try whether it would be much the worse if its people should merely mind their business and say their prayers."

#### Flax Culture.

An interesting letter on this subject from Mr. Theo. Richardson, Belfast, which recently appeared in the Cork papers, set some people asking, for the one hundredth time, the trite question—Why is flax not extensively grown in the South, where the soil is so suitable for its cultiva-tion? It seems to me that Northerners in general do not appear to be aware of the many obstacles which present themselves to the would-be flax farmer in Munster. Apart from his ignorance as to the selection of suitable soil and the proper method of after manipulation, the absence of good scutch-mills, the opposition of the landlord owing to its being an exhaustive crop, the scarcity of labour consequent on the prolonged exodus to America, there is still another difficulty to be met—the conservation of the rivers in the South. Most of these are conserved, and this, of course, interferes with the steeping process. But incomparably the greatest obstacle to successful flax culture here, though fortunately one that is not insurmountable, is the want of technical training for the young agriculturists. The recent laws affecting immigration passed in the United States will naturally assist in the solution of the labour problem; the difficulty about the conservation of the rivers could be overcome after a little time; but no real progress in the culture of flax—the basis of the staple industry of this country—can be made until properly equipped agricultural schools, such as are scattered all over the kingdom of Würtemberg, are to be met with in every barony in Munster. Nor is it travelling lecturers, with permanent residences in Dublin or Belfast, that are requisite, but first-class local certificated teachers, who will go round the country giving the farmers practical instruction on the spot. These men country giving the farmers practical instruction on the spot. These men should be well acquainted with the Courtrai and Dutch methods of treating flax; and it goes without saying that they should be directly responsible to the Government for the work they do or leave undone. And in this connection I would wish to draw attention to the fact that some of the little pamphlets published on this subject are inferior of their kind, as anyone must be aware who has read and studied the evidence of scientific experts given before the Royal Commission on Technical Education, the Select Committee on Irish Industries, and the leading articles and letters that have from time to time appeared in the Irish press.

The highest authority we have in the South at the present time on the

subject of flax culture is Mr. Alexander Fergusson, Belvidere, Cork, a genial, courteous gentleman, who is very popular here because of the deep interest he takes in the welfare of agricultural classes. Mr. Fergusson is an ex-president of the Co. Cork Agricultural Society, an ex-Land Commissioner, and has been for a long time connected with the administration of the Land Purchase Act. This gentleman is of opinion that flax would be widely grown in the South, especially in certain parts of this county—Bandon, Ballyneen, &c., where the soil is very suitable, were the farmers sufficiently trained in the technical processes, as they are, e.g., at Courtrai—in other words, if they could be assisted to make it pay. Mr. Fergusson states that until recently, when the price of flax rose, owing to the deficit in the supply from Russia, it would not have paid Munster farmers to grow it under the circumstances. This would have been a bad year, too, to venture, owing to the long continuance of north-easterly winds. From the same authentic source I learn that there has been of late years a marked improvement in the class of buyers sent down; and, as our countryfolk naively remark, they like "an honest man."

MARGARET T. DOWNES.

Mardyke, Cork, *July 1*, 1893.

#### \*\*\*\*\*\*\*\*\*\*\*\*\*\* THE HOWARD STRAW TRUSSER.

MESSRS. J. & F. HOWARD, of Bedford, were awarded the silver medal by the Royal Agricultural Society of England, at Chester, on 22nd June last, for their Patent Straw Trusser, which is a marked improvement on those machines hitherto made. The leading features of the improvement, to which the judges gave a very close attention, were the automatic conveyors for taking the straw from the hopper as it fells from the threshing machine, which effectably prevent the very close attention, were the automatic conveyors for taking the straw from the hopper as it falls from the threshing machine, which effectually prevent the possibility of the lodging of the straw in the hopper, or the choking to which such machines without conveyors have been liable when working with damp straw. An ingenious arrangement automatically stops the inward movement of the straw during the brief time the binding needle is out of the table in the act of binding the trusses, and instantly the truss is ejected, the conveyors automatically recommence feeding the straw to the binding table. We understand that Messrs. Howard have made and sold about 1,500 of these machines since they were awarded the First Medal by the Royal Agricultural Society of England for Straw Trussers at work in 1883. for Straw Trussers at work in 1883. \*\*\*\*\*\*\*\*\*\*\*

#### Chemicals and Byes.

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

THE chief feature in the chemical market is the utter collapse of Tar Products. A determined effort appears to be made on the part of buyers to still further depress these articles. It is all the more remarkable, as stocks are not by any means large. The competition in the Alkali trade continues, and both Soda Ash and Caustic Soda can be got at ever-decreasing prices. Sulphate of Ammonia and Caustic Soda can be got at ever-decreasing prices. Sulphate of Ammonia and other Ammonia products are "booming," Sulphate having attained to £13 5s. per ton. This is curious, having regard to the value of Nitrate of Soda, which has, until now, fallen concurrently with the advance of Sulphate. Dyers' Chemicals are in good request at prices most unremunerative. Dyes are weak, especially Aniline, which has touched the unprecedented price of 6d. per lb. Oxalic Acid has improved, and is in larger request, and the proposed combinations of makers of it will probably bring about higher prices.

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### 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 323, High Holborn, London, W.C.

J. A. WILSON, Barnsley, No. 9,130.—Securing ring-weft, pirns, bobbins, or spools on loom shuttle tongues.

H. C. LAWLOR and H. HAMIL, Belfast, No. 9,132.—Automatically cleaning

fallers and gills in machinery for preparing flax, tow, jute, or other fibres.

J. Good, London, No. 9,279.—Machinery for spreading and drawing hemp.

J. Good, London, No. 9,280.—Machinery for spreading and drawing hemp.

A. W. Cummings, London, No. 9,735.—Machine for forming turn-down

linen collars. H. H. LAKE, London (The Kerr Thread Company, U.S.), No. 9,820. - Knot-

catching and thread or yarn-cleaning devices.

R. V. RENARD, London, No. 10,453.—The spinning and weaving of fibrous and filamentous materials.

#### 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.

- J. ERSKINE, Belfast, No. 9,179.—"Improvements in machines for hackling flax and other like fibres." 14th March, 1892.

  J. ERSKINE, Belfast, No. 11,580.—"Improvements in machines for hackling flax and other like fibres." 21st June, 1892.

#### GERMAN APPLICATIONS.

ALFRED WADDINGTON, Bradford, No. 8,879w.—"Improved shuttle-guard applicable for looms." 19th January, 1893.

OTTO HALLENSLEBEN, Hilden, near Dusseldorf, No. 13,321H.—"Improved

OTTO HALLENSLEBEN, Hilden, hear Dusseldon, No. 13,3218.— Improved apparatus applicable for preventing breakage in the beating-up mechanism of looms." 29th March, 1893.

HEINRICH A. SCHMITZ, Barmen, No. 8,722Sch.—"Improved weaving machine." 30th March, 1893.

GEORGE E. DONISTHORPE, London, and TAYLOR BURROWS, London, No.

5,386D.—"Improved machine applicable for combing and hackling fibrous materials." 1st October, 1892.