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Notices.

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

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

The *Home and Foreign Linen Trade Directory*. Published at 2s. 6d. Price 1s.



The Woollen Trade.

WITH the December number of this Journal the series of articles on linen weaving were for the present brought to a close, though the subject was not by any means exhausted, as in the department of designing alone there is a wide field for work, which we hope to return to later on. With the present number the first of a new series on woollen manufacturing is commenced, which may prove interesting to Irish manufacturers. The writer of these papers will be pleased to answer questions on any branch of the work. Inquiry has been made if the linen articles will be reproduced in book form, but at present it is not intended to do so, and only a few sets of the whole are now in stock.

We would take this opportunity of asking our various correspondents to kindly send us their market reports regularly, so that full information may be given from month to month on all branches of the Irish textile industries. It is frequently very difficult to get market reports, particularly in reference to the state of the woollen trade, and we think those who are immediately interested in this branch should not be behindhand in supplying information directly tending to benefit their business, and a trade journal like this can be of much use to them. We are desirous of doing all in our power to serve the interests for which this Journal was established, and count upon the friendly co-operation of our readers and correspondents. To very many correspondents we are greatly indebted, and cordially thank them for the regularity with which they furnish reports from time to time.

Flax Cultivation.

We publish a second letter on this subject from Mr. Walker of Rotterdam, which will doubtless be read with equal interest as the first, as it follows up and deals with several points not brought out in the previous communication. The great importance of this

question, from an Irish point of view, cannot be overrated, and the circumstances which exist at present in Holland as well as in Belgium should help to stimulate a movement to promote the increased cultivation of flax with us, more particularly in the South and West of Ireland. The Royal Dublin Society could do a great deal in the way of reviving an interest in the subject by inviting the Provincial Agricultural Associations to consider the matter, and getting it discussed at public meetings and in the Press. We send a copy of Mr. Walker's letter to the Irish newspaper press, with a request that they will circulate it as dealing with a question of great importance to the country.

Flax grown at Wexford.

A correspondent has shown us the following letter from a leading spinner of fine yarns in this city, dated 7th ult., giving his opinion of the quality of this flax:—"Respecting the Wexford flax of 1891 crop, steeped and scutched the same year at Courtrai, and sent to Belfast for sale, we bought the two bales at £102 per ton, which was then the full market value, and used it as regular Courtrai flax. If we had not been told we should have thought it was Belgian, as it turned out equal to average at price. The value now we think would be about £110 per ton." Another Irish spinner wrote:—"I am pleased to be able to report most favourably of the Wexford flax. The two tons hackled here gave the largest yield of dressed line of any lot of Irish flax of 1892 growth, and the quality was very satisfactory."

Belfast Technical School.

The winter session of this school opened on the 2nd October last, and we are glad to learn that the several classes have been very well attended. The course of instruction embraces flax cultivation, spinning, weaving, and designing, in both the elementary and advanced grades, besides classes in wood-carving, carpentry, and plumbing. Dressmaking, &c., is also taught this season by a certified teacher. The range of subjects is, in fact, only limited on account of the small accommodation which the premises in Hastings Street afford. It would be most desirable, pending the erection of a central building, that some arrangement for enlarging the present school premises should be made, and we believe the matter is engaging the attention of the committee of management. Probably the carrying out of the larger scheme, in the face of very dull trade for some time past, must be postponed; but at a comparatively small outlay additional room can easily be obtained in the present locality, and we hope that steps will be taken to do this, as the school is every year becoming increasingly popular.

PROGRESS OF BELFAST.

THE following statistical summary of the valuation of the city has been published. The number of new buildings was more than in previous year.

	NUMBER OF NEW BUILDINGS ERECTED.		INCREASE IN VALUATION.	
	1892.	1893.	1892.	1893.
Antrim side	1,253	1,503	£15,110	£20,624
Down side	859	1,030	8,903	9,928
	2,112	2,533	£24,013	£30,552

Total valuation of city on 1st January, 1893, after settlement of appeals, £740,184. Total valuation of city on 1st January, 1894, £770,736. Total valuation of borough on 1st January, 1862, £279,087. Total valuation of city on 1st January, 1894, £770,736. Increase in valuation in 32 years, £491,649.

During the above period (32 years) there were 43,904 new buildings erected in Belfast.

SWEDISH HAND-LOOMS AND TOOLS FOR INDUSTRIAL WORK.

THE introduction of Swedish looms into London about a couple of years ago was a new departure in the promotion of industrial training, and the school for teaching weaving, established in Regent Street, has been successful in stimulating work of this kind. In the construction of these looms the aim has been to produce a machine light in build, easy to work, occupying small space, and, at the same time, effective for all the purposes required. The Countess Hamilton, one of the Lady Principals at the Regent Street School, informs us that they have found them very useful and of great practical utility, being easily worked, and taking up small space, and that they are well adapted for weaving woollen, cotton, linen, and silk goods. A large number of the linen and woollen hand-loom in Ireland are very old and heavy, and take up a great deal of room, besides being more laborious to work than these handy Swedish looms. We think that for use in the Convents, as well as for cottage work, where an industry of this kind is started for the first time, it would be well to try

these looms, particularly as the cost is so small. A six-treadle loom, to weave cloth 27 inches wide, occupying about 3 square feet, costs £2 2s.; and for 36-inch cloth, taking up 4 square feet, the price is £3 3s. Gobelin looms to weave material 30 inches wide, occupying a space 36 by 18 inches, cost £1 10s. These looms and the accessories connected with the work can be had from O. Newmann & Co., 84, Newman Street, Oxford Street, London.

This firm also sells all kinds of materials, tools, models, and diagrams suitable for kindergarten, manual and technical instruction in various arts and crafts, and at very moderate prices, together with books of instruction on the Sloyd system, and manual work of every kind.



Commercial Gambling.



issue by Mr. C. W. Smith of a pamphlet containing the Press opinions on his work, *Commercial Gambling: the Principal Cause of Depression in Agriculture and Trade*, recalls us once more to this all-important subject. As long ago as 1892, the matter was dealt with in these columns in reference to some remarks made by Mr. R. L. Hamilton, J.P., in the Irish Church Synod. Again, in reviewing Mr. Smith's work, the subject was pretty fully dealt with, but it is one to which we have no hesitation in returning, prepared to denounce with equal vigour as formerly this crying evil of the age. Mr. C. W. Smith's main contention is, that the continual and continued decline and fall in the prices of agricultural produce is due to the gambling transactions which are daily taking place on the Corn Exchanges. It is of interest, he points out, that the "option" and "future" systems had their origin in America about 1875. In 1879 the Duke of Richmond's Royal Commission on Agriculture was appointed, and did not issue a final report until 1882. For the three years 1877, '78, '79, wheat averaged 49s. per quarter. In 1883 this system of gambling in corn was introduced into England, but it did not become general until 1889-90, when it was extensively adopted on the Liverpool Corn Exchange, combined with a daily cash settlement of "differences;" while in London the Produce Clearing House was registered in 1888. "It is an odd coincidence," says Mr. Smith, "and may have an important bearing upon my subject, that the Royal Commission mentioned above was appointed about four years after the introduction of these systems throughout America. Further, that we find another Royal Commission appointed in 1893 (with wheat selling at about 26s.), after those systems had been ruling in England for ten years, but only extensively so during the past three or four years." There can be very little doubt, we imagine, that as regards wheat Mr. Smith's theory can be amply substantiated, and that the price of wheat—that is, the market quotations—being no longer dependent in any way upon the relations of supply to demand, but wholly upon the fictitious prices "made" by gamblers in "options" and "futures," the farmer is being swindled out of his just earnings by a pack of dicers, who, while buying and selling whole cargoes of wheat, never touch nor intend to touch in a legitimately commercial fashion a single peck of the grain. But it is not to be supposed that the dealers on the Liverpool or London Corn Exchanges are the only commercial gamblers, the only sinners. Far from it; we wish they were, for with a localised evil it would not be difficult to deal. Unfortunately, the gambling spirit permeates the commercial system of the country. It is to be found wherever produce is offered for sale and barter; and just as with wheat, so with cotton and other stuffs—more is bought and sold in a week than the world produces in six months. If, however, these gamblers in agricultural or other produce rob the farmer of his profit, and often ruin themselves, at least their transactions are pretty well confined to their own ring. The "jobbers," "wreckers," "scalpers," "dealers," and "manipulators" endeavour to "bull" and "bear" the market upon each other, and the unsuccessful ones go to the wall; yet, while the collateral evils may be vast, the wholesale ruin brought about is but small compared with that caused by the operations of the "bulls" and "bears" of the Stock Exchange.

If we were asked to name the greatest curse of the day, we should say option gambling on the Stock Exchange. This again, were it confined to the brokers, would, after all, though a blot on our com-

mercial system, be of minor consequence. But it is not confined to the brokers; they are far too wide-awake to be content with endeavouring to pluck each other bare, when there are other pigeons at hand. Besides, what could one gambler expect to get out of another, compared to what he can get out of the public at large? Not a day passes but that, through the post, thousands of homesteads are flooded with the enticing circulars of some enterprising financial genius who offers, out of pure and simple kindness, to make the fortune of the needy. All he wants is £10, or £5 (if he can't get more), for a share in a "syndicate" which is being formed to "pool" certain unnamed securities, which, "from information received from private and reliable sources," our friend the broker knows are about to rise in value. Such is the cupidity of the ordinary human nature, that in hundreds, ay, hundreds of thousands of cases these insidious temptations are listened to. The country clergyman, with a family to clothe, feed, and educate, sees here a chance of turning his hardly-saved £5 note into £50. The widow takes her mite out of the old desk and hopes in a week or so to find it swollen ten-fold. The clerk in an office, who has got into debt, sees here a chance of retrieving his fortunes. He has not got a £5 note—but what then? Success is certain, and his employer will not miss it for a day or two. We all know the result—ruin, arrest, imprisonment. Why should these advertising sharks, more rapacious than ever was a shark of the sea, be allowed to spread abroad their bait to lure innocent people to their ruin? As we write, we have not one but half-a-dozen of these Syndicate Pool Circulars before us. One shark shows (at least he says) that his last "deal" resulted in a clear profit of £20 odd upon every £10 invested. And this in a week. Another is content with having, or pretending to have made, a smaller profit. Instead of 200 per cent., he is moderation itself with only some 120 per cent. But this man hardly knows his business. For the class of person to whom these circulars are addressed the profit cannot be laid on too thick. They either are too innocent to scent a swindle, or they are would-be sharks themselves, and go into the game with their own, or probably some one else's money, in the hopes of getting something out of it. The sharks must occasionally disgorge, or the game would be up. As an example of what some of the public will swallow, we saw one of these circulars the other day, in which it was asserted that the issuer's last "deal" had resulted in a profit of over 2,000 per cent. This is certainly the most astonishing piece of barefaced lying it has ever been our misfortune to come across; and yet there it was set forth in all the glories of capital letters and italic type in a circular which had evidently been issued by the thousand, and which would not have been issued unless the Ananias who paid for the printing and postage had known that his outlay was not thrown away. It would be hard to say whether more misery and crime are engendered by these brokers' circulars or by betting on race-horses, another form of gambling more prevalent now than ever. This may not be strictly "commercial gambling," but it is so closely allied to the other form that it cannot be passed by without reference. Take up almost any newspaper published in the three kingdoms, and you will find the "Sporting News" set out in whole columns of "entries," "scratchings," the programme of the day's racing in full, giving the time at which each race starts—important this to the gambler, for it allows him to bet up to the last moment. Below, there are figures giving the latest "market prices" of the horses in the principal races; and last, but not least, someone calling himself "Sphinx," or "Hawkeye," or something else, gives the readers of the particular journal to which he is attached his invaluable services in the way of "selections," forecasting the winner of each race. All this is done solely and wholly for the benefit of those who bet upon horse races; and, being given, is it too much to say that each successive issue of the paper is an inducement to some one, not yet addicted to gambling, to begin and have a try at it? Everything is made easy. Tom, Dick, or Harry need not know a horse from a jackass; all the poor deluded soul has to do is to "follow" Sphinx or Hawkeye, as the case may be. Tom, Dick, or Harry will not make a fortune by doing this, but they will have the supreme satisfaction, after losing all their money, of reading how it was not Sphinx or Hawkeye who was at fault, but the weather, the jockey, the trainer, or the horse. When, again, Sphinx or Hawkeye happen to name a winner—an accident that occurs about "once in a blue moon"—then Tom, Dick, and Harry, whether they have won their money or not, will hear of it in no uncertain tones; for the Sphinxes and the Hawkeyes of the sporting press are as proud of having "spotted" a winner as a hen is of having laid an egg.

But to be serious. The spirit of gambling has apparently entered

the hearts of men in every walk of life. From the Corn Exchange gambler who deals in tens of thousands of pounds, to the office boy who speculates in pennies or sixpences, the motive is the same—to make money without honest work. It is the crying evil of the day, the least hopeful sign of the future. Nowhere is one free from it. In the athletic field, not less than at horse-races and on the “flags” of the Stock Exchange, gamblers assemble, and we fear very often outnumber the non-gamblers. We do not mean to infer that gambling is a new vice; it is probably as old as the world. But we do mean to say that it is becoming, and has become, far more general and more widespread, and consequently far more dangerous and disastrous. Formerly, the would-be gambler had to seek out the haunts of those who would accommodate him in his vice. To-day the means—worse still, the temptation—to gamble is brought to one's very door. The post brings us the broker's alluring though lying circular; our newspapers crowd their columns with every detail pertaining to betting on horse-races; our sons cannot attend field sports or cycling tournaments without hearing the “odds” cried, and rubbing shoulders with professional bookmakers. At every turn the demon meets one face to face. It is a smiling demon, an innocent-looking, attractive demon, as all dangerous demons are. But he can strike home, and, once his talons are fixed in a victim, there is little hope for escape. Deeper and deeper the remorseless talons sink into the flesh; weaker and weaker for resistance becomes the victim; lower and lower he sinks, until at last he falls never to rise again. This demon which is sucking at the life's blood of the country must be exorcised. The gambling “option” dealer who is defrauding our farmers, the lying broker who sends out his false and fraudulent circulars to steal from the poor and innocent—these and all of their kind must be made to cease their nefarious practices. Surely there are enough honest men left in Great Britain to purge the land of these parasitical pests, to free our commerce from the stigma they cast upon it, and to remove at least some of the temptations to evil-doing which are now being spread broadcast before the eyes of both young and old who may be weak enough to yield to them.

Practical Hints on Materials, Weaves, &c., for the Irish Woollen Manufacturer.

I.

(SPECIALLY WRITTEN FOR THIS JOURNAL, AND ALL RIGHTS RESERVED.)

The Raw Material.



IN the infancy of the art of weaving, and for many centuries after, the making of cloth was merely a domestic employment; the fleece was shorn from the sheep, washed, opened, spun, and woven under the same roof that witnessed the preparation and grinding of corn. In proportion as society advanced, and a division of labour became convenient, an improved knowledge was acquired, not only of spinning and weaving, but of the breeding and selection of animals, whether sheep or goats, which gave the finest fleeces. We may imagine that in the earlier stages of the woollen manufacture, when cloth was merely a substitute for the skins of animals as an article of clothing, little if any attention would be paid to the colour or fineness of the wool; but as luxuries increased, coloured garments were required, and wool could no longer be indifferently taken from sheep of every kind, whether white, brown, or black. The grower began to pay more particular attention to the quality and quantity of the fleece, which was essential to render the cloth susceptible of the brilliant dyes which even in the far away past were certainly given to it. The harshness of wool does not depend solely upon the breed of the animal or the climate, but is owing to certain peculiarities in the pasture. Sheep fed on chalky soils will grow coarse wools; those on richer soils will have softer and more silky fleeces, with a greater quantity of grease, or “yolk,” as it is technically termed. In sheep there are four distinct qualities in the fleece of one animal: the finest growing along the spine, from the neck to within five or six inches of the tail, including one-third of the breadth of the back; the second covering the flank and shoulders, the third the neck and hinder parts, and the coarsest the breast and feet. The sorter separates these to the best advantage. But the best wool is that shorn from sheep at the proper seasons; that which is taken after death, called “skin wool,” is always inferior. Wools also differ from each other not only in coarseness and fineness, but also in the length of their filaments. Long or combing wool varies in length from three up to ten inches, and is treated by a process

of combing; such wool, however, when woven, is unfit for felting. The short, clothing wool varies in the length of its staple from three to a little over four inches, and is broken down by carding to adapt it for felting where the fibres are convoluted or matted together. I am not speaking of worsteds in saying that a cloth, whatever may be the weave, composed entirely of long stapled wool subjected to much felting, will by the process have the points of the fibres forced to the surface of the fabric, giving a hairy, blanket kind of appearance, with a spongy feel not at all desirable. But there is a continual waste from cutting which impoverishes the cloth of its solidity, and materially reduces the weight, with no benefit whatever, in fact a direct loss. With short stapled wools, the density in the number of points will allow of the construction of a fabric of far higher value in every respect; having a good firm solid handle, with plenty of pile, the finish can be obtained at far less cost, less wear and tear, and with more credit to the producer and satisfaction to purchasers.

I have no desire whatever to pose as an authority: these remarks are substantially based upon years of practical experience, and it is highly necessary that the preparatory processes of producing the yarns suitable for a good class of fabrics which will command sale should be discussed before entering upon cloth construction. To those who spin their own yarns the purchase of the wool ought to decide in what manner it shall be worked up. It may be said, in passing, that the bulk of the wool now sold is Australian. When this wool is opened, all is found entangled, one heap of confusion; not only has it to be loosened, but the different qualities have to be sorted; and very much of the profit of a manufacturer depends upon this process, and in producing a yarn which will build an enduring fabric; with a good combination of fibres a greater weight per stone may be obtained with far less waste in weaving and finishing.

Scouring.

In cleansing or scouring the wool the greatest care should be taken to prevent any portion becoming felted, and after washing it ought to be wrung as free from water as possible, and dried at a temperature not greater than that of an ordinary hot summer's day; this prevents a loss of colour, and preserves the fibres from being harsh, inelastic, and brittle. After drying, it is a wise policy to allow the mass to remain for a few days in a cool place free from damp, allowing the atmosphere to thoroughly penetrate the fibres; in this way the material retains a considerable portion of the properties subtracted from it during the scouring.

Blending, &c.

The lubricating of the wool for blending should be in accordance with the nature of the fibres; natural oils are the best in the long run. Olive oil, for instance, will develop the fibre and assist it in carding, giving it a smoother and rounder sliver than can be obtained by any of the cheap nostrums; further, the cloth, when woven, can be more easily cleansed, ensuring a good condition of the fabric. In fulling, the soap should consist largely of animal fats; a small quantity will suffice when the best soap is used.

Having various lengths of staples to be used in combination, it will be advisable to have the medium lengths in such a proportion that they may unite agreeably, the short and medium to form a mixture, and then mixed with the longest; this is better than using certain portions of each separately. Suppose there are three lengths of material, then by mixing half of the medium with the longest and the other half with the shortest two separate parcels are made, which may be dealt with separately in willowing, and afterwards the two may be mixed in the same order. This practice may not meet the views of many spinners or carders, who fully believe and maintain that a long staple will carry more short staple because of cheapness, therefore the greater the amount of short staple used on account of less cost the more economy. This is no doubt a very correct view to take if very coarse yarn is the object of production; but if we consider that strength and solidity of a fabric are gained in the fulling, then the short staples will carry the much shorter the longest distance, for an even and durable yarn, than those which are unequal or opposed to each other; and, in fact, more wool per lb. in proportion to length of fibre at less cost, and more cloth, weight for weight, cost for cost, than in using such extremes. If we take say 80 lbs. of a black material to mix with 10 lbs. of white or grey, this latter being of long staple, and longer than any of the fibres found in the black, a sample being made by carding, it is then compared with the order sample; of course some degree of alteration by the process of carding must be allowed for, and this will be in the white, which is the more pronounced, so that the shade is made on the side of the black. This shows that, weight for weight, the proportion will incline on the side of a proper mixture; if the white staple was not so subdued in fulling, it would be above the shade, owing to the projection of its long fibres above the surface, and when cropped in the finishing process a long way below the shade. Taking another view of this blending: if the white was the short staple the shade would not be so much reduced in the cropping, because the fibres would not be so prominent through felting, but there is a possibility it would be above the shade in finishing. To obviate this, a less proportion of the white must be used on account of the density of the fibre points. A distinct gain is obtained in using the short staple in preference to the long in the manufacture of woollens, and the modification of shade is rendered easier and more reliable. Blending is the foundation of good wool-manufacturing. On some future occasion full details of sorting,

scouring, carding, and spinning may be given; in the meantime the object of these papers will be to deal with cloth construction, simple weave, and patterns for handloom-woven woollen fabrics.

The Twist.

Having obtained the spun yarns, it is necessary to ascertain the direction of the twist for warp and weft, as this will materially affect the appearance of the fabric. If two cloths were made from the same yarns in size, etc., with the same weave, the difference in the twist would be sufficient to produce distinct samples, more so perhaps in woollen than any other known fibre. In reverse stripes or herring-bone diagonals advantage is taken of this peculiarity in twist by drawing in a given number of threads having a left-hand twist for one stripe, and another given number of threads right-hand twist for the second stripe. As plain cloths will be first dealt with, it will be unnecessary at present to enter into the effect of twist in conjunction with twill weaves. In plain fabrics it will suffice to say that the twist of warp and weft must run in the one direction, the fibres of each thread will thus lock or curb into each other, making a more close and compact cloth with less perforation than by the use of opposite twists, which give a bare open construction difficult to felt and finish.

Cloth Construction.

Taking it for granted that the loom is complete in all its arrangements, it may just be hinted that where very heavy plain goods are made the warp beams are better if built up rather than being solid, and having the gudgeon or spike going all through from one end of the beam to the other; this will prevent any irregularities from the delivery of the yarns off the beam from the greatest circumference down to the last lap.

Two distinct threads make every class of fabric—the warp and weft in plain cloths; the odd series of numbers 1, 3, 5, etc., from one shed for the passage of the shuttle; 2, 4, 6, etc., even numbers, give the opposite shed, no matter how the warp threads may be distributed, provided the number of heald shafts is divisible by two. Those who have the convenience in their hand-looms for extra top-mounting generally use eight heald shafts for plain goods in close-set reeds, because the wide distribution of the warp threads thus given affords a clearer shed being opened, and the great advantage of changing the weave from plain to the extent of an eight-shaft weave without removing the healds and going through the trouble of re-tying up with a loss of time. Taking, however, the ordinary four shafts of healds: suppose we warp one thread black and one thread grey or white all through the breadth required, all the odd numbers would be black warp and even numbers white; then if the weft thrown in was alternate pick and pick of black and white—for instance when white was up, black down, black weft put in, and the reverse with black and white down, white shuttle used—we would have black and white lines.

If we warp 2 black 2 white all through, the same result will be obtained by the tie and draft; checkered and broken effects may also be obtained by warping any number of 1 and 1 colours and breaking with 2. Suppose 1 black 1 white for 16 threads, then 2 of black and 1 black, 1 white repeated, we should then throw the white on to the odd numbers, the black falling on the even ones; to obtain the same result for a break of another kind, say a break which would require 3 threads of black, the stripes would be effective, but by checking with the weft same pattern as warp some very neat checks large or small could be produced, or small checks intermingled with larger ones. Repps may be formed in this way by passing 2 or more picks in a shed having a selvage thread as a catcher. The patterns might be 1 and 1 of black and white for a certain number, then all black for another number, and thirdly all white bar. All these line effects are produced by covering the warp colours with the same colours in wefts; in this way there is a possibility of using three or four colours, and with the weft corresponding these numbers of solid lines can be obtained; but in the case of three colours 3 shafts of healds would be necessary. The changes on this number of heald shafts will be entered into when the treatment of plain cloth patterns is disposed of. In pattern-making for light-weights the object is to have the face of the fabric soft; a deep firm nap is not demanded, but simply a small degree of cropping. The pattern now given will be found well worth a trial; it will meet the popular taste, be easily made in the first style, and a rapid safe production, 11 dents to the inch with 2 warp threads in each dent, 26 weft picks per inch, half velvet finish when well felted, and would be better left uncropped; plain weave.

Warp pattern—2 dark brown, 2 white repeated 10 times, 1 sky blue, 1 dark brown, 2 white, total pattern 44 threads, all lump yarns of 15 skein yarn 256 yards to the skein. The weft pattern the same, with the exception that 2 dark brown and 2 white are repeated 11 times, so that the total number would be 48 picks of weft; this pattern will be found a welcome novelty, and the colours may be changed at will.

Messrs. Morrrough Bros. & Co., Ltd., of Douglas, near Cork, Woollen Manufacturers, say that trade is very brisk with them, that their hands are quite full, and the outlook so encouraging that they intend to add to their machinery immediately.



Flax Cultivation in the South.—II.

To the Editor of the Irish Textile Journal.

SIR,—Referring to my letter in your last number, it may interest your readers if I follow it up by pointing out some of the great defects connected with the production of flax in Ireland as compared with the Continent. To begin with, the points of greatest importance are the soil, the seed, and the weeds. From my own observation, especially in the South and West of Ireland, I believe no better soil for flax-growing can be found anywhere. As regards the seed, that question ought to be easily settled, if farmers would only pay the difference between good and bad, and get really top quality seed. On the Continent, no farmer would sow seed without first testing its germinating properties; and as this can be so easily done, the wonder is that it is not applied in Ireland. The farmers themselves, if they will only take the trouble, can save themselves from the risk of a serious loss by the following very simple test:—Place the seed between two thick sheets of wet brown paper or flannel, with a thin layer of damp earth under and over this covering, and place it in a moderately warm room, and in four or five days the percentage of dead seed can easily be seen, and its character at once determined.

As regards the weeding: on the Continent generally this is not done by the party who owns the land, but by the party who hires the land (the conacre man, as understood in Ireland), or by the person who subsequently buys the growing flax from the owner of the land. This second party (whom we on the Continent call the "flax farmer") weeds, pulls, winnows the straw, ripples off the seed, steeps the straw, dries and afterwards prepares it for market, so that the party who owns the land in the first instance, or farmer proper, only prepares the ground and sows the seed. Thus, on the Continent, we have a wholly distinct and large body of skilled hands who follow the secondary operations as described as a distinct industry. In Ireland, however, the farmer attempts to do all from beginning to end, and does it so badly that his flax, which might rank among the first in the world, holds a third-rate place.

In Ireland, when the flax has been grown, one great drawback is the crop of weeds which spring up with it. I fear that, in most cases, where Riga seed is sown, it is sown just as it is bought, without being cleaned of weed seeds. Dutch seed, as a rule, is free of weeds, at least the better class; but at all events, before the seed reaches the farmer's hands, it ought to be well cleaned to avoid the great loss which a dirty seed entails. Another point needing attention in Ireland is that when the flax is being pulled the ends should be kept square, and the sheaves bound up regularly. The common practice is that they are of different sizes, some bound up loosely and others too tightly. In the dams some portions of the flax will be quite loose, whilst others will be trampled on to the bottom of the dam, and so weighted with stones that the retting becomes most irregular. Sometimes it will be too little and in other cases too much watered. Then in drying, after retting, under the Irish system it is spread on the ground, perhaps on grass that is too long, consequently the portion that is uppermost dries quickest, whilst the lower portion remains wet; and then if rain comes on it runs to the under side and remains there, whilst the upper dries immediately. Under all these heads, through sheer carelessness and the slovenly way in which the work is done at every stage, as well as in the subsequent operations of scutching the flax for market, there is an amount of waste which is quite unknown on the Continent. Here the drying process after steeping is conducted on a sensible plan. The flax is dried standing up on end; the consequence is the water runs quickly out of the straw, and if rain comes on it is infinitely less injurious than if the flax were spread on the ground, so that inside of 24 hours after being taken from the steep the Continental flax is ready for stacking. Then as regards the scutching machinery in most of the Irish mills, it is open to much improvement, and, as pointed out in my previous letter, the loss of the seed to the grower is a very material one.

The introduction of trained labour, such as we have here, to do the weeding, pulling, rippling, steeping, and scutching would speedily bring about a great reformation in Ireland in regard to flax production; and causes have been in operation in Holland, and which have been gathering force for several years past, that tend to greatly reduce the demand with us for the army of trained men who have followed the flax industry all their lives, so that many of them, from want of employment, are in a state of destitution. No more favourable opportunity could possibly present itself than the present for Ireland to step in, and, with its thousands of acres of splendid flax land, to put this great question on a really intelligent and profitable footing. By the help of these skilled Dutchmen, an immense improvement might easily be brought round in the condition of the South and West of Ireland, as well as to the manifest advantage of the Irish linen trade. A variety of circumstances have been operating with us which is reducing the area of profitable flax-growing, circumstances which have no parallel in Ireland. The land available for flax-growing

here has been over-flaxed, consequently the price of suitable soil has considerably advanced, so much so that these middlemen are now heavily handicapped. This has been intensified owing to the high price paid for land to grow beet-root for the sugar factories. To this must be added the heavy cost of the carriage on the straw, which in many cases has to be brought from 50 to 80 miles to the steeping ponds. Poor crops from over-flaxed land, and low prices for the finished article, have reduced very many of these middlemen to such a condition that, I have no doubt, if they were encouraged to settle in the South and West of Ireland, they could resuscitate an industry which through ignorance and carelessness has been a decaying one with you. In Zealand and other districts last season committees were organised to provide hundreds of these flax labourers with some sort of employment, and this year it will be even worse, as there will be still less employment owing to a smaller crop or almost a mis-crop. To illustrate the condition of things with us: in the past season as much as £40 per acre was paid in at least one case for the green flax, probably more than the average of Irish estates would bring if sold rent free in perpetuity. Of course this is only an odd case; but, irrespective of this, the taxes on the flax land in Holland are equal to about 15s. per acre, about the average of agricultural rents in Ireland. These heavy taxes are for pumping and keeping the dykes in order, so that the land may remain above water. Then the diminishing area of suitable land is a great difficulty. When Haarlem Meer (Sea of Harlem) was reclaimed 30 years ago it supplied excellent soil for flax-growing for many years, and then later the reclaimed lands between Amsterdam and the sea when making the waterway to Amsterdam. But these lands are little used now for flax, at least for some years past, as far too much was taken out of them, and till more land is reclaimed the difficulty will more or less continue. At present there is talk of reclaiming land from the Zuider Sea. When this is accomplished, it will give a great outlet for increased flax-growing for many years.

What has contributed so much to the falling off of flax-growing in Ireland, perhaps more outside of Ulster than in it, is the idea which obtains among many landlords that flax impoverishes the soil, and in many old leases prohibitory clauses were inserted. This view is entirely erroneous, and the consequence is that a fruitful source of labour for the people has been taken away from them. How helpful this industry would be to the many idle hands now crying out for work in the South and West, if it were spread over the country. The old hand-scutching as an indoor occupation, irrespective of the field-work, would bring comfort and independence to many a village homestead where want at present exists.

Another point I would like to mention is this, that flax-growers should not be embarrassed by the claims of riparian landlords in reference to the using of rivers for the sake of the small value of the fish therein. Where rivers are really valuable and require protection they should be classified, but others should be left free for steeping purposes. In the South, where we steeped our flax, there was a stream where I doubt if a stone weight of fish could have been caught in the whole of it, and yet we were threatened with a claim for £10 for allowing some flax water to run into it. If the Fishery Conservators have not the power to settle this question, and remove a difficulty of the kind, which in some districts would greatly interfere with the flax industry, an Act of Parliament should be obtained to settle the point. Strange to say that flax water, which is injurious to fish, is not so to cattle—in fact they will drink it in preference to pure water.—Yours faithfully,

F. M. WALKER.

Rotterdam, January 6th, 1894.

To the Editor of the Irish Textile Journal.

SIR,—It may interest your readers and the public to know that action has at last been taken to introduce the Continental system of flax culture and treatment into the South. Mr. Walker's correspondence in your last publication has tended very much towards this end, and I may mention that two influential M.P.'s are now in treaty for the purchase of land for cultivation and storage of the produce of the district, for which there is the prospect of good prices in future, owing to the condition of the markets at home and abroad. The present scheme is a preliminary movement, with a view to extensive developments later on under limited liability. It is now fully acknowledged by all experts, and confirmed by Mr. Walker of Rotterdam, that our present system is far behind the age. This has been shown conclusively by results lately obtained from Southern produce, which quite eclipsed all ordinary examples; so that it is evident under an improved system our country would stand pre-eminent for fibre, and a vast sum of money might be saved annually, which would materially alter the present position of our agriculture. This development interests, or should interest, not only Irish, but English and Scotch manufacturers, who would benefit largely by it. Under the *dépôt* system labour could be provided in very many parishes throughout the country for the peasantry, which would be most welcome in the winter time especially. Mr. Walker has already rendered a great public service by giving his experience on this important subject. Exception only is taken to his estimate of the value of seed for feeding. My experience is that it is worth £5 per acre, and the refuse should meet cost of removal. In this opinion I am fortified by practical men—however, I can understand Mr. Walker's desire to err on the cautious side, which is very commendable, but it may weaken enthusiasm in the cause. I knew of 24

bushels of seed per acre being obtained at Selby, which sold at 10/- per bushel; and why should we not produce the same, or say on an average 20 bushels at 6/-, equal to £6 per acre? The purchase of the property referred to will require a capital sum of £2,000, which will be provided by the issue of 100 £20 bonds, representing the land and crop, by which subscribers will be secured. The management will be undertaken by a qualified Committee, which will work it at a minimum of cost.—Your obedient servant,

JAMES CANNING.

Belfast, January 8th, 1894.

THE IRISH WOOLLEN TRADE.

To the Editor of the Irish Textile Journal.

SIR,—The notes in your issue of December 15th on this important and happily increasing industry are very instructive reading, especially to one who, like myself, is interested in and *practically* assists home manufactures, and who has spent some time and money in pushing them.

I fully endorse the fact of "the non-appreciation of Irish goods by our own people," and have been often surprised, when showing goods to "patriotic" Irishmen, to be asked, "Have you no Scotch?" So long as this feeling exists amongst our own people, home-made goods cannot be expected to make the headway they would if all were willing to recognise their good qualities. I attribute the indifference largely to ignorance of the great progress made by Irish manufacturers in the patterns and styles of their goods of late years, though admitting there is still room for improvement in such goods as saxonies and trouserings; but the cheviot makes are really splendid, not only in style but value. It is just possible that cheviots being made in such quantities, and so much attention being devoted to them, that other makes are being neglected, so that there is a risk of the Scotch houses cutting us out when a competition takes place between these other makes. But in cheviots we can more than hold our own, and it is a fact that in some cases Scotch and English makers are now imitating these goods, and trying to compete in this particular line. At present, however, we hold the field. I do not suggest that patriotic sentiment should either sell or buy our manufactures; and progress will not be made in our manufactures if they are to rely on this idea; but, other things being equal, Irishmen ought to give their own goods the preference, and Irish goods deserve to be pushed, because they are better for wear and better value than any Scotch or English. But the saxon end of the trade is being neglected. Five or six years ago beautiful tweeds of this make could be bought; now, makers-up cannot see anything like them; and when I have asked manufacturers the reason, have been told the demand has ceased. This may be so, but I am satisfied that, to some extent at least, the demand would have continued and would have revived if the goods had been shown. I have been able to get some this season, but they are in the cheaper qualities, and not for a moment to be compared with those of some years ago. Some makers are trying to turn out worsted suitings, and this may have something to do with the neglect of saxonies; but any worsteds I have seen are not in it with those sold by English houses. Another mistake our manufacturers are making is in not paying more attention to trouserings. It is almost impossible to get anything approaching a fair selection of goods of this class, and yet there is no safer stock than a range of stylish trouserings. I cannot for the life of me understand why these should be neglected. No doubt there are trouserings made in Ireland, but the only thing to recommend them is their good wearing qualities, certainly not the style, and the latter frequently makes the sale when the former fails. The Caledon Woollen Co. turn out some two-and-two checks which I have seen nothing either Irish or Scotch "to hold a candle to," and have repeatedly shown the cloth to Scotch makers, and they have had to confess they could not compete with them. Why then are not these goods more largely made when they can be so easily sold? As regards homespun, these, I am afraid, are very nearly played out in this country. Of course the ordinary light greys and heavy twills are popular in many parts of England, but they appear to have fallen behind here, so far as gentlemen's suits and ladies' dresses are concerned. This probably is partly owing to the nice styles and extra widths turned out by the ordinary looms. No doubt the hand-spun and hand-woven have an appearance the others cannot have; but, judging by my own experience, I may say that a few seasons ago I sold 1,500 yards of these Donegal tweeds; last season, though exceptionally warm and suitable, I did not get through more than 200 or 300. There is another hand-spun and hand-woven tweed in the market which, for weight, style, and quality, I have never seen equalled in this country; it is quite as good and stylish as the best Harris tweed, and lower in price. The name of this latest homespun is the Clady. You have not touched upon what seems likely to develop into an important industry, and that is the manufacture of rugs. A number of firms are making these, but I have seen none superior to those manufactured in our own city, and I know they are being sent in immense quantities to England and Scotland. I have only slightly touched upon some of the points raised in your notes, and perhaps at another time may refer to other matters concerning the Irish woollen industry; and would only add that every Irishman should consider it a duty to make himself at least acquainted with the manufactures of his own country.—Yours faithfully,

J. M. M'ALERY.

21, Royal Avenue, January 6th, 1894.

The Belfast Linen Trade Report.

SINCE the beginning of the new year a rather better tone has been experienced, accompanied by a larger inquiry, and orders, chiefly on home account, have been placed a little more freely; but, at the same time, business, generally speaking, is still very slow.

FLAX.

A well-sustained demand has characterised the market, and prices are slightly higher than last month. Stocks of Irish flax are getting much smaller, and the season's supply will be cleared up much earlier than usual. The following are market reports since the 23rd ult. :-

December 23rd.—COLERAINE—10 tons of mill-scuted, chiefly of medium quality, was in active demand, and realised an advance of 2/6 per cwt., prices ranging from 65/- to 82/6 per cwt. BALLYMENA—20 tons of milled, sold from 7/3 to 10/3; demand steady; usual attendance of buyers. 28th.—MAGHERAFELT—4 tons of milled, prices from 8/- to 10/- per stone; quality medium; limited number of buyers, and demand quiet. NEWRY—1½ tons, prices from 7/- to 9/-. 29th.—BELFAST—Only a trifling quantity of flax in this market to-day. 30th.—BALLIBAY—4 tons of milled, prices from 8/- to 10/6, and 2 tons of hand-scuted, at from 6/6 to 8/3 per stone. COOKSTOWN—10 tons, prices from 7/9 to 11/6. January 3rd.—RATHFRILAND—10 tons, prices from 7/9 to 9/9. 4th.—BALLYMONEY—28 tons, prices from 60/- to 85/- per cwt.; quality generally good without any extra fine; large attendance, demand extremely active; prices firmer. NEWRY—8 tons, prices from 8/- to 10/3. 5th.—BELFAST—One lot at 9/6 per stone. 6th.—BALLIBAY—6 tons, prices from 8/- to 11/6; demand active. BALLYMENA—12 tons, prices from 7/6 to 10/6; medium to good quality; market well attended; demand brisk. 11th.—MAGHERAFELT—3 tons, prices from 8/- to 10/6; medium quality; small attendance, but demand good. NEWRY—12 tons, prices from 7/- to 10/-; average quality; market well attended, and demand very keen. 12th.—BELFAST—1 ton, sold at 9/6 per stone.

YARNS.

A good deal of activity has been reported in this branch of trade since the holidays, both on home and export account, tow yarns especially selling freely at the undernoted quotations, which are now the minimum rates. The coarser numbers are very firmly held on account of the scarcity and dearness of the raw material, and the turn of prices in the entire range is in favour of spinners. Weft lines are also pretty freely dealt in, several numbers being 1½d. to 3d. higher than last month. Foreign yarns have been largely advanced by spinners, more particularly in the heavier numbers. Scotch dry-spun yarns are also much dearer.

BROWN POWER AND HAND-LOOM LINENS.

A slight improvement in demand for power-loom bleaching cloth has set in, green yarn goods moving off at better prices, but patent makes have been quiet, though prices are firm. In medium and heavy, as well as light, there is more doing of late, and stocks of all are moderate. The small production of Ballymena cloth at present is readily disposed of at firm prices, though manufacturers have not as yet been able to get the advance warranted by the rise in yarns. County Down

makes are in fair though not brisk demand, stocks moderate, prices firm. Only a quiet business doing in cloth for dyeing, but stocks are small, and prices the turn firmer. Roughs continue in good request, especially the narrow widths, and prices show an advancing tendency. Linen handkerchiefs still very slow in moving, but prices are without change. Cambric cloth, both power and hand-made, is in fair request, but handkerchiefs are very quiet. Damasks can scarcely be said to show any improvement in demand; prices, however, are very steadily maintained. Drills and coarse goods have had attention, and continue to move off fairly well.

BLEACHED AND FINISHED LINENS.

Home Trade.—Since the first inst. a good many buyers have been in the market and have given out orders to a moderate extent, but no material improvement has yet set in. It is, however, too soon to expect this after the lengthened period of great depression.

Continental.—Business still quiet; sufficient time has hardly elapsed to finish stocktaking and give out new orders. A *modus vivendi* has at last been arranged with Spain, so that some improvement in that market may now be looked for, after the dull trade since the lapse of the former treaty in July, 1892. The December shipments were considerably larger than same month in previous year. Trade with France is also much better of late.

United States.—A sharp falling off in the December shipments, compared with 1892, is indicated in the Board of Trade returns. Advices received, as well as actual business done, since last report, do not give any immediate promise of improvement, and commercial confidence is very slowly recovering.

Other Markets.—With Australasia there was a considerable increase last month, compared with December of previous year, amounting to 23 per cent. The Brazil trade is also keeping up; but with all other countries there is more or less of a decline for the month compared with December, 1892.

The year's export trade of the United Kingdom in linen yarns shows an improvement equal to 5 per cent. in quantity and nearly 13 per cent. in value, but linen piece goods mark a decline in quantity equal to 7½ and value of 7 per cent.

CONSULAR DISTRICT OF BELFAST.

Declared value of Exports to the United States from 1890 to 1893 :-

	Year ended Dec. 31st.			
	1890.	1891.	1892.	1893.
Flax and Tow	£97,191 10 1	£107,965 6 10	£98,995 9 7	£105,525 13
Threads and Yarns ..	55,961 8 8	39,551 17 1	34,858 12 6	25,587 15 0
Linen, Unions, & Cottons	1,711,926 0 9	1,460,582 5 2	1,679,081 14 4	1,436,638 13 8

We have to thank Mr. J. B. Taney, United States Consul for Belfast, for kindly supplying the above particulars for publication.

Prices Current for ordinary Line and Tow Wefts. January 12th, 1894.

LEA NOS.	14	16	18	20	22	25	28	30	35	40	45	50	55	60	65	70	75	80	85	90	100	110	120	130	140	150	160
Line Wefts	—	—	—	8/6	7/6	6/9	6/3	5/9	5/3	4/10½	4/7½	4/6	4/3	4/1½	4/1½	4/1½	4/1½	4/1½	4/1½	4/1½	4/1½	4/3	4/4½	4/6	4/7½	4/10½	5/1½
Tow Wefts	6/3	5/10½	5/9	5/6	5/3	5/1½	5/-	4/10½	4/9	4/6	4/4½	4/3	These prices are per bundle of 60,000 yards of grey Yarn, subject to the usual discount for cash.										120 threads 2½ yds.—1 lea 12 leas—1 hank 16 hanks 8 cuts—1 bundle				

Flax Cultivation in Ulster.

THEN the Report of the Royal Dublin Society on farm competition in Ulster for 1893 the following paragraph by Mr. W. J. Malden, the agricultural superintendent, appears :-

"Flax cultivation is somewhat on the decrease. This is attributable to the difficulty in obtaining labour; though the writer, who all his life has been interested in the cultivation of special crops calling for a large supply of high-priced labour, is of opinion that labour can be obtained at a price, and it is purely a matter of 'will it pay' to give the extra price for labour, or is it more profitable to let the particular crop drop out of cultivation? Apparently a proportion of the Northern farmers think the profit is not sufficient for them to hold out extra inducement for labourers to stay in the country districts for the employment derivable from flax culture. Doubtless, the increase in the quantity of rye-grass seed grown has had an effect on the acreage given up to special croppings; but there is room for both. The exhaustion of the fertility of the land under flax cultivation without doubt has much to do with the decrease. The whole crop is taken off, and none returned; consequently additional manure has to be applied. The system of destroying the seed is accountable for much of this. The seed, whether crushed or as oil-cake, as every cattle feeder

knows, is exceedingly nutritious, and the manure obtained from it is very powerful. Yet this is wasted in the flax-ponds. Efforts to induce growers to take up the system of saving the seed have proved abortive, as it entails more trouble to work it, and longer time to soak. Probably the fibre is less valuable; but there is always a market for all qualities, and in those countries where the double market is catered for it is found more remunerative to utilise both products of the crop. The methods of soaking the flax appear very crude and laborious; and it looks as though, with a little ingenuity, the flax-ponds might be made more convenient, both for filling and emptying, while inexpensive mechanical means of weighting could certainly be devised, thus avoiding the necessity of moving the weights now employed. The crops brought under the notice of the judges were very good; in fact, it was hard to find a fault in them, except that there were more weeds than was desirable in some cases. Mr. Rankin is a good example of a prosperous flax-grower, and his crops and management well deserved the recognition he obtained. According to the season and other conditions, Mr. Rankin adopts the following methods, which are worth noticing, as flax culture forms a 'special' crop. The land selected has been three or four years old lea, from which a crop of oats has been taken in the previous season. According to circumstances he adopts one of the following three methods of tillage :- First, the land is ploughed about 5 inches deep in the month

Exports of Linen Yarns and Linens from the United Kingdom for the Month ended 31st December, 1893; and in the Twelve Months ended 31st December, 1893, compared with the corresponding periods of the Years 1891 and 1892.

COUNTRIES.	MONTH ENDED 31st DECEMBER.						TWELVE MONTHS ENDED 31st DECEMBER.					
	Quantities.			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,	211,200	255,500	193,400	16,609	22,937	17,717	3,217,000	2,801,200	4,136,800	260,857	237,725	325,216
Holland,	198,000	213,300	229,100	6,613	7,382	8,517	2,216,400	1,892,200	2,070,300	77,487	68,825	76,032
Belgium,	109,400	153,900	184,300	9,784	11,379	12,829	1,640,700	1,486,100	2,223,300	140,772	118,254	161,414
France,	158,900	121,200	93,500	16,295	12,764	10,809	1,566,000	1,326,000	1,295,100	171,622	147,915	149,128
Spain and Canaries, ...	238,200	229,800	373,600	8,334	10,083	16,225	3,659,000	4,900,000	3,476,200	133,330	182,267	157,926
Italy,	42,200	19,100	10,100	2,106	1,043	513	432,800	368,600	247,300	20,936	17,494	12,112
United States,	12,700	46,900	16,300	647	1,304	670	375,200	532,900	476,800	14,229	17,408	17,280
Other Countries,	182,200	253,500	160,000	7,965	11,660	7,222	1,752,800	2,153,600	2,333,700	79,793	100,256	106,047
Total,	1,152,800	1,293,200	1,265,300	63,353	78,552	74,502	14,859,900	15,460,600	16,259,500	899,026	890,142	1,005,155
LINEN MANUFACTURES.	Yards.	Yards.	Yards.	£	£	£	Yards.	Yards.	Yards.	£	£	£
To Germany,	265,500	324,900	235,600	13,162	16,483	11,830	3,581,900	3,594,400	3,675,600	172,434	175,732	179,118
France,	209,600	96,600	210,200	8,374	4,656	8,672	2,149,600	1,882,300	1,781,100	94,590	85,912	77,318
Spain and Canaries, ...	32,600	29,400	46,200	3,214	890	1,735	1,437,000	1,373,500	705,400	54,388	54,556	23,375
Italy,	61,900	74,500	57,900	2,622	2,950	2,702	841,800	931,000	715,200	37,053	41,430	30,705
Philippine Islands, ...	98,000	34,000	8,000	1,342	419	359	1,016,800	399,200	286,800	17,545	6,866	8,226
United States,	7,640,100	8,872,600	4,649,700	162,303	183,477	105,834	80,603,900	96,475,000	85,258,800	1,720,133	2,012,837	1,804,031
Foreign West Indies, ...	1,373,200	1,023,100	1,060,500	26,824	18,441	21,292	18,081,100	17,752,900	17,898,600	345,278	339,936	358,651
Mexico,	210,600	153,300	112,300	4,596	4,200	2,749	2,225,100	1,683,600	1,520,100	52,679	42,182	37,881
Republic of Colombia,	258,800	285,500	106,400	4,334	4,305	1,756	3,434,600	3,451,300	3,041,900	60,623	57,849	50,976
Brazil,	132,000	233,000	314,800	4,876	7,144	10,016	3,416,300	2,885,100	3,296,500	112,869	83,610	101,885
Argentine Republic, ...	16,900	142,700	68,900	646	5,503	2,490	540,000	1,236,200	1,310,800	13,339	39,097	45,465
British East Indies, ...	218,000	255,400	208,500	5,596	7,257	5,480	3,041,100	2,910,900	3,180,000	84,522	81,731	89,806
Australasia,	1,784,600	999,200	1,229,500	49,704	29,417	32,320	13,625,600	10,811,700	9,000,800	375,725	293,142	245,097
British North America Do. West India Islands & Guiana, ...	832,900	1,041,800	674,100	16,003	22,765	10,656	7,310,500	8,766,100	7,698,800	144,376	177,045	139,406
Other Countries,	1,385,600	1,351,500	1,081,900	27,862	26,448	22,210	16,045,400	15,237,300	17,609,900	333,442	352,395	384,576
Total Plain, Unbleached, or Bleached	13,574,700	13,545,100	8,465,800	301,643	301,659	201,195	144,416,700	156,254,800	139,761,300	3,263,463	3,443,189	3,126,592
Total Checked, Printed, or Dyed, and Damasks or Diapers,	936,300	1,305,400	1,425,000	24,297	29,956	29,646	11,807,600	12,157,000	15,406,500	301,279	301,344	336,373
Sail Cloth,	204,300	234,100	256,800	9,414	10,821	11,820	3,233,400	2,890,700	3,246,900	144,227	133,117	144,103
Total of Piece Goods, ..	14,715,300	15,084,600	10,147,600	335,354	342,436	242,661	159,457,700	171,302,500	158,414,700	3,708,969	3,882,650	3,607,068
Thread for Sewing,	213,100	218,500	203,400	26,756	23,111	24,087	2,474,100	2,453,400	2,398,600	309,626	309,613	238,463
Other Articles,	69,854	76,003	54,746	1,013,601	973,639	833,465
Total Value of Linen Manufactures,	431,964	446,550	321,494	5,032,196	5,165,902	4,778,996

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

COUNTRIES.	MONTH ENDED 31st DECEMBER.						TWELVE MONTHS ENDED 31st DECEMBER.					
	Quantities.			Value of Imports.			Quantities.			Value of Imports.		
	1891	1892	1893	1891	1892	1893	1891	1892	1893	1891	1892	1893
	Tons.	Tons.	Tons.	£	£	£	Tons.	Tons.	Tons.	£	£	£
From Russia,	5,126	3,714	5,385	138,387	105,020	172,719	57,054	60,858	49,908	1,499,303	1,592,515	1,563,139
„ Germany,	65	188	113	1,840	6,043	3,540	2,230	2,669	3,489	59,350	60,647	96,173
„ Holland,	476	690	166	23,805	23,643	16,435	4,355	5,108	5,134	219,929	219,217	190,776
„ Belgium,	2,101	2,227	1,568	113,848	114,625	91,432	16,227	15,746	12,777	393,196	315,831	647,001
„ Other Countries,	145	175	167	3,599	5,612	2,831	4,081	2,274	958	99,290	55,065	20,864
Total,	7,913	6,994	7,399	231,479	259,943	287,007	83,947	86,655	72,266	2,771,568	2,743,305	2,517,953

of February or March. In the middle of April it is well harrowed, rolled, and top dressed with 5 cwt. of kelp or kainit per acre. Dutch seed is then sown, and the land is harrowed and rolled to complete the seeding. The second method is to plough in November 5 inches deep; to cross plough 3 inches deep in March, and then prepare the bed as before. The third method is to rib the land with a single-furrow plough in October or November to a depth of 4 inches. In March the ribs are harrowed down, and the land ploughed to a depth of 5 inches, after which the seed bed is prepared in the usual manner. Mr. Rankin has built his own scutching mill, and made a large reservoir to supply water-power; he scutches a considerable quantity for his neighbours. An interesting feature in connection with flax culture is a collection of fibre made by Mr. Beatty, who has been a frequent winner of flax-cultivation prizes. It consists of samples from prize flax of his own growth for twenty years, together with a record of particulars relating to each sample."

The latter part of this report answers the first. If all Northern flax-growers were as careful as Mr. Rankin and Mr. Beatty, who for years have been successful by observing the necessary conditions essential to success, we should hear less of the old excuse about flax exhausting the soil. Where the proper rotation in the cropping is carried out, the flax water used as liquid manure, and the seed saved for crushing or feeding, there is no exhaustion of the fertility of the land, and surely Mr. Rankin and Mr. Beatty have not made money by flax-growing if exhaustion has been the result of their experience.

IMPORTS AND EXPORTS, BELFAST.

Imported into and Exported from the Port of Belfast from 1887 to 1893, per Harbour Board Returns.

	IMPORTED.						EXPORTED.							
	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1887.	1888.	1889.	1890.	1891.	1892.	1893.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Flax ...	18,865	21,455	24,806	21,458	26,709	24,916	25,027							
Linen Yarns	2,911	4,113	3,789	3,393	3,607	4,014	4,197							
Cotton "	2,632	2,774	2,683	2,879	3,633	3,626	3,573							
Jute "	24	23	15	77	201	178	102							
Linen Goods	1,997	2,035	2,298	2,363	2,513	2,407	2,330							
Flax ...	2,835	2,181	2,575	3,997	3,803	2,545	3,307							
Linen Yarns	7,876	8,174	7,613	8,763	8,860	8,220	8,751							
Cotton "	85	72	90	148	149	144	84							
Jute "	—	—	—	—	5	11	11							
Linen Goods	28,942	30,259	31,248	34,506	33,699	35,766	34,189							
Cotton "	471	457	564	592	937	900	1,150							

* We have to thank Mr. Currie for the figures for 1893.

The Ulster Cotton Trade.

HERE is not much change to notice in this market, so far at least as concerns the quantity of yarns imported during the past month, and the demand continues to run on the usual numbers. The generally backward state of trade during the past few months has prevented anything like the amount of purchases which the increase in the manufacture of union goods would warrant; but manufacturers, finding it difficult to dispose of their productions, have been limiting their output as much as possible. Now, however, as the prospect of better trade is brightening, there is every likelihood of more soon being done. At the present moment the prices of cotton warps are very low—in fact they have not been lower for some time; and consumers could scarcely be wrong in placing their contracts now, as, with the continued advances demanded for linen yarns and the increased cost of production, cottons cannot remain long at present figures. Coarse union goods of the crashes and roughs descriptions are being produced in fairly large quantities, as there is a constant demand for these articles. Shirting unions have been also selling more freely of late; and although stocks are fairly large, the manufacture is being steadily pushed forward. Union towels, tea and glass cloths, are somewhat sluggish, and their manufacture is being kept within narrow limits. The demand for Irish hand-loom mulls is very feeble, and the production small.

The printed cotton handkerchief trade has been extremely quiet for some time past, and the printing and hemming houses having large stocks of finished goods on hands have only been buying cambrics in odd lots, either to more thoroughly assort designs or to keep their hands employed. The heavier makes of cloth are likewise quiet, only limited quantities being disposed of.

The Making-up Trades.

Apron and Pinafore Trade.

ALL the houses engaged in this branch are now busy with the execution of the orders booked some weeks ago. This will take up all their time for the next three or four weeks, so that they are not now looking for any fresh business. Besides, buyers are not likely to place fresh lines until they have tested the opening of the season with the present sample orders. The bulk of the samples is of the "useful" description, although the fancy end is also represented.

Collar and Cuff Trade.

The makers of these goods have been rather slack of work for some weeks, and the orders for the spring trade have been, for so far, both few and small. It is expected, however, that the season will bring in

some fresh business as it opens up. In the meantime, as many of the hands as possible are being kept working on regular saleable goods, and the execution of the few lines coming in from time to time.

The Irish Lace Trade.

(Communicated.)

THE great demand we have had for Irish lace in 1893 should have been of considerable benefit to the industrial poor; but as employers could not prevail on their workers to "make hay when the sun shone," many large orders had to be countermanded in consequence of the delay. We Irish are so sanguine of success, that we cannot entertain the idea of a discontinuance of any particular demand, or how important it is to work diligently and well. Those volunteers who years ago took a special interest in the poor around them, and under many difficulties organised industries, sustaining them through all the fluctuations of trade, have experienced much trouble in keeping their workers together during the past year, new institutions and exaggerated publications having caused unprecedented discontent. No new schools (to the writer's knowledge) have been opened in the North of Ireland for lace teaching, nor has any fresh enterprise been started; but we have had a number of unqualified emissaries sent into the different industrial centres interfering between employer and employed in an unaccountable manner, visiting the lace workers engaged on special orders, and by a system of bribery buying up the best specimens made on new designs which must have cost time and money, and which have been unscrupulously appropriated for the benefit of rival dealers. Surely this is not justifiable in a business or philanthropic sense, as it encourages deception, and discourages those who have the workers' real interest at heart.

A great deal has been written and said on the Irish lace industry, and it is gratifying to find the subject has been taken up by those in authority.

Mr. Brennan, R.H.A., in his able lecture before the Dublin Arts Club, made some very wise suggestions. He has acquired a very good knowledge of lace, and has evidently made it a study for the last few years: no doubt he has come in contact with those connected with lace-making. There are sufficient workers just now in Ireland to meet the demand, should they prove steady, and work carefully and with taste on approved designs. He suggests lending out designs to the different lace centres, which would indeed prove a boon, as the purchase of them is at present a great tax on the employer; but in many cases the design, though exquisite in an artistic sense, is perfectly worthless to the lace-worker without some alterations which in all probability the designers would object to. We hope to hear more from Mr. Brennan with regard to this proposition.



MONTHLY REPORTS.

Irish.

DUBLIN.—The markets are beginning to recover from the Christmas slackness, and transactions show a tendency to more buying on behalf of the home trade. Linens are fairly active, and the tendency of the market encouraging. In woollens more firmness has been shown, and the advance in the prices of the raw material has brought about a strengthening and hardening in the market all round. Considerable offers for yarns for the present year have been made, but spinners have shown no inclination to deal in "futures," except at advanced rates. The latest market report for wools to hand is:—Little doing, but the tone tends to recovery. Prices:—Downs, 10½d.—10½d.; hogget, 9½d.—9½d.; ewe or wether, 9d.—9½d.; seaside, 8½d.—9d.; mountain, 7½d.—8½d.; Scotch, 5d.—7d. In silks and poplins there is nothing to report. In looking forward to the present year, everyone must hope that it will be better than the one just closed, of which all that can be said is—it might have been worse. To certain Irish industries the World's Fair has no doubt given a stimulus, and opened up new outlets. The volume of trade done at the Irish Villages was considerable and highly gratifying; and in other quarters, too, I hear of exhibits disposed of and orders placed. So far good, but the hope which was once entertained of a speedy revision of the M'Kinley Tariff imposts must, I am afraid, be abandoned. The Free-trade platform in America has, as far as can be judged, collapsed; and in the face of the present monetary crisis in that country, and the deficit in the Washington Treasury, it is useless to look for more favourable terms being offered to the importers of foreign goods. On the other hand, no increase on the present duties is to be apprehended, and we must rest content with doing business in those Irish products and manufactures which are able to carry the present fiscal tariff without being thereby excluded from the American markets. At home, considerable strides have been made in the way of opening up European and British markets for Irish goods—especially woollens. At the same time nothing is more certain than that Ireland herself could consume far more of her

own manufactures than she does, and thus make her manufacturers more or less independent of an export trade, whether to America, Great Britain, or Europe.

The Irish Industries Association.

The new depôt in Grafton Street, formerly the late Mr. Ben. Lindsey's Lace Depôt, was formally opened for the Christmas trade, and, I am glad to learn, attracted a very large amount of patronage. As, I think, I have already mentioned, under the management of the Industries Association some new departments have been added to what was originally a purely lace emporium. Underclothing, *lingerie*, baby requisites, etc., of all sorts, linen and woollen, have now been added, but all these, as is the case with the laces, are of Irish manufacture and hand-made. Embroideries form another item of the stock-in-trade, and any class of embroidery desired, if not in stock, will be undertaken to order, and, I may add, executed in a manner to give every satisfaction to even the most exacting of customers. The Industries Association, with their two Dublin Depôts, one in London, and the newly opened branch in Chicago, should now be in a position to dispose of very large quantities of lace and other cottage-made stuffs. The rapidity with which the business of the Association has progressed is most gratifying to all friends of Irish enterprise, and speaks volumes for the manner in which the affairs of the concern have been conducted by those in control.

The Metropolitan School of Art.

The annual exhibition of prize drawings, designs, etc., of the scholars of the Metropolitan School of Art was opened, as usual, in the School Galleries on St. Stephen's Day, and attracted a goodly number of holiday sight-seers. The prizes will be distributed on the 18th inst., as at present arranged by the Lord Lieutenant, but the death of Lord Crewe may possibly alter these arrangements. This, however, has nothing to do with the success of the School as an educational centre—a success which, annually as the South Kensington Examinations come round, is shown to be greater and greater. Mr. Brenan, R.H.A., the head master, is to be sincerely congratulated upon this continued success, the more so as a large number of the prizes gained are for designs for art industries, laces, and other textile fabrics. I notice that the Misses Jacob, Wilkinson, Crowe, and Webb are again to the fore this year with admirable lace designs, some of which were utilised in producing the laces which were specially worked for the Chicago Exhibition. Mr. M'Grath has produced a design for iron-work gates, which I hope may ere long find a patron, and be reproduced in metal.

The Irish Woollen Trade.

A very interesting interview with an Irish woollen manufacturer has been published, in which some points are well worthy of notice. As to doing anything practical to give an impetus to the Irish woollen trade, this gentleman thinks, as many have thought before him, that it lies with those who buy woollen stuffs, *i.e.*, with everybody in Ireland. The least, he thinks, that manufacturers should expect, is that purchasers should take none but Irish goods, which they can easily recognise by the trade-marks and makers' names. The "shopkeeper" difficulty is also admitted, where retailers push foreign goods because of deriving a larger profit from their sale. Touching upon the present and past condition of the industry, it is pointed out that about ten years ago there was an important movement in favour of Irish industries. Among others, it gave a great impetus to the woollen trade, and since the movement was inaugurated quite a number of mills have been established in Ireland. Thus there was a great increase in supply and a corresponding increase in demand. All these mills, without exception, he says, are doing a prosperous trade now, and the goods produced are being sold, not only in England and Scotland and on the Continent, but in America and the Colonies as well. The class of goods turned out has also, we are told, considerably improved, and a new branch of manufacture has been opened up in the way of fabrics for ladies' dresses, a branch which had been long neglected. Of Irish produce about three-fourths of the output at present leaves the country, whereas were the home consumption of woollen goods confined to Irish manufacturers, the present mills could not supply the demand, much less supply the export trade as well. Can nothing, asked the interviewer, be done to bring about this result? And the answer is extremely interesting. "I may as well tell you," was the reply, "that the Irish Industries Association has already done a good deal, and I have no doubt that the exhibits of Irish woollen goods at the World's Fair, and the great success which they met with, will be followed by excellent results." Now to my mind the most important portion of this reply is that which refers to the good effects following upon the exhibition of manufactures. I have consistently urged this point in these columns, and have yearly deplored the fact that for years only one, and latterly no Irish manufacturer has thought it worth his while to send his wares for exhibition and competition at the Royal Dublin Society's Autumn Show. If the Irish public are to be induced to patronise Irish manufactures they must be familiarised with them, and nothing will do this better and quicker than placing the goods on view at exhibitions, or in places where the general public congregates. It surely stands to reason that if it is beneficial to exhibit Irish woollens at Chicago, it must be even more so to exhibit them in Ireland, especially as I understand that the wish of the manufacturers is to extend, indeed to monopolise, the Irish trade. Can it not also be argued, with justice, that the impetus which was given "ten years ago" to the Irish woollen trade was very

largely attributable to the excellent exhibit of Irish tweeds and friezes at the Manchester Exhibition? Publicity is the very essence of trade success; and the best remedy which Irish manufacturers can take to do away with that ignorance amongst the Irish public of which they complain so bitterly, is to take every opportunity of allowing the public to see their wares. If a gentleman or a lady sees a fine specimen of an Irish tweed, say at Ball's Bridge, he or she is far more likely to ask a tailor or habit-maker for the stuff, than if only acquainted by hearsay with the fact that such stuffs are turned out by Irish mills. This interview to which I have referred is, I think, likely to do a great deal of good, and it is reassuring to find from an indisputable authority that our Irish mills are all doing well.

LURGAN.—I cannot report much change as yet in our staple industry here. Stocktaking at the beginning of this month always prevents orders being placed for a week or ten days. The feeling is certainly more hopeful, and goods ordered some time ago are being asked for. Plain linen cambric (hand-loom) is in fair request, and the production is fully accounted for. Woven bordered cambric handkerchiefs are a slow sale, but stocks are not large, and the usual orders which should soon be coming for home trade markets will make a clearance; but should trade improve to any extent it will be difficult to get fine hand-loom cloth to fill the orders. Linen handkerchiefs from boiled yarns are being more inquired after, and something more is being done in these on Continental account. The output has increased in all hand-loom makes, and the turnout previous to holidays was fairly good. Power-loom manufacturers still keep fairly well employed, but are working at a small margin of profit. Machine hemstitch factories still keep running short time, but are rather busier than at last time of writing. Some of the places have fitted for pinafore making, and are making some headway at these. Damasks, diapers, and sheetings, hand-loom makes, are the turn better. Embroideries on linen pillow-shams, sheets, &c., are not much wanted.

English.

BARNESLEY.—There has been no improvement in the linen trade, and, being the closing month of the year, there was little new business doing in any department. The unsettled state of the foreign trade, which has recently fallen off considerably, has been the means of stopping much machinery, manufacturers having taken full advantage of this and the "taking of stocks" to curtail production as much as possible. As regards the home trade, a rather better state of things exists, but the goods being made are largely for stock. The main business done during the month has been in the cheapest kinds of fabrics. In the fine makes of table linens there is nothing new to note, business being about the average of the past twelve months. In drills a quiet state of things has been apparent, and the same may be said of carpet, stair, and such-like coverings. In bed linens a moderate demand has been experienced. In the smaller kinds of goods for toilet and domestic purposes a fair business has passed, but in less quantities than usual. As to prices, nearly all classes have kept tolerably firm.

BRADFORD.—Taking into account that it was the last month of the year, and also the usual time for stocktaking, business in the worsted trade has, on the whole, been fairly satisfactory. There is a very confident feeling all round. In English wools there has been a gradually increasing demand for nearly all classes at firmer prices, and at the close of the month rates had a decided tendency upwards. In Botany descriptions, also, much more has been done than for some time past, and, with the opening of the new year, it is confidently expected that a much larger business will be done in most kinds of wool. In the yarn branches an improvement has also taken place, orders having been fairly good, and at higher rates, in sympathy with the advance in wools. Two-fold 40's and 36's and super lustre yarns have been in chief demand, and the year closed with a very firm tone, and with prospects of a sound, healthy business early in the new year. In the piece branches a rather better state of things may be noted in the home trade, but for foreign account there has been little new business.

LEEDS.—Quietness has pervaded most branches of the woollen trade of this district, and the outlook for the new year is not cheering. The effects of the coal strike are still being much felt, especially amongst those engaged in the production of the lower classes of goods, and the outcome of the coal conference, to be held during next month, being problematical, has a tendency to prevent any large orders being given out. In the finer qualities of worsted, both plain and fancy, a moderate business has been done, and in medium descriptions the demand has been fair, but in the lower kinds there is little new to note, the demand having been chiefly in small lots taken from stock. In serges only a small business has been transacted, when compared with the average demand of the past twelve months. In tweeds and chevots trade has been, on the whole, quiet in nearly all kinds. In cloths for the ready-made clothing branch there is little change. In mantling fabrics the demand has been extremely quiet. Prices generally have kept firm.

MANCHESTER.—The firmness of the linen yarn market is shown by the action of the Ghent and Lille spinners, who, just before Christmas, withdrew all offers at the old rates, and substituted a new list showing an advance. For linens the home ingoing has displayed no features

of special interest this year. The spring orders booked by manufacturers have been fairly satisfactory, and there is less grumbling amongst agents for Scotch firms, who certainly had a far from pleasant experience last year.

It is to be hoped that those interested in the Irish poplin industry will not neglect the opportunity shortly to be afforded them by the Exhibition of British and Irish silks, to be held at Stafford House, London, in May. A good deal of work is being quietly performed by those interested in the project, and as there will be no foreign silks shown, it is hoped that home manufacturers will do their best to show the fashionable world what they are capable of.

The year has opened very badly as far as the operatives in the North of England are concerned. In the woollen districts a number of the mills are closing in the afternoons to save cost of gas, and others are working four days a-week, or are working with a diminished staff. The distress in the West Riding of Yorkshire is most severe, and mills dependent upon the American trade find their efforts almost paralysed. Business is almost at a standstill owing to the uncertainty caused by tariff legislation, and the suffering amongst thousands of respectable operatives in the West Riding is pitiful. These remarks are based upon personal observations made during a recent visit to Bradford, where the distress is no doubt especially keen. In the Leeds district there is not so much dependence on the American trade, but still, there, and in other parts of the North, trade is in a most unsatisfactory condition. All this must directly affect sales in the home market for some time to come, and it is because of their bearing on this connection that the facts are mentioned here. The circumstance is one with which sellers of linen goods will require to deal.

The opening of the Ship Canal is now a matter of history, and it is unnecessary to speak here of the mere ceremonial portion of the affair. But there are some features of the undertaking which call for remark here. Already consignments of Belgian and French flax yarns have reached Manchester by the Canal, ample facilities being afforded by the Cork Steamship Company and the General Steam Navigation Company, which are running boats from Rotterdam, Amsterdam, and other ports, taking goods from and to Ghent. A substantial saving, amounting to several shillings per ton, results from the use of the new route compared with that *via* Grimsby, Hull, or Goole. It may be useful for reference purposes to summarise the extent of the Humber import trade in certain articles in which Belfast is interested. This is done below, and it will of course be remembered that the goods named are in transit to various parts of the kingdom. The returns relate to 1892. Those for 1893 will not be obtainable for some time, as the ordinary Board of Trade returns do not give such particulars.

	Flax.	Linen Yarn.
	Cwts.	Lbs.
Hull	78,662	188,088
Goole	65,017	8,416,307
Grimsby	3,119	56,466

Doubting the accuracy of the linen yarn imports at Goole, I have referred to a table giving the total entries of foreign spins in 1892, and find it amounts to over 20,000,000 lbs., so that the Goole figures are not disproportionately high, considering that the Humber is so convenient an importing centre for the trade. As far as mere weight goes, a larger quantity of flax yarn enters the country than leaves it, but the average value per lb. is higher in the case of yarn exports, and the total value is also above that of the imports. Leith and Belfast follow Goole as flax yarn importing centres.

The proportion of this trade which will come to Manchester must of necessity be small, owing to the comparatively small consumption of the district which can be served from this city. Most of Liverpool's imports of foreign flax yarns is, it may be assumed, intended for destinations east of it. The quantity amounts to 175,000 lbs., to which must be added a portion of the imports which enter the country on the eastern coast.

The point to notice is that, whatever the consumption may be, cost of transit has been very materially reduced as between Continental ports and Manchester. The coasting traffic will, it is generally admitted, be greatly benefited, and it is scarcely likely that the tedious process of transshipment at Liverpool into the railway waggons will be adopted in the case of Irish goods intended for Manchester. Irish cattle for Tuesday's fat cattle market will arrive in much better condition if they are not to be trucked at Liverpool, but are brought up direct from the port of shipment to Manchester. Curiously enough, the Dublin Steam Packet Company has given no indication as yet that it intends to use the Canal. Whether this dilatoriness is due to the intimate relations existing between the Company and the London and North Western Railway, is a point upon which I prefer to say nothing. But the fact remains that Dublin is the only important port in the kingdom to which regular lines of steamers have not been arranged. This is a state of affairs which, of course, cannot exist for long, whether the Steam Packet Company alter it or not.

LONDON.—There are times when it is a pleasing task to write a retrospect; not so, however, of the year that is past and gone, for from beginning to end it has been a period of acute depression in the dry goods trade of the city. To trace its immediate cause would be impossible, but it seems to have commenced with the disastrous strike among the cotton operatives, strengthened by the struggle which immediately followed at Hull, and consummated by the unprecedented troubles which arose out of the prolonged coal war. There were of course many other causes in

operation, notably the crisis in the Australian financial world, and the collapse of the American market. The loss to the country directly by strikes has been estimated at about fifty millions, although some authorities place it at a higher figure. Indirectly we have also suffered heavily, but it would be impossible to give any reliable estimate of this loss; suffice it to say, that for weeks the trade of the country lay in a paralysed state, while stockholders in the various railways are commencing to realise how intense the struggle of the year has been. Of financial collapses in London there has been no end; thousands of families who at the beginning of 1893 were in easy circumstances are to-day in poverty, and these, unfortunately, people of a class whose days of labour are over, or who have been unaccustomed to any form of employment. If we turn our eyes abroad, there is hardly a country which is not in precisely the same condition, with perhaps the notable exceptions of Southern Africa and Canada; still we are not without hope that the wave of depression has well-nigh spent itself, and that the new year is the dawn of better days; but the improvement will be slow. It was so after the crisis of 1866, which saw the collapse of the great banking house of Overend, Gurney & Co., with liabilities £18,727,915, the liquidation of which was only brought to a close last month. In dry goods quarters we are commencing to learn more accurately the state of the past year's trade by the declaration of the dividends of the companies. Messrs. Devas, Routledge & Co.'s (Ltd.) balance sheet shows a net profit of £10,851 for the year ending the 20th December, 1893, which, compared with the same period of 1892, discloses a small decrease of £332, but a decided improvement upon the year ending 19th December, 1891, when the net profit was £7,215. A new feature in this balance sheet is the investment of £15,000 in 2½ consols as a reserve fund. On the two previous periods referred to above the stock of the company fluctuated between £75,000 and £76,000; this year it stands at £67,940. The book debts for the two previous periods fluctuated between £112,000 and £115,000; this year they are reduced to £99,517. At the time of writing, no further balance sheets of the London companies has been published, but Messrs. Devas, Routledge & Co., Ltd., cannot complain, and it is greatly to be hoped that the larger companies have relatively done as well. Of course there is no doubt but that the dry goods financiers will question the advisability of investing capital in 2½ consols; but the shareholders will feel greater security to know that the reserve is not an imaginary figure, as it often is in companies. The changes at the beginning of the year were practically *nil* in the dry goods trade, most people no doubt acting on the good old maxim, let well enough alone, particularly in a weak time; hence I cannot chronicle a single fresh start of any importance. Time was when the beginning of a new year would see at least half-a-dozen new houses branching out of old ones. In the Milk Street trade very little life is exhibited yet, although no stone is being left unturned to infuse vitality into it; possibly at the end of the month, when the retail may commence to waken up, some good replenishing orders may be placed, but the wholesale houses are moving with more than exceptional caution in the matter of purchases. Advices from the provinces through the travellers are not too hopeful, and I do not hear very sanguine opinions of the spring trade, the impression being that we must look farther ahead for any appreciable improvement. Personally, I cannot see what is to bring about a more improved state of things immediately, with most of our markets abroad in a dull state, while it will take a very bountiful harvest in this country to recoup the agricultural classes for the losses they sustained last season by the drought. Unquestionably, however, things are on the mend in the city; we know the worst; and although we have been a long time touching bottom, we have got to it at last. The road has been long, but it is a long road without a turning.

Scotch.

DUNDEE.—Since the holidays the tone of the market has somewhat brightened, but it cannot be said that any appreciable improvement has set in. *Flax* is firm and somewhat higher than last month, but buyers are very slow to follow the upward movement. *Yarns*—The hardening tendency of the raw material has forced spinners to seek for better prices for both line and tow yarns. Manufacturers, however, are not operating, except to a limited extent, seeing the difficulty of getting more money for cloth. *Linens*—Though a good many buyers have been looking round, the business done is as yet of a meagre description. *Jute Yarns* and *Cloth* are without much change, and demand limited.

Continental.

LANDESHUT, *January 8th.*—The yarn and flax exchange on 3rd inst. was well attended, owing to the prices for raw flax being considerably advanced. Spinners were obliged to ask another advance of 10 per cent. for yarns, which prevented larger contracts being made. Several of the leading spinners did not attend the exchange. Power-looms in this district are fully employed, but in general cloth does not sell so easily, as buyers are not willing to pay the advanced prices demanded, and which manufacturers are obliged to ask. Next yarn and flax exchange will be on February 7th.

LEIPZIG, *January 10th.*—The yarn exchange on the 5th inst. in this city showed almost no attendance, a token that no great interest at present is ruling; and no particular change is to be reported in the linen

industry. Spinners in Silesia, etc., ask an increase of 10 per cent. for yarns, but buyers continue to suffer from the fact that fabrics can't be sold at prices in proportion to those quoted for yarns. After the holidays which curtailed production so much, stocktaking, and other work connected with the close of the year, are over, a renewed demand and buying is likely to set in.

United States Market.

(From our Special Correspondent.)

NEW YORK, December 29th, 1893.



THESE last of the ember days close one of the most delightful Christmas weeks we have enjoyed in many years—not seasonable, it is true, for snow and cold were wanting to give the proper holiday tone to affairs; but then the compensation came in the way of splendid shopping weather up to the very last moment of the Saturday preceding Christmas. It was a big lift for our army of retailers, to many of whom bad weather would have brought the menace of disaster, if not disaster itself. As it was, sales were off, away off as compared with former years; but this had been looked for, and preparations had been made accordingly. To give British readers an idea of the holiday transactions of one of our leading dry-goods bazaars, I will cite the case of Abraham & Strauss, of Brooklyn, successors to the old concern of Wechsler and Abraham. They published that they would donate to the poor fund of the city twenty-five per cent. of their gross receipts for the Saturday preceding Christmas. This may have brought a preponderance of trade to their establishment—dear knows; but, at any rate, their sales for that day were announced to have been £8,000, and their promise was duly performed.

Just how the general retail trade of our cities fared in the aggregate can only be guessed at, for shoppers were abroad in their usual bustling numbers; but those who profess to know the facts say, as expressed above, that sales were "away off," and that although purchases were many, amounts were small as compared with the flush days of last year. Our handkerchief importers had very good calls upon their stocks, but largely in the cheap end, where, to our sorrow, muslin has taken the place of the linen goods that used to foot up so well in accounts of sales to Belfast and Lurgan. Arent the retail question, we hear a rumour now and then of one or two Brooklyn houses intending to retire from business. There are too many of them in that great suburb of this great metropolis, and the rent question is an enormous factor. There will be no failures among them, anyhow; and, to do their best in the way of obtaining credit, none of them could rival the London retail house that failed recently and let one of your manufacturers in to the tune of £5,000. Such credit-giving is unknown in this land of windy financing, and we, even we, pause in wonder.

Up to within a few days before Christmas there was a fair business accomplished in all lines of housekeeping linens, embroidered linens in general, handkerchiefs, elastic canvases, &c., &c.; but this week—always a dull period with the linen men—has been as dead as a door nail, and stocktaking has gone forward with scarcely any interruptions from customers. 4/4 linens made a bad sales record for December. The best that might be said of them is that they maintained their prices in the face of little or no demand. The proposed change in duties affects them but slightly—in the shuffle of fair trading it would be lost sight of entirely, and the coarser sets of linen goods now paying 50 per cent. duty can easily be run off before June 1st, the new date for the operation of the Wilson Bill. As far as 4/4 linens are concerned, they must be used for collar and shirt making purposes, no matter what the duty rate may be; but the collar and shirt making industries are lying almost fallow while awaiting the readjustment of affairs that will follow the settlement of the tariff question. The life of each industry is contingent upon the welfare of all; or, in the words of our New York *Herald*—"Importers, merchants, and manufacturers cannot make contracts ahead or determine upon future dealings until they know what the tariff is to be. Until this is known, many mills must remain closed or continue to run on short time, employment must be handicapped, wage-earners kept idle, values unsettled, and markets uncertain."

Before many days elapse, Congress will be absorbed over the great question,—and it will have its hands full. Protests are pouring in upon it from all the manufacturing centres of the country, exclaiming against any changes from the M'Kinley schedules. The political phase—the Democratic view—affects politicians and partisans only. Manufacturers forget all party bias in the overwhelming demand for the maintenance of the present laws that gave them and their workers the most prosperous days they ever knew. As an example of these petitions, I quote one addressed to the Congressman representing the Passaic, N.J., district. Acheson Harden & Co. established a cotton handkerchief industry there after the M'Kinley Bill went into operation.

"PASSAIC, N. J., Dec. 27, 1893.

"We, the undersigned employes of the firm of Acheson Harden & Co., manufacturers of cotton hemstitched handkerchiefs at Passaic, N. J., do humbly petition Congress and earnestly request that you will use your

influence that the present existing tariff on cotton hemstitched handkerchiefs be retained, as should the proposed tariff become a law it will ruin this industry and close the factory, thereby causing your petitioners loss of employment. We trust that Congress will take into consideration our prayer, so that the handkerchief industry may be further developed and fostered, the existing tariff being only sufficient for that purpose."

The Troy manufacturers, threatened with the removal of the specific rates that afford them their only protection against Germany, Austria, and Japan (the Japs have discovered us too), are foremost in the anti-Wilson crusade, and, being well organised, they sway the sentiment of all the shirt trade of our country. As the result of the labours of their committee, a protest, to which 75,000 signatures are appended, will be forwarded to Washington at the close of next week. It will be presented to Congress by a Democratic member of the House; and it has received the written approval of a Democratic Senator, himself a Trojan, Irish by extraction, and Murphy by name! "We are a great country, sir."

Advertising in the United States.

II.



AS an afterword to my first article on the above subject in November Journal, and thinking over our great retail advertisers again, I am reminded that the late A. T. Stewart, who never permitted a sign-board on his "Marble Palace" at Broadway and Chambers Street, or at his new—and surviving—establishment at Broadway and Ninth Street, kept his business constantly before the public in the daily newspaper column, and the competitors of his day were compelled to follow him. His successors, now Hilton, Hughes & Co., acknowledge the virtue of the sign-board, and have been sharply criticised of late for resorting to advertising by means of doggerel rhymes in theatre programmes.

The great retail lights of his day were compelled to follow him: that is the secret of the success of what I have been leading up to—our trade journals. These valuable representative channels of intercourse between our mills and manufacturers on one hand, and our purchasers for manufacturers' and consumers' wants on the other hand, are, of course, well-known vehicles of information on both sides of the Atlantic; but we patronise and sustain them with greater liberality here, as is shown by their goodly number, their lasting quality, and the deference paid to them as authorities upon the matters for which they stand as exponents. They are as powerful, many of them, to "make or break" a commercial reputation as are the daily newspapers over handling a politician's welfare. This power is never used on the offensive side, it is only fair to say; but the power remains, all the same, and is tacitly acknowledged in some quarters. They are subscribed to by every retailer who amounts to anything in all our cities, towns, and villages,—they read them for information as to what is "going" and where to get it, by direct calling, from the commercial traveller upon his rounds, or by the handy mail order. The textile mill owners receive them by virtue of being *advertisers* therein; so do the makers of mill machinery, the manufacturers of everything appertaining to men's and women's wear, and of household need, comfort, and adornment. They read and digest what "the man over the way" is doing in their own lines, and learn more than their best spies could detect by observation or hearsay. They are "put on" to the good things by which a competitor is overreaching them, and they start in "to beat the other fellow" by improving upon his labours, and by *advertising the fact broadcast*.

So then, as already hinted, Yankee advertising in the manufacturing and in the wholesale and the retail is done, in very many instances, because our manufacturers and merchants are compelled to it by the vigorous and persistent methods of their competitors,—they must keep up with the procession or fall out. To be "established" amounts to nothing here where every merchant reads his trade journal; and when the newcomer begins his commercial existence, his first thought is how to tell his story most effectively in the columns of the paper representing his industry. Keeping to the textile lines,—the man with a new weaving-machinery wrinkle adds it to his old story and keeps both going; so does the laundering machinery man, the cutting machinery man, the button-hole machinery man, and all the other ingenious fellows who labour to save labour. The new dress fabric and the new shirting fabric must be duly exploited in the advertising columns and be mentioned in the reading matter of the *Dry Goods Economist* and the *Dry Goods Chronicle*. Fancy goods, carpets, upholstering goods *et al* must appear in their several *Reviews*; and the makers of collars, shirts, neckwear, and general men's furnishings would be out of the fight indeed if they did not tell their stories every month of every year on the pages of Gibson's *Haberdasher*, and be mentioned in the reading columns.

Reading mentions and personal notices—"puffs" they are called in the trade newspaper offices—are methods employed here to a most successful, though sometimes nauseating extent. Nine-tenths of our advertisers place more value upon them than they do upon their actual advertisements. They are usually written in a sparkling fashion, to catch the eye of the reader and to call attention to the advertisement pages; and when to these are added personal notices, familiar allusions to managers and salesmen, and "talks with readers and advertisers," why, our trans

atlantic brethren can readily comprehend that any one of our leading trade journals is a harp of a thousand strings! And are these played entirely for the old "governors" that sit in their offices—for the "seniors," as we call them? Not by any means. Their chief editorial music is for "the boys" that do the work, and these very "boys" are the best friends our trade journals have. In the town and on the road they "talk up" the paper; they send it subscribers; and if "the house" does not advertise, they insist that it shall, to further their interests upon the road. It is the *avant courier* of the travelling salesman, cutting the way for him and authenticating his market information. That is another secret as to the success of Yankee methods.

Does advertising pay? That is no longer a question here. Of course it does. That goes without saying. As to the superficial views expressed by some advertisers, to the effect that they had discontinued patronage because they could not observe that they had ever obtained a solitary result from their advertising, I will dismiss the subject by quoting the remarks akin to it made by an old dry-goods merchant:—"As I look at it, a man might just as well remark at the end of the year that he could not see that he had received a single order on account of the sign over his door, and consequently that he would take it down and save the wear and tear; or that he could not trace business to his printed letter head and envelope, and consequently would hereafter use blank stationery."

What is good advertising? I will speak only for the trade journals. There the story should be short and truthful, pointed and plain, illustrated with cuts, and with prominence given to the trade-mark. Tell it upon a half page or a whole page, and this continuously: desultory advertising does not pay! Changes now and then renew the interest. Small cards are not stimulants to attention. Pamphlets gotten up by trade journals that understand the ways of their business as to illustrations, cover adornments, and clever reading matter are good advertising: they are not thrown into the waste basket—plain circulars are. A last word as to continuous advertising. Our leading representatives of Belfast handkerchief and damask houses keep their half pages and pages of advertisements going the year round, yet their reputations were "established" years ago. Our great collar and shirt houses, our big manufacturers of neckwear, the great cotton mills, the wholesale clothing men, the dress goods men—all well known and "established" for a generation—are the most liberal patrons of our trade papers in the way of space and unbroken continuance.

A "FOUL AIR SCAVENGER."

Most people are interested in the subject of ventilation, and would hail with satisfaction the discovery of an appliance which would, without the slightest attention or looking after, silently and unceasingly draw off from their office, warehouse, or factory the air which has been breathed, or otherwise rendered objectionable and unhealthy. We are all very well aware that this air is poisonous, and that its unwholesome presence is highly undesirable, especially as there is an unlimited supply of the pure article waiting outside ready to come in when there is a vacancy! Such an indefatigable "foul air scavenger," when introduced to their notice, should surely be pressed into the service of everyone who attaches the proper importance to healthy surroundings.

The very ingenious invention known as the "Tubular" Exhaust Ventilator, of which Messrs. John King, Ltd., Engineers, Liverpool, are the sole manufacturers, might very fairly claim this title. We believe it is one of the best ventilators in the market, and well worthy of examination. In external appearance it is not dissimilar to the usual turret-like ventilator one is accustomed to see on the ridge or roof of buildings. Some of the designs shown in the manufacturers' illustrated pamphlet, are, however, quite new, and are of great excellence, but it is the interior or *working portion* wherein the merit of the invention appears. The arrangement consists of four vertical tubes arranged around a central tube of square section, all five communicating with a foul air chamber situated above in the cap of the ventilator. Each of the four outer or extracting tubes is closed at the bottom, and has a narrow vertical opening extending its entire length, and situated so as to face the central tube. These openings are formed in a special manner, so that the wind or the slightest air current passing across from any direction causes a very powerful extracting effect upon the air inside; and from the data given in Messrs. King's (Limited) pamphlet as to the constant prevalence of wind currents, it is shown that this action is practically a perpetual one. Upon the air being exhausted from the four extracting tubes in the manner described, these naturally draw a further supply from the reservoir above, to which their upper ends are connected, and this reservoir is, in its turn, fed by the central tube, which also communicates with the apartment from which the foul air is to be pumped or drawn. The action appears simple and excellent, and the invention one which is likely to be very largely used. It is claimed as a strong point that there are *no movable parts*, and that the apparatus is so absolutely weather-proof that it can actually be immersed in water without admitting any.

Book Notices.

Onward and Upward. Edited by the Countess of Aberdeen. Crown 4to, profusely illustrated. Published monthly, price 1d. London: Partridge & Co. Edinburgh: George Duncan & Son. The annual volume for 1893, now published, is full of attractive reading for young and old, and is pervaded by a high moral tone. Throughout its pages industrial work receives attention, and several chapters on the Irish Village at Chicago will be perused with interest. The object of the work is to inculcate thrift and economy, promote habits of industry, and, as its title indicates, to make progress onward, whilst its religious teaching points upward. A companion magazine called *Wee Willie Wankie*, edited by Lady Marjorie Gordon and her mother (the Countess of Aberdeen), and

published by the same firms, is also a very useful monthly periodical, and the annual volume for 1893 contains entertaining reading for young people.

Calvert's Mechanic's Almanack. Manchester: John Heywood. Price 4d. This very useful workshop companion has reached its twenty-first year of publication, and contains practical, technical, and industrial information of value to artisans and handicraftsmen, as well as those engaged in manufacturing, engineering, building, and construction trades. Illustrated with numerous diagrams and tables.

We are informed that Messrs. Robey & Co., Engineers, of the Globe Works, Lincoln, have converted their business into a Limited Liability Company, with an authorised Share Capital of £300,000 in Preference and Ordinary Shares, £272,710 of which are taken by the partners and holders of capital in the old firm, no issue of any of the Company's Share Capital having been offered to the public. In addition to the above Capital of £300,000, there will be an issue of £125,000 Four-and-a-quarter per cent. Debentures, making a total Capital of £425,000. This change has been made in consequence of the deaths of partners, and to facilitate family arrangements, leaving the present management of the business unaltered.

Chemicals and Dyes.

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

THE Chemical trade generally is distinctly dull, and prices in almost every instance are lower. There is great competition for any business that is going, and makers are unanimous in stating that business was never so uninteresting as it is at present. It is hoped that the turn of the year will bring an important change in the aspect and prospect of the Chemical markets; but it is difficult to see where the improvement can come from. Bleaching Powder is now offering at £7 to £7 10s., a considerable drop on former quotations. Ammonia products are moving off freely, and Sulphate has realised within a fraction of £14, although it has since receded from that figure to £13 10s. The low price of Benzole is tempting buyers to put it into stock. Other Tar products are also lower in value, with the exception of Pitch, in which business has been done at 28s., the highest price for a long time. Aniline Oil is remarkably cheap, and the approaching dyeing season should see a large consumption of this dye, which is, at present price, likely to displace Logwood and other cheap black dyes. Most other Tar colours are in competitive and decreasing value. Alizarine is quotable at 8d. and under, with a moderate business. Bichrome is more inquired for, especially Soda Bichrome, the prejudice against which is now rapidly disappearing. Oxalic Acid is stronger, and is likely to see higher prices. Tartaric, Citric, and other Acids for printers' purposes are in fair request, but at miserably low prices. Sulphate of Copper and Tin Salts are both moderately firm. Nitrate of Soda is being short shipped, but price does not improve.

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. BARBOUR, Belfast, Nos. 22,431, 22,432.—"Improvements in gill drawing heads and hackling machines, and in pickers for looms."

W. H. HUGHES, Liverpool, No. 22,768.—"An improved method or process for scouring, cleansing, and disinfecting all raw materials used in the manufacture of woollen, cotton, and linen textile fabrics, and the fabrics themselves, whereby also a great saving of water is effected, and the pollution of rivers and streams is prevented."

J. ERSKINE, Halifax, No. 22,772.—"Improvements in appliances to be applied to machines for feeding flax, tow, or similar fibres to carding and other like machines."

J. C. PENNINGTON and W. O. ALLISON, London, No. 22,808.—"Improvements in or relating to the retting of fibres."

J. PERRY, London, No. 22,827.—"Improvements in spinning frames for flax, hemp, tow, jute, and other fibres."

J. KIRKER, Glasgow, No. 22,900.—"An automatic oiler for use on spinning frames."

J. MACKIE and A. W. METCALFE, Belfast, No. 22,977.—"Improvements in machines or frames for spinning and twisting fibres."

S. H. and J. S. BROOKS and R. A. DOXRY, No. 23,751.—"Improvements in apparatus for twisting and doubling yarns."

SPECIFICATIONS PUBLISHED.

The specifications of the following patents have been printed and published during the month, and copies thereof may now be obtained through Messrs. W. P. THOMPSON & Co. at the uniform price of 1s. per copy, which includes postage.

1892.

A. M'VEEKIN and J. LOGAN, Antrim, No. 21,292.—"An electric alarm or stop-motion for gill drawing frames as used for flax and others." 23rd Nov.

R. C. ROSS, Antrim, No. 23,612.—"Improvements in apparatus for heating air for use in connection with stenter finishing machines." 22nd Dec.

T. E. WILSON, France, No. 24,119.—"Improvements in the construction of bobbins, spools, and tubes used for the spinning, doubling, or winding of flax, cotton, and other fibres." 31st Dec.

1893.

T. H. SPENCE, Portadown, No. 497.—"Improvements in or connected with machines for winding yarn on to pirns, bobbins, or quills." 10th January.

J. V. EVES, Belfast, No. 946.—"An improved method of constructing the rollers of wet-spinning frames." 16th January.

J. V. EVES, Belfast, No. 1,806.—"An improved method of constructing the rollers of wet-spinning, twisting, or doubling frames." 27th January.

S. JONES, Newtownards, Ireland, No. 18,839.—"Improvements in or connected with the construction of pickers for looms." 7th October.