SINGER'S VIBRATING SHUTTLE MACHINES

Are the Latest Production for Family Use. They have a
High Arm, New Automatic Bobbin Winder, Latest and Best Soft-Threading Shuttle, Simplest and most Convenient Stitch Adjustment, and they are ready to an extent degree the great requirements for Household Use—Strength, Mechanism, Noiselessness, and Easy Maintenance.

THE SINGER'S SEWING MACHINES FOR FACTORY USE.

The SINGER COMPANY have recently made extensive arrangements at their Branches in the Manufacturing Centres for adopting their Velox Style of Machinery for the use of manufacturers of Clothing, Boots and Shoes, Corsets, Underclothing, Collars and Cuffs, &c. &c. Also their Various Styles of Bosch and Power Fittings, to which the attention of Manufacturers is especially invited.

FREE INSTRUCTION is given to all, whether for Domestic or Power-Driven Machines.

ANY CLASS OF MACHINE REPAIRS is undertaken.

THE SINGER MANUFACTURING CO.

Manufacturing for the United Kingdom.
39, Foster Lane, Cheapside, London;
And 423 Brands, Offices throughout Great Britain and Ireland.

BEFORE ORDERING ANY

FIRE EXTINGUISHING APPLIANCES
You write, wire for our Catalogue of latest and improved apparatus.

MERREY, EATHER & SONS, LTD.,
Oldest and largest Fire Engine Makers in the World.

Works: Greenwich, Show Rooms, Long Acre, London.

MANUFACTURERS and all interested in Dying
Textile Materials or Fabrics, or in Removing Stains from
Materials, Dint from Cutting, or from Air from Gaining
Kneading, etc., should apply to the Blackman Company, who have been engaged for a number of years in Chemical Adhesives and
Rinsing, and have among their productions a wide range of special and experimental
products which are placed at the service of the consumers, being included in the cost of the
place they supply.

BLACKMAN
VENTILATING CO., LTD.

TRADE MARK LONDON, 52, Fourn Street, E.C.

Manufacturers of Air Inlet and Exhausting Apparatus.

"OUR CCRUENT FPOSITE S"—enlarged. Sold by BookSELLERS or from COXON and SONS, 77, Victoria street, London. For free. 3d.

Publishers’ Notices.

All remittances to be made payable to Manchesr and Co. 27, Street Street, Manchester. All subscriptions payable in advance.

Copies of The Textile Mercury may be obtained at the following libraries, without charge.


Sandwich: Messrs. W. and W. Lindsey.


Evesham: Messrs. J. Masson and Co.

London:—Mr. C. Veller, Messrs. J. M. Smith and R. C.

SUBSCRIBERS’ COPY.—The Textile Mercury will be forwarded as far as may be to any part of the United Kingdom, from any date; for which subscriptions, the fee for the first number, is 6d., and for those months, 1s. 6d. per annum.

Advertisements (paper edition) One year, 12 shillings; six months, seven shillings and three pence; three months, four shillings.

THE TEXTILE MERCURY.

TEN MILLION
SINGER’S
SEWING
MACHINES

June 18, 1872.

The Textile Mercury.

Vol. VI. No. 169. Saturday, June 18th, 1872.


London Office—121, Newgate Street, E.C.

COTTON UNCOMMERCIAL.

There are many ways of looking at cotton. It may be approached from an advantage from the statistical side, bringing into view the marvellous developments of its culture, trade, and industry, the marvelously rapid increase in its area, the increase in its yield, the increase in its production; and, tracing all the mighty productive capacity of modern machinery to the first mechanical processes employed in clothing mankind. It would take a long time, or a big book, to completely exhaust even the ordinary inspirations of the chief among textiles, what may be called the commonplace of cotton. There would still remain for consideration all the bigger bearing of cotton in its effect upon the world and habits of the people, just as it was stated long ago that the commoner wearing of printed calicoes, which required washing, led to greater personal cleanliness; and for the purpose we have at present, more particularly in view, there would be plenty of room for study of the evidence, here, there, and everywhere, of adaptations of cotton in our language. Cotton wool is an equivalent for luxury—to be lapped in cotton-wool implies tenderness of treatment. Cotton is still used in a figurative sense in many parts of the country, and if the applications of the word are not always obvious at first sight, there is no doubt of an opportunity for the growth and development of the term. There is the other and much more familiar metaphor in which cotton signifies agreement, mutual inclination and liking: as where it was said in Walker’s “History of the Independents” that the Parliament “and their Masters of the Army could not cotton together,” and again in Drayton’s rendering of Horace—

So fyeath he, thinge true and false,
So always mighte me be,
That bath with modde, and modde with bast,
Muye cotton and agree.

As this occurs in a passage issued early in Elizabeth’s reign, there are some centuries of justification for the colloquialism by which we say ‘cotton’ to ‘any particular signification. It is given to the word in a way indicated by Dyche’s “Dictionary” of 1777, there, following an amusing inaccurate description of cotton wool as “a woollen kind of flax,” brought at that time from the Levant and both Indies,” it is given again as a verb, “to agree, succeed, or hit,” which is correct enough, in olden days as a synonym for success in any enterprise. Nares explains this as probably derived from the finishing of cloth, when it cotton, or rinses to a smoother nap, is nearly or quite complete. It is often joined with some, which is also a technical and manufacturing term. The screwing of yarn, or twisting the yarn, is from Boxum and Fletcher’s “Menon Tomes,” 1695—

Nay, Providence! this year will cotton.

From Lyly’s “Alexander and Campaspe,” 1584.

Now, Hesperien, doth now this matter cowt as I would.

And from the “Family of Love,” 1606.

It cotton will, it cannot choose but here.

A proverb.

The latter instance is explicit enough in its textile expression to contradict Mr. Smythe-Palmer’s theory that cotton in this sense “is evidently an old English word still surviving, and has nothing to do with cotton, being identical with Welsh codros, cotes, to agree, or consent or concide, from cyden, cyden, cyden accord, unanimous, coincident, literally at one (together)’’ (p. 576). ‘‘To cotton to a person is to be of no use to him at all, and is at one time, a fact that cotton was undoubtedly imported and used for candlewicks and in padding garments from the thirteenth century onwards, together with the other fact—both open to conclusive proof—that woollen fabrics were called cottons long before the cotton manufacture was set up. It is an ancient man,” then, to be a possessor of cotton, to be less than a cotton, to be covered with cotton, less than a cotton, to have a cotton. In the States a rabbit is known as a cotton-tail, and a venomous snake with a white streak along its mouth is called the “cotton mouth,” and we might as well dispute the distinction of cotton in such cases as in the other references which have been given, but while the notion of cottoning to an agreeable person can be easily understood, how can the connection with a dusty thrashing or with theprocesses of cottoning of some unknown or unexplained origin?

ARTIFICIAL SILK.

Marin Muyroyt, in Le Moniteur de la Toile, writing on artificial silk, says that it has been noticed that the silk-worm, eating as it does vegetable tissues, takes in cellulose and nitrates in some form or another through its fibre-glands, assimilates these materials, and converts them into the silk fibre. For long time the question is how to produce this silk artifi- cially the exercise of the minds of chemists of all countries, with the result that the problem has been solved for a greater or less extent, and it is being the silk of explosives. The lower, bit tri- or tetra nitro celluloses, although somewhat inflammable or explosive, are used in the manufacture of silk. The nitro product is used in the manufacture of colloba by dissolving it in a mixture of ether and alcohol. By dis- solving this in acetone, nitro cellulose, and forming the desired form through tape tubes, the resulting cellulose are obtained. These differ from the natural
fibre in being a nitric product: that is, the atoms of nitrogen are combined with oxygen in the form NO, while in the natural product they are connected with hydrogens in some form or other. Composition of artificial silk is very variable, owing to the fact that the action of the nitric acid forms a variety of nitric products.

One essential difference between artificial and natural silk is the former contains less water. In the latter it exists only to a small extent, and there is more carbon in its composition. Khinal, of Lille, proposed many years ago to convert cotton into nitro cellulose, as an inexpensive artificial silk; but at the same time he recognised that its inflammable properties were a great drawback to the adoption of the process. This inflammability is, indeed, the most serious hindrance to the extended use of artificial silk. It has been stated that this defect is overcome by a subsequent process of denitrating, but the author, from his experience, says that all the schemes which have been proposed have been impracticable on the large scale. As a matter of fact the means adopted to denitrate the silk, and so modify its inflammability, also destroy the additional dyeing properties which nitration has introduced to the silk. There are two or three methods of making artificial silk.

The oldest, that of Chardonnet, consists in drawing a thread from a solution of nitrocellulose in a mixture of alcohol and ether. The solution is poured into water, and the so-called artificial silk is precipitated at the surface. In 1866, a second process, that of Duhrer, consisted in drawing a thread from a solution of acetate of bisulphide of carbon and galingale, in glacial acetic acid. The silk produced by this process resembles more closely natural silk than does that produced by Chardonnet's method, and on the other hand the use of glacial acetic acid as a solvent is a disadvantage, owing to its powerful corrosive properties, as it necessitates the use of silver, platinum, or gold articles for drawing purposes, and most of the materials used in the production of the thread. Artificial silk is white, and has a fine lustre, but it is deficient in tenacity, which is another objection to its use. As to its dyeing properties, unfortunately, it will not stand the action of boiling water, this seriously impeding the work of the dyer. In dyeing the silk, therefore, it has to be dyed cold, and the old wood colours, such as madder, logwood, and orchi, give the best results. There seems at present no prospect of artificial supplanting natural silk, although better methods were discovered of denitrating it, which should leave it non-flammable without altering its other properties, it might, in the opinion of the Mourellet, have a brilliant future before it.

Calico-Printing on the Continent: the Colourist Chemist.

Some time ago we reproduced some sarcastic remarks of a correspondent of our own newspaper, known dyer, who spoke of the lack of practical chemists in the silk trade. The reply to this was a vehement challenge on the part of a Yorkshire gentleman—or rather a gentleman who spoke in Yorkshire—of the rule of thumb. The rule of thumb, we were told at a dyers’ meeting in Bradford, had made England what it was. Rule of thumb was everything—science nothing. The speaker did not ask three cheers for the dyers before turning to their leader, but they had been educated, he said, until they could not turn too well out to be as well chemically as the dyers. He did think it necessary to keep up the art of the dyer. In their trade, as in others, however, the best man must of necessity win, and if Parisians, whose artistic ability is assisted by the profusion of beautiful objects to be found in their glorious city, can maintain their lead, so should we: as Alsatia will continue to buy designs from them. Rouen does not turn out such good work as Lancashire or the West of Scotland, many of its works being principally printed. But Rouen has, however, been said to stand alone in its surpassing excellence of design and colour. The works of Mr. Franz Leitzenberger at Cosmanoir, Bavaria, should be especially admired; the firm produces not only the most beautiful designs, but the most active trade, and it supplies the principal Austrian centres with fine prints. Italy and the States of the Balkan Peninsula also buy Mr. Leitzenberger’s goods largely. We described some of his productions in our recent numbers, but he is offering at the time to show any of our readers samples. The work was so excellent that many assured that they were printed by the block method. It is a curious fact that while pointing out the superiority of the Mulhouse methods in many respects, intelligent Frenchmen have been so obvious to us that English print workmen are undoubtedly the workers especially in other respects to the French, being stronger and better men, with a more perfect training in their special branch. They can be given greater responsibility than to those of their craft, where they are used in wool and worsted manufacturing.

The view is an interesting one, and may not be correct if applied to the employés of Potter’s and Graffon’s. We should not like to say, however, that the remark could be applied to the men engaged in the smaller works.

Some Textile Novelties: Plain Underwear from Balbriggan, Velvet Skirt from Malvern.

There is always something that is fresh to be found in the dry goods warehouses. Amongst the latest novelties introduced is a class of woollens, the production of an Irish firm—Smyth and Company, “no less”—consisting largely of flax yarn, and appropriately named “Flaxonia.” The makers are, of course, ready to claim all the virtues for the new material. It consists, we are told, of pure linen yarn, so spun as to render the garment beautifully soft, and the more delicate flax yarn than the ordinary flax referred to; but that it is Messrs. Smyth’s secret. Reading the circular of the manufacturers further, we learn that linen next the skin is recommended by the highest medical authorities. The objections previously felt to the use of linen underwear has been the cold nature of the garment when first put on, “but after long study and experiment, this difficulty has been overcome by making the garment absolutely porous, giving free ventilation to the skin, so that the article has not only the remarkable qualities of flax whilst possessing more hygienic qualities, and much greater durability.” Another great recommendation is that the goods improve by frequent washing. These claims, verified by experience, should ensure the new underwear a large demand. There will, of course, be numerous copies, and these Messrs. Smyth will require to answer. It can, at least, be said in favour of the novelty which the little Dublin town has brought forth, that the wearers are liberal in their praise, and that the article is preferable to the linen cure recommended by the Knippung fanatics, who would have people jump into a cold bath, and then run barefoot for a long time in order to get dry, after which—horror of horrors!—linen vestments must be donned.

The new underwear is made in shirts, pants, combinations, vests, hose, and half-hose, for ladies, gentlemen’s and children’s wear, in three weights. Seriously, we wish the goods every success. If they succeed in securing a foothold at once, in an Irish market, it will be by sheer force of attraction. There are two qualities in most trades which draw the notice of buyers. Omitting coal and pig-iron—and a few other unattractive substances there are two more: the first being a constant attention because of intrinsic merit, or it may be called mark on account of its excellence. The new underwear is undoubtedly a novelty, and we hope that, as time goes on, its makers will be able to boast of successive successes, and if it is necessary to permanent success in all trades and professions—that of simple merit. The material is, no doubt, of a substantial character, and the name of Balbriggan is sufficient to ensure a liberal patronage for such goods being employed in the manufacture. If the standard objection to linen as an article of underwear can be removed by the experience of the weavers of the new article, then a further addi-
tion may be made to the list of standard articles in the departments of the wholesale warehouses. While we are speaking of novelties, a reference to the application of spoolable prints may not be out of place. Handkerchiefs and mufflers, both sides alike, fast washing colours, as the travellers may, have been placed on the market in considerable quantities of late. We need not say more about these articles, except that a London house is making designs under the title of "manufactured"—although the goods are printed—in a variety of colours. A velvet clerical hat has also been pushed vigorously by a Manchester firm during the past few months. It is superior to the old-fashioned bands, and is made up in continuous lengths of 3 yards.

THE BOARD OF TRADE RETURNS FOR MAY.

The Board of Trade returns for the past month have once more proved satisfactory, as, with one more working day and no disturbance to trade from public holidays, the total imports are only £570,000, or 17 per cent. in excess of the previous month, the total being £1,787,000. The exports of British and Irish produce are valued at £1,079,000, or a decrease of £2,000, or 18 per cent. In the exports of foreign merchandise, the value of coal was valued at £5,947,400, or an increase of £1,141,116, owing chiefly to larger shipments of coal, cotton, tea, and tobacco, the latter being also to the advantage of the waterborne labour disputes. As regards the imports, the receipts of raw cotton, sheep's wool, flax, jute, and silk, are much below last year's level, the decreased value of wool being £1,941,077, and of sheep's wool £787,411. Of raw cotton the United States sent only 652,936 cwt, valued at £1,755,000, or 55 cwt. in May 1891. Egypt, however, sent 202,256 cwt, as against 92,313 cwt. The receipts of this article during May are so far 506,000 cwt. below the quantity of last year, but, nevertheless, prices are lower. As to sheep's wool, the falling-off is due to the receipts from Austrasia being 95,000,000 lb, as compared with 83,000,000 lb.

The imports of this article were, however, very heavy in the earlier months of the year. As to the imports of tea and tea produce, the decreased value of £1,960,504 is largely made up of the increased shipments of coal and iron. The former is now by 61,004 tons in quantity and £5,249,000 in value and the latter by 8,488 tons in quantity and £1,633,419 in value. The balance of the total decrease is found in the lessened shipments of tea and tea produce and other miscellaneous manufactures. It will be noticed from the annexed tables that the prices of both cotton yarn and piece goods are lower, notwithstanding the fact that the shipments of the latter are 14,933,900 yards more than last year. Of yarn, with the exception of one or two countries, the shipments are generally smaller, but as regards cotton piece goods, there are some important increases, the British East Indies having taken 35,000,000 yards more—the quantity being 186,000,000 yards, compared with 141,000,000 yards. Chili also took 22,479,000 yards compared with 14,150,000 yards; and the Argentine Republic, 12,475,000 yards, as against 51,150,000. On the other hand, Turkey, China, and Australasia took less. Of jute piece goods the requirements of the United States were only 952,000, compared with 1,245,000 yards; those, however, of the Argentine Republic rose from 456,000 yards to 1,358,000 yards. Of linen piece goods the United States took 3,673,000 yards, compared with 4,189,000 yards; the shipments of woolen and worsted piece goods to the United States, Brazil, and the Argentine Republic were also greater than in May of last year. It will scarcely be satisfactory to silk manufacturers to learn that while exports of throw silk have decreased by £16,852, and those of worsted goods by £22,085, the imports of silks manufactures have increased by £153,000. Our imports of raws and knubs have, however, fallen off to the extent of £240,000. Our purchases of woolen and cotton goods from the Continent for the five months of the year were as follows:

Cotton

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fustian</td>
<td>1,787,000</td>
</tr>
<tr>
<td>Woolen</td>
<td>2,000,000</td>
</tr>
</tbody>
</table>

Flax

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jute</td>
<td>1,245,000</td>
</tr>
</tbody>
</table>

Other Articles

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linen</td>
<td>1,358,000</td>
</tr>
</tbody>
</table>

The following tables particularly will be found of the imports and exports of textiles, etc., for the month:

NARROW WIDTHS AND DOUBLE WIDTHS: SHORT LENGTHS AND FULL LENGTHS.

Machinists, manufacturers, and warehousemen are alike interested in the fact that the United States have taken place during the past few years in connection with the widths of certain classes of dress goods and how chiefly determined by the production of chintzes at any representative collection of such fabrics as seen in the establishment of a representative distributor, whether wholesale or retail, to keep in stock, whether double widths are much more largely stocked than narrow widths. Some ascribe the change which has taken place in this respect to an alteration in public taste. Dressmakers, it is said, prefer double width rather than 21 in.

The broad and narrow woollen departments have both been amalgamated in our leading home-trade houses as a consequence, no doubt, of the new condition of things. Late Mr. Peacock, well known to Manchester men as an expert buyer of such goods, who purchased for Messrs. Henry Banmier and Sons, Ltd., up to the time of his death was indeed a great authority on the subject. The prospect of narrow cloths "going out" in the woollen trade unless fashion (if the word may be used to convey the idea) materializes, it is said, is merely a matter of opinion. There are many judges perfectly ready to say that the change from broad to narrow goods is more due to the action of the public than to any difference in the requirements of consumers. It is not difficult to find dressmakers who refuse to admit that it would be an advantage to have all goods made in wide widths, whether 24 in. or more. However this may be, it is an undoubted fact that narrow makes have receded into the background. If manufacturers have produced this result this by their own determination they are to be congratulated; and the circumstance should encourage them to look to the demands for the accomplishment of other reforms. The widths in which dress goods are made differ widely. Bradford, for instance, ranges from 44 in. to 14 in., and narrow goods range from 22 in. upwards. Some fancy stripes and checks, fancies which we ordered the other day were 22 in. to 24 in., and a collection of Cheviot mixtures were 24 in. to 24 in. Again, another illustration of the diversity which prevails in this trade, it may be added that fancy striped shirtings may be seen any day in our warehouses in 16 in. to 18 in. widths, the length of the pieces being 20 yards. The matter of length is one which attracts much
more attention amongst retail drapers than that of widows. Manufacturers will readily understand that the smaller town if it is a matter of some inconvenience to drapers, who have to take pieces of 50 to 60 yards when half the quantity would answer their requirements.

Even the farmer has experienced the effects of recent changes in the goods traded for, and they are perfectly cabled to curtail their purchases of each individual style to as low an extent as possible. This is not the fault of the merchant or draper any more than of the manufacturer. It is due to the changed condition of the times—greater appreciation amongst the masses of novelty and excellence in design and colourings. Merchants can afford to fill their shelves with grey cloths, shirtings, blankets, and other goods of the kind, because, although the staff of drapery life, their sale is assured, whereas that of the fashionable cloths is not. The demand for shorter lengths is not yet general, because some persons are too apathetic to voice their complaints. The most energetic buyers, however, making their voices heard, and if the cry they have raised be taken up it will be difficult for those to whom the final appeal must necessarily be made to resist the demands of their friends and customers. Manufacturers would of course object to the additional expense involved in setting up so many extra warps; and weavers would not care to run the risk of further waiting while the tailors perform their extra tasks. Perhaps the day of shorter lengths is yet far off; but it would not be safe to reckon on its being so distant. American buyers of dress goods have taken up the cry of their English counterparts, and the demand on the other side of the Atlantic also is for shorter lengths. Already 30 to 40-yard pieces in the commoner cloths are woven largely in Yorkshire and for the market; and if buyers knew this they would be all the more pressing in their recently-formulated demands. Lace and embroidery houses have also had to face an agitation of a similar kind on the part of their customers, and a widening demand is for shorter lengths in such goods.

The matter is one which has been broached by us for the first time, is far from being a new one in the trade. So far, however, there has been no thorough exposition of the subject, and although attempts have been made from time to time to draw attention to minor phases of the subject.

Sewing Machines.

A Continental commentator reports the substance of a very interesting lecture recently delivered in Germany on the economic significance of sewing machines, from which we extract the following facts and figures as likely to have interest for our readers. The sewing machine has now established itself so firmly as an article of Western civilization that few or none can be wholly indifferent to the story of its gradual diffusion. There are at present, it is asserted, about fifteen millions of sewing machines in use in the civilized world. The annual production amounts to 1,750,000, of which 80 per cent. are made in America. Although the first experiments in the way of making a sewing machine date from the eighteenth century, the history of the practical use of this art extends in reality over only about half a century. At the London International Exhibition of 1851 only three sewing machines were on view: at the Paris Exhibition of 1856, only 14. In 1880, however, the number of manufacturers exhibiting had risen to 55. In 1853 only 2000 sewing machines were in the United States; but by 1859 the number had mounted up to 46,243.

In 1854, the first American sewing machine came to England, and 1,000 branches of this machinery were strongly represented in the FATHERLAND. The capacity of the sewing machine has developed enormously since its invention, and it is now of house to be expected. With the present pace, as many as 5000 stitches can be made per minute; with steam, as many as 3,500. A sewing machine requires, if properly worked, about 1500 of one horse-power, so that it is necessary that the use of it for eight hours does not exceed the human capacity in that the sewing machine industry is a capital of at least 150 millions of marks is invested. The machines made in the United States are admitted to work more rapidly, but those made in England are more accurate. In 1850 Germany exported 77,936 quintals of sewing machines, and imported only 20,588 quintals, by per cent. of which came from America and England.

The New Fibre Mania: Enter Wool—Shint Cotton.

Professor Mitteich, of Freiburg, has patented a method for the isolation of the third wool so that it can be worked upon and yield yards capable of being woven. For this purpose the wool is cut into thin strips, which are repeatedly passed between roughened rollers, so that they are reduced to the required size. There is thus produced a mass of material which can easily be divided across, but is with difficulty torn in the direction of its length. The mass is thus wrought until it is finally cast into the desired shape. This fibrous stuff is dried and treated between the rollers until it is completely disintegrated into its fibres. These fibres are very delicate and soft, and only in the form of small wool they can be worked up and spun like raw cotton. Since fibres made of wood (as is shown by paper produced from cellulose) take colours very well, it is only a question of the cost of production, says Roman's Journal, as to whether this material will or will not prove a formidable competitor to cotton (1).

The American Elections.

Englishmen cannot help feeling more than ordinary interest in the political proceedings of their kinmen across the Atlantic. This interest is partly sentimental, partly one of business. It is the custom on the occasion of each successive American Presidential election for Englishmen to form various fire-eating politicians on one side or the other to hurl defiance at this country, and to fish for votes by insinuating that the opposition campaign funds have been swollen by the help of English gold. The sale of this kind of book becomes rather stale when repeated so often, but though observers may be apt to treat them lightly, it should not be forgotten that the passions of England and the United States for Cox have been stirred up by the stump politicians of the Republic. We have yet to wait for the opening of the oratorical flood-gates, but not for long. In the meantime the National Convention of the two parties have been actively engaged in selecting their candidates. Democratic politicians are already moving towards Chicago in anticipation of the National Democratic Convention, which will open on the 1st. A "wiggum" capable of holding 20,000 persons has been erected. The convention numbers 928 delegates, and of these a third of them, or 300, will be required to give a candidate the Presidential nomination. It is estimated that there is a majority in favor of Banning, and that the scientific man, whose example in the years 1845-53 has had a salutary influence on American politics. The Republicans have already nominated President Harrison as their candidate.

The present occupant of the White House has shewn himself capable of discharging with ease and dignity the duties of his high office. He does not possess the aggressive ambition of Mr. Blaine, the disappointed candidate for the Republican nomination; but he is a better choice for that, in the eyes of English and European observers. Whether right or wrong, there is an opinion in the United States that Mr. Blaine, despite his brilliant abilities, would make a dangerous president; and with such a scale of excellence, the Republicans appear worthy of commendation. Manufacturers in this country have repeatedly been informed by the daily press that the outcome of the elections is to be expected. We therefore recommend our friends to form such a belief. Our views on the subject have been expressed fully and frequently, and it is only necessary to add here that the protectionist party in the United States was never so energetic as it has shewn itself during the past few years.

SIR HENRY JAMES AGAIN.

A fortnight ago the trade-unions of the textile industries, which in the main means those of the cotton trade, met at Bury to reward Sir Henry James for the distinguished services they consider he has rendered to them in urging upon their Government the need of taking power into the shape of a bill, and piloting this through the Legislature. The right honourable gentleman, with the modesty which usually distinguishes him, declined any substantial reward for his services, preferring to accept to lieu thereof what may be described in the euphemistic language of the weaving shed as "a leather medal." So a beautifully illuminated address, in a massive gilt frame, was presented to him. In my last column I said Sir Henry James wrote a report at full length in our last issue, and which, we trust, has received the careful attention of our readers. It is upon this address that we propose to offer a few comments. In doing this we can hardly be said to be going out of our way, as the right honourable gentleman made the criticisms we have previously offered upon his conduct the text of a considerable portion of his speech. Sir Henry James is essentially an Englishman, and great credit is due to himself; at least so he tells us. It is very unfortunate that the irony of circumstances should be so cruelly hard upon him as to compel him so frequently to do things that are distasteful to him. Last year himself suffered from the criticisms of The Textile Mercury before a similar audience, he had to make himself the burden of his own speech for a couple of hours; and at the end thereof he had not rehabilitated himself as a fair dealing and honourable politician, or such a one as should be entrusted with the representation of an important constituency like Bury. In his speech of last year he delighted much, and must have destroyed a great deal of the small amount of confidence that continued to be felt in him in Bury.

Sir Henry, at the outset of his speech, placed himself in the ranks of the factory reformers—and we regret to say that to those who know the story of their labours it was greatly to his disadvantage. The band of brave men to whom he referred examined the House of Commons themselves acquainted with the evils which had sprung up within it: the long hours, the exhausting labour, the low rooms, the crowded and altogether unfurnished machinery, the impure atmosphere, the dirty floors, and the imperfect sanitary arrangements, the employment of young children—children of very tender years, and the cruelly exercised upon them by those to whom they were subordinate.
THE TEXTILE MERCURY.

FOREIGN CORRESPONDENCE.

TEXTILE MATTERS IN THE UNITED STATES.

BOSTON, JUNE 5th.

The Protectionists have made every preparation for a vigorous campaign during the Presidential elections. The country will be inundated with the literature of the American Protected Tariff League, the most active organization of its kind in the world, compared with which the Golden Rule sinks into the shade. This body has issued a series of 'Tariff Sermons,' and it furnishes sermons and streets to the country papers favourable to the cause. One of its recent publications in this direction illustrates a girl's dress, under which are the following remarks:-

Had this dress been imported the duty on it would be $1.75. The tariff bill adds so much to its price for the purchaser, the Free-Trade says: but it was bought at retail for $1.80. If the Free-Trade is correct all you have to do is to add the tariff and you get the complete suit for one cent.

Another example of the League's methods is given in the reply to the following query:-

A neighbour who went to England last summer, says that a suit of clothes which cost £15 in England costs $20 in this country. Of course he is a Free-Trade man, and you cannot imagine the excitement when he discovered that the American Protectionist was true.

The following quotation from a report by Mr. L. John, formerly U.S. Consul at Tunstall, Staffs., England, is given as a reply:-

In view of these figures, which show the constant and invariable assertion that the cost of living is much lower in the United States, I must ask: In England? The truth is that the only item in which there is any considerable advantage in the working man's cost of living is in the matter of rents. In plain clothes for men, women, and children there is scarcely any advantage. If it, indeed, there is any at all... As good a suit of clothes can be purchased for £10, and only cost £6 to £8 to be obtained in this country for the same money.

J. Schoenholz, Consul at the same place during the administrations of Grover Cleveland, and an enthusiastic Free-Trader says:-

Everything made in order in the way of clothing, except shirts, perhaps, is made cheaper here, as machine-made factory-made goods show disappearing differences only. In workingmen's suits I find I am at a loss to find corresponding articles of the wholesale source of manufacture inferior in the United States. This is true in most cases, and the argument of the Free-Trader is not unanswerable.

The report of the second quarter's work at the Fall River mills indicates that with the exception of a few corporations, the mills have been working up to capacity, in part, by dividends amounting to nearly $127,000, or an average of 18 per cent. of their capital, as against 16 per cent. of the preceding quarter, and this, if continued through the year, would aggregate $66 per cent. This is much better than the results in 1891, when the dividends averaged 37 per cent. But even this did not fairly represent the earnings of the mills, as the surplus was decreased heavily in order to make anything like a respectable showing, while in the present instance it is stated that a considerable amount has been held in hand, perhaps to meet contingencies in the future or to effect improvements without the necessity of calling for additional capital. New England cotton manufacturers have by no means lost faith in the success of the new mills, and the last instance of the largely increasing "spindling" following the construction of new mills or the additions to old ones at Fall River, and rapid growth of the large new mills of large productive capacity at New Bedford and Fall River, and large additions to well-known plants, is an increase in one instance of over 500 spindles being contemplated. Massachusetts possesses 25,000,000 spinners and spinners of an aggregate of 14,000,000 for the entire country.

HUNGARIAN SILK INDUSTRY. — The Health, Museum, in its issue of May 31st, says that the Hungarians are at a disadvantage in the world's market by being handicapped by the small size of the State in the way of cultivation of silk. This is the case with the Hungarian silk industry continues to flourish. There were, in 1860, only 275,000 engaged in this industry, as compared with 9,250,000 in the United States. The production of silk goods increased from 29,000 to 188,000, or more than 600 per cent. The amount of wages earned by persons engaged in the silk industry in 1880 was $1,445,721, and in 1902, $1,235,740. The economic value of wages is obtained by the fact that the wages paid in 1880 were considerably lower than the wages of the same year in 1880, when wages increased. The amount of wages earned by persons engaged in the industry in 1880 was $1,445,721, and in 1902, $1,235,740.
THE VELVET AND SILK INDUSTRY OF CREFFLED.

The following is an extract from the report of the Creffield Chamber of Commerce on the local velvet and silk industry:

The trade in velvet has fallen from £1,266,000 in 1890 to £1,401,000 in 1891; this is the lowest figure in the statistics since 1864. is has been made between the production of velvet and silk. The years 1891 will therefore be the worst of years for the local industry. The production of velvet and silk has been chief in respect of home demand. The production of velvet is distributed as follows:—

- 217,000 lbs for the German market, £549,000 for England, and £5,000 for extra-European countries. This latter result may partly be attributed to the demand for the United States in 1890, in view of the enforcement of the McKinley tariff, and further, to a change in the range of fashion.

The production of silk and half-silk tissues was valued at £4,450 last year, against £1,900 in 1890 and £2,800 in 1889. In 1890, the production of silk and half-silk tissues was valued at £4,450 last year, against £1,900 in 1890 and £2,800 in 1889. In 1890, the production of silk and half-silk tissues was valued at £4,450 last year, against £1,900 in 1890 and £2,800 in 1889.

Designing.

**NEW DESIGNS.**

**SILK DRESS GOODS, ETC.**

**Design A** is a neat, desirable, effective for silk, and specially constructed to develop the brilliance or sheen of well and warp to the fullest extent. Clear colours, skillfully harmonized, will be of the utmost importance to make it successful. Clean, clear, neatly-stitched work is sought for in fashionable circles, and, if properly arranged, appeal to the person of the purchaser whenever or wherever exhibited. A rich and large variety ought to be made, but we deem it undesirable to produce them all together in one pattern. Every detail ought to be clearly defined; charming effects can only be obtained by the use of a little judicious selection of shades. The figured portion of the stripe stands upon 22, which ought to be drawn in two threads in a mail, two mails in a dent, 20 inches per inch for the reed; the second stripe is a 9 shaft satin 2 ends, two mails per dent; but there is no reason why this stripe, along with the 9 shaft satin ground that the weft figure developed upon, should not be 18 shafts, or, in fact, 22, if desired.

**Woolen and Worsted Wears.**

Another interesting diamond or twist check is produced by the following, with a simple arrangement, which consists of only four colours viz., dark blue, dark olive green, olive, and medium brown. The effect is quite novel, and the contrast of the brown with the other colour seeming to add to the beauty of the harmony of analogue forms the body of the pattern.
If for a woollen, the sett should be as follows:

Warp:
- All 3/4 sh. woolen; 10's need 4 1/8.

Wof.
- All 3/4 sh. woolen; 40 picks per inch.

In using this for a worsted it will be found advisable to use a finer yarn for the colouring, and a heavier backing yarn for weight, as follows:

Warp:
- 1 thread, 2 45's worsted, for face.
- 1 thread, 2 90's, for back.

Wof.
- All 20's black or dark colour; 30 picks per inch. The weave to employ is Design 2.

A very effective worsted pattern is given in Design 3, which practically consists of an 8 end satin ground, with two worst rib and wefted hopscotch stripes.

Warp:
- All 2 45's dark brown; 14's need 6%.

Wof.
- All 21's medium brown; 50 picks per inch.

With this almost solid colouring the extent of the stripe may be much increased. It may be found necessary to either separate in the weft or to put the rib threads into two distinct shafts, otherwise they will tend to twist round each other.
Machinery
and Appliances.

PATENT MACHINE FOR PASTING, MEASURING, AND CUTTING ROLLER CLOTHS.


The excellence of yarn depends in these days of our elaborated system of cotton spinning almost entirely upon two factors—the quality of the raw material and the perfection of the machinery employed in making it into yarn. The injurious effect that imperfect machinery had in depreciating its quality will be very obvious to any one acquainted with the yarn turned out of our mills in the “fiveies,” who will take the trouble to contrast that with the productions of the present day. The cotton crops of that time may safely be assumed to have been as good as they are now, and therefore the improvement in yarn may all be safely set down to increased skill in the manipulation, and this manipulation is the result of the improvements effected in machinery. The theoretical perfection of yarn in its mechanical construction depends therefore upon the identity of the dimensions and the absolute similarity of action in the working parts of the machinery through which the material had to pass. It is only out of these that uniformity of results could be obtained. This cannot be shown more obviously than in the various series of drawing rollers from the drawing frame to the mule or ring, in which if any variation of diameter exists there will be a corresponding variation of tension and attenuation of the material, and consequently of the strength of the yarn. It has been the study, therefore, of our machinists to eliminate all these sources of defective results, and to their credit it must be said they have perfectly succeeded.

But drawing rollers have to be covered, and in the cloth and skins employed for that purpose mischief is again liable to be introduced, and more particularly in the manner of covering them. If either skill or care be wanting in this operation the joinings of cloth or leather will form ridges upon the roller, and materially damage the silver, slab, or cove. In order to remove these contingencies Messrs. Dronsfield Bros., Limited, of Atlas Works, Oldham, have long devoted attention to this matter, and have brought out a series of machines intended to obviate all imperfections of this kind. We have pleasure in drawing attention to the last of the series, which is illustrated herewith.

This is a machine for spreading the paste, measuring the length, and cutting off in lengths the cloth foundation used in roller covering. Our illustration will convey a good idea of its general appearance, whilst the following description will elucidate the details:—The cloth A is placed in a roll on the shaft, and the end is passed through the pasting box at the back of the machine and thence to the feed roller. This roller is covered with cardboard so as to hold the cloth for drawing it through the paste and for measuring. The measuring is performed in the same way as on the firm’s patent splicing machine for roller leathers: the handle B is used for measuring; it is made in two parts, passing on each side of the wheel C, so that by pressing the handle together the wheel is held and moved with the handle, giving motion to the feed roller through the gearing, the distance being determined by the stop D. This stop is fitted to slide for adjustment on the arc E, which is figured to scale for measuring. The cloth, after being pasted, is fed under the knife H on the table T, and is cut off by pressing down the knife by the handle H. The knife being fixed at an angle gives an oblique cut to the cloth, so as to make a slight overlap and thus make a better joint on the roller. The paste is fed in the box at the back of the machine, the top of which is removed by drawing out the taper pins that hold it in position; the edges of the cloth are protected by side plates F, which are placed on each side of the box and are adjustable to any width of cloth; the thickness of paste on the cloth is regulated by a screw on the top of the paste box, and the paste is pressed into the cloth by a presser plate with a weighted lever. The cloth is thus covered with a perfectly even thickness of paste, and the pieces are measured to exactly the same length, so that the rollers when covered have a perfectly even foundation, which cannot be obtained by the usual method of pasting and cutting by hand. A great saving in time is also obtained by using the machine. The firm may be communicated with for any further information.

PATENT CENTRIFUGAL FRICTION PULLEY.


The use of the friction pulley in driving certain classes of machinery is of considerable advantage, yielding as it does a quick start and a quick stop, both of which are highly desirable in swiftly-running machinery, and in which it is desirable to attain the maximum speed as soon as possible.

We illustrate herewith a patent centrifugal friction clutch made by Messrs. Watson, Laidlaw, and Co., Engineers, Glasgow, which may not have come under the notice of our readers. This firm are well known as large and successful makers of hydro-extractors and other high-speed machines, and specially designed this pulley to obviate difficulties and defects experienced in the use of other types of this kind of appliance when used in connection with hydroelectric machines. It is particularly adapted for all high-speed machines, and where it is used a number of them may be driven direct from the same shaft, and any one can be stopped and started independently of the others. Both stopping and starting are performed easily and gradually without shock, strain, or undue labour being thrown upon the machine, belt, or pulley. In most circumstances it is best to make the friction pulley the driver, and then a common fast pulley only is required on the machine. The belt is never traversed from side to side, and when the friction pulley is, the driver is always at rest when the machine is not in operation. Hence the life of the belt is considerably prolonged.

The friction is applied automatically by centrifugal action, an arrangement that precludes damage from the sudden application of the power, as neither willfully nor from carelessness in starting it suddenly can it be damaged. The only fractional parts liable to wear are the leather facings on the ends of the arms. These, however, will last for years, and when requiring

FIG. 2
THE TEXTILE MERCURY.

To be replaced any overlook or mechanic can perform it in a very brief time, as all that is required is to take out the old leathers and introduce fresh ones. The pulley may be set so as to meet the necessary amount of power. By the use of this pulley the expenses of counter-shafting, friction, extra belts, etc., may often be avoided. It is usually made of cast iron, but for very high powers or else the makers recommend their steel disc pulleys. Our illustrations show Fig. 1, constructed for the belt drive in Fig. 2 for the rope drive. The makers will be pleased to afford any other information.

We regret, owing to certain illustrations not having been completed in time for this week's issue, to be compelled to hold over until next week an important article descriptive of the works of Mesers. Brooks & Doyce, machinists, Microfiber, Mass.

NEW MILLS IN OHIO AND DISTRICT. -- In reference to the list under this heading published in our issue of June 12th, the following additional particulars should be noted:—Moss Mill, Rockdale (63,000 spindles) owned by Messrs. Taylor, Long and Co.; and Messrs. Procter, Good, and Co., Eastland (10,000 spindles), and Canoe Mill, Ashton (35,000 spindles) by Messrs. Taylor, Long, and Co.

The Textile Mercury.

BLEACHING, DYEING, PRINTING, ETC.

ALIZARIN: A STUDY IN CHEMISTRY FOR DYERS AND CALICO PRINTERS.

It is good occasionally for a technical man to pay a little attention to the more purely scientific side of his trade. Particularly in such industries as dyeing and calico-printing, where so many chemical products are used, it is desirable to study the chemistry of the materials he works with. This course of proceeding can not fail to be of interest and value, as being likely to increase his knowledge of the tools he is working with, and at the same time to throw some light on the general principles that underlie their application in his trade.

It is of greater interest to the dyer and calico-printer than that which is now proposed to consider in detail from a scientific aspect, although the practical application will not be altogether lost sight of. One of the most important of the dye-stuffs that are obtained from coal-tar is in quantity what it forms, when we consider that this alcohol is one-half of the total quantity made, while in money value they represent about one-third, alizarin being a comparatively cheap material.

Following this, Colin and Robinet showed that dyes in general are natural dye-stuffs that were used for dyeing Turkey-reds—contains a colouring principle to which the colouring power of the madder was due, and which they named alizarin. These researches were followed up by other chemists, notably by Schwab, Koch, Röhr, and Person, the results being that madder was shown to contain not only alizarin, its principal colouring matter, but also purpurin, a similar body; and one or two other colouring principles, which are present in small amount. To Schwab we owe the first correct account of its chemical composition; he gave it as having the composition shown by the formula C_{15}H_{14}O. Some years later Graebe and Liebmann succeeded in obtaining from alizarin a hydrocarbon body having the formula C_{15}H_{14}O which they proved to be identical with a substance known as anthracene. Subsequent researches have been carried on in the direction of elucidating the structure of alizarin and its relation to anthracene, and the object of this study is to throw some light on the nature of the variations in the chemical composition of the different products treated.

Anthracene is a product of the distillation of coal-tar, and is obtained in a form which is not suitable for use in the manufacture of dyestuffs. It is, therefore, necessary to prepare it in a form suitable for use. The preparation of anthracene is as follows:

**Oxidation of Wool in Wool Printing.**

It is a well-known fact that the wool fibre readily takes up substances that give off oxygen—a property which has been found of importance in the application of dye-stuffs. Schüttel has found that when woolen yarns are treated with 1.5% solution of potassium permanganate (which is a very strong solution), and then dyed in the indigo vat, the shade is much darker than that ordinarily obtained. This is probably due to the oxidation of the wool by means of the permanganate. Experiment in which a 0.5% solution of potassium permanganate, to which was added 2% of magnesium chloride, was used in oxidizing the wool, which was then dyed in various colouring matters, such as anilin, bronson, Victoria blue, etc. The results showed that the treatment with permanganate was of no advantage. In printing, the application of the permanganate was unsatisfactory. By using sodium chloride (0.5%) and vanadium dichromate in addition to the dye-stuff, and thickening in printing on unprepared wool, darker shades are obtained than if the dye-stuffs be printed without using the sodium chloride prepared wool. Some dye-stuffs, such as anilin, give darker shades on chlorine-prepared wool. This method of treatment possesses the advantage of the chlorine preparation of leaving the wool white and soft. The addition of a small quantity of ethyl alcohol (0.5%) increases the intensity of the colours produced. The mixture, if kept for more than 10 or 14 days, begins to decompose, and is advisable therefore to prepare them fresh for use.

**Recipes for Dyers.**

The following are mostly translations from foreign sources. We do not guarantee the results from these recipes, but give them for the purpose of showing our readers what their foreign competitors are doing:

**Dark Brown on Linen Yarn.**

For 100 lb. of linen yarn, the dye-bath is made with:
- 15 lb. Glacer's salt
- 1 lb. soap
- 1 lb. Sodium chloride
- 2 lb. Sodium chloride
- 0.75 lb. diamine red II

Work at the boil for one hour; then rinse and dry.

**Brown on Half Wool Cashmere.**

For 100 lb. of cashmere, prepare a dye-bath with:
- 15 lb. Glacer's salt
- 1 lb. soap
- 1 lb. Sodium chloride
- 2 lb. Sodium chloride
- 0.75 lb. diamine red II

Work at the boil for one hour, then rinse and dry.

**Bright Navy Blue on Wool.**

For 100 lb. of goods, prepare a dye-bath with:
- 15 lb. Glacer's salt
- 1 lb. Sodium chloride

Work until the bath is exhausted; then add
- 1 lb. sodium nitrate
- 0.75 lb. sulphate

The TEXTILE MERCURY.

News in Brief.

ENGLAND.

Acrington. 

At a meeting of the Acrington Town Council held on Monday, it was decided to establish a technical school for Acrington. The main point discussed was the question of the future of the town. It was hoped that surrounding townships will join in the scheme.

Ashton under Lyne.

Probate has been granted of the will of Mr. Samuel Backhouse, of Alderhide Lodge, Heysham, and Ashton, Heysham, a paper by the Executors. The Executors were instructed to their premises in order to make room for the preparatory department of the weaving section of their firm. New offices are also to be built in front of the mill entrance, and some alterations and extensions are being made in the cotton mixing department of the mill premises.

Barrow.

A fire at the Barrow & Co. Ltd., works last week caused damage to the amount of £6,000. The northern wing and a large spinning shed were gutted, and much spinning machinery and a large quantity of finished goods were destroyed.

Bolton.

The Conservative candidates will be the present members, Mr. H. Sheppard-Cross and the Hon. F. C. Bridgeman. The former is connected with a large blockwork in the neighbourhood.

Mr. T. Holden, manager of Messrs. Hartley, Gill, and Co.'s mill, has been elected president of the mill, and a party of goods by the weavers and others in the employment of the firm on the occasion of his retiring and removing to Runcorn. With reference to the recent fire at Messrs. James Parsley & Sons' Allon Mill (already reported in this column), the likelihood of such a fire is very small. Around the mill are many houses, with which the mill was fitted, Messrs. Muralon explained that they are very much pleased with the way the mill is maintained, and feel sure that saved the mill from destruction.

The Liberal candidates at the forthcoming General Election are Mr. James Taylor and Mr. W. Taylor, and the Liberal-Conservative candidates are Mr. James Taylor and Mr. W. Taylor.

Bradford.

It is with regret that we have to record the death of Mr. William Millington, of the firm of Millington, Cundall, and Cundall, and principal partner in the firm of Smith and Cundall, Hutton, manufacturers, of Tunwell Mills, Eecially.

Bury.

On Wednesday, at a special meeting of the Bury Town Council, Mr. Councillor John Ashworth, one of the partners in the well-known firm of hat manufacturers, Adam Ashworth and Sons, Bury, has been appointed Mayor of Bury, in the stead of Mr. A. M. Harris, who resigned with a view to contesting the borough against Sir Henry James at the next Parliamentary election.

Mr. John Pilling's spinning concern in Bridge-street, Rawcliffe, Preston, is known as the Higher Lancashire Spinning Company. The concern has been acquired by a limited company, with a capital of £25,000, in shares of £1 each. The number of directors will be not less than seven, nor more than nine. Messrs. J. Pilling, H. J. Pickow, W. R. Askew, and T. Pickow, will be members of the board. The incorporation will be decided by a general meeting of the company. The registered offices are at the mills.

The Whitfield holidays have been advantageously carried out in the area by several cotton firms, to ensure some necessary repairs. The messes, W. Rumney and Co., in Speke, are well known for their workings, opening and closing, and Panhole, and Mr. H. C. Open- shaw, Elton, while at Messrs. W. and G. Open- shaw's mill, Panhole, the stoppages extended over a fortnight, owing to a new steel shaft being put in, as well as some repairs being carried out.

The Northwest.

On Monday night a special meeting was held at the Hotel Nelson's Weavers' Association. They had previously adopted a resolution to nominate Laboratories for the new Parliamentary division. Replies were received from ten other trade societies in the division bearing on the subject. Seven societies declined to entertain the proposal; two approved, and were prepared to bear the proportionate cost of the candidate's election expenses, and in their absence in Parliament if elected. Another society suggested a combined meeting of representatives of trade societies to examine the matter. The meeting welcomed the previous resolution, and Sir Upton Kay, Shuttleworth, the Liberal member for the division, and Mr. W. E. Pickow, was present, will be the only candidates before the constituency.

Farnworth.

Messrs. Thomas Nuttall and Sons have now removed the whole of their weaving plant to Lightlake Mills, in Worsley-pre, recently purchased from Messrs. S. Hurst and Co. (in chambers). The cotton mills here are only part of the usual Whitfield holiday of from Thursday to Tuesday. Messrs. Thomas Hurst and Co., however, closed for eight days. No arrangements have been made for the management of the latter firm, consequent upon the recent decease of Mr. Wm. Green, has yet been made.

A meeting of the Heckmondwike and Ladiesweave branch of the English and Scotch Carpet Weavers' Association was held here on Tuesday to hear the reports of the masters at their annual meeting in Carlisle. Mr. W. Wharton, of the Heaton Bridge, explained that the masters' committee at Easter (which had been by mistake conveyed to the trade Executives. Mr. W. Wharton, of the Heaton Bridge, explained that the masters' committee at Easter (which had been by mistake conveyed to the trade Executives. It is understood that the Heaton Bridge, and it is only a question of time and expense before the Weavers' Association to send delegates on such a hopeless mission in future. Under the circumstances, the delegates are not expected to get the necessary support, but they had tried their best, though unsuccessfully, to get the concessions asked for. A vote of thanks was passed to Mr. Farthing and Mr. Taylor (trade secretary) for their reports.

Heywood.

The balancesheet of the Heywood, Castleford, and Newton Weavers' Associations shows a total income of £219 for the past quarter, while the expenditure has amounted to £287. The deficit is made up by a lock-out grant of £145, being a gain of £1,292. There are 1,200 active members, being a gain of 220. The committee complained that the "particular clause" is not being carried out in the district.

The architect having given as his opinion that the walls of the recently burned down Whatman Mill, Heywood, were strong enough to form the walls of a two-storied spinning mill, a proposal is on foot to erect a mill on the site. If the works are completed, the building would be used by the purchasers, the company, that has been acquired by the owners, with a capital of £25,000, to take over the buildings, the present engine, boiler, warehouse, and other local cotton and weaving premises.

The dispute at the Blackpool Spinning and Manufacturing Co., Barnsley, has been adjourned to the 5th of October, the question, proceeds. The majority of the weavers employed at the mill have struck work. Although the mill recommenced work last week, the view of the weavers to contest the borough against Sir Henry James at the next Parliamentary election.

The Tynemouth Report on the Cotton Spinners' Co-operative Amalgamation is now published, and it is expected that the large number of the workers will have already obtained employment at Burnley sheds.

June 19th, 1892.

The textile industry continues to be depressed, and the prospects for the future are not encouraging. The demand for cotton goods is not sufficient to absorb the output of the mills, and the prices are low. The majority of the weavers are still out of work, and the situation is critical. The government has taken steps to alleviate the situation by providing subsidies for the cotton industry, but the impact of these measures is not yet clear. The outlook for the coming months is uncertain. The industry is at a crossroads, and the future depends on the outcome of the negotiations with the trade unions. The situation is tense, and the atmosphere is charged with the possibility of further industrial action.
THE TEXTILE MERCURY.

Scotland.

Glasgow.

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Value (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total exports</td>
<td>10,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

The following are the total values of the exports for the same four weeks of last year — Cotton, £81,500; linen, £2,650; total, £84,150.

IRELAND.

Belfast.

In the linen industry of Ulster there are about 14,000 operatives. There are 10,000 men employed.

Miscellaneous.

MR. ISAAC HOLDEN'S CAREER.

A correspondent of the Leeds Mercury writes as under:

Yorkshire has knew few men who have won such distinction in the business world as MR. ISAAC HOLDEN. He is a native of the city of Leeds, and by his genius and enterprise conferred incalculable benefits on his country and the world.

The position which the county holds in the great field of manufactures might, indeed, be cited as evidence of the fact, that is not possible to name a single individual who, in our broad streets, has played conspicuous parts in the industrial revolution that has marked the development of the cotton industry. Probably none of them is more entitled to the congratulations of those who knew Isaac Holden. His claim to be regarded as a great captain of industry rests not simply on his organizing power, energy, and enterprise, but also upon his discerning judgment and mechanical genius. Mr. Holden is eighty-five years of age; but he would be a mistake to suppose that he belongs to a past generation. It is a remarkable fact that though half a century has nearly passed since he won his greatest triumphs as an inventor, there have yet been unimproved, and are being applied in manufactures to-day with the same success as when first introduced.

Then, though old in years, the master for the Knitwear Business is still vigorous and sound, and is the young man in the House of Commons. There is a good deal of truth in this enthusiastic allusion to his intellectual vigour and youthful enthusiasm in whatever he undertakes.

It is not too late to say that Mr. Holden's career has been a remarkable one. That springing from a family of low origin, he has acquired fame and wealth and high social status, is already known to the world. But few are aware that the story of how a young Scotch drudge achieved his honours borders almost upon the romantic. Fewer still have heard it from his own lips. Autobiography has an interest which cannot easily be imparted to biography. A few days ago I was so told that the valuable Member was at his house at Oakworth receiving the congratulations of his friends on the completion of his four score years and ten, and knowing something of his career, I was tempted by the opportunity to ask him to tell me about his more notable achievements as an inventor. Mr. Holden is one of the most genial of men. Almost before you had felt the gush of his hand and noticed the wry smile that never seemed to have his countenance, you were at your ease in his presence. Mr. Holden had a rather severe attack of influenza some time ago, when the disease was so severe that it left him, as it does younger people, much enfeebled. He assured me that his recent illness in Algeria has completely restored his health and restored vigour, and his appearance the other night removed the doubt that had been entering as to the truth of the news paragraphs, which stated that he had been fighting an attack of influenza from Oakworth to Bradford, a distance of about ten miles.

Mr. Holden was unwilling to comply with my request, but he did show at least a little light in his habitual haughtiness. We were seated in the neighbours...
THE TEXTILE MERCURY.

June 13, 1892.

turned the place into a manufacturing concern, and introduced many improvements in the methods of processing. They were not limited by my direct advantage as an inventor, for the reason that they were introduced without being protected. Sinistrally enough, the Merchants chose to refuse anything to do with a patent. There were four brothers of them, and they were all against the kind of the machine. For my invention I had a new machine, viz., that of genapye yarn. They would not have it patented. Happily for me they have been a fortune for them and also for me. I calculated that it would have been worth a million sterling at least to us. At that time, a man called Mr. John Waring, who had opened four or five other houses in the trade were applying the invention, and applying it on the most advantageous terms, for they had obtained an advantage. The advantage I had in the kind of the machine, of which I was rather proud, was an improvement of Colling's spinning machine, which was patented in 1841. Town End would not patent that either, nor would they allow me. They seemed to think that rain would override them if they had a patent. As that was decided that my next invention should be patented, and not to be interfered with, that was my process in dealing with genapye yarns.

"What are genapye yarns, Mr. Holden?"

"They were at that time chiefly No. 2 fold 30s. worsted yarns, singed by being passed over a red-hot plate, and were chiefly used at first to substitute hand-spun No. 20 s' worst for what were called Irish poples. Genapye yarns have also been extensively used for making blankets. My first invention in 1892 was the so-called genapye yarn, which could not be done previously by the clumsy machinery which had been used for spinning worsted yarn, and its invention was the result of that time spent in the continuous creation of the genapye trade. My invention of 1847 was reduced to practice. The reduction of the worsted yarn had to go through. As it had to be used in combination with silk, it was, of course, most important that there should be no interminglement of the two materials. These must therefore be a scouring one. Up to this time that had not been accomplished. My invention was to scour and set the worsted yarns without the use of any machinery. Setting means singeing the yarn at a high temperature, so that when it is taken out of its state of tension it will not return to its former state of tautness. The scouring process also rendered it perfectly free from oil, and capable of being blended with the silk, without injury to either material. Before the introduction of the revolutionise the manufacture, and that there was a fortune in it, and I thought that I could not allow him to suffer injury on my account, and so I left Slaidburn. I did not know where to go, but I was young, and I thought that another opening would present itself. A classical master was required at Reading in Berkshire, and I applied for the situation and got it. When I had been there eighteen months, my health completely broke down, and no wonder, for I studied hard. I used to get up at four o'clock in the morning to get a glimpse of the sun before it went down. I was a friend in Scotland wrote to me saying that if I would go back to Glasgow and start a school he would provide me with a house and a salary, and the west of the city, where he was erecting some buildings, and I went, and when he had recovered somewhat, I opened the school, and soon it was filled with pupils. The next change occurred in this country, when I was appointed Teacher to a school near Keighley, in the county of Lancashire, and of one of them came to Glasgow in search of me, for Glasgow at that time was the wool capital of the British Empire. The young man was a step above me in my profession, and I had been there twenty years afterwards. Some day I was going to call on a friend, and I asked him if he would not like to come and see me. He said yes, and he came with me. He introduced me to his family, and we had a pleasant chat. I asked him if he had any plans for the future. He said yes, and he was going to start a new business, and he asked me what I thought of it. I said I thought it was a good idea, and I would help him in any way I could. He said thank you, and he started his business. We have been good friends ever since. Yes, I am aware of that; but tell me, Mr. Holden, how did you fail to get the contract?

"Well, before I left Callington, I had been making experiments, and had an idea of making a new process, and had, at last, taken care of the patent. When I left I was certain that I alone possessed the secret. But I was mistaken, for there were others who had the same idea as me, and I went over and saw them how to overcome a difficulty they had failed to surmount. We had parted on friendly terms, and I have never lost that confidence. But how had they found out the process?"

"In this way; one of the young men I trained had, under my directions, made a number of experiments, and, dividing their object, had set out experimenting on the same lines, and had, partly by chance, and partly by skill, taken it aback, but I reflected that I had secured my patent, and, as I have said, I helped them to overcome the difficulty. This is how it happened. Through Mr. Robert Milgley, our commissioner, and the Sugglins of Dockery, were engaged in the same manufacture, they had a right to a royalty of 1d. per lb. of wool that underwent the process in their works, provided the Townend would do the same. What was I to do? I was forced to go on with the process before I obtained my patent, and it seems to me this would weaken my case if I carried it to a court of law. But this I am not sure of; the more I think of it, the more I think there is a chance that I might have been successful if I had done so. If the Townend would not agree to pay me royalties, I must look elsewhere, and I lost the value of my patent. It was not long after several firms were using my process; and I should then have said, "But fortune at length smiled upon you?"

"Yes; it was my good fortune to make the acquaintance of Mr. Lister and to form a kind of friendship. He possessed the patent of Mr. Dominis, for which he paid a large sum, on which he could not afford to carry any more. Without the Townend patent I had no chance of profiting. My chief study during the first fifteen years I was at Callington; and before I left I had in my mind that I must form a company to bring about a poor man's business, profits are very small, if any."

"I suppose your invention cost you a good deal of thought?"

"That was so; much long and patient study. It brought me fame and wealth, and all the advantages that come with it. Many a man would have failed alone, and many a difficult problem have I worked out in my mind. In my walk this afternoon I had some free time, and was thinking about various social and political difficulties. This led into a conversation about some of these sad difficulties. For example, we discussed the recent six-hour question, regarding which Mr. Holden holds liberal views. He pointed out that the difficulty, however, was not that the working-class was demanding six hours, but that whilst their foremen are working twelve or fourteen hours, and their employers are making handsome profits, wages are not paid here. And the difficulty was all the greater, he said, when competition had reduced the manufacturer's profits to a mere pinch."

"What is the question which affected not merely the interests of the employers, but those also of the workpeople, for whom were the employers to be employed if the employers could not compete with their foreign rivals? It was a mistake to think that the employers were making money by producing goods at a lower rate of wages than what was due to them. There were many firms at that time not making any profits whatever. In this teaching he was in line with the working class, marking that his experience made him thoroughly sensible that their condition is in many respects as bad now as it was then. He then expressed the hope that reforms will be effected which will materially change the condition of the working-class, and that we shall be able to see great changes in our law and customs, and also portions of the operatives. The change has been heard of by the great men of the world."

THE CULTIVATION OF FLAX FOR FIBRE.
The Textile Mercury.

100 pounds of flax, and in 1859, owing to a greatly diminished production of flax concurrently with a large consumption of flax, manufactured and sold in the United States, 24,000 bales of flax seed were produced in every pound of flax.

 biscuit to convey, however, the full nature of the change which has taken place. Little if any estimate of the value of flax seed which within recent years has been fit for spinning, or has really been entitled to the designation that for convenience it has been given to it in census and other statistical reports. While flax seed was a well-defined product in the same quantities, the qualitative varieties in agricultural products in general, fleshed. The American flax mill manufacturer has not always had a like uniformity of meaning. Indeed, the utilization of the fibrous part of the flax plant has varied widely at different periods that any comparison of flax production based upon statistical reports which are misleading. The flax reported at the various census years in including that of 1860 was an excellent grade of scattered grade, flat, for spinning, and able to hold its own against all but the finest imported variety, the raw material which was raised to meet the enormous demand for hogging, which was raised to meet the enormous demand for hogging. This is the hook, and it is probably a very common quality of tow, abounding in woody refuse, and so conformed probably as dudly as in some measure to have led the way for that abortive legislation which practically put an end to its production. The "flax" or "seed" flax of the present day is, however, with few exceptions simply a coarse, by-product, used mainly as a sublatory to other uses, and with the American Census, ready to find the report stating: "As a result of increased interest in new varieties, the Department of Agriculture there are indications of the revival in the United States of a genuine flax industry that would amongst the larger industrialized countries of the world, entirely independent of the foreign manufacturer." New York Bulletin.

TEXTILES AND DESIGNING.

(Continued from page 224)

The consideration of Textile design subsequent to the Exhibition of Byzantine art, brings us to the art of the Mahommedans. With the spread of Islam in a great revolution of culture took place. Owing to the rapid progress of other sciences, its history is almost confined to the period of the Mahommedan conquests. The fabrics of the black and white, the yellow and white, and the yellow and orange, are the most prominent in the world, entirely independent of the foreign manufacturer.

In the Royal collection at Crete there is a little fragment of the silks in which the most exquisite fabrics of the King of Crete were woven. The design is composed of two colours, a deep violet and a light yellowish violet. It is quite possible that this splendid coloured fabric was manufactured in Egypt, but it seems to have been enriched by the addition of Greek and Byzantine. In the exhibition at the Royal Collections, it is said that the King of Crete, after his campaign against Emmanuel of Constantiople (1417). At all events the designs re-embroidered in these fabrises, that only Greek weavers could have made. Other samples of this period, bearing the characteristic of the Cretan-Sicilian fabrics, were made in the North Coast of Africa. Some of these samples are composed of silk and wool, in different colours, red, green, blue, and white, with ornaments of gold thread. In the smaller pieces, here and there, are also blue or green ornaments in the shape of an eye, and sometimes in the shape of a heart. The eye is said to be (according to the opinion of men who know the subject) a magic symbol, employed by the Ostrogoths to drive away the spirits from the material. The thread strips, red and black alternately, consist, as to a remarkable similarity to the pattern which is characteristic of the woven designs of the 14th century, the most picturesque pattern; the other, on the ground which appear spiral and geometric tangles in a different holding show an Arabino-isicillian, is an "asalaini allamia" or "ealul alamia" which means in English "the wise Salamia." This rare fabric came from the Church of Mary at Enfato. A large number of splendid subtrices and taffies are preserved in the treasury of this Church. A. Brander also at the Ratisbon similar stuffs are preserved in the treasury of the same Church. A. Brander also at the Ratisbon similar stuffs are preserved in the treasury of this Church.

The most of the Egyptian kings were buried in these sarcophagi, and among these sarcophagi, which the German Emperor Henry VI, presented to the Ratisbon Cathedral. The Emperor Henry, by his wife Constance, the daughter of the Kaisers of the Ancient Empire, patrimonial by marriage and various other qualifications, the same being in the possession of the said Emperor Henry VI, presented to the Ratisbon Cathedral the most of the Egyptian kings were buried in these sarcophagi, and among these sarcophagi, which the German Emperor Henry VI, presented to the Ratisbon Cathedral.

The Emperor Henry, by his wife Constance, the daughter of the Kaisers of the Ancient Empire, patrimonial by marriage and various other qualifications, the same being in the possession of the said Emperor Henry VI, presented to the Ratisbon Cathedral the Ratisbon Cathedral also exist in the same way as those already described. The Egyptian inscriptions on these Edges are very important. They are divided into four classes: (1) Notemata, (2) victory, (3) long life; (4) the other powers without death the sign of age of these materials: it et et. This beautiful garment was made by Master Abdul Aziz in his factory for William IV. It was a Norman King, according to F. 1169 to 1195.

The ornamental art of letters is a characteristic of Islam art. Mahomets intense eagerness to suppress the weapon lies simply, and he provides a fixed proportion in the Koina a strict probation against making any image of created beings. He considered his works to be such an image, and he should, in the light of God's consequent arrogance. According to the words of the prophet, the possession of his works, and the possession of the works of the innocent, will be mounted on their backs in the day of judgment: With burdens, and according to the weight,负担s, and according to the face, burdens, and according to the face, burdens, and according to the face, burdens. In order to be able to bear this terrible burden for ever.

These letters are the organic, as the theme supposed in one pan, are sure to bear fruit in another. Hence it followed that ornamental designs and the graceful line treatment attested to this high degree of perfection in Arab art. This perfect and harmonious spirit is characteristic of the Moorish art, and it is very difficult to describe the effects at the present day.

To compensate for the loss of figured patterns, the Khalil Musalman took a very small corner in the new design, with the same artistic effect, so well capable of treatment, the idea expressed in other styles by allegories and symbols. Thus we find the walls of Mosques and palaces richly decorated with sentences from the Koran and holy books; their woven goods also show the same tendency. The products of the East, however, the saddle-bags of the Koran in Spain are, of course, much more by the Turk, and there is but little room for error. The wild beasts were embroidered with a more logical interpretation of it.

After this, ornamental designs were not the origin were considered unsuitable, whilst a conversational treatment which nearly represented the genius of the East, and such an art, as that which is contained in the invention of the Oriental, were particularly admired. Similarly, the introduction of silk dresses, which Mahomets considered should only be worn in harem, was extended not to extend to the use of silk dresses with a linen base.

In the textile fabrics made by the Moors in Spain, we can see abundant evidence of their strict adherence to figure subjects. The Arab, with their peculiar capacity for exactness, preferred geometrical designs, and we find patterns from the end of the 13th century, which, showing a line of a straight line, arranged in circles or medallions for the Roman style. These designs might be the precursors of the splendid pomponiave composition on the velvet, silk, velvet, and batiste stuffs which were manufactured in the 13th century in Northern Italy.

Whilst the Arab style in textile design had almost disappeared in Italy in the 13th century, the influence of the East continued for a long time in the East. This influence is seen in the large number of the design the regular borders of the intervals is mostly abandoned: elegantly crown-touched from the ground over which more slender and less-slimed animals, giving a stronger nature, give great variety in the territory. Figure subjects are particularly adapted to all the forms of all ages. In accordance with this, we find in the designs of the Moorish style, the same spirit of the fantasy animal figures already described when speaking of the earlier period. In the arrangement of the design the regular borders of the intervals is mostly abandoned: elegantly crown-touched from the ground over which more slender and less-slimed animals exist in the same way as those already described. The Egyptian inscriptions on these Edges are very important. They are divided into four classes: (1) Notemata, (2) victory, (3) long life; (4) the other powers without death the sign of age of these materials: it et et. This beautiful garment was made by Master Abdul Aziz in his factory for William IV. It was a Norman King, according to F. 1169 to 1195.
COTTON

Manchester, Friday.

The trade has resumed its normal relations, which is the holiday, without any alleviation of the discouraging circumstances attendant upon it previous to their advent. The bullion sentiments of jobbers in cotton in Liverpool seem to indicate that the cotton market is quite independent of that for yarn and cloth. Evidently when the spindles and looms that consume it are stopped, imagination runs riot with dealers in the raw material, and the wools and cottons are brought to a position in which intrinsic values can be accurately tested there is a considerable diminution of the strength of an article. When the financial requirements and conditions there has not been the slightest justification for the advance of the raw material beyond from 75% to 80%, although the figures attained for them have been 140%. We are now close upon the verge of the new crop, and those following over from the last two large lots are totally unprecedented and in bulk, and there are no signs of the occurrence of any rapid depletion of these before they will again begin to swell from the heavy receipts of the new crop as it comes into sight. What the amount of this may ultimately be is a matter of considerable doubt, and those interested in disposing of the balance of the old crop at high prices are writing down very low figures indeed. We have, however, ventured to publish an estimate of $5,000,000, which, from the careful consideration of the probable financial probabilities, we believe is justified. We are prepared to claim credit for the fact that regarding the crop, the finishing point, according to which we have protected the total world to exceed 9,000,000 bales so early as the closing weeks of November last, and all other estimates do not go up to 7 or 8 million bales, and belief in which has been most disastrous to the Lancashire cotton trade, as the false estimates made by unscrupulous spinners and manufacturers to take over great portions at a price far above that which the facts warranted. These comments are intended to allay the trouble against being jangled into repeating the blunders of the last two seasons.

Writing very recently respecting the new crop a private correspondent in Texas says:—"It is a little too early to say anything about the new crop, except that the acreage, I think, is less than last year, and that the crop has been damaged considerably by floods, etc. It is also about three weeks late, but don't think its being late will be detrimental to the output. Very few favourable things I notice is that the 'stand' is very good, and little or no replanting is needed. Everybody is claiming a very materially short acreage. I am not just now in position to state what the acreage would produce, but if such is the case, it will require to produce a good crop, you can depend on it. It is very difficult to find out substantial facts on the subject, as we have lost nineteen million acres, twenty and a half million acres. My belief is now—that with any authority for stating that there will be at least nineteen million acres planted, and if there is you can depend on a crop of from eight and a half to nine million bales."

This is from a correspondent who says: "I am no "aeo to grind," as he is not engaged in the production, sale, or purchase of cotton, except perhaps the latter to a limited extent, generally conducted by agents in a producing district. Once more, therefore, it is necessary that spinners should act with the greatest circumspection if they are to stop the operations of those whose object it is to 'take the wool off their backs,' and, we may add, the skin also. The assurance of such stock-takings as have prevailed lately can only be brought upon every portion of the trade.

COTTON—Last week, the well-received business as at Manchester. The market opened with considerable spirit, and prices advanced. On the second day, in contrast with the facts, much of this was lost, but within the next two days the recovery was fully recovered from, owing to the joint import report and the large increase of sales of that of Messrs. Nell Bros. The second day was an estimate of 7,500,000 bales for the coming crop, and the latter two days the total of those who believe in these two authorities steered their backs accordingly. On Saturday there was only a very small demand for stocks and the balance for the future was small, and although few expectations of the part of specula-
tors and exporters. Of course, the holidays kept the trade out of the market. Prices hardness a little, but rather unwieldy in character, with the balance on the day recorded a gain of 4 to 4.5 points. On Monday there was a rise, owing to poor advances from America, and the purchase of 500 bales, which were subsequently resold a portion, but closed with a loss of 1 to 1.5 points. Spots were in moderate request, and the prices of goods of any description not being pushed forward are "kept" by being advanced 3d. Other growths were unchanged. On Tuesday the market was again slow, and on Wednesday the day for the sale of some American and fair good crop prospects were reported to be the cause. Holders of spots were eager to deal with, and consequently were received by the merchants. On Wednesday last the market had lost the impetus derived from Messrs. Neill's and the Barclays reports, and with the sale of only 2,421 bales for the East, 587 bales for the West, and 720 bales for the East Indian, the trade was considerably and frequently, and finally closed with a loss of 4 to 4.5 points on the day. Other spots were unsecured.

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

<table>
<thead>
<tr>
<th>Import</th>
<th>Forward</th>
<th>Sales</th>
<th>Stock</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>28,180</td>
<td>4,582</td>
<td>36,580</td>
<td>4,150</td>
</tr>
<tr>
<td>Brazilian</td>
<td>1,909</td>
<td>1,890</td>
<td>3,820</td>
<td>2,420</td>
</tr>
<tr>
<td>Egyptian</td>
<td>2,421</td>
<td>2,421</td>
<td>4,842</td>
<td>4,842</td>
</tr>
<tr>
<td>West Indian</td>
<td>1,971</td>
<td>241</td>
<td>440</td>
<td>350</td>
</tr>
<tr>
<td>East Indian</td>
<td>5,193</td>
<td>1,593</td>
<td>840</td>
<td>390</td>
</tr>
<tr>
<td>Total</td>
<td>38,471</td>
<td>5,124</td>
<td>6,160</td>
<td>6,219</td>
</tr>
</tbody>
</table>

The following are the official quotations from the same source—

<table>
<thead>
<tr>
<th>G.O.</th>
<th>L.M.</th>
<th>Md.</th>
<th>G.M.</th>
<th>F.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Peruvian</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Carra</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Maranhao</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Egyptian</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Ditto white</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>M.G. Brighton</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Dohobol</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Omira</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Tuninelly</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

The following are the prices of futures at mid-day on each day of the week—American deliveries—any port; bases of middling; low middling clause; (the fractions are in $ per 100 pounds on the spot.

<table>
<thead>
<tr>
<th>Price of</th>
<th>American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>25%</td>
</tr>
<tr>
<td>Released</td>
<td>4,000</td>
</tr>
<tr>
<td>Sales</td>
<td>1,000</td>
</tr>
<tr>
<td>Export</td>
<td>1,000</td>
</tr>
</tbody>
</table>

YARNS—Spinners have found no improvement since the resumption of business and are still purchasing only in small quantities, as in the main it required the day for merchants to gather up the dropped transactions. On the other hand, the Lancashire trade was quite satisfactory on every hand. The slight accumulation of enquiries that had been met with the day previous were mostly unnoticeable and disappeared. The appointment resulting distinctly weakened the market. The reports to which Liverpool showed itself to remit in the Lancashire trade were not stimulated into activity. Although quotations were very little higher than those of the Lancashire day before, the trade was firm and the balance of the trade was that of a "kept" market. On Wednesday the demand on both house and foreign account for American yarn was still slow, and prices for American were not much better than that of yesterday. Sales of Indian yarn were still weak, but a few bundles for India and China took place. Yesterday brought forth no material change in any department. The Lancashire trade remained in moderate activity. Bundles for the East continued in moderate demand. Bolton yarns were firm with a moderate demand.

CLOTH—Manufacturers have only found a moderate
THE TEXTILE MERCURY

FLAX AND JUTE.

DUNDEE, WEDNESDAY.—The market is firm for all jute products. There has been a large business done for South America, and the continued restriction of production does begin to tell. Jute is at the highest price in years, although the latest quotations are not given. The demand is not as strong as it was, but there are still plenty of orders, and a few orders have been placed for the next few months. Jute linen is at a premium, and the demand for it is steady. There is a good demand for light jute goods, and the market is firm for all jute products.

WOOLLENS AND WORSTEDS.

BRADFORD.—The trade is steady, and there is a good demand for all woollens and worsteds. There is a steady demand for worsted goods, and the market is firm for all worsteds. The demand for worsteds is good, and the market is firm for all worsteds.

PHILADELPHIA.—There are very few buyers in the market, and the trade is steady. There is a good demand for worsted goods, and the market is firm for all worsteds.

BOSTON.—There is a steady demand for worsted goods, and the market is firm for all worsteds. The trade is steady, and there is a good demand for all woollens and worsteds.

LONDON.—There is a steady demand for worsted goods, and the market is firm for all worsteds. The trade is steady, and there is a good demand for all woollens and worsteds.

PRIVATE LETTERS.

LEEDS.—There is a steady demand for worsted goods, and the market is firm for all worsteds. The trade is steady, and there is a good demand for all woollens and worsteds.

NEW COMPANIES.

THOMAS SINGING MACHINE Co., LIMITED.
Registered at Guild Hall, and House, in Gt. Russell Street, E.C., with a capital of £10,000 in 100 shares.

Capital £5,000 in 50 shares. Object: to acquire the undertaking of the Thomas Singing Machine Co., limited, for £20,000 in 10 shares.

FILLING AND COMPANY, LIMITED.

Capital £20,000 in 100 shares. Object: to acquire the undertaking of the Filling and Company, limited, for £20,000 in 10 shares.

LACE AND HOSIERY.

NOTTINGHAM.—Orders for lace goods are still coming in, but the demand is not as strong as it was. There is a steady demand for lace goods, and the market is firm for all lace goods.

LEICESTER.—Accounts of the lace trade are good, but the demand is not as strong as it was. There is a steady demand for lace goods, and the market is firm for all lace goods.

SILK.

LONDON.—There is a steady demand for silk goods, and the market is firm for all silk goods. The trade is steady, and there is a good demand for all silk goods.

Patents.

NOTICE OF REMOVAL AND CHANGE OF FIRM.

E. K. DUTTON & Co., CHARTERED PATENT ATTORNEYS, 10, ELEPHANT AND CASTLE, LONDON.

The proprietors of the E. K. DUTTON & Co., CHARTERED PATENT ATTORNEYS, 10, ELEPHANT AND CASTLE, LONDON, have removed from their present Indian and European branches, and are now associated with Messrs. Howard & Co., Edinburgh, and Messrs. Brand & Co., Liverpool, under the name of E. K. DUTTON & Co., 10, ELEPHANT AND CASTLE, LONDON.

SPECIAL SPECIFICATIONS PUBLISHED.

Each of the following Specifications may be purchased separately, or in combination, as desired. Each Specification is printed on a separate sheet, and is priced at 6d. (in four volumes as required), or may be ordered on the above application.

NOTICE TO THE PUBLIC.

J. S. CUMMINGS, 9, ST. JAMES’S SQUARE, LONDON, has removed to 9, QUEEN’S CHAMBERS, 10, ELEPHANT AND CASTLE, LONDON, and will continue to carry on the business as before.

48, 754, 754.