

publishers, while the price is low considering the considerable cost which the introduction of the patterns must have entailed. It will, we feel assured, be the standard text book on silk dyeing for many years to come.

Foreign Correspondence.

TEXTILE MATTERS IN THE UNITED STATES.

BOSTON, March 19th.

UNITED STATES CONSULAR RETURNS OF ENGLISH TRADE.

Below I append a summary shewing the extent of recent changes in the volume of the American trade of Huddersfield, Bradford, and Leeds during the past two years, as indicated in returns published by the American Consuls in those towns:—

	1890.	1891.
Bradford	\$23,688,000	\$10,958,000
Huddersfield	4,185,699	3,046,718
Leeds	2,444,653	1,796,186

The figures refer in each case to the year ending September 30. Comment upon them is unnecessary, as your Yorkshire readers will know well enough what are the causes which have produced the changes indicated.

THE PLUSH INDUSTRY.

Mr. Acroyd, the English manufacturer through whose efforts a silk plush mill is to be established at South Portland, made some interesting statements before the Lewiston (Me.) Board of Trade in regard to the manufacture of plushes in this country, and respecting the uses to which the now idle Lincoln Mill in that city might be put. He remarked that but for the McKinley Bill he would now be in England making silk plushes. Because of that bill the silk plush industry of England has greatly declined, and a number of English manufacturers are already looking toward the United States. Mr. Acroyd stated that, after paying a duty of 110 per cent., it costs \$550 per yard to land foreign-made "seal plush" in New York, while he declared he could make and sell the same goods at \$475 per yard. Regarding the Lincoln Mill, Mr. Acroyd said that it would do for a silk plush manufactory, because of the unavoidable vibration. Silk plush looms must be placed upon a solid foundation, free from tremor, such as will be provided at South Portland, where a brick building 80 feet square is to be erected. He would guarantee, however, that English capitalists would take one quarter of the stock in the Lincoln Mill if that establishment were started on fancy yarns, and he thought the enterprise would pay 20 per cent on a capitalization of \$500,000, as there is a large and steady demand for the class of goods mentioned.

BRITISH MANUFACTURES IN THE UNITED STATES.

Another lace curtain factory is to be established in this country. Cleland Campbell and Co., of Glasgow, will own and operate the factor, which will be situated at Columbia, Pa. The Scotch firm will equip it with \$100,000 worth of machinery and will employ over 200 operatives.

Archbald Campbell, who represents a firm of lace curtain manufacturers in Glasgow, Scotland, is at Chester, Pa., with the object of making preparations for establishing a plant, which will probably be located at Chester, near the mill of the Abefoyle Manufacturing Company.

The Frank Wilkinson Manufacturing Company, of Tariffville, Conn., and Nottingham, have been turning out and delivering finished lace curtains for some weeks past. They are now making rapid progress in setting up additional machinery under the supervision of Superintendent Jones, and will be in good shape for fall deliveries.

THE CHEAPNESS OF STAPLE ARTICLES.

Cotton idown to seven cents a pound, Bessemer pig iron a Pittsburg to \$15 a ton, and wheat to \$1.02 a bushel. A year ago the figures were nine cents \$16½, and \$1.11 respectively. Two years ago Bessemer pig was at \$20.25. The

shrinkage in values has been enormous. The value of 8,000,000 bales of cotton at New York prices was \$500,000,000 two years ago, and is only \$222,000,000.

REVERSAL OF THE FRINGED TOWEL DECISION.

The importers have at last been relieved from anxiety by the General Appraiser's decision. It may be remembered that the Appraiser returned some fringed towels as "manufactures of flax containing not more than 100 threads to the square inch," and duty was accordingly assessed thereon at 50 per cent. *ad valorem* under paragraph 371. The following is the text of a portion of the final decision overruling that of the Appraiser:—

As appears from our findings of fact, the number of threads to the square inch differs in different parts of the substantial or body portion of these goods, the number of threads in the borders being greater than in the plain portion of the surface; hence that the fabrics—exclusive of the fringes—are not homogeneous or alike throughout. Nevertheless, we have ascertained by actual count, and without difficulty, that the average number of threads to the square inch contained in such woven portion of the goods, counting both warp and filling, exceeds 100. We have here, therefore, fabrics 90 per cent. of the entire value and surface whereof—comprising all that portion composed of both warp and filling—contains over 100 threads to the square inch according to the test prescribed by the statute. The remaining 10 per cent. of the value and surface of these fabrics consists of fringe, to which the prescribed test cannot be applied, for it does not contain "both warp and filling," and hence, in our opinion, must be disregarded in the count. Although, as stated by the Appraiser, this "fringe forms an appreciable part of the articles," it is not part of the cloth proper or a substantial or essential portion of the fabrics. It appears to answer the purpose of a hem or binding to prevent fraying or ravelling.

In view of our findings of fact, and following the decisions of the U. S. Supreme Court in *Newman v. Arthur* (109 U. S. 132), and the doctrine of our decision of March 1st, 1892, in relation to certain fancy cotton dress goods, we hold that the goods here in question are dutiable at 35 per cent. *ad valorem* under paragraph 371 N. T., and accordingly sustain the protests.

Fringe towels will therefore pay 35 per cent. duty and not 50 per cent.

MISCELLANEOUS.

The print cloth market rules quiet but firm on the basis of 3 1-16c. for 64 by 64 cloths; and 2½c. at Fall River for 56 by 60 cloths.

At Fall River the reported sales for the week ending March 12th, 1892, were these:—

	Pieces.
64 x 64 cloths, spots, at 3 1/16 @ value.....	40,000
64 x 64 cloths, to be made at 3 1/16.....	6,000
56 x 60 cloths, spots	—
Irregular cloths, to be made.....	144,000
Total	190,000

Messrs. Geo. A. Clark and Bro., of O. N. T. fame, announce that after this month they will supply handsome desk cabinets free of charge to buyers of certain amounts of their goods. The useful store fixtures presented by this house have always been of handsome exterior and fine workmanship, and their generous offer will be welcome to the trade.

With reference to the dye and chemical market, trade is moving along quietly, with few new features to note. Chlorate of potash continues to shew a firm and advancing tendency. Quicksilver has also a firmer undertone. Cream tartar and tartaric acid continue dull and rather easy in tone. Citric acid is firmer. Shellac remains dull, but quotably unchanged. Borax is quiet.

The present season is said not to offer many inducements to manufacturers of chevots. This is because plain goods in browns and fans have been so much enquired for that large numbers of manufacturers have taken up the trade. The trade is greatly cut up, and profits will dwindle away to nothing if the competition is maintained. Wool is cheap, and so are goods, and the manufacturer to realise good profits must place his production at opening prices. There cannot be much margin in to-day's prices unless the entire production is sold. These are the views of a local authority, and refer to domestic makes chiefly. Blacks in chevots are great favourites. Makes up to 5s. a yard are in request, and there is not a large supply. The quantity of goods on the

market is, in fact, small. Worsted chevots in fast dyes are also moving off freely. With reference to the demand for piece-dyed makes, European goods are selling at very low prices, lines offered at 9s. last year being now quoted at 8s. Fine botany goods, all worsted diagonals, 19 ounces, 56 inches, sell at \$2; and goods guaranteed to weigh 21 ounces at \$2.05. The domestic maker has strong competition to meet, and were it not for the distrust of clothiers, who have had some experience in handling the foreign stuff, which came in during the spring season, the domestic maker would not be in it. Some lines of domestic goods with cotton in, ranging \$1.50 to \$1.75, are reported as meeting with a fair sale, but the price is low, and few care to meet it.

Dress goods agents are beginning to give more thought to fall goods, and are closely watching the market. As yet very little has been done, and there is not much disposition to urge the opening. Here and there is a speciality on which orders have been taken. With reference to the spring trade, fancy, soft wool goods are probably the weakest point in the market; there is very keen competition on 36 in. stuff, and it is here that the struggle is. Yet makers have been fairly successful in placing their lines, and the season will close with desirable stuff cleaned up.

ACCORDING to a return by the Crefeld Chamber of Commerce, the production of silk and velvet goods in that centre during last year was £800,000 less than in the previous year.

THE RATING OF MACHINERY BILL.—The President of the Local Government Board has arranged to receive a deputation on Tuesday from the Central Chamber of Commerce with reference to the Rating of Machinery Bill (which will be read a second time on Wednesday). The Central Chamber consider that the effect of the Bill will be to throw further charges upon land, houses, and other property by relieving manufacturers of a part of their present liability to rates; and they will urge that it ought not to be dealt with by a private member's Bill, but by a comprehensive measure brought forward by the Government.

IRISH HANDLOOM WEAVING.—Colonel Saunderson's Bill dealing with the regulation of handloom weaving in Ireland has been issued. It provides that when the weaver receives materials to be woven into a piece of linen a written contract note shall be delivered to him, stating the name of the manufacturer, the name of the weaver, the number of the contract, the description of the linen to be woven, and the price for each length of fifty yards. Such contract note shall provide that no piece shall be woven in pursuance of the contract exceeding a length of fifty yards by more than one yard. Any contract which does not comply with the provisions of this Act shall be void if the handloom weaver elects to declare it void, and no money paid or advanced to him in part performance of such a contract shall be recoverable at law. The inspector of linen, who is to be appointed by the local authority, is armed with full powers to visit any place in which handloom weaving is being carried on, or in which handwoven pieces of linen are kept for sale, and may examine any web or piece, and may require the production of the contract note in pursuance of which such web or piece was woven, and he shall stamp in such manner as the local authority may prescribe all completed pieces of linen which do not exceed a length of fifty yards by more than one yard. The inspector shall be entitled to receive from the person in whose custody any piece of linen is when stamped a fee of twopence. The penalty for selling unstamped pieces to linen shall not exceed £2. The Act does not apply to any damask weaver or to damask.

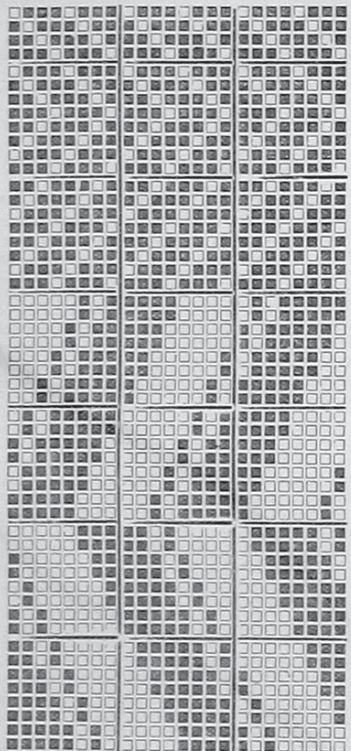
Designing.

NEW DESIGNS.

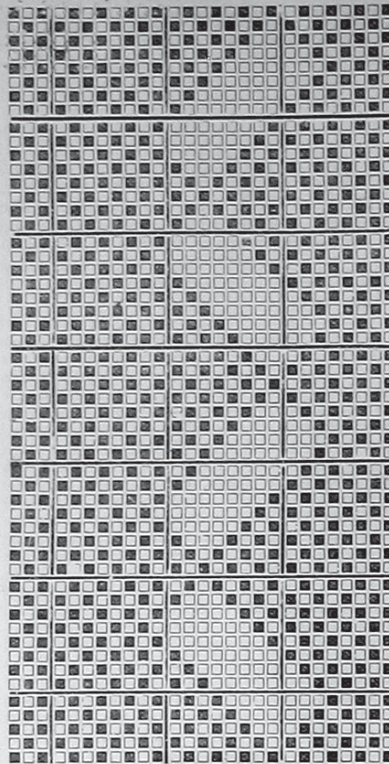
SHIRTINGS, CHEMISETTES, Etc.

Designs for fancy and *negligé* shirtings, chemisettes, zephyrs, and other light or gauzy fabrics, are being rapidly produced for the summer season. Fashion will lead with very low vestings, so that the front or bosom of shirt and chemisette will shew either stripes or checks. We cannot, however, follow all the *minutiae* of forthcoming fashionable details; suffice it to say that *Design A* has been specially constructed with a view to meet the popular taste as a fancy shirting. It can be woven on 16 shafts, 24 to

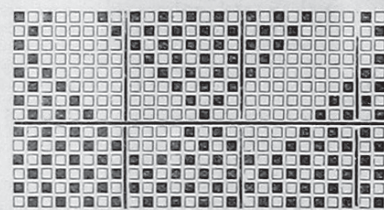
the round; the pegging plan is numbered for the purpose of following the draft of any pattern, however small or extensive. The dots in the design give a warp surface, the weft being subordinate in the make of the fabric. The warp, two in a heald, four in a dent, 20 dents per inch, of two-fold 60's, on the shafts 1, 2, 3, 4; for the shafts 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, the counts to be two-fold 30's; this will require a second beam; 40 picks per inch, 60's linen, or finer if required; the linen must be clear and lustrous. First warp pattern: 48 cream, two in a heald, on 1, 2, 3, 4 shafts; four in a dent. The drafting of this would be as follows: 1 2 3 4, 1 2 3 4, 1 2 3 4, 1 4 3 2 1, 4 3 2, 24 double ends, or as pattern, 48 single, then 24 royal blue, two in a heald, four in a dent on 5 6 7 8 9 10 11 12 13 14 15 16 shafts; 24 very bright coral, two in a heald, on the same shafts, and four in a dent, the complete pattern being 96 ends, and repeating from "48 cream." Weft all cream linen. The figures will clearly demonstrate how this pattern or any other can be drawn in. Four shafts give a satin twill ground, or any other twill may be made on the four shafts. The 12 shafts may also be made to



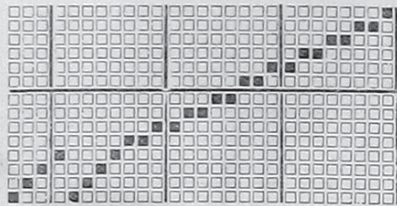
DESIGN A: FANCY STRIPE.



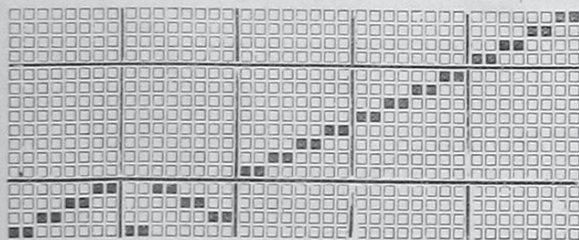
DESIGN B.



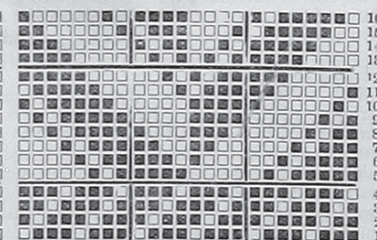
DESIGN B: PEGGING PLAN.



DESIGN B: DRAFT.



DRAFT FOR DESIGN A.



PEGGING PLAN: DESIGN A.

produce fancy or broken diagonals. The great scope afforded for change, combination of colours, and arrangement of pattern is almost unlimited, giving every opportunity for effective styles.

We give a second pattern shewing how the stripe may be shaded on 1, 2, 3, 4 shafts, especially if the pegging plan in these shafts is made to develop a broken satin; 24 deep orange, 24 mid orange, 24 primrose, 24 very light straw, all two in a heald, on 1, 2, 3, 4 shafts; 24 cinnamon brown orgazine silk, two in a heald; 24 crimson or scarlet orgazine silk, two in a heald; this silk stripe of 48 to be on 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16 shafts; 4 in a dent, 48 picks per inch of 30's cotton weft. We

need not give further details, as sufficient is shewn how to obtain the best results. Good lustre finish, 30 inches wide out of loom.

DRESS GOODS OR FANCY SHIRTING.

Design B will give a pretty effect in striped materials: 10 shafts for the figure, which has two in a heald, four in a dent. The ground for plain stripe is on 4 shafts, single in the heald, two in a dent, 26 to the round. Of course extended stripes of ground and figure may easily be obtained by increasing the draft repeats on each set of shafts. The construction of the design is for a weft effect; therefore this material may be cotton, linen, silk, mohair, angola, or any very lustrous material. The warp for figure stripe, 30's, two in a heald, four in a dent, 36 dents per inch. Warp for ground stripe, 30's, two in a dent. Weft, 56 picks of 18's cotton, or the equivalent, if linen, silk, or worsted weft be used; 31 inches in the reed. First warp pattern: 72 primrose on the ground shafts, 40 very dark blue on the ten figured shafts, weft all primrose. The following varieties in the two stripes will be fashionable:—

<i>Ground.</i>	<i>Figure.</i>
Cream.	Cinnamon brown.
Cream.	Shrimp.
Light pink.	Greenat.
Rose.	Sage.
Dark buff.	Dark prune.
Dark eau de Nile blue.	Claret.

In every colour arrangement the weft must be of the same tint as the ground stripe, always one shuttle; the dark hue being the figured stripe, the light weft crossing it gives the effect or contrast, producing a bright pleasing figure and a very neat stripe.

THE ANALYSIS OF PATTERN.—VIII.

FIGURED GAUZES.

A thorough comprehension of the foregoing principles renders the task of analysing figured gauzes a comparatively simple one. Take such an example as that represented in Figure 6: intricate it undoubtedly looks, but if the analyst for the moment throws aside all consideration of the combination of ordinary figure and gauze, and carefully examines each as separate and distinct patterns, and having done this proceeds to systematically combine them, then his task is much simplified. In all cases then, where gauze and figuring are combined, the following procedure should be adopted:—(1) Find the gauze pattern by careful analysis, and divide the design paper into stationary, doup, and doup shaft threads, clearly indicating each; (2) Analyse the warp and weft flush figures as if they were an ordinary cloth; (3) Carefully put this figure upon the stationary threads, and either the doup or doup shaft threads, *not both*.

It follows from the above that a gauze pattern will always occupy more threads than picks on the design paper, should an equal number of threads and picks be present in the cloth. The analysis of Figure 6 may now be given as an example for reference:—(1) Brief examination of the gauze ground shows that it is constructed as indicated in Diagram 17. (2) An examination of the figure reveals that it is composed of warp and weft flush as indicated in Design 24, with plain weave between these flushes and the gauze ground. This figure then must be sketched out in full and developed, on design paper. (3) Having ascertained the number of threads and picks that the figure repeats according to (2), take the same number of picks but a third more threads (for the doups); place the figure on every four out of the six threads, as

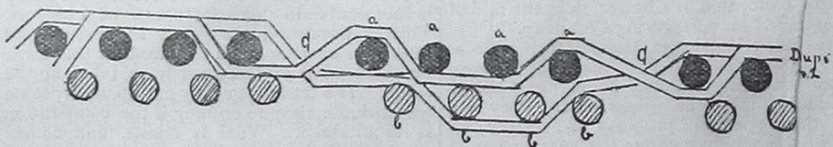


DIAGRAM 18.

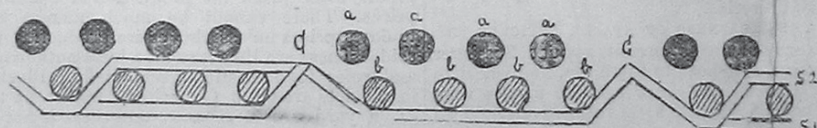


DIAGRAM 19.