

Letters from Readers.

The Editor does not necessarily endorse the opinions of his correspondents.

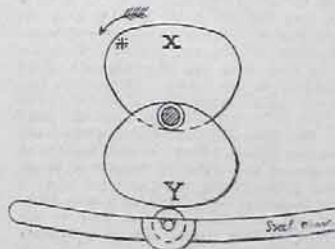
THE PROPOSAL FOR A TOP MARKET

(To the Editor of *The Textile Mercury*.)
 Sir,—In the report of the discussion of the Bradford Chamber of Commerce, recorded in your issue of the 28th inst., we notice a statement by the Mayor that the establishment of a terminal top market in London had been "suggested by the London brokers." We take leave to say that this is an entire misconception. Such a course, so far from being suggested by the London woolbrokers, is, on the contrary, very decidedly deprecated by a majority of their body, and the request conveyed through them to the Bradford Chamber for a consideration of, and the expression of an opinion upon, the question was made distinctly at the instance and on behalf of the London Produce Clearing-house, Limited, by whom the subject was initiated, and of this the Chamber was made fully aware when being addressed on the matter. As the Mayor's statement, although no doubt inadvertent, may be calculated to leave a false impression upon your readers, we shall be much obliged by your giving an early and prominent insertion of this letter in a forthcoming issue of your journal.—We are, etc.,
 CHAS. BALME & Co.,

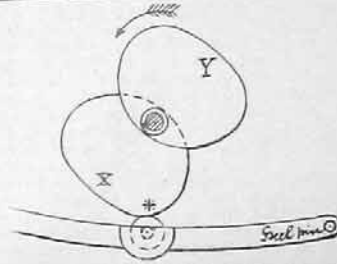
61, Basinghall-street, E.C., London,
 27th June, 1890.

ANSWERS TO CORRESPONDENTS.

- J. F. M. (Perth).—Messrs. Ashton and Co., Knott Mill, Manchester, and Mr. W. Abell, Brook-street Ironworks, Derby, are makers of Ribbon Blocking Machines.
- J. A. W. (Sowerby Bridge).—For treatise of calculation in cotton spinning, see Scott's Practical Cotton Spinner, Moss's Cotton Manufacturers' Guide, Baird's American Cotton Spinner, and W. Leigh's Practical Cotton Spinner, of which the last-named is the best, but is now, we believe, out of print. You might however obtain it second-hand.
- H. K. (Dewsbury); H. C. S. (Belfast).—Communications received.
- J. C. (St. Petersburg).—Question 13, section 2, ordinary grade, Jute manufacture.—"In what position are the wipers in a plain loom (a) at the moment the shuttle is about to cross the web, (b) at the moment the reed reaches the fell of the cloth? State what change has taken place in the sheds."—Answer: (a) The crank of the plain loom revolves twice for once of the wiper shaft. The crank revolves backwards, and as the wiper shaft is geared directly with the crank, it must revolve forwards. At the moment the shuttle is about to cross the web, the crank is in the top centre, and the lay is therefore half way back. The shed at this moment is full open. The wiper,



y. is pressing down the treadle to its full extent. Now, when the shuttle picks, the crank—traveling backwards twice as fast as the wiper shaft travels forward—makes $\frac{1}{2}$ of a revolution before reaching the fell of the cloth. In the same time the wiper shaft travels $\frac{1}{2}$ of a revolution, and therefore (b) at the moment the reed reaches the fell of the cloth, the treadle pulley of the x wiper has just entered on the dwell, and is advancing towards the centre of the wiper, in order to be ready for the next pick. In this position the shed is also open. The change that has taken



place in the shed is, that in the first case, the half of the shed worked by x wiper was down; in the second instance, the half of the shed worked by x is down. In both cases the shed is wide open.

THE competition for the Oxford University Extension Scholarship has this year produced some remarkable results. Among the working men competitors were a dyer, a shoemaker, a joiner, several cotton weavers, and a mechanical draughtsman. The best essay on English poetry in the nineteenth century was written by a working plumber at Abergavenny. A capital essay on Stratford was sent in by a machine fitter from Oldham, while the educational influence of co-operative industry is perhaps indicated by the fact that two of the best essayists are employed as cotton weavers in the Nutclough Co-operative Factory at Hebden Bridge.

Designing.

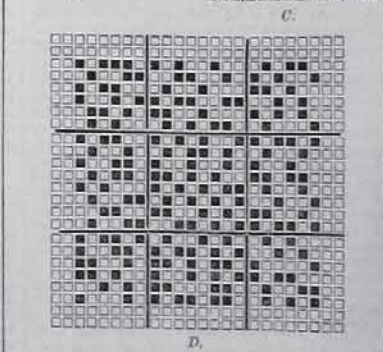
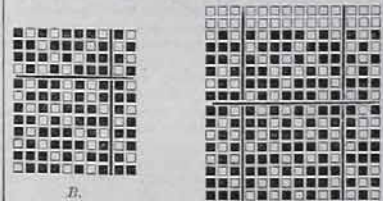
NEW DESIGNS.

ZEPHYR CLOTH.

We give in this issue a washing zephyr cloth, fast colours, on 7 shafts—2 plain stripes, 5 for quilting (see pegging plan and draft marked A). Reed 60, two in a dent, 30's twist, 60 picks per inch of 30's weft. Warping and draft: 60 ends of slate on shafts marked 3, 4, 5, 6, 7, 8, 9, 10; 10 dark brown on same shafts, 12 slate on shafts marked 1, 2, and 10 dark brown on shafts marked 3, 4, 5, 6, 7, 8, 9, 10; total ends in pattern, 92. Checking the same as warp. Ten to



PEGGING PLAN AND DRAFT.



the round if the transverse stripe of 12 slate is not made same as warp; in fact it is scarcely required to be so. Changes may be made as follows: fawn and blue in place of slate and dark brown; bleached white, and shrimp or orchid mauve hue; wallflower (a lovely shade of red brown) and willow green; any of the browns, such as vandyke, oak, cocoanut fibre, chamois, with very light blues; in the lighter tints, pink, salmon, coral, light drab and grey.

There would be little difficulty in giving in each issue a number of designs which would look well on paper, but possess little or no practical value, if not actually useless, so that it requires both judgment and a considerable amount of calculation to furnish even a very simple pattern that will suit the trade. What might serve the purpose of one manufacturer or the requirements of a certain market, may not be of the least value in another direction, or rather let us say the design that meets with the greatest approval in Manchester might be unsuitable in London. Both skill and ingenuity are required in determining size, quality, and quantity of yarns and warp and weft to suit a given pattern and make something like a decent cloth. Again, what has a designer to guide him as to the style of patterns he must adopt? The winter and summer season mean heavy or light cloths, but there are the character and application of the pattern to determine; some patterns will only suit light cloths, and others only heavy goods, while plenty of patterns will suit both. Perhaps there is no better indication of the direction in which public taste and fashion will run than by careful observation of what has been and the changes that have taken place for many seasons back. Taste is nowhere in a case of this kind; the goods of the past and present seasons must be studied and the changes that have taken place in the inclination of the public mind to one style of fabric or another. By such means the designer will be able to produce the patterns that the public mind desires, and his taste is that of the public. As the season advances styles become more distinct, more colour is added, and wherever threads of silk are introduced they are thrown more prominently on the face; a lower grade of stock is often worked in, and before the close what was quiet and subdued becomes glaring and loud, "with the colours swearing at one another."

These remarks lead up to the very vexed question of what should constitute a good oatmeal cloth. We have tried to show that the public fashion decides such questions independently of the designer. We give pegging plans, B, C, D, as suitable for either coarse or fine goods. There is variety and the maximum amount of irregularity. Weft spots are to be preferred in oatmeal cloths, weft very coarse, as low in many cases as 7's. The great object in making these patterns effective is to create as great an amount of irregularity as possible so that repeats are scarcely visible.

INDIAN GINGHAM.

Woven in Madras No. 1.—Length, 5 yards 34 inches; width, 31 $\frac{1}{2}$ inches; weight, 15 ounces 7 drams; 72 ends per inch, 72 picks; weft and warp 40's; plain cloth, 12 red, 2 white, 5 repeats, 12 white, 2 red, 5 repeats, 12 red, 2 white, 5 repeats, 12 dark green, 2 yellow, 5 repeats; total ends in pattern, 280; checking same as warp pattern.

No. 2.—Same reed, ends, picks, and counts as No. 1. Length, 4 yards 33 inches; width, 26 $\frac{1}{2}$ inches; weight, 15 ounces 4 drams; warp pattern: 40 unbleached grey, 8 red, 2 yellow, 8 dark green, 2 yellow, 2 dark green, 2 yellow, 2 dark green, 2 yellow, 8 dark green, 2 yellow, 8 red; total ends in pattern, 86; checking the same pattern.

No. 3.—Reed 48, four in a dent, or 96 ends on 1 inch; 80 picks, warp and weft 60's; length, 8 yards 21 inches; width, 31 inches; weight, 1lb. 8 ounces. Warp pattern: 16 white, 8 dark blue, 16 white, 4 light blue, 16 white; total, 60 ends. Checking: 24 blue, 4 white, or 28 picks.

The three patterns here given are particular favourites with rich and poor alike. We intend to give more gingham patterns from other districts in a future issue.

COITON TROUSERING.

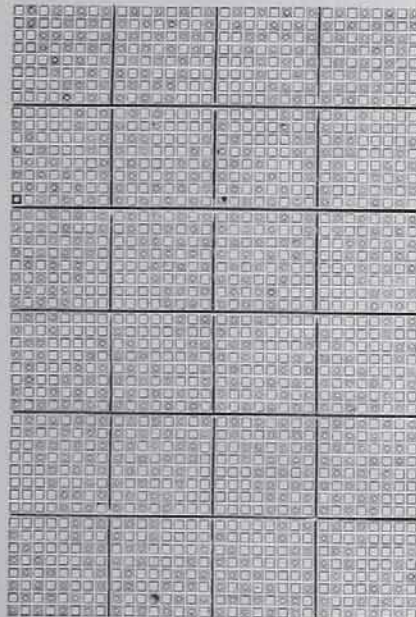
No. 1.—Indian cotton trousering from the Kistna district, Madras. Lengths, 2 yards 4½ inches; width, 26 inches; weight, 7 ounces 8 drams; reed 56, four in a dent, or 112 ends on the inch; 2 in a head, 112 picks, two in a shed; weft and warp 30's; four end or cassimere twill stripe, 8 dark blue, 24 unbleached grey; weft all dark blue, or unbleached grey.

No. 2.—Same reed as No. 1. Counts of warp and weft 24's, and 80 picks per inch; warped 4 unbleached grey, 4 mid blue, two in a head; cassimere twill, checked 4 red, 4 dark blue, two in a shed. This cloth is made at Akola Bersar

DRESS FABRICS.

Designs 147 and 148 are supplied for this class of goods. Design 147 is a very simple yet very neat pattern on sixteen threads and thirty-two picks, but by employing a point draft as indicated only eight shafts need be employed; taking into consideration, therefore, the number of shafts employed, this pattern is very effective. As developed here it is suitable for a cotton warp and lustre weft piece made as follows:—

Warp. All 2 60's cotton, 30's reed 2's, or 30's reed 2's
Weft. 30's or 36's mohair, 70-80 picks per inch.
 The positions of figure and ground might be reversed for a different effect, or again this design suggests a form for developing the ground of a figured design. The effect as here given is



DESIGN 147.

perhaps rather large for employing thus, but if a very bold figure be its complement, or if it be reduced in size, it should prove very effective.

In Design 148 the same figure has been utilised on a more comprehensive principle, being placed in all the effective positions possible. Rather more than a repeat is given, in order to give a complete idea of the figures which, it will be noticed, is concealed on this principle already mentioned in one of the articles, on the "Arrangement of Figures." A design like the one under consideration, or more particularly 147, if developed in solid colours, would appear uncongenial if a definite geometrical figure were the prominent characteristic, but if due care be taken to subdue any inclination of a figure to shew too prominently by the introduction of equally interesting figures, as in Design 148, then the mind, in contemplating such a design, becomes lost in a maze of wonderment as to its origin, at the same time admiring any evidences of skill apparent. It will be noticed that in the design under consideration (148) several definite

figures are involved: thus we may pick out the square, the star, and also the two figures combined in Design 147, while all these in unison produce another figure, which is almost lost by the repetition of its components, but which is, nevertheless, present.

The particulars for the development of this design may be the same as for 147, in which case the solid squares should be left out and the diamond-shaped figure developed in weft, the long flushes being tied down as required. The following particulars should, however, prove more acceptable:

Warp. All 2 60's blue silk, 36's reed 2's.
Weft. All 30's yellow silk, 72 picks per inch.

If a cotton warp be used, as in the first case, the solid squares may be formed by the introduction of an extra weft, under which circumstances colour must be taken into account and carefully considered. All worsted warp and weft may also be used with the design as here given; also cotton warp and weft.

MANTLE CLOTH.

As a mantle cloth, Design 148 may be used in several ways. As here given, it is too small to prove very effective, but if considerably enlarged the following system of development may be adopted:—The warp should be of fairly fine worsted, say 2/40's to 2/50's, medium set, say 70-80 threads per inch, with two wefts, one mohair or lustrous worsted, the other woollen.

The star figure developed plain should be formed by the woollen weft in rib or twill form; the white portion must be developed in worsted warp, and the solid square portion in the mohair weft.

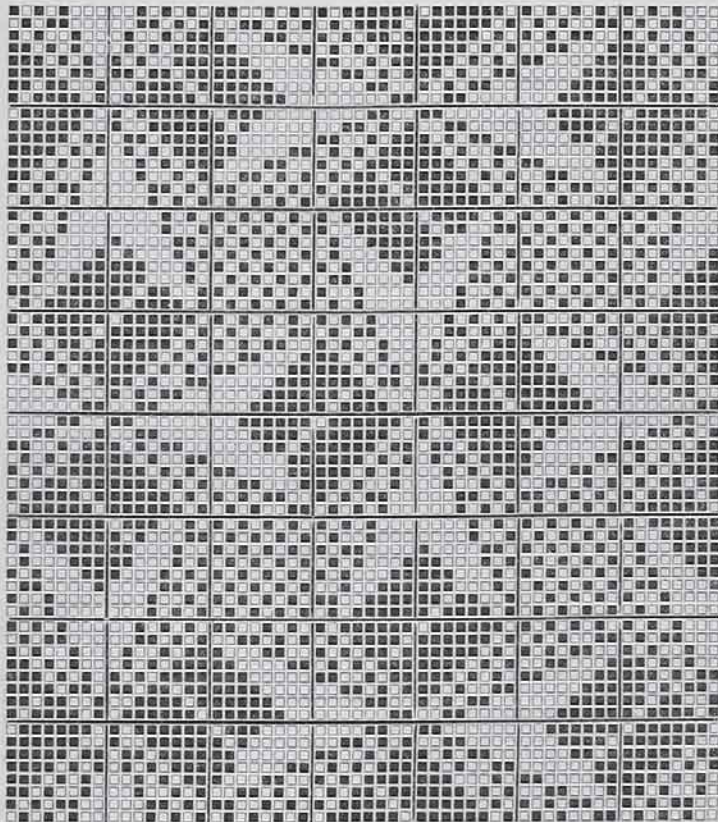
As a single cloth without extra weft with a cotton warp and lustre weft made much heavier than the sett supplied above, a good effect will be obtained.

WORSTED TROUSERING.

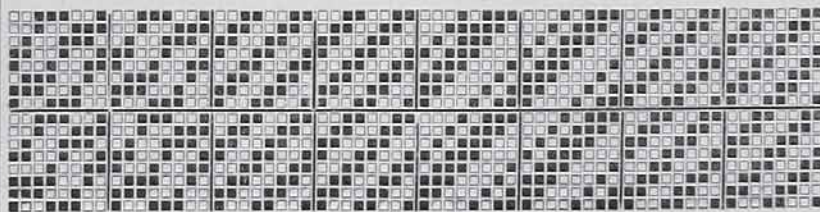
In Design 149 a special weave arrangement has been made for the introduction of colour:—

Warp.
 1 lbs. 2/40's black worsted,
 8 " " very dark drab or brown worsted,
 24 " " black worsted,
 8 " " dark blue or dark peacock green worsted,
 20 " " black worsted.
 15's reed 4's.
Weft.
 All black worsted.
 64 picks per inch.

The sixteen threads of the Campbell twill and diagonal are introduced to give a distinct stripe, up the middle of which go the coloured threads. These threads must be very neutral since they are so prominent. The Mayo or Campbell twill may be used in the place of the 8-end diagonal, when fewer shafts will be needed, twenty being required in the first case, but only twelve in the second.



DESIGN 148.



DESIGN 149.