

	1890.	1891.	1892.
Fall River manufacturers...	17,000	425,000	37,000
Fall River speculators....	—	—	—
Providence manufacturers...	303,000	331,000	192,000
Providence speculators....	—	—	—
Elsewhere.....	3,000	—	—

Total 321,000 756,000 229,000
 The closing quotations for middling spot cotton, 64 x 64 and 56 x 60 cloths, January 30th, in the three years were as follows:—

	1890.	1891.	1892.
	Cents.	Cents.	Cents.
Extra 64x64 cloths.....	3 54	3	3 1/2
56 x 60 cloths.....	3 49	2 3/4	2 3/4
Middling cotton, spots....	10 94	9 1/4	7 1/2

Mr. C. M. Moseman, a prominent dealer in saddles, blankets, and general horse goods, of this city, recently sent copies of a circular letter to manufacturers in all parts of the Old World, whose goods his firm used to import, suggesting that they send him cuts, photos, or descriptions of goods which they desired sold in America. One of the largest English dealers in these goods, William Middlemore and Co., in reply to this letter, says:—

"My supplies of saddlery to the United States have of late years been very small. Since the McKinley Tariff Bill I have received no orders whatever."

In reference to this letter, Mr. Moseman said to a *Tribune* reporter: "The advance in the import duties upon woollen, leather, and hardware goods made by the McKinley Tariff has had a most encouraging effect on the domestic manufacturers. These goods can be bought to-day considerably cheaper than when the old tariff was in force, and the present duties make it impossible to import goods of foreign manufacture and sell them with any profit. This has so encouraged the domestic manufacturing industry that new factories and mills are continually being started, and the greater demand for the domestic goods still allows them to sell the much larger output at cheaper prices to advantage, while wages are kept fully up to their former point by the increased demand for labour."

"I am now exporting woollen blankets to the very English dealers from whom I bought goods for import two years ago. They ship our goods to Australia, and we find that the Australians are using goods of American manufacture largely where those of English make were formerly used."

Mr. Archibald Campbell, of Glasgow, is said to be in Chester, Pa., looking for a site to build a mill for the manufacture of lace.

Further investigation of the action of the Customs authorities in advancing the duty on fringed linens from 35 to 50 per cent. *ad valorem* discloses the fact that the General Board of Appraisers rendered a decision on April 23rd, 1891, in which the 35 per cent. duty was affirmed. In this decision rules for counting the number of threads to the square inch were laid down, which were quite ignored in reaching their subsequent ruling (May 1st, 1891), that duty should be levied at the rate of 50 per cent. *ad valorem*.

The decision of April 23rd was on protest by Messrs. Taylor and Young against the duties assessed by the Collector at the port of San Francisco; that of May 1st on the protest of Edmund Taylor and Co., also against the action of the Collector of San Francisco. The decisions given are as under:—

April 23, 1891.

"The other merchandise in question appears to be known in the trade as Turkish towels. The sample is a completed article with borders and fringed ends. It is about 60 inches in length and 24 inches in width, and is manufactured from flax. The body of the towel has a rough appearance, produced by the warp threads being looped alternately on opposite sides of the fabric in the process of weaving. The proviso to paragraph 371 reads, 'That until January 1, 1894, such manufactures of flax, containing more than one hundred threads to the square inch, counting both warp and filling, shall be subject to a duty of 35 per cent. in lieu of the duty herein provided (50 per cent.).' There is no limitation imposed upon the manner in which the threads are to be counted. It is not required that they shall be countable by the eye or with a glass in the fabric. Resort may be had to raveling or other means whereby the number of threads to the square inch can be accurately determined. We have satisfactorily tested the said towel, and find that it contains more

than one hundred threads to the square inch, counting the warp and filling.

"The claim of the importer that this portion of the merchandise is dutiable at not more than 35 per cent. *ad valorem* is accordingly sustained."

May 1, 1891.

"In the case now presented to us, one-twelfth of the surface of each towel contains less than one hundred threads to the square inch, and such portion could not come within the proviso of par. 371; the other portions of the towel contained the requisite number, but the towel entire is the complete article of manufacture, including fringes, and, applying the language of Judge Lacombe to this merchandise, can we ignore the fact that many square inches of this manufacture do not count one hundred threads; and can we say that the article as a whole may be fairly classified by the test laid down in the proviso as included within its provisions? We find the following facts upon which to base our conclusions:—

"1. The articles the subject of this protest are linen towels, manufactured of flax as the component of chief value.

"2. Definite portions of each towel contain more than one hundred threads to the square inch, counting each separate thread of warp and filling and other appreciable portions less than that number.

"3. Each towel is a separate and complete article of manufacture, with fringes consisting of the warp threads only.

"Upon these findings we are constrained to hold that manufactures of flax of this kind are not embraced within the proviso of par. 371, but only such manufactures as are woven, so that the number of threads per square inch will not fall below one hundred in any appreciable portion of the fabric.

"The protest is overruled, and the action of the Collector is affirmed."

Designing.

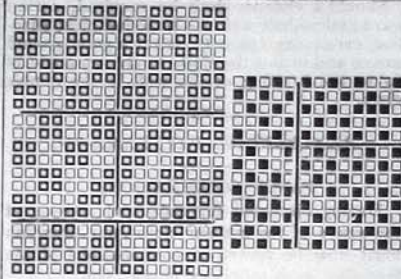
NEW DESIGNS.

COTTON DRESS GOODS, Etc.

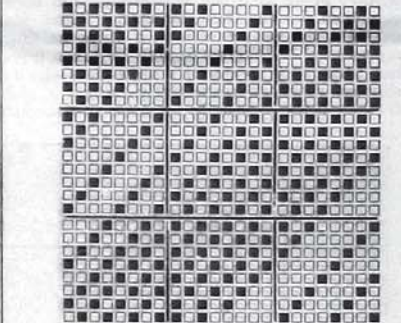
Design A is on 16 shafts, straight-over draft, 20 to the round, 72 ends per inch for warp, 24's cotton; 72 picks per inch, 24's cotton weft. *Warp pattern*—200 of dark brown, 36 white, 4 dark brown, 36 white, 4 dark brown, 36 white, 6 dark brown, 32 white, 8 dark brown, 24 white, 12 dark brown, 12 white, 18 dark brown, 6 white, 36 dark brown, 4 white, 36 dark brown, 2 white, 36 dark brown, 2 white; total threads in pattern, 550; the repeat commences from the "200 dark brown." *Weft pattern*—the same. By retaining the white or some very light tint, the following fashionable shades may be used for dark brown: bog myrtle, bronze, fawns, sage, emerald green, terra-cotta, olive, mauve, and "London smoke." Pretty patterns may be obtained on a more convenient scale to the checking round by equal squares of two colours, 24 and 24, or 12 and 12.

Design B is also for fancy cotton dress goods suitable for the Spring, in large plaid checks, 24 shafts, straight-over draft, 24 to the round, 24 dents per inch, 4 in a dent of 40's cotton warp, 96 picks of 40's cotton weft; perhaps 80's two-fold for warp would give more facility in the weave. *Warp pattern*—64 very light cream or faint yellow, 24 peacock blue, 64 cream, 4 blue, 16 cream, 4 blue, 12 cream, 8 blue, 8 cream, 12 blue, 4 cream, 16 blue, 4 cream, 64 blue, 24 cream, 64 blue, 4 cream, 16 blue, 4 cream, 12 blue, 8 cream, 8 blue, 12 cream, 4 blue, 16 cream, 4 blue; total, 380 threads, and repeat from the first "64 light cream." *Weft pattern*—the same. For peacock blue, the variations are black, dark blue, rose, greens, fawn, stone, drab, and buffs. The diagonals cut the monotony of the plain ground, giving a very charming effect.

Design C is for shirting patterns, 13 shafts, straight-over draft, 13 to the round. This design represents a class of patterns eminently useful for any fabrics, whatever the material used in the construction. It is not always that designs will be found adaptable to such a diversity or number of changes as can be found in this very simple weave. It only requires a little ingenuity for any pattern weaver to obtain effects, if different colours, or different shades of the same colour, be used in the checking. We might easily cover a page of this journal with details in connection with the variety of combinations easily produced from this design; but we can only confine ourselves to the follow-



DESIGN A: COTTON DRESS GOODS.



DESIGN B: DRESS GOODS.

ing particulars. For a good fancy shirting, or lawn tennis cloth, 66 reed, two in a dent, 20's cotton for warp, all two in a head, one head per dent, 48 picks per inch of 12's cotton weft, two in a shed. This is to obviate the use of drop boxes on each side. *Warp pattern*: 2 navy blue, 2 white. *Weft pattern* the same, or 2 dark brown, 2 white; or 2 dark green, 2 white; or 2 dark red, 2 white. If a break in the diagonal is required, the checking may be continued for any distance, and by using four of white in place of the ordinary two of white a very singular change takes place; by again commencing with the two-and-two pattern, the angle, or rather run of the diagonal is removed 22 threads away from its original position, giving a very unique, handsome, and desirable effect. It will be found one of the most serviceable designs that a manufacturer can possibly entertain for a cheap cotton fabric.

FIGURED MANTLINGS.

In *Design 10* is illustrated a type of figured mantle cloth at present much in favour. In the more elaborate examples some extensive figure is formed, having a bulky or raised appearance, owing to the peculiar manner of utilizing double-plain with some solid weave, such as sateen, or, preferably, crape. It will be observed that in the oblong figure given in *Design 10*, double-plain is used throughout; but that the constant changing of the two cloths thus formed is all the binding that takes place. Owing to this fact, quite a raised or wadded appearance is given. Of course a wadding pick coming in between the two cloths may assist, but more depends upon the distance apart of the interchange. For example, should the interchange take place every six threads and picks, practically no raised appearance would result. Several methods of development suggest themselves. First of all the fabric may be worsted, all one colour, under which conditions a good crape weave for the ground will materially add to the effect. Another method suggested is a one-and-one scheme of colouring in the warp and weft. For example:—

- Warp.*
 1 thread 2/60's medium grey lavender.
 1 thread 2/60's black;
 16's reed 6's.
- Weft.*
 1 thread 30's medium grey lavender.
 1 thread 30's black;
 96 picks per inch.

In the solid colour intimated above, a somewhat coarser sett and yarn will prove more effective.

DESIGN C: SHIRTINGS.

Should a cheaper cloth be required, cotton warp and mohair weft will be found most effective, care being taken to select a good ground weave and to sett the cloth to give an angle of 60° in the bending of the weft in the double plain.

ANALYSIS OF PATTERN.—IV.

FANCY COMBINATIONS.

Having discussed the means of arriving at the weave of the simpler cloths, our attention must now be turned to combinations of the foregoing, such as stripes, checks, etc.

Stripes are easily treated, the weaves of each section being analysed separately, and then combined in the best manner. Thus, for example, the weaves of such a stripe as that represented in *Diagram 6A* may be taken from the surface by means of a piece-glass—let us suppose they are respectively *Designs 1 and 6*—then there is usually no need to examine

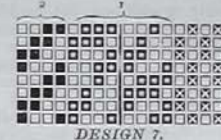
the exact way in which they are combined in the cloth, which would be only waste time, for they may be equally well combined on design paper irrespective of the cloth.

In *Diagram 6* are given two threads out of the same cloth, which is a stripe composed of the weaves given in *Design 7*. Thread 1 has been taken out of section 1 on the design, being Mayo or Campbell twill, $a = \text{two down, } b = \text{one up, and } c = \text{two down, and } d = \text{three up}$. Thread 2 is taken from section 2 of the design, being two-and-two twill or rib. Of course a weft pick would show alternately sections of each weave.

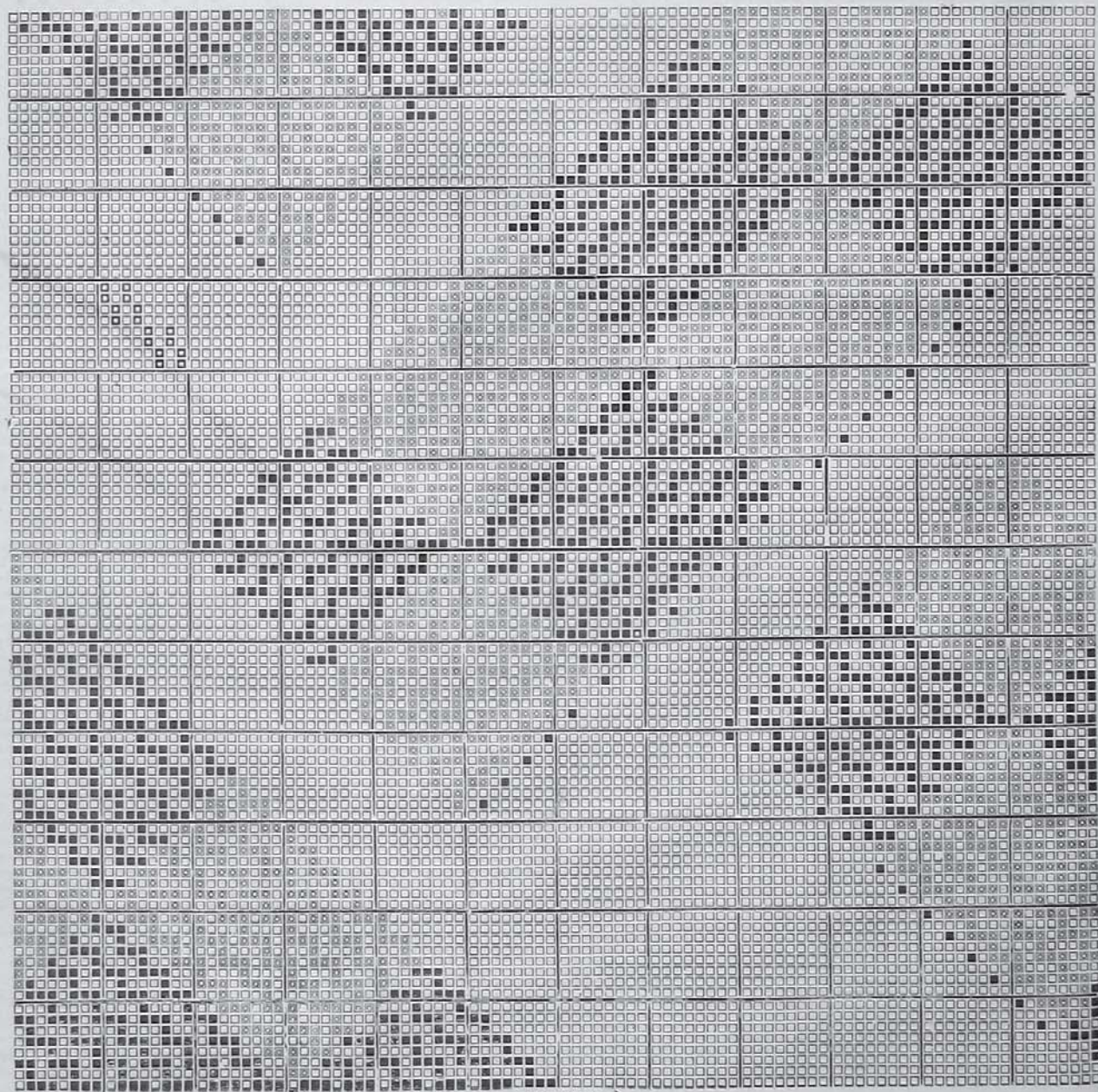
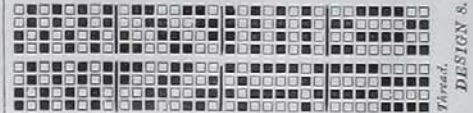
Checks may be treated in very much the same manner, the weave being taken off each section of the pattern and combined as efficiently as possible. For example in *Diagram 7*, a thread and pick taken from a fancy check are given. The construction is demonstrated in *Design 8* and *Diagram 8A*, which it will be seen is composed of warp and weft ribs and 2-and-2 twill, a careful inspection of the curvature of these threads reveals the respective compo-

ments. In the thread 1 and the pick 2, $a = \text{warp rib, } b = 2 \text{ and } 2 \text{ twill, and } c = \text{weft rib}$. Thus again it is evident that the minute inspection of each individual thread and pick may reveal to a considerable extent the structure of the fabric.

(To be continued.)



Pick.



DESIGN 10.