Novelties.

For Use in Trouserings-Suitings for Men's Wear.

Weave Fig. 1-shows a most suitable interlacing for a Fancy Trousering, calling for

> Warp: 7 ends of an oblique granite (running down).

> > 9 ends of the 2 up 2 down regular 4harness twill.

> > 8 ends of 2 by $2-4 \times 4$ Basket weave.

8 ends of the 2 up 2 down regular 4harness twill.

16 ends of an oblique granite (running

48 ends in repeat of pattern.

Filling: plain yarn.

Repeat of Weave: 48 × 8—which could be woven on 19 Harness-fancy draw; or possible, if using additional 4 Harness for 2 up 2 down 4-harness twill and 4 by 4 basket weave, on 23 Harness-fancy draw.

Weave Fig. 2-shows a good combination of the 4-harness twill for a neat combination to produce a standing "check effect" in the fabric used. Repeat:

Weave Fig. 3-shows a plan for a neat "stripe effect" running:

> 92 warpthreads on the twill and double basket V-effect.

5 warpthreads on the $\frac{2}{2}$ 4-harness twill (running in the reverse direction of the for-

1 warpthread is used $\frac{2}{2}$ to cut off on both sides of the weave.

98 warpthreads in the repeat of the pattern. 16 bars are required for the harness chain.

Weave Fig. 4—shows a plan for another neat "stripe effect" running

> 96 warpthreads on the twill and basket effect (single basket effect).

5 warpthreads in the $\frac{2}{2}$ 4-harness twill.

1 warpthread is used $\frac{2}{2}$ to cut of on both sides of the weave.

102 warpthreads in the repeat of the weave. 8 bars are required for the harness chain.

Weave Fig. 5-shows another plan for constructing these fabrics, having for its basis the 4×4 twill and basket weave. The combination used being:

> Twill 2 up 2 down \times 2 running for 8 threads /, and for the next 8 threads ; the same effect to be repeated = $16 \times 2 =$ 32 warpthreads Next running 2 up 2 twill for $8 \times 5 = 40 + 1 =$ Basket effect × type 2 up 2 down twill Basket effect \times type 2 up 2 down twill $2 \text{ up } 2 \text{ down rib} \times \text{type}$

> > Repeat of pattern: 100 warpthreads

Weave Fig. 6—shows a combination of:

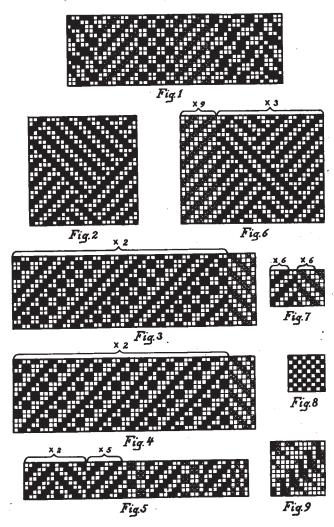
 $9 \times 8 = 72$ warpthreads (see \times type) run

on 2 up 2 down twill. $3 \times 24 = 72$ warpthreads (see type) on the entwining principle.

> 144 warpthreads in the repeat of the pattern.

Filling: calls for 6 repeats of the 2 up 2 down twill, i. e., 24 picks.

Repeat of weave: 144×24 .



Weave Fig. 7-shows what is known as a "herringbone" effect.

One 2 up 2 down 4-harness twill running

for 26 warpthreads (shown in type) running from left to right; to alternate

26 warpthreads (shown in X type) running in the reverse direction.

Repeat of weave: 52×4 .

Weave Fig. 8-shows what is known as a "plain" weave; repeat 2×2 ; and which can be used with any combination of colors in warp and filling to produce stripes or checks of any combination of colors. The proper (average) number of harnesses to use is eight.

Weave Fig. 9—shows what is known as a crêpe effect; repeating on 12 warpthreads and 12 picks. Any combination of colors and counts of yarns can be used and by proper selection produce salable styles of fabrics for suitings.

British Empire Cotton-Growing Scheme.

Details are now available of the scheme for increasing the supply of cotton grown within the British Empire, which the Empire Cotton-Growing Committe, with the assistance of the Government, proposes to put into force without delay. According to the Manchester Daily Dispatch, it is probable that a board of trustees will be incorporated to hold the funds, comprising the Government grant of £50,000 (\$ 243,325) a year for five years, proceeds of a voluntary sixpenny (12-cent) levy on cotton bales used in the United Kingdom (estimated to produce £100,000 or \$ 486,650 a year), and any other money raised for this purpose.

The administrative body will be made as representative as possible; Government offices, employers' associations, trade-unions in the cotton industry, and chambers of commerce will be asked to nominate members. A general director with an office in England will be established, although it is said the main expenditure will be abroad. Research and education will be fostered and assisted, but it is said that the most pressing matter is the strengthening of the staffs of the agricultural departments in the British colonies and protectorates where cotton is a possible crop.

The new organization proposes to develop the growing of cotton by natives and settlers in the colonies and protectorates for their own profit. It will do all in its power to facilitate the growing of cotton by British capitalists in such places as may be suitable for this form of progress.

German Chemical Industries.

The Peace Treaty requires that Germany shall deliver to France, during each of three succesive years. 30,000 tons of sulphate of ammonia, 35,000 tons of benzol, and 50,000 tons of coal tar. The Reparation Commission reserved the right to one-half the supply of dyestuffs and chemico-pharmaceutical products on hand at the time of the signing of the treaty; also an amount up to one-fourth of the product up to January 1, 1915. Now that a year has elapsed since these provisions became effective, it is of interest to read the German reports of company meetings, chambers of commerce summaries, and trade-journal reviews of conditions in the chemical industry.

The two general conclusions that may be drawn from this published material seem at first to be entirely contradictory. The introductory pages of every report and summary discuss the shortage in coal and raw materials, the closing of plants, the scarcity and high cost of labor, and the poor transportation facilities. As a consequence, a very great scarcity of the finished product is reported so that orders can not be filled. Some reports specifically mention the French deliveries as the occasion of the shortage on the market. The impression of industrial hardship that is conveyed in these opening paragraphs is, however, offset at the end of the same reports by the financial statements that record, almost without exception, the declaring of dividends largely in excess of those of 1918. The explanation of the discrepancy is, of course, to be found in the heavy foreign demand at the high prices of the last few months of 1919.

Silk Trade Short Time.

The period of prosperity which was enjoyed by the silk trade of Macclesfield after the war has come to a temporary stoppage owing to the scarcity of orders. A question asked by Mr. J. R. Remer, M.P., in the House of Commons last week, indicated that the mills in the town were working only two days a week. The situation is not quite so serious as that, but it applies to the making-up and fancy trade. This may also apply to the manufacturing section if matters do not improve. Employment is being found on orders left over from the boom period. The wave of economy on the part of the public is responsible to a large extent for the situation, but there is no prospect of any reduction in price. Silk which was bought at 105s. a pound will have no chance of competing as a manufactured article with silk bought as at present at 30s. a pound. In addition, under an arrangement between the employers and workpeople, the men's wages will be increased 4s. a week, women's 3s., and girls 2s., from August 13th. There is also a revival of foreign competition, and a large amount of material is coming from the continent, presumably from Switzerland, but it is felt that the origin of its manufacture is in Germany. A large amount of this stuff was exposed for sale last summer in Cologne and other towns of the Rhineland. The price of the "Swiss" article is ridiculously low, and the competition is becoming very strong. petition from Japan is also serious, as she has made much progress in both plain and fancy silks. Some take an optimistic view of the situation, and think the trade will revive later in the year, but there is no evidence to support that view.

Cocoon Market in Piedmont Province.

The cocoon market in the Province of Piedmont, Italy, for this year proved superior to that of preceding years. Cocoon breeders, anticipating that high prices would be offered, extended breeding, and although atmospheric conditions and secondary qualities of larvæ somewhat hampered cultivation, the yield turned out to be satisfactory. The medium prices paid for cocoons were from 180 to 225 lire (1 lira = 19.3cents normally) per 10 kilos (1 kilo = 2.2 pounds), although it had been expected that the price would go to 350 lire per 10 kilos. In one Province the cocoon breeders formed a cooperative society for the drying of cocoons, storing them until more advantageous conditions offered. It is calculated that the cocoon market of Italy brought forward a gain of 660,000,000 lire during the year.

The Province of Cuneo, in this consular district, yielded 79,826 myriagrams (1 myriagram = 22.046 pounds) of cocoons which sold at a medium price of 210.12 lire per myriagram. This represents only the quantity sold on the open market. About 10 to 12 per cent more cocoons are said to have been sold directly to silk factories. Statistics concerning the Province of Cuneo for 1918 show a yield of 76,620 myriagrams of cocoons, sold at a medium price of 140.20 lire per myriagram; in 1919, the production amounted to 55,442 myriagrams, sold at an average price of 132.22 lire per myriagram. One reason for the satisfactory yield in 1920 is the more extensive cultivation of mulberry trees, the fresh leaves of which contribute toward a better development of the cocoon worm.