Although production diminished last year by about 8 per cent, as compared with 1896, the quantity of raw silk has increased, a greater quantity of timer has been consumed and entirely of silk has been woven than previously.

This is shewn by the fact that were consumed last year about 18½% more than in 1890, and that a hand-loom has produced on an average £13 worth of silk in 1891 against £16 18s. in 1890. Wages in aggregate £8,000,000 in 1890. Hand industry received £7,200,000.

Some Germans, it would seem, are unsatisfied enough to give an order to England when the same article can be supplied by a native firm for no other reason excepting the higher wages. A firm in Glascow, it appears, having decided to procure a fresh stock of spinning machinery, adopted that firm in the technical papers. Hereupon the Barcon representative of a machine factory in Millhaisen offered to furnish the requirement for 200,000 marks. The tender, however, was not accepted, because a factory in Manchester, with a world-wide reputation, and particular line, offered to supply them for 80,000 marks less.

COLD GALVANIZING.—The ordinary method of galvanizing iron and steel consists in dipping the articles in a bath of molten zinc. There are certain drawbacks incidental to this treatment, which reduces the strength of the iron, tends to cinder steel and small section brittle. In order to overcome the effect on the wire the bath of zinc is kept at a low temperature and the rate of production is restricted to one or two yards per hour, which, however, tends to imperil casting and a waste of zinc. To overcome these and other difficulties a cold galvanizing process has been introduced by the London Metallurgical Company, of So, Tarnsill-street, London. The system has several special features, in the chamber, the articles being introduced into an electro-process. A recent inspection of the plant for carrying out this work, and examination of a number of articles galvanized by the new system, showed very satisfactory results. From the reports of public officials who have tested various articles treated by the cold process, it appears that the coating of zinc is more adherent and affords a better protection to the iron than an equal thickness of zinc by the hot process. The wire gauze is coated on the new system without the meshes being filled up with zinc, and the screws similarly treated do not require re-tapping, the threads being quite clean. The process is also suitable for coating nails and spikes, as it does not impart to them a slippery surface similar to that resulting from hot galvanizing. It is stated that the cost of the cold system is no greater than that of ordinary hot galvanizing.

Designing.

SILK DRESS GOODS, ETC.

Design A is a neat, desirable effect for silk dress materials; it is specially constructed to develop the brilliance and sheen of woven and worsted wool to the fullest extent. Clear colours, finely harmonised, will be of the utmost importance to make it successful. Clean, clear, finely-marked stripe lines are much sought for in fashionable circles, and, if properly arranged, appeal to the taste of the purchaser whenever or wherever exhibited. A rich and large variety ought to be made, but we deem it inadvisable to crowd too many colours together in one pattern, which is clearly defined; charming effects can easily be obtained by the use of a little judicious selection of shades and tints. The figured portion of the material comprises a worsted end, which is sought to be drawn in two threads in a main, two mains in a dent, 20 cents per inch for the second; the second stripe a 9 thread satin, 72 ends, two in a main, two mains in a dent. That stripe, along with the 9 thread satin ground that the web is developed upon, should not be 12 threads, or, in fact, I8, both being a measure of 72 threads, or 144 in both stripes. For the warp, a two-fold 36's organzine would be similar, that is ready 36's; not as two-fold cotton in which this 36's doubled would be considered 18's; the 20's tram; picks according to requirements for very heavy goods may be used; for instance, white and worsted all yellow or white, light brown, cream or, in fact, any light tint, then the worsted will be dark, thus giving a solid strip of satin, and the figured one thrown up in bold relief on the satin ground. Should an all-over pattern be found desirable, then the force of contrasts will be found necessary, and it might be advisable to leave out all the round spots, making the figure reversible alternately on some well-defined satin basis. Ground of warp, either light or dark; web a contrast. The satin stripe might be made an open canvas, or the basket weaving, in any case, consider very many handsome samples can be produced desiring of notice.

WORSTED DRESS FABRIC.

A beautifully toned Tartan check is produced by the combination of a fabric which consists of only four colours viz., dark blue, dark olive green, brown, and medium brown. The effect is quiet in tone, yet exceedingly rich, the contrast of the brown with the medium green seeming to add the beauty of the harmony of analogy which forms the body of the pattern. Worgt.

16 lbs. 2½ God's Olive. 4 lbs. 2½ God's Olive.

4 lb. Mclain 16

4 lb. Mclain 16

4 lb. Mclain 16

4 lb. Mclain 16

4 lb. Mclain 16

4 lb. Mclain 16

4 lb. Mclain 16

16 lb. God's Olive.

8 lb. Dark blue.

12 lb. red. 4's.

Worgt.

Same as warp in 40's yarn; 60 picks per inch. Weave to be two-and-two twill.

WOOLLEN AND WORSTED WEAVES.

Another interesting diamond or twill check is given in Design 1, this, as in previous examples, being based upon the 8-thread sateen throughout. In this case the pure sateen has been converted into tied hopsack and in no case are any other conversions admissible. For the weed trade the smaller float weaves should be found reliable, while for the best trade we recommended shaded patterns on an enlarged scale and the longer float weaves.

A colouring worthy of trial either for worsted or woolen goods is as follows:

Worgt.

100 lb. Dark brown.

100 lb. Dark brown.

100 lb. Dark brown.

100 lb. Dark brown.
If for a woolen, the sett should be as follows:—

**Warp.**
- All 36 sl. woolens: 20's need 4½.
- All 36 sl. woolens: 40 picks per inch.

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

**Warp.**
- 1 thread, 2-4½'s worsted, for face.
- 1 2-3½'s, " back.
- 18's need 5½.

**Warp.**
- All 20's black or dark colour: 50 picks per inch. The worst is employed in Design B.

A very effective worsted pattern is given in Design A, which practically consists of an 8-end satin ground, with two weft rib and twilled hopsack stripes.

**Warp.**
- All 2-4½'s dark brown: 14's need 6½.

**Warp.**
- All 2½'s medium brown: 80 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 reed or to put the rib threads into two distinct shafts, otherwise they will tend to twist round each other.