are best treated before soaping with a little weak hydrochloric acid, which
trace well, and such silks contain; the acid
and should be followed by a washing with
be required to be continued for a longer
the case with ordinary silk, as, owing to the
of the wild silk fibre, the gunn extends
the end of the fibre than it does in the
ordinary silk.

To be continued.

PRINTING OF WOOLLEN PIECE-GOODS.

The printing of wool is almost always carried
on by means of a calico printing machine, in the same manner as the
printing of cotton piece-goods. Two points, however, are more
important in practice:—first, the blanket and the back cloth must
be very soft, so, especially in light shades, every unevenness is
noticeable, giving the goods a bad appearance.
The second point is the heating of the drying
room, which cannot be too well looked after. It
will take a long time before the importance of the
matter is understood any change in, and still longer to con-
vinced of the fact that the goods must
be dry as slowly as possible, and on coming out of the
room they should be as moist as possible, and will only become dry.
Goods dried in this manner are susceptible to moisture, and readily allow steam to
penetrate, and it is very difficult, if not impossible, to
get a really dry cloth; whilst if they are quickly dried the
pressure of the steam lies only on the surface, and a very
reasonable temperature is required, which is liable to cause the
colours to run into the whites. Colours dried quickly are
not so brilliant as those which have been dried slowly.
At one time the goods could be hung for several
days after printing, and thus slowly dried, and the colours came out brilliant; now the
time is much reduced, hence the dying has to
be done in a drying-room or a stove, and the after
operations depend much on this being done
properly. The regulation of the temperature of the
supply to the drying stove is important, but no
fixed temperature or regulations can be given;
the printer must judge for himself, and
as a very fine quality of goods may be produced
such a manner that the goods will not rub off
nor become too dry.

The printing of the colours for printing is
carried out in the same way as for calico-printing
colours. They may be preserved for some time with the
butter and the underprint, and yet be usable. The compositions of
the printing colour is generally a very simple
one, as, besides the colour and the thickening
agent, the fat, the resin, the dextrin, or starch, an acid
is added, such as sodium, acetic, or salicylic.
The following recipes will be found useful:

**Black.**—Naphthol black B, shaded with patent blue.

**Red.**—Any of the azo scarlets will give good results.

**Brown.**—Any of the azo browns, or the brown hetrope, croy.

**Orange.**—Use any orange which is very bright, and with a good poppy yellow.

**Yellow.**—Madder yellow, shades of yellow which are avail-

able from the merchant, and do not contain any
of the azo orange shades, are also useful. The use of
the yellow shades of colour with the black is not
unusual, and the following recipe, as a very simple one,
will be found useful:

**Green.**—In the stage of green, shades of green, there are
several shades which are available. The use of
the green shades of colour with the black is not
unusual, and the following recipe, as a very simple one,
will be found useful:

**Blue.**—Use any blue which is very bright, and with a good poppy yellow.

**Purple.**—Use any purple which is very bright, and with a good poppy yellow.

**Black.**—Use any black which is very bright, and with a good poppy yellow.

**Red.**—Use any red which is very bright, and with a good poppy yellow.

**Brown.**—Use any brown which is very bright, and with a good poppy yellow.

**Orange.**—Use any orange which is very bright, and with a good poppy yellow.

**Yellow.**—Use any yellow which is very bright, and with a good poppy yellow.

**Green.**—Use any green which is very bright, and with a good poppy yellow.

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The 8-end sateen in all over the 64 threads by 64 picks, and producing the design by adding to the sateen dates. If ordinary twill is being dealt with, the sateen selected must be one which lends itself to the production of an ordinary twill in either direction. Such, for example, as the 12-end sateen, as shown in Design A.

Should an upright twill combination be required, then a sateen yielding such a twill in both directions must be made the basis of the effect, as shown in Design E, which is based upon the 6-end sateen, counting five. We should recommend that all the sateens be worked out and kept for reference in such cases as this.