

QUESTIONS AND ANSWERS

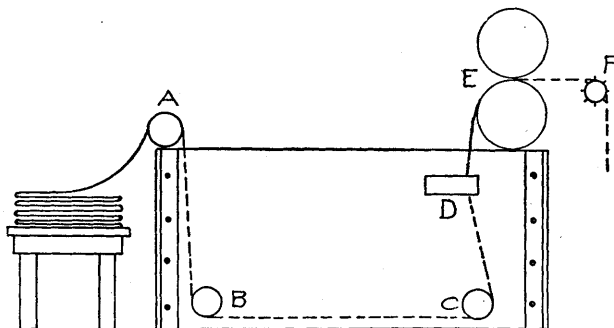
We invite subscribers to submit any questions they desire answered regarding the manufacture or sale of textile products. Any question sent to us will be answered at once if the information is in our possession. If it is not, we will submit the question to experts and their replies will be published promptly. In urgent cases we will, if practicable, send the inquirer an advance copy of the reply. Inquirers are requested to state their questions as clearly, concisely and fully as possible. This will save time and misunderstanding. The names of inquirers are held in confidence.

CARBONIZING FLANNEL

Editor of TEXTILES:

Please inform me how white flannel should be carbonized when it is to be piece-dyed afterwards. I enclose two samples showing our goods as they come from the loom and also when finished. We are carbonizing the pieces with aluminium after weaving. Should they be carbonized before fulling? If so, should the goods be scoured before carbonizing? Should we use soap or alkali for washing? Any information regarding the carbonizing or finishing of these goods will be greatly appreciated. MACASSAR (207).

For carbonizing goods like the sample, a wooden tank should be provided, about 6 ft. long, 4 ft. deep and 3 or 4 ft. wide, with a roll at one end and a set of squeeze rolls at the other. Inside the tanks far enough from the end and bottom for the cloth to pass under, there are two rolls, as



shown in the illustration. There is also a guide through which the cloth passes before entering the squeeze rolls. The opening in this guide should be 4 or 5 in. wide so as to bring the cloth into small compass for squeezing.

The speed of the squeeze rolls should be slow enough to allow the cloth to become thoroughly saturated while passing through the bath. This bath should be prepared by filling the tank nearly full of water, and adding sulphuric acid to bring the solution to 6° Be.

The cloth passing over the roll A and under the rolls B and C, through the guide D and squeeze rolls E becomes thoroughly saturated with the acid solution. For heavy goods it might be necessary to arrange an extra set of rolls above B and C so as to allow the cloth to remain longer in the liquor. A carrier roll F is placed in front of the squeeze rolls to deliver the cloth to a truck. Pressure should be applied to the squeeze rolls to force as much of the liquor as possible back into the tank. After passing through this process, the cloth is extracted, then taken to a dryer arranged to pass the pieces slowly through a chamber heated to 240°. Following this process the goods are run dry in a rotary fulling mill to crush the carbonized burrs.

The cloth should first be scoured, then carbonized, thoroughly in a 4° Be. alkali solution, neutralized and dried before fulling. Time and labor are saved by fulling and scouring and then carbonizing. Any attempt to carbonize the goods in the grease or to full them without thoroughly removing the acid is likely to cause serious trouble. The goods should be fulled and scoured in the usual way with suitable soap for each process. If the goods are to be given an "acid dye" they may go forward without neutralizing; otherwise, a thorough removal of the acid before drying is essential. All parts of the soaking tank must be of wood.

MEDIDA.

TEMPERATURE FOR SIZING.

Editor of TEXTILES:

1. What is the proper temperature for the size when running No. 9 indigo dyed warps?
2. What should be the percentage of gain in weight due to sizing?
3. What should be the percentage of gain in breaking strength?
4. For best results in weaving, should the warps be run damp or dry on slasher? Please explain fully.
5. What percentage of moisture should a warp contain, when taken off from slasher?
6. If a warp is taken from the slasher damp, how long does it remain in this condition?

ALENCON (205).

I see no reason to state other than 185° as the proper temperature. Indigo dyed warps are liable to contain considerable quantities of chemicals that act upon the starch causing it to grow thin, so it might be possible to run at 170° on such a warp. The determining factor would be the thickness of the size. If the size is not too thick at 170°, thus making the top roll slip, that would be the best temperature.

The answer to the 4th question is that the warps should be run from the slasher just dry. They should not be at all moist, nor should they be so dry as to be crisp. As you will understand, such a condition as this can be obtained only when the temperature of the size in the size box is regulated.

The answer to the 5th question is the percentage of moisture should be about normal for cotton, say 5 to 6 per cent.

It is difficult to reply to question 6. I do not know what "Alencon" means by "damp." This might be most anything from a warp practically dry to one quite wet. A warp would retain dampness for weeks or months as it is in such a dense package.

EVERETT H. HINCKLEY.

MATTING OF WARP YARN.

Editor of TEXTILES:

How can I overcome the matting together of colored cotton warps? CORNING (206).

I am in some doubt as to what is meant by matting of colored yarn in warps. Yarn in the warp will stick together because of the presence of size which was not properly dried on the cylinders before being wound on the beam. I will assume that "Corning" refers to the ends becoming stuck together after leaving the warp beam. Sometimes, owing to improper sizing, the fibers will curl up together behind the drop wire and harness. On a plain weave the 2 ends that rise and fall together will knit into each other and break the end that works between them. If this is "Corning's" trouble the only relief is a 2 and 2 lease. See Practical Fixing of Cotton Looms.

JOHN REYNOLDS.

TESTING STRENGTH OF FIBERS.

Editor of "Textiles":

Please let us know where we can get a machine for testing the strength and elasticity of fibers. We have had an inquiry for this machine from a Japanese correspondent who advises us that they have been informed it was manufactured in the United States. YORK (204).

The machine which the Japanese correspondent refers to is evidently the fiber testing machine built by A. S. MacKenzie, 11th street and Ridge Avenue, Philadelphia, Pa.