

RAW COTTON.

The market has recovered entirely from the weakness resulting from the Price McCormack's failure, and the first week in July saw the advance of cotton to 10 cents a pound, a price which it has not reached in a period of nearly ten years. The rise was all the more striking to those not familiar with the conditions when taken in contrast with the quietude prevailing in the cotton goods market. It was attributed chiefly to the apprehension of spinners in Liverpool over the crop situation in the United States and the operations of a bull clique in New Orleans.

COTTON CLOTHS.

The present disturbance in China is to have more influence on the market for cotton cloths than some suppose. China is, next to India, the great importing market for cottons, and at present the Chinese market is closed, and will probably remain so for some time. Already, very severe cutting has taken place in the brown cotton mills in the United States at Fall River and elsewhere. That the market remained stagnant in spite of such cutting shows that prices will go much lower. The amount of cotton sent from Canada to China will not depress our market very seriously, even if thrown upon it, which will not be done, but the United States prices will bring ours down very sharply and that before long. The great increase in the capacity of our mills, with the closing of the Chinese market, and the inflow of United States cottons will have a decided effect on our market, there can be no doubt.

UNSHRINKABLE WORSTED AND WOOLEN GOODS.

Wool, in any condition, treated by chlorine or its compounds, loses all its characteristic qualities, and notably its capacity for felting. The loss of this latter quality is absolute if the chlorinating has been sufficiently energetic to ensure that pure wool materials, after having been treated, are unshrinkable. As a rule, wool fabrics which have been called unshrinkable are not possessed of such property, but if the treatment with the chlorine or its compounds which is applied to the wool in any one of its conditions—that is to say, raw wool, combed, carded, spun, woven or manufactured wool, etc.—before or after dyeing or bleaching—renders the wool unshrinkable, it at the same time makes it dry, rough, hard, papery and similar to pasteboard to the touch, and therefore partially useless. It has been the aim of experimenters for some years to obtain the unshrinkable properties given by chlorine without the great disadvantages accompanying such treatment, and the efforts of a Roubaix dyer in this direction appear to have met with a certain degree of success. His object has been to restore the chlorinated, unfelted, and unshrinkable wool to its other natural properties, such as elasticity, suppleness, softness to the touch—in a word, to soften it, and to thus obtain wool analogous both in appearance and touch to ordinary wool, but being in addition unshrinkable.

The processes for chlorinating wools are numerous, and generally consist in treating solutions of calcium hypochlorite with an acid, or in directly employing chlorine gas itself. According to the proportions of the agents employed, the

transformation will be more or less complete, and wool become absolutely unshrinkable with 12 per cent. of calcium hypochlorite and an equal proportion of acid. By reason of the more powerful affinities of chlorinated wool, the latter is capable of attracting, when cold, the bases of a number of salts of weak acids—such, for example, as the basic mineral salts, organic salts, acetates, oxalates, tartrates, citrates, sulphocyanates, etc.—in such a manner as to form new combinations which give a touch quite different from that of the chlorinated wool, the modification depending upon the nature of the base of the salt employed. In particular the salts of aluminum, zinc, tin, iron and chrome have the property of considerably softening chlorinated wool so as to render it at least of equal quality to natural wool. The salts of the alkalis and alkaline earths from the following acids—that is to say, aluminates, zincates, stannites and stannates—can be also employed for the same purpose. The reaction can be effected simply by immersing the materials treated in a bath of one of the salts above mentioned; for example, a bath can be employed which is obtained from 125 parts by weight of acetate of alumina at 10 deg. Re., and 2,500 parts of water to 100 parts of wool. The reaction can be quickened by heating the bath to a temperature more or less high. At the end of a suitable interval—say about one hour—the wool is washed, and then dried by exposure to the air. At first it preserves its rough touch, but after a time, especially when left exposed to the air, its softness gradually completely returns to it. The bath is not exhausted, and for another operation can be renewed so as to have the same richness as at first.

The chlorinated wool energetically retains all substances which it meets, and certain acids or washing does not eliminate them; this should be taken note of, as the presence of these acids hardens the wool, especially in soapy baths, which are often employed before or after finishing or dressing. It is therefore necessary to eliminate these acids and prevent the formation of a precipitate of fatty acid during subsequent washing operations, by treatment with a suitable weak alkali such as soda, potash, ammonia, lime, magnesia, etc., caustic, carbonate or bichromate. This treatment can be applied directly after the chlorinating or the softening process. For example, the neutralization can be effected with about 50 grms. of crystallized carbonate of soda per kilogramme of wool.—*Ex.*

DECOLORATION OF SHODDY.

A simple, yet safe process for removing the color from woollen rags and shoddy is greatly needed in the textile industry, and has been since the demand increased for light-colored or undyed shoddy, says an exchange. Unfortunately, the processes most easily carried out have injurious effects upon the wool fibers. Recently, however, two German chemists have succeeded in finding an excellent chemical for the purpose in hydrosulphite acid, a product of reaction of zinc dust upon bisulphite, which, when employed in an aqueous solution at boiling temperature destroys the color of the woollen rags after a short immersion. Of the hydrosulphite solution, only a comparatively small quantity is required, and with most of the rags, especially those of cloth, stockings and woollen fabrics generally, a thorough decoloration is said to be obtained, so that the goods manufactured from them appear almost white, and as if manufactured from fresh wool. As with this process the solidity, touch and elasticity of the wool fiber is in no way injured, there is obtained a great improvement in the rag material furnishing regenerated wool, which constitutes a result of considerable importance. The following is an example of the manipulation of the process: 100 kilos, of fully dyed rags (bordeaux, scarlet red, navy blue, green), so-called "Thibet," are boiled with about 1,500 to 2,000 litres of water