

Raw Cotton Efficiency

By R. C. Lipscomb, Spartanburg, S. C.

THE time is fast coming when the manufacturer of cotton shall look to getting efficiency from his raw material. I appreciate fully when I make this statement that the most of the cotton manufacturers will say that they do look after this, and spend large sums of money in receiving their cotton. The subject is so large and contains so many difficult problems—that is to prove—that I am just a little skeptical in making known some facts I have discovered in my study of cotton. Nevertheless, the facts remain the same.

Most of the manufacturers of cotton spend each year about 70 per cent. of their entire manufacturing cost for raw material. This being true, is it not time we were giving more attention and thought to the efficiency of cotton, especially so when we take into account every machine, and even nowadays are looking after the health and welfare of labor in order to get efficient work from them and the machinery. As before stated, there are so many things that we come in contact with when we begin to study the efficiency of cotton that we hardly know where to begin. However, I believe the following few suggestions, if studied, will prove a great benefit to manufacturers.

DAMAGE BY COMPRESSING

First, have you considered how much more inefficient cotton is after it has been compressed? I am sure that there is from 2½ to 5½ per cent. more waste in cotton after it has been compressed than in uncompressed cotton. We should solve this problem at once if the waste is greater in compressed cotton. Then the efficiency of compressed cotton is not equal to uncompressed because the compression damages the fiber. This question is of more importance than most manufacturers consider.

SPINNING VALUE

Next, are you getting the best cotton for the kind of work you are giving it. The spinning value of cotton is the most important question I know of to-day to the manufacturer. Every manufacturer should at once begin this study, and any information he obtains he should be glad to give to his brother manufacturers. There is such a varied difference of opinion as to staple and character of cotton, it seems to me that there is only one course for the manufacturer to pursue, that is to study his own case. If you are buying cotton from one certain section, buy from two or three others and then run them at the same time, keeping as nearly as possible accurate records. Buy your supply from the section that gives best results as soon as possible. The mere fact that you can buy cotton to-morrow at one-fourth to one-half a cent lower does not mean that it is the cheapest cotton for you to purchase. The most important thing for the manufacturer to keep foremost in his mind is—production, and as near perfect product as he can obtain. You will find that cotton gives you best results this year from one section may give you the poorest results next season, owing to the change in season and possibly seed. So every season I would suggest to every manufacturer that he try out several different sections and buy his supply from the one that gives best results. Do this every year and keep your records, say for five or even ten years, and you will be amazed at the results.

TEST YOUR COTTON

The Government is doing all in its power to help both the manufacturer and the farmer—why should not the manufacturer make up his mind to help

himself. Every manufacturer should *by test*, not by what someone else has done, determine what cotton is best suited to his particular mill, if it is cheaper to use middling than good middling, and so on in each grade. Study your waste problem, and keep as nearly accurate records as possible. Watch your card waste, notice your spinning waste. These two if properly watched, I believe, will give you some very valuable information. In watching the two wastes take into account your production, for after all that is the end we are working to. If your production is not up this month the chances are that you will find the reason in your cotton. If production is to be looked for, you must have approximately perfect carding, spinning and weaving. If you do not get production your manufacturing cost goes up. I do not care how up-to-date your machinery is, and you may also have the best superintendent and overseers, but they cannot get off production unless they have the proper cotton, and cotton efficiency is going to be foremost in the better manufacturer's mind. We are going to have to come to it as competition grows.

A DOCTOR FOR COTTON

By all means try and get someone to study your case. It may seem like a large sum of money thrown away (and will be if you do not get the proper doctor), but do not expect the accomplishment of everything the first month. There should always be hearty co-operation between each foreman and the man that is studying your cotton. They should deal in facts at all times, and it should be understood in the beginning that they both are after the same end, to increase production and lower cost at all times, leaving out personal gains and loss.

Don't be afraid to experiment. If you have a large plant and consume large quantities of cotton, buy a small card and spinning frame, also other machines, for your cotton man, so he may study your needs. Give him the proper support and let him know you are willing to co-operate with him, also that you expect results. If he has a special lot of cotton he wants to run through the beaters at a certain speed, let him try it out. The chances are he and you will be benefited. By all means have the cotton man, card foreman and spinning foreman make all tests together each day.

It would be well to have a card system of this, with the full weather conditions each day when the test is made. There is no better time to study the efficiency of cotton than during the so-called "dog days." Most of us have walked through the spinning room at this particular time of the year to see the room full of "fly waste," that is waste resembling the cotton fiber, also the work running badly, with the help in a bad humor. There is a way to correct this evil—cotton efficiency.

Knowing that there is plenty of room for every one to contribute to this question of cotton efficiency, I earnestly look forward to expressions on this subject.