CARD SETTING.

"Hobo," criticizing a writer in The Southern Textile Excelsior on card setting, says. I agree with him that a drum grinder will do more work but I dispute the fact that it will do better work. The traverse grinder passes the entire width of the card, and even if the emery is not laid exactly smooth it is obliged to grind a straight surface. If the shaft is out of true it can be easily detected by the ear. It is almost impossible to lay 40 inches of emery on a drum grinder so that it will present an absolutely straight surface. If it has a traverse of 1 inch any high place on it will grind out one inch in the card to correspond, and vice versa, any low place on it will fail to grind one inch of the card. In setting up new cards there are several very important points that are often neglected.

First—The cylinder and doffer should be perfectly clean and free from grease and rust. This will prevent the wire from rusting or the clothing from rotting.

Second—The wire should be very carefully rubbed down on the inside of the clothing. If this is not done any loose wires will be bent when the clothing is put on and afterwards work loose.

Third—It is best to draw the clothing twice. If the clothing is drawn on one day and left until the next morning and redrawn it will be found that about 15 inches of slack will be taken out, and it will fit the cylinder very much more tightly than at first.

Fourth—The clothing should not be tacked across until after the first grinding. The clothing cannot be laid exactly in its true position, which is a perfect spiral, and unless it is given an opportunity to find its own position before being tacked there will always be a strain on it.

Fifth—It is best to grind first with a drum grinder and then finish with a traverse grinder, but don't get in a hurry and set the drum grinder hard enough to hook the wire and then polish the top of the hooks with very light traverse grinding.

BLEACHING YARNS.

A plant for the bleaching of yarns by means of ozone, or ozonized air, was established recently at Greiffenberg, in Silesia. The plant has been provided by the well-known electrical firm of Siemens & Halske, Berlin, who have given much attention to the question of the production of ozone and its application to bleaching, many tests having been made in their laboratories, which have been visited by various persons interested in bleaching. Bleaching by ozone is a natural system of bleaching; it is the active agent in the ancient system of air bleaching. Attempts have been made in times past to procure ozone in a quantity sufficient to enable it to be used as a bleaching agent, but none of these were successful. However, the great development of electricity during the past decade has caused inventors to pay some attention to the production of ozone by electricity, and several ozone generators are on the market. Two of these, the Yarnold and the Andreoli appliances, have proved effective, and are in use in many places. The bleachworks at Greiffenberg does not differ from other bleachworks, except in the fact that it has a plant for the generation of ozone and a chamber in which the yarn is treated with the ozone or ozonized air. The ozone plant consists of the electrical generator and a pump which forces air, first through a series of driers to free the air from moisture, then though the ozonizer and into the ozone chamber. The ozone chamber is only an ordinary one, fitted with rods on which to hang the hanks of yarn, and tubes to convey the ozonized air. The hanks are hung damp in the chamber, and the ozone is sent in until observation shows that the yarn has become fully bleached. It is much more economical to have two chambers, and to send the ozone alternately for half an hour at a time, first into one and then into the other The interval of rest allows the ozone already in the chamber to react and become absorbed by the yarn, which is thereby bleached. It possibly takes longer to bleach cotton by ozone than by chlorine, but the advantage is gained of there being no possible change or any damage to the cotton fiber Ozone should be of some considerable service in the bleaching of wool and silk. It would be far superior to sulphur, in that the white produced would be permanent and not come back again when the silk or wool were washed; further, there is no liability to any defects, as the case with sulphur bleaching —Textile Mercury

AN IMPROVEMENT IN LOOMS.

Jonas Northrop and Edward S. Stimpson, of Hopedale, Mass., assignors to the Draper Company, of the same place and Portland, Me., have patented an invention which relates to automatic filling-supplying looms wherein the supplying mechanism is operated at the proper time to effect the introduction of a fresh supply of filling. As the fresh supply of filling is transferred the nearly-exhausted filling carrier is ejected from the shuttle into a box or suitable receptacle, carrying with it the end of filling thread leading from the edge of the cloth; and this invention has for its object the production of means to part or sever this filling so that the length of thread extending from the ejected filling carrier will be as short as possible, the length of filling between it and the cloth being engaged by a thread clamp or holding device and moved into position to be severed adjacent the cloth by a thread-cutting temple The piece of thread thus cut in two places between the shuttle and the cloth is retained by the clamp and moved away from the shuttle path, and before the next change of filling is effected the clamp is opened to release this piece of thread.

THE VALUE OF A HORSE POWER.*

My attention has been recently called to the question noted above, by a paper read by Mr. George L. Rockwood, of Worcester, before the American Society of Mechanical Engineers, and it leads me to bring the question before the association in these forms, dividing it as follows: Do you know how much your power costs you per annum, either steam or water? What per cent. of the cost of labor and other expenses do you pay for power; and if you should move an inland mill to the seaboard, to save cost of freight and coal, might that saving not be overbalanced by the extra cost of labor, and other expenses not covered or affected by freight charges?

Mr. Rockwood's paper is a short analysis of the evidence given by a number of well-known engineers, in the various cases of suits brought by the mill owners on Blackstone river, against the city of Worcester, for the abstraction of the water of Kettle brook for municipal purposes, and the average value of a h.p was summed up by Mr. Kent, one of the engineers, as being $50 per annum, or the cost of replacing it by steam.

This agrees exactly with the conclusion which I came to myself, long since, as the fair cost of small steam powers in New England, but it is confronted by a different set of statements, made by other engineers, as to the cost of steam power in large quantities, where these engineers have been employed by mills who sought an abatement of taxes and a depreciation of the value of their water power plant, and in these cases the engineers have assumed that power in large masses of 1,000 horse power or more could be furnished on the seaboard by engines and boilers of modern construction for a maximum of $20 per horse power, and from that to a much lower cost.

*Extracts of a paper read by Col. Samuel Webber, at the recent meeting of the New England Cotton Manufacturers' Association.