NEW TREATMENT OF RHEA FIBRE.

The *Bradford* correspondent of the *Draper's Record* says, in reference to the new Ferguson process of treating Rhea fibre that this was being carried on from the raw material to the finished yarn at the Phœnix Mills, Brighouse The raw material is certainly of a most unpromising appearance, closely resembling in appearance heaps of dried stalks of the common stinging nettle, and obtainable in practically unlimited quantities at a cost of not more than a penny per lb The method of treatment is most simple, and quite does away with the old-fashioned decortication processes which have been a feature of all previous treatments of the various fibres of the Rhea character All that is required appears to be to immerse the raw fibre in a strong alkaline bath, and then, after a simple bleaching process, to put the fibre thus cleared of gum and pith through exactly the same processes of dressing, combing, and spinning as are required for the preparation of waste silk yarns, which are largely produced in this district of Yorkshire There can be no doubt about the successful production of yarns made from Rhea fibre in this manner, as the whole of the processes could be seen in actual course of performance, and the yarns in the completed state seemed most satisfactory, both when composed solely of the fibre and also in combination with wool and with silk in various proportions The fibre itself, when in the combed state, has a remarkable resemblance to mohair in the form of combed tops, possessing also a somewhat similar lustre to mohair The leading objections to the use of yarns made from Rhea and similar fibres have hitherto been that the want of elasticity which they have had has been a great drawback to their use in dress fabrics, on account of the way in which creases in the fabric were retained, and also that as these fibres were vegetable in origin, and followed the peculiar formation of all vegetable fibres, they were not so warm or healthy as fabrics composed of animal fibres, such as wool and silk. The patentee claims that the Rhea fibre yarns treated by this method are more elastic and kinder and warmer to the touch than those prepared by the old methods, and are also less inflammable Whether they will ever be considered sufficiently brilliant to replace silk, or lofty enough in appearance to replace wool, will depend largely on the price at which this product can be put on to the market in bulk, as the necessary intricacies and cost of preparation quite precludes its competition with cotton The yarn has been dyed both separately and in conjunction with wool, but for the present the patentee seems to place most faith in the use of the yarn in a white state

It is said that the Rhea yarn is not very inflammable, that the mixed yarns and the pure Rhea yarns are perfectly strong, and that the thread lends itself readily to the gassing or clearing processes

PROFIT IN WASTE.

So far as the mill itself is concerned, the method of accomplishing this result is simple, as most of the work falls upon the spinner The mill carpenter is needed first, and he should make six boxes for each mule, the same to be made of ⅜ inch white pine, perfectly smooth, and the boxes to be three feet long, four inches wide at the bottom six at the top and about twelve deep These are to be screwed to the front of the carriage of the mule, says the *Wool and Cotton Reporter*, on the lower guide board, three on each side at equal distances apart. With a stencil print on two, one on either side, "soft ends," on two others "hard ends," and on the remaining two "middle ends" This is the manner in which the mules are fixed up with boxes in the mill The spinners use this equipment as follows If an end snaps off before any twist goes in, the hanging end is quickly gathered up by the spinner and is promptly tossed into the box marked soft ends. If the end has received a few hundred turns of twist, it goes into the middle box, and if wholly twisted into the hard box At the end of the day all three sets of boxes are usually filled with clean and assorted waste The great saving is made in that in the soft box, for this is worth just as much as formerly, as it can be put into the card feeds and run through again, whereas, if it had been mixed with the other, its value would come down to that of the latter The waste in the middle boxes is fairly good, and can be reground without much breakage of fibre, while that in the hard box must go through the regular shoddy grinding processes before it can be used again It will be argued that spinners working by the piece will not take the trouble to do all this, but will let the waste scatter about on the floor. This depends altogether upon the discipline of the mill. The narrator has had operatives come into his employ from other mills, or as beginners, and these have at times proven so shiftless that the appearance of the floor about their work was anything but pleasing to the man who has paid for the valuable stock which is being walked upon and scattered about as it were valueless A few lessons on neatness and economy have often changed these people to such an extent that one of the worst of these, who at first waded in waste unconcerned, was heard to remark that "I can't work when there's waste underfoot" If the overseer can get the help into the habit of keeping the floor clear from waste, they will cling to the custom, and the rest will come easy

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WINDOWS of workshops, toilet rooms, etc., are often painted either to soften the light or to shut off the view. A very lasting and uniform coat of paint is obtained in the following manner The glass is cleaned thoroughly with acidified water and fossil meal and a solution of 10 parts of stale beer and 1½ parts of potash water glass is poured over it After drying the glass is heated moderately and as uniformly as possible, when it is ready to receive its coat of paint, for which the following prescription is given 100 parts (weight) of Cologne glue are allowed to soak in cold water for several hours The water is then poured off and the glue is put into a pot and melted. While the glue is melting, 200 parts of linseed oil are heated until the temperature of both substances is about equal As soon as no more air bubbles can be observed in the glue, the linseed oil is added gradually under continual stirring The mixture has to be kept hot over a slow fire for an hour and stirred without interruption For stirring a round stick is the best, as an angular one will produce bubbles Then 200 parts of slightly heated turpentine or camphor oil are added and at last the coloring substance and 150 to 200 parts of water All these additions have to be made slowly, while stirring must not be neglected. The paint is spread on lukewarm and is dry within six hours