

more varied resources, only in process of being utilized; the other parts of Africa under British control; and India and the other scattered dependencies are capable of undreamt of achievements. Their very geographical separation under the changing aspect of transportation problems is an element of influence and power in the British Empire of the time to come. And yet all depends on the moral qualities at the back of these material resources. "Ill fares the land to hastening ills a prey, where wealth accumulates and men decay." The Power that turned Nebuchadnezzar out to eat grass and become a companion to the ox, at the very zenith of his commercial power, and while his "resources" were most highly "developed," is yet in control of the destinies of nations. A nation that estimates its greatness only by its material wealth is already on the down grade, though the people may not realize the situation till their momentum is too great to apply the brakes.

#### FLAX BINDER TWINE.

The *Journal of Fabrics* has on one or two recent occasions called attention to the suitability of flax as a raw material for binder twine, especially in Manitoba and the North-West, where so much twine is consumed and where flax can be successfully grown. The manufacture of this class of twine is likely to become an important industry in the near future. The Deering Harvester Company and the McCormick Harvesting Machine Company, both of whom are establishing works in Canada, have been experimenting for some time, and with such success that a number of carloads of twine made from flax were distributed and used in the North-West the past harvest. Reports indicate that it was in every way successful. It spins even and makes a very strong twine, stronger by test than Manila. It is difficult to ascertain the exact facts, but the *Cordage Trade Journal* understands that a large amount of special machinery for the manufacture of this twine has been ordered from England, in addition to machinery that is being made in this country by the harvester people, and it is also reported that a large amount of raw material is on hand for manufacture into twine for next season. The harvester people will give no information regarding their processes, but it is reported that they have developed three, or possibly four, distinct processes of preparing the fibre for spinning, each of which is found practical and on a commercial basis. In one method the straw is retted by a quick chemical process, while two other methods reduce the straw into fibre by mechanical means, the unretted straw going in at one end of the machine, and coming out at the other end in a sliver ready for spinning.

The *Journal* says that hard fibre men in Chicago are inclined to be sceptical regarding flax, basing their

opinion on the numerous failures of the past. Taking corn harvesters as an analogy, it points out that a million dollars was spent before a practicable machine was reached, and the money was considered well spent. Flax straw can be easily and cheaply produced—in fact it is the cheapest raw material of its class in the world. The only thing needed is machinery to convert it into twine. It is said that has already reached such a basis that it can compete with hard fibre at four cents and still make a large profit.

A great deal of the flax straw is now burned to get rid of it, so that it seems reasonable that it could be laid down at twine factories, established in the neighborhood, at a cost of not more than one cent per pound of twine. With automatic machinery the cost of manufacture should be very low, in fact, so low that flax twine might entirely supplant hard fibre twine.

The *Cordage Trade Journal* suggests that other uses might also be found for flax fibre. A refining process might be found that would complete the work of retting or separation so as to produce a fine soft fibre that, for many purposes, would be superior to cotton, as well as cheaper.

Between the possibility of flax fibre and sweet clover, the latter of which has already been suggested in the *Journal*, we see no reason why Canadian farmers should not have cheaper binder twine, besides making us independent of foreign countries for the supply of raw material for an article of ever-increasing consumption.

#### WOOL SUBSTITUTES.

During the last few years there has been much agitation on the shoddy question in the United States, and recently the question has crossed the Atlantic. Of course the subject is not new, but it has received fresh attention from a resolution relating to the need for legislation on the compulsory distinction between wool and wool substitutes, brought before the Chamber of Agriculture at London. The aim seems to be to bring wool goods under the merchandise marks act. Such a suggestion would be very difficult to carry out in practice, and the British wool growers, who are the complainants, would derive very little benefit, for the reason that the many grades of shoddy and mungo and the various mixings of wool and cotton tend more towards the imitation of merino wools, and there is very little chance of anybody buying any of these substitutes in mistake for British wool. Then, again, shoddy and other substitutes can be worked up into such a tasteful and durable form that they are unknowingly worn by many who would at first scorn the suggestion, but who would continue to buy it after they