

largest in the world, and will contain forty-two 400 spindle wide gauge mules. The weave room will be equipped with 500 of the latest style Crompton and Knowles looms. The mill will be run by electricity, power being generated on the premises, by two engines of 2,500 and 800 horse-power, respectively. There will be a separate motor for each room, so that in case of a break on any floor the whole mill need not be shut down. This is in accordance with the most advanced ideas of motive power. In other ways, the mill will possess the most modern equipment, and in that respect will rank as one of the first in the world.

—March 17th was the 96th anniversary of the death of David Dale, one of the fathers of the cotton manufacture in Scotland. In 1783, in company with Sir Richard Arkwright, he commenced the celebrated New Lanark Cotton Mills, and in a few years became a rich man. Like many other pioneers of industry, he had numerous difficulties and prejudices to overcome. His great object in promoting cotton mills was to furnish profitable employment for the poor, and to train to habits of industry those whom he saw ruined by a semi-idleness. Robert Owen, the great social reformer, became his son-in-law, and succeeded him in the management of the cotton mills. Mr. Gibson, founder of the Marysville cotton mills, in New Brunswick, appears to have been actuated by like philanthropic motives in establishing his mills.

—Elsewhere we refer to the losses made by the Dominion Cotton Co. during the past year. The Merchants' Cotton Co. seems to be in quite as bad luck. It has been paying 8 per cent., but the last half-yearly dividend was not declared. The reason came out at the annual meeting in Montreal, when it was announced that, owing to the high prices paid for raw cotton, the old profits on the manufactured lines could not be made owing to current prices. Although the company bought their raw material at what looked to be favorable figures—considerably lower than the previous year—the expected profit on the goods could not be realized. The cotton mills, apparently, have to buy a stock of raw material a year ahead and are, therefore, more or less at the mercy of the ensuing trend of the market.

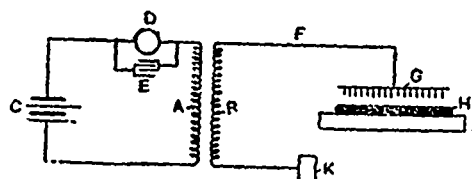
—The Textile Record defends shoddy, and regards recent legislation in the United States as against the interests of the poor man. The ingenuity of the manufacturer, it says, now permits him to clothe himself decently and comfortably for little money, and competition is so sharp among dealers that he usually gets just about what he pays for. That he will be any happier, any more comfortable, any richer, if he shall get an analytical statement with his suit, explaining what it is made of, seems unlikely; but, whatever may be the

feeling of the retail dealer in clothing, it is sure manufacturers of cheap fabrics do not care whether the goods are or are not tagged with such a statement. The rescue from waste of the woollen material in rags is useful in precisely the sense that valuable acids and other products are rescued from sawdust or from petroleum distillation. In each case, the general wealth of the community is enlarged. The oleomargarine business, for example, is a business of great importance, and when the product is sold for exactly what it is, no one is harmed. On the contrary, there is much benefit to the people. Shoddy has a far worse name than it deserves. Notwithstanding the opinion of the Record, we believe the anti-shoddy legislation to be in the right direction. Why should clothing be adulterated any more than food, for instance?

### ELECTRICITY IN FIBRES.

In many preparing machines, and sometimes even in the spinning frame and loom, the static electricity generated in the fibres by friction is a source of trouble. This is especially noticeable in dry weather or in a dry room where the atmosphere is incapable of carrying off the electricity as it is formed. Wool and cotton are both subjected to this trouble, especially in the combing and carding processes, while the nature of silk makes it specially liable to it. Charged fibres or yarns have a tendency to bristle or stand out, and so fibres will make rough yarns, or spun threads will catch and entangle with each other or some other object in the vicinity.

Many devices have been tried to obviate this evil. The easiest seems to be that of keeping the air of the rooms moist, while another is an arrangement which ensures that the parts of the machine which the fibres touch shall be metal and metallically connected to the ground. A later device has recently been patented by a London firm, and is explained by the accompanying diagram.



A and B are the primary and secondary circuits respectively of an induction coil. The primary coil is connected in circuit with a battery C (or any other source of direct current) and an interrupter D of any suitable type, this interrupter being shunted by a branch circuit containing the condenser E. One terminal of the secondary coil B is connected by an insulated wire F with a series of metallic points G, arranged in proximity to the wool H or other material in course of manufacture. The points G are supported by a suitable attachment on the machine performing the operation of carding, combing, spinning, etc. I represents the rollers, combs, or other parts of the machinery employed in the manufacture of these materials. The other terminal of the secondary coil is connected to earth K.

The essence of the process consists in applying to the wool or similar material under manufacture a charge of electricity for the purpose of neutralizing the charge collected in it and thereby de-electrifying the material. Instead of de-electrifying the wool while it is actually on the machine it may