Sargent & Calvert.

Burring Mach.

No. 19,585. Patented Mar. 9, 1858.

Fig. 1.

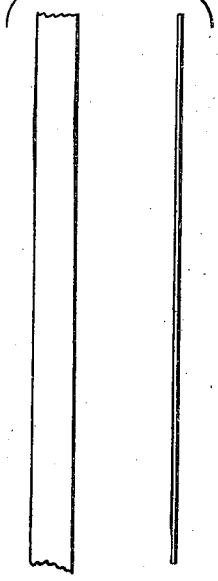


Fig. 2.

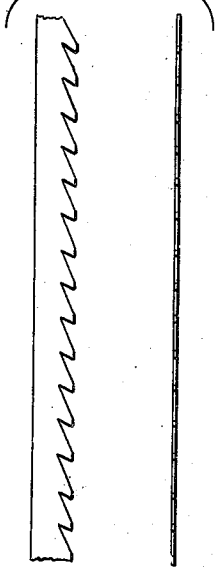
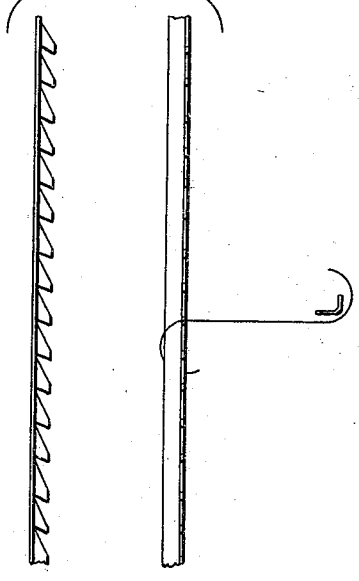


Fig. 3.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES G. SARGENT AND FRANCIS A. CALVERT, OF LOWELL, MASSACHUSETTS.

CLOTHING FOR CARDING-CYLINDERS.

Specification of Letters Patent No. 19,585, dated March 9, 1858.

To all whom it may concern:

Be it known that we, CHAS. G. SARGENT and FRANCIS A. CALVERT, of Lowell, in the county of Middlesex and State of Massachusetts, have made certain Improvements in the Clothing of Carding-Cylinders, which clothing is applicable to machines for burring, picking, and carding wool, cotton, and other fibrous materials, the following being a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification.

Our present invention is an improvement upon the card clothing represented in Letters Patent granted Francis A. Calvert on the 23d January 1849, for "improvement in the manufacture of cylinders for burring wool." The clothing therein employed can only be employed with a metallic cylinder of peculiar construction.

To produce a clothing which shall possess all the advantages of the above together with the capability of being attached to any species of cylinder whether of wood or iron is the object of our present improvement which consists in bending up the teeth at right angles to the strip of flattened wire upon which they are formed, in the manner and for a purpose which will now be described.

Iron, steel, or other wire of a suitable size is rolled between plain rollers so as to produce a thin flat strip or tape as seen in Figure 1, of the accompanying drawings. The teeth are then formed upon one side of this strip as seen in Fig. 2, and these teeth are afterward turned up at right angles to the strip as seen in Fig. 3, or the teeth may be bent by the same punch which forms the teeth, it being so formed that as it descends to form one tooth, it shall bend down the one last made. The finished clothing is seen in end view at *a*, Fig. 3.

We will now enumerate a few of the advantages which this species of clothing possesses over any other yet known. 1st, it may be secured to a wooden cylinder by means of metallic staples or nails, which is not the case where the teeth are in the plane of the strip which sustains them—2nd, it may with equal facility be secured to the surface of a metallic cylinder by solder or by tacks passing into the wooden plugs usually employed for the purpose.

In addition to the above the advantages which result from the use of this species of clothing are very great, particularly when employed intermediate between the coarse clothing of the picker and the fine clothing of the carding machines. Locks of wool and flakes of cotton, &c., are continually liable to be left by the various preparatory machine, which are not in a suitable condition to be submitted to the carding engines, which are in consequence injured by the labor that is thus thrown upon them. Where the cotton is subjected to the action of the above described tooth, which is at the same time rigid, strong and fine,—the fibers are more completely and perfectly drawn out and separated before they are submitted to the cards, which are thus relieved of much work and the operation itself is more perfectly performed.

We are aware that clothing for carding and burring cylinders has been made by punching up teeth from short strips of sheet metal, which were secured longitudinally to the cylinder, and we therefore lay claim to no such invention but .

What we claim as our invention, and desire to secure by Letters Patent is—

The within described method of making clothing for burring and carding cylinders, the teeth being formed upon flattened wire and bent at right angles to the plane of the strip of metal which sustains them for the purpose herein set forth.

FRS. A. CALVERT.
CHAS. G. SARGENT.

Witnesses:
WM. A. RICHARDSON,
E. A. ALGER.