(No Model.)

## S. ROBERTS.

## FOUNDATION OF CARD CLOTHING.

No. 397,441.

Patented Feb. 5, 1889.

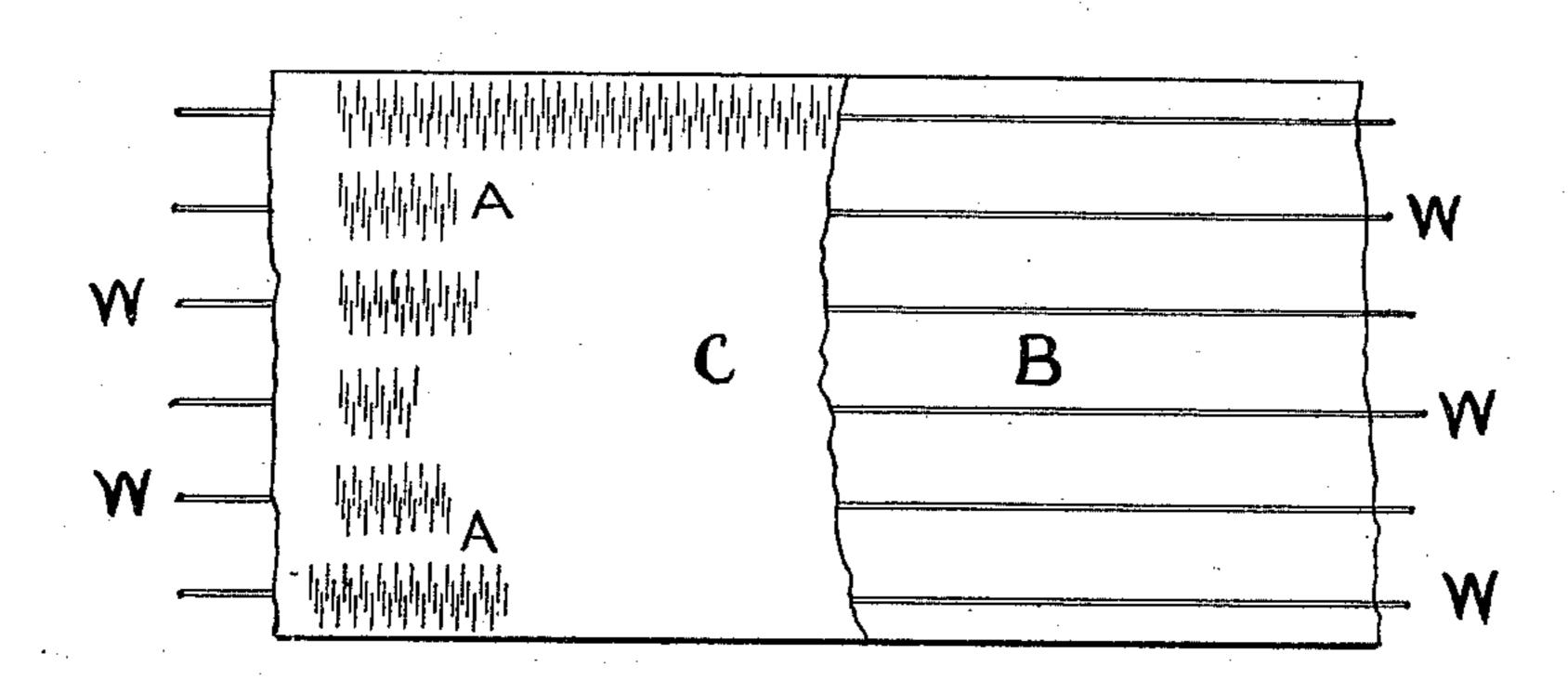
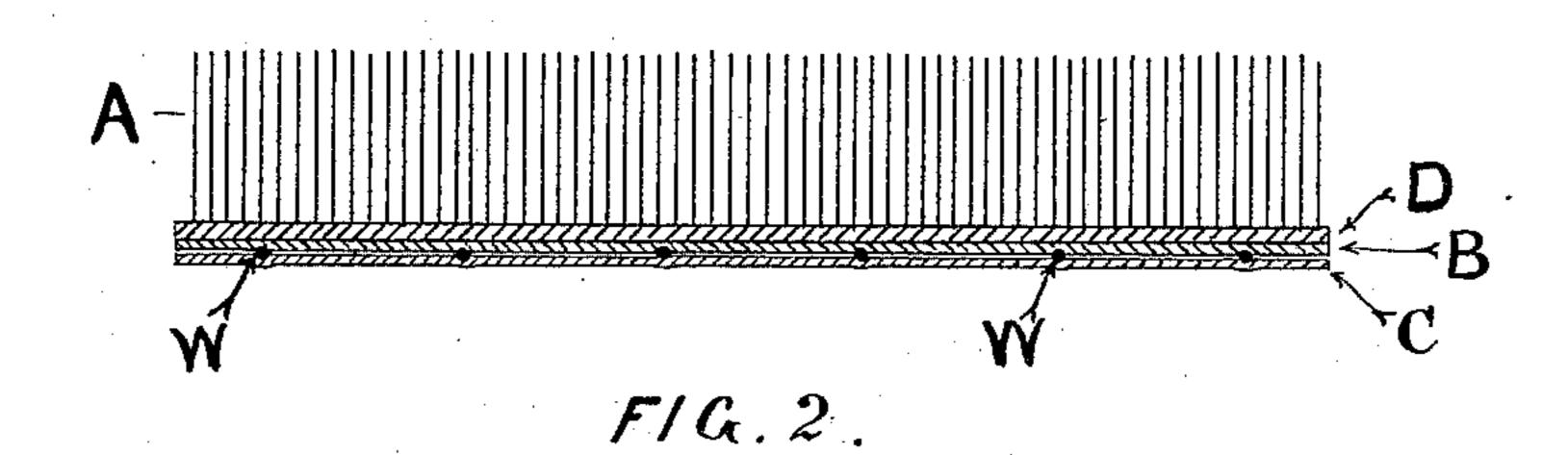


FIG. 1.



WITNESSES:

G. J. Griswold.

INVENTOR

Squire Roberts
by his Attorney
Hubert Howson

N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

SQUIRE ROBERTS, OF CLECKHEATON, COUNTY OF YORK, ENGLAND, ASSIGNOR OF ONE-HALF TO JOHN VOSPER CURRY, OF SAME PLACE.

## FOUNDATION OF CARD-CLOTHING.

SPECIFICATION forming part of Letters Patent No. 397,441, dated February 5, 1889.

Application filed January 18, 1888. Serial No. 261,133. (No model.) Patented in England February 22, 1887, No. 2,727.

To all whom it may concern:

Be it known that I, SQUIRE ROBERTS, a subject of the Queen of Great Britain and Ireland, and residing at Cleckheaton, in the county of York, England, have invented certain Improvements in the Foundations of Card-Clothing for Carding Fibers, (for which I, along with my assignees, Henry Law and John Vosper Curry, have obtained Letters Patent in England, No. 2,727, dated February 22, 1887,) of which the following is a specification.

This invention relates to certain improvements in the construction of the foundations for card-clothing which are now commonly em-15 ployed in lieu of leather formerly used for this purpose, the great cost of leather and its inequality as to thickness and pliability leading to the adoption of a woven fabric coated with rubber and now universally known as 20 "cloth-filleting;" but experience has shown that whereas cloth-filleting has many advantages over leather, it nevertheless has one radical defect, which is the object of this invention to remedy, and that is that after being 25 worked a time the foundation elongates and becomes slack on the surface of the card-cylinder, thereby causing what is technically known as "running," the result being bad carding or inferior opening of the fiber, and 3° considerably shortening the life of the whole of the clothing of the card.

In the accompanying sheet of drawings, Figure 1 represents the under side of a piece of card filleting constructed according to this invention, showing a few of the crowns of the dents or teeth A, which are inserted in the ordinary manner; and Fig. 2 is a cross-section

of the same drawn to an enlarged scale, the teeth or dents A being on the upper surface.

The card foundation may be composed of 40 two or more thicknesses of cloth and rubber, the drawings illustrating a card foundation composed of two sheets of cloth of strong texture, indicated by the letters B and C, and a covering of sheet-rubber, D, the latter and 45 cloth B being cemented together in the usual manner, and in order to provide a positive remedy for the before-mentioned well-known serious defect a number of metallic wires, W, are placed lengthwise, by preference, between 50 the two sheets of cloth B and C, which are also cemented together in the same manner as hitherto, thereby embedding in the foundation pliable material practically non-elastic, which acts as a metallic warp, greatly adding to the 55 strength of the cloth, and absolutely preventing the elongation or running, as is the case with clothing as hitherto constructed after being in use for a short time.

I am aware that it has been proposed to 60 combine metallic warps or strips with belting or hose; but

I claim as my invention—

Cloth-filleting of rubber and cloth with longitudinal metallic wires between the layers 65 and with card teeth or dents passing through this filleting, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SQUIRE ROBERTS.

Witnesses:
E. M. Bray,
JOHN GILL