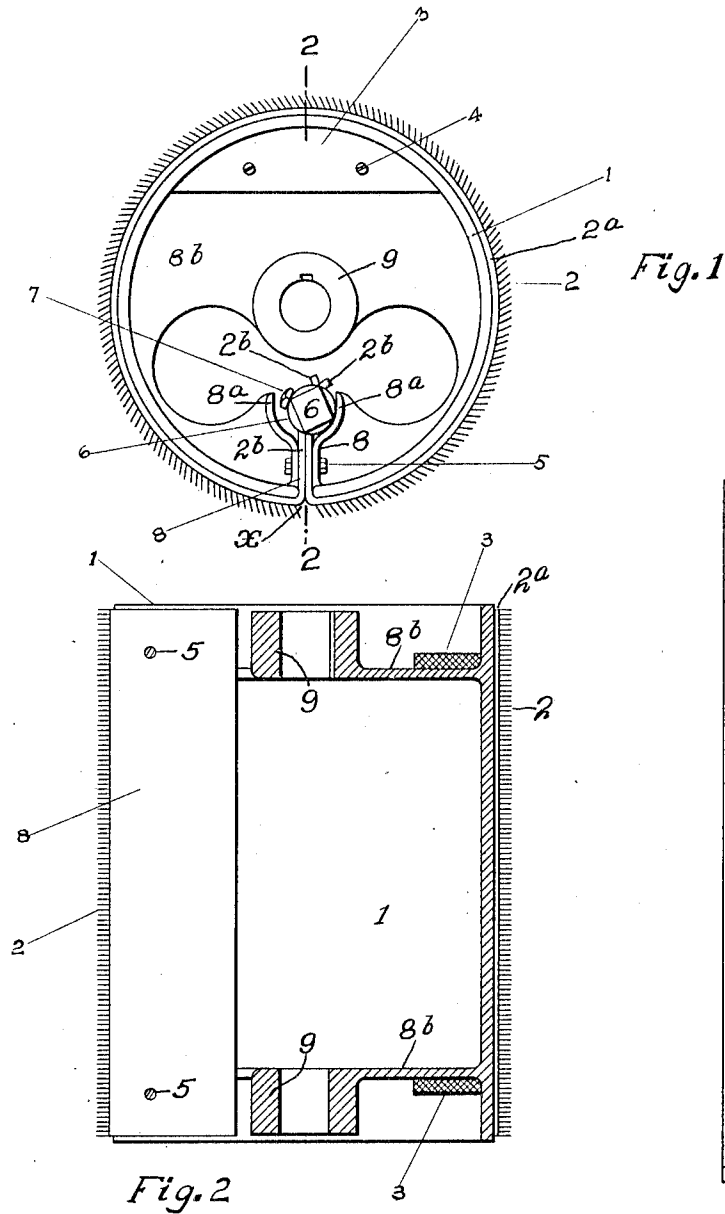
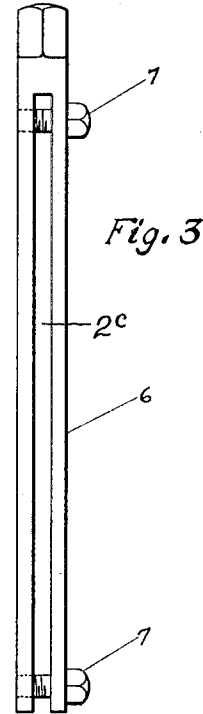


B. C. CALDERWOOD.
CARD CLOTHED ROLL.
APPLICATION FILED APR. 30, 1913.

1,084,786.

Patented Jan. 20, 1914.



Witnesses
Ralph Olney Smithson
Andrew Eschil Rylander

Inventor
Benjamin Calderwood

UNITED STATES PATENT OFFICE.

BENJAMIN CRABTREE CALDERWOOD, OF VALLEY FALLS, RHODE ISLAND, ASSIGNOR
TO PRICE-CAMPBELL COTTON PICKER CORPORATION, OF NEW YORK, N. Y., A COR-
PORATION OF DELAWARE.

CARD-CLOTHED ROLL.

1,084,786.

Specification of Letters Patent.

Patented Jan. 20, 1914.

Application filed April 30, 1913. Serial No. 764,515.

To all whom it may concern:

Be it known that I, BENJAMIN CRABTREE CALDERWOOD, a citizen of the United States, residing at Valley Falls, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Card-Clothed Rolls, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvement in card clothed rolls whereby the card clothing is firmly secured around the periphery of a split cylinder in such a manner that the surface of the card clothing is left unbroken over the periphery of the cylinder.

The objects of my invention are: first, to provide means whereby the card clothing may be quickly secured to or detached from the roll without puncturing the card clothing; secondly, to stretch the card clothing evenly and firmly in place without injury; and thirdly, to provide means to prevent cotton or dirt from gaining access to the chamber of the cylinder whereby the same would become clogged and impaired in efficient operation.

In the accompanying drawings Figure 1 is an end and Fig. 2 a central lengthwise sectional view at line 2—2 of Fig. 1 of my improved card clothing roll; and Fig. 3 is a view of the key (removed) by the use of which untoothed ends of a backing of a strip of wire toothed card clothing are held and tensioned in place.

Referring to the drawings, 1 is a lengthwise slit cylinder the periphery of which is clothed with a strip 2 of wire card clothing. The usual backing 2^a is left untoothed across its marginal ends 2^b—2^b. In assemblage these end margins are located in the space 2^c of the forked key 6 and are securely clamped therein by the binding screws 7—7 which pass through sides of the fork, as shown in Fig. 3. The cylinder is lengthwise slit at α and the cylinder edges 8, one at one side and the other at the other side of the lengthwise slit α are extended radially inward into and along the length of the chamber of the cyl-

inder, forming clamping flanges, and at their extreme edges being bent flaringly out, as at 8^a—8^a. Thus there is formed lengthwise of the cylinder chamber and within the same a pair of clamping flanges between which the untoothed marginal end portions 2^b—2^b of the card clothing backing is clamped by means of transverse bolts 5 passing through the flanges 8, and after the card clothing is tensioned by turning the key, in which the end margins are also clamped. The periphery of the cylinder, its flanges 8—8, and its end walls 8^b, are all preferably integral, the slit α being extended radially through each end wall part way to the centrally apertured boss 9 thereof. A shaft, not shown, is secured in the apertures of bosses 9. Opposite the key and clamping flange construction the cylinder is provided with counter weights 3. The flared edges 8^a of the clamping members form a space between them in which the key may rest, and wherein it may be turned for tensioning the card clothing backing. 3 are counterweights, the balance of the weight of the stock in the radially inward-extending cylinder edges or flanges 8.

What I claim is

1. A wire card clothed roll comprising a split cylinder having inwardly projecting clamping flanges between which marginal portions of the card clothing are anchored, the flanges extending radially inward part way to the central shaft-opening, and having their edges flared outwardly.

2. A wire card clothing roll comprising a split cylinder having inwardly projecting clamping flanges between which marginal portions of the card clothing are anchored in combination with a forked key clampable on marginal portions of card clothing adjacent to the clamping flanges, the flanges extending radially inward part way to the central shaft-opening, and having their edges flared outwardly.

3. A wire card clothing roll comprising a split cylinder having radially split end walls and adjacent clamping flanges; the end walls

being formed with central shaft-receiving
openings, the flanges extending radially in-
ward part way to the central shaft-opening
and having their edges flared outwardly, and
5 the cylinder having a counterweight balanc-
ing the inwardly-extending flanges.

In testimony whereof I affix my signature
in presence of two witnesses.

BENJAMIN CRABTREE CALDERWOOD.

Witnesses:

G. BLAKE,

EDWARD E. BLACK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
