March 13, 1928. 1,662,658

J. BANCROFT

ROLLER FOR CLEANING AND STRIPPING THE CYLINDERS OF CARDING MACHINES OR LOOSENING FIBER THEREFROM

Filed May 14, 1927 2 Sheets-Sheet 1

FIG. 1.

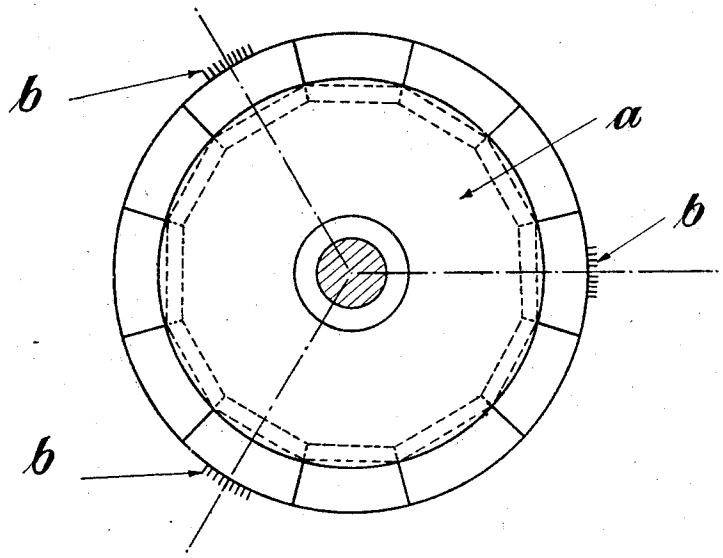


FIG. 2.

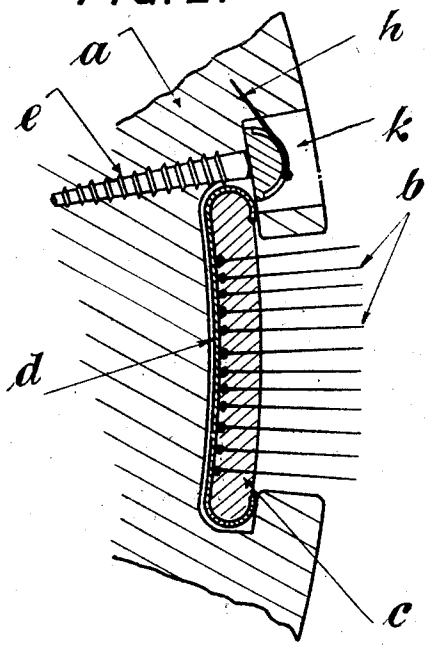
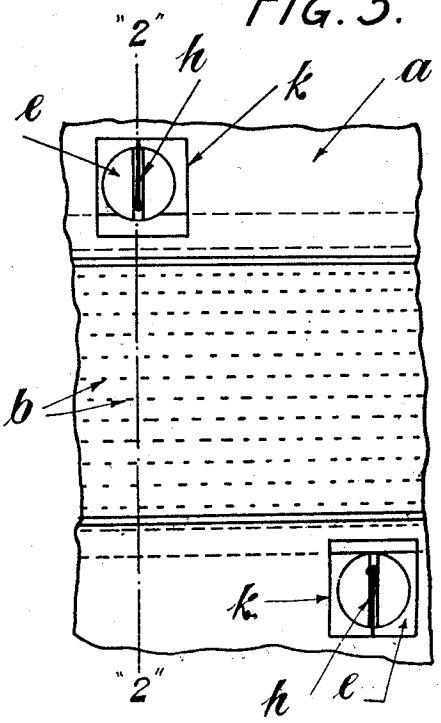


FIG. 3.



Inventor
James Bancroft

BY ATTORNEY:- Arthur Gadd.

March 13, 1928. 1,662,658

J. BANCROFT

ROLLER FOR CLEANING AND STRIPPING THE CYLINDERS OF CARDING MACHINES OR LOOSENING FIBER THEREFROM

Filed May 14, 1927 2 Sheets-Sheet 2

FIG. 4.

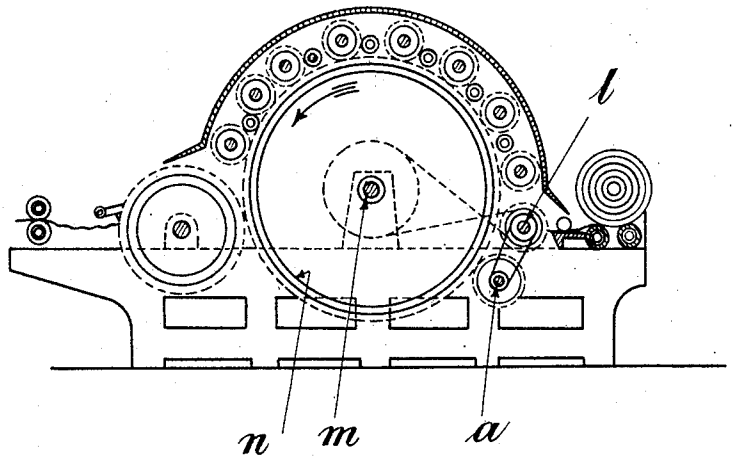
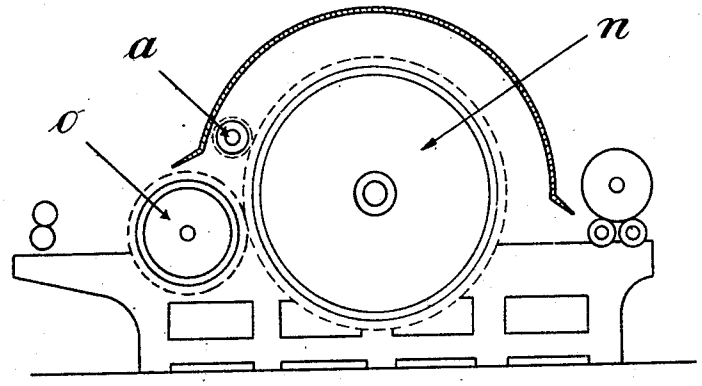


FIG. 5.



Inventor
James Bancroft

BY ATTORNEY Arthur Gaiobl.

Patented Mar. 13, 1928. 1,662,658

UNITED STATES PATENT OFFICE.

JAMES BANCROFT, OF ACCRINGTON, ENGLAND, ASSIGNOR TO H. & B. AMERICAN MACHINE COMPANY, OF PAWTUCKET, RHODE ISLAND.

ROLLER FOR CLEANING AND STRIPPING THE CYLINDERS OF CARDING MACHINES OR LOOSENING FIBER THEREFROM.

Application filed May 14, 1927, Serial No. 191,500, and in Great Britain August 24, 1926.

The invention relates to that kind of roller mounted adjacent to the cylinder of a carding machine, (whether of the roller-and-clearer, or revolving-flat type), for cleaning the carding thereon, or may be loosening fiber therefrom, and which roller is provided with spaced-apart areas or fillets of pin-wire, projecting so as to engage the carding on said cylinder. Pins with heads thereon have been employed for this purpose, said pins being passed through a backing supported by a foundation, the backing and foundation being contained within a cavity formed in the roller rim parts. Screws have been used to attach the same to said roller.

The object of the invention is to provide said roller, here termed an eliminating roller, with more effective means for holding or gripping the foundation and backing aforesaid.

With reference to the accompanying drawings, Fig. 1 is an end sectional elevation of the eliminating roller.

Fig. 2 is a section through line 2—2 of Fig. 3, the latter being a portion of the face of said roller. Both Figs. 2 and 3 are on an enlarged scale.

Fig. 4 is a sectional elevation of a portion of a roller-and-clearer type of carding machine, showing the eliminating roller referred to in position relatively to said carding machine cylinder for cleaning the carding on said cylinder.

Fig. 5 shows some portion of Fig. 4 but with the eliminating roller in another position, and suitable for loosening fiber from the carding cylinder, such as in those cases where artificial silk is being operated upon.

a is the eliminating roller provided with pins *b* mounted in or passed through a backing *c* of suitable substance, the heads of the pins being adjacent to a foundation *d* of rigid-like substance, such as metal sheeting, and containing said backing *c*. The edges of the metal sheet *d* are according to my invention shown turned over for closing upon the edge parts of the backing referred to.

In the example given, wood screws *e* are shown at convenient intervals across the width of the roller face, so that the heads of the same according to my invention bear against the turned-over edges of the foundation *d* for retaining the same in position.

A spring *h* in each case is forced into position shown, and the head-end portion bent down to engage the screw-driver slot in the head of *e*.

The cavity shown at *k* in Figs. 2 and 3 may be conveniently filled in afterwards with such as liquid paraffin wax and resin, or as desirable. Exaggerated clearances are shown betwen various parts in Fig. 2 for the sake of clearness.

In Fig. 4 an eliminating roller *a* is shown revolubly mounted below the usual "taker-in" roller at *l*, the two being in gear connection with each other, and with a pulley on the shaft *m* of the carding cylinder *n*.

In Fig. 5 an eliminating roller *a* is shown revolubly mounted adjacent to cylinder *n*, the former being situated above the position of the usual doffer or roller *o*.

In practice, the relative speeds or revolutions of the eliminating roller and carding cylinder, are arranged so that the card surface on the cylinder which passes under said eliminating roller is wholly operated upon by the fillets of pins described. The invention would be equally applicable if bent pins in place of straight ones were employed.

I claim:—

For cleaning and stripping the carding of carding machine cylinders or loosening fiber therefrom, an eliminating roller of the kind having spaced-apart operating areas composed of headed pins passed through a backing adjacent to a foundation within slots in the roller-rim parts, and having holding-down screws for attaching the backing and foundation to said rim parts, a foundation aforesaid of metal with turned-over edges gripping the sides of the backing named, and spring-retained holding-down screws beyond the edges referred to, the heads of said screws in contact with said turned-over edges of the foundation for holding the same in position, substantially as herein set forth.

In testimony whereof he hath affixed his signature.

JAMES BANCROFT.