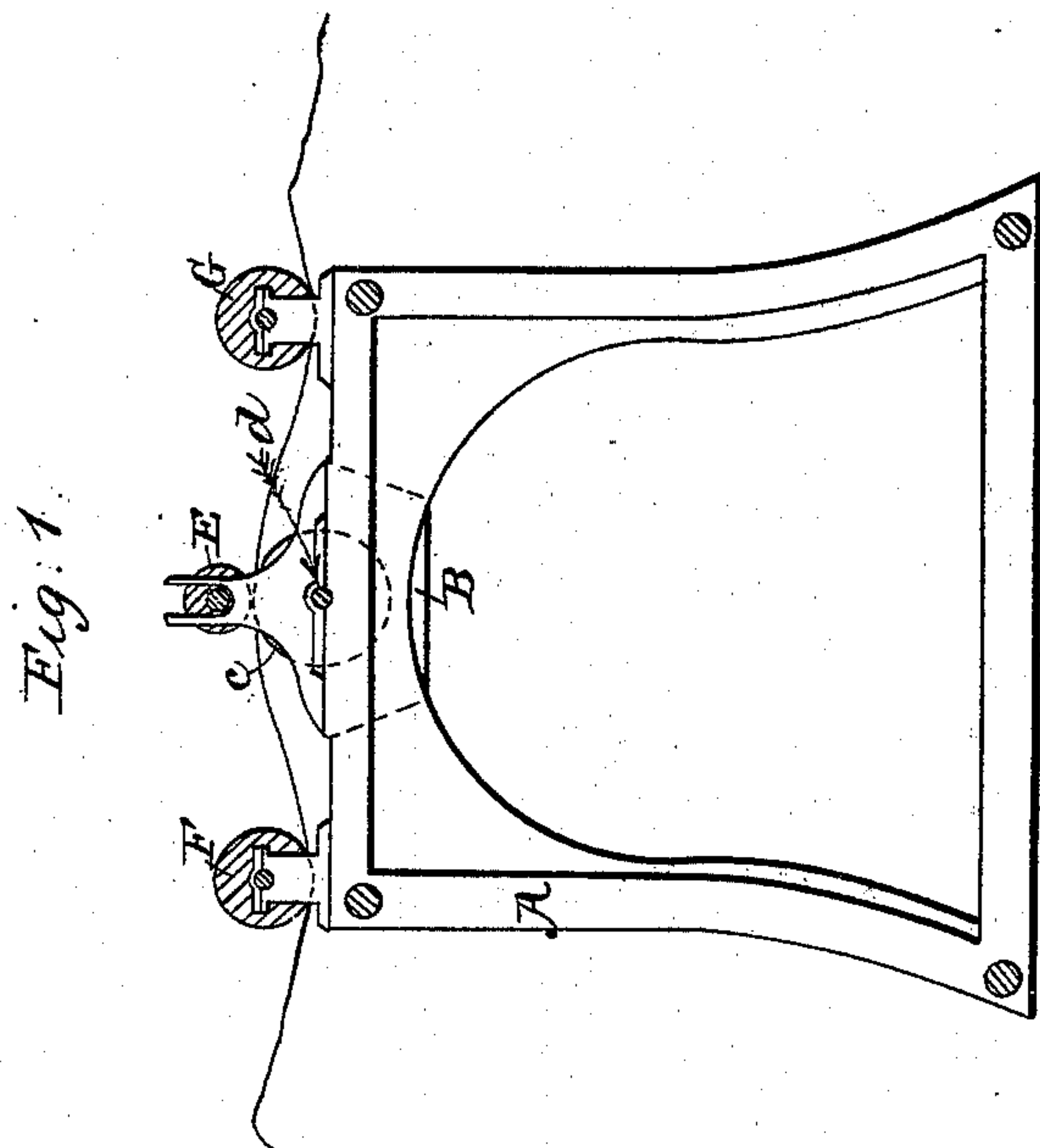
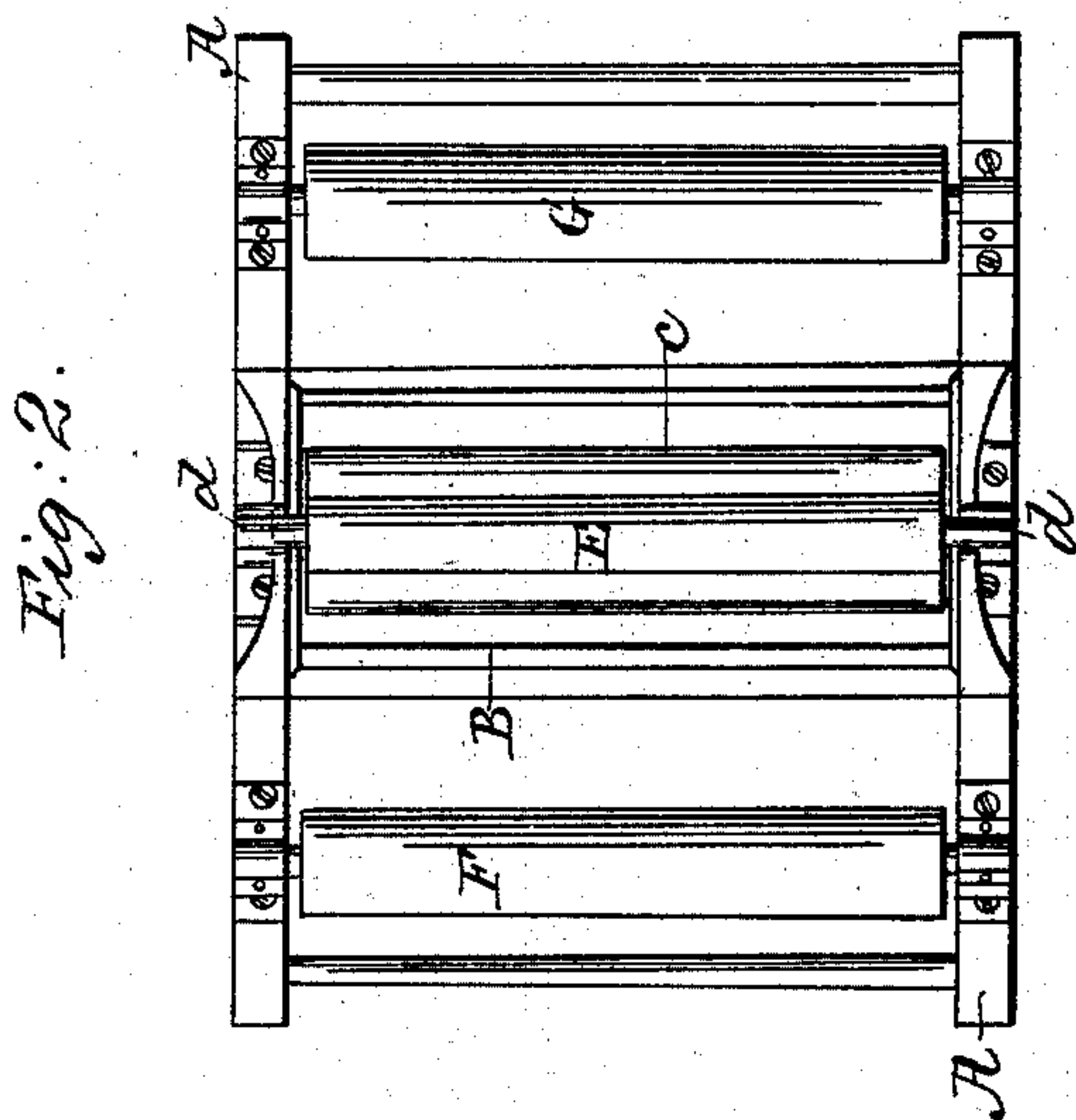


J. T. TROTTER.
Finishing Rubber Fabrics.

No. 26,720.

Patented Jan'y 3, 1860.



Witnesses.

E. F. Brown

G. Ketchum Jr

Inventor.

Jonathan T Trotter

UNITED STATES PATENT OFFICE

JONATHAN T. TROTTER, OF NEW YORK, N. Y.

FINISHING FELT RUBBER GOODS.

Specification of Letters Patent No. 26,720, dated January 3, 1860.

To all whom it may concern:

Be it known that I, JONATHAN T. TROTTER, of the city, county, and State of New York, have invented a new and improved
5 method of finishing and fixing to the surfaces of cotton, silk, wool, or other cloth fabrics a coating of powdered flocks, ground cork, or other similar material by means of a series of carrying and sizing rollers; and I
10 do hereby declare the following to be a full description of the same.

The nature of my invention relates to an improved method of manufacturing felt water proof goods. These goods are com-
15 monly made by sifting over the surfaces of cotton, silk or other water proof fabrics, powdered flocks, or ground cork, or other fibrous material, and then by the application of a solution of india rubber fix the
20 flock or other substance to the surface of the cloth, by passing it over the edge of a scraper and between pressure rollers. The object of this is to remove any excess of the solution of rubber, or excrescences, or in-
25 equalities in the application of the gum. But in doing this there is constant liability to abrade or rub, or skin the rubber fabric of its coating of powdered flock or other ma-
30 terial, and thus damage the fabric, and often to so great an extent as to require being done over again.

The object of my improvement, therefore is to obviate this difficulty in the manufacture of felt rubber goods.

35 To describe my invention more particularly I will refer to the accompanying drawings forming a part of this specification the same letters of reference wherever they occur referring to like parts.

40 Figure 1, is a side elevation of the machine. Fig. 2, is a plan view of the same.

Letter A, is the frame of the machine, across the top of it is arranged a box or trough B, for containing or holding a sol-
45 vent or a solution of india rubber or other vulcanizable gum and in which a roller C, is adjusted on suitable bearings *d, d*. Directly above this roller is a pressure roller E, and at opposite ends of the frame of the
50 machine, and parallel with the rollers C, E, are rollers F, and G. These rollers are intended to act on the cloth as it passes through the machine to give it tension, as it passes over the sizing roller to gum the
55 flock into the surface of the fabric. It will be apparent that these rollers may be made

to answer the purpose of cloth driving and receiving rollers by the application of any suitable mechanism for that purpose.

The method of operating and applying 60 my invention is as follows: I take a piece of cloth, and by any well known means spread upon its surface a liquid or plastic coating of vulcanizable gum. On this I sift, (while in the raw state) a coating of pow- 65 dered flock, ground cork, or other prepared fibrous material, and by means of suitable pressure rollers, compress the same into the surface of the gum. I next form the cloth into a roll by winding on a suitable cylinder, 70 and carry the end of it under the tightening roller F, and over the upper surface of the sizing roller C, under the pressure roller E, and thence out under the back tightening roller G, to any suitable drawing or wind- 75 ing frame upon which the cloth is to be received. When thus arranged the machine is set in motion by any suitable arrangement of gearing or belting, which by the friction of the cloth upon the surface of the 80 sizing roller, and tightening rollers causes them to rotate. In doing this the submerged part of the sizing roller carry up as it rotates and delivers upon the flocked surface of the fabric, a thin film or coating of the 85 solution of a vulcanizable gum, or solvent thereof, as may be used, according to the nature and quality of the goods to be made. Thus, where fabrics having a heavy flocked surface are to be finished, a solution of the 90 gum will be used; but where light fabrics, such as silk, worsted, or cambrics, having a thin coating of flock are to be finished a solvent of any of the vulcanizable gums may be used, as it will sufficiently soften or dis- 95 solve the previously gummed surfaces of such goods to saturate the flock to make it adhere, in consequence of the yielding or elastic pressure of the roller E, upon the upper surface of the fabric. By this means 100 the solution or solvent as the case may be, is made to saturate and penetrate the felt or flock coating as it passes over the sizing roller to cause it to combine and adhere 105 permanently and evenly with the gum previously laid on the fabric, to give it a cloth like textile appearance.

Having now described my invention and its application and mode of use I will proceed to set forth what I claim and desire to 110 secure by Letters Patent of the United States.

What I claim is—

The method of finishing or fixing the felt like coating of powdered flock, ground cork, or other similar fibrous material, upon the
5 surface of a previously water proofed fabric, by means of a roller partially submerged in a solution of, or solvent of any vulcanizable gum, so that as the submerged parts of the roller rise from the bath, it will de-

liver, the solution or solvent upon the flocked 10 surface of the fabric, in an even and uniform sheet, to fix the flock into the surface of the fabric smoothly and uniformly to give it a cloth like textile appearance.

JONATHAN T. TROTTER.

Witnesses:

E. F. BROWN,

E. KETCHUM, Jr.