

No. 706,132.

Patented Aug. 5, 1902.

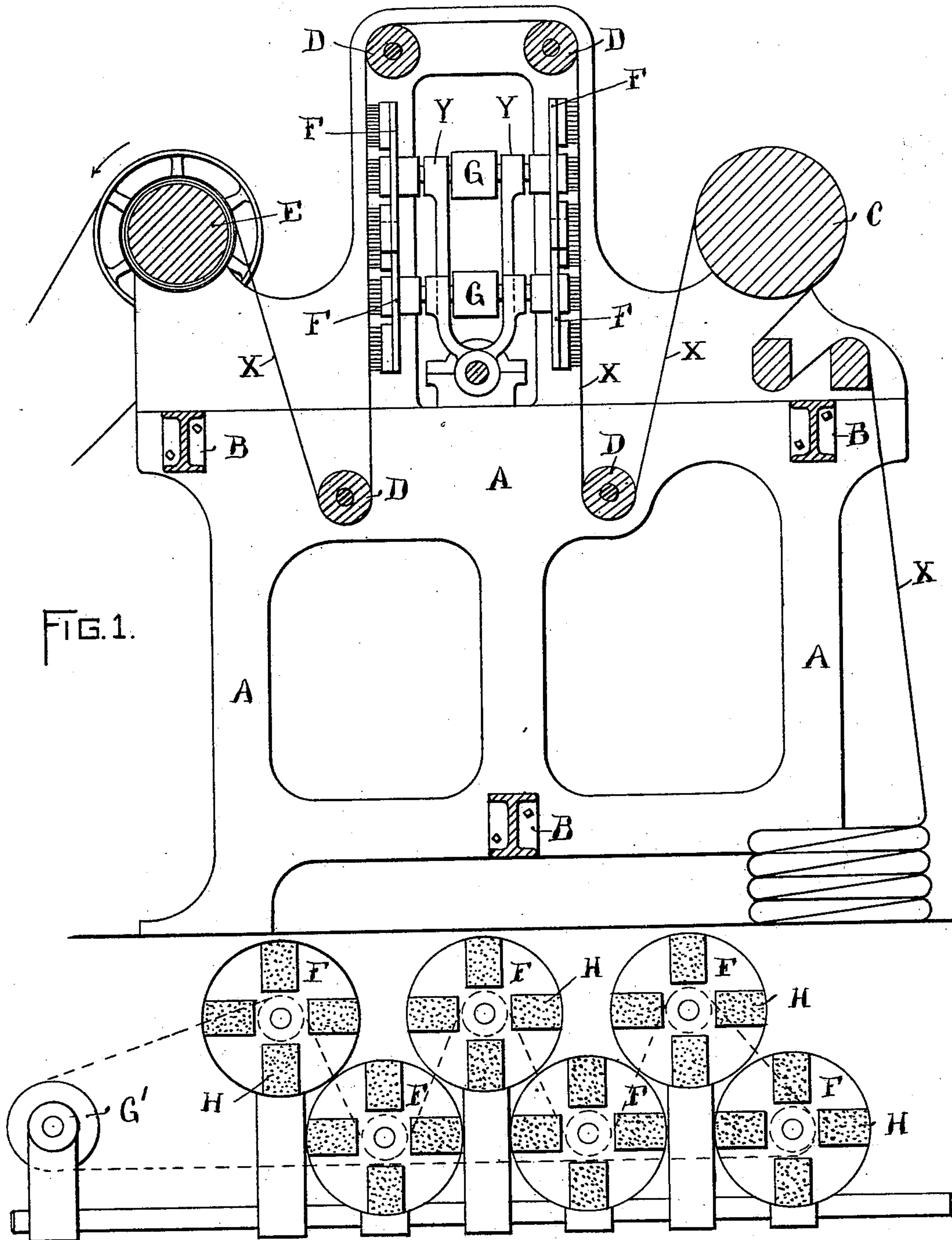
G. W. VOELKER.

BRUSHING MACHINE FOR CLOTH MANUFACTURING.

(Application filed June 12, 1901.)

(No Model.)

2 Sheets—Sheet I.



WITNESSES:

Annie A. Wallis
Walter D. Brownell

FIG. 2.

INVENTOR:

George W Voelker
BY Wm R. Tillinghast

ATTY.

No. 706,132.

Patented Aug. 5, 1902.

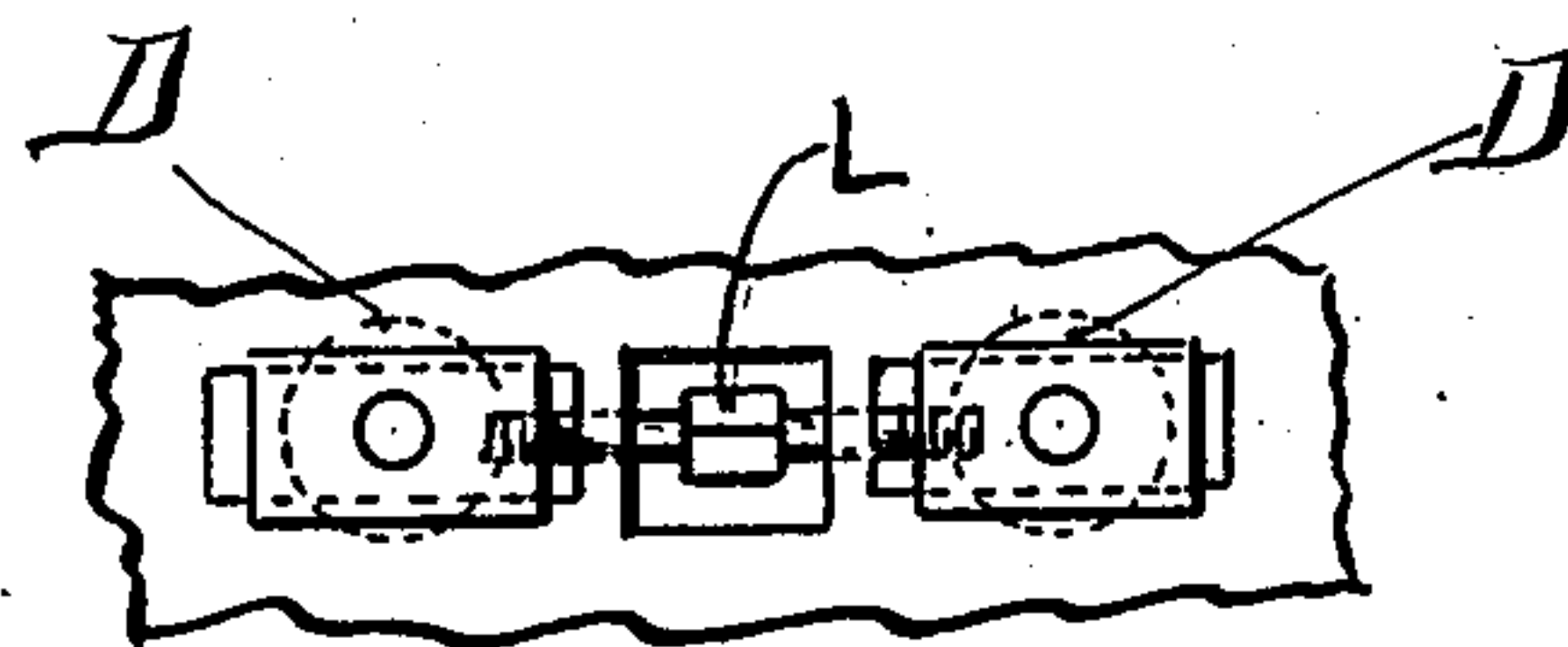
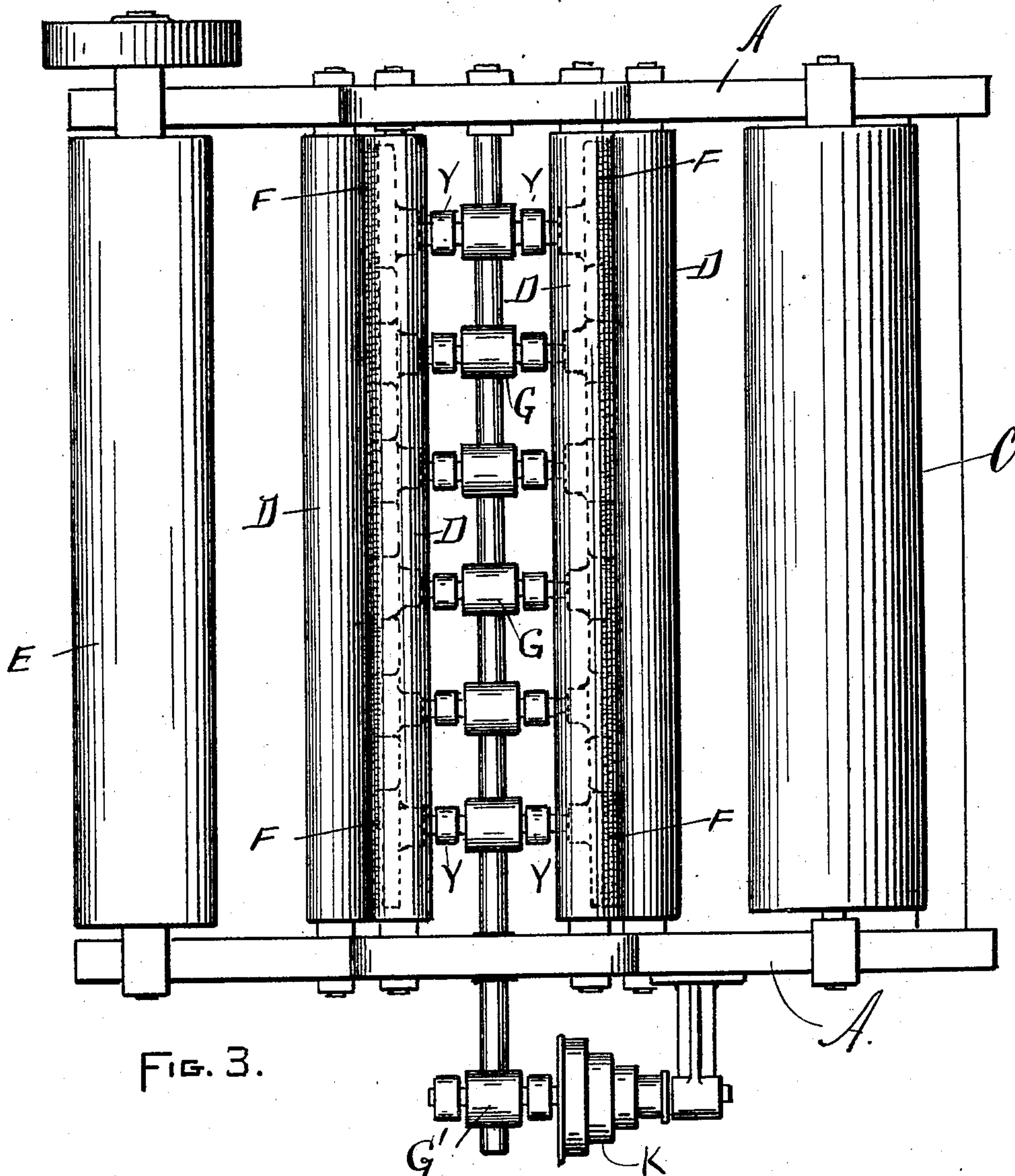
G. W. VOELKER.

BRUSHING MACHINE FOR CLOTH MANUFACTURING.

(Application filed June 12, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses.

Annie A. Willis
Edward H. Can

Inventor.

George W. Voelker
By Wm R. Tillinghast
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. VOELKER, OF WOONSOCKET, RHODE ISLAND.

BRUSHING-MACHINE FOR CLOTH MANUFACTURING.

SPECIFICATION forming part of Letters Patent No. 706,132, dated August 5, 1902.

Application filed June 12, 1901. Serial No. 64,267. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. VOELKER, a citizen of the United States, residing in the city of Woonsocket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Brushing-Machines for Cloth Manufacturing, of which the following, with the drawings hereby made a part hereof, is a description.

10 The machine is designed to give the newly-manufactured cloth a much more thorough brushing than is obtained by the ordinary brushing-machines, and thereby remove many imperfections caused in the yarn which the
15 other machines will not affect.

Figure 1 is a sectional side elevation of the machine, showing the one side A of the frame supporting the machine, the tie-beams and the rolls being shown in cross-section, it being understood that another frame or standard, the same as A, is removed to show the parts as they are delineated; Fig. 2, a transverse elevation of the disk wheels carrying the brushes, as hereinafter more fully described. Fig. 3 is a plan view of the machine; and Fig. 4, a detail drawing showing how the rolls may be adjusted to vary the pressure of the brushes upon the cloth, as hereinafter described.

30 The machine consists of a frame, preferably made of iron, consisting of two ends, as A, joined together by proper cross-ties B B and with the rolls C, D D, and E mounted between the sides or ends A. The cloth (designated as X X X) to be brushed passes over these rolls, being taken from a pile upon the floor or other convenient place and being wound up upon the roll E; but it is to be understood that the particular manner in which
40 the cloth is made to pass through the machine and over the brushes is not material. Also mounted between the upper portions of the frames A is a series of disks F, carrying brushes (shown separately in Fig. 2) disposed as follows: The disks are arranged in pairs upon each end of short shafts carried in a yoke-casting Y, with a pulley G mounted upon each shaft between the sides of the yoke and so between the disks. (See Fig. 1.)

The sets of disks are preferably arranged in two series or rows one above the other and placed relatively to one another to completely cover the width of the cloth. The disks are rotated by a belt passing around the several pulleys and also over a driving-pulley, as G', to give it motion, as shown in Fig. 2. The pulley G' is mounted upon a shaft driven by a cone-pulley K, which in turn is driven by overhead shafting in the usual manner. The brushes H H are conveniently made rectangular and inserted and fastened in recesses in the disks, but might almost equally well be made by inserting the bristles directly in disks of wood or metal and screwing or otherwise fastening the disks upon the ends of the
65 shafts.

In using the machine the cloth X X X is caused to pass up over the brushes in one set of disks and down over those upon the other ends of the same shafts. The brushes may be driven at any proper speed, and the speed may be readily varied by means of the cone-pulley K, Fig. 3. These brushes thus give the surface of the cloth a thorough brushing in all directions as it passes over them, and thus do much more effective work than the brushes ordinarily used, which always operate to brush the nap in the direction of its length only.

In practice it is preferable to make at least some of the rolls D slightly adjustable, so as cause the cloth to run across the brushes with greater or less pressure to suit different styles of cloth. Thus these rolls may be mounted in sliding bearings made adjustable by means of the screw L, as shown in Fig. 4.

I claim as my invention—

1. In a machine for brushing cloth, the combination of a series of disks, with brushes upon their faces, arranged side by side in two rows across the cloth to be brushed and with the brushes of one row placed to cover the spaces between those of the other row, means for causing the cloth to pass over the brushes, and means for rotating the disks.

2. In a machine for brushing cloth, a number of pairs of disks with brushes upon their faces, each pair of disks being mounted upon

a shaft with means between the two to rotate both, the brushes on one end of the several pairs being disposed side by side in two rows across the cloth to be brushed and with the
5 brushes in one row placed to cover the spaces between those of the other row, and means for causing the cloth to pass successively over the brushes upon each end of the pairs of disks.

GEORGE W. VOELKER.

Witnesses:

THEODORE F. TILLINGHAST,
ANNIE A. WILLIS.