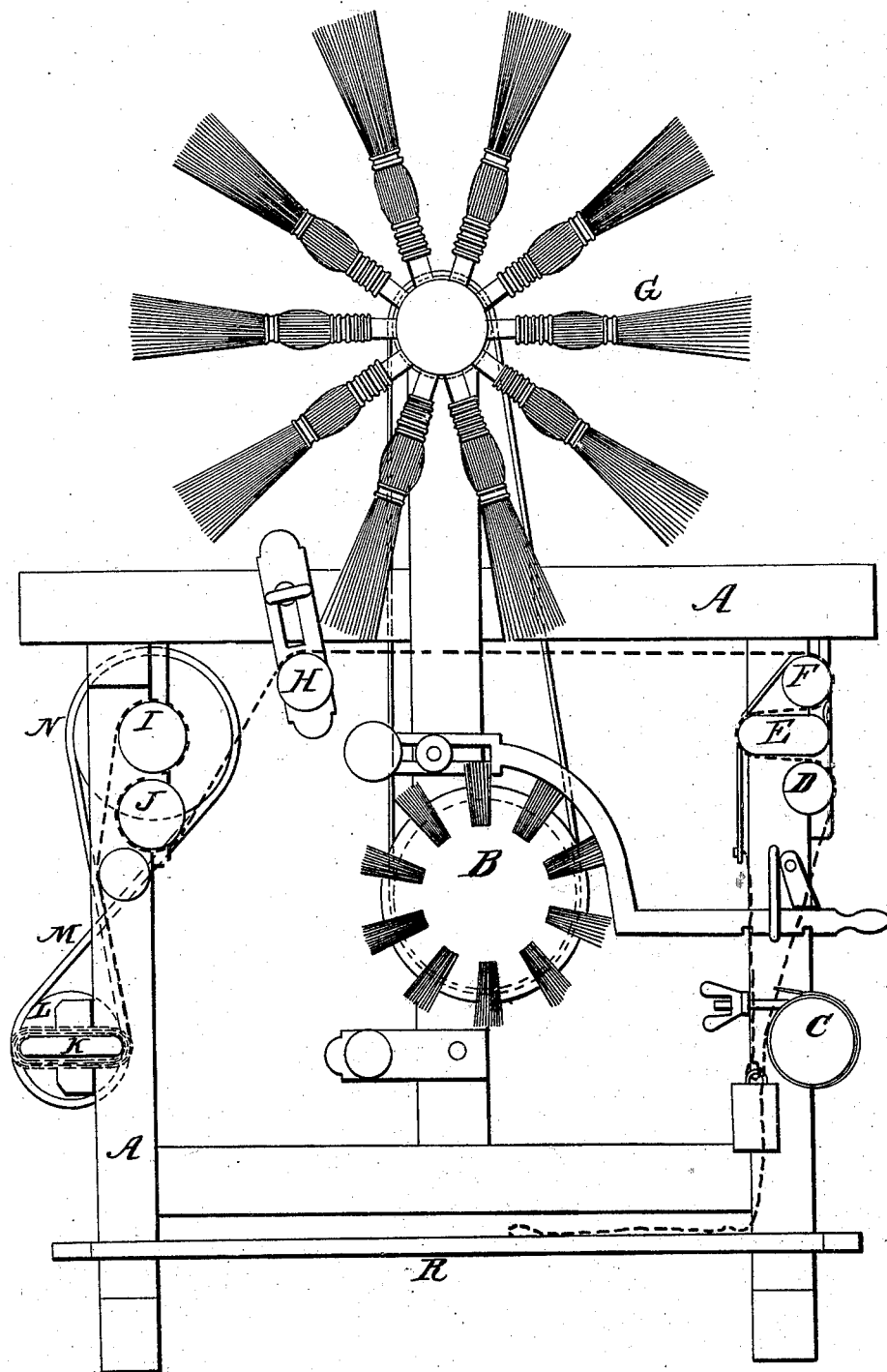


R. C. Varnel.
Brushing and Folding Cloth.
N^o 3,487. Patented Mar. 13, 1844.



UNITED STATES PATENT OFFICE.

REUBEN C. VARNEL, OF WEST SOMERS, NEW YORK.

MACHINE FOR BRUSHING AND WINDING CLOTH.

Specification of Letters Patent No. 3,487, dated March 13, 1844.

To all whom it may concern:

Be it known that I, REUBEN C. VARNEL, of West Somers, Westchester county, State of New York, have invented a new and useful Machine for Brushing and Winding Cloth; which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical longitudinal section of the machine.

The nature of this invention is by the addition of spirally set, revolving corn brooms rollers, pulleys and bands and a revolving flat winding board to the ordinary cylinder brushing machine, to render said machine capable of performing the additional operations of finishing or brushing and rolling or winding the cloth, which have heretofore been performed by hand on a horizontal table.

The frame A of this machine is made of a rectangular form, of suitable size, strength, and material, for containing and supporting the several parts hereafter described.

B is the common brushing cylinder. On the shaft of this cylinder is placed the driving pulley represented by a circular dotted line to which the power is applied for driving the machine. Also another pulley for a crossed band leading to a second pulley.

C represents the cloth cylinder whose gudgeons turn in boxes at the back end of the machine.

D is a round connecting bar of the machine over which the cloth passes. E is another connecting bar of the frame whose edges are rounded placed over the said round bar at a distance therefrom equal to the thickness of the cloth to be brushed which is made to pass between them and back between a weighted roller F and said connecting bar E. The cloth after passing over the roller F is extended horizontally under the cylinder of spirally set corn brooms G to an adjustable roller H used for raising the cloth to the brooms as they wear. The gudgeons of this roller turn in boxes or apertures in arms that slide in grooves in the frame over the shanks of thumb screws used for holding said arms and roller at any height required. The cloth is then carried under, between, and over the ordinary cloth covered cylinders I J geared together by cog wheels and used

for drawing the cloth forward. The cloth is then carried to the revolving flat winding board K upon which it is wound or rolled. This flat winding board has a gudgeon or axle in each end turning in boxes in the frame, one of said boxes being so constructed that by means of simply drawing a pin or key it can be easily taken from its box in order to remove the board or winder with the cloth thereon from the frame and for drawing the winder from the cloth. On one of said gudgeons or axles is placed a pulley L for a band M leading to another pulley N on the axle of the roller I by which it is turned.

The cloth to be brushed by the aforesaid revolving brooms in order to remove the lint and lumps of wool and other impurities therefrom having been carried over, under and between the rollers aforesaid with the back of the cloth uppermost and the machine properly adjusted and put in motion the revolving spiral brooms will remove whatever lumps of wool, lint, or other dirt that may be thereon, the cloth thus partially cleaned falling upon the rack R in the frame below the rollers. It is then turned over and its face side subjected to a similar operation. It is then ready for the pressing operation and being pressed one end of the cloth is carried over the rollers under the brooms and around and between the drawing rollers and around the flat winding board the face of the cloth being next the brooms the machine being again put in motion all the remaining lint or dirt will be removed therefrom and the cloth will be wound or folded on the winding or folding board. The board is then removed and withdrawn from the cloth which is then finished and ready for the market.

What I claim as my invention and which I desire to secure by Letters Patent is—

The combination of the revolving cylinder of brooms with the weighted roller adjustable roller and revolving winding board as before described for brushing and winding cloth, whether combined and arranged in the manner here described, or in any other manner substantially the same, by which analagous results are produced.

REUBEN C. VARNEL.

Witnesses:

WM. P. ELLIOTT,
ALBERT E. JOHNSON.