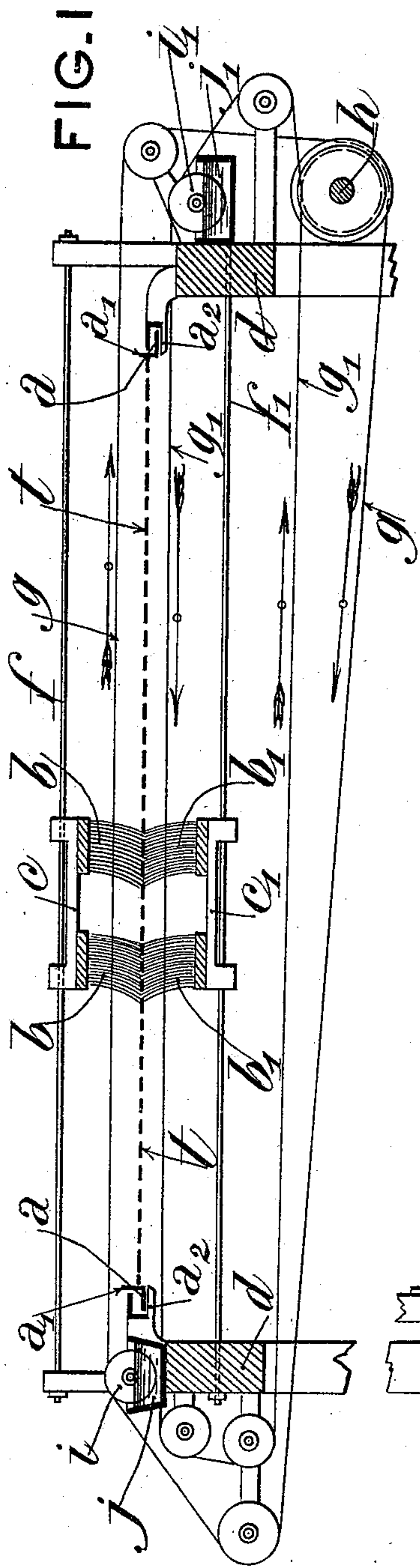


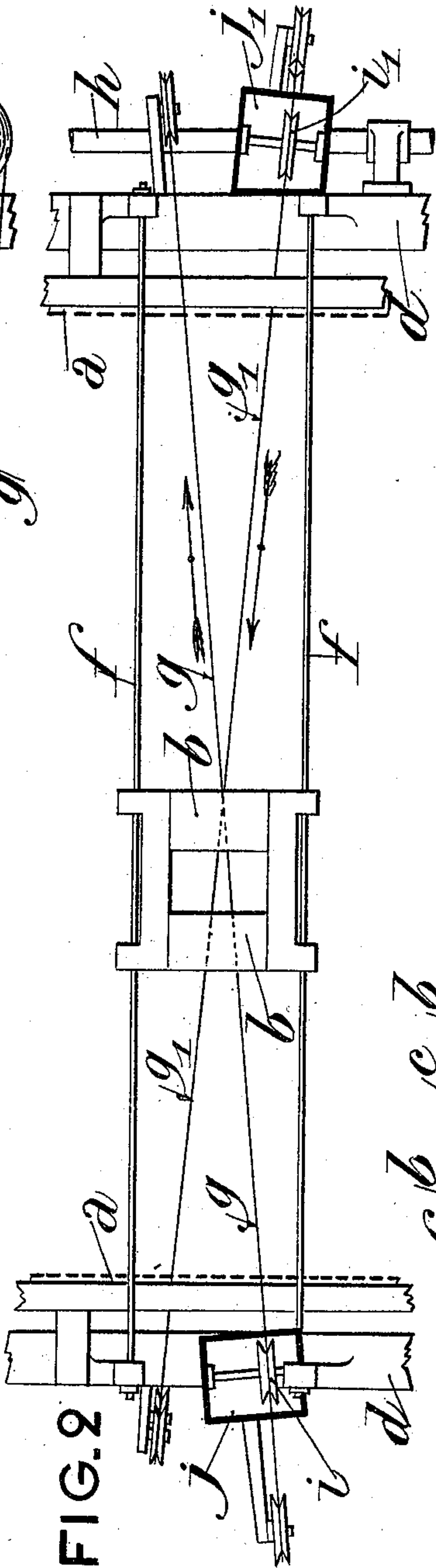
APPLICATION FILED OCT. 11, 1910.

982,158.

Patented Jan. 17, 1911.



261



NO
G
L

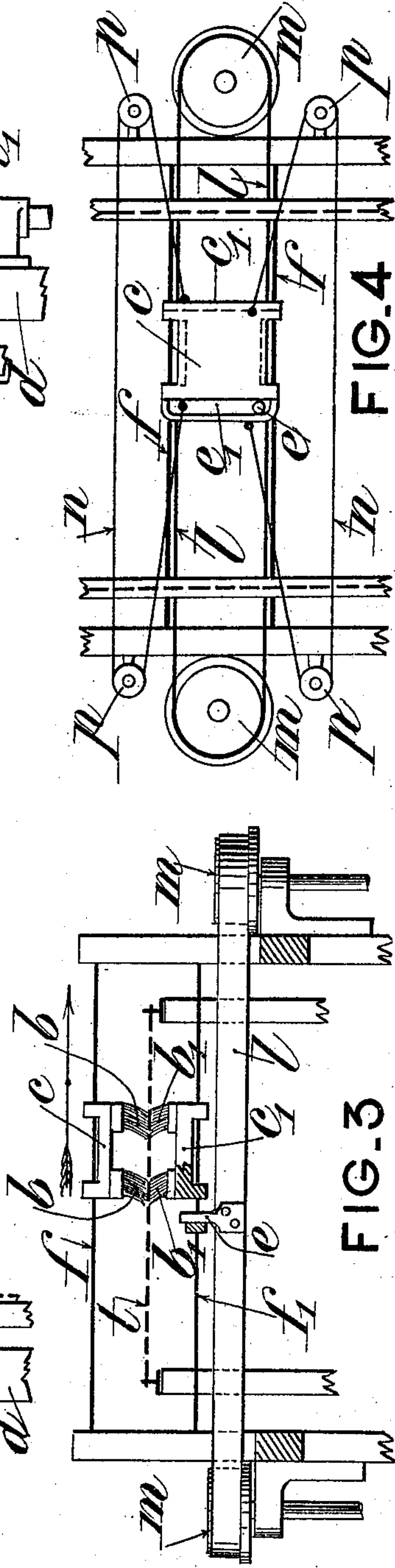


FIG 4

WITNESSES

W. P. Burdett
John A. Percival.

INVENTORS

Marino Ratinier
Henry Pernilhac
E. M. Mulan Mulan

ATTY

UNITED STATES PATENT OFFICE.

MARIUS RATIGNIER, OF LYON, AND HENRY PERVILHAC, OF VILLEURBANNE, FRANCE.

APPARATUS FOR DRESSING FABRICS.

982,158.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed October 11, 1910. Serial No. 586,540.

To all whom it may concern:

Be it known that we, MARIUS RATIGNIER and HENRY PERVILHAC, citizens of the French Republic, residing, respectively, at Lyon and Villeurbanne, Rhone, both in France, have invented certain new and useful Improvements in Apparatus for Dressing Fabrics, of which the following is a specification.

The present invention relates to apparatus for spreading dressing on the surface of tulle and like fabric by means of brushes having a transverse movement, and arranged symmetrically one above the other on each surface of the fabric, said brushes being adapted to spread the dressing in a continuous manner and in quantities which may be varied according to requirements.

An embodiment of the invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a transverse section of part of the machine showing the brushes. Fig. 2 is a plan view of said part of the machine. Fig. 3 is an elevation on a slightly smaller scale, showing an example of mechanism for operating the brushes. Fig. 4 is a plan view of Fig. 3.

The fabric t is drawn through the machine in the usual manner by means of chains a carrying pins a_1 which travel in guides a_2 carried by the beams d disposed at distances apart according to the width of the fabric. The movement of the fabric and the guiding thereof is effected in the known manner.

The upper brushes b are mounted to the number of two or more on a slide or carriage c adapted for movement on two metal wires f stretched transversely across the machine above the fabric. The lower brushes b_1 which equal in number the upper brushes are similarly arranged below the fabric on a carriage or slide c_1 adapted for movement on the stretched wires f_1 similar to the wires f . The two carriages between which passes the fabric to be dressed are each given a reciprocating movement from one side of the machine to the other during which time each pair b and b_1 are continuously superposed, the fabric being held and acted on by the brushes on both surfaces. The brushes are supplied with the dressing material during their movement by means of two endless transverse cords g g_1 , which pass one above and the other below the fabric

and traverse the brushes near their free ends. The said cords g g_1 are guided by suitable rollers conveniently mounted and are operated at a variable speed by means of a longitudinal shaft h , their upper stretches moving in opposite directions and in such a manner that they cross at the center of the fabric as shown in Fig. 2. Both cords become coated with the dressing material by passing over grooved pulleys i i_1 rotatable in receptacles j j_1 containing said material. It will be obvious that each cord as it travels in a path which is inclined with regard to that traversed by the brushes, will transmit the dressing material to said brushes along the whole or substantially the whole length thereof, and that the supply of the dressing material will be increased the greater the speed of the cords g g_1 . The distribution of the dressing material can thus be regulated by controlling the speed of the shaft h which may be driven by an independent motor or by a variable speed transmission gear.

The apparatus above described may be repeated or duplicated as often as necessary along the length of the machine to supply the necessary quantity of dressing and to conveniently regulate the supply.

The reciprocatory movement of the brushes may be produced by any known mechanism capable of acting on all the brushes at once by means of suitable transmission gearing or can be repeated for each brush or series of brushes as may be desired.

For the most effective spreading of the dressing material it is preferable that the brushes are given uniform movement which may be effected by means of the mechanism shown in Figs. 3 and 4. This mechanism is shown as applied to the carriage c_1 carrying the brushes b_1 acting on the lower surface of the fabric t . Located below said carriage is an endless belt l passing over two horizontal pulleys m m and traversing the machine from one side to the other. At a suitable position on this belt a vertical finger e is fixed traversing a slot or guide e_1 in the carriage c_1 . The belt l being put in movement in one direction or the other the carriage c_1 will be given a reciprocating movement the speed of which will be uniform during its strokes in both directions. The upper brushes b which remain exactly superposed relatively to the brushes b_1 may be actuated by similar mechanism by replacing the belts by endless

chains but is more simple to transmit the movements of the lower carriage c_1 to the upper carriage c by means of cords n n disposed as shown in Fig. 4. The said cords
5 pass over pulleys p p rendering the movements of the two carriages absolutely simultaneous.

What we claim as our invention and desire to secure by Letters Patent of the United
10 States is—

1. In a machine for dressing fabrics the combination of a pair of superposed brushes adapted to be given reciprocatory movement and between which the fabric is fed, means
15 for supplying dressing material to said brushes comprising flexible members traversing same and means for imparting variable movements to said flexible members.

2. In a machine for dressing fabrics the combination of a pair of superposed brushes adapted to be given reciprocatory movement in unison, and between which the material is fed in one direction, means for supplying
20 dressing material to said brushes comprising cords traversing said brushes, and means for imparting movements in opposite directions and at variable speeds to said cords.

3. In a machine for dressing fabrics the combination of a pair of superposed brushes adapted to be given reciprocatory movement
30 and between which the fabric is fed, means for supplying dressing material to said brushes comprising flexible members traversing same said flexible members moving in
35 paths inclined to that of the brushes, and means for imparting variable movements to said flexible members.

4. In a machine for dressing fabrics the combination of a pair of superposed brushes between which the fabric is fed, means for
40 supplying dressing material to said brushes comprising flexible members traversing same, means for imparting uniform reciprocatory movement to the lower brush of the pair, and means for imparting said uniform
45 movement from the lower brush to the upper brush.

In witness whereof we have signed this specification in the presence of two witnesses.

MARIUS RATIGNIER.
HENRY PERVILHAC.

Witnesses:

GASTON JEAUNIAUX,
MARIN VACHON.