

(No Model.)

2 Sheets—Sheet 2.

A. EDWARDS.
GIMP PREPARING MACHINE.

No. 414,689.

Patented Nov. 12, 1889.

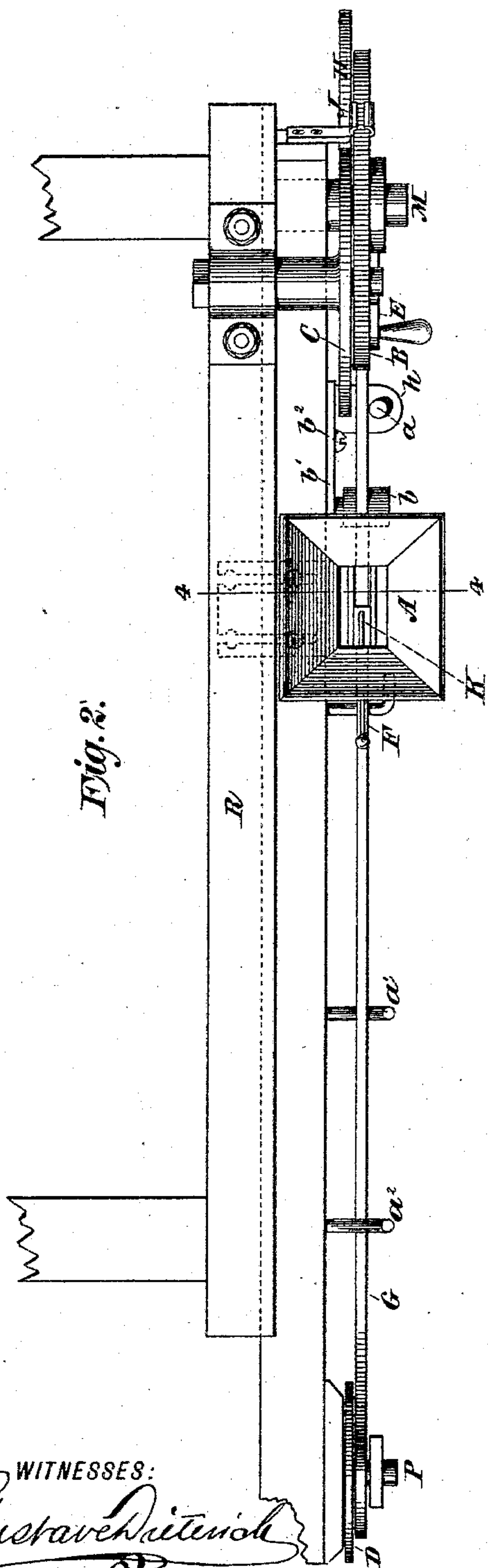


Fig. 2.

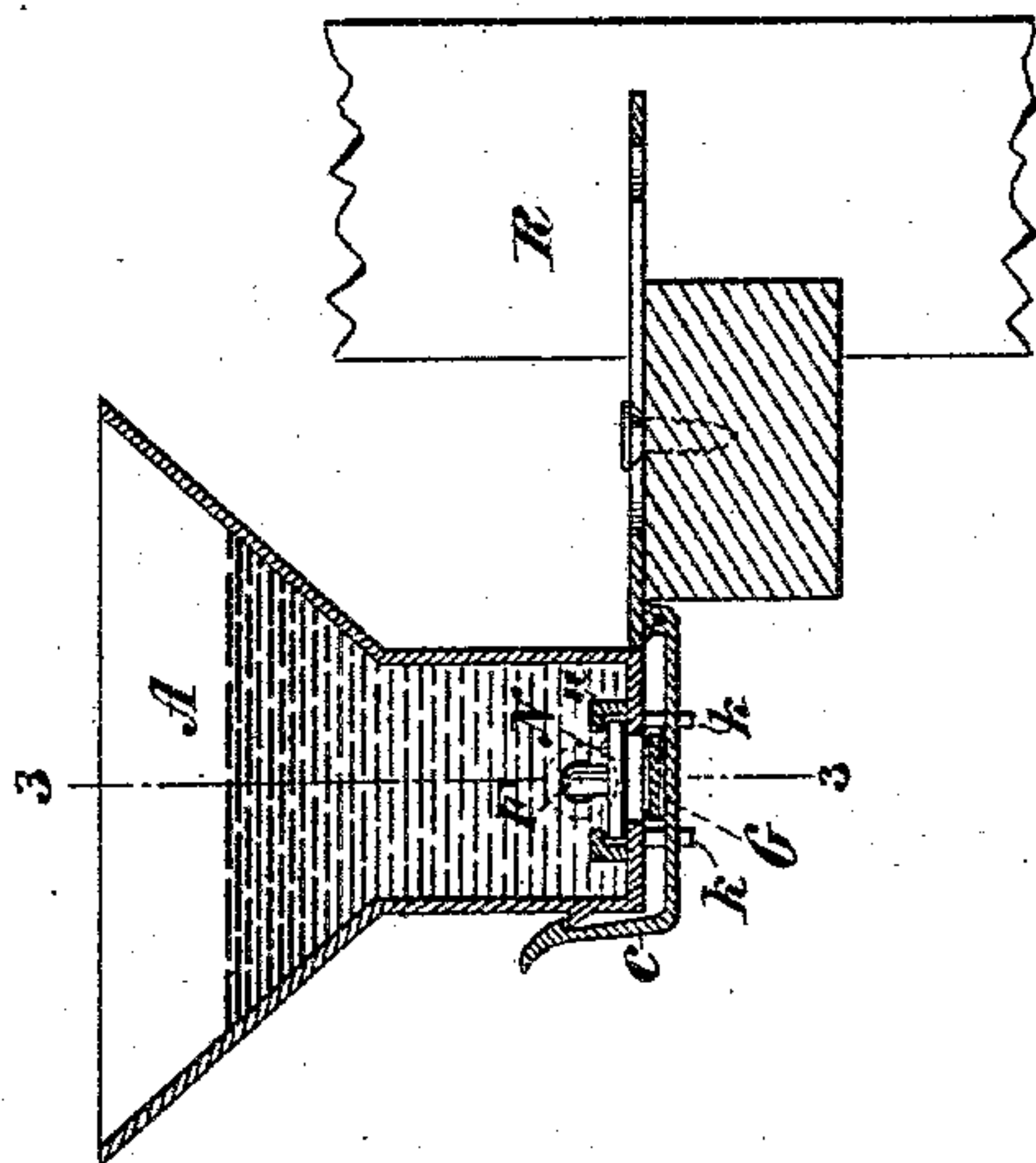


Fig. 4.

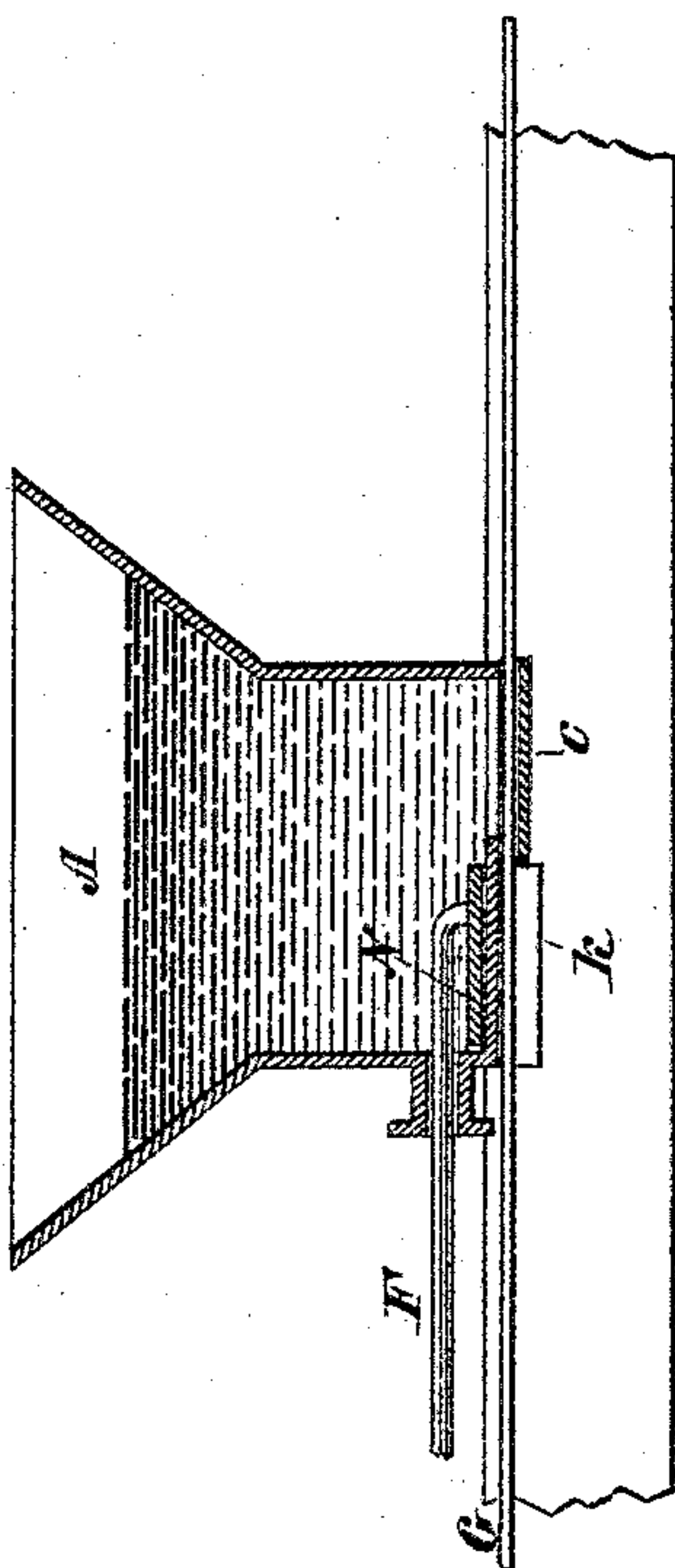


Fig. 3.

WITNESSES:
Gustave Dittus
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2 Sheets—Sheet 1.

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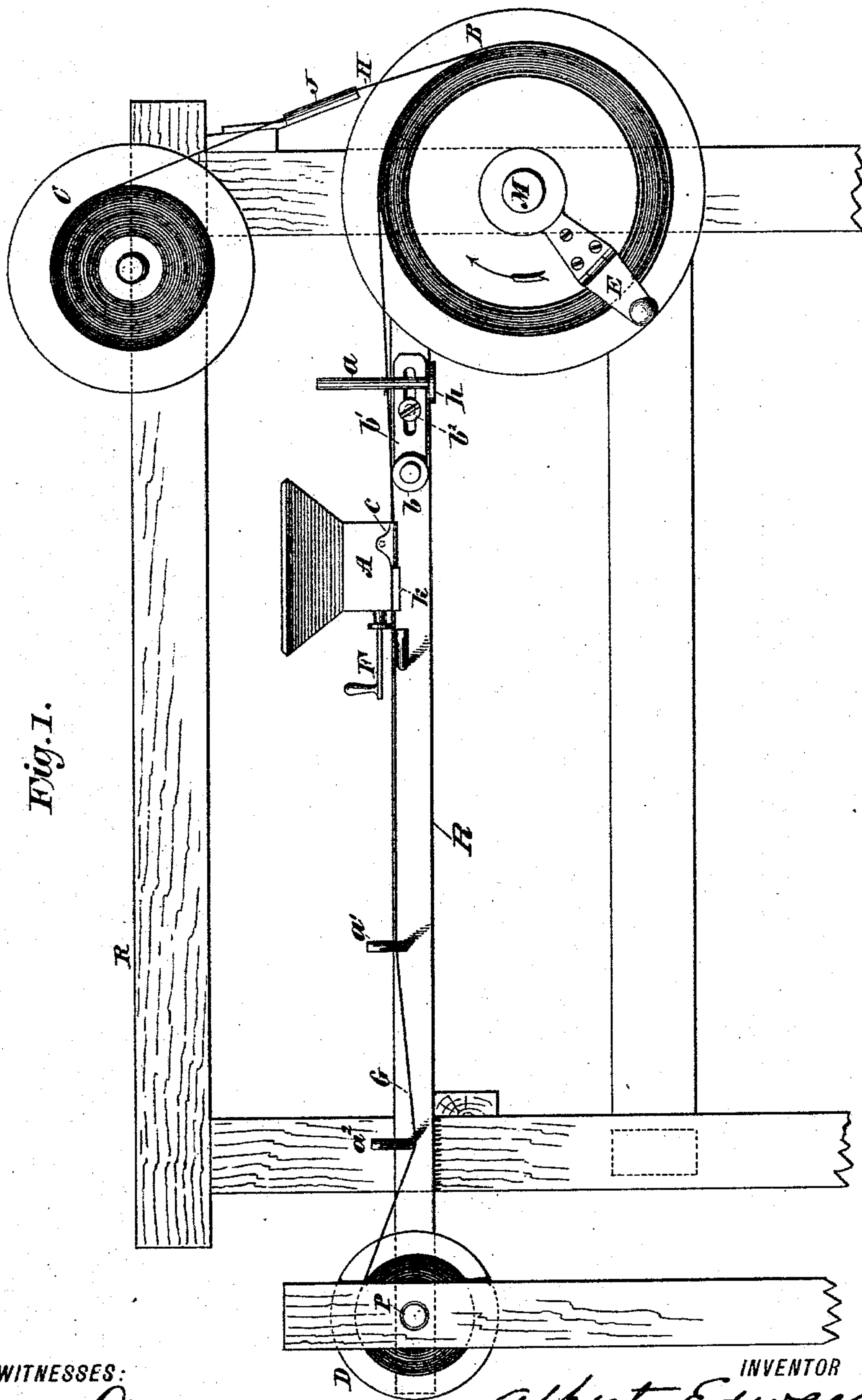


Fig. 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT EDWARDS, OF BROOKLYN, ASSIGNOR TO THE ADHESIVE GIMP COMPANY, (LIMITED,) OF NEW YORK, N. Y.

GIMP-PREPARING MACHINE.

SPECIFICATION forming part of Letters Patent No. 414,689, dated November 12, 1889.

Application filed February 24, 1888. Serial No. 265,160½. (No model.)

To all whom it may concern:

Be it known that I, ALBERT EDWARDS, a citizen of the United States, residing at Brooklyn, county of Kings, and State of New York, have invented new and useful Improvements in Gimp-Preparing Machines, of which the following is a specification.

The object of my invention is to provide a machine by which gimp may be prepared for attachment to furniture by means of some adhesive substance spread uniformly upon the back of the gimp, so that when thus prepared it can readily be made into merchantable packages which can be cheaply transported and easily applied to furniture by the consumer without the use of tacks or the like.

To construct a machine embodying my invention I take a sliver or ribbon of brass or some like material of convenient length and cause the same to pass beneath the valve in the lower part of a hopper containing fish-glue or some like adhesive substance. This valve is preferably a slide-valve, so arranged relative to the ribbon that when the latter is passing beneath it the ribbon presents only its face to the reservoir of the hopper, and therefore only that part of the ribbon will receive the glue. This strip or ribbon is wound upon a delivery-bobbin, preferably positioned with its edge to the hopper. It is guided both before and after passing through the valve beneath the hopper by guiding pins or rollers positioned in the frame of the machine. The gimp to which the glue is to be applied may also be wound upon another delivery-bobbin and so positioned relative to a receiving-bobbin that as the latter gathers and winds the ribbon of brass with its partial coating of glue it shall simultaneously gather an equal length of gimp, so that upon the receiving-bobbin will be gathered alternate layers of the ribbon, with its coating of glue, and of gimp, the gimp being so gathered upon the receiving-bobbin that the gimp shall rest immediately upon the glued ribbon, so that the glued face of the ribbon shall have applied to it the back of the gimp. After a quantity of the gimp thus interlaminated with the glued ribbon has thus been wound upon the receiving-bobbin sufficient to make

merchantable rolls it is removed from the bobbin and placed in a convenient place to dry. After drying the ribbon is carefully removed from the gimp, so as to leave the glue upon the gimp as a backing, and the gimp is then made up into rolls prepared for the market, which needs only to be wet to make it adhesive to the furniture.

In the drawings, Figure 1 is a side view of a machine embodying my invention. Fig. 2 is a plan view of the same from above. Fig. 3 is a sectional view of the hopper, on an enlarged scale, through the line 3 3 of Fig. 4; and Fig. 4 is a cross-section of the same through the line 4 4 of Fig. 2.

In the drawings, Fig. 1, D is a bobbin, on which is wound the brass ribbon G; and C is another bobbin, on which is wound the gimp H.

B is a receiving-bobbin common to bobbins C and D, and revolves in the direction of the arrow, and designed to receive the glue-carrying ribbon and the gimp, which latter passes through a guide J. This receiving-bobbin has a crank-handle E, with a hinge by means of which a part of the handle is capable of being moved out of the way when it is desired to remove the interlaminated ribbon and gimp from the receiving-bobbin. This crank-handle is secured at point M. The single-headed bobbins C and D are both made easily removable from their spindles; but owing to the tendency of the ribbon to spring off from the bobbin the bobbin D has a removable or false head P to keep the ribbon upon the bobbin. This false head is so made as to be readily pushed aside to allow the removal of the bobbin D. The ribbon G is guided by the pins a a' a'' , which are fixed in the machine for the purpose of guiding the ribbon G to and from the hopper A. Attached to the bottom of the hopper are other devices, to be hereinafter explained.

b is a roller, on which the ribbon G rests on its passage to the bobbin B. This roller turns upon the slotted piece b' , which in turn is secured to the frame R by the set-screw b'' .

J is a guide secured to the frame R. This guide partly encircles the gimp H, and prevents it from slipping off either bobbin C or B.

The hopper A is so secured to the frame R that it stands directly over the path of the ribbon G, so that the adhesive matter within the hopper can be distributed upon the ribbon. The hopper A is constructed with a sliding valve N, to which is secured the regulating-handle F. This valve N is held in position within the hopper by means of the frames *n*. Directly under the valve N passes the ribbon G. The ribbon is prevented from moving laterally by means of the guides *k*, secured to the bottom of the hopper. These guides occupy about one-half of the bottom of the hopper in length, as shown in the drawings. Beneath the valve-opening is arranged a hinged false bottom *c*, which is provided with a locking device, and is intended to hold and press the ribbon G against the bottom of the hopper, so that the glue may be properly deposited upon it.

h is an extension-piece, secured to the frame R, supporting the guide-pin *a*.

The operation of my invention is as follows: A convenient quantity of brass or similar ribbon, which I call a "carrying-ribbon," is wound upon the bobbin D, and an equivalent quantity of gimp upon the bobbin C, and the bobbins are placed in position upon their spindles, the false head of bobbin D being positioned so as to prevent the carrying-ribbon from springing off. The end of the carrying-ribbon is then passed along the guide-pins to the hopper and between the guides *k* under the hopper to the valve-opening, which is readily done by loosening the clamp or false bottom *c* of the hopper. This clamp acts to hold the ribbon close to the valve-seat. The end of the ribbon is then carried along over the guide *b* and along by the guide *a*, and made fast to the upper side of the barrel of the receiving-bobbin B. In its passage beneath the opening of the valve of the hopper, which valve is opened as soon as the end of the ribbon has passed beneath it, a portion of glue from the previously-filled hopper is deposited along the face of the ribbon. The end of the gimp from bobbin C is then fastened upon the receiving-bobbin B at the point where the carrying-ribbon is fastened. The handle of the receiving-bobbin is then turned, and with it the bobbin, and as it turns it gathers upon the bobbin the carrying-ribbon and the gimp in alternate layers. In this manner a coating of glue is applied along the back of the gimp. When the ribbon and gimp from the delivery-bobbins have all been gathered upon the receiving-bobbin, the handle is bent out of the way toward its center M, and the bobbin, with its interlaminated gimp and ribbon, is slipped off from its spindle and placed in a convenient place to dry. After it is sufficiently dried the gimp is pared off from the ribbon in such a way as to leave the glue upon the ribbon, the tendency of the glue being to adhere to the gimp rather than to the ribbon. The gimp is then

made up into merchantable rolls and stowed away ready for delivery.

In the construction shown the width of the opening of the valve N of hopper A is about equal that of the ribbon, so that the adhesive liquid will be supplied to about the full width of the ribbon. Obviously, the valve-opening may be contracted to such dimension that the entire face of the glue-receiving ribbon will not be covered with the liquid, but the latter will be disposed along the median line of the ribbon. In this way the adhesive backing may be applied to gimps or bands of different widths by using the same ribbon and contracting the valve-opening in any suitable manner.

What I claim, and desire to secure by Letters Patent, is—

1. In a machine for coating materials with an adhesive substance, the combination, with a traveling band or ribbon for receiving and transferring the adhesive substance and a device for supplying such substance to the band, of means for bringing into close contact the material to be coated and the face of said band so covered with the adhesive substance, whereby the adhesive substance may be presented to the material and caused to adhere thereto, for the purpose set forth.

2. In a machine for coating materials with adhesive substance, the combination, with a band or ribbon for receiving the adhesive substance and transferring it to the material and a device for supplying the adhesive substance to the band, of a rotary receiving-bobbin for winding together the said band and the material to be coated, whereby such material may be brought into close contact with the band so covered with the adhesive substance, so that the substance may be transferred and caused to adhere to the material, substantially as and for the purpose set forth.

3. In a machine for coating materials—such as gimp—with an adhesive substance or glue, the combination, with a band or ribbon G, made of material practically impervious to glue, and a bobbin for delivering said band, the hopper or receptacle A, supplying the glue to the band, of the receiving-bobbin B, acting to wind the gimp and the glue-covered band together thereupon, whereby the glue upon the band may be transferred and caused to adhere to the gimp, substantially as and for the purpose set forth.

4. In a machine for coating materials—such as gimp—with an adhesive substance or glue, the combination, with the glue receiving and transferring band or ribbon G, made, for instance, of metal, the bobbin D, for delivering the said band, and suitable guides for the band, the hopper A for supplying the glue to the band, the bobbin C, for delivering the gimp H, of the receiving-bobbin B, acting to wind on together in the alternate layers the said glue-covered band G and the gimp, whereby the glue may be transferred and

caused to adhere to the gimp, so as to be permanently affixed thereto, substantially as and for the purpose set forth.

5 5. The combination, with the traveling glue-receiving band or ribbon G, of the glue-supplying hopper A, provided with a feed valve or opening at the bottom, and the hinged false

bottom or covering c, substantially as and for the purpose set forth.

ALBERT EDWARDS.

Witnesses:

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