

J. W. COLLINS.
PASTING DEVICE.
APPLICATION FILED JAN. 7, 1911.

1,042,325.

Patented Oct. 22, 1912.

2 SHEETS—SHEET 1.

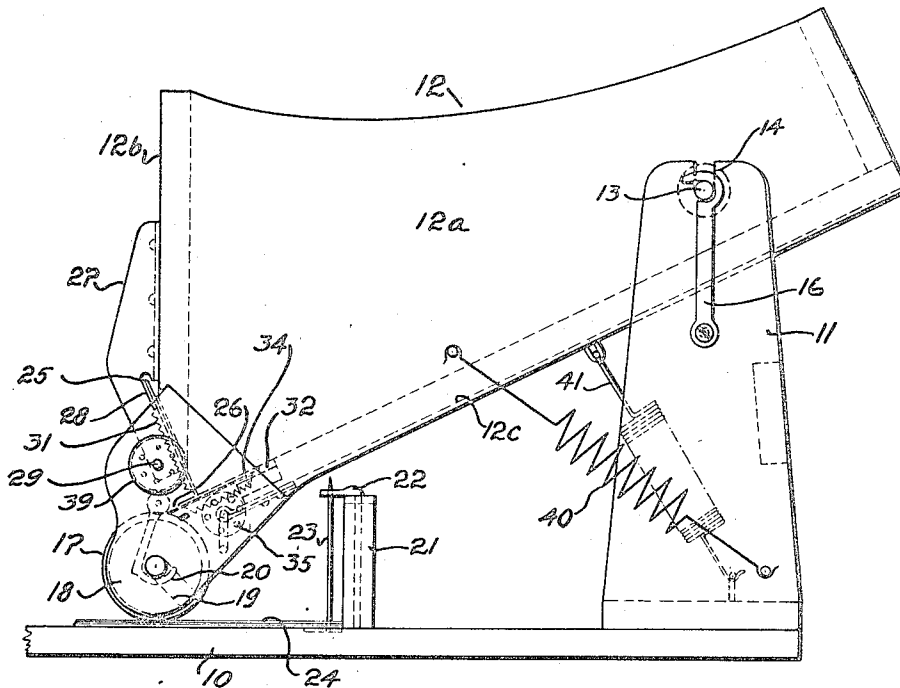


Fig. 1

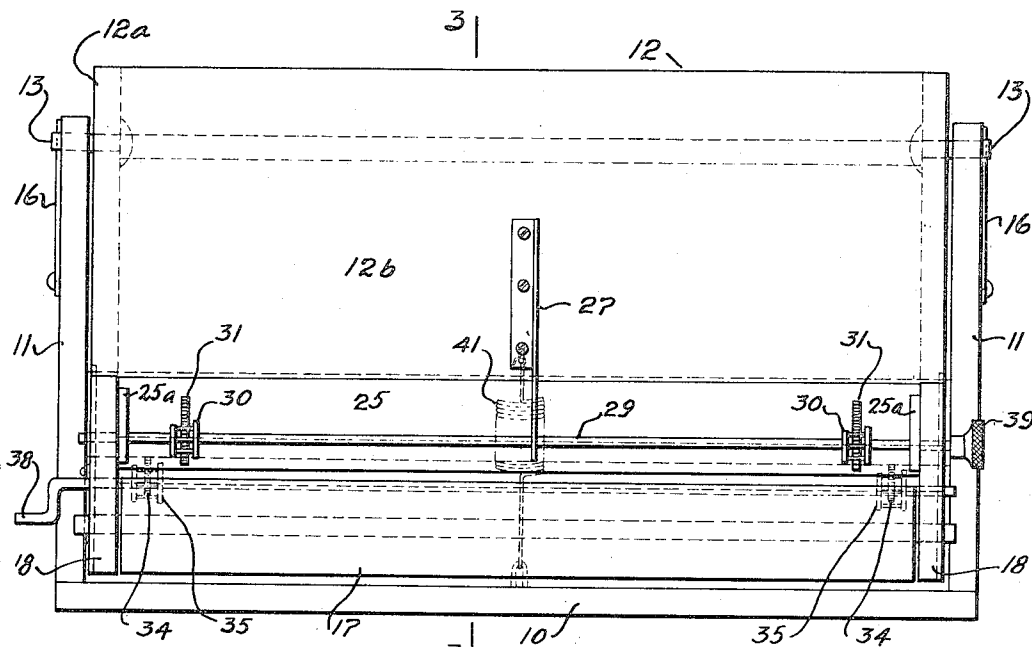


Fig. 2

Witnesses:
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Inventor
John W. Collins
By this Attorney
H. C. Karlson

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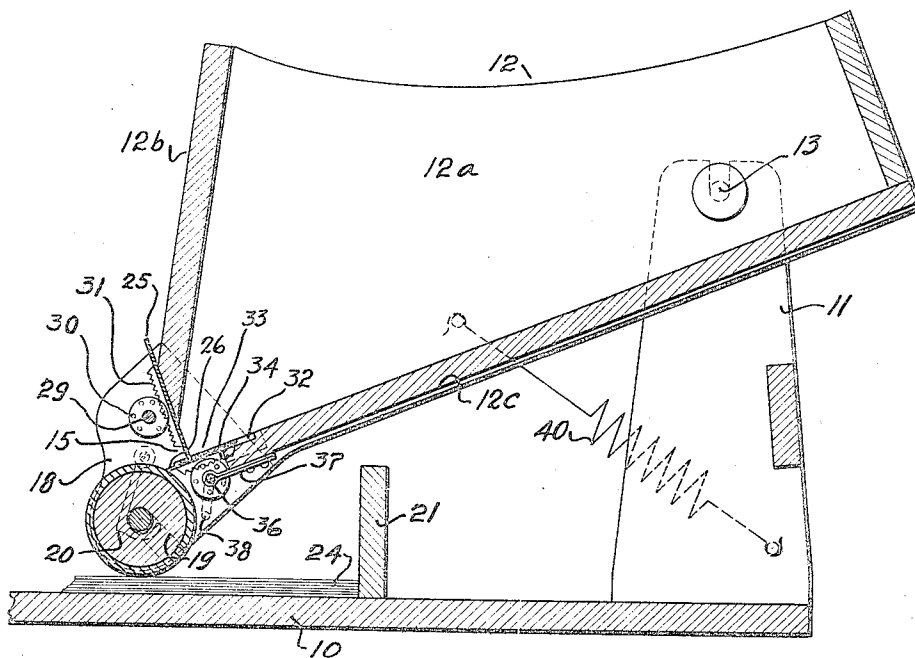


Fig. 3

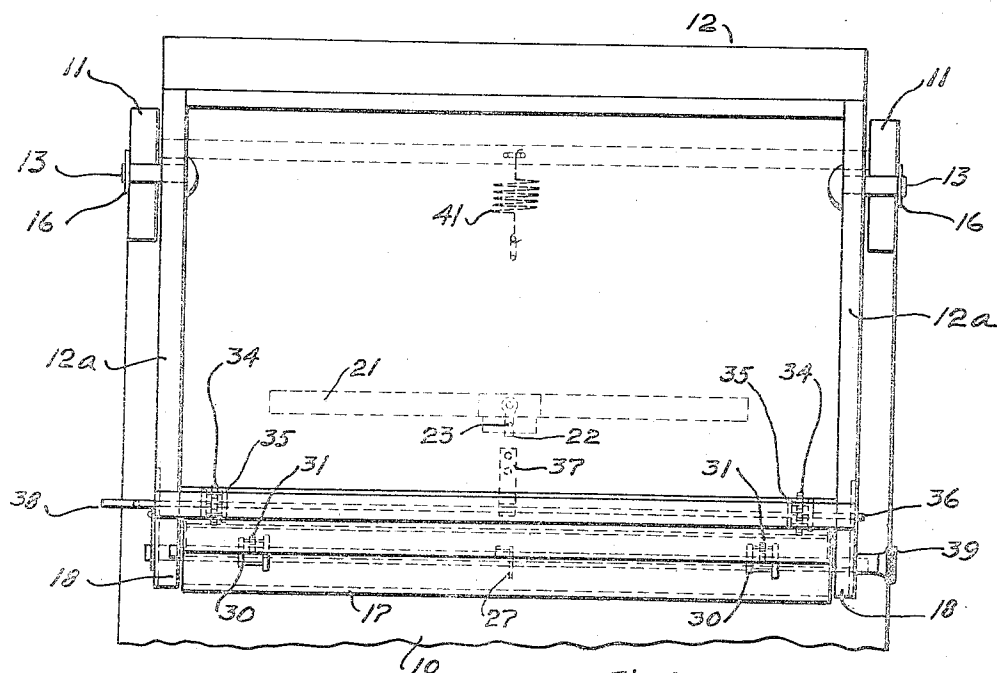


Fig. 4

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UNITED STATES PATENT OFFICE.

JOHN W. COLLINS, OF BROOKLYN, NEW YORK.

PASTING DEVICE.

1,012,325.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed January 7, 1911. Serial No. 601,417.

To all whom it may concern:

Be it known that I, JOHN W. COLLINS, a citizen of the United States, and a resident of the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Pasting Devices, of which the following is a specification.

This invention relates to a device for applying paste to the ends of wrappers such as are used for newspapers and magazines. The device may also be used for applying other liquids or semi-liquids to sheets of various kinds.

The object of the invention is to provide a simple device by means of which the wrappers may be held in a convenient manner and that will apply paste to the wrappers as fast as these are drawn out by hand.

A further object is to provide means for reliably controlling the flow of material from the interior of the receptacle as well as the thickness of the layer or film carried around by the roller.

Other objects will become apparent as the specification proceeds.

With these objects in view, the invention consists in the parts, improvements and combination of parts hereinafter described and pointed out in the claims, reference being had to the accompanying drawings which are hereby made a part of this application.

In the said drawings, Figure 1 is a side view of the device Fig. 2 is a front view of Fig. 1 Fig. 3 is a section on the line 3—3 of Fig. 2 and Fig. 4 is a plan view.

In these views, the numeral 10 designates a table, which may be merely a flat board or plate; 11 is a stand or support extending upwardly from the rear part of the table; and 12 is a paste receptacle. The latter is inclined downwardly and forward and is pivoted at its upper rear portion to the said stand 11, as by means of pivot pins 13, secured to its side walls 12^a, and resting on the bottoms of open slotted bearings 14 near the top of the stand. (Fig. 1.) Latches 16 pivoted to the sides of the stand 11 cooperate with the said bearing slots 14 to operatively maintain the receptacle 12 in position. The said receptacle 12 is provided with a slotted discharge opening 15 formed in the bottom portion of its front wall 12^b. A paste applying roller 17 is located below and in front of said opening 15, being journaled

at its ends in bearing blocks or ears 18, extending forwardly from the side walls 12^a. The said roller 17 is preferably mounted removably to facilitate cleaning, as by slotting the bearing for one end of the roller and providing a latch to complete the bearing, as indicated at 19 and 20 in dotted lines (Figs. 1 and 3) the latch being shown in full lines in Fig. 4.

An alinement piece or gage 21 extends upwardly from the table 10, to which it is secured. An impaling pin 23 is disposed vertically immediately in front of the said alinement piece 21, so that the rear end of the pile of wrappers which are indicated at 24 may be spiked onto the said pin 23 with their rear edges against the alinement piece 21. The several parts are so proportioned and related that the roller 17 rests on the pile of wrappers in advance of the said alinement piece 21. A guard 22 cooperates with the said pin 23 to hold the latter from breaking when the wrappers are pulled away therefrom.

Two plates or gates 25 and 26, disposed in angular relation to each other, with the edge of the first adjustable with reference to the face of the second, and the edge of the second adjustable with reference to the peripheral face of the roller 17, constitute means for controlling the supply of paste from the discharge opening 15 to the paste roller. The gate or cut-off plate 25 is mounted to slide up and down across the opening 15, being supported at its ends by guiding strips 25^a formed with the side walls 12^a of the receptacle 12 and having lateral support at its front side in a bracket 27 which is secured centrally to the front side 12^b of the paste receptacle, said bracket 27 being provided with a recess or guiding surface 28 for the reception of the said gate 25 (Fig. 1). The latter is operated by a transverse shaft 29, journaled at its ends in the bearing pieces 18 and centrally in the bracket 27. Said shaft 29 carries gears 30 which are in meshing engagement with racks 31 secured to the front face of the said cut-off gate 25; the gate or spreader plate 26 forms a continuation of the bottom wall 12^c, and is preferably flush with the said bottom in a recess 32 in the front portion thereof, being retained therein by guiding strips or the like 33. The said gate 26 extends forwardly beneath the lower edge of the gate 25 into proximity with the roller 17 and is

adjustable forward and backward, preferably by means of racks 34 secured to the under side of said plate, and gears 35 engaging said racks 34. The said gears 35 are mounted on a shaft 36 journaled in the bearing pieces 18 and in an intermediate strap bearing 37 secured to the underside of the bottom wall 12°. The said shaft 36 may be provided with an operating crank 38 and the shaft 29 for the gate 25 may have an operating knob 39. The gears 30 and 35 are preferably of open lantern type to permit paste coming in contact therewith to be squeezed out without clogging. Tension springs 40 secured to the sides of the receptacle 12 and to the stand 11 may be employed to hold the said paste-box 12 yieldingly down with the roller resting on the wrappers. Another spring 41 may be connected to the box intermediate the other springs 40.

In operation, the wrappers having been spiked over the pin 23 against the alinement piece 21 and the receptacle 12 having been provided with paste, the wrappers are drawn forward one at the time from beneath the paste roller 17, rotating the latter and causing it to apply paste to the wrapper. As the pile of wrappers decreases in thickness, the paste-box 12 descends accordingly. The discharge from the opening 15 may be regulated from time to time by sliding the gate 25 and the thickness of the layer of paste carried around the roller 17 may be regulated by sliding the spreader plate 26.

Having described my invention, what I desire to secure by Letters Patent and claim is:—

1. In a pasting device, the combination with a paste feeding receptacle, a paste applying pressure roller carried by said receptacle on the outside thereof, said roller bearing upon a layer of sheets and rotated by withdrawing the latter singly for depositing paste upon said roller and applying it upon the withdrawn sheets, of a gate at the bottom of said receptacle adapted to be extended outside thereof, and an adjustable feed gate for graduating the opening between its edge and the face of said first gate for emitting layers of paste of various thicknesses thereupon, the latter being adjustable for graduating the distance between its edge and said roller for depositing layers of paste of various thicknesses upon the periphery of the roller when the latter is rotated.

2. A pasting device, comprising a table, an alinement piece thereon, upright supports at the sides of said table and rearwardly of said alinement piece, an impaling pin set in

said table, a guard at the top thereof, an inclined paste receptacle swung from its upper portion, to and between said supports, means of detachably securing said receptacle to said supports, a paste-applying roller connected to the paste receptacle outside of and beyond the paste containing area, and one or more springs adapted to tensionally hold said roller in contact with sheets disposed below the same.

3. In a pasting device, the combination with a paste feeding receptacle, a paste applying pressure roller carried by said receptacle on the outside thereof, said roller bearing upon the sheets to be pasted, of a gate at the bottom of said receptacle adapted to be extended outside thereof, means for graduating the degree of opening in said receptacle for emitting streams of paste of various depths upon said gate, and means for graduating the distance between the edge of the latter and said roller for depositing layers of paste of various thicknesses upon the periphery of said roller when rotated to apply paste upon said sheets.

4. In a pasting device, the combination with a paste feeding receptacle, a paste applying pressure roller carried by said receptacle on the outside thereof, said roller bearing upon the sheets to be pasted, of a gate at the bottom of said receptacle adapted to be extended outside thereof, means for graduating the degree of opening in said receptacle for emitting streams of paste of various depths upon said gate, means for graduating the distance between the edge of the latter and said roller for depositing layers of paste of various thicknesses upon the periphery of said roller when rotated to apply paste upon said sheets, said graduating means being adjusted by finger pieces.

5. In a pasting device, the combination with a paste feeding receptacle, a paste applying pressure roller carried by said receptacle on the outside thereof, said roller bearing upon a layer of sheets and rotated by withdrawing the latter singly for depositing paste upon said roller and applying it upon the withdrawn sheets, an alinement block for the sheets, a pin passing through the sheets, a guard, said guard engaging the end of said pin to maintain the pin against breaking when the sheets are withdrawn.

Signed at the borough of Manhattan in the county of New York and State of New York this 4th day of January A. D. 1911.

JOHN W. COLLINS.

Witnesses:

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W. M. BASTABLE.