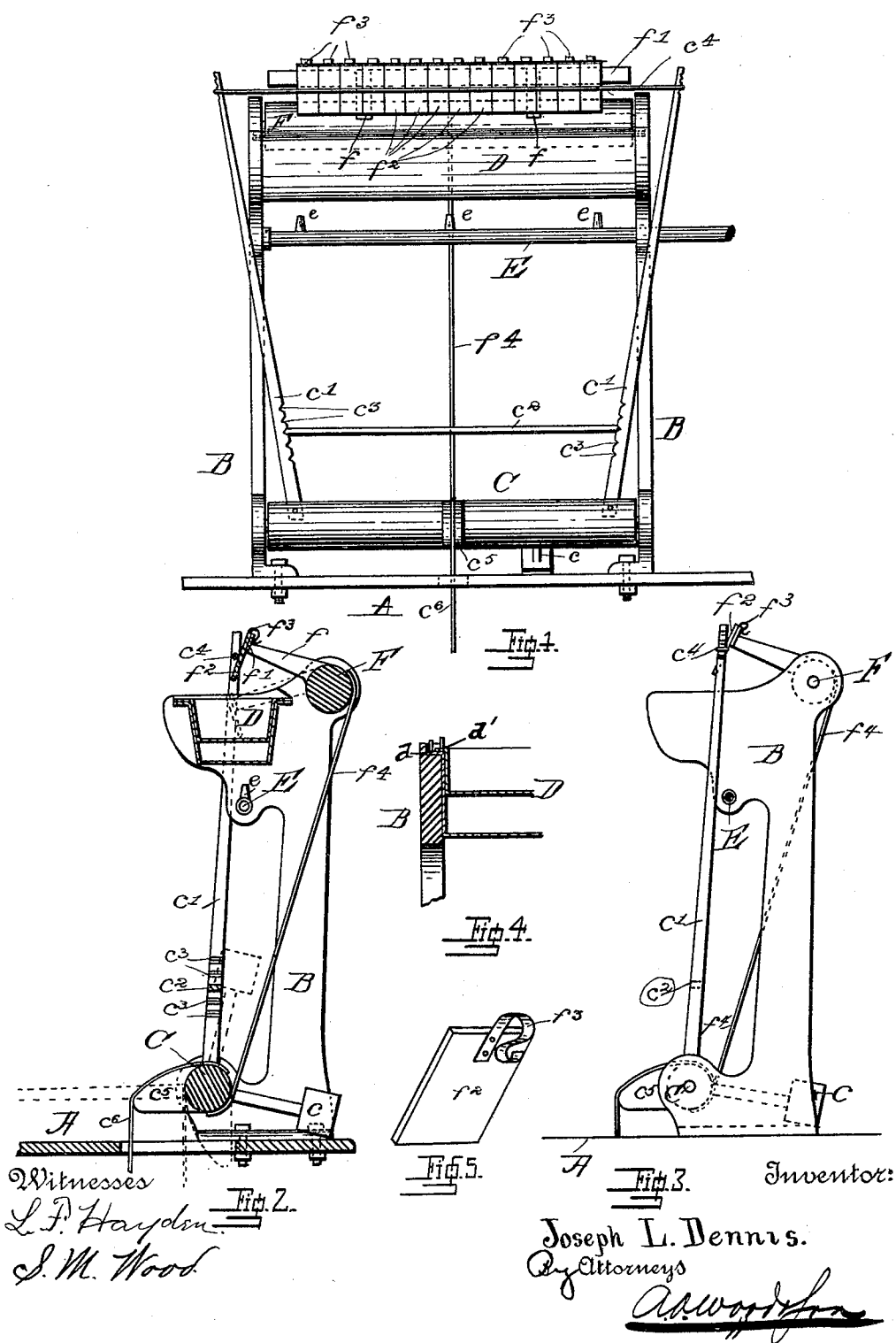


(No Model.)

J. L. DENNIS.
BINDERY PASTING MACHINE.

No. 481,258.

Patented Aug. 23, 1892.



UNITED STATES PATENT OFFICE.

JOSEPH LITTLETON DENNIS, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-HALF TO TOMLINSON F. BREWSTER, OF SAME PLACE.

BINDERY PASTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 481,258, dated August 23, 1892.

Application filed March 19, 1891. Renewed May 31, 1892. Serial No. 435,069. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH LITTLETON DENNIS, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Bindery Pasting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to machines for applying the glue or paste on the proper places and manner upon the fold of a pamphlet in binding same, the object being the improvement of the art to the extent of furnishing a durable machine which will properly perform the function desired and be inexpensive to the user, the details of the invention being hereinafter fully specified.

In the accompanying drawings, Figure 1 is an elevation of the device looking at the left side in Figs. 2 and 3, showing the elements in their normal position. Fig. 2 is a vertical cross-section through the entire device, the cut being to the right of the center of Fig. 1, this figure showing by dotted lines the position assumed by the parts in applying the adhesive. Fig. 3 is an end elevation of the right end of Fig. 1, further showing the elements therein shown. Fig. 4 is a detail in section through the frame, showing the glue-receptacle and means of suspending same, both ends being duplicate. Fig. 5 is a detail perspective view of one of the paste-dipping plates and springs thereof.

In the drawings like reference-characters are employed in the designation of corresponding elements in all the views.

A is the base, upon which rest and are secured the uprights B. The base A is preferably in the form of a table-top, upon which the work may be laid, as will be presently seen.

Journaled at each end to the uprights B, near their bottoms, is a shaft C, which is arranged by means of a weight-lever c or a spring and stop to remain normally in the po-

sition shown. Arms c' are secured to said shaft by the proper connecting device, the preferred form of which is as shown in Fig. 1—that is, setting their lower ends in mortises and pivotally securing them therein. In order to be light and resilient, these arms are made of wood, although of course metallic arms would perform the function required, and are caused to stand apart by a cross-piece c², of wood or metal, the ends thereof entering notches c³ in one side of each of the arms c'. Attached to the distant extremities of these arms c' and extending in a taut condition between them is a cord c⁴, of fiber or metal, the former preferred, and to keep this taut and elastically so is the function of the resilient arms c' and the cross-bar c². When the shaft C is in the position shown in the drawing, these arms project approximately vertically therefrom in the specific construction shown. Projecting from the proper side of the shaft C is a cam c⁵, over which passes the cord c⁶, as shown, the end being secured in any suitable manner to the shaft C, near the base of said cam c⁵. By the operation of this cam it will be seen that the initial movement of the shaft C on the depression by the foot of the treadle to which the cord c⁶ is secured will be slow, and all tendency of the centrifugal to throw the glue will be obviated, the speed being increased and the force, hence, diminished at the latter end of the stroke to a degree that will not spread the glue between the sheets already pasted, or unduly strain the cord c⁴.

Suitably carried near the top of the frame is a glue or paste pot D, a recess d being provided in the frame for the flanges d' of said pot. A transverse pipe E, provided with jets e, delivers gas or inflammable oil under the said pot for combustion in heating, and necessarily suitable cocks are thereto affixed for controlling said combustion. Burners of Argand or other suitable construction are preferable.

The shaft F is journaled on the frame near the glue-pot D and carries one or more arms f, which arm or arms carry a cross-bar f', to which are secured the removable dipping-plates f² by a spring-snap f³ thereon being pressed over the said cross-bar. By reason of this removability of the plates it is obvious

that various combinations of glued spaces may be laid upon the paper, the cross-bar f' being provided with as many plates f^3 in the proper position as are necessary to dip up and deliver glue to the cord c^4 when brought into contact therewith. For actuating the shaft F it is connected with the shaft C by pitman or otherwise, the preferable form being shown consisting of a strap or cord f^4 . Owing to the are passed through by the dipping plates being shorter than that of the arms c' , the said plates will remain in the glue during the latter portion of the passage downward of the said arms, which will keep said plates at all times heated and prevent any accretion of glue thereon and deliver the glue to the cord c^4 in the same degree of liquidity.

The operation of this device is as follows: Suitable guides are set upon the table A to bring a folding-point on the pamphlet to the point where the cord c^4 will fall along said folding-point. The treadle is then compressed and the cord laid along said folding-point by the partial revolution of said arms carrying said cord, and, being released, said arms will be drawn back by the weight on the shaft C. As the arms go down the glue-dipping plates descend into the glue, and as they come back the said dipping-plates are lifted out of the glue and the cord is laid against said plates, after which the second folio is laid on top of the first according to the guides and the arms and cord carried thereby are again depressed, gluing the folding-point of the second folio and pressing said second folio against the glued portion of the first folio, thus insuring its adherence. The pamphlet is then completed in this manner, and when the last folio

is reached it is not glued, but the first folio of the next pamphlet is laid on top thereof and the operation proceeded with.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class specified, the combination of the shaft C, carrying-arms projecting therefrom, a cord secured at each end to one of said arms at its distal extremity, means for forcing said arms apart for the purpose of tightening said cord, and means for supplying said cord with paste, for the purpose specified.

2. The combination of a binding-cord, supporting-arms therefor, a rock-shaft to which said arms are secured, a glue-pot, a dipping-plate e , means to swing the dipping-plate from the glue-pot into the path of the binding-cord, consisting of a rock-shaft and suitable plate-supporting arms secured thereto, and means to operate said shaft, all substantially as described.

3. In a device of the class specified, the combination of the rock-shaft F, the carrying-arms f , secured to said rock-shaft, the connecting cross-bar on the free ends of the carrying-arms, and the movable plates provided with the hook-shaped springs, said plates being adapted to be removably attached to the cross-bar, all substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOSEPH LITTLETON DENNIS.

Witnesses:

T. F. BREWSTER,
A. P. WOOD.