

(No Model.)

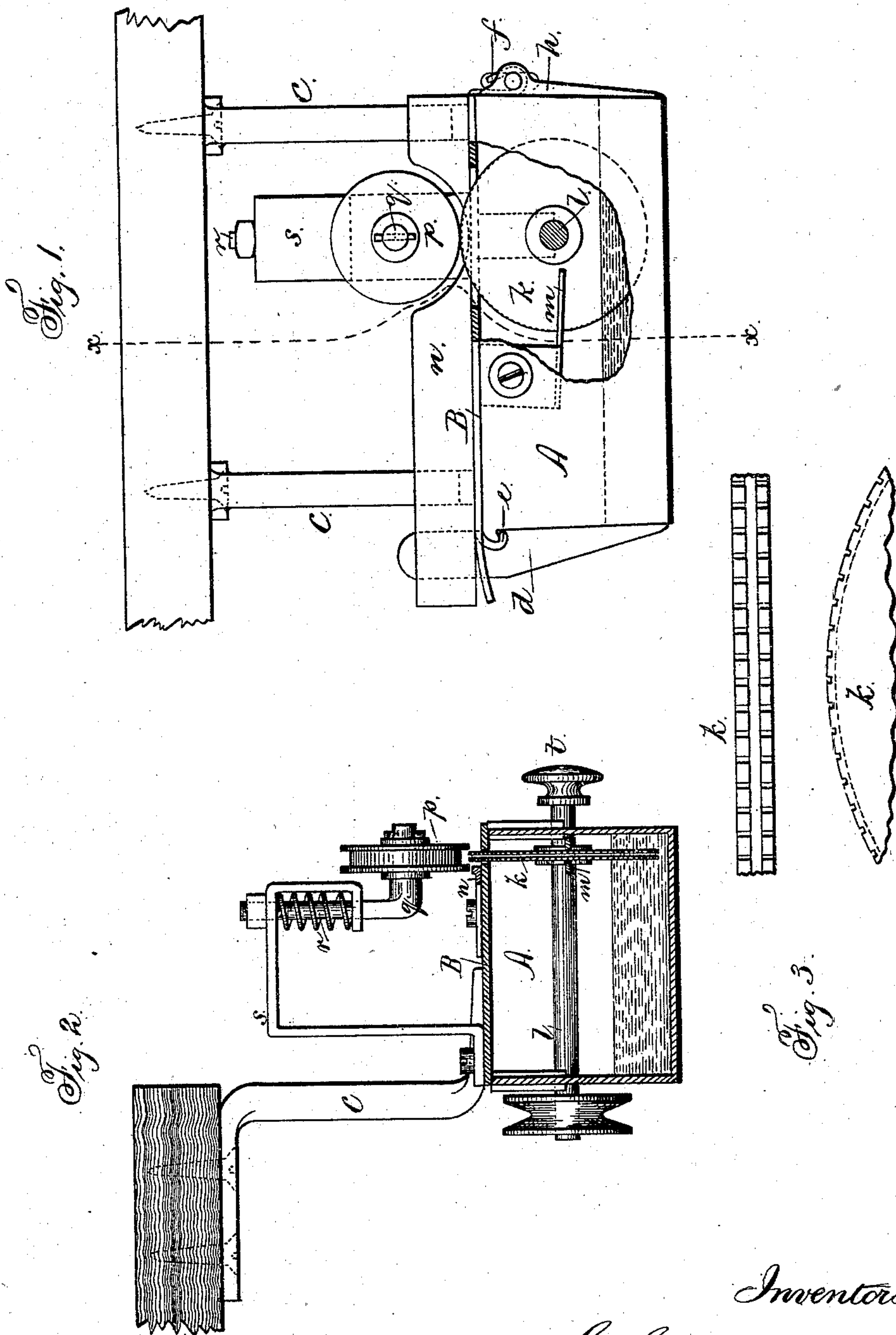
2 Sheets—Sheet 1.

G. CARLTON & D. M. SMYTH.

APPARATUS FOR PASTING SHEETS IN BINDING BOOKS.

No. 276,224.

Patented Apr. 24, 1883.



Witnesses

Chas. H. Smith

J. Haib

Inventors

G. Carlton

D. M. Smyth.

per Lemuel W. Perrell atty

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

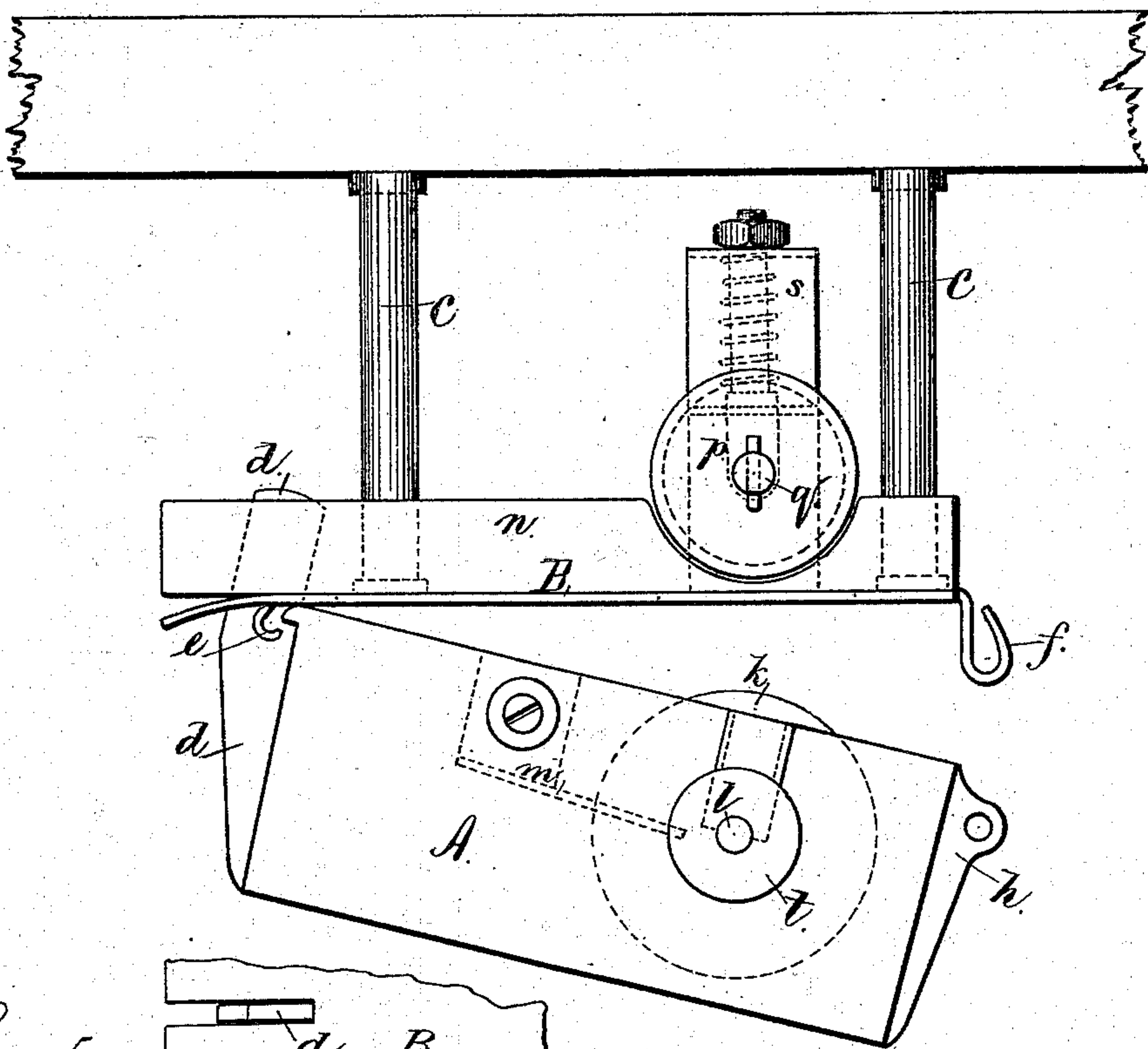
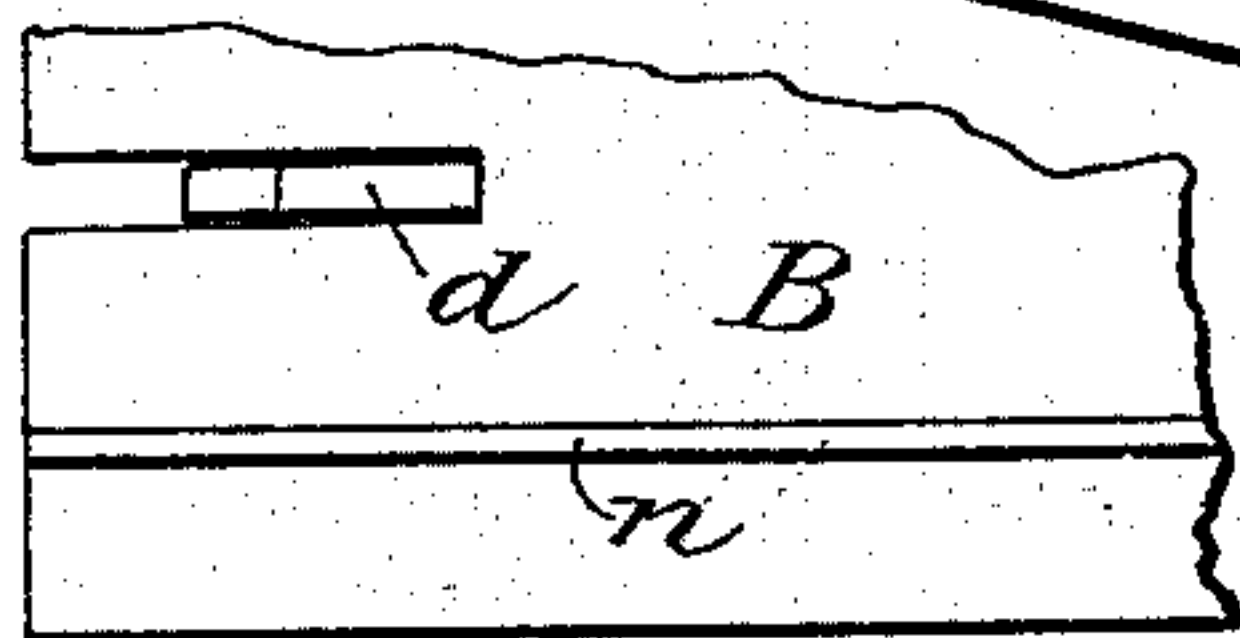


Fig. 5.



Witnesses
Harold Terrell
Chas. H. Smith

Inventors
Galen Carlton
per David M. Smyth
Lemuel W. Terrell
att'y.

UNITED STATES PATENT OFFICE.

GALEN CARLTON, OF BROOKLYN, NEW YORK, AND DAVID M. SMYTH, OF HARTFORD, CONNECTICUT, ASSIGNORS TO THE SMYTH MANUFACTURING COMPANY, OF HARTFORD, CONNECTICUT.

APPARATUS FOR PASTING SHEETS IN BINDING BOOKS.

SPECIFICATION forming part of Letters Patent No. 276,224, dated April 24, 1883.

Application filed October 2, 1882. (No model.)

To all whom it may concern:

Be it known that we, GALEN CARLTON, of Brooklyn, E. D., in the county of Kings and State of New York, and DAVID M. SMYTH, of Hartford, in the State of Connecticut, have invented an Improvement in Apparatus for Pasting, Gumming, or Tipping Folded Sheets in Binding Books, of which the following is a specification.

10 In binding books it is usual to paste the end sheets to the first and last signatures. In sewing books by such machinery as that shown in patents heretofore granted to David M. Smyth, the paste upon the end sheets is liable to spread and adhere to the presser, and come off upon subsequent sheets.

15 The object of this invention is to apply a line of paste or other adhesive material in the proper place for cementing the signature and sheets together without risk of the paste spreading, and to do this with great rapidity and accuracy.

20 In the drawings, Figure 1 is an elevation of the apparatus, partially in section. Fig. 2 is a cross-section at the line *x x*; Fig. 3 shows the edge of the paste-roller in larger size; Fig. 4 is an elevation of the apparatus with the paste-box below the fixed cover and ready to be moved up and attached to said cover, and Fig. 5 is a partial plan view of the cover and the blade upon the paste-box.

25 The box A is adapted to hold the proper quantity of paste or other adhesive material. It is removable from below the cover B, which usually will be fastened by brackets C from some suitable part of the book-sewing machine.

30 The paste-box A and cover B are connected in any usual manner. We prefer to employ a blade of sheet metal, *d*, that passes up into a slot in the cover B, and hooks *e* pass below a flange at one end of the box. There is a hook, *f*, depending from the cover B and passing in between flanges *h* at the end of the box, and these flanges are perforated, so that a pin can be inserted through the flanges and above the hook to connect the box to the cover after the other end of the box has been secured by the blade *d* and hooks *e*. This construc-

tion allows for removing the box and paste-wheel for cleaning the same.

35 The paste-wheel *k* is narrow and provided with a groove in its periphery, which, becoming filled with paste, places a line of paste upon the paper, near to and parallel with the back or folded edge of the sheet or signature. The surfaces of the wheel are preferably milled, so that the wheel will be revolved by the paper as it is drawn along over the edge of this wheel.

40 The shaft *l* of the paste-wheel *k* is in journals at the sides of the box A, there being slide-caps that fill the notches in the sides above the journals. These allow the shaft and roller to be lifted for cleaning. The scraper *m* is fastened to the box, and it is slotted for the paste-wheel, and it is movable, so as to set closer to or farther from the edge of the wheel and regulate the quantity of paste.

45 In the cover B is a slot for the paste-wheel to project up through, and upon the cover is a movable gage, *n*, that can be adjusted to regulate the distance between the line of paste and the folded edge of the sheet, which sheet is drawn over the wheel *k*, with the fold against the gage *n*. There is a yielding presser to keep the sheet down upon the paste-wheel. For this presser we use a roller, *p*, that is upon a gudgeon, *q*, that projects from a sliding bar, *r*, supported by the frame *s*, and provided with a spring that keeps the roller *p* downward with a small pressure. The roller *p* is preferably grooved, so that there will not be any force to spread the paste, the roller only insuring contact between the paste-wheel and the folded sheet or signature.

50 When this pasting apparatus is employed with the Smyth book-sewing machine it is preferable to paste near the back edges of the proper sheets or signatures and upon the surfaces that come toward the operator, and the presser-bar, which forces the sewed sheets back, is grooved, and acts above and below the line of paste, and does not become soiled with the same.

55 At one end of the shaft of the paste-wheel a thumb-wheel, *t*, should be provided, for rotat-

ing the shaft, if necessary, to turn any part of the wheel that may have become dry down into the paste.

If desired, the shaft and paste-wheel can be
5 revolved by a pulley and belt to pass the sheets through by power, instead of by hand.

We claim as our invention—

1. The combination, with the removable
paste box, wheel, and scraper, of a slotted
10 cover, an adjustable gage upon said cover for the folded edge of the signature, and a yielding presser to keep the sheet to the paste-wheel, substantially as set forth.

2. The combination, with the paste-box and
15 its cover, of the plate *d*, hooks *e f*, flanges *h*,

and pin for connecting the box and cover, substantially as set forth.

3. The presser-roller having a grooved periphery, and the gudgeon and its yielding support, in combination with the removable paste-
20 box, the cover, the adjustable gage *n* upon such cover, and the paste-wheel within the box, substantially as set forth.

Signed by us this 26th day of September,
A. D. 1882.

GALEN CARLTON.
DAVID M. SMYTH.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.