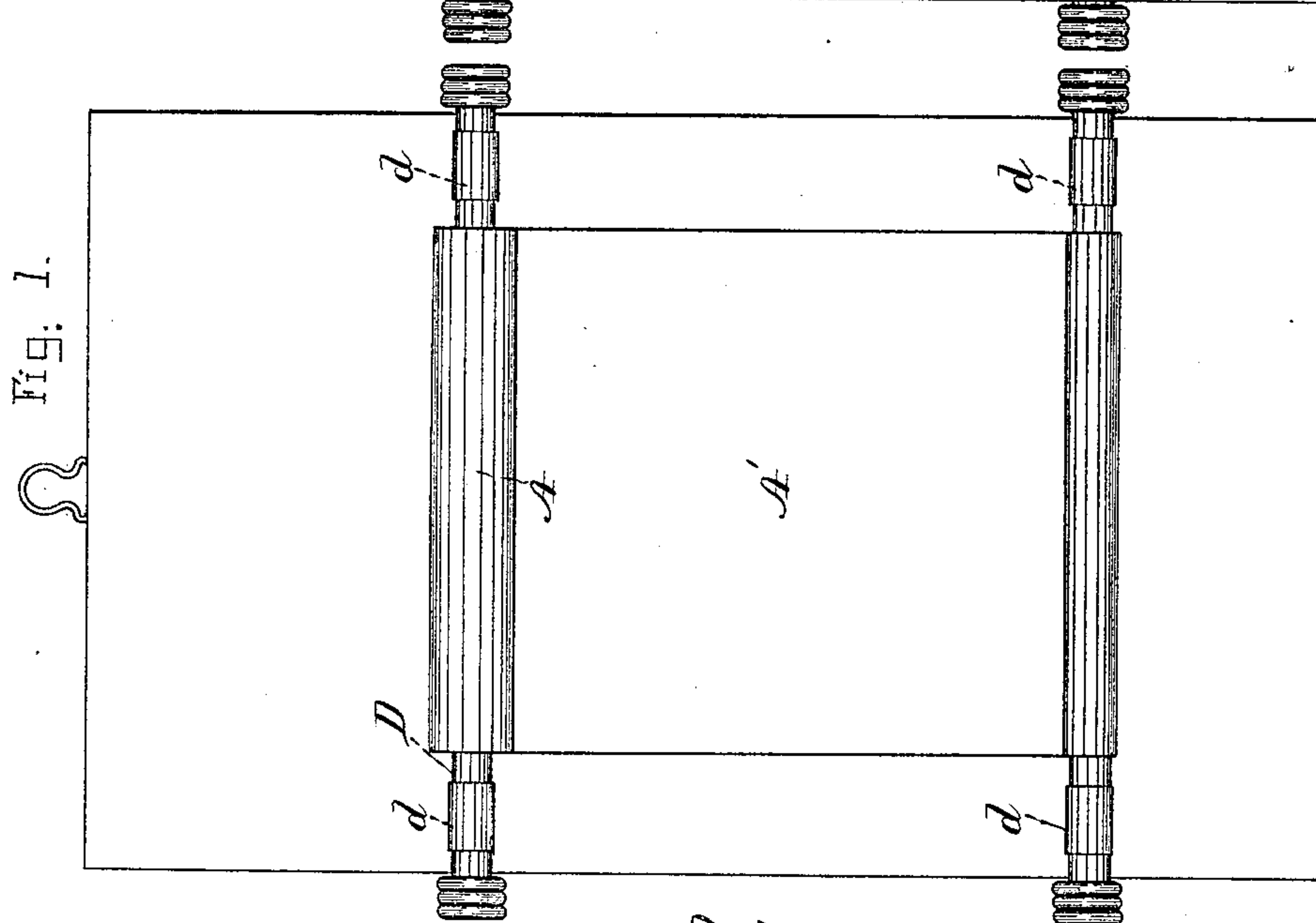
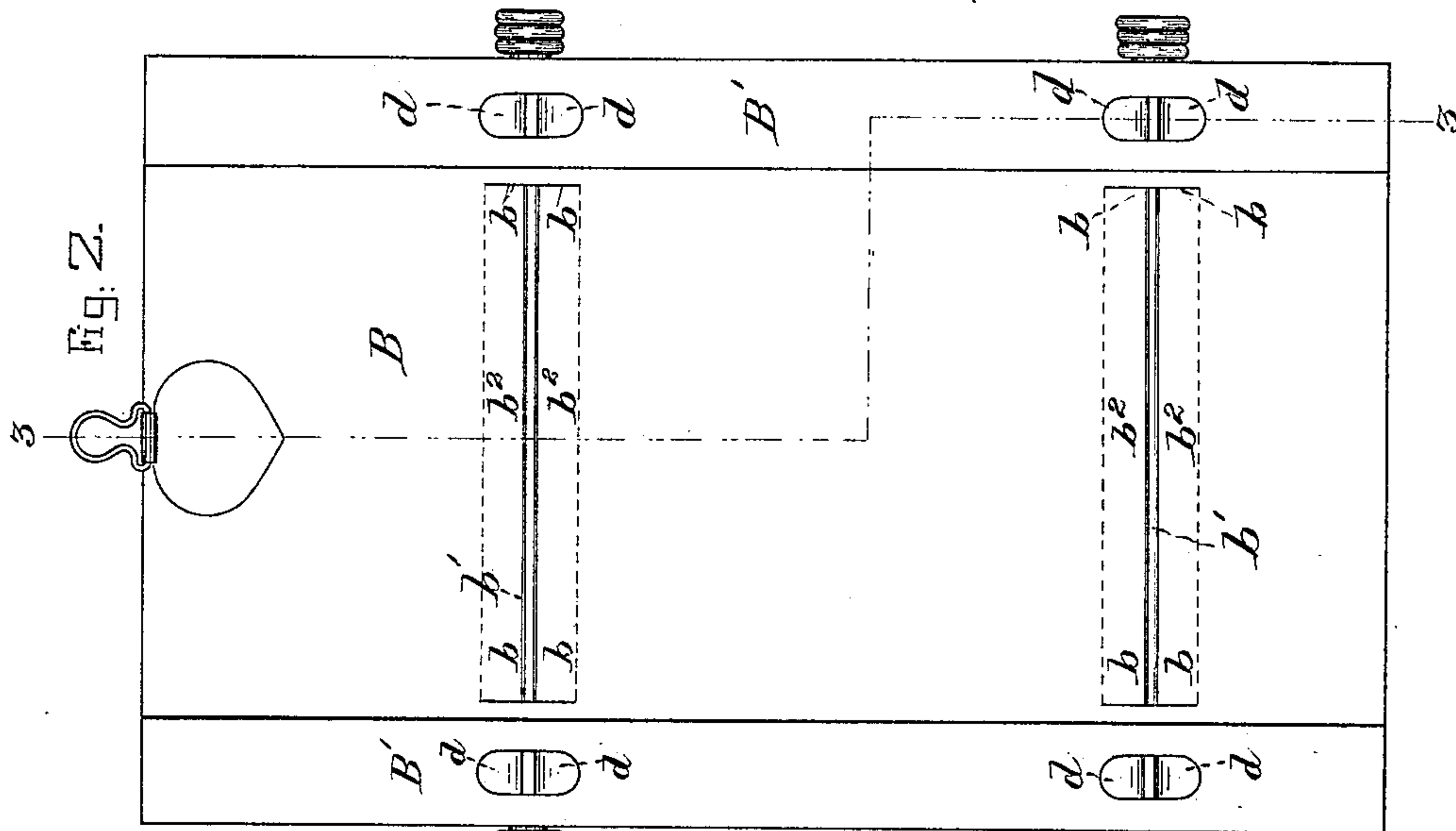
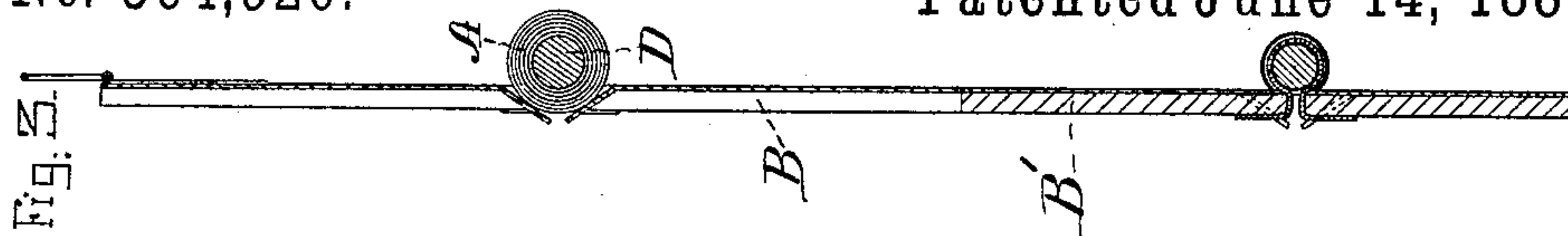


(No Model.)

H. S. HACK.
ROLL CALENDAR.

No. 364,920.

Patented June 14, 1887.



Witnesses.

Edward S. Beach.

John R. Knowlton.

Fig. 4.

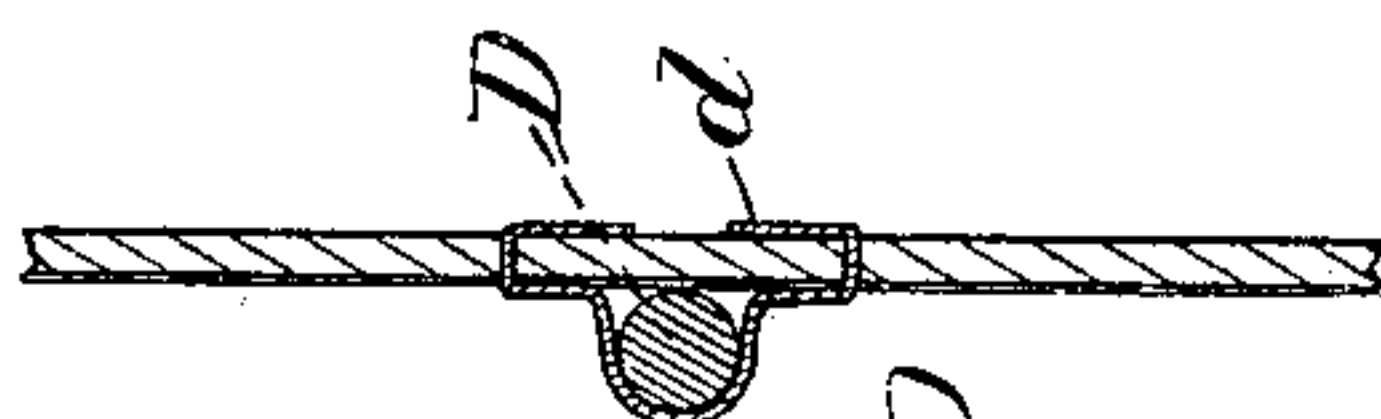
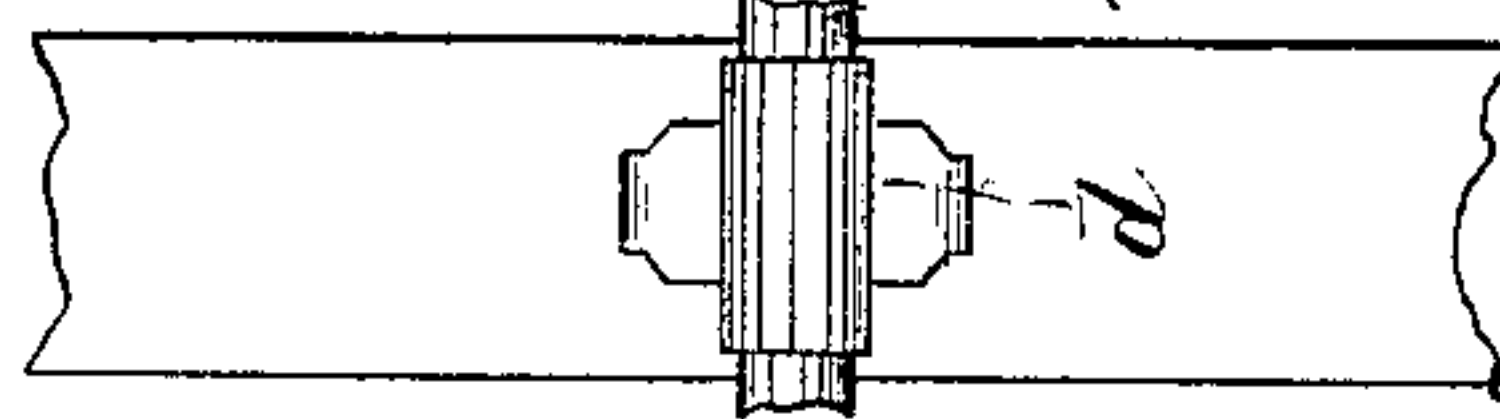


Fig. 5.



Inventor.

Henry S. Hack

by his attorney.

J. E. Maynard

UNITED STATES PATENT OFFICE.

HENRY S. HACK, OF TAUNTON, MASSACHUSETTS.

ROLL-CALENDAR.

SPECIFICATION forming part of Letters Patent No. 364,920, dated June 14, 1887.

Application filed April 21, 1887. Serial No. 235,615. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. HACK, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Roll-Calendars, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a calendar with my improvement. Fig. 2 is a rear elevation. Fig. 3 is a section on the line 3 3, Fig. 2. Figs. 4 and 5 show in section and plan a modification of the metallic fastenings.

My present invention is an improvement upon the calendar described in my pending application, Serial No. 111,174, filed November 8, 1883. In that application the backing was slotted to receive the calendar-roll; but I have found that providing such a slot with flaps greatly improves the operation of the calendar, these flaps forming a friction device which bears gently against the periphery of the roll, and thereby keeps the roll in shape. This combination of the roll, its spindle, and slotted backing with the friction-flaps in the slots constitutes the main feature of my invention.

Another feature is a backing composed of a sheet of paper or the like re-enforced by side strips, with the calendar-roll and its spindle held to the backing by metallic fastening devices, which serve as bearings for the spindle and connect the spindle with the re-enforcing strips.

In the drawings, A represents the roll, and A' that part of the calendar-strip which is unwound. The backing is formed of a sheet of paper, B, and two re-enforcing strips, B', of wood.

To form the slot to receive the roll A, I slit the sheet B at *b b*; but instead of recessing the rectangular piece between the slits *b b* (shown

in dotted lines in Fig. 2) I connect the slits *b b* by the long slit *b'*, or else remove only a part of the rectangular piece between the slits *b b*, thereby leaving the flaps *b²*. It will be obvious that the rectangular piece between the slits *b b* may be wholly cut out, leaving a slit of which *b b* in Fig. 2 will represent the end walls and the dotted lines joining *b b* in Fig. 2 the side walls, and that the flaps *b²* may be made of strips pasted or otherwise secured to the sheet B; but when the sheet B is of paper of the proper quality I prefer to make the flaps *b²* integral with it, and it is only where I use a sheet B which is brittle and lacks resiliency that I use separate strips to form the flaps *b²*. I prefer to cement the sheet B to the wooden strips B', especially at and near the ends of the strip B'. I then stab the backing for the reception of the metallic fastenings *d* and slit the sheet B at *b, b*, and *b'*. The roll A and its spindle D are then applied, the prongs of the fastenings *d* being passed through the stabs and bent back, as shown. In the larger sizes of calendars I prefer metallic fastenings of the form shown in Figs. 4 and 5.

In the drawings I have shown a double-roll calendar; but, as will be obvious, all the features of my invention are applicable to single-roll calendars.

What I claim as my invention is—

1. In a roll-calendar, the flaps *b²*, one or both projecting from the side walls of the slot in the backing B and pressing against the roll A, substantially as and for the purpose specified.

2. The backing formed of sheet B and strips B', in combination with the roll A, its spindle D, and the fastenings *d*, as set forth.

HENRY S. HACK.

Witnesses:

J. E. MAYNADIER,
M. W. MAYNADIER.