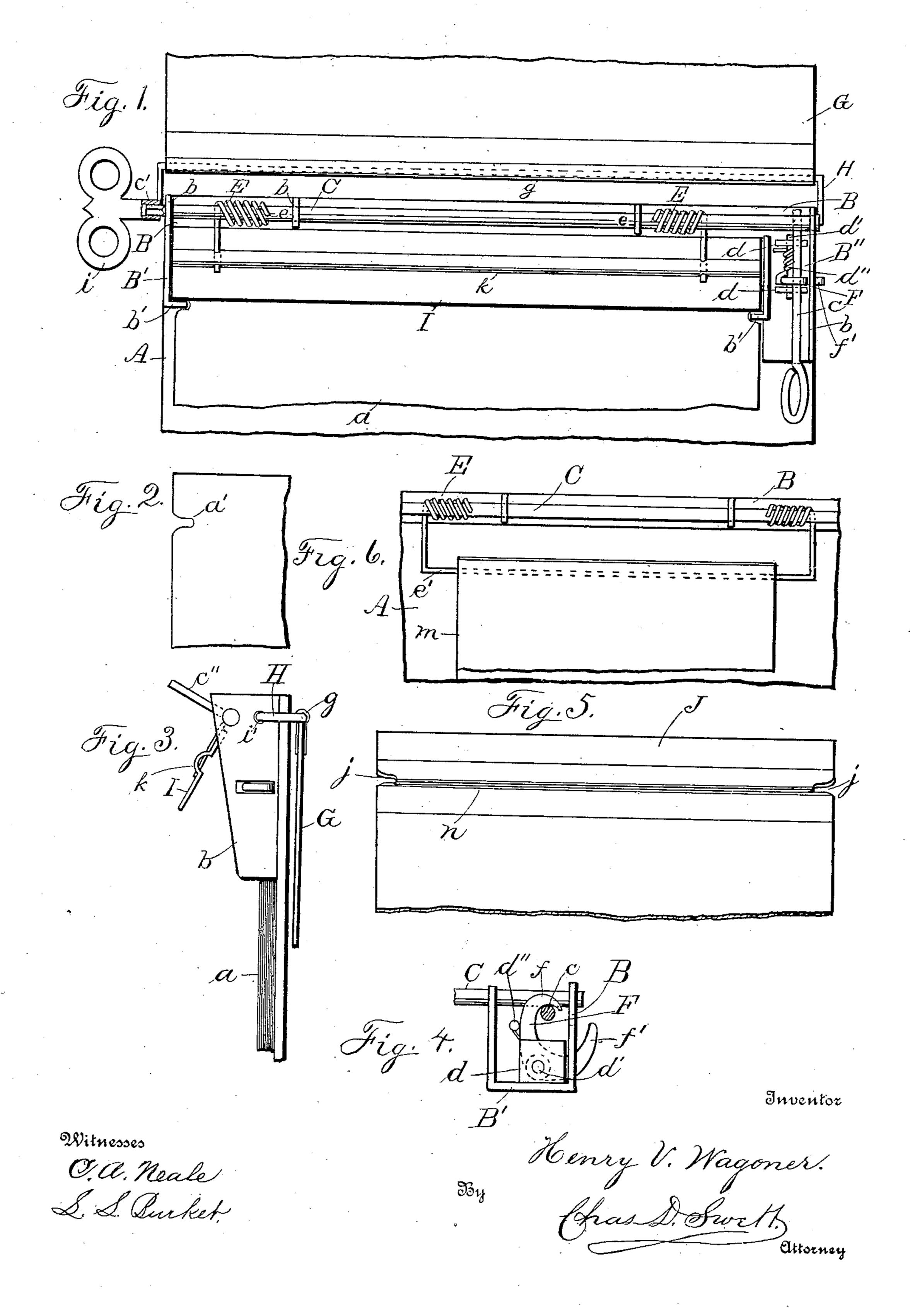
H. V. WAGONER.

BINDER.

APPLICATION FILED NOV. 21, 1906.



UNITED STATES PATENT OFFICE.

HENRY V. WAGONER, OF BROOKLYN, NEW YORK.

BINDER.

No. 863,242.

Specification of Letters Patent.

Patented Aug. 13, 1907.

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To all whom it may concern:

Be it known that I, Henry V. Wagoner, a citizen of the United States, residing at Bensonhurst, in the borough of Brooklyn and State of New York, have invented certain new and useful Improvements in Binders, of which the following is a specification.

My invention relates to devices for holding loose leaves or sheets of paper or other material under clamp pressure, and either with, or without a cover. It is 10 also adapted for holding magazines, note books and pamphlets, as a book binding. Normally, the clamp employed stands open, and is closed by a short lever, or by a key, and is held closed by an automatic catch until purposely released.

The accompanying drawing illustrates the device, in which, Figure 1 presents a plan view with an open cover thereon and the clamp in operative position. The cover, leaves and base-board, are shown fragmentarily. Fig. 2 is a plan of the upper end of a loose sheet of paper. 20 Fig. 3 is an enlarged side view of Fig. 1, but with the clamp open and the cover turned over against the under side of the base-board. Fig. 4 is a rear elevation of the catch, enlarged. Fig. 5 is a detail view of an upper corner of the sheet support, and Fig. 6 is a plan of the 25 middle part of the device showing a modification of the clamp.

Like letters of reference denote corresponding parts in the several views.

The letter A designates the base-board on which the 30 sheets or leaves a are laid.

B, B are supports for a rock-shaft C, and are secured to the base A, near one of its sides or ends. These supports are preferably formed of metal plates, secured to the base A, and having their ends b, b, turned up at a 35 right angle to form the bearings.

B', B" are extensions of the plates B, and upon these are erected the sheet retainers b', b', which engage lateral notches a', a', in said sheets. They also engage the notches j, j, in the sheet support J, which is placed be-40 neath one or more of the sheets to insure a smooth and firm writing surface.

The shaft C is rocked by a short lever or handle c, attached to it near one of its ends. When this lever is depressed, it is engaged by an automatic spring catch 45 secured on the extension B' of the plate B. This shaft may also be rocked by a key i, adapted to fit upon the angular end c' of the shaft C. in which case a short arm c'' on the shaft is engaged by the catch.

Coil springs E, E are provided on the rock-shaft, each 50 having an end e bent to engage a hole in the shaft; or being attached to the shaft in any other preferred way. The other ends of the springs E are secured to the clamp piece I. This clamp piece may be formed in any preferred way, but I here show it to be substantially flat 55 with a corrugation k upon it. The clamp I stands open normally, and when the lever c is depressed an l

elastic pressure is secured upon the leaves a; said pressure being maintained by the catch until purposely released. This catch is composed of supports d, d, on the extension B', a rod d' on said supports, a coil spring d'' 60 on said rod and having one end anchored and its other end bearing against a detent F, whose upper curved part f is adapted to engage the depressed lever arm c, and whose lower end extends outwardly through the part b to form the finger pressure piece f'

G is the cover of the device whose edge g is attached to the hinges H, H, whose ends are bent to engage holes i' in the part b. This construction permits the cover to be turned over backwards against the under side of the base A.

J is a leaf support to be placed under one or more of the leaves a, when writing thereon, to give them a smooth and firm surface. It has notches j, j, to engage the retainers b'.

In the modification shown in Fig. 6 the clamp con- 75 sists of a continuation e' of the wire E. This part e' is placed between the leaves of a magazine or note book m, and holds it securely when the clamp is under pressure.

I do not limit myself to the exact construction of this 80 device as shown, since more or less than two springs E might be used: also the base A might be formed of metal and the supports B be formed integral with it. And so in other parts of the device, in which I reserve the right to make equivalent changes—

What I claim and desire to secure, is,—

1. A binder comprising a base, a rock-shaft, means on said base for carrying said rock-shaft, a pressure clamp, springs coiled about said rock-shaft, one end of said springs being attached to said rock-shaft and the other 90 ends of the springs being attached to the pressure clamp, means for actuating said rock-shaft thus tightening said spring coils and producing pressure on the clamp, and means for retaining and releasing the pressure so produced.

2. A binder comprising a base, shaft bearings on said base, a rock-shaft in said bearings, coil springs attached to said shaft, a clamp attached to said springs, means to actuate said shaft to produce pressure by said clamp and means to maintain, and to release, said pressure, as 100 described.

3. A binder comprising a base, sheet retainers on said base, sheets having notches engaged by said retainers, shaft bearings on said base, a rock-shaft in said bearings, a short arm on said rock-shaft, coil springs on said shaft 105 one of whose ends engages said shaft, a corrugated pressure clamp attached to the other ends of said springs, said clamp standing open normally, a key to close said clamp, a catch to engage said arm on said shaft, and a sheet support provided with notches to engage said sheet 110 retainers as herein set forth.

4. A catch comprising supports on a base, a rod on said supports, a coil spring on said rod, a detent loose on said rod having its upper pårt adapted for engagement and its lower part extended to form a pressure piece, said detent 115 being under pressure of said coil spring as described.

5. In a binder a base having supports for a clamping device, holes in said supports, a cover for said binder, a

wire hinge attached to said cover and having its ends bent to rotate in said holes in said supports as described.

- 6. In a leaf binder comprising a base, a shaft support thereon a rockshaft in said support, a clamp, spring con-5 nection between said rock-shaft and clamp, a lever to actuate said shaft, a spring catch to engage said lever when depressed means to release said lever, and means to retain said leaves on the base board, as described.
- 7. A binder comprising a base, shaft bearings on said 10 base, a rock-shaft in said bearings, coil springs on said shaft, one of whose ends engages said shaft, a pressure clamp attached to the other ends of said springs, said pressure clamp standing open normally, means to actuate

said rock-shaft to produce a tension on said clamp, and means to retain the tension so obtained, until purposely 15 released.

8. A catch comprising a rocking detent freely journaled on a bearing rod, a spring holding said detent in operative position, and a projection on said detent by which it is forced out of operative position, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. HENRY V. WAGONER.

Witnesses:

BENNETT S. JONES, CHAS. D. SWETT.