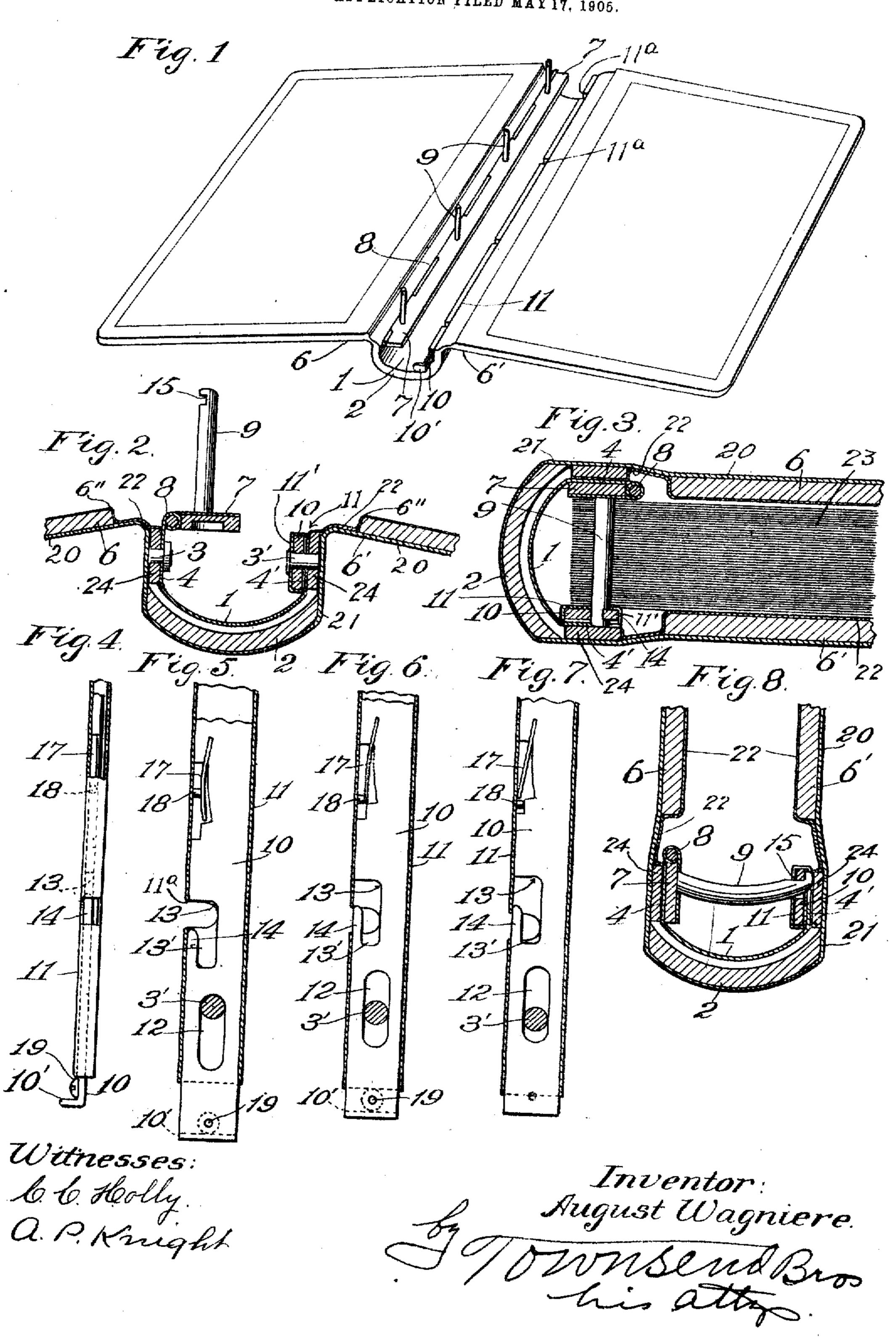
A. WAGNIERE.
PERMANENT BINDER FOR LOOSE LEAF RECORDS.
APPLICATION FILED MAY 17, 1905.



## UNITED STATES PATENT OFFICE.

AUGUST WAGNIERE, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO HENRY J. PAULY, OF LOS ANGELES, CALIFORNIA.

## PERMANENT BINDER FOR LOOSE-LEAF RECORDS.

No. 842,361.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed May 17, 1905. Seriai No. 260,744.

To all whom it may concern:

citizen of the United States, residing at Los Angeles, in the county of Los Angeles and 5 State of California, have invented a new and useful Permanent Binder for Loose-Leaf Records, of which the following is a specification.

The main object of this invention is to fato cilitate the insertion of leaves in loose-leaf binders.

Another object of the invention is to provide means for permanently locking records in the binder.

The accompanying drawings illustrate the invention, and, referring to the same, Figure 1 is a perspective of the binder in position for insertion of leaves. Fig. 2 is a section of the back or fastening portion of the binder in 20 open position. Fig. 3 is a transverse section thereof in closed position. Fig. 4 is an edge view of part of the locking-bar. Figs. 5, 6, and 7 are side views thereof in unlocked, temporarily-locked, and permanently-locked 25 positions. Fig. 8 shows a modified form of ! the back device.

I designates the back member or plate, preferably formed of sheet metal bent into channel shape and having the book-back 2 30 firmly secured thereto, as by means of screws. or rivets 3 3' passing through the upturned walls 4 4' of member 1 and into book-back. 66' designate the cover members of the book.

A strip or bar 7 is hinged at 8 directly to the top edge of wall 4 and carries the pins, studs, or standards 9 to engage and hold the paper, which is suitably perforated to slip over said pins. Said bar 7 can be turned up 40 to bring the pins 9 into upright position, so as to facilitate the insertion of sheets, and can then be turned down to extend thepins across the channeled back member 1. At the other side of this channeled back member 45 is a locking device for the pins, consisting of a bar 10, slidably mounted in a case or guide 11, formed on the side wall 4'. This case may be formed by an angle-strip 11', fastened to wall 4' by rivets 3', so as to leave 50 between said strip and wall a space for reception and guidance of the locking-bar 10. Case 11 has notches 11<sup>a</sup> for passage of pins 9.

Locking-bar 10 has a lug or bend 10' at the end to enable it to be grasped in moving it in |

Be it known that I, August Wagniere, a for passage of rivets 3' and with notches 13 for reception of pins 9, said notches 13 having rearward extensions 13', into which the pins enter when the bar 10 is pushed in, the arms or projections 14 above said extension serving 60 to hold down or lock the pins. Pins 9 have notches or slits 15 engaged by said lugs to more firmly bind the parts together.

It is usual to bend in the joint or flexible portion between the back and cover, with the 65 result that when the binder is opened the inner corners of the cover will form ridges, preventing the leaves from lying flat. To overcome this, I prefer to attach the rigid cover members 6 and 6' to the outer ply 20 of the 70 cover at a little distance from the back of the book, so that the inner corners 6" of the cover members are spaced outwardly from and sag to nearly a level with the bent portions of inner ply 22 when the book is open, so that 75 there will be no bending of the sheets 23. 24 designates bracing-bars glued or otherwise secured between the case 11 and the side 21 of the back 11.

The above-described binder constitutes a 80 binder which is complete in itself. For some purposes I prefer to use in connection therewith means for permanently locking the bar in inner or locking position. Such means may consist of a detent 17, formed, for ex- 85 ample, as a leaf-spring on bar 10, which in the normal locking movement of bar 10 slides idly in the case 11 over the top of a pin or lug-18, but which when the bar is pressed in farther engages back of said pin 18 to hold the 90 bar from being again pulled out. A movable or removable stop is provided for normally limiting this inward movement, so that this permanent locking effect cannot take place. This stop may consist of a screw 19, 95 screwing into the slide-bar 10 and engaging the end of case 11 to limit the movement of bar 10. On removing the screw the next inward movement of bar 10 will cause engagement of spring-detent 17 with pin 18, and the 100 binder will be permanently locked by the automatic action of said detent 17.

The construction may be variously modified without departing from the invention. Fig. 8 shows a form of the invention in which 105 the pins 9 instead of being straight, as in Fig. 1, are curved.

In practical use the leaf-holding means 9

may be readily swung up out of the channeled member for the reception or removal of the leaves, and when returned to normal position said leaf-holding means are chambered in the channeled back member, which gives permanent form to the back of the book. The under surface 20 of the cover is fastened to the cover members 6 6' and forms flexible means connecting said cover members with the edges of the back member, as clearly shown in Figs. 2, 3, and 8, above the level of the leaf-holding means when the book is laid open.

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1. In a loose-leaf binder, a channeled back member and a bar hinged thereto carrying leaf-engaging pins, and adapted to fold into the channel of the back member.

2. In a loose-leaf binder, a channeled back member, a bar hinged thereto carrying leaf-engaging pins and arranged to fold into the channel of the back member, and a locking means for engaging said pins, when the same

are in the channel.

3. In a loose-leaf binder, a channeled back member, a locking-bar at one side thereof, a bar adapted to fold into the channel of the back member hinged to the other side of said member and carrying leaf-engaging pins standing upright in one position of the bar to receive the leaves, and across the channeled member in another position of the bar, to engage the locking-bar.

4. In a loose-leaf binder, a leaf-engaging member, a locking member therefor; an automatically-operating locking-detent for the locking member preventing its backward movement when engaged therewith, and means normally preventing the engagement

of said locking-detent.

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5. In a loose-leaf binder, a leaf-engaging

member, a locking member therefor, means for normally limiting the movement of the locking member and a detent engaging the locking member, when it exceeds the normal movement, to prevent return movement.

6. In a loose-leaf binder, a leaf-engaging member, a locking member therefor having a definite normal movement, and a detent engaging the locking member when it exceeds the normal movement, to lock said bar.

7. In a loose-leaf binder, a leaf-engaging member, a locking member therefor, movable means for normally limiting the movement of the locking member, and a detent engaging the locking member when it exceeds the normal movement, to prevent return movement.

8. In a loose-leaf binder, a leaf-engaging member, a locking member therefor, removable means for normally limiting the movement of the locking member, and a detent engaging the locking member when it exceeds the normal movement, to prevent return movement.

9. A locking device for loose-leaf binders comprising a case member, a locking member 65 slidable thereon, one of said members being provided with a projection and the other with a spring-detent to engage such projection in a certain relative position of the members, and a removable stop to prevent the 70 relative movement of said members to said position.

In testimony whereof I have hereunto set my hand, at Los Angeles, California, this 9th

day of May, 1905.

AUGUST WAGNIERE.

In presence of— ARTHUR P. KNIGHT, JULIA TOWNSEND.