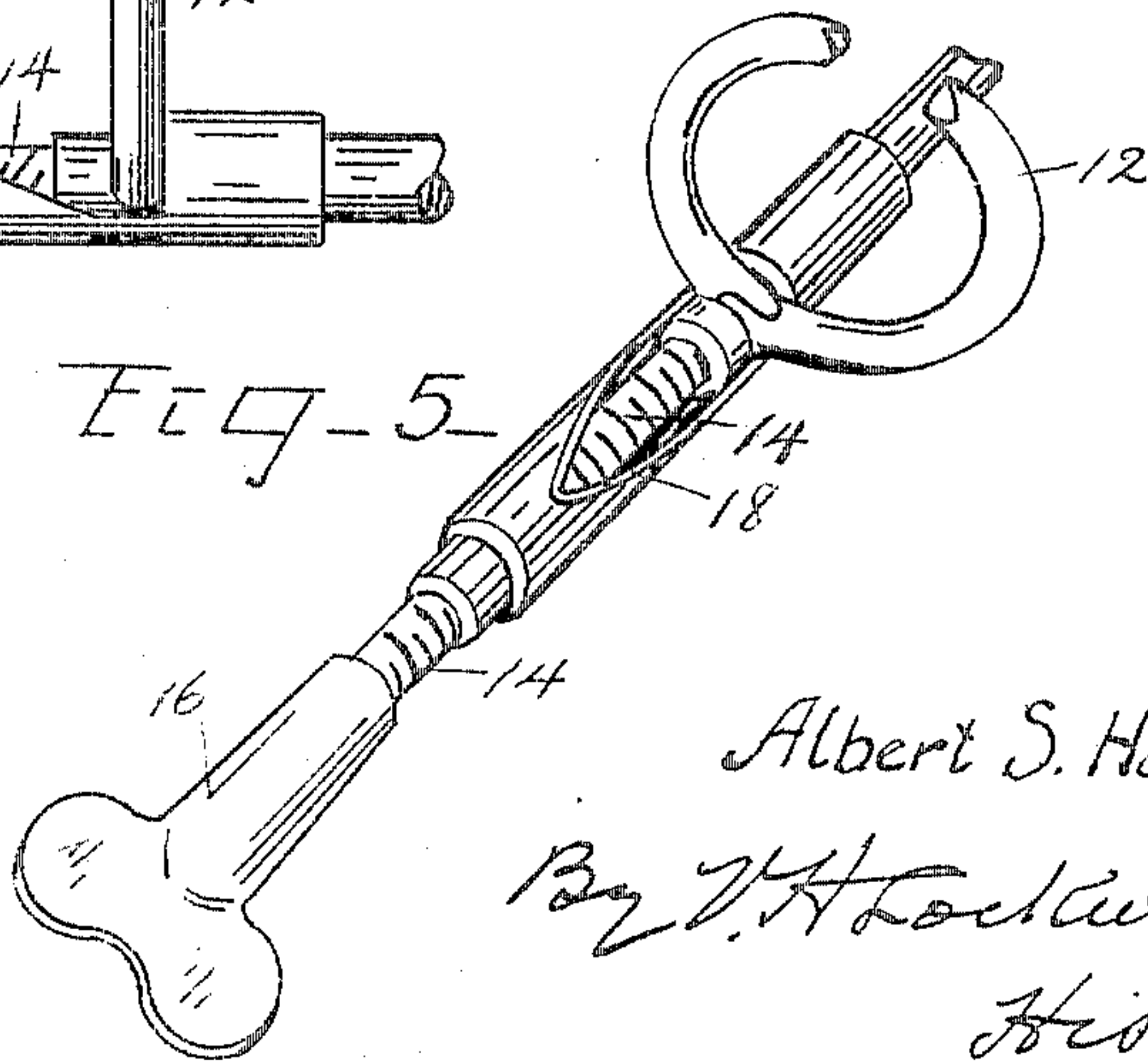
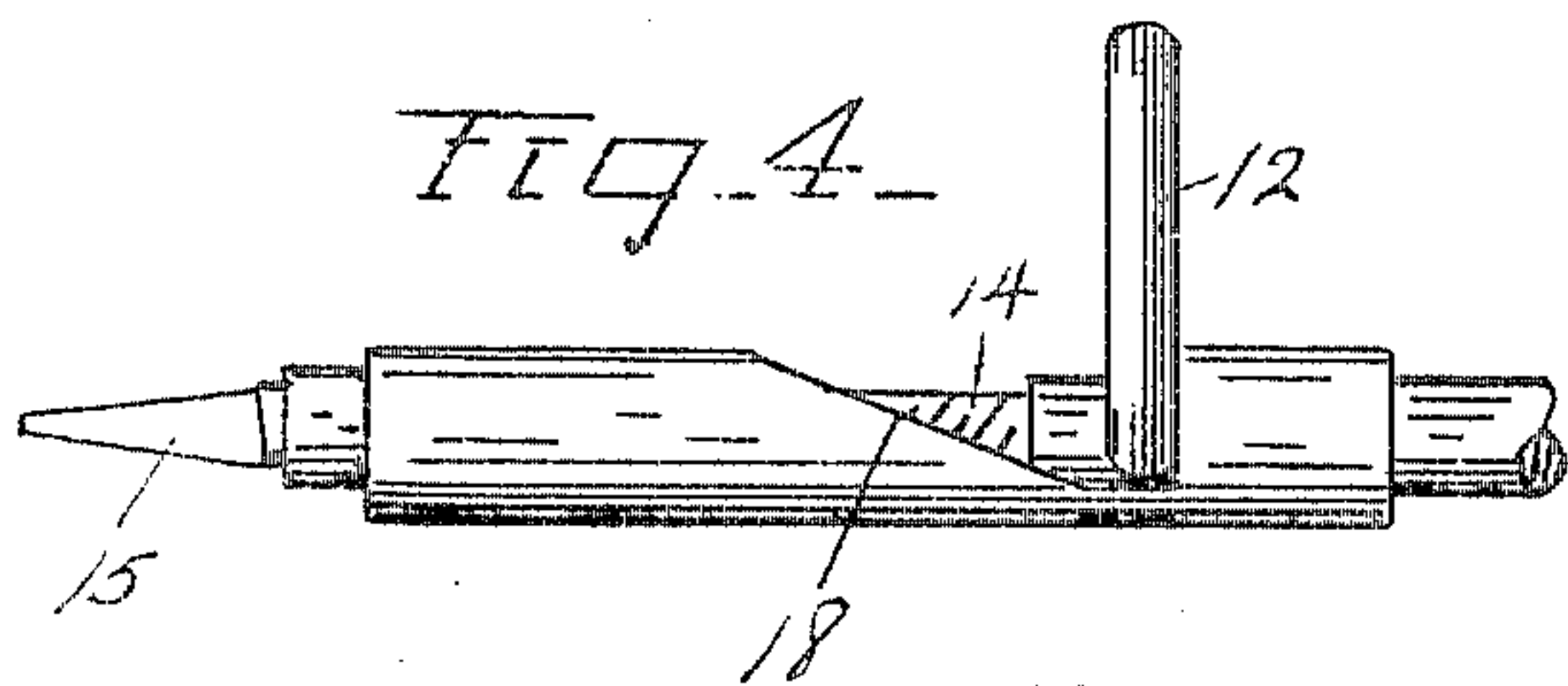
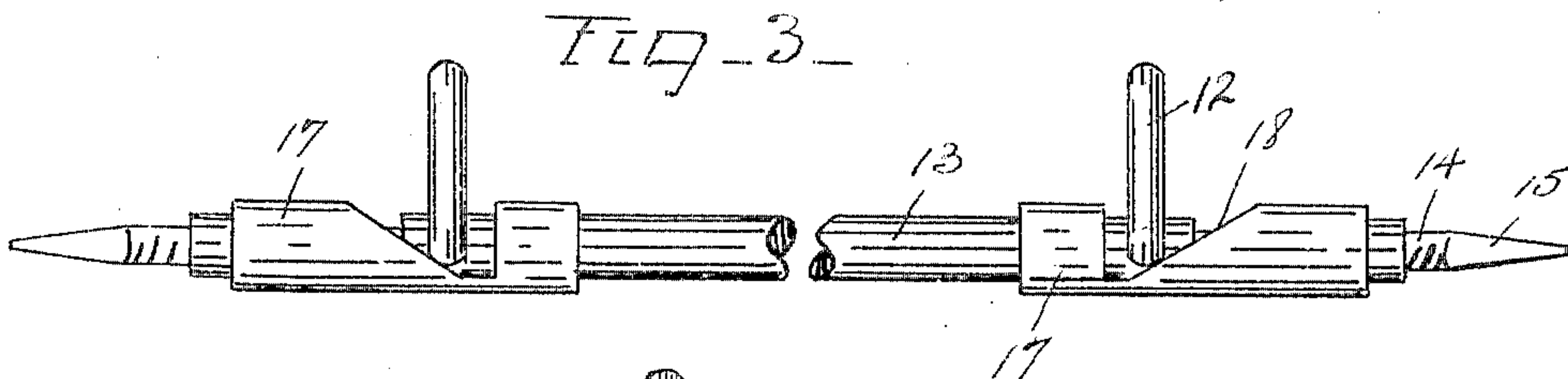
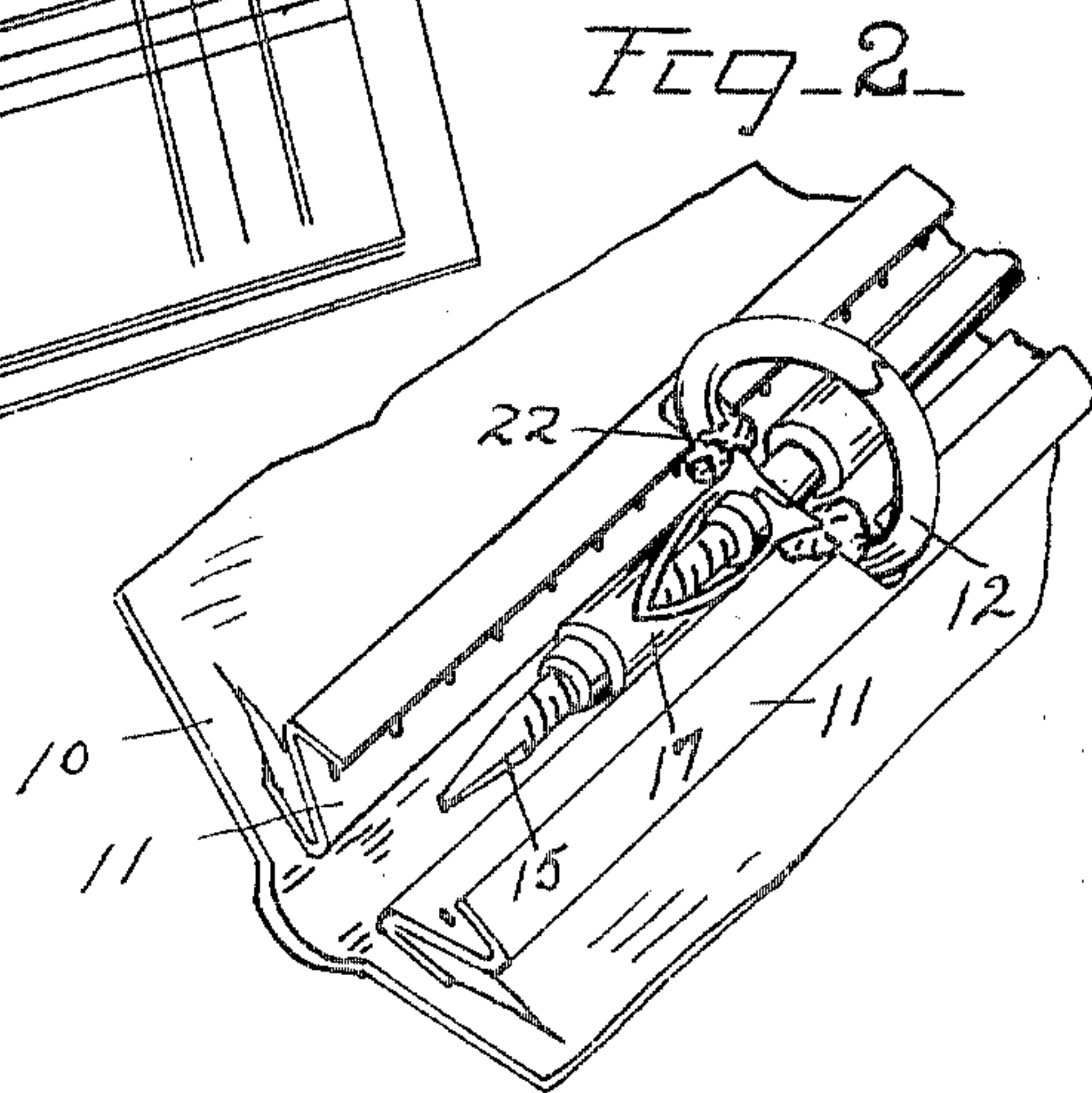
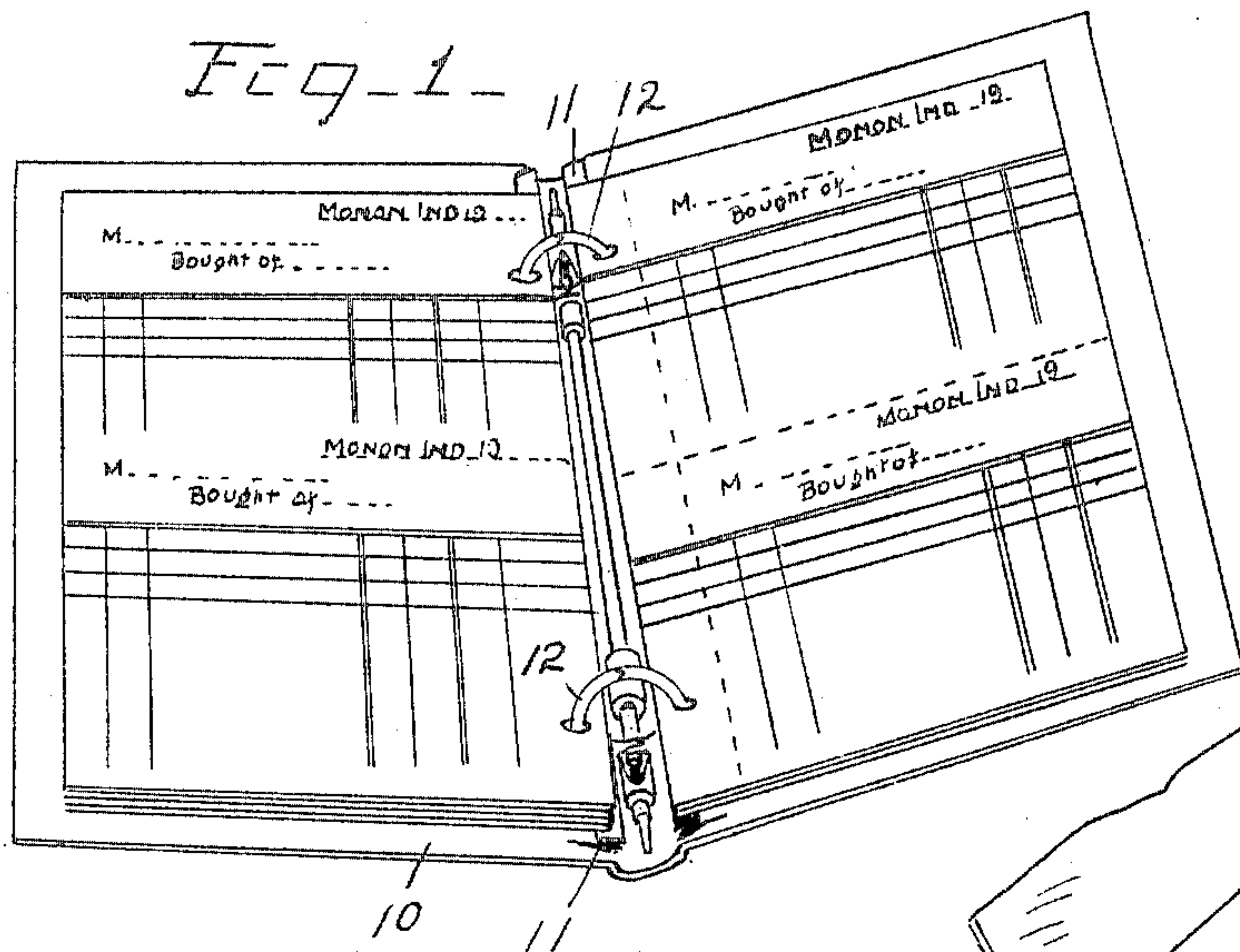


No. 804,599.

PATENTED NOV. 14, 1905.

A. S. HARN.
TEMPORARY BINDER.
APPLICATION FILED DEC. 24, 1904.



Witness
W F Bonham.
N. Allmoning.

Inventor
Albert S. Harn
By V. H. Lockwood.
His Attorney

UNITED STATES PATENT OFFICE.

ALBERT S. HARN, OF BLOOMINGTON, INDIANA.

TEMPORARY BINDER.

No. 804,599.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Original application filed September 28, 1904, Serial No. 226,288. Divided and this application filed December 24, 1904. Serial No. 238,239.

To all whom it may concern:

Be it known that I, ALBERT S. HARN, of Bloomington, county of Monroe, and State of Indiana, have invented a certain new and useful Temporary Binder; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

This application is divided from an application filed by me September 28, 1904, Serial No. 226,288, on "loose-leaf ledgers."

The object of this invention is to provide convenient means in connection with a loose-leaf binder for holding the leaves in place or releasing them, and said means being operated by a removable key for opening and closing the loose-leaf fastener, so that the contents of the book will be locked in place and the sheets be not removable except by some one having the proper key.

The full nature of the invention will be understood from the accompanying drawings and the following description and claim.

In the drawings, Figure 1 is a perspective view of a loose-leaf ledger open, some of the removable sheets torn away. Fig. 2 is a perspective view of the means for holding and combining the sheets together, the holding-ring being closed. Fig. 3 is a side elevation of the means for opening and closing the rings, the same being centrally broken away. Fig. 4 is a side view of what is shown at one end in Fig. 3. Fig. 5 is a perspective view of one end of Fig. 3 with the ring open and with a key for operating the device.

In detail, 10 represents the back of a ledger, to which a pair of metal plates 11 are secured. To said metal plates at opposite points corresponding halves of sheet-holding rings 12 are secured by solder 22, and said halves are pivotally mounted side by side on a reduced portion of the rod 13, that lies longitudinally in the back of the cover. Two rings are provided, one near the bottom and one near the top of the cover. Said rod 13 near each end is threaded at 14, and at each end at 15 it is

formed to receive a removable key 16, whereby said rod 13 is rotated. A sleeve 17 surrounds the rod 13 in proximity to each pair of rings and the threaded portion of said rod. The outer end of said sleeve is internally threaded to screw upon the threaded portion 14 of the rod 13. The inner end of said sleeve surrounds the rod loosely between the ends. Said sleeves are cut away on the top sides to avoid the rings 12 and permit their movement. Said sleeves have inclined faces 18, that extend under each half of each ring.

The rotation of the rod 13 by the key 16 causes the longitudinal movement of each sleeve, and said longitudinal movement of the sleeves forces the inclined faces 18 thereof under the halves of the rings and forces them together and holds them together, as shown in Figs. 2 and 3. A reverse movement of the rod 13 by the key causes the inclined faces 18 to disengage the halves of the rings and permit their separation, as seen in Figs. 4 and 5.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a loose-leaf book, the combination with the cover of a pair of metal strips secured to the back of the cover, leaf-holding rings formed of halves, and the halves of each ring secured at opposite points to said metal strips, a rod on which the halves of said rings are pivoted, said rod being threaded near said rings, sleeves surrounding said rod near said rings and internally threaded to fit on the threaded portions of said rods, said sleeves having inclined faces that engage the halves of said rings when said sleeves are moved longitudinally of said rod to close the rings, and means for turning said rod so as to give longitudinal movement to said sleeves.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

ALBERT S. HARN.

Witnesses:

THEODORE J. LOUDEN,
JOS. M. ROBERTSON.