

No. 803,705.

PATENTED NOV. 7, 1905.

R. D. MILLER.  
BINDER FOR LEAVES.  
APPLICATION FILED MAR. 10, 1905.

2 SHEETS—SHEET 1.

Fig. 1

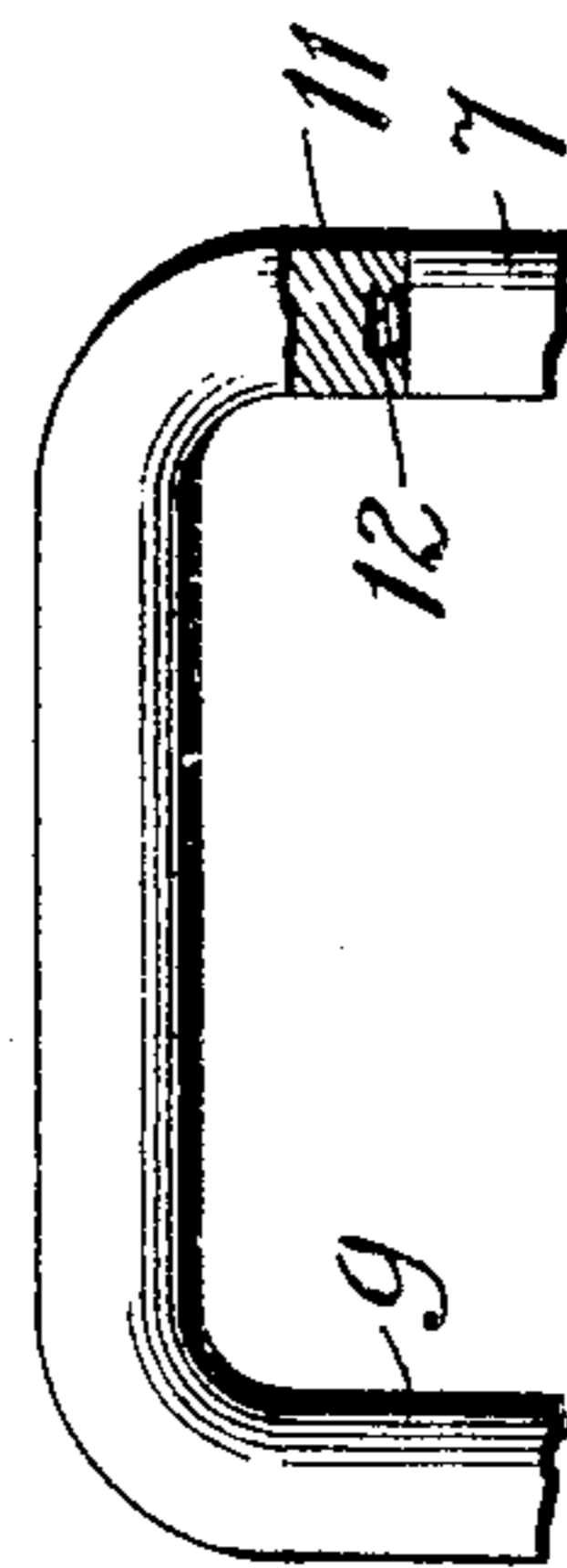
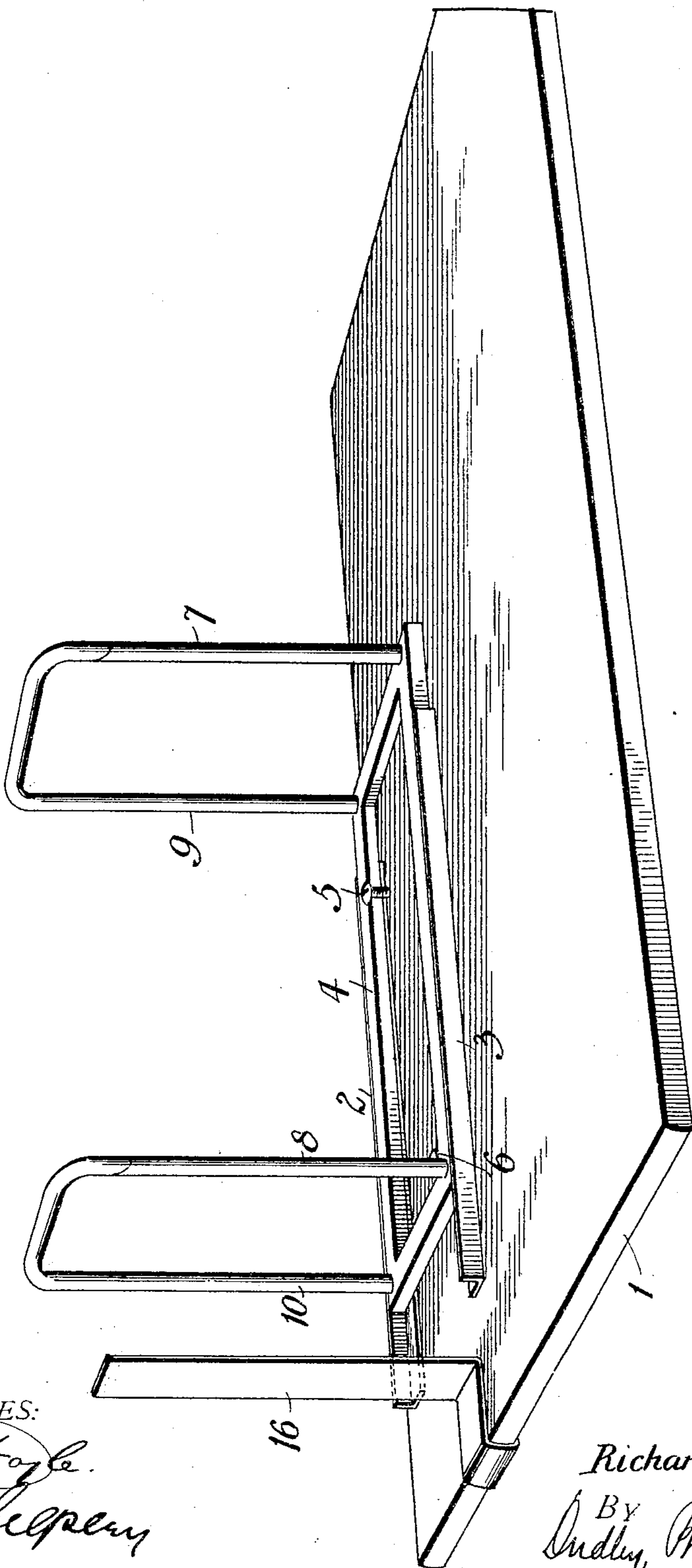


Fig. 4.

WITNESSES:

*H. F. Koffe.*  
*W. A. Wheeler.*

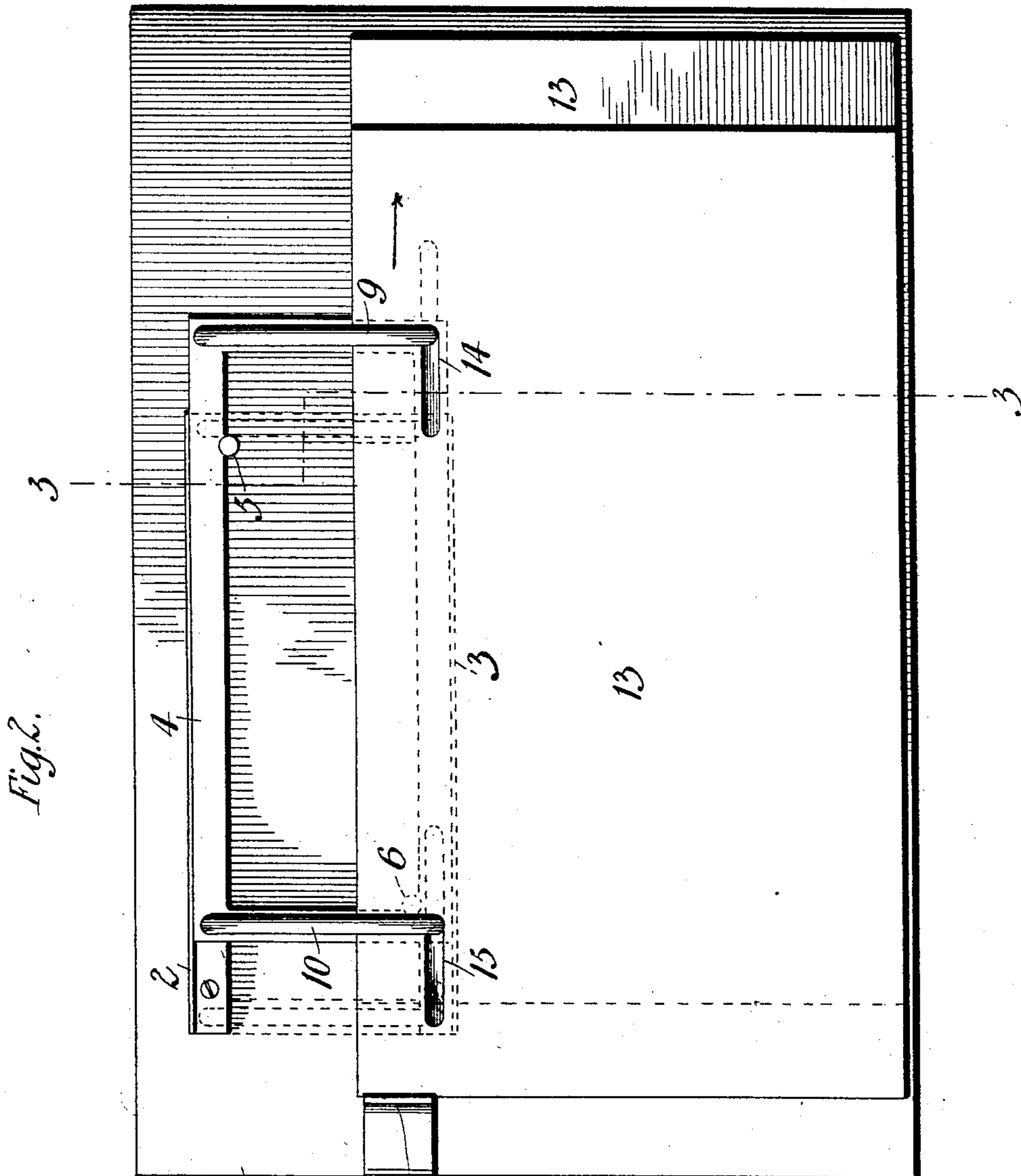
INVENTOR

*Richard Dale Miller*

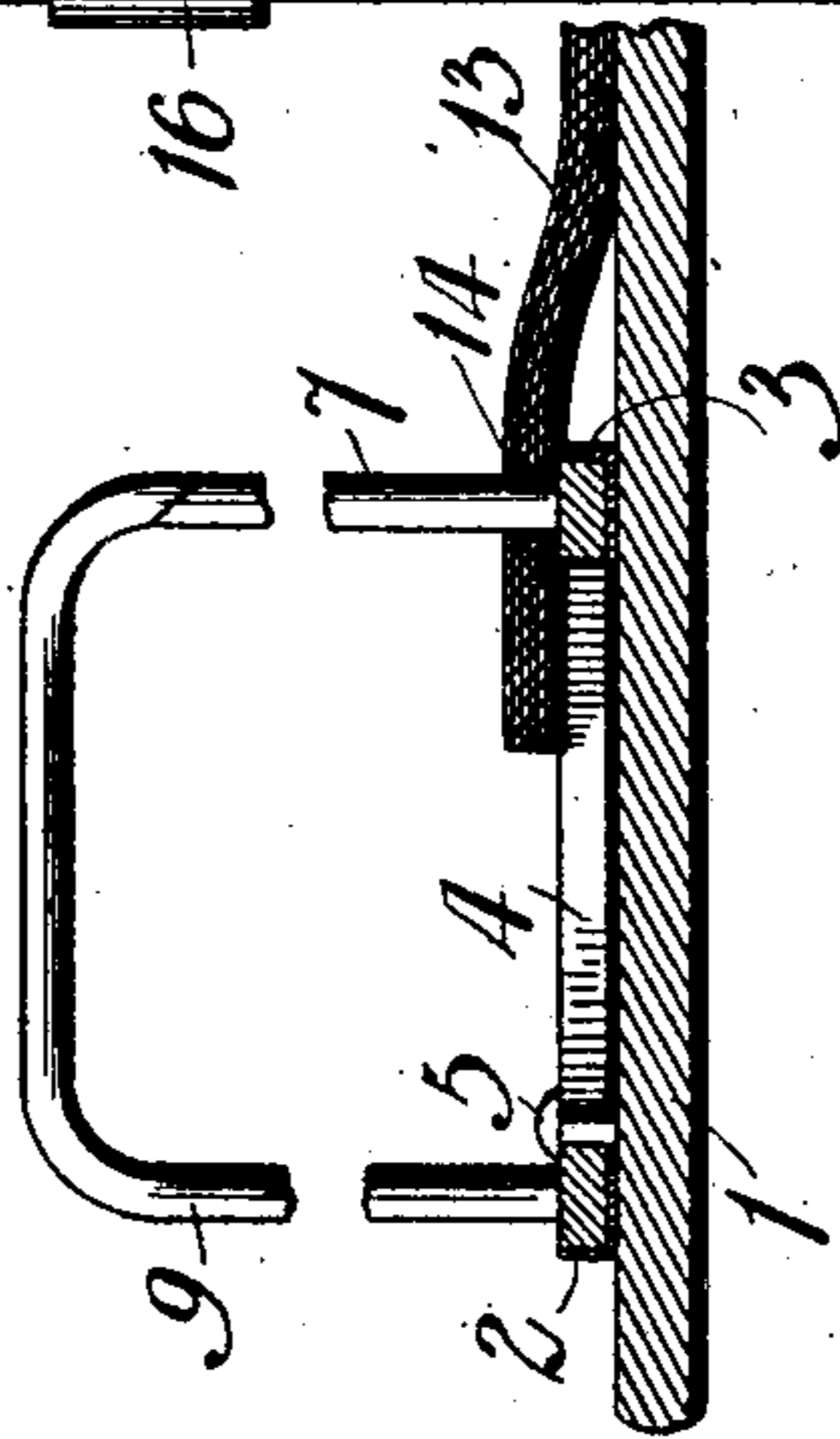
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2 SHEETS—SHEET 2.



WITNESSES:  
*H. F. Koye*  
*L. A. Wheeler*



INVENTOR  
*Richard Dale Miller*  
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# UNITED STATES PATENT OFFICE.

RICHARD DALE MILLER, OF SPOKANE, WASHINGTON, ASSIGNOR OF ONE-THIRD TO DON C. ANDERSON AND ONE-THIRD TO ERNST WIENSS, OF SPOKANE, WASHINGTON.

## BINDER FOR LEAVES.

No. 803,705.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed March 10, 1905. Serial No. 249,470.

*To all whom it may concern:*

Be it known that I, RICHARD DALE MILLER, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Binders for Leaves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention, which relates to binders for leaves, has for its object the production of a binder of improved construction adapted more especially for employment in connection with the slotted leaf shown, described, and claimed in an application for patent filed March 10, 1905, by Don C. Anderson, Ernest Wienss, and myself, the improved binder being adapted to hold the leaves in a manner to obtain facility of manipulation and insertion and removal, if desired, and to effect the retraction of the leaves to their normal position after certain of them have been moved to an extended position.

In the application above referred to the slotted leaves are described as being capable of being moved from their normal position to an extended position, which extended position may be at the top, bottom, or side or may be at the side and top or side and bottom, and while my improved binder is designed for retracting leaves which have assumed any of these described positions I have illustrated a form of binder adapted more especially for leaves which are movable to assume an extended position at one side, although such a showing is not to be regarded as a limitation.

The nature of the invention will be readily understood, reference being had to the following detailed description and to the accompanying drawings, in which—

Figure 1 is a perspective view of a binder embodying my invention. Fig. 2 is a plan view, full and dotted lines indicating the different positions of the parts. Fig. 3 is a sectional view on line 3 3 of Fig. 2. Fig. 4 illustrates means for locking the pins and the transfer-wires.

Referring to the drawings by numerals, 1 designates the back of the binder, on which are fastened guides 2 3, between which is

slidably arranged a rectangular frame 4, the range of movement of the frame being limited by headed stops 5 6, which also serve to confine the frame vertically. Erected at the inner corners of the frame are pins 7 8, and erected at the outer corners of the frame are transfer-wires 9 10, the ends of which are in juxtaposed relation to the ends of the pins, the leaves being inserted and removed by being slipped between said ends. Fig. 4 illustrates a means for locking the ends of the pins and transfer-wires, the ends 11 of the pins being reduced and screw-threaded and entering threaded sockets 12 in the ends of the wires. The pins illustrated in Fig. 4 may be mounted to be rotated in both directions, whereby to effect the locking and unlocking of the pins and wires to allow of the insertion and removal of the sheets.

The leaves 13 are provided with slots 14 15, through which the pins extend. When it is desired for any purpose to extend a sheet or sheets, the sheet or sheets are pulled to the right or in the direction of the arrow in Fig. 2, and when said extended sheet or sheets are to be retracted to their normal position the frame is moved to the left, and in such movement the pins engage the ends of the slots of the extended leaves and move said extended leaves back to their normal position, which position is determined by a stop 16, erected at the back of the binder. The normal position of the frame is to the right, and said frame must assume this position before the leaves can be extended.

Obviously without material modification my improved binder may be employed in connection with any of the constructions of leaves set forth in the application above referred to.

I claim as my invention—

1. A binder for leaves slotted to allow of a change of position, said binder consisting of a back, a frame slidably mounted on said back to be shifted to different positions thereon, leaf-holding elements carried by said frame, and a stop arranged to be engaged by the leaves to aline the latter after change of position.

2. A binder for leaves which are slotted to allow of a change of position, said binder consisting of a back, a frame mounted on said back to be shifted to different positions there-

on, pins and transfer-wires commonly mounted on said frame, and a leaf-stop on said back.

3. A binder for leaves consisting of a back, pins and transfer-wires having interlocking  
5 engagement, said pins and wires being commonly mounted to be shifted in position along said back.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD DALE MILLER.

Witnesses:

W. T. NORTON,  
ELIZABETH L. MacFATE.