

E. WILLGEROTH.

BINDER,

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917,227.

Patented Apr. 6, 1909.

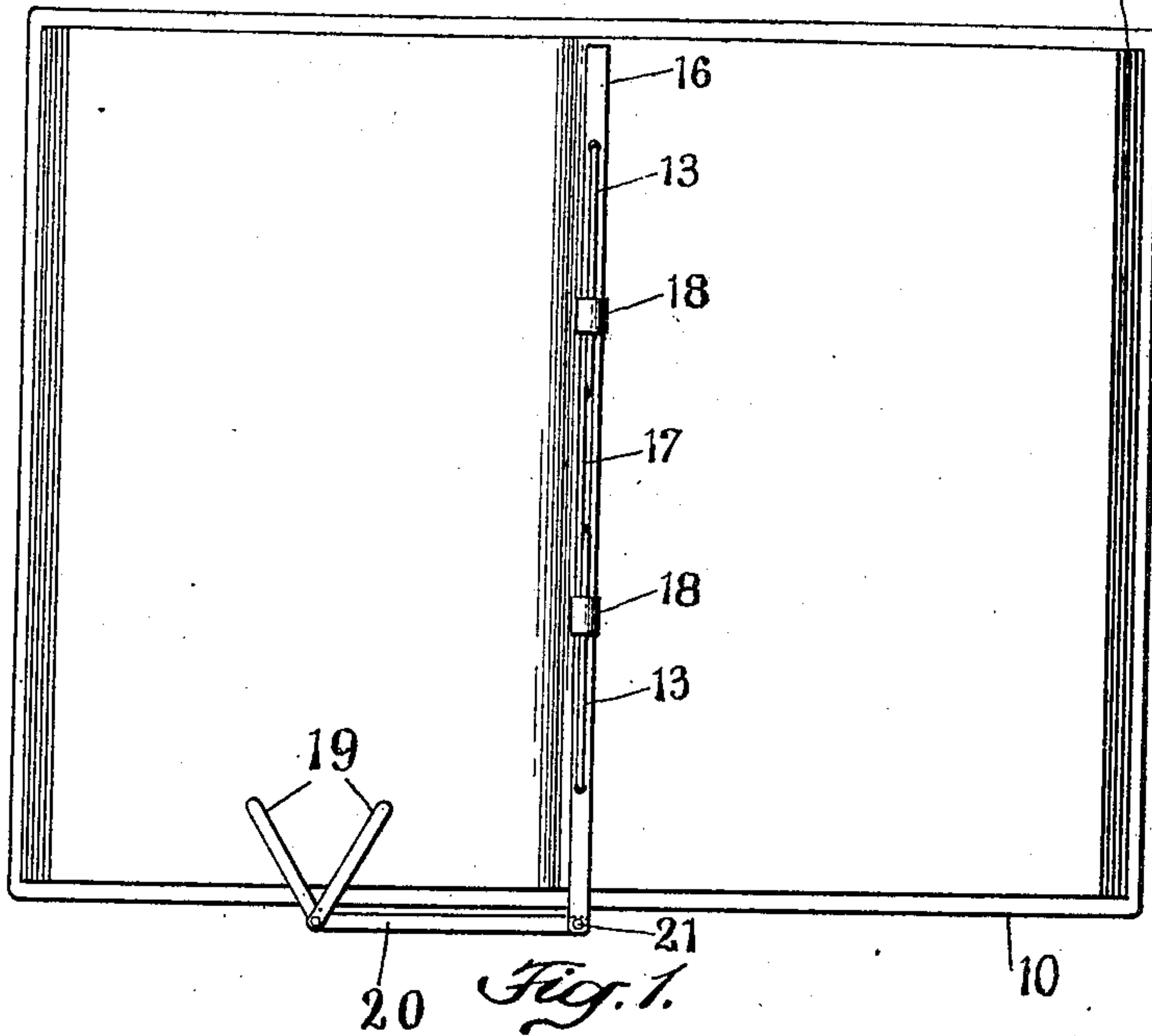


Fig. 1.

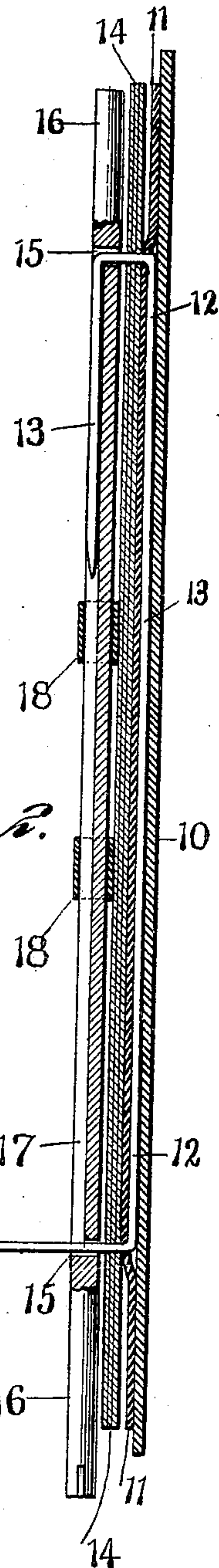


Fig. 2.

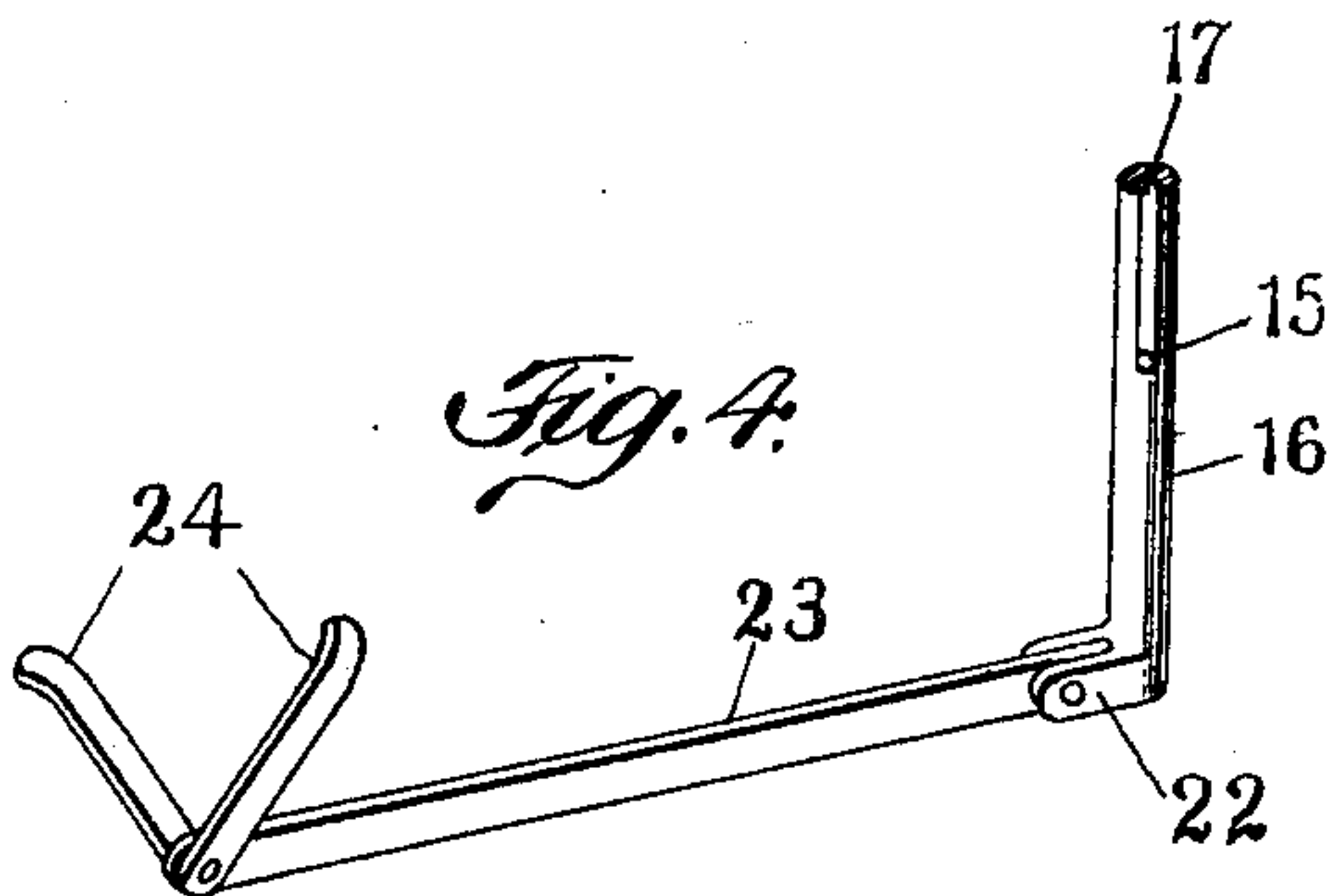


Fig. 4.

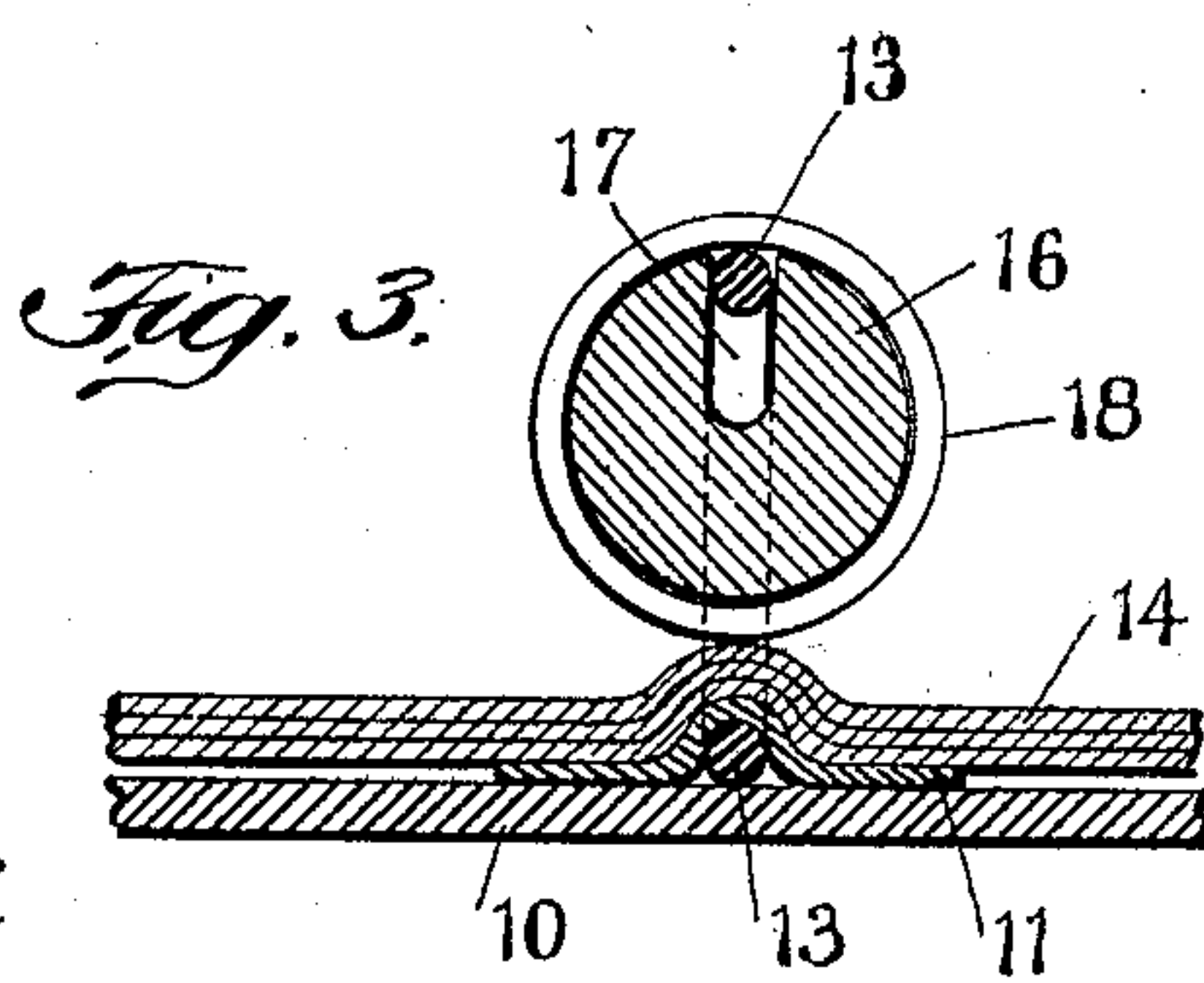


Fig. 3.

WITNESSES
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ERNST WILLGEROTH, OF ELIZABETH, NEW JERSEY.

BINDER.

No. 917,227.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed July 16, 1908. Serial No. 443,910.

To all whom it may concern:

Be it known that I, ERNST WILLGEROTH, a subject of the Emperor of Germany, and a resident of Elizabeth, county of Union, and State of New Jersey, have invented certain new and useful Improvements in Binders, of which the following is a full, clear, and exact description.

This invention relates more particularly to a binder for music or for holding a plurality of leaves or the like to a suitable backing.

The primary object of the invention is to provide a simple and efficient device which may be readily applied to a backing or cover in such a way that a number of leaves, such as music or letters, may be properly held to the backing and the leaves or objects held quickly removed from the binder or replaced when desired; and to provide a simple binder which will occupy a minimum amount of space so that it will not interfere with moving the objects or interfere with the reading of the matter contained by the objects held by the binder.

A further object of the invention is to provide a simple device which has means to adapt the same to be moved to a position to hold the leaves of music or the like in an open position, in such a way that the same will not readily close, thus permitting the hands to be entirely free and avoiding the difficulty usually present in music portfolios, for example, as ordinarily constructed where the leaves of music while in use are constantly folding over to a closed position.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is an elevation of one form of binder embodying my invention. Fig. 2 is an enlarged vertical section, partly in elevation, of the binder. Fig. 3 is an enlarged fragmentary transverse section; and Fig. 4 is a fragmentary perspective view of a slightly different form of leaf holder.

While I have shown the invention as applied to a backing or cover and as constructed more particularly to hold music, it will be understood that the invention may be applied in various ways and that the construction thereof may be varied to adapt it simply as a binder and for letters, or in any

other connection without departing from the character of the invention.

The backing 10 may be made to form a cover, and centrally thereof may be provided with a retaining strip 11 under which is held the binding element or member 12. This element 12 may be in the form of a wire, the ends of which are bent so as to project outward, as at 13, on which the articles to be bound are strung, as for example, a plurality of leaves or objects 14. The ends 13 of the binding element 12 are forced through the leaves or the said leaves may be perforated for this purpose, and the ends 13 are passed through apertures 15 in a second binding element or member 16. The element 16 is in the form of a rod and is provided with a slot or groove 17 lengthwise thereof between the openings 15 so that the ends 13 of the wire binding element 12 may be bent over and forced therein as shown in Figs. 1 and 2. The ends of the wire 13 as they are bent over into the groove 17 force the rod 16 on to the surface of the objects 14 and rigidly hold them in this position, and when the ends are thus bent over they may be held within the groove of the rod by the sliding devices or sleeves 18, which may be tubular in form and are adapted to be forced lengthwise of the rod 16 so as to hold the ends of the wire member within the groove 17. By this means the rod member 17 occupies comparatively little space, and permits the leaves of the object to be readily folded or shifted.

Where music is to be bound to the cover so as to form a portfolio or otherwise I may provide one or more engaging fingers 19 which are pivotally held to one end of an arm 20, and said arm 20 may be pivoted at its other end, as at 21, to the end of the binder rod 16 so that it may be moved out of the way when not in use. The arm 20, as well as the fingers 19, may be round or of any desired form and are adapted to be spread so as to properly hold the leaves of music when in an open position, and may have their ends beveled so that the leaves may be readily inserted under the same; and while the rod member 16 is shown longer than the music it may be of any desired size and length to adapt it for the purpose for which it may be used.

In Fig. 4 the lower end of the member or element 16 is angularly formed, as at 22, and to the said end is pivoted an arm 23 to which

are pivoted the fingers 24. The fingers 24 and the arm 23, in this case, instead of being round, are flat, and by reason of the end 22 the said arm and fingers may be folded in
5 close relation to the member 16.

From the foregoing it will be seen that a simple and efficient binder is provided which is adapted to be used in various connections to bind various forms of leaves or objects;
10 that said binder occupies very little space and will not interfere at all with the printing or reading matter of the objects bound; and that said binder may be made to hold the leaves or objects bound in an open position.

15 Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. The combination with a binding element adapted to be attached to a backing, of
20 a second binder element engaged by the first-mentioned element and adapted to clamp objects between the same and the first-mentioned element, devices movable along the second element for holding the ends of the
25 first-mentioned element, an arm pivotally held to one of the members or elements, and fingers pivotally held to one end of the arm for the purpose set forth.

2. The combination with a binder ele-

ment adapted to be attached to a backing, of 30
a second binder element engaged by the first-mentioned element, an arm pivotally held to one of the members or elements, and fingers pivotally held to one end of the arm for the purpose set forth. 35

3. The combination with a binder element, of a second binder element engaged by the first-mentioned element, devices movable along the second element for holding the ends of the first-mentioned element, and an
40 arm pivotally held to one of the members or elements.

4. The combination with a binder element adapted to be attached to a backing, of
45 a second binder element engaged by the first-mentioned element, devices movable along the second element for holding the ends of the first-mentioned element, an arm pivotally held to one of the members or elements, and means held to one end of the arm adapt- 50
ed to engage the objects held.

This specification signed and witnessed this 9th day of July A. D. 1908.

ERNST WILLGEROTH.

Witnesses:

M. TURNER,
A. BECKER.