

No. 749,407.

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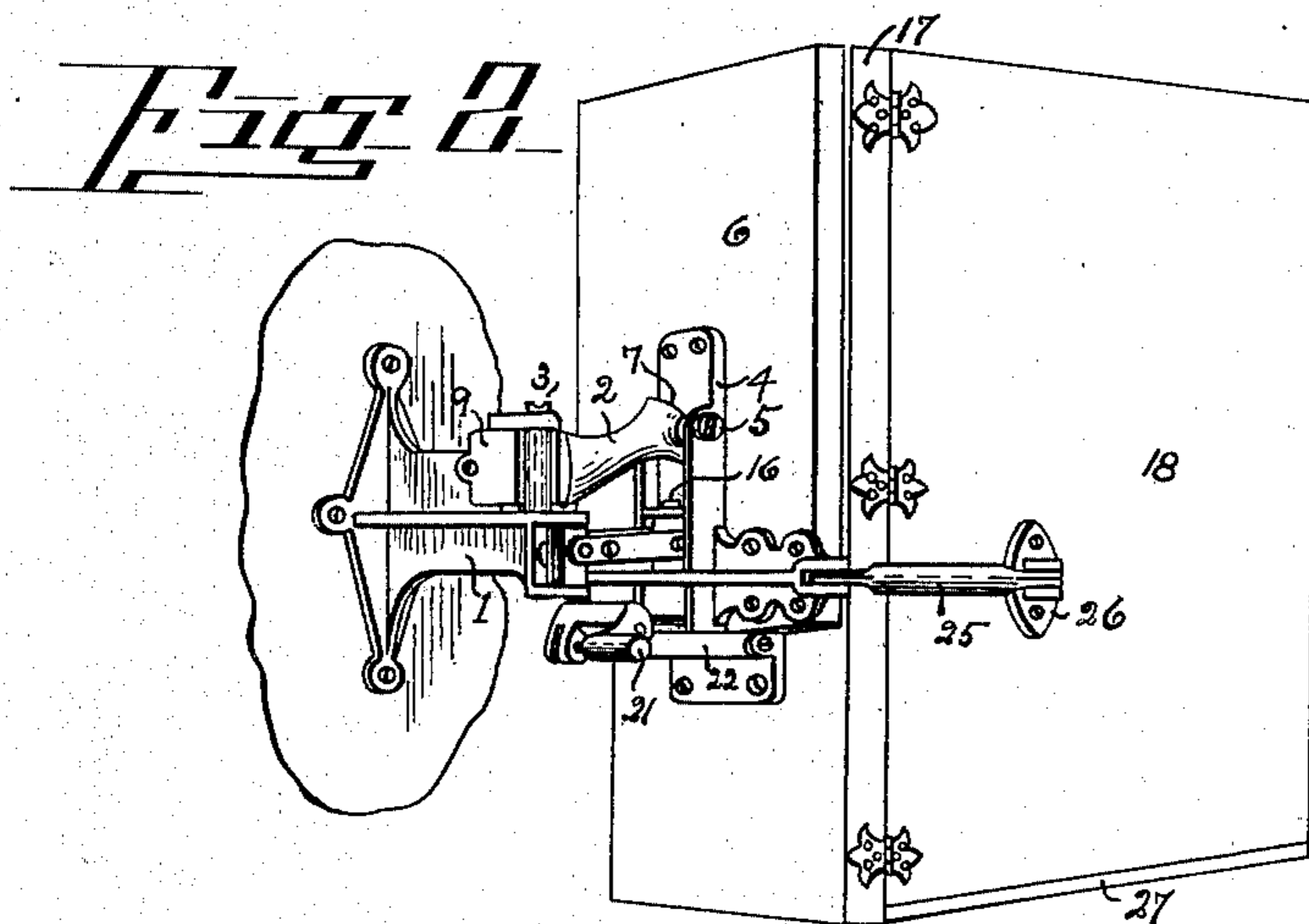
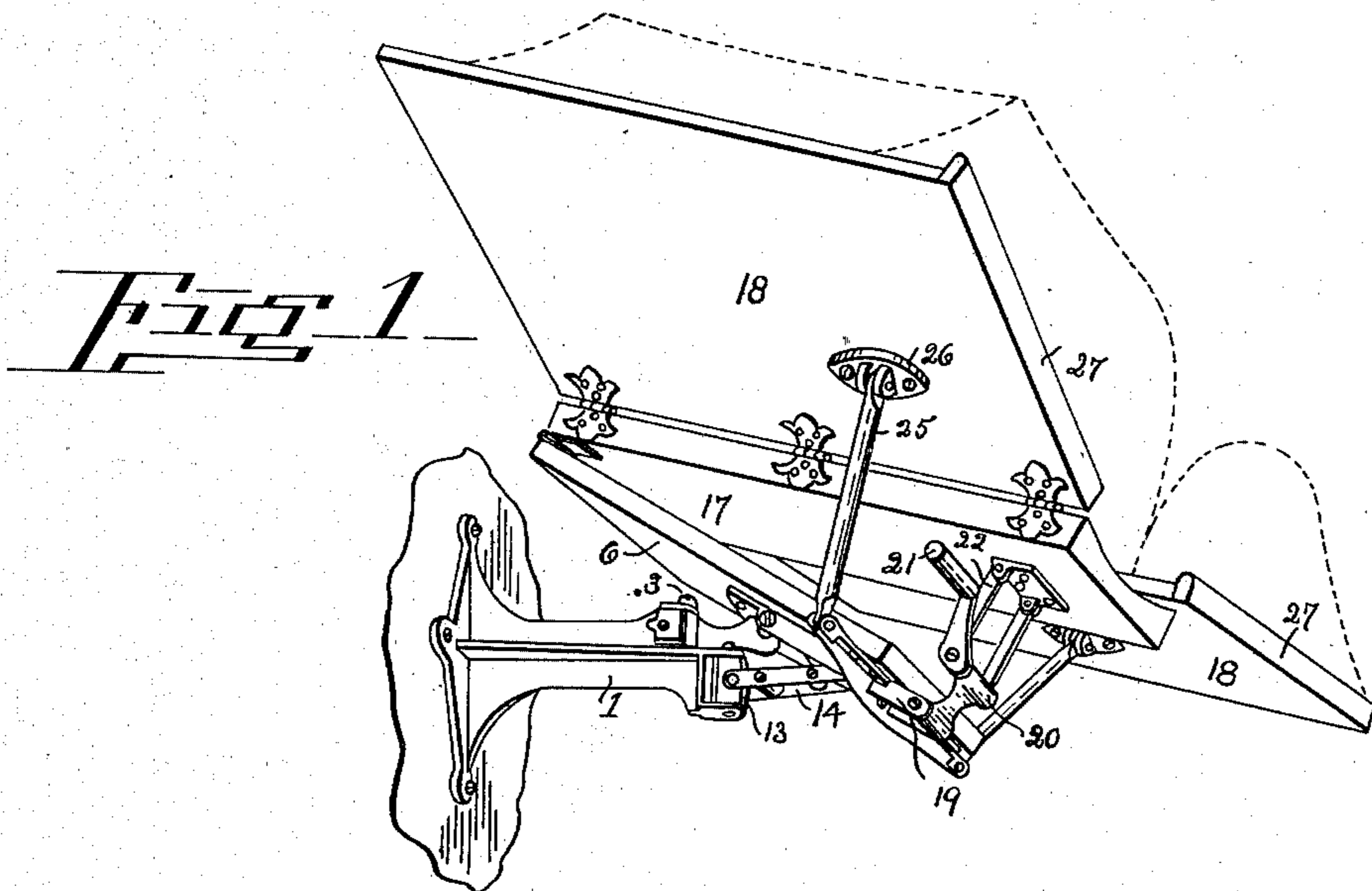
B. T. STEINER & J. A. HALL.

BOOK HOLDER.

APPLICATION FILED OCT. 7, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

W. H. Stough
J. R. Bond

INVENTORS
Barnette T. Steiner
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BY *F. W. Bond*

ATTORNEY

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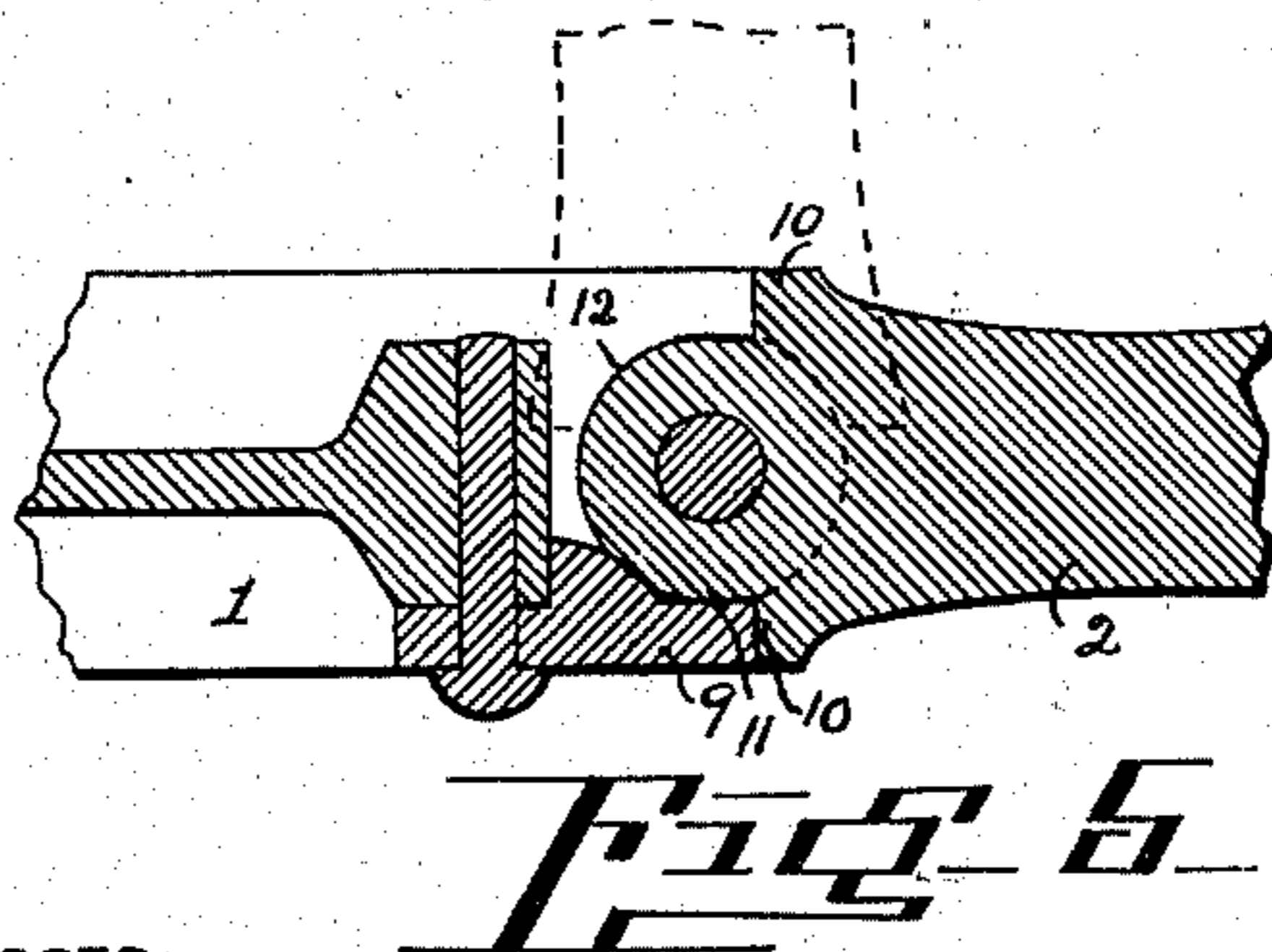
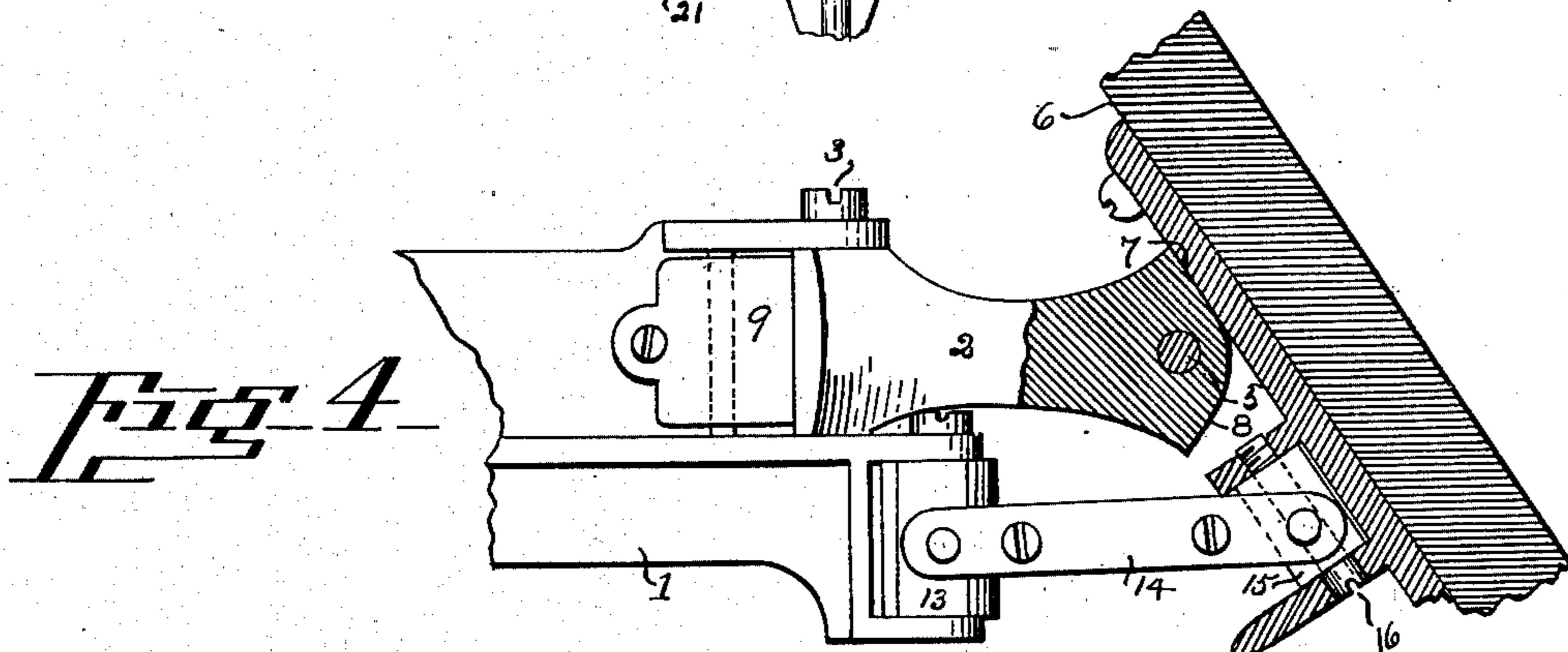
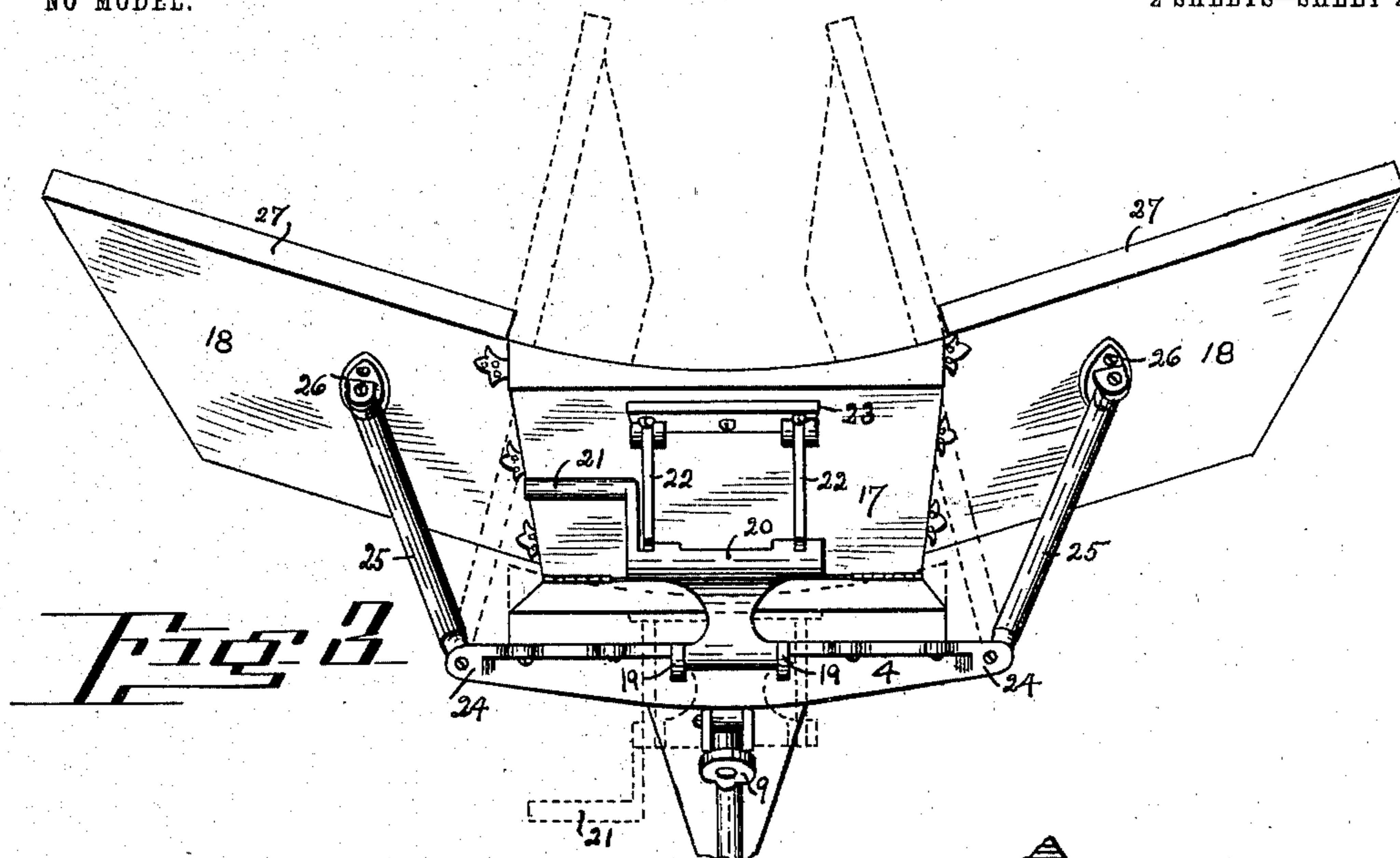
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UNITED STATES PATENT OFFICE.

BARNETTE T. STEINER AND JOHN A. HALL, OF CANTON, OHIO.

BOOK-HOLDER.

SPECIFICATION forming part of Letters Patent No. 749,407, dated January 12, 1904.

Application filed October 7, 1903. Serial No. 176,035. (No model.)

To all whom it may concern:

Be it known that we, BARNETTE T. STEINER and JOHN A. HALL, citizens of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Book-Holders; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view showing the book-holder open and a book located thereon. Fig. 2 is a perspective view showing the book-holder closed and turned at an angle or to one side and out of the way. Fig. 3 is an end view showing the outer end of the book-holder and illustrating the same in position to receive and hold an open book, also showing in dotted lines the position of the holder when closed. Fig. 4 is a view showing the hinge-and-link connection between the fixed arm or support and the movable parts of the book-holder proper. Fig. 5 is a sectional view through line *xx*, Fig. 4, illustrating the fixed arm and the pivoted supporting-arm in position to hold the book-holder proper when in an open position.

The present invention has relation to book-holders designed to support and hold books in an open position, and also to hold the same when in a closed position and at the same time to move the book and book-holder into a position to one side of the supporting-arm and out of the way.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the fixed arm or support, which may be secured to any desired object, such as the wall of a room or to a desk. To the upper and outer end of the arm or support 1 is pivotally attached the bar 2 by means of the coupling-bolt 3 or its equivalent. The opposite end of the bar 2 is pivotally attached to the frame of bracket 4 by means of the bolt 5 or its equivalent, and for the purpose hereinafter described the axes of the opposite ends of the bar 2 are substantially at right angles to each

other. The frame or bracket 4 is securely attached in any convenient and well-known manner to the bottom or under side of the supporting-board or base 6.

For the purpose of limiting the pivotal movements of the bar 2 the outer end of said bar is provided with the stop-flanges 7 and 8. The stop-flange or end 7 strikes the bottom or under side of the bracket of frame 4 when said bar 2 is brought in position to bring the different parts of the book-holder into substantially right angles to the wall or desk to which the support 1 is attached, and the stop-flange 8 is for the purpose of limiting the book-holder and book when turned to one side and out of the way.

For the purpose of holding the book-holder, together with the book, in a firm condition and prevent the same from moving out of position during the time the book is used the friction or binding plate 9 is provided, which friction or binding plate is secured to the support 1 and is so located that its outer end will strike the shoulder 10 when the book-holder proper is brought into position for use.

The plate 9 is so adjusted that its inner face will come in contact with the flat face 11, formed upon the inner rounded end 12 of the bar 2, by which arrangement the bar, together with the different parts carried thereby, is held in a firm condition and not liable to become accidentally displaced during the time the book is in use.

It is not absolutely necessary to provide flat the faces upon the rounded portions 12 of the bar 2, as it will be understood that all that is necessary is to provide sufficient frictional contact with the binding-plate 9.

It will be understood that in some instances it is desirable to have the book-holder, together with the book, turn to the right and in other instances turn to the left.

In the drawings, the book-holder is illustrated in Fig. 2 turned to the right; but it will be understood that it may be turned to the left, and if it is desired to turn the holder to the left the binding-plate 9 is placed upon the opposite side from that shown in Fig. 5.

To the under forward end of the supporting-arm 1 is journaled the block or head 13, which block or head is located in a vertical

plane different from the vertical plane of the pivotal point of the bar 2 to the supporting-arm 1.

To the block or head 13 are pivotally attached the links 14, which links are pivotally connected to the block or head 15, which block or head is pivoted to the frame or bracket 4 by means of suitable ears and a bolt or rivet, such as 16.

To the supporting board or base 6 is hinged the center book bar or base 17, the top or upper face of which is preferably concaved and is so formed for the purpose of better fitting the back of the book designed to be held.

To the book bar or base 17 are hinged the leaves 18, which leaves are formed of sufficient size to properly hold a book when said leaves are brought into position to support and hold the book when open and at the same time to clamp the book when the book is closed, as it necessarily must be when the leaves are brought into the position illustrated in dotted lines, Fig. 3.

The frame or bracket 4 is provided with the flanges 19, which flanges are for the purpose of providing a means for pivotally attaching the oscillating link 20, which oscillating link is provided with the operating-handle 21.

To the free end of the link 20 are pivotally attached the links 22, the upper ends of which are pivotally attached to the bar 23 or its equivalent.

The frame or bracket 4 is provided with the lateral arms 24, to the outer ends of which are pivoted the bottom or lower ends of the bars 25, and the top or upper ends of said bars are pivotally attached to the flange-plates 26, which flange-plates are attached to the hinged leaves 18.

It will be understood that different ways may be provided for pivotally attaching the upper ends of the bars 25 without departing from the nature of the present invention, owing to the fact that all that is necessary is to provide a pivotal connection between the bars 25 and the hinged leaves 18.

When the leaves 18 are brought into the position illustrated in Fig. 2 and in dotted lines, Fig. 3, the bottom or under side of the book bar or base 17 will come against the top or upper side of the board or base 6, at which time the handle 21, together with the link 20 and the links 22, is in a lowered position, as illustrated in dotted lines, Fig. 3.

When it is desired to turn the leaves 18 upon their hinges, so as to bring them into the position illustrated in Figs. 1 and 2, the handle 21 is moved upward, carrying with it the free end of the link 20, which in turn moves or carries the links 22 and moves the book bar or base 17 upward, and owing to the fact that the board or base does not change its position relatively between the link 20 and the handle 21 the leaves 18 will be turned downward as the book-bar 17 is moved upward at its free end, and

when the handle 21 has been moved upward until the link 20 strikes against the outer end of the board or base 6 the links 22 will be moved a short distance beyond a true perpendicular position, which locks the book-bar 17, together with its hinged leaves, in an elevated position, and no downward pressure brought upon the top or upper side of the book-bar 17 or the leaves 18 will change the relative positions of the board or base 6 and the book bar or base 17, by which arrangement a firm support is provided for an open book.

When it is desired to close the book and clamp the same between the leaves 18, the handle 21 is lowered by an outward pull, which in turn moves the free end of the link 20 downward, carrying with it the links 22, which movement causes the leaves 18 to turn upon their hinges and clamp the book, after which the bar 2 is turned until the shoulder 8 strikes the bottom or under side of the frame or bracket 4, and when the shoulder 8 is in position to come against the bottom or under side of the frame or bracket 4 the book-holder will be in the position illustrated in Fig. 2.

It will be understood that by hinging the bar 2 to the support 1 and connecting the links 4 to the block or head 3 and locating the axes of the arm 2 and the head or block 13 in different vertical planes when the book-holder proper is turned to one side it will bring the same, together with the book, into nearly a vertical position, which position brings the book-holder and book out of the way or near the wall or other object to which the supporting-arm 1 is attached.

It will be understood that in order to assist in holding the book and prevent the same from slipping upon the leaves 18 said leaves should be provided with the flanges 27.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a book-holder, a supporting-arm having pivotally attached thereto a bar, a board or base provided with a frame or bracket, and the bar pivoted to the frame or bracket at substantially right angles to the pivot connection with the supporting-arm, links located in a different vertical plane from that of the bar, said links pivoted to the supporting-arm and to the bracket respectively, and a book-support hinged to the frame or bracket, substantially as and for the purpose specified.

2. The combination of a supporting-arm, a board or base hinged to the book-supporting devices, a link located at the free end of the board or base and pivoted at its bottom or lower end, its free end provided with an operating-handle, a book-bar hinged to the board or base, link connection between the book-bar and board or base, leaves hinged to the book-bar, and bars pivotally connected to the leaves and mechanism for pivotally connecting the lower ends of the leaf-bars, and hinge connec-

tion between the outer end of the supporting-arm and the board or base, substantially as and for the purpose specified.

3. In a book-holder a supporting-arm, a bar 5 pivoted to said supporting-arm, links having pivotal connection to the supporting-arm in a vertical plane forward of the pivotal connection of the bar, and a frame or bracket having pivoted thereto the bar at substantially 10 right angles to the pivotal connection of the bar to the supporting-arm, and a board or base having hinged thereto a book-supporting bar, substantially as and for the purpose specified.

4. In a book-holder a supporting-arm and a 15 board or base spaced from the end of the supporting-arm, two pivotal connections between the board or base and the supporting-arm, the pivotal connections to the supporting-arm located in different vertical planes and the piv- 20 otal connections to the board or base located substantially at right angles to the pivotal connections of the supporting-arm, substantially as and for the purpose specified.

5. In a book-holder, a supporting-arm hav- 25 ing pivotally attached thereto a bar, said bar provided at its support or pivotal point with shoulders, a friction-plate secured to the support and adapted to bear against the bar having the shoulders at points adjacent said shoulders, 30 said bar provided with stop-shoulders at its outer end, said stop-shoulders adapted to bear against the frame or bracket, and a board or base secured to the bracket and mechanism for holding a book in an open position and clamp- 35 ing the book in a closed position, substantially as and for the purpose specified.

6. In a book-holder, a board or base having hinged thereto a book-bar, said book-bar having hinged thereto leaves, a supporting-arm and different pivotal connections between the 40 supporting-arm and the board or base, and the outer and inner pivotal connections of the different pivotal connections located at substantially right angles to each other, substantially as and for the purpose specified. 45

7. In a book-holder the combination of a board or base, a book-bar hinged to said base, a handle-link located at the free end of the board or base, link connection between the 50 handle-link and the book-bar, leaves pivoted to the book-bar, and means for actuating the leaves, substantially as and for the purpose specified.

8. The combination of a supporting-arm, vibrating or swinging members connected to 55 said supporting-arm, and the vibrating or swinging members connected to a frame or bracket having secured thereto a board or base, a hinged book-bar connected to said board or 60 base at one end thereof, and book-leaves hinged to the book-bar, and means for holding the book-leaves in a rigid open position, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the 65 presence of two witnesses.

BARNETTE T. STEINER.
JOHN A. HALL.

Witnesses:

J. A. JEFFERS,
F. W. BOND.