

W. T. FERGUSON.
MAIL RECEIVING AND DELIVERING APPARATUS.

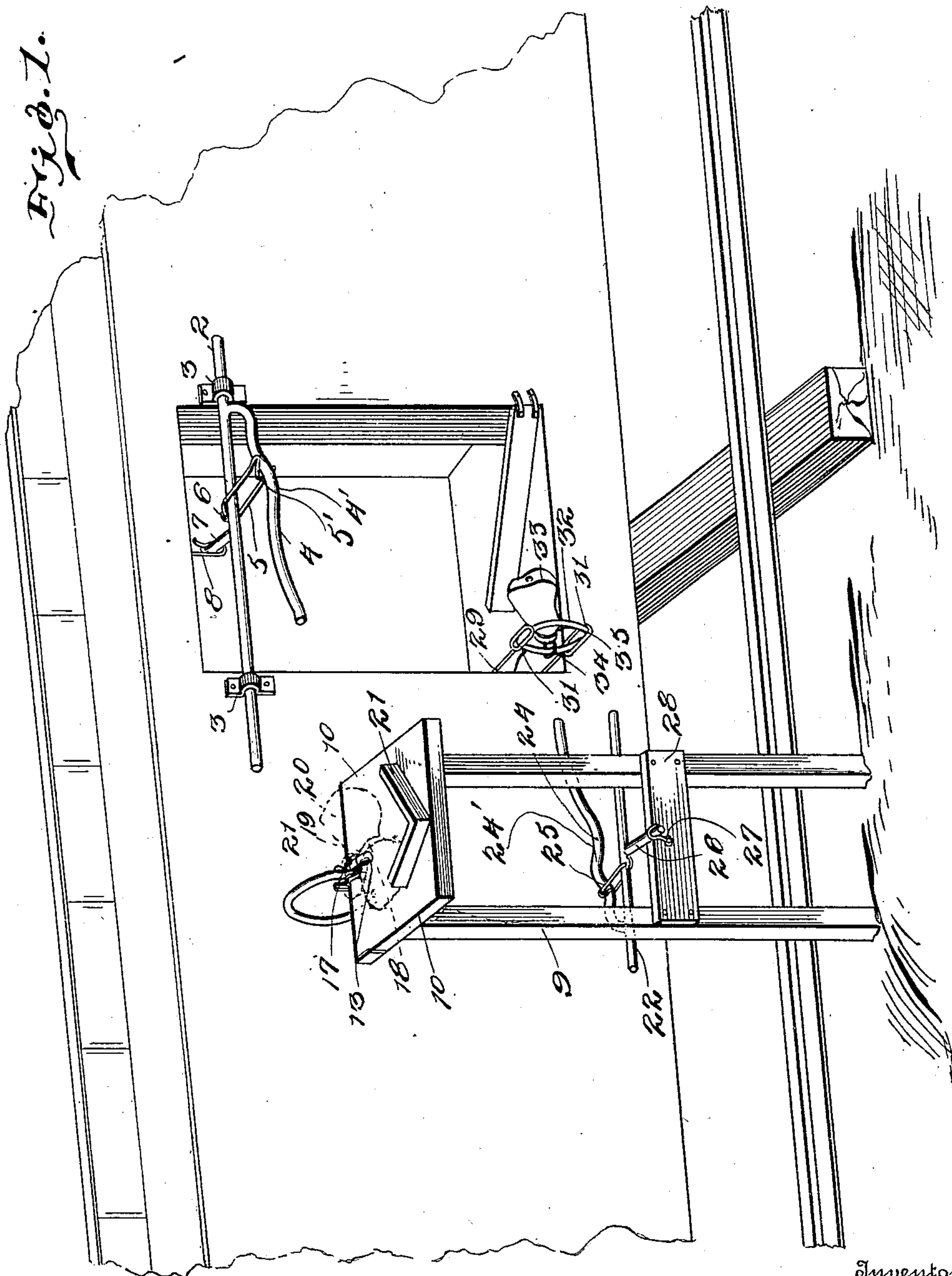
APPLICATION FILED APR. 27, 1910.

969,612.

Patented Sept. 6, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



Inventor

William T Ferguson.

Witnesses

J. W. Wile

Ir. L. W. Bathman,

By

E. E. Vrooman,

Attorney.

W. T. FERGUSON.
MAIL RECEIVING AND DELIVERING APPARATUS.
APPLICATION FILED APR. 27, 1910.

969,612.

Patented Sept. 6, 1910.

2 SHEETS—SHEET 2.

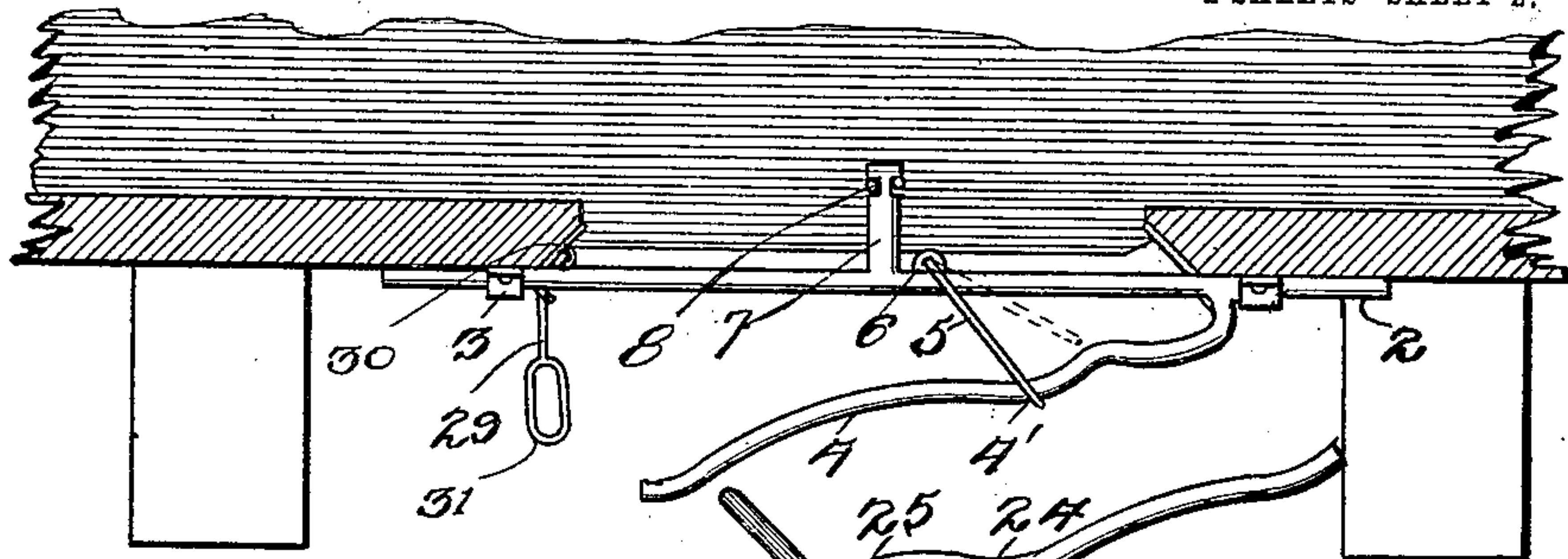


Fig. 2.

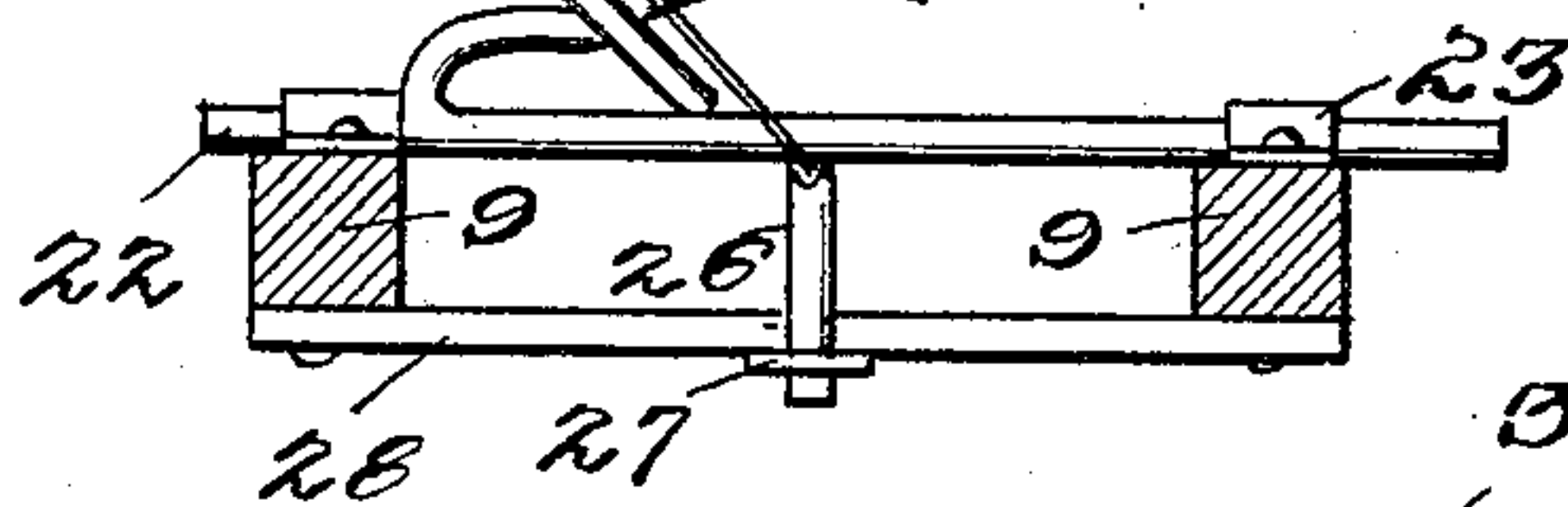


Fig. 3.

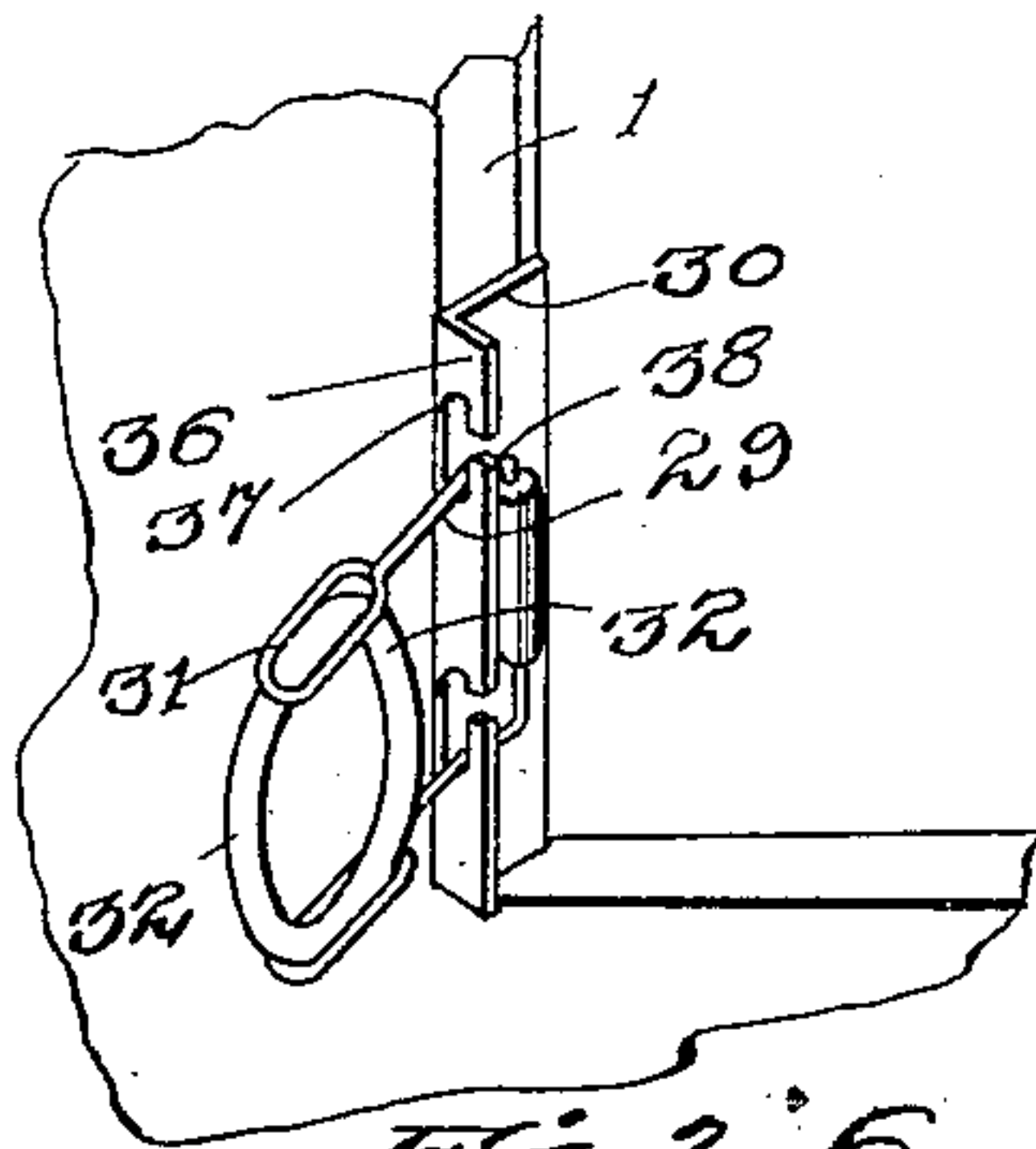


Fig. 6.

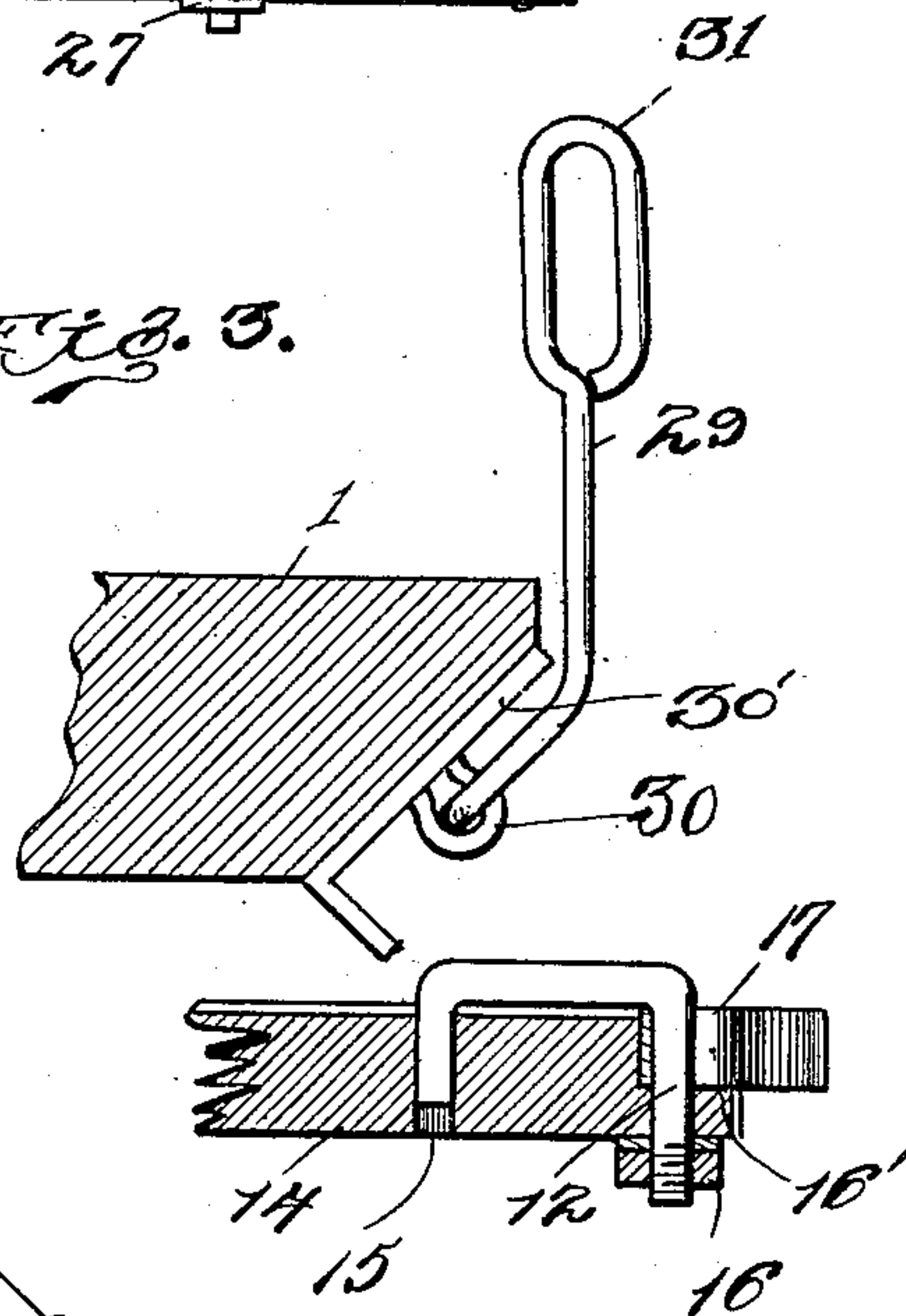


Fig. 5.

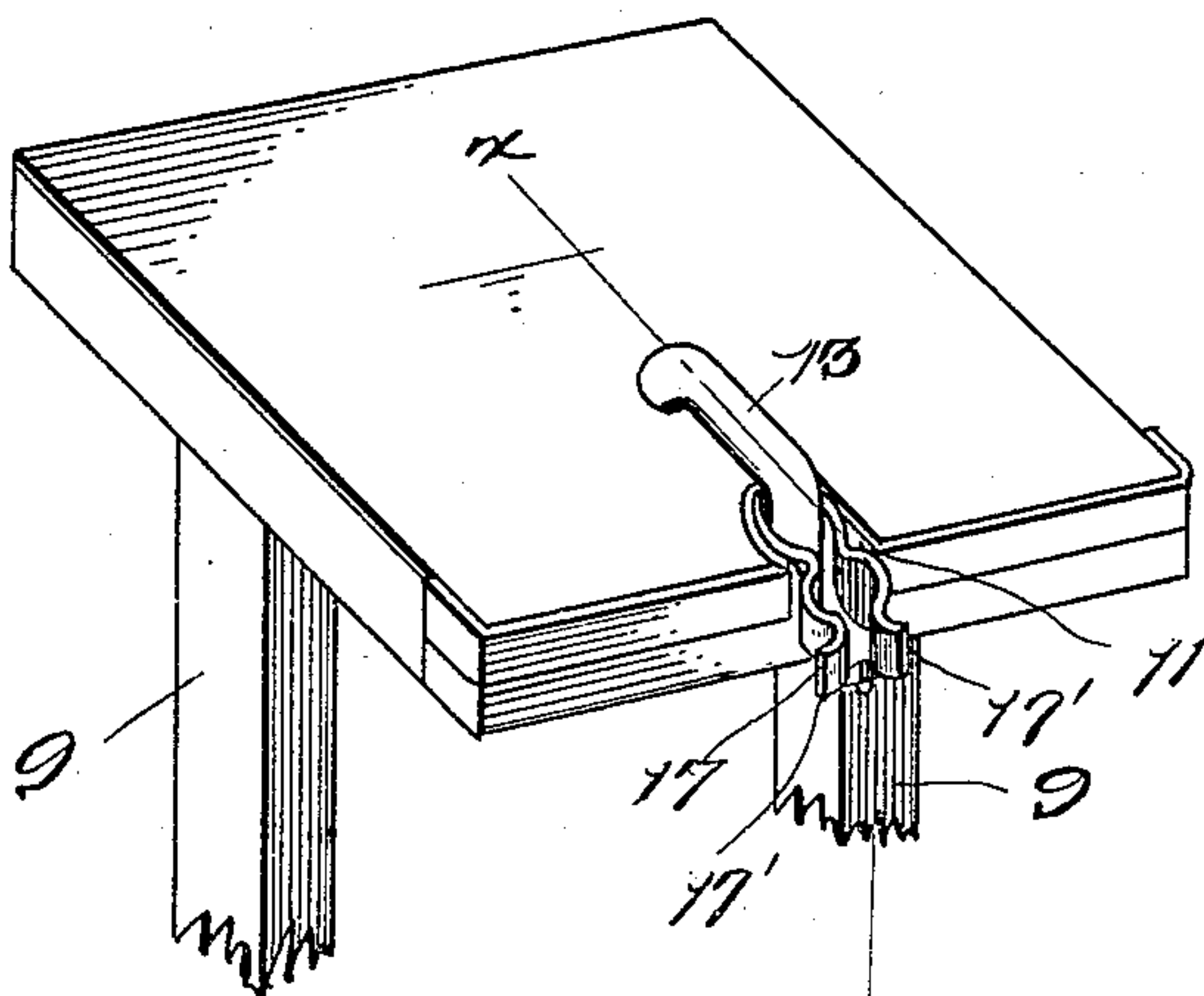


Fig. 4.

Witnesses

J. W. R. L.

Wm. L. M. & Bathar,

Inventor

William T. Ferguson.

By

E. C. Vrooman,

Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM T. FERGUSON, OF WEISER, IDAHO.

MAIL RECEIVING AND DELIVERING APPARATUS.

969,612.

Specification of Letters Patent.

Patented Sept. 6, 1910.

Application filed April 27, 1910. Serial No. 557,985.

To all whom it may concern:

Be it known that I, WILLIAM T. FERGUSON, a citizen of the United States, residing at Weiser, in the county of Washington and State of Idaho, have invented certain new and useful Improvements in Mail Receiving and Delivering Apparatus, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to mail bag catching and delivering mechanisms of that class where mail is received by and delivered from a moving train.

The invention has for its object to provide improved mechanism of this character by means of which mail bags may be simultaneously received by and delivered from a moving mail car.

The invention further has for its object to provide improved mechanism of this character, which is so constructed and arranged that the mail bag may be effectively handled and easily placed in position.

Another object of this invention is to provide improved mechanism of this character by means of which a mail bag may be either delivered to or received from a moving mail car without disarranging or breaking the mechanism.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, and in details thereof, all as hereinafter set forth and claimed.

Referring to the accompanying drawings,—Figure 1 is a side view of a portion of a mail car equipped with receiving and delivering mail bag devices, and also an upright or standard located at the side of the railroad track, and equipped with mail bag receiving and delivering devices. Fig. 2 is a plan view partly in horizontal section of a portion of the car and of the upright at the side of the track, showing the relative position of the mail bag delivering and receiving devices. Fig. 3 is a plan view in horizontal section showing a portion of the car in Fig. 1, with a portion of the mail bag delivering device at the side of the car door opening. Fig. 4 is a large detail view in perspective with parts broken away, of the upper end of the upright at the side of the track, with a portion of the delivering device for holding a mail bag. Fig. 5 is a detail view in horizontal section, partly broken away, of a portion of the upright in Fig.

4, shown on the line $x-x$ of Fig. 4. Fig. 6 is an enlarged detail view in perspective of the top of the upright at the side of the railroad track.

In carrying out the invention, a mail bag receiving device is mounted across the upper end of the car door opening 1, said mail bag receiving device preferably consisting of a rod, 2, swiveled in sockets, 3, secured to the side of the car, and formed with an arm, 4, extending diagonally from the rod 2, adjacent to one of the sockets 3, and projecting over the car door opening 1, and outwardly from the side of the car at a sufficient distance to receive a mail bag between the arm 4 and the rod 2. When the bag receiving device is set in position to receive a mail bag, the arm 4 extends out in a horizontal plane from the side of the car and between it and rod 2 is an arm preferably consisting of a looped wire, 5, having its forked outer end 5', engaging the rod 4, and its inner end, which straddles the rod 2, hinged to a ring, 6, on the rod 2. The rod 2 in this position is held from turning by means of a rearwardly projecting arm, 7, engaging a snap hook, 8, depending from the top of the car door opening. The device for detachably supporting a mail bag at the side of the car track, to be received and delivered to a passing mail car, consists of an upright preferably formed with vertical posts, 9, located a few feet from one side of the track, and having mounted on the top thereof a small shelf or platform 10, on which a mail bag is supported to be delivered to a mail car. The front edge of the platform 10 is formed with a socket, 11, about midway between its ends, through which extends one arm, 12, of an inverted U-shaped clamping device, 13. The other arm, 14, thereof projects into a hole, 15, in the platform 10. The arm 12 of the U-shaped device 13 extends through the platform 10, and has upon its threaded end a nut, 16, and washer, 16', bearing against the under side of the platform 10, by means of which a spring clip device, 17, with flaring ends 17' is clamped to the platform 10. The spring clip 17 has its looped inner end engaging the arm 12 of the U-shaped clamping device 13. A spring clip, 18, fastened to the strap, 19, at the middle of the mail bag, 20, as shown in Fig. 1, engages a ring 21 as the mail bag lies extended on the platform 10. The ring, 21, in turn en-

gages the spring clip 17, and projects out from the edge of the platform 10 so as to be in the path of movement of an arm 4 of the mail bag receiving device on the car, and to be engaged by the latter. In order that the mail bag resting on the platform 10 may be held against sliding off of the same, a suitable stop, such as the angular stop, 21', is mounted on the platform 10 at its rear edge. The upright at the side of the car track is also provided with a mail bag catching and receiving device similar to the one mounted on the car door, said receiving device consisting of a rod, 22, adapted to rotate in sockets, 23, on the uprights 9, and having a diagonally extending arm 24, which is held in a horizontal plane outwardly from the upright by means of a wire loop, 25, having its outer end projecting against the rod 24 and its inner end hinged to the rod 2. An arm 26 projecting from the rear of the rod 22, and engaging a hook 27 on a cross piece, 28, of the upright holds the receiving device from swinging.

A mail bag delivering device is mounted on the side of the car door opening adjacent to the lower end of the opening and preferably consists of a crane, which is preferably as here shown formed of heavy wire bent into a U-shape, with resilient arms, 29, the rear portion of said crane being hinged to a socket, 30, mounted on a plate, 30', on the side of the car door opening. The outer ends of the resilient arms 29 are formed with oblong loop portions, 31, between which is adapted to be clamped a ring, 32, to which is detachably secured a mail bag, 33, by means of a spring clip, 34, fastened to the strap, 35, at the middle of the mail bag.

It will be seen that, by means of this construction, with a mail bag suspended from the side of the car, as shown in Fig. 1, as the mail car approaches the receiving device on the upright at the side of the track, the ring 32 will be brought into engagement with the arm 24, and will be disengaged from the resilient arms 29, and carried along the arm 24 till it hits the arm 25, swinging it back and passing beyond the same, the position of arm 25 being such that the ring 32 will be prevented from moving past it toward the outer end of arm 24.

The receiving device, when not in use, may be swung out of the way by releasing the hook 27 from the arm 26. So also the arms 29 may be swung into the car, as shown in dotted lines in Fig. 1. In order to hold the arms 29 in their outwardly extended position, a suitable retaining device is employed, and as here shown, preferably consists of an angular plate, 36, provided with oblong openings, 37, through which extend the resilient arms 29, said arms being adapt-

ed to be raised up by raising the hinged portion thereof in the socket 30, and swinging them through openings 38 in the plate 36.

At the same time that the mail bag 33 is received and caught by the receiving device on the upright, the ring 21 will be received and caught by the arm 4 of the receiving device at the upper end of the car door, the ring 21 being carried along the arm 4 till it hits the hinged arm 5, which is swung back to the position shown in dotted line in Fig. 2. The ring 21 having passed by the arm 5 cannot move past the arm 5 toward the outer end of the arm 4 or into the position of the movable end of the arm 5 adjacent to the arm 4. By this means the mail bag is prevented from being moved off of the arm 4.

The arms 4 and 25 are each formed respectively with the reversely curved portion 4'—4', and 24'—24'.

When the receiving devices are not in use, they may be folded up against the side of the car and the upright respectively, by unfastening the arms 7 and 26.

It will be seen that by means of this invention simple and effective apparatus is provided by means of which a mail bag may be delivered from a moving mail car simultaneously with a mail bag delivered from the sides of the track to the mail car. In order to keep the mail bag from striking the opposite side of the car door the angular plate 36 extending inwardly from the side of the door opening is provided, against which the mail bag, when it is delivered to the car will be guided into the same.

Having described the invention, I claim:

1. In an apparatus of the character described, an upright provided with a platform at its top, a spring clamp projecting from the front edge of said platform and consisting of a pair of resilient arms formed of a single strip of metal with curved intermediate portions, and means for detachably holding said clamp to said platform.

2. In an apparatus of the character described, an upright having a platform at its top, an elongated strip of metal in the form of a loop with spring arms forming a clip, with each of said arms having intermediate curved portions, and together forming a ring, said arms having outwardly curved flaring ends projecting from the front edge of said platform.

3. In an apparatus of the character described, a crane hinged to the side of a car door opening and formed with resilient clamping arms having loops at their ends, and a slotted locking plate mounted on the side of a car door opening for detachably holding said crane in extended position.

4. In an apparatus of the character described, an upright located at one side of the railroad track and having a platform at its

top, a stop on said platform for retaining a mail bag, and a spring clip projecting from the front edge of said platform, in combination with a ring engaging said spring clip, and a mail bag fastened to said ring.

5 In an apparatus of the character described, a crane hinged to one side of the car door opening and having means for detachably engaging a mail bag at its outer end,
10 and means for detachably holding it in

extended position, and a plate located on the opposite side of the car door opening from the crane and extending diagonally into the car.

In testimony whereof I hereunto affix my 15 signature in presence of two witnesses.

WILLIAM T. FERGUSON.

Witnesses:

F. B. LLOYD,

JOHN L. THOMPSON.