

908,452.

FIG. 1.

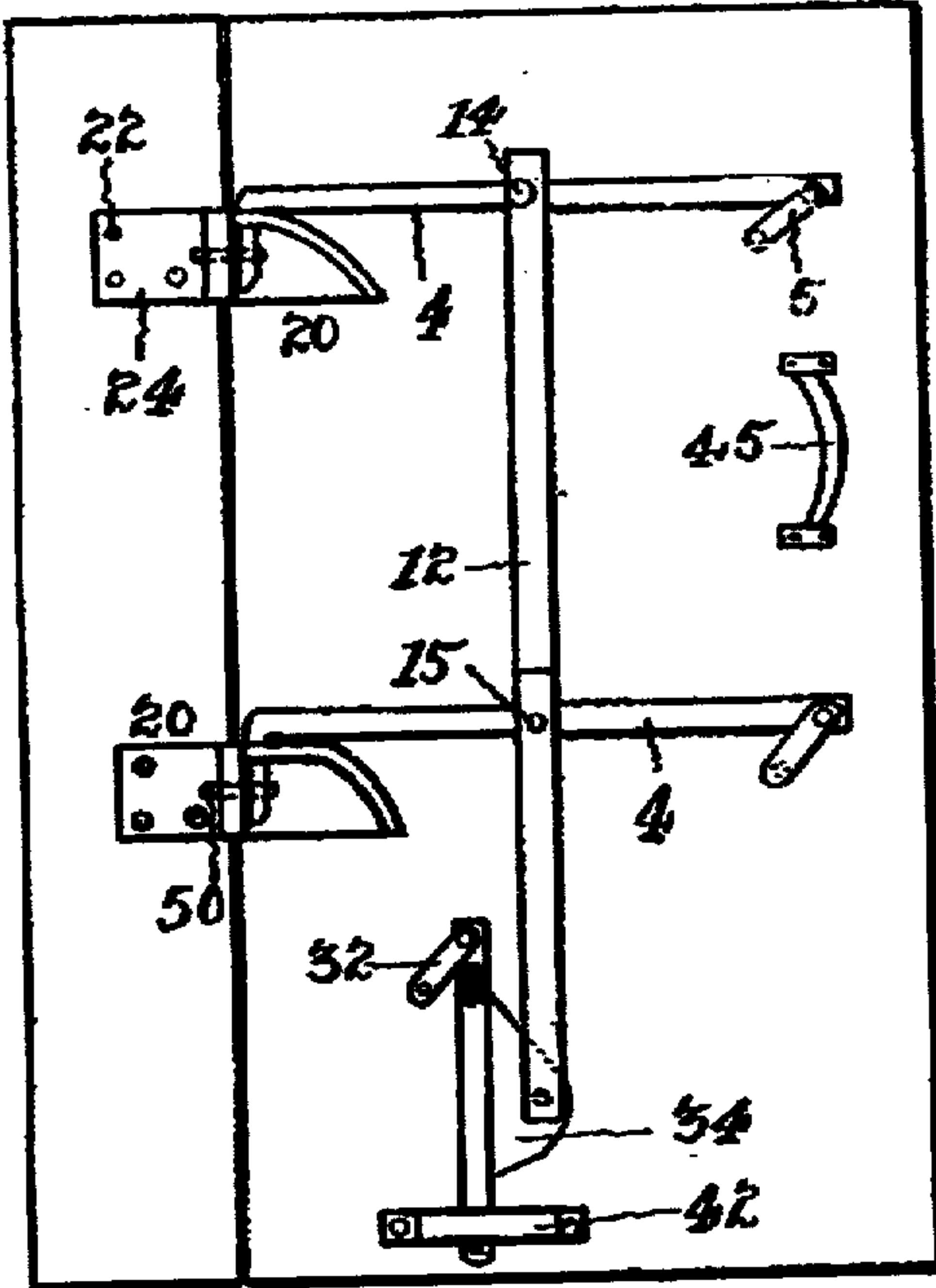


FIG. 3.

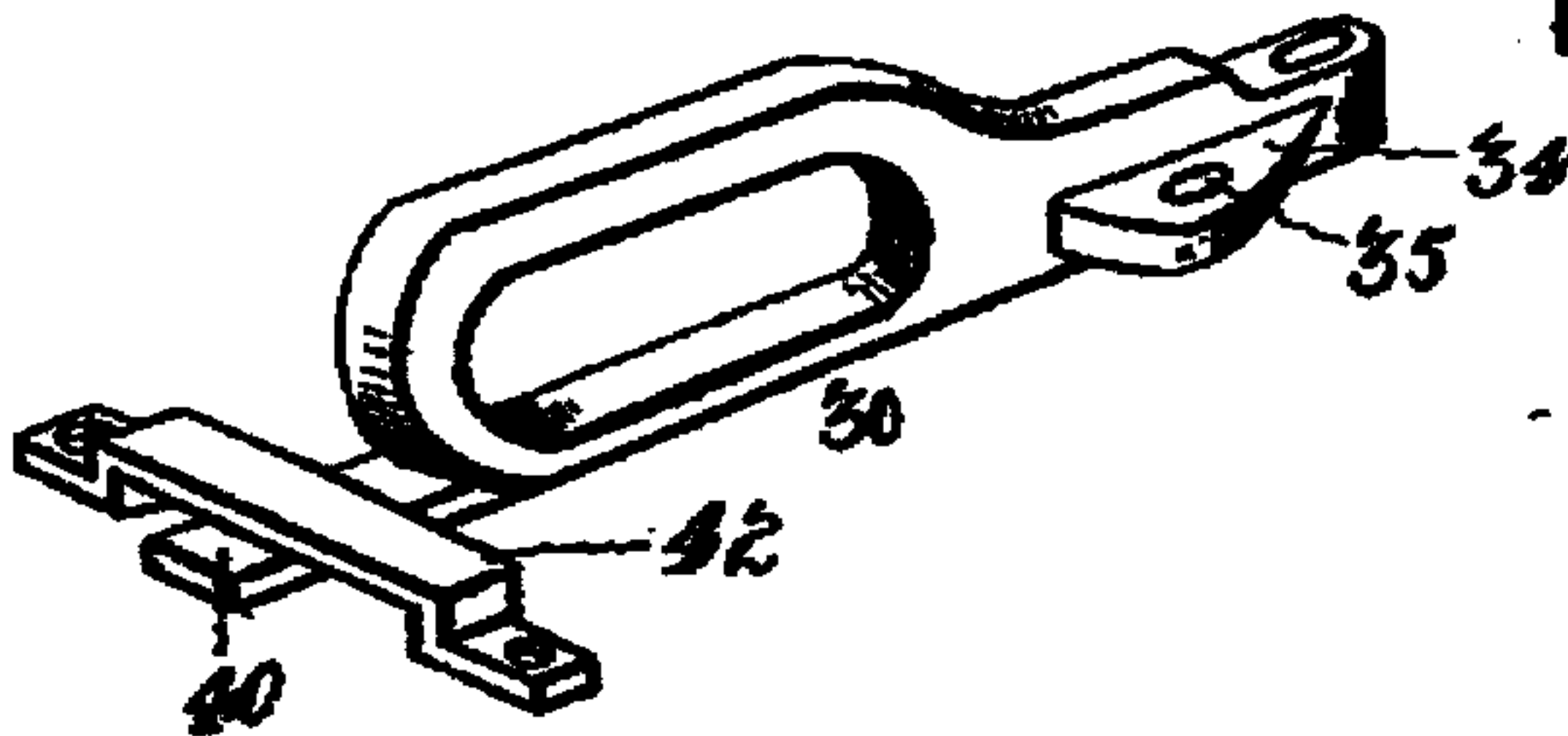


FIG. 4.

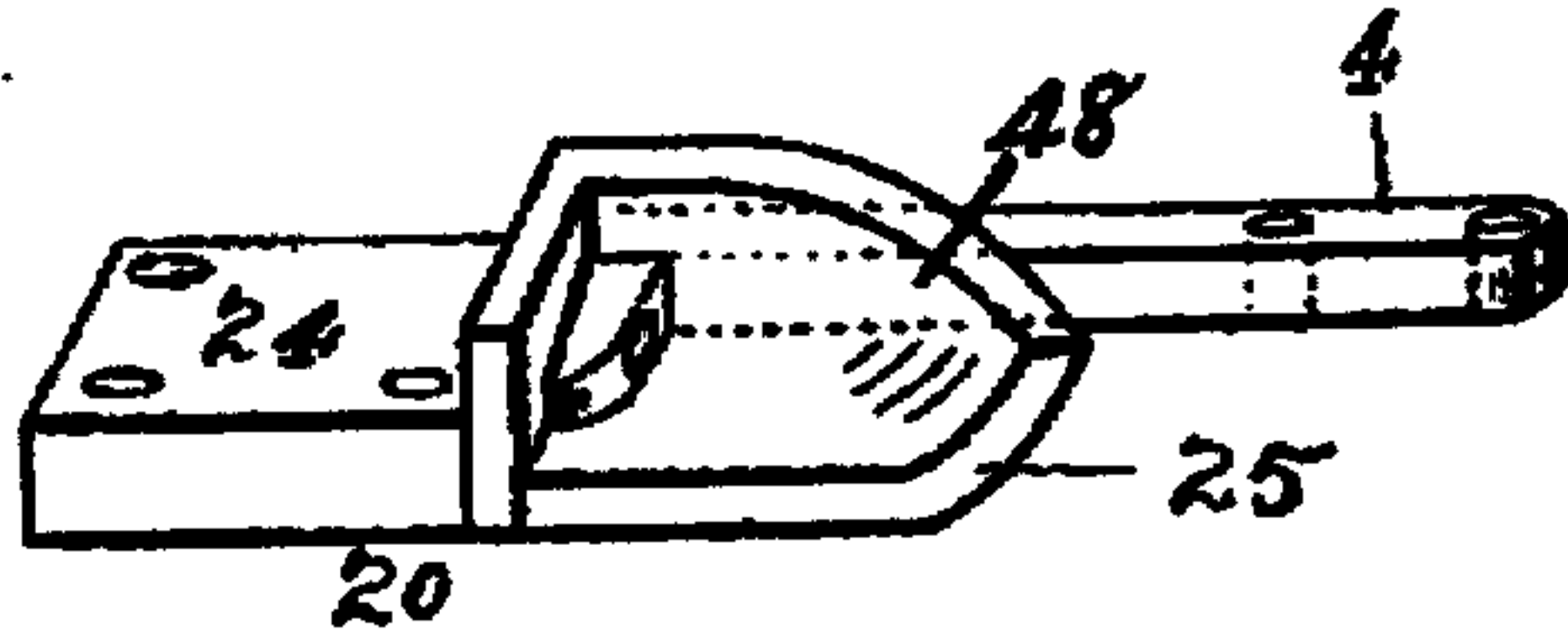


FIG. 5.

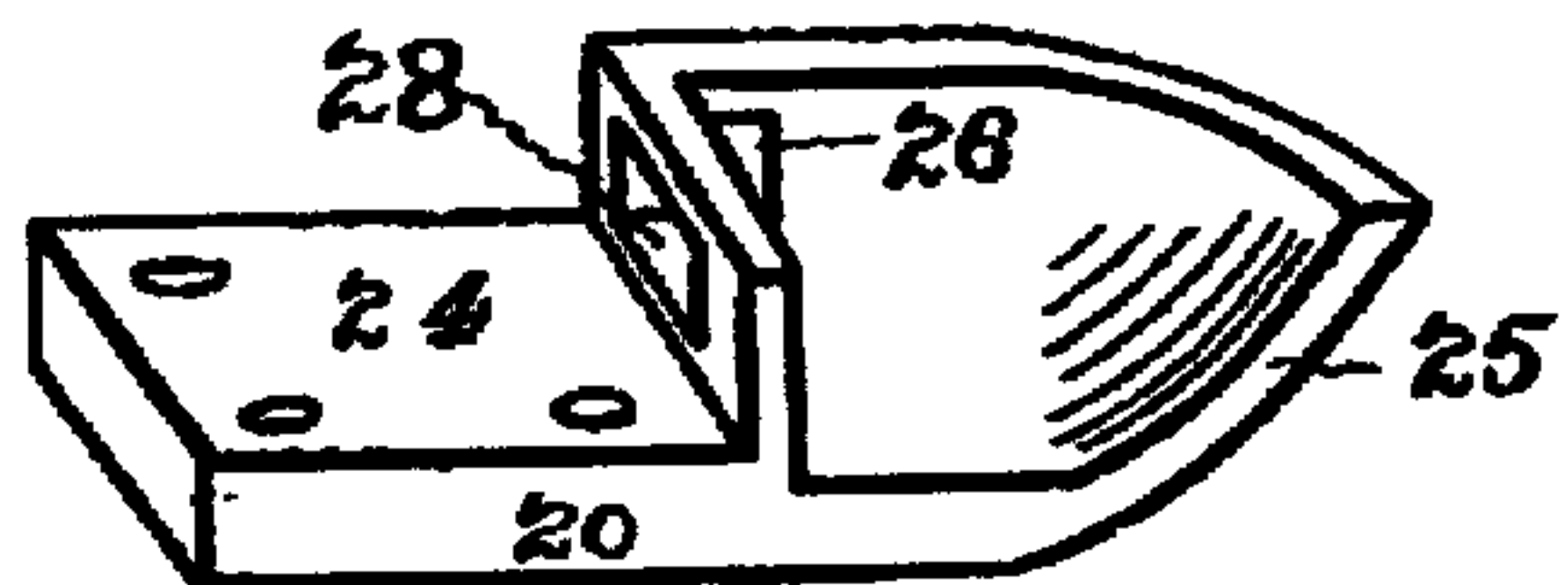


FIG. 6.

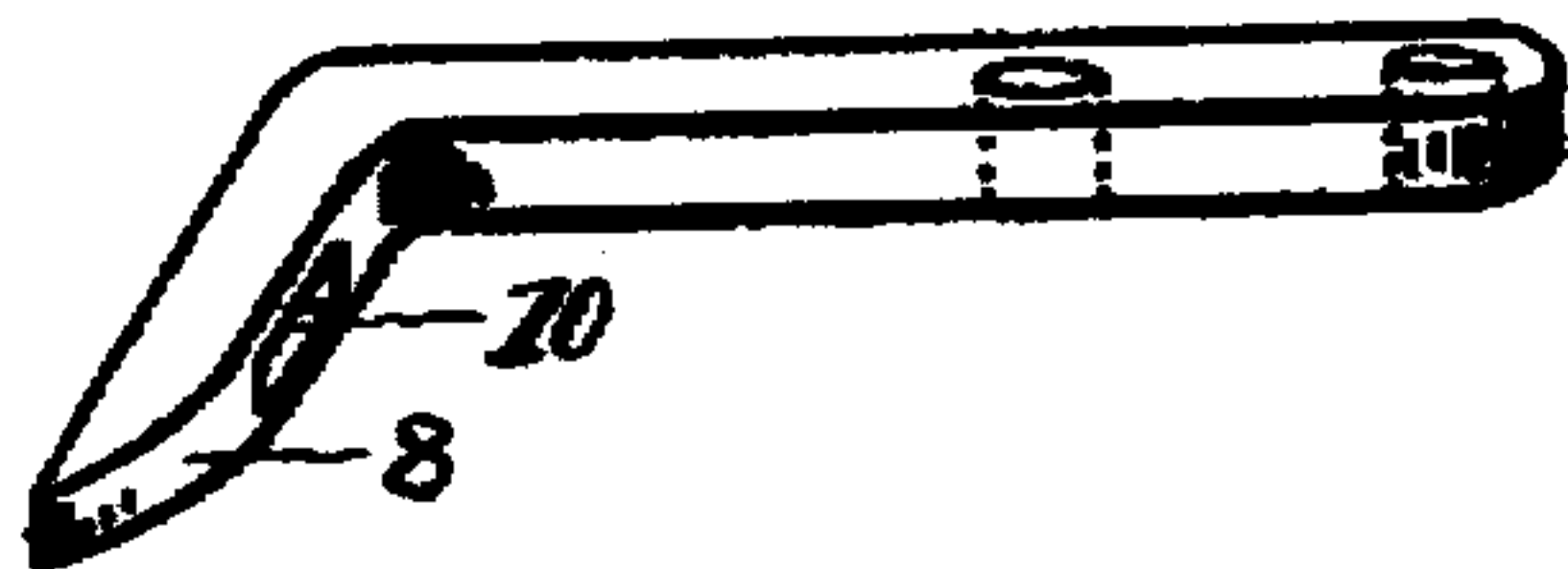


FIG. 8.



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CAR DOOR FASTENER.  
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Patented Jan. 5, 1909.  
2 SHEETS—SHEET 2.

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Fig. 2.

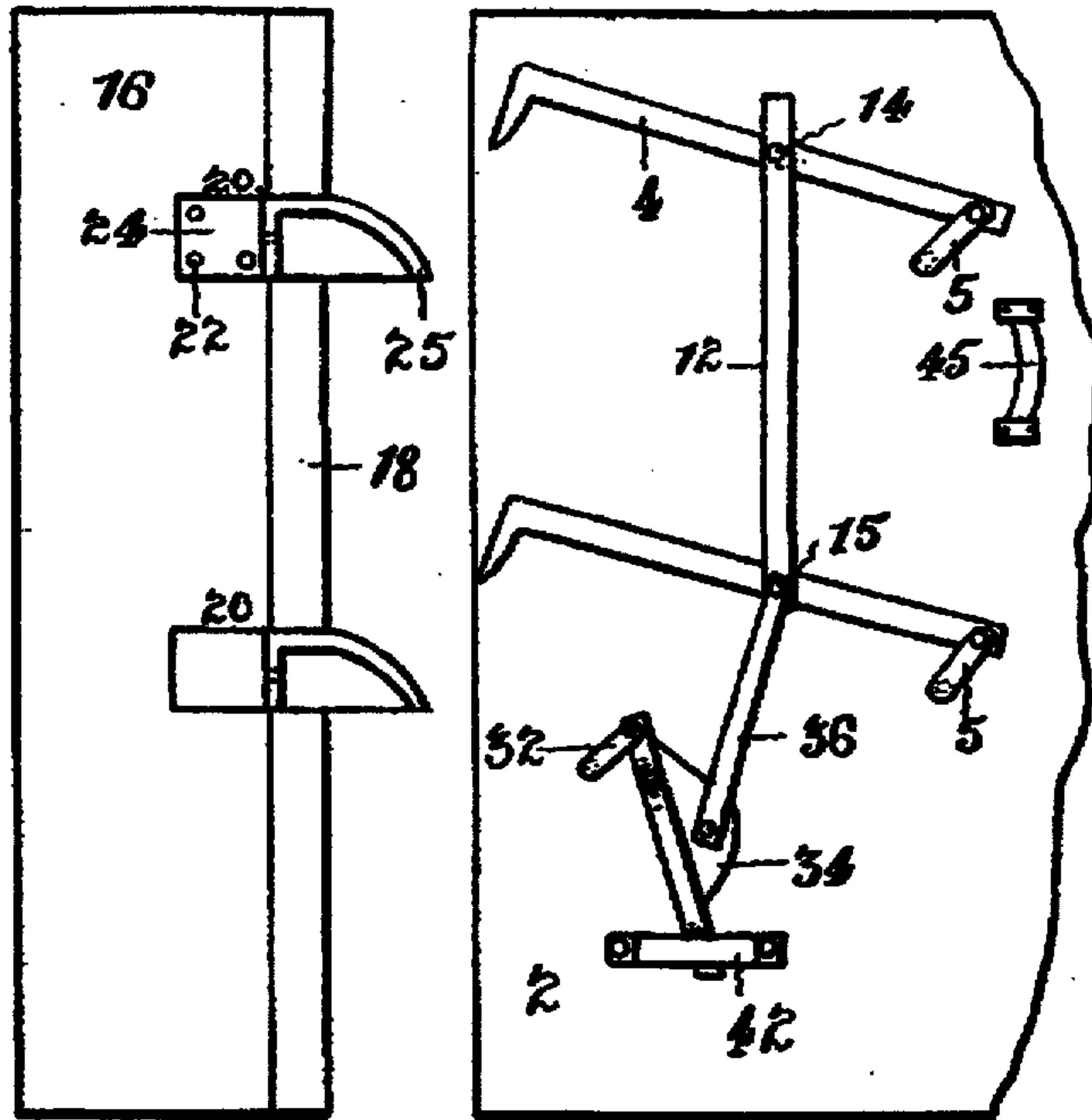
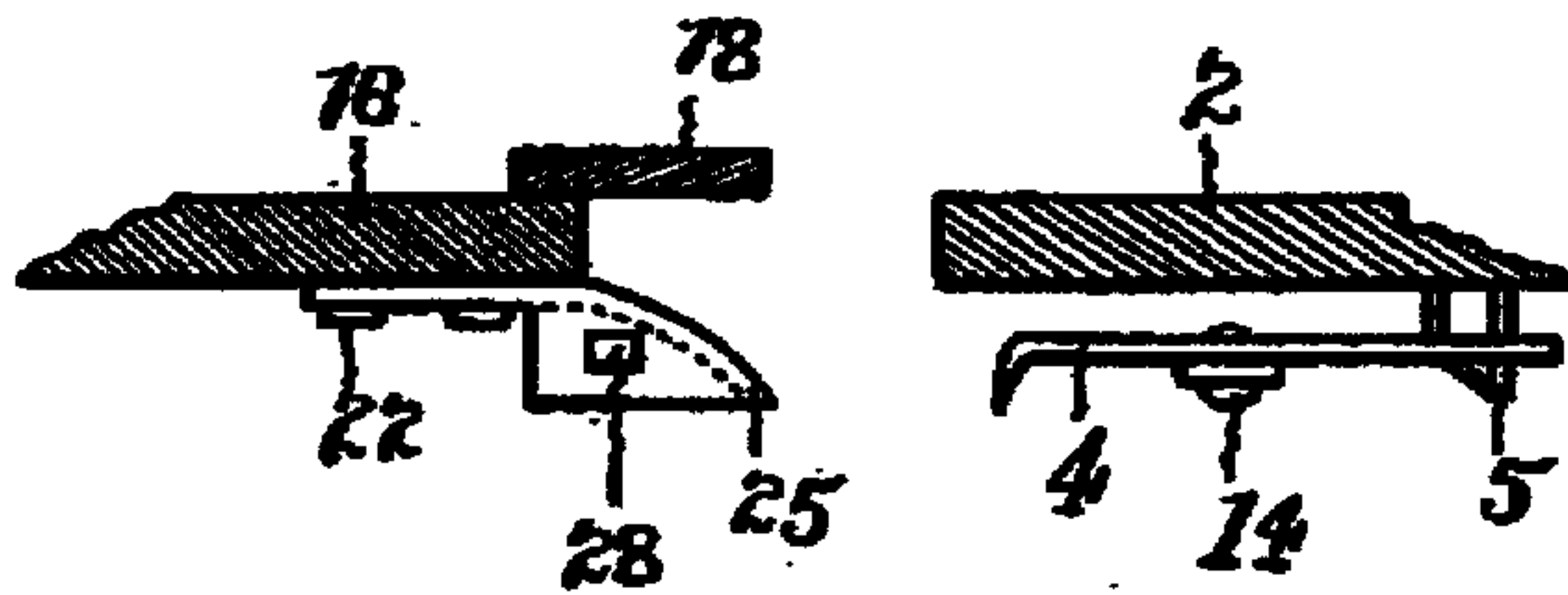


Fig. 7.



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# UNITED STATES PATENT OFFICE.

FRANK O. DOHLIN, OF DUBUQUE, IOWA.

## CAR-DOOR FASTENER.

No. 908,452.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed September 18, 1908. Serial No. 453,709.

*To all whom it may concern:*

Be it known that I, FRANK O. DOHLIN, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Car-Door Fasteners, of which the following is a specification.

My invention has relation to fasteners for car doors with special reference to sliding doors and has for its object to automatically double lock and seal the door and also furnish means for operating the double lock and opening the door.

In what it consists, its mode of construction and manner of operation will be fully described and shown in the following specification and drawings accompanying the same and forming a part hereof.

Figure 1, is a side elevation of a car door closed and locked with my device thereon. Fig. 2, shows the same with a door partly open. Fig. 3, is a perspective view of the handle. Fig. 4, is a perspective view of the catch with the hook in engagement therewith. Fig. 5, is a perspective view of Fig. 4, taken from one end. Fig. 6, is a perspective view of one of the hooks. Fig. 7, is the top view of the door and jamb with the device in position and the door and jamb in section, and Fig. 8, a staple to which a hook is pivoted.

Like characters of reference denote corresponding parts in each of the drawings.

Referring to the drawings, 2 designates the door and 4 the hooks which are pivoted to a staple 5. The staple passes through the door and is bent in rectangular shape with the end 6 slightly engaging the door sufficient to keep it from turning. This staple acts as a rest for the hook when it is in engagement with the catch or when the door is locked or when the door is opened. The opposite end of the hook is bent downward at 8 and provided with an opening 10. These two hooks 4 are connected together by a bar 12 to which they are pivoted near their centers by the pivot pins 14 and 15.

To the jamb 16 of the door which is securely fastened to the door post 18 are attached catches 20, by bolts or screws 22. These catches are shown in Figs. 4 and 5 and consists of a rectangular member 24 and a curved end 25 rounded to a point and provided with an opening 26 through the top and also an opening 28 on the plane parallel with the rectangular member 24 which opening registers with an opening 10 in the hook

4. For the purpose of raising these hooks out of the catches or locks there is provided a handle 30 which is pivoted to the door 2 by a staple 32 similar to the staple 5 to which is pivoted the hooks 4. The handle is provided in one side with a projecting plate 34 having a hole 35 therethrough in which is pivoted a lever 36 that is also pivoted at its opposite end to the bar 12 and lower hook 4. It is manifest that on small doors one hook and catch may be all that is necessary and in that case the lever 36 would be pivoted directly to the hook. The handle 30 is also provided with an opening therethrough for inserting the hand of the operator, not only to operate the hooks but also to open the door. There is also secured to the base of the handle or integral therewith a plate 40 across which is a strap or loop 42 for the purpose of limiting the movements of the handle and to stay it in a given position. It is also limited in one direction by the staple 32. There may also be secured to the door a handle 45 for opening and closing the door when necessary.

The manner of operating my device is substantially as follows: Starting with the door closed and the hooks in engagement with the catches, the operator grasps the handle and moves it to the right, which action forces the lever 36 against the bar 12 and lifts the two hooks out of engagement with the catches 20. The further movement of the handle 30 to the right will bring the plate 40 into engagement with the loop 42 and prevent any further movement of the handle in that direction but the further pressure upon the handle will shove the door open and it will then have appearance as shown in Fig. 2. When it is desired to close the door the operator may grasp the handle 45 and push the door together and as the door closes together the weight of the handle 30 together with the weight of the hooks and the bar 12 with the lever 36 will bring the hooks into engagement with the hole 28 in the catches 20. The operator then secures the seal 50 through the hole 10 in the hook 4 and the hole 28 in the catch 20.

If the door be warped or for any reason does not run in a vertical plane then the door will engage with the curve 48 of the catch 20 and force it in between the door post 18 and catches and into engagement with the jamb 16.

Having now described my invention what



I claim and desire to secure by Letters Patent is:

1. In a car-door fastener, a plurality of hooks pivoted to the door, connections between the hooks, a lever pivoted to one of the hooks and to the connection between the hooks a handle pivoted to the door and provided with a plate to which said lever is pivoted, in combination with a plurality of catches secured to the jamb of the door and adapted to be engaged by the hooks on the door and lock the door.

2. In a car-door fastener, a hook, a staple to which the hook is pivoted at one end and having means connected with the staple to limit the movement of the hook in one direction said hook provided with an opening near the point of the hook, a handle pivoted to the door and provided with a plate in one side, a lever pivoted to the plate and to the central part of the hook, in combination with a catch secured to the jamb of the door and curved outwardly and provided with two openings at angles to each other, and a seal adapted to engage one of the openings in the catch and an opening in the hook and seal the two together.

3. In a car-door fastener, a plurality of hooks pivoted to the door and each hook provided with an opening in its end, a plurality of catches secured to the jamb of the door and projecting beyond the edge of the jamb, said catches provided with points curved outwardly to guide the movement of the door, and also having both vertical and horizontal openings there through, means for simultaneously releasing the hooks from engagement with the catches consisting of a lever pivoted to one hook and connected to the other, and means attached to the door for causing the lever to operate the hooks.

4. In a car-door fastener, a plurality of

hooks provided with openings through their points, staples secured in the door to which each of the hooks are pivoted at one of their ends and by which they are limited in their movements in one direction, a bar connecting the two hooks to which the hooks are pivoted near their centers, a handle pivoted to the door, a plate in one side of the handle, a lever pivoted to said plate and to one of the hooks, in combination with a plurality of catches secured to the jamb of the door and each provided with two openings at right angles to each other and double curved at one end to guide the door in closing.

5. In a car-door fastener, a hook pivoted to the door by a staple and having an opening there through near the point and projecting within the limits of the door, a catch on the jamb of the door and extending beyond the edge of the door when the door is closed and adapted to be engaged by the hook said catch having therein two holes opening at right angles to each other, a handle for operating the hook pivoted to the door and provided with a plate, means attached to the door and engaging the handle to limit its movements, and a lever pivoted to the plate on the handle and to the central part of the hook.

6. In a car-door fastener, a hook pivoted at one end to the door, in combination with a catch rigidly fastened to the jamb of the door and provided with a doubled curved projecting end to guide the door in closing and to guide the hook into engagement with the catch.

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

FRANK O. DOHLIN.

Witnesses:

M. M. Cady,  
R. SULLIVAN.