

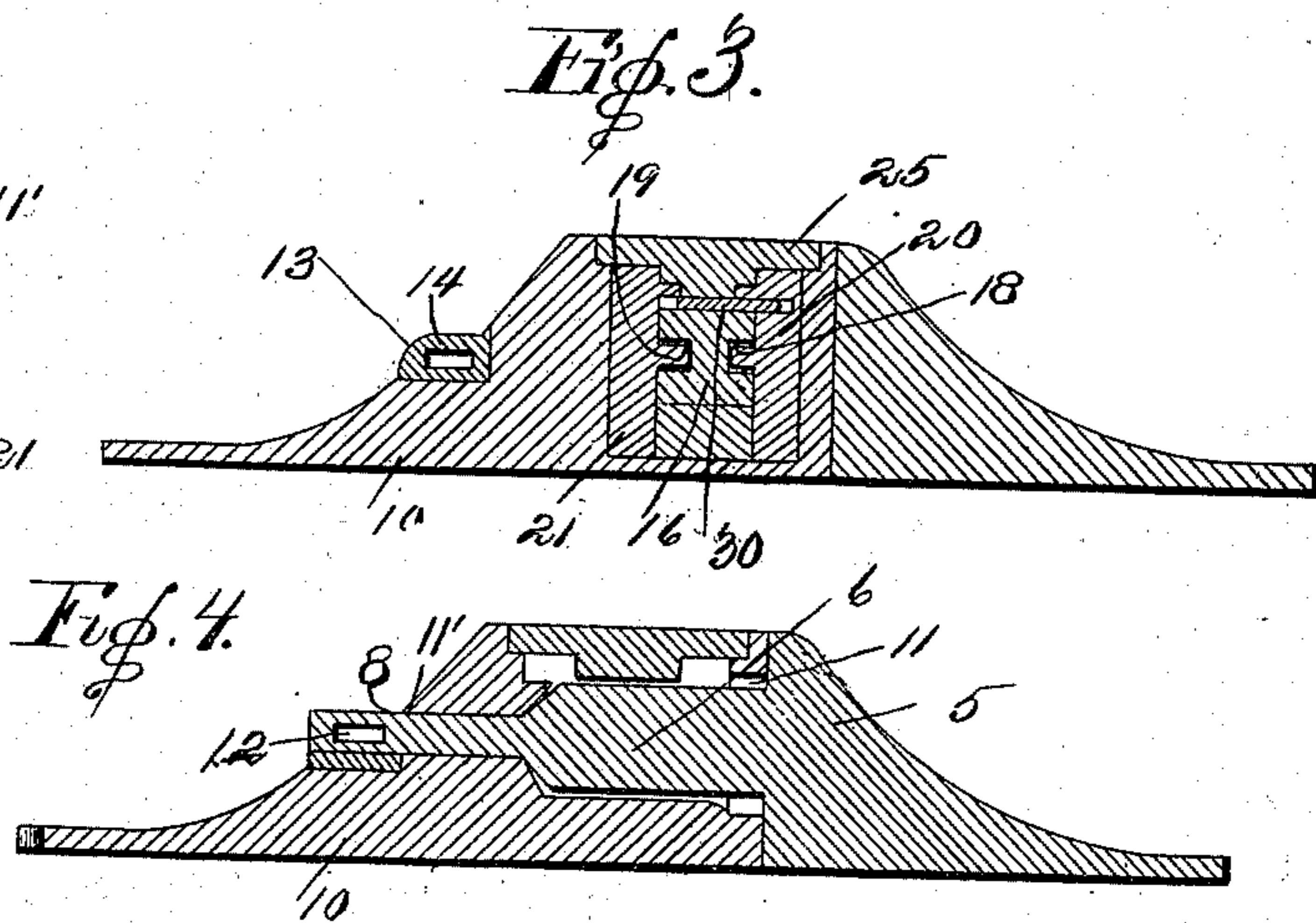
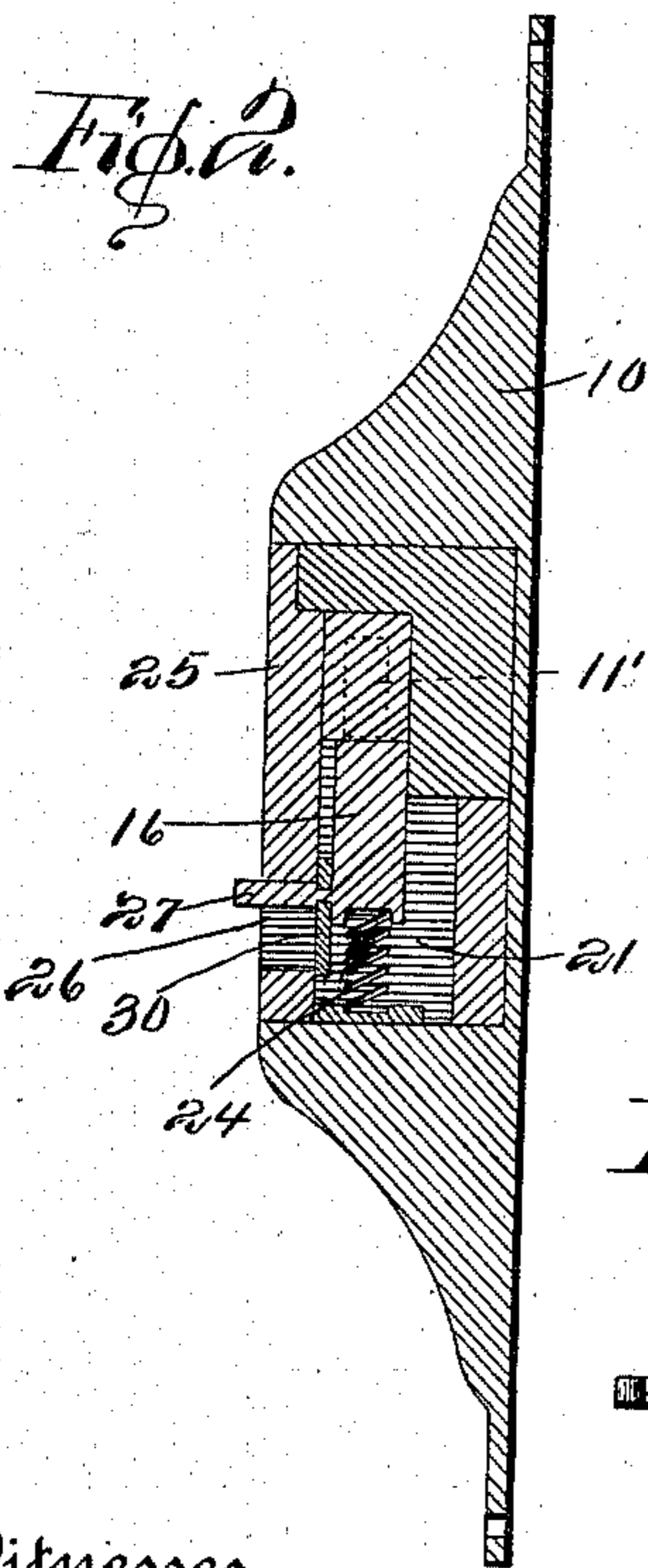
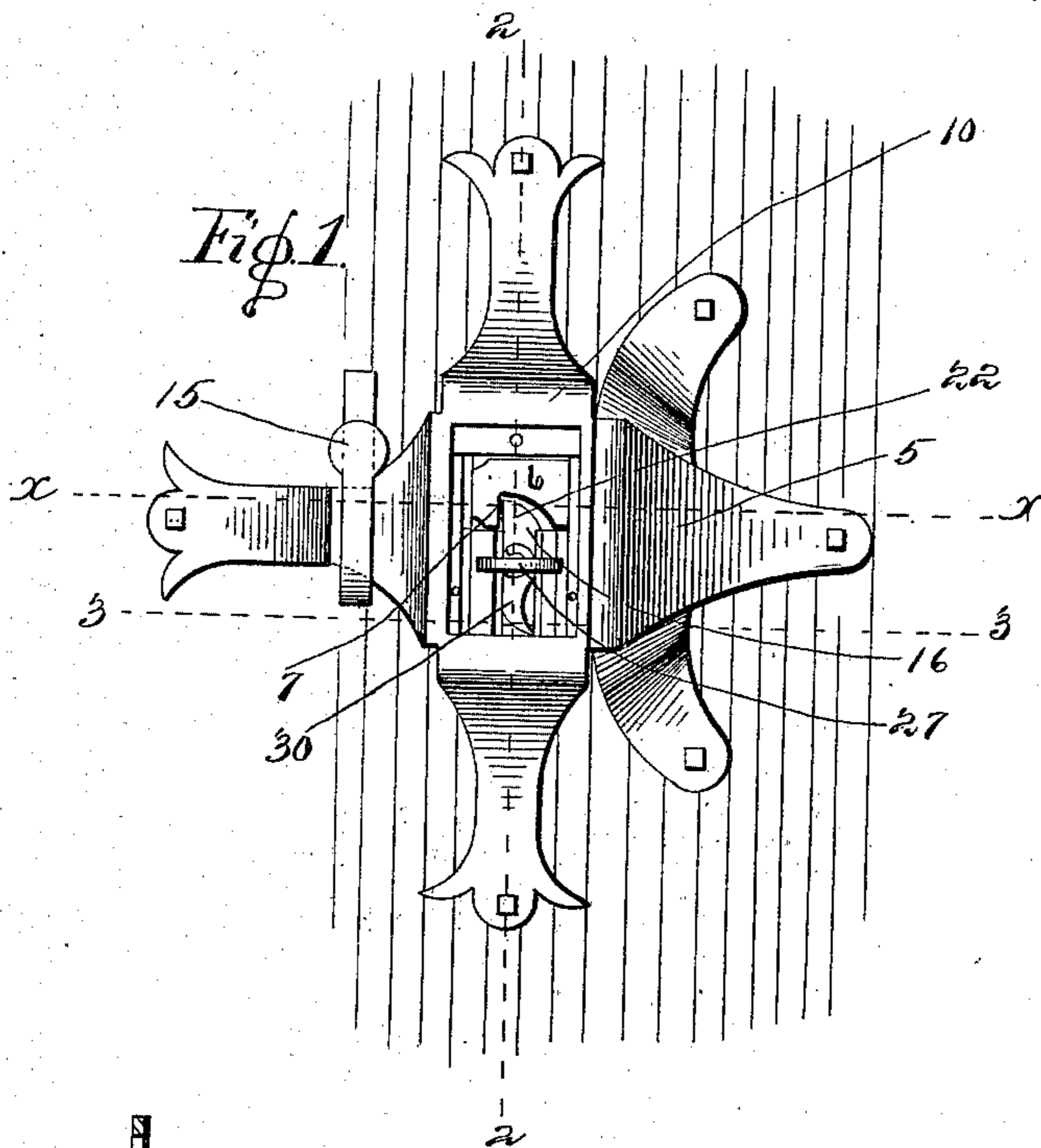
No. 681,150.

Patented Aug. 20, 1901.

W. H. SWANK.  
CAR DOOR FASTENER.

(Application filed Feb. 14, 1901.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

WALTER H. SWANK, OF DIXON, ILLINOIS.

## CAR-DOOR FASTENER.

SPECIFICATION forming part of Letters Patent No. 681,150, dated August 20, 1901.

Application filed February 14, 1901. Serial No. 47,250. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER H. SWANK, a citizen of the United States, residing at Dixon, in the county of Lee, State of Illinois, have  
5 invented certain new and useful Improvements in Car-Door Fasteners; 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  
10 it appertains to make and use the same.

This invention relates to fasteners for freight-car doors; and it has for its object to provide a fastening wherein the latch-bolt is held in locking position by means of a bolt  
15 which may be operated at will; but the latch-bolt cannot be withdrawn from locking position until after the seal for the door has been broken, the locking-bolt acting to relieve the seal of strain incident to jarring when the car  
20 is in motion.

Further objects and advantages of the invention will be evident from the following description.

In the drawings forming a portion of this  
25 specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation of the fastening with the cover-plate removed and the locking-bolt in engaged position with a  
30 seal in place. Fig. 2 is a section on line 2 2 of Fig. 1 with the cover-plate in place. Fig. 3 is a section on line 3 3 of Fig. 1 with the cover-plate in place. Fig. 4 is a section on line *x x* of Fig. 1.

35 Referring now to the drawings, the present fastening comprises a member which is mounted on the sliding door of the freight-car and includes a block 5, the face of which is set flush with the edge of the door, and from  
40 which face there projects a latch-bolt 6, including a body portion having a notch 7 to form a hook, and from the web portion of which hook there is extended a reduced portion forming a finger 8.

45 The second member of the fastening includes a casing 10, which is mounted on the outer face of the side of the car, and in the side of which, adjacent to the member above described, there is formed an opening 11, which  
50 is adapted to receive the latch-bolt, the finger 8 thereof being adapted to pass entirely through the casing and outwardly through an

opening 11' in the opposite side thereof, and in this outer end of the finger there is formed a passage 12, adapted to aline with a passage 55 13 in a projection 14 upon the casing 10 to receive a seal 15, passed through said passage. When this seal is in place, the latch-bolt cannot be withdrawn, and hence the sliding door cannot be opened. When the parts are in  
60 this locked position, there must be some means provided for taking from the seal the strain incident to such motions as would tend to slide the door open. For this purpose a spring-pressed bolt 16 is provided. This bolt 16 is  
65 slidably disposed on guideways 18 and 19, formed on the opposite faces of plates 20 and 21, which are removably placed in the casing 10, below the openings in the side walls thereof, the sliding bolt having its upper end rounded, as shown at 22, for engagement by the  
70 bill of the hook of the latch-bolt when the latter is moved into locking position, whereby the said latch-bolt may act to press the spring-pressed bolt downwardly to permit the  
75 bill of the hook to pass beyond it. When the bill of the hook has passed beyond the bolt 16, the latter rises under the influence of a helical spring 24, disposed between its lower  
80 end and the bottom of the casing, so as to engage itself with the hook and prevent withdrawal thereof.

The spring-pressed bolt 16 is covered by a plate 25, which forms a front for the casing, and in which plate there is formed a slot 26, 85 through which is passed the stem of a knob 27, this stem being secured to the spring-pressed bolt, and when the knob is moved downwardly this bolt is drawn from engagement with the hook, and the latch-bolt 6 may  
90 then be withdrawn from the casing by sliding the car-door in the proper direction to open it. Thus when the door is closed, the spring-pressed bolt engages the latch-bolt 6 and holds it closed whether or not the seal is  
95 in place, while when the seal is in place it is relieved from all strain.

To prevent insertion of any obstruction into the casing beneath the spring-pressed bolt that would prevent lowering of it out of engagement with the latch-bolt, a closing-plate 30 is provided, this plate being pivoted on the stem  
100 of the knob 27 and having a cam-face that rests against the bottom of the casing 10. When

the knob is drawn downwardly, this cam-face is pressed against the bottom of the casing and sliding thereover causes the plate to swing laterally and allow the spring-pressed bolt to be moved downwardly. When this bolt rises, the closing-plate is acted on by gravity and swings into its vertical position, the dimensions of this closing-plate, however, being such that it closes the slot in all positions.

It will be seen that with this construction there is provided a most simple and efficient construction for the purposes defined, and it will be understood that in practice various modifications of the specific construction shown may be made and that any suitable materials and proportions may be used without departing from the spirit of the invention.

What is claimed is—

1. A car-door lock comprising a casing having transverse openings therethrough and a slotted projection formed thereupon, a latch-bolt adapted to pass through the openings and having a slot for alinement with the slot of the exterior portion to receive a seal in conjunction therewith, said latch-bolt having also a notched portion to lie within the casing, a spring-pressed bolt in the casing for engagement with the notched portion to prevent withdrawal of the latch-bolt, a slotted cover-plate for the casing, a knob having a stem passed through the slot of the plate and secured to the spring-pressed bolt to move it against the tendency of the spring, and a

closing-plate pivoted to the stem of the knob and adapted to hang therefrom and close the slot of the plate, said pivoted plate having a cam-face lying against the bottom of the casing for swinging the plate laterally when moved with the knob in the direction of the bottom of the casing.

2. A car-door lock comprising a casing having transverse openings therethrough and a slotted projection formed thereupon, a latch-bolt adapted to pass through the openings and having a slot for alinement with the slot of the exterior portion to receive a seal in conjunction therewith, said latch-bolt having also a notched portion to lie within the casing, guideways removably mounted within the casing, a spring-pressed bolt in the casing for engagement with the notched portion to prevent withdrawal of the latch-bolt, a spring interposed between the bolt and the bottom of the casing, a slotted cover-plate for the casing, a knob having a stem passed through the slot of the plate and secured to the spring-pressed bolt to move it against the tendency of the spring, and a closing-plate pivoted to the stem of the knob.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, on this 11th day of December, 1900.

WALTER H. SWANK.

Witnesses:

W. L. SAWYER,  
JOSEPH SHAFFER.