

No. 696,820.

Patented Apr. 1, 1902.

D. HOYT.  
LOCK CASE.

Application filed Jan. 2, 1902.)

(No Model.)

Fig. 1. Fig. 2. Fig. 3. Fig. 4.

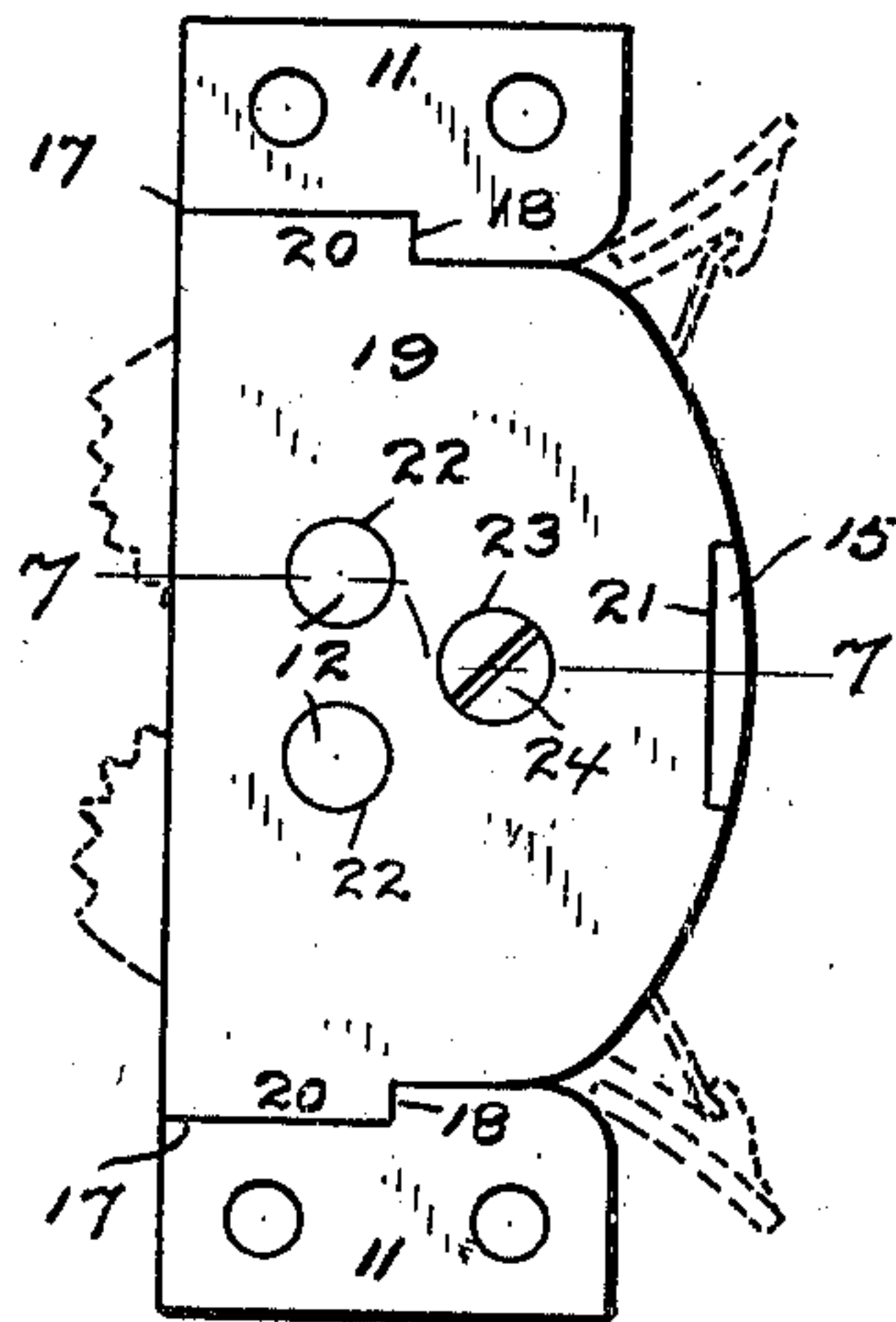
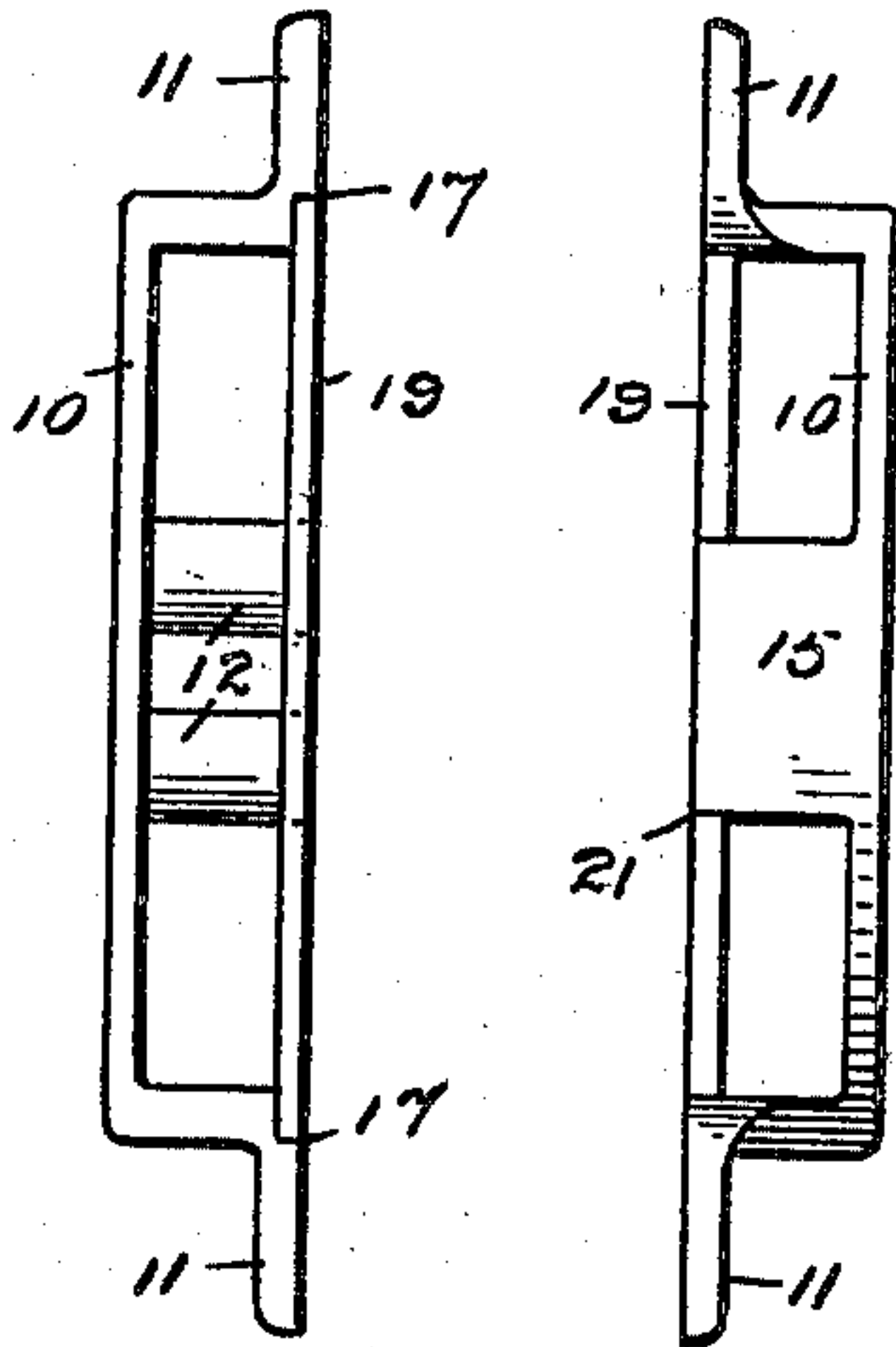
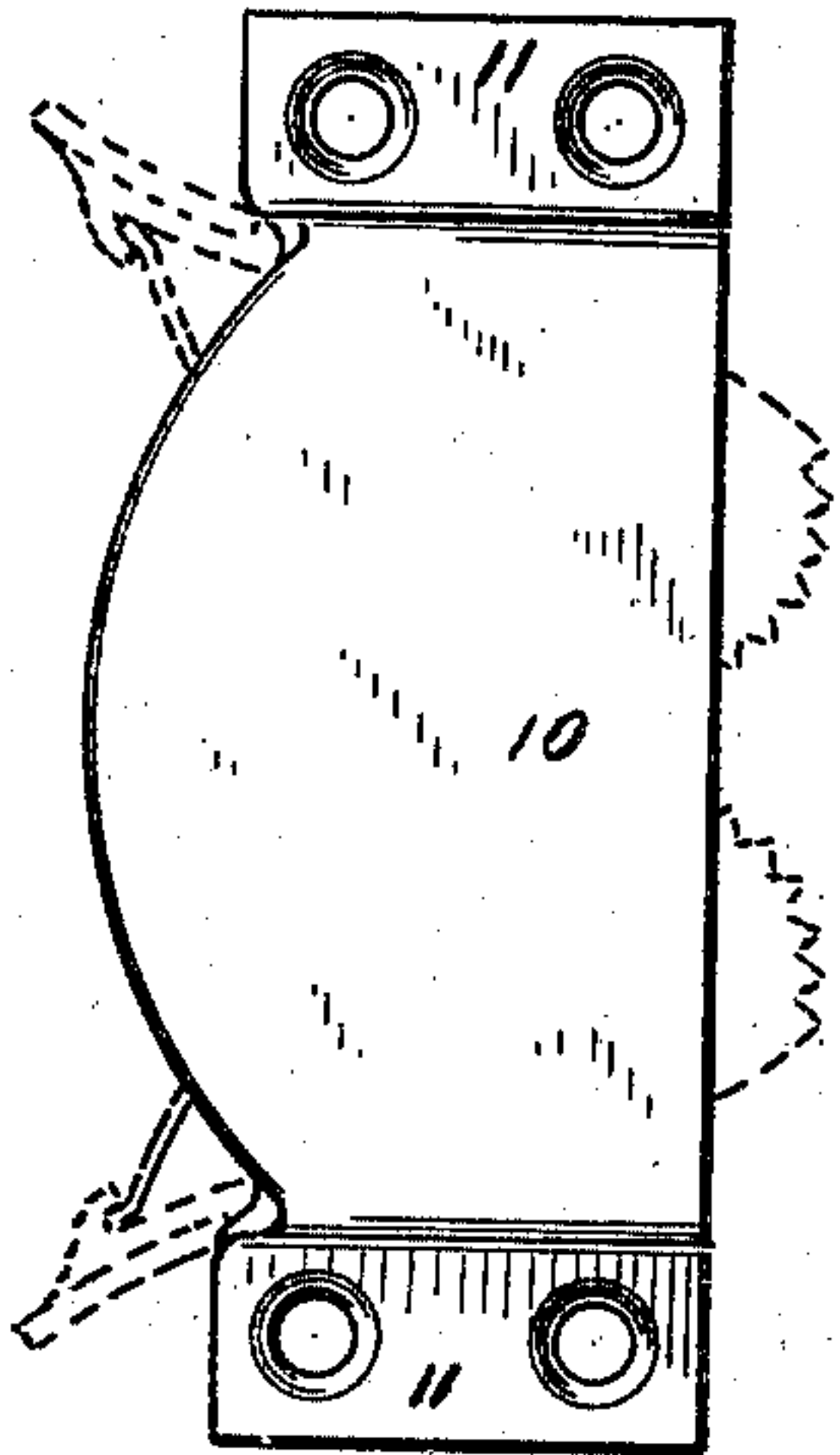


Fig. 5.

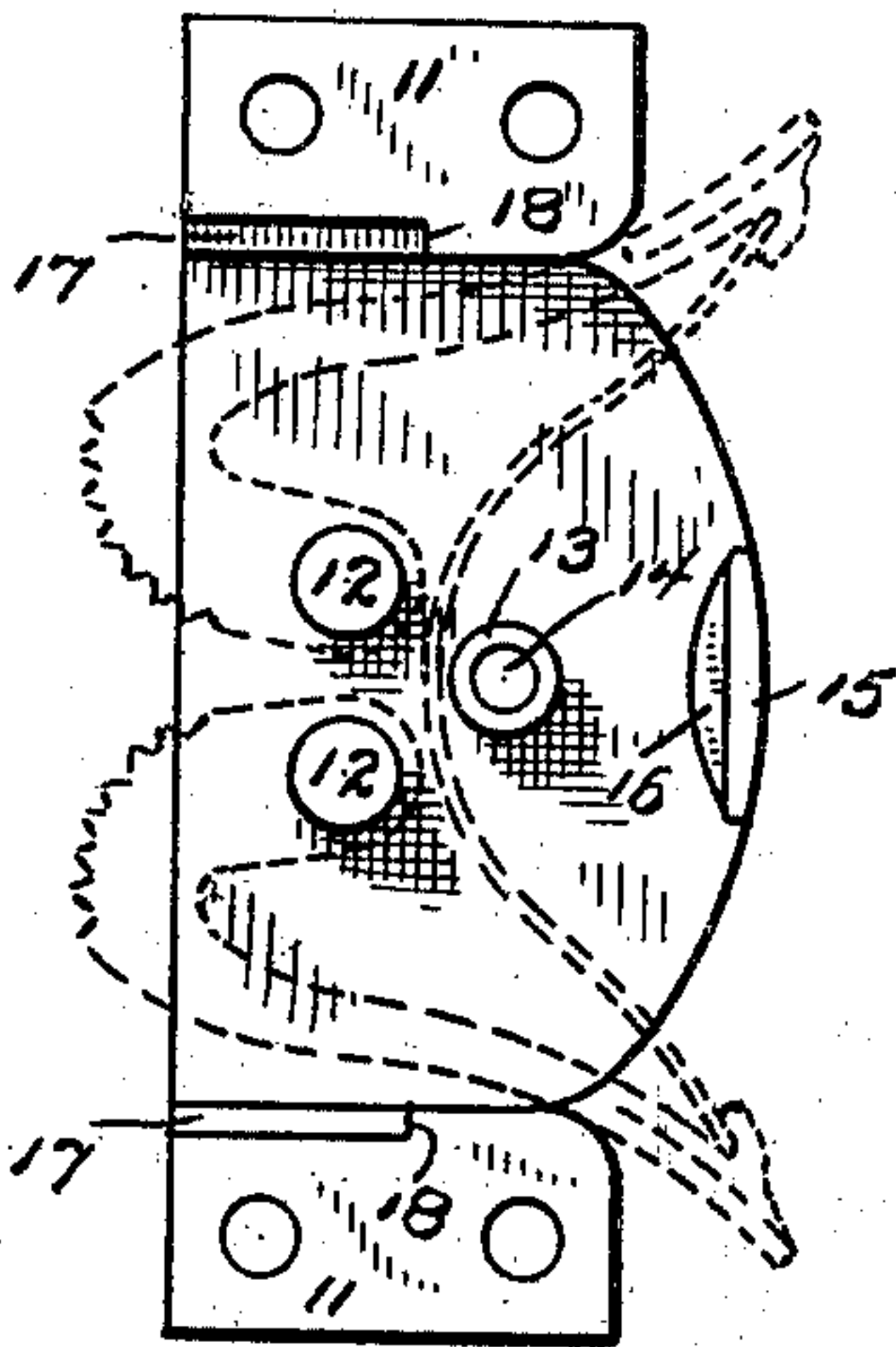


Fig. 7.

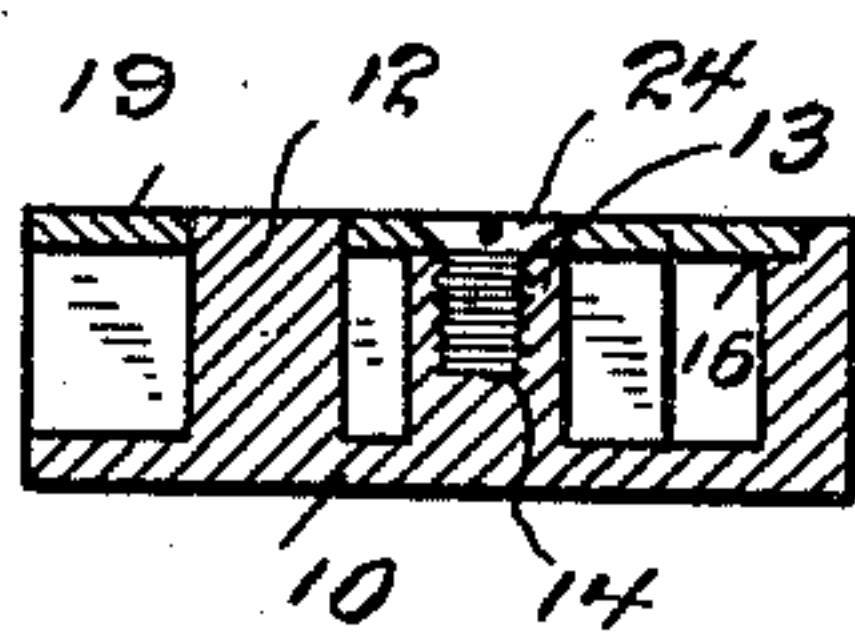


Fig. 6.

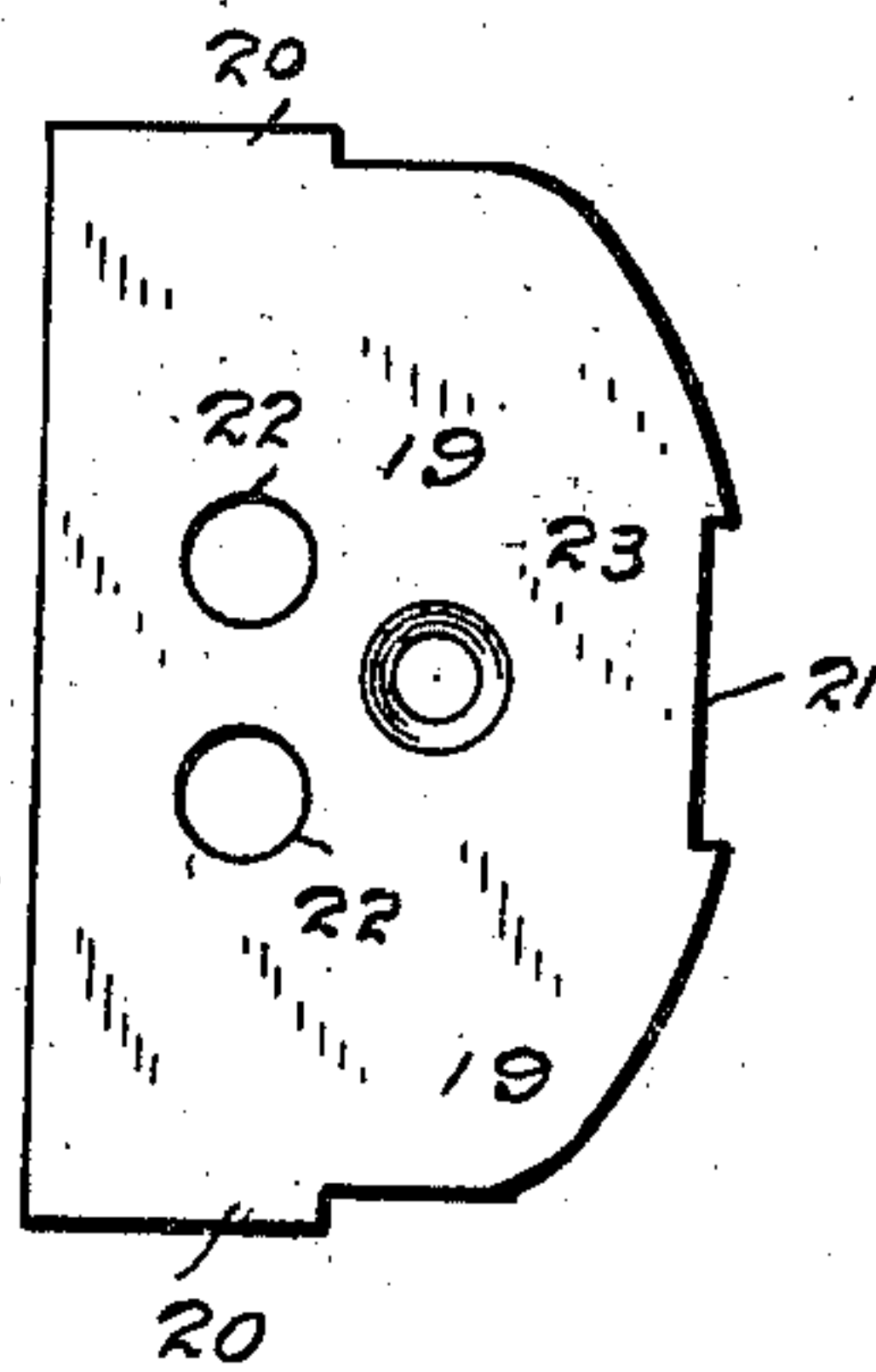
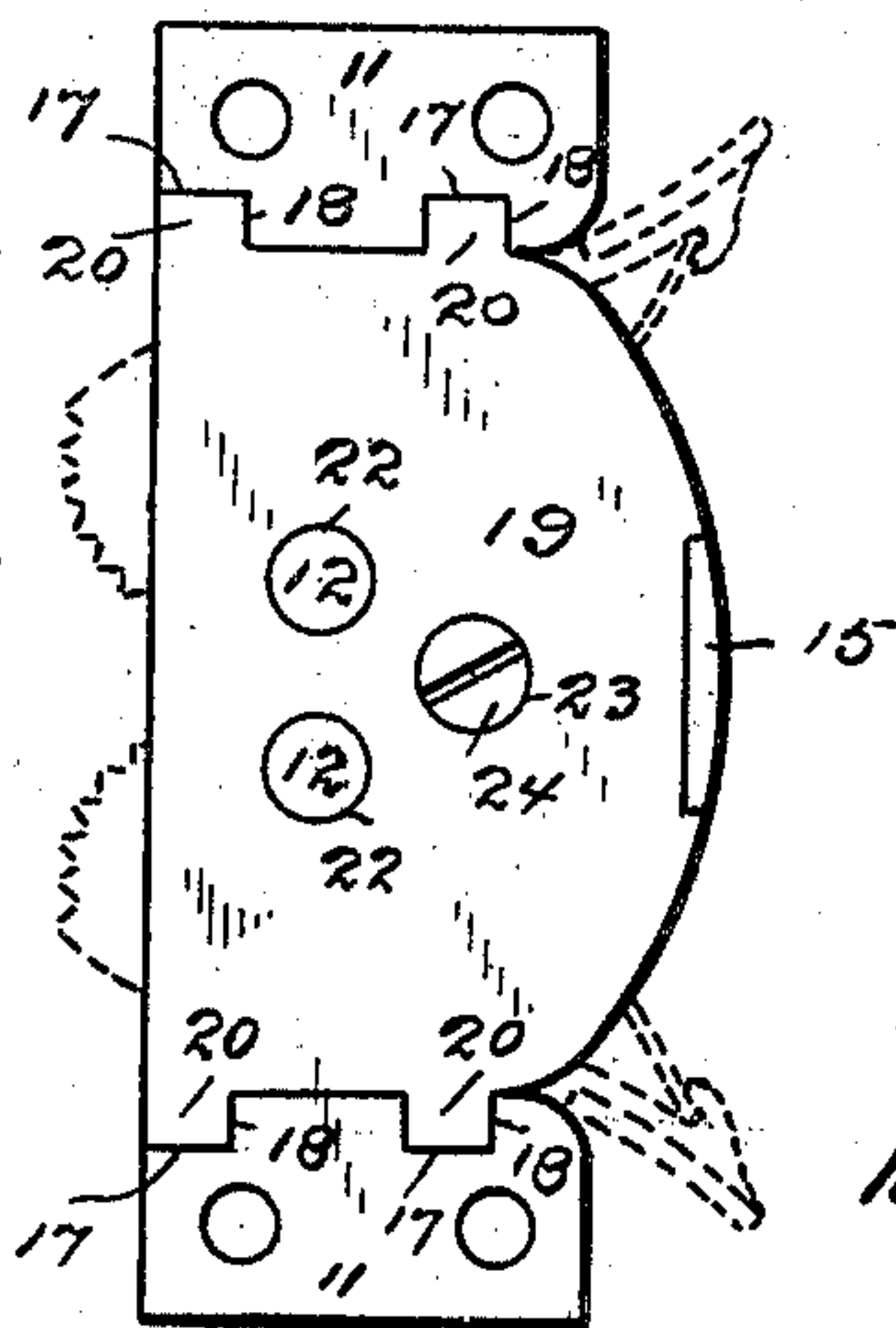


Fig. 8.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

DANIEL HOYT, OF SOUTH NORWALK, CONNECTICUT, ASSIGNOR OF ONE-HALF TO THE NATIONAL LOCK WASHER COMPANY, OF NEWARK, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## LOCK-CASE.

SPECIFICATION forming part of Letters Patent No. 696,820, dated April 1, 1902.

Application filed January 2, 1902. Serial No. 88,176. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL HOYT, a citizen of the United States, residing at South Norwalk, county of Fairfield, State of Connecticut, have invented a new and useful Lock-Case, of which the following is a specification.

My invention relates to the general class of sash-locks in which the case is attached to the face of the sash and the locking mechanism bears against or takes into a bead or the casing. The special construction of the locking mechanism is not of the essence of my invention, although the invention will be found especially adapted to the class of sash-locks which act to hold a sash in any position and against movement in either direction through the engagement of locking-cams carried by the case with the face of the window-casing or the bead. It will be obvious that in locks of this class the entire strain of the weight of the sash or of any undue pressure brought to bear through ignorance or carelessness to move the sash is necessarily transmitted obliquely to the posts of the lock and is by the posts transmitted to the general structure of the case. The result has been that unless the cases were made excessively heavy, which is objectionable both on account of the weight and on account of the greatly increased cost of production, the plates or the posts, or both, would spring sufficiently under the strain to separate the posts from the plate which they engage, but to which they are not attached, and thus render the lock useless.

My invention therefore has for its object to provide a lock-case adapted for general use, and especially adapted for use in connection with cam sash-locks, which may be cast complete in two parts, shall be so constructed that the amount of metal required shall be reduced to the minimum, and, most important of all, the metal used shall be so disposed as to give the maximum resistance to the strains of use and to amply fit the case to sustain without buckling or yielding in any respect all the strains that can be brought to bear upon it under the ordinary conditions

of use. With these ends in view I have devised the simple and novel lock-case which I will now describe, referring to the accompanying drawings, forming part of this specification, and using reference characters to designate the several parts.

Figure 1 is an elevation of my novel lock-case; Fig. 2, a front edge view; Fig. 3, a back edge view; Fig. 4, a view of the inner side of the case assembled; Fig. 5, a similar view with the back plate removed; Fig. 6, a view of the back plate detached; Fig. 7, a transverse section on the line 7 7 in Fig. 4; and Fig. 8 is a view corresponding with Fig. 4, showing a slight modification in details of construction.

10 denotes the case proper, shown as provided with attaching-flanges 11. The case is provided with posts 12, which are cast integral therewith and extend backward from the front with an integral abutment 13, shorter than the posts and having a threaded hole 14, and with an abutment 15 the full height of the posts and having a shoulder 16 the height of abutment 13. At the upper and lower ends of the case, on the back, are recesses 17, the bottoms of which are of uniform height with abutment 13 and the shoulder 16 on abutment 15 and the back ends of which are heavy solid walls, as at 18. The special shape of these recesses and whether there are one or two at each end of the case is a matter of no importance whatever, the essential requirement being that a solid wall 18 be provided at the rear end of each recess, for a purpose presently to be explained.

19 denotes the back plate, which when assembled rests upon abutment 13, shoulder 16 of abutment 15, and the bottoms of recesses 17 and is provided with projections 20 to engage recesses 17 in the case and to bear against walls 18, a recess 21 to receive abutment 15, holes 22 to receive posts 12, and a countersunk hole 23 to receive a screw 24, which engages the threaded hole 14 in abutment 13.

When assembled, the back plate lies flush with the surface of the back of the case, resting



upon abutment 13, shoulder 16 on abutment 15, and the bottoms of recesses 17, and bearing firmly against walls 18 at the rear ends of recesses 17 and against abutment 15 and  
5 being retained in place by a screw passing through hole 23 and engaging the threaded hole in abutment 13. Posts 12 pass entirely through holes 22 in the back plate and lie flush with the surface. These posts are made  
10 large enough so that there is no possibility of their buckling or springing to the slightest extent under any amount of pressure that can be brought to bear against them. Any strain upon the posts is transmitted to the  
15 case, to which both ends of the posts are rigidly secured, one end through their being made integral therewith and the other end through engagement with the holes in the back plate. The back plate transmits all pressure  
20 that may be brought to bear upon it to the case proper through the engagement of projections 20 with walls 18 at the rear ends of recesses 17. The form illustrated in Fig. 8 differs from the other form only in that two  
25 projections are provided at each end of the

back plate which bear against corresponding walls 18.

Having thus described my invention, I claim—

A case of the character described comprising a case proper provided with integral posts, an integral abutment 13 shorter than the posts, an integral abutment 15 the height of the posts and having a shoulder the height of abutment 13 and recesses at its upper and  
30 lower ends, the bottoms of which are of uniform height with abutment 13 and the shoulder on abutment 15, and are provided at their rear ends with solid walls and a back plate resting upon abutment 13, the shoulder on  
35 abutment 15 and the bottoms of the recesses and bearing against abutment 15 and the walls at the ends of the recesses.

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

DANIEL HOYT.

Witnesses:

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S. W. ATHERTON.