

M. SHEPARD.

LOCK.

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976,509.

Patented Nov. 22, 1910.

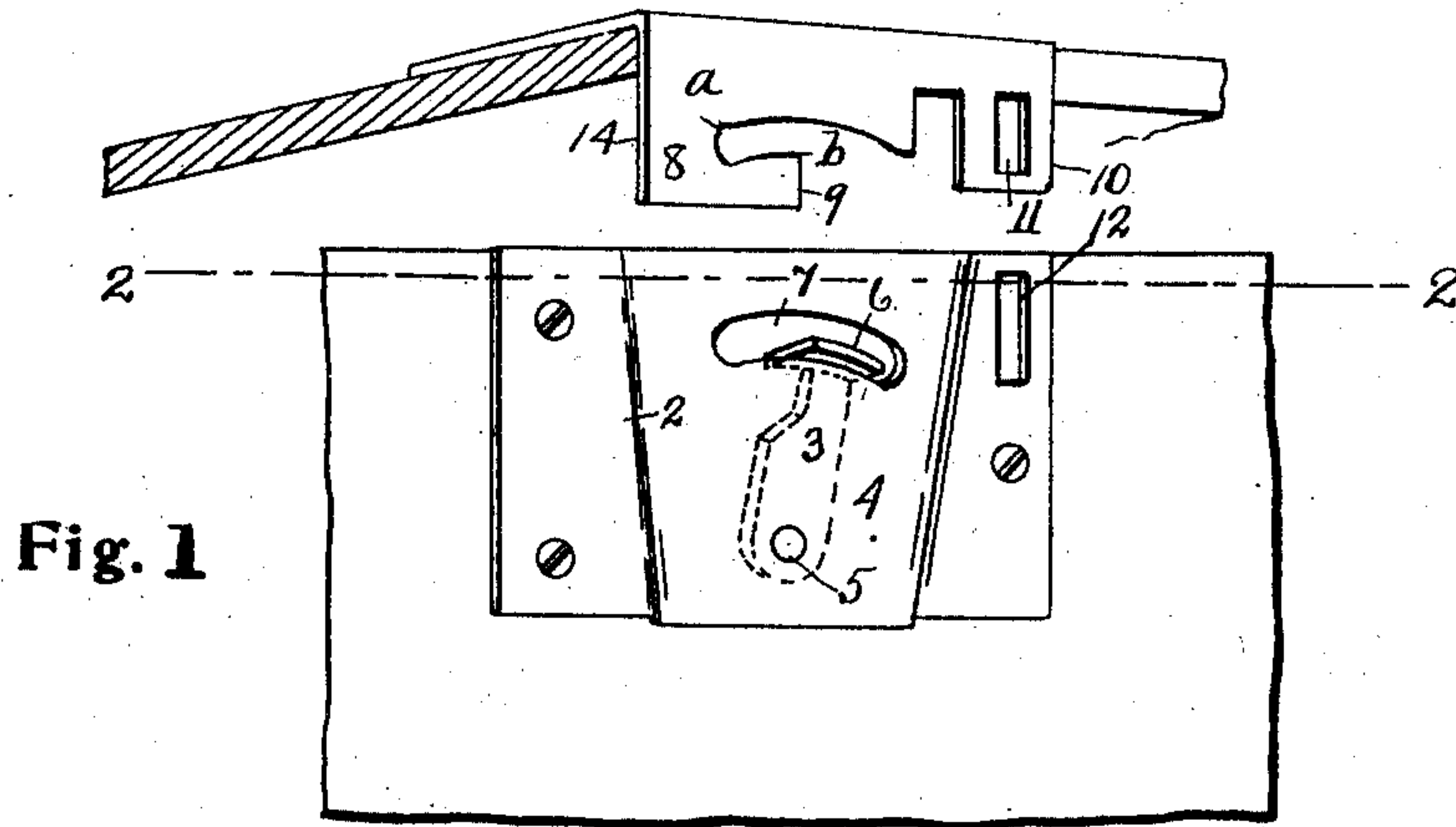


Fig. 1

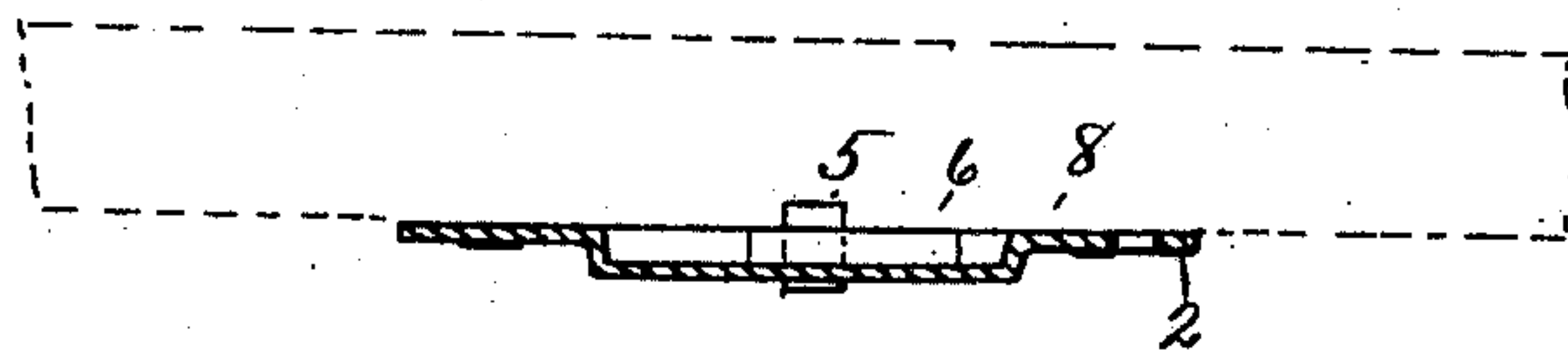


Fig. 2.

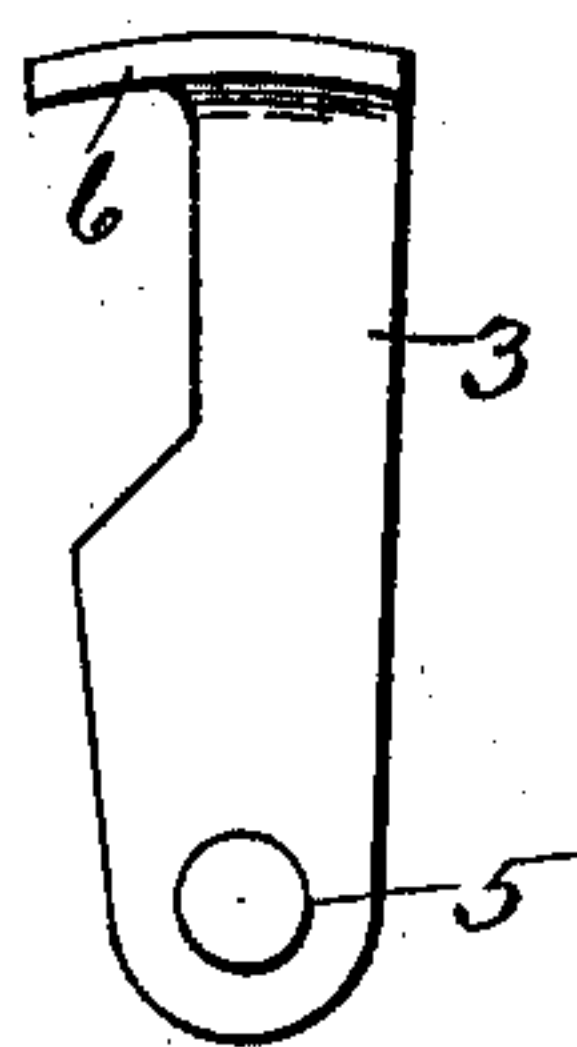


Fig. 3.

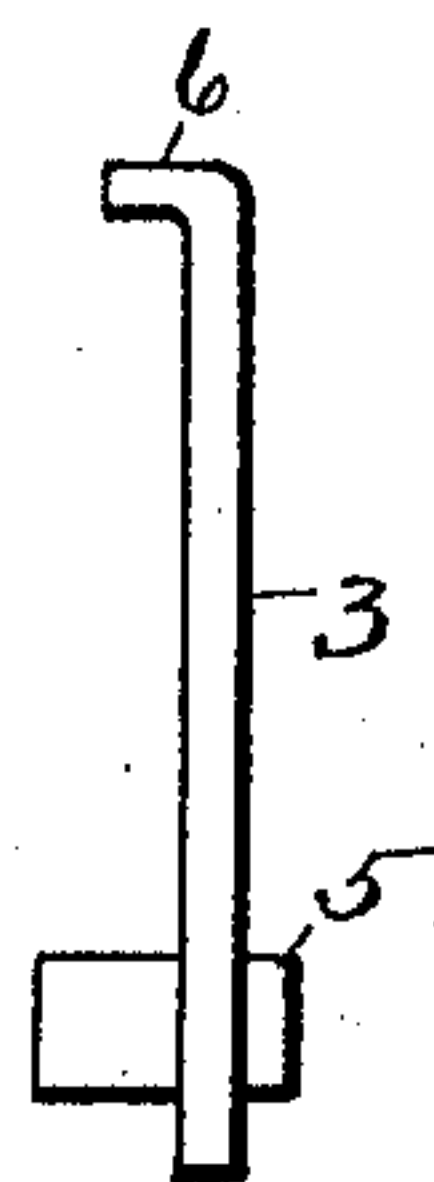


Fig. 4.

Witnesses  
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# UNITED STATES PATENT OFFICE.

MELZAR SHEPARD, OF WAYNE, MICHIGAN.

## LOCK.

976,509.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed March 4, 1910. Serial No. 547,185.

*To all whom it may concern:*

Be it known that I, MELZAR SHEPARD, a citizen of the United States, residing at Wayne, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Locks, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to box locks.

It has for its object an improved box lock adapted to be used in connection with knock-down crates, or in connection with any box or trunk that is provided with a receptacle part and a lid part.

The improved lock consists, in brief, of a pocket in which there is contained a pivoted latch member having a hooked terminal. Into the pocket can be dropped a catch over which the latch is adapted to engage, and which is so shaped that when the parts are forced into close engagement, the hook and that part with which it is connected, are drawn into very close connection with the parts upon which the pivoted hook is mounted. Provision is also made for sealing the receptacle, using for this purpose a sealing device commonly known as a car seal.

In the drawings:—Figure 1, is a front elevation showing the two engaging parts of the lock. Fig. 2, is a cross section at the line 2—2 of Fig. 1. Fig. 3, is a front elevation of the latch. Fig. 4, is a side elevation of the latch.

The pivoted latch 3 is held to the box or trunk with which it is to be used by means of a casing 2, made preferably from sheet metal and provided with a pocket 4 within which the latch 3 is pivoted, preferably by a rivet pivot 5. The swinging end of the latch 3 is formed as a hook and is provided with a flange 6 that engages through a curved slot 7 in the case; that wall of the slot which is farthest removed from the pivot 5 is concentric or substantially concentric therewith, and the slot has such a length and relation with respect to the pivot 5 that the end of it toward which the hooked end of the latch swings, when coming to inter-

locking position, is somewhat beyond the vertical line drawn from the pivot 5. (By vertical line is meant a line in a plane which is perpendicular to the hinge on which the lid of the box swings.)

A catch 8 is provided with a hooked terminal 9, whose upper surface is slightly eccentric to an arc having a center at the pivot 5, and whose eccentricity is so arranged with respect to the assumed center that the surface of the terminal diverges from the arc in such relation that the point *a* is radially farther away from the assumed center than the point *b*. The catch member is provided with a tongue 10, through which there is a hole 11 that registers with a hole 12 in the side flange of the pocket member or hook-bearing member. Through these holes as the catch part 8 is brought near the casing 2 by the closing down of the lid or cover of the box the strap of a car seal may be passed and the parts of the latch are thus sealed together.

The device is put into locking engagement by inserting the catch member in the pocket member until the point 9 of the catch drops below the curved slot in the pocket member, and the latch is then swung into engagement with the point of the catch. In making the engagement the two members of the lock are brought into close engagement, and are held in this close engagement by the frictional engagement of the latch and catch, which will not disengage without the use of force. The edge 14 of the catch member engages closely against and within the side wall of the pocket, and the catch is thereby prevented from yielding before the pressure that is required to make the engagement between the hook and the catch. That part of the casing 2 which contains the hole 12 not being recessed and lying flat against the outer face of the side of the box, lies beneath the tongue 10 of the catch member when the lid of the box is lowered.

What I claim is:—

In a lock for boxes, the combination of a pocket member having a slotted portion, a pivoted latch having a terminal flange engaging through the slot in said pocket member, and a catch member having a hook provided with a curved engaging edge adapted



to engage beneath said slotted portion of the  
pocket member and the terminal flange of  
said latch and to be frictionally engaged by  
said terminal flange of the latch, said pocket  
5 member and said catch member each being  
provided with a hole adapted to register the  
one with the other when the pocket member  
and the catch member are engaged, through

which a sealing medium may be passed, sub-  
stantially as described.

In testimony whereof, I sign this specifica-  
tion in the presence of two witnesses.

MELZAR SHEPARD.

Witnesses:

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