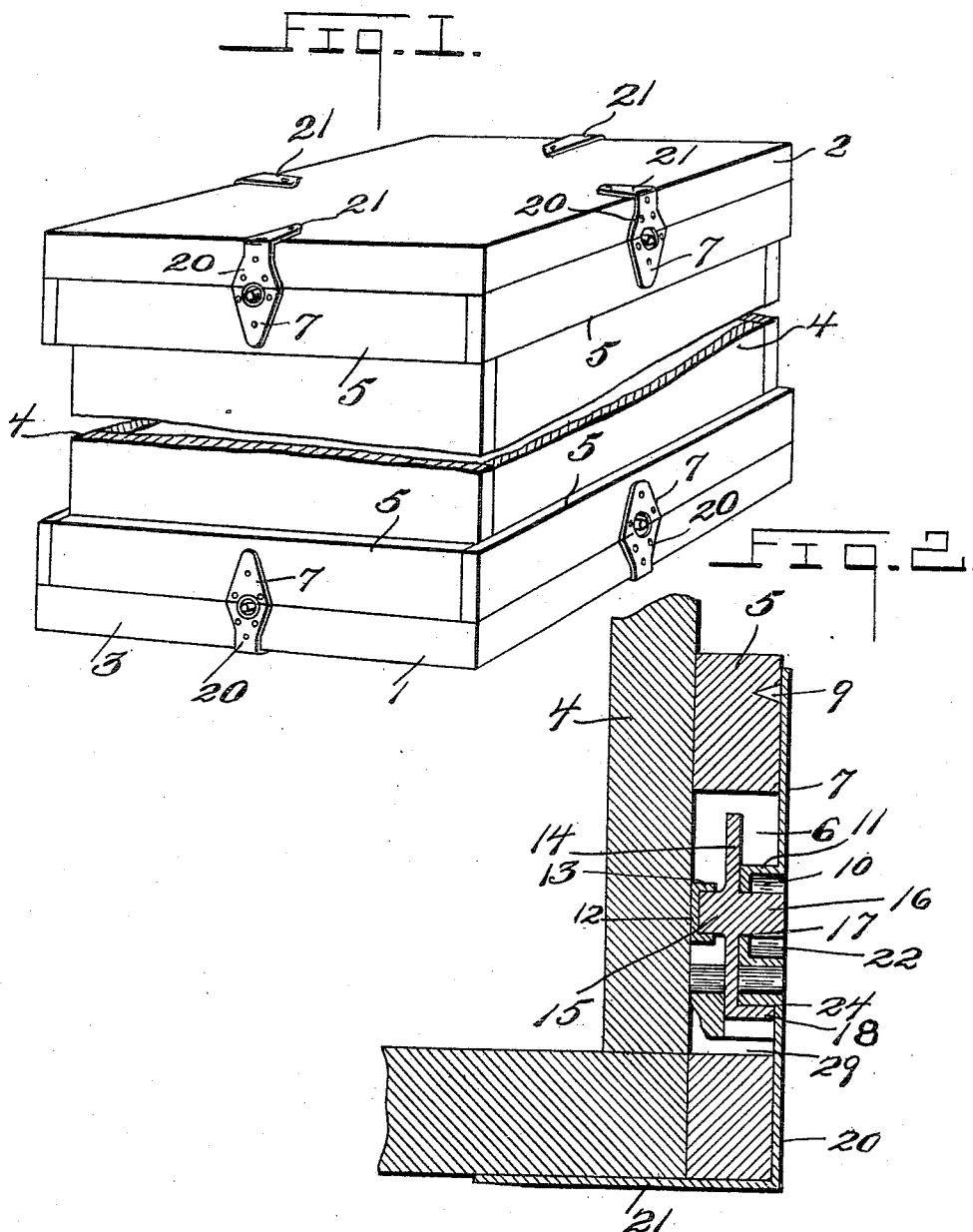


F. R. PRESCOTT.
BOX FASTENER.
APPLICATION FILED APR. 28, 1910.

971,790.

Patented Oct. 4, 1910.

2 SHEETS—SHEET 1.



Witnesses
E. E. Johansen.
M. L. Lons

Inventor
Frank R. Prescott.

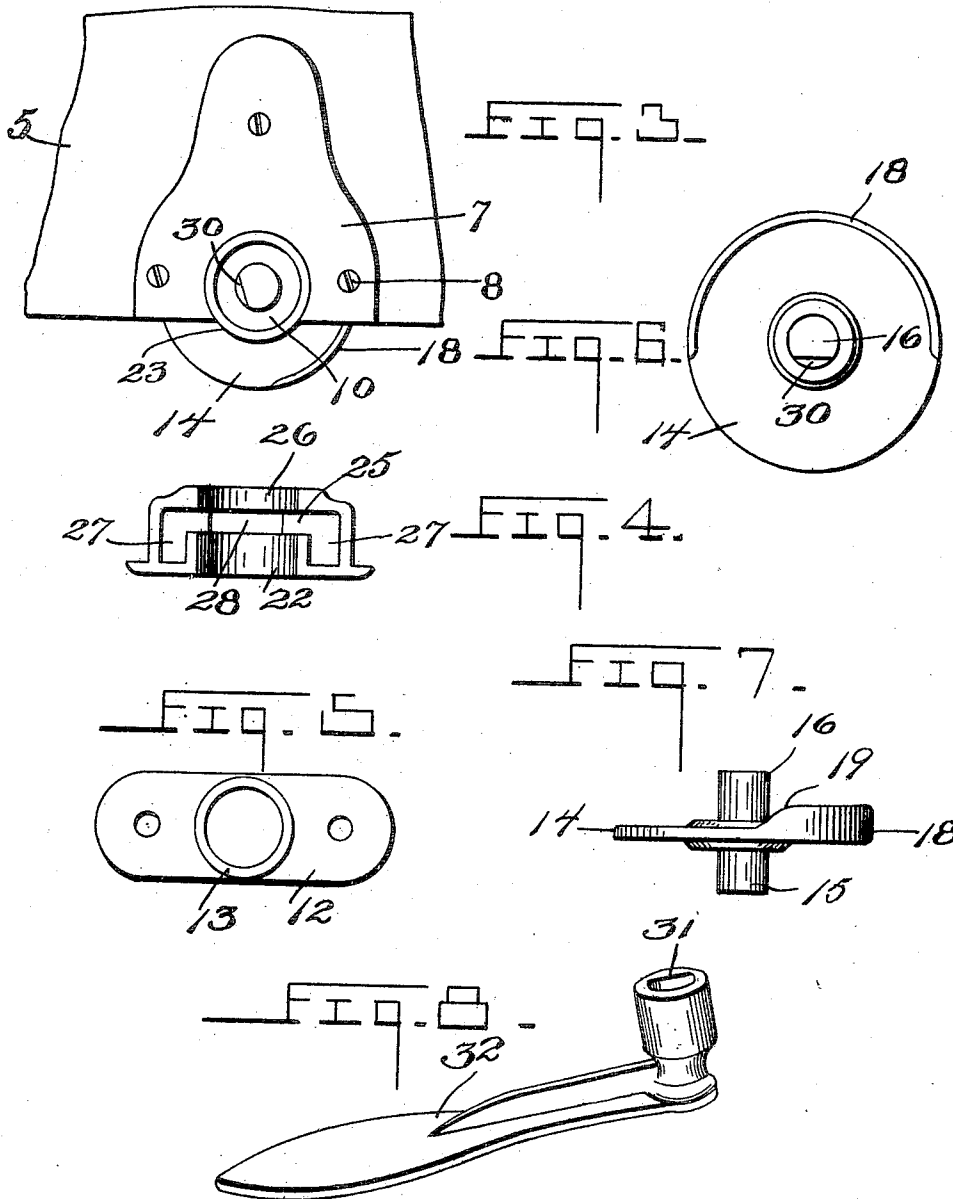
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UNITED STATES PATENT OFFICE.

FRANK R. PRESCOTT, OF MEREDITH, NEW HAMPSHIRE.

BOX-FASTENER.

971,790.

Specification of Letters Patent.

Patented Oct. 4, 1910.

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To all whom it may concern:

Be it known that I, FRANK R. PRESCOTT, a citizen of the United States, residing at Meredith, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Box-Fasteners, of which the following is a specification.

This invention relates to improvements in box fasteners, and it consists in the novel combination and arrangement of parts as will be hereinafter more particularly described and claimed.

Referring to the drawings: Figure 1 is a perspective view of the box, the parts of which are collectively connected with the invention applied thereto. Fig. 2 is an enlarged vertical section of the locking device with the parts assembled and attached to fractional parts of the box. Fig. 3 is a top plan view of the catch plate of the lock. Fig. 4 is an edge view of the connecting member of the lock. Fig. 5 is a plan view of the bearing plate used in connection with the locking cam. Fig. 6 is a face view of the cam of the lock. Fig. 7 is an edge view of the cam. Fig. 8 is a perspective view of the key which is employed in connection with the lock.

The object of the invention is in the employment of a specially designed lock, whereby the several detachable sections of a box are securely drawn together and locked in such a manner as to provide a case or inclosure which will withstand rough usage to which the same is necessarily subjected.

A further object of the invention is in the application of a removable lever for operating the lock, as will appear from the detailed description to follow:

Referring to the drawings, an ordinary construction of box is shown, 2 representing the bottom and top which are similarly constructed and provided with continuous flanges, 3 projecting a suitable distance from said portions to which the invention is properly applied. The side sections 4 are of uniform construction, and the dimensions thereof, are such as to provide a box of suitable dimensions, said sections 4 referred to are each provided upon one of their outer faces with battens 5 which are arranged in parallel position in respect to one another and at a suitable distance from the opposite edges of said section.

The box herein shown and described is not claimed but merely shows the application of the invention. The lower portion being properly recessed for the accommodation of the lock hereinafter to be described. The battens 5 adjacent to their meeting edges are each provided with semi-circular cut away portions 6, and to the outer faces of said battens are secured plates 7, the lower edges of which are flush with the lower edges of said battens, the plates referred to being located over the cut away portions of the battens and arranged and secured in position by fastening devices 8, and a lug 9 projecting from said plate and forced into said battens. The locking devices are all similarly constructed and are preferably located between the several sections of the box. The lower portion of the plate 7 carrying the several parts of the lock, is provided with a socket 10 forming an integral and inwardly protruding portion 11, and secured to the side portion 4, opposite the socket 10 is a plate also having a socket 13, the latter being separated a suitable distance from the protruding portion 11 of the plate 7. Movably located between the socket 13 and the inwardly protruding portion 11 of the plate 7 is a circular disk 14, and projecting from the opposite sides of said disk are trunnions 15 and 16, the former being freely received by the socket 13 of the plate 12, and the latter passing loosely through an opening 17 formed in the base of the socket 10, whereby the circular plate 14 is rotatably held in position. Formed integrally with the circular disk 14 is a flanged portion 18 which extends outwardly and is located on a line with the lower edge of the disk, the outer edge of the flanged portion forming a cam surface along a portion of the circumference of said disk and having riding end engaging surfaces 19 which cooperate with the other section of the lock in a manner hereinafter to be described. Fixed to the strip 3 is a securing plate 20, which forms the opposite member of the lock and is provided with a right angular extension 21 which is in contact with the remaining portion of the member to which the same is secured by suitable fastening devices. The upper portion of the receiving member 20 of the lock is especially designed for the purpose and is enlarged and counter-sunk into the edge strip 3 to cause the upper edge of said section of the lock to lie flush with the upper edge of said strip.

Projecting inwardly from the receiving member 20 is a lip 22 which is curvilinear in shape, the upper edge of which snugly receives the convex projecting portion 23 of the other section of the lock when the parts are properly assembled, the under curved surface 24, of the lip gradually receding toward its ends forming an engaging cam surface with which the inner curved surface of the flange 18 of the disk 14, cooperates when the latter is turned in its proper position. The enlarged portion of the receiving member of the lock is thus provided below the curvilinear lip 22 with a curved guideway 25, and is further formed by the rear wall 26, forming an integral part of the receiving member 20 and the securing plate of the latter, the entrance at either end of said guideway 25, being enlarged laterally as shown at 27 for freely receiving the flanged portion 18 of the circular disk 14, the latter in which instance being located between the rear wall 26 and the lip 22. The wall of the lower medial portion of the guideway 25, is provided with an opening 28, and the rear wall 26 is likewise cut away forming a discharge space 29, through which dirt or other accumulations that have gained access within the receiving portion of the member 20 may be easily removed or forced out of the same in the operation of the lock. The outer trunnion 16 forming an integral part of the circular disk 14, projects into the socket 10, the end of which is substantially flush with the surface of the plate 7, whereby a suitable space is formed about said trunnion, the latter having a flattened longitudinally arranged face 30, which trunnion together with its flattened portion is adapted to be snugly received by a correspondingly shaped socket 31 forming one end of a detachable key or lever 32 for turning the circular disk 14 in engaging and disengaging the sections of the lock.

In carrying out the invention, the bottom member 1 is laid in such a position as to cause the flanged portion thereof, to project upwardly, after which the side members are placed in their proper position within the flanged portion of the bottom and in close proximity thereto, in which operation the sections of the several locks will be in a position to permit the disks of the locks to be turned to bring the flanged portions thereof into engagement with the curvilinear shaped lips forming a part of the bottom. After the parts have been assembled as described, the top 2 may readily be placed upon the side members so supported in a similar manner as the bottom and the disks carried by the upper edges of the side members likewise operated, all of said locks, or more properly the circular disks thereof, being rotated by the removal key in a manner previously described.

It is further to be noted that any number of locks of the character described, may be employed to hold the several members of the box in a rigid and locked position, and further that the top may be readily removed without destroying the rigidity or strength of the remaining portion of the box in filling the box, with merchandise or removing the same as may be required.

It is further to be noted that by the construction of the lock employed the several sections of the box are not only locked in respect to one another but are rigidly brought together and by its construction or formation in respect to construction as herein shown and described, the most satisfactory results are obtained.

The construction of the box and lock employed in carrying out the invention may be used for dry-goods, piano or other receptacles without departing from the nature of the invention, and the members of the box of proper shape and dimensions for practical purposes.

What is claimed is:

1. A lock composed of two detachable sections one of which is provided with a receiving portion, a lip projecting within the latter and out of contact with the rear wall of the section, a second section, a disk mounted within the same and movable between the end of the lip of the other section and the rear wall thereof, means carried by said disk for engagement with the lip carried by the other member, and a removable key adapted to be applied to the said disk for rotating the latter, as and for the purpose described.

2. A lock comprising two detachable sections one of which is provided with a receiving guideway, a lip projecting within said guideway, a second section having a socket, a bearing located beyond said socket, a circular disk having oppositely arranged trunnions one of which is received by said bearing and the other passing through the rear wall of the socket and projecting within the latter, a circular flange forming a part of the disk and extending partially around said disk, for interlocking engagement with the lip of the other section, and a detachable key adapted for application to the trunnion of the disk projecting within the socket of its accompanying section, as and for the purpose described.

3. A lock composed of two detachable sections one of which is provided with a receiving portion, a curvilinear shaped lip projecting within the receiving portion and out of contact with the rear wall of the latter forming lateral receiving entrances for said section, the lower engaging surface of the lip being curved and receding toward its ends, a second section composed of a suitable plate having a socket located in its lower extremity providing a concave extension

which is snugly received by a correspond-
ingly shaped concave depression formed by
the first named section, a circular disk, trun-
nions projecting from the opposite sides of
5 the latter one of which is mounted in the
rear of the socket of said member and pro-
jecting within the socket, a plate having a
suitable socket for the reception of the other
trunnion, a flange formed integrally with the
10 disk and extending partially around the cir-
cumference of the same the ends of which re-
cede toward the disk, the trunnion forming
a part of the disk and projecting within the
socket of the second member being flattened,
and a key having a socket formed therein the 15
shape of which corresponds to the shape of
the projecting trunnion of the disk, said key
being adapted to be removably applied to the
trunnion of the disk for rotating the latter.
In testimony whereof I affix my signature, 20
in presence of two witnesses.

FRANK R. PRESCOTT.

Witnesses:

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LYDIA E. ESTES.