

No. 884,481.

PATENTED APR. 14, 1908.

G. GLAUS.
BOX COVER FASTENER.
APPLICATION FILED MAY 15, 1907.

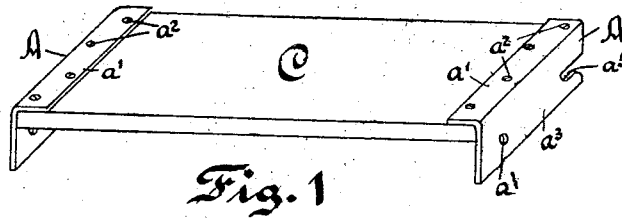
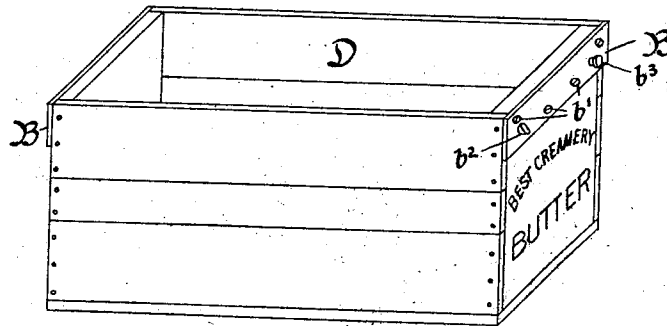
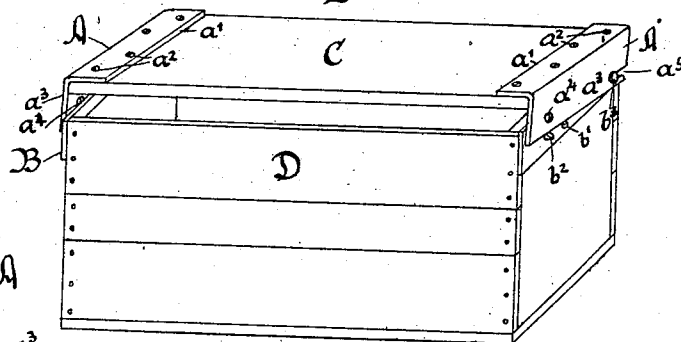
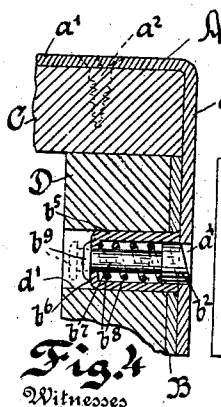
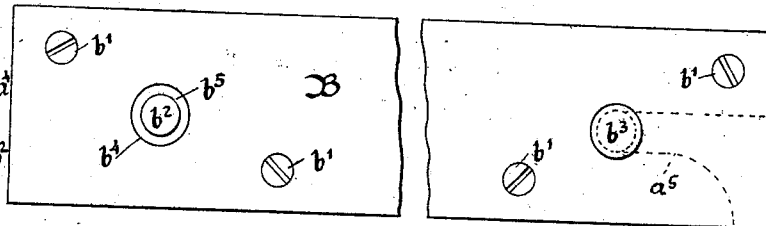


Fig. 4
Witnesses

Fig. 5

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UNITED STATES PATENT OFFICE.

GOTTLIEB GLAUS, OF MILWAUKEE, WISCONSIN.

BOX-COVER FASTENER.

No. 884,481.

Specification of Letters Patent.

Patented April 14, 1908.

Application filed May 15, 1907. Serial No. 373,863.

To all whom it may concern:

Be it known that I, GOTTLIEB GLAUS, of Milwaukee, Wisconsin, have invented a Box-Cover Fastener, of which the following is a specification.

This invention consists of a device for securing in place the covers of various kinds of shipping-boxes and crates which it is desirable to use more than once, said boxes being shipped back to their starting point after the first use and then used again for the same purpose. In such cases the edges of the covers and boxes, when the former are nailed on as is the present custom, become so shattered and broken by repeated nailing that they cannot economically be used more than once; in addition to which the setting and drawing of the nails consumes an amount of time wholly out of proportion to the proper importance of such an operation.

It is my object to produce at a trifling price a device for securing the covers of such boxes which will hold them as strongly and substantially in place as nails could do, while permitting the covers to be attached and detached by a movement of the hand at any time, thus not only saving much time in packing and unpacking but also dispensing with the injury inherent in any nailing process, and thereby enabling the boxes to be used repeatedly.

The nature of my invention will be best understood by a consideration of the following description of one embodiment thereof, taken in connection with the accompanying drawings illustrative thereof.

In these drawings, Figure 1 is a perspective view of a box-cover having one member of the box-fastener attached thereto. Fig. 2 is a similar view of a box having the corresponding member of the box-fastener attached thereto. Fig. 3 is a similar view showing the box with the cover partly set thereon. Fig. 4 is a transverse section through the box in the axis of the latch-stud. Fig. 5 is a front elevation of the box member of the fastener.

In these drawings every reference letter refers always to the same part.

The fastener comprises two members, A and B, which are attached to the cover and box respectively, at opposite sides or ends thereof, two of each being necessary to each box. The member A consists merely of an angle-plate the upper or horizontal flange a^1

of which is secured upon the upper side of the cover C by any suitable fastenings as screws a^2 . The vertical flange a^3 has near one end a hole a^4 and near the other end a horizontal slot or notch a^5 . The two members A are right and left, so that the hole a^4 on both is on one side of the cover and the slot a^5 on the other side.

The box-member B consists also of a plate which is secured by screws b^1 or other fastenings to the edge of the box D, it being understood that a pair of the members B, which are also right and left, are secured to opposite sides or ends of the box at the upper edge thereof, where they will underlie the flanges a^3 of the members A when the cover is in place, as shown in Fig. 3. Each member B has at one end corresponding to the hole a^4 and fitting therein, a latch-bolt b^2 , and on the other end, corresponding to the slot a^5 , a stud b^3 which has a shank fitting in the slot a^5 and an enlarged head as shown which stands outside of the slot a^5 .

The construction of the latch-bolt b^2 is clearly shown in Fig. 4. The plate B has a hole b^4 punched or bored therein, in which is closely fitted a cylindrical spring-casing b^5 , which latter may be secured in place by any suitable means, as expanding, upsetting, soldering or the like. This spring-casing fits in a hole d^1 in the edge of the box and at its inner end has an internal annular flange b^6 . The latch-bolt b^2 has a reduced shank b^7 which fits the opening in the inner end of the spring-casing, leaving an annular space wherein is confined a coiled compression spring b^8 , acting by pressure to move the latch-bolt outwardly. After being set in place the inner end of the latch-bolt is upset to form a head b^9 which holds the stud in place and forms a limit to its outward motion.

In order to engage the cover with the box, the slots a^5 on each end are first engaged with the studs b^3 , holding the cover at a slight obliquity as shown in Fig. 3, so that the lower edges of the flanges a^3 clear the latch-bolts b^2 . When in this position the cover is pressed down, forcing the latch-bolts b^2 inwardly until they engage and snap into the holes a^4 , whereupon the box-cover is firmly engaged with the box against any possibility of dislodgment, except by pressing a pointed object, or the finger-nail, upon the ends of the studs b^3 until the latter release the flanges a^3 .

The members A and B may be mortised into the cover and box respectively if so desired, as will be obvious, without in any way affecting their operativeness. It will be obvious that the invention is subject to various modifications and changes of form without departing from the principle thereof, and I consider all such embraced within the purview of my invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In combination with a box having a removable lid, plates secured to opposite edges of said lid and overlapping opposite sides of the box, a fixed stud on each side of the box overlapped by said plates, each said stud detachably engaging in a short slot or notch in the corresponding plate, and a movable bolt engaging in holes in the sides of the box and plate respectively and holding them in fixed relative position.
2. In combination with a box and a removable lid, a plate secured to each end of the lid and overlapping the ends of the box, detachably interengaging means on the ends of said box and on said plates adapted to become engaged together when said lid is pushed sidewise over said box, and means for interengaging the ends of said box and said plates adapted to be set in position after said lid is in closed position whereby it is held in said position.
3. In combination with a box and a removable lid therefor, a plate secured to one end of said lid and overlapping the end of said box, means for detachably engaging said plate with the end of said box when the former is pushed sidewise of the box into place, and a spring-bolt mounted on one of the engaging elements and adapted to snap into a hole in the other when said lid is in closed position.
4. In combination with a box and a removable lid therefor, a plate mounted on the end of said box and having a headed stud near one end and a spring-bolt near the other, an angle-plate secured on the end of said lid and having one flange overhanging the same and overlapping the end of said box, said flange having a longitudinal slot adapted to engage with said headed stud and a hole adapted to become engaged with said spring-bolt.
5. A box-cover fastener comprising, in combination, a plate adapted to be secured to the end of a box and a second plate adapted to be secured to the end of the lid and to overlie said first plate; interlocking means on said plates adapted to become engaged when one of said plates is moved longitudinally on the other; and a spring-bolt mounted on one plate and adapted to engage in a hole in the other when they are in proper relative position for closure of the box.

6. A box-cover fastener comprising, in combination, a plate adapted to be secured to one end of a box and carrying a headed bolt and a spring-bolt normally projecting therefrom; and an angle-plate adapted to be secured to the end of the box-lid with one flange overhanging it and overlying the first plate, said angle-plate having an elongated notch or slot adapted to become engaged with said headed bolt and a hole adapted to engage with said spring-bolt.

7. A box-cover fastener comprising, in combination, a plate adapted to be secured to one end of a box and carrying a headed bolt and a spring-bolt normally projecting therefrom; and an angle-plate adapted to be secured to the end of the box-lid with one flange overhanging it and overlying the first plate, said angle-plate having an open ended notch or slot adapted to become engaged with said headed stud and a hole adapted to engage with said spring-stud, said spring-stud lying normally flush with or slightly below the surface of said angle-plate.

8. In combination with a box and a removable lid therefor adapted to cover one open side thereof, a fixed stud projecting from one end of said box near said open side, a spring-latch also projecting from one end of said box near the open side, and a plate attached to the end of said lid and overlapping the end of said box when in place and having an open-ended slot adapted to become engaged with said fixed stud when moved longitudinally and having also a hole adapted to receive said spring-latch when the lid is pressed down in closed position.

9. In combination with a box and a removable lid therefor adapted to cover one open side thereof, a plate secured to one end of said box adjacent to said open side, a stud and a spring-latch mounted on said plate, and a second plate secured to the end of said lid and adapted to overlie the first plate when said lid is in closed position; said second plate having an open-ended slot with which said fixed stud is adapted to become engaged when moved through the open end of said slot, and said second plate having further a hole into which said spring-latch is adapted to snap and engage when said lid is moved into closed position.

10. In a box-cover fastener, in combination with a box having an open side, a plate secured to the outer face of said box adjacent to the open side, said box and plate having each a hole therein registering with each other, and a spring-latch comprising a cylindrical casing containing a spring-bolt and having its outer end secured by frictional engagement in the hole of said plate and the remaining part of the casing projecting into and resting in the hole in said box.

11. A box-cover fastener comprising, in combination, a plate adapted to be secured

to the side of the box adjacent to the open
side and a second plate adapted to be secured
to the lid overlying one edge thereof and to
overlie said first plate; interengaging means
5 on said plates adapted to become engaged
when one of said plates is moved longitudi-
nally on the other; and a spring-bolt with
beveled head mounted on one plate and
adapted to engage in a hole in the other

when they are in proper relative position for 10
closure of the box.

In testimony whereof, I have hereunto set
my hand this ninth day of May, 1907, in the
presence of two witnesses.

GOTTLIEB GLAUS.

Attest:

MINNIE SCHIENBEIN,
GEORGE WETMORE COLLES.