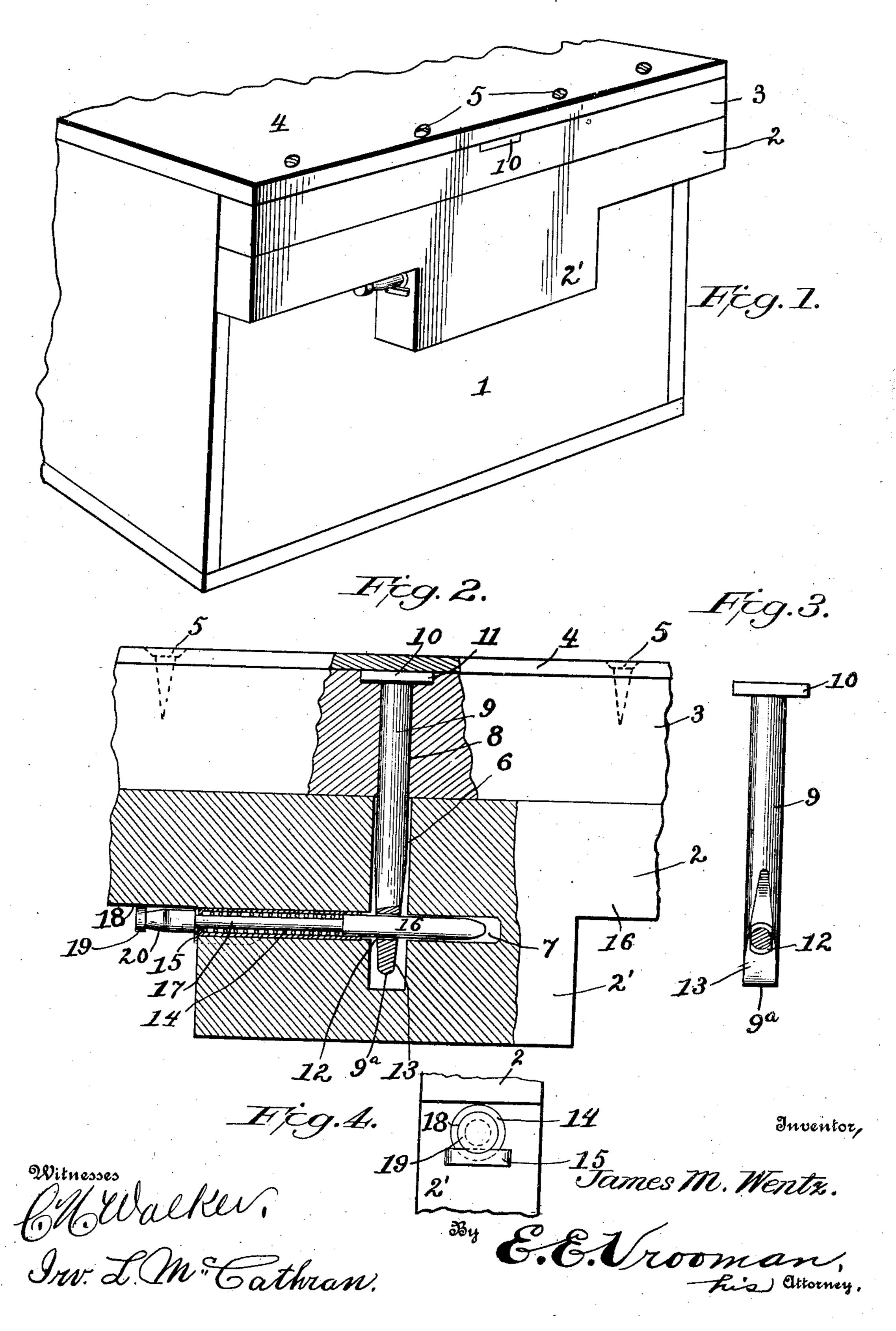
J. M. WENTZ.
FASTENING DEVICE FOR SHIPPING CRATE COVERS.

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## UNITED STATES PATENT OFFICE.

JAMES M. WENTZ, OF NEWBERG, OREGON.

## FASTENING DEVICE FOR SHIPPING-CRATE COVERS.

No. 896,495.

Specification of Letters Patent.

Patented Aug. 18, 1908.

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To all whom it may concern:

Be it known that I, James M. Wentz, a citizen of the United States, residing at Newberg, in the county of Yamhill and State of 5 Oregon, have invented certain new and useful Improvements in Fastening Devices for Shipping-Crate Covers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a means for fastening the tops of boxes to the body of the receptacle, and has for its object the provision of means for facilitating a cover to be readily attached to the body of a crate and 15 quickly removed therefrom, and which will prevent the accidental removal of the same.

With these and other objects in view, this invention relates to certain novel constructions, combinations, and arrangements of 20 parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a perspective view of one end of the crate or receptacle provided with a fastening device, con-25 structed in accordance with the present invention. Fig. 2 is a fragmentary view of the same partly in section, showing the parts as they appear when in a locked position. Fig. 3 is a view in elevation of the vertical bolt. 30 Fig. 4 is a fragmentary view of the lower cleat, showing the head of the horizontal

plunger or bolt.

Referring to the drawings, 1 designates the body of a shipping crate or receptacle pro-35 vided at each end with a horizontal, primary cleat 2; each primary or lower cleat 2 is provided with a central depending portion 2'. Each cleat 2 is engaged by an upper, auxiliary cleat 3, which is attached to the body 40 of the top or cover 4 by any suitable fastening means, as for instance, screws 5. The cleat 2 is provided with a vertical, recess opening 6 and with a horizontal recess or opening 7 which extends transversely across 45 the opening 6 and intersects the same. The auxiliary cleat 3 of the cover is provided with a vertical opening 8 in which is positioned the shank of the vertical bolt 9, and the head 10 of said bolt is seated in a squared socket 50 or cut-out portion 11, formed in the upper edge of the cleat 3. It is to be understood that I employ a similarly constructed locking device at each end of the crate or receptacle, and, consequently, it is only neces-

sary to specifically describe one of these lock- 55 ing devices, as illustrated in the accompanying drawings. The head and the socket or cut-out portion 11 will prevent the bolt from having rotary movement after it is assembled with the top. The bolt 9 is provided with an 60 eye or opening 12 in its shank near its lower end, which eye or opening opens upon oppositely beveled faces 13, formed upon the lower end of the bolt for the purpose hereinafter specified.

In the opening or recess 7 there is positioned a detachable casing 14, which casing is open at its inner end and partly closed at its outer end. The casing is detachably secured in said recess 7 through the medium of 70 detachable fastening means, as for instance, staple 15, which staple engages the lower end of the casing for normally securing the same against accidental displacement, although by removing the staple 15 the casing can be 75

quickly attached.

The horizontal, sliding bolt or plunger is movably mounted in the casing and said bolt or plunger is provided with an inner head 16, a reduced portion 17, and an outer 80 head 18. The outer head is formed by an outer flange 19 and beveling the body of the head as at 20; said annular beveled portion 20 and head 19 constitute a gripping portion. Yielding means, as for instance, coil spring 85 21 is positioned in the casing and has one end bearing against the inner end of the head 16 and the other end bearing upon the other partly closed end 15 of the casing, whereby there is exerted an inner pressure upon the 90 head 16 for normally holding the same in the aperture 12 of the vertical or depending

bolt 9. When assembling the bolt 9 it is immaterial which beveled side is exposed towards 95 the open, inner end of the casing 14 and the plunger head 16, as both are similarly constructed for facilitating the assembling of the bolt. The beveling or rounding of the inner end 16' of the plunger head 16 also facilitates 100 the head riding over the beveled portion 13 and entering the aperture 12, which is of importance in quickly locking the cover upon the body of the crate, as will be obvious. If the aperture does not entirely remove the in- 105 ner end of the head 16 from the path of the movement of the bolt 9, the rounded lower end 9a of bolt 9, together with the beveled

sides 13 will quickly cause the bolt to pass over the head 16, and permit said head to be pressed into the horizontal aperture or eye 12.

It will be obvious that I have produced a 5 very simple structure which can be quickly assembled, and which will produce an efficient locking device for quickly attaching a cover over the body of a receptacle. I do not limit myself to any particular kind of a 10 body or crate, as it will be obvious that my invention is susceptible of being attached to different types of crates known to the art, and, consequently, it is to be noted that I have produced a locking or fastening device 15 for a cover or top, and not an improved body of a receptacle. Furthermore, it must be borne in mind that when the spring-pressed bolt or plunger is positioned in its depending portion a portion is exposed at one end of 20 said depending portion, so that the head of the horizontal bolt or plunger is protected against accidental displacement, whereby a guard is formed for said head, although the operator can quickly place the nut under the 25 primary or lower cleat 2 and actuate the spring-pressed bolt or plunger for permitting the cover to be detached.

What I claim is:

1. A device of the class described, com-30 prising a body, a cover carried by said body, a depending bolt provided with an eye, extending through a portion of said cover, a cleat secured to the body and provided with a vertical opening and with a cylindrical 35 horizontal opening extending transversely across said vertical opening, a detachable cylindrical casing positioned in said horizontal opening, a horizontal bolt slidably mounted in said casing and provided at one 40 end with a head normally positioned outside of said cleat, and at its opposite end with an inner head adapted to be normally positioned in the eye of said bolt, said bolt provided with a reduced portion between 45 its outer and inner heads, said casing provided with a partly closed end, a spring positioned upon the reduced portion of said bolt and engaging the inner end of the inner head or the partly closed outer end of said 50 casing, and means for detachably securing said casing in said horizontal opening.

2. In a device of the character described, the combination of a body provided with a cleat extending transversely across the 55 same near one end thereof, said cleat provided with a depending portion, a cover provided with a body and with a cleat contiguous to one end, said last mentioned cleat provided with a recess and with a vertical 60 aperture opening at one end upon said recess said first mentioned cleat provided with a vertical opening and with a horizontal opening in a depending portion, said openings of the first mentioned cleat inter-65 secting near their inner ends, a bolt pro-

vided with a squared head positioned in said aperture and the head seated in the recess beneath the body of the cover, a detachable easing positioned in the horizontal aperture or opening of the first mentioned cleat, and a spring-pressed bolt slidably mounted in said casing and bolt to engage the portion of said first mentioned bolt for normally holding said cover upon said body.

3. In a device of the class described, the 75 combination with a crate-body, a cover positioned upon said body, a bolt provided with beveled portions upon opposite sides thereof, said bolt provided with an aperture, extending through the bolt having the 80 beveled portions, a spring-pressed sliding bolt positioned upon the body, said springpressed bolt provided with a head adapted to engage one of the beveled portions for facilitating the insertion of said head into 85 the aperture of the first mentioned bolt.

4. In a device of the character described, the combination with a body, and a cover, said body provided with a cleat having a central depending portion, said cover pro- 90 vided with a cleat adapted to engage said first mentioned cleat, a bolt having a head, extending through the cleat of the cover, the head of the bolt seated in a portion of said last mentioned cleat and the shank of 95 the bolt extending through a portion of the first mentioned cleat, said shank provided at its lower end with a horizontal aperture, a casing detachably secured in the depending portion of said first mentioned cleat, 100 a staple engaging the partly closed end of said casing for securing said casing in the cleat a bolt provided with a head positioned outside of the casing and depending portion, said bolt provided with a spring 105 adapted to be positioned in the aperture of the first mentioned bolt for holding the cover upon the body, and means normally exerting an inward pressure upon the bolt for holding the same in said aperture of the 110 first mentioned bolt.

5. In a device of the character described, the combination of a body provided with a cleat having a depending portion, said cleat provided with a vertical opening, a horizon- 115 tal opening in the depending portion intersecting the vertical opening, a casing open at its inner end and partly closed at its outer end positioned in the opening of the depending portion, said casing opening at its inner 120 end upon the vertical opening of said cleat, a sliding bolt positioned in said casing and provided at its outer end with a head outside of said casing, a cover provided at one end with a cleat, means securing said cleat 125 to said cover, said last mentioned cleat provided with a vertical aperture and with a squared recess in its inner edge, a bolt provided with a squared head, positioned in said last mentioned aperture and said head 130

seated in said squared recess, said bolt provided with a beveled portion extending longitudinally thereof and with a horizontal, transverse aperture, said beveled portion adapted to facilitate the positioning of said first mentioned bolt in the aperture of the last mentioned bolt.

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

JAMES M. WENTZ.

Witnesses:

J. J. HAGMANN, L. L. OLIPHANT.