No. 662,311. Patented Nov. 20, 1900.

M. C. RYAN.

BOX FASTENER.

(Application filed Jan. 23, 1899.)

(No Model.)

Fig. 1

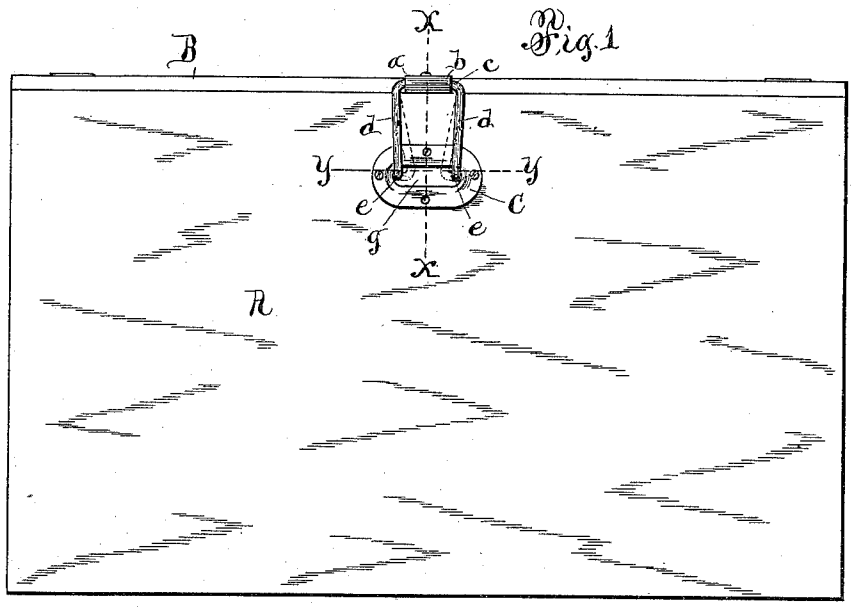


Fig. 2

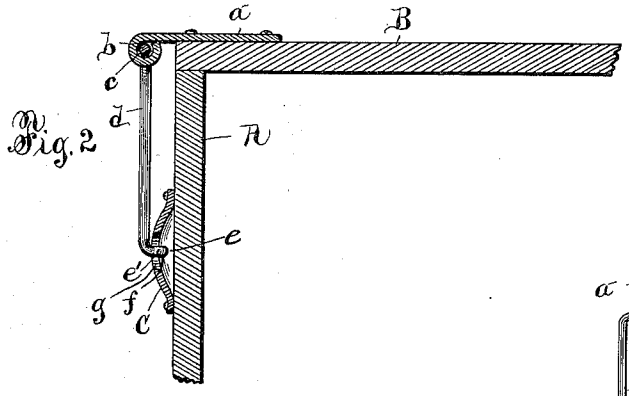


Fig. 3

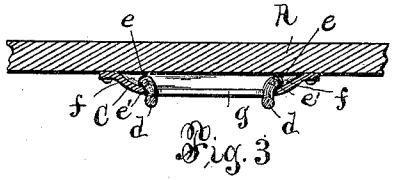
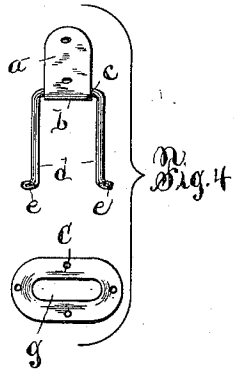


Fig. 4



WITNESSES:

J. J. Laass.

H. B. Smith.

INVENTOR

Michael C. Ryan

By E. Laass

his ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MICHAEL C. RYAN, OF OSWEGO, NEW YORK.

BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 662,311, dated November 20, 1900.

Application filed January 23, 1899. Serial No. 703,031. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL C. RYAN, of Oswego, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Box-Fasteners, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of clasps in which the hasp is formed with spring-arms terminating with hooks which interlock with the catch-plate.

The object of the invention is to provide a clasp in which the catch-plate shall be devoid of projecting edges which are liable to injure the hand of the person coming in contact therewith and shall effectually house and shield the engaged ends of the hasp-arms, so as to guard against accidental disengagement of the same and also prevent said ends from coming in contact with the hand or clothing of the person handling the box or article to which the clasp is applied.

To that end the invention consists in the novel construction of my improved clasp, as hereinafter fully described, and set forth in the claim.

In the accompanying drawings, Figure 1 is a front view of a box having a lid and provided with the clasp. Figs. 2 and 3 are enlarged vertical transverse and longitudinal sections on lines X X and Y Y, respectively, in Fig. 1; and Fig. 4 is a detail view of the detached parts of the clasp.

Referring to the drawings, A represents the box, and B is its lid.

C denotes a catch-plate which is secured to the front of the box. Said plate is formed with a concavo-convex central protuberance, and with its margin or attaching portion in a uniform plane and united directly and gradually with said central protuberance around its entire perimeter, and thus obviating presentation of sharp edges, which are liable to injure the hand of the person coming in contact with said plate. In the center of the concavo-convex protuberance of the plate is a slot *g*, extending part way the length thereof, so as to leave at the ends of said slot shielded sockets *f f*, formed by the concavity of the plate.

To the top of the lid B is rigidly secured a tongue *a*, which projects over the front edge of said lid and is bent into the form of a sleeve extending across said tongue. In said sleeve is hinged the hasp, formed of spring-wire, the central portion *c* of which passes through the sleeve *b*, and the end portions are bent nearly or quite at right angles and in the same direction from the central portion and constitute the clasp-arms *d d*, each of which terminates with a locking-hook *e*, bent in the opposite direction of that of the other arm. In order to allow said hooks to interlock with the catch-plate C, the hasp-arms *d d* are each bent with an offset *e'* immediately back of the hook *e*, as clearly shown in Figs. 2 and 3 of the drawings.

In operating the described clasp to close the same the hasp-arms *d d* are swung down onto the front of the protuberance of the catch-plate C. The locking-hooks *e e* of the hasp-arms then lie over the shielded sockets *f f*. Then by compressing the arms *d d* toward each other, so as to place the hooks over the slot *g*, and then while holding the said arms compressed pushing them toward the catch-plate the offsets *e' e'* allow the hooks *e e* to pass through the slot *g*, and then by allowing the ends of the hasp-arms *d d* to spring from each other the hooks *e e* are carried into the sockets *f f*, and thus become interlocked with the catch-plate C, and when in this condition the locking-hooks *e e* are perfectly housed and shielded by the aforesaid sockets.

What I claim as my invention is—

The improved clasp consisting of a catch-plate formed with a hollow protuberance in its center and with a margin in a uniform plane and united with the protuberance around its entire perimeter and provided with a slot in the protuberance, which slot terminates with housing-sockets, and a hasp formed with flexible arms terminating with locking-hooks to enter into the aforesaid sockets and formed with offsets immediately back of said hooks to allow the latter to pass through the slot in the aforesaid protuberance of the catch-plate substantially as described and shown.

MICHAEL C. RYAN.

Witnesses:
LOUIS C. ROWE,
DAVID P. MOREHOUSE.