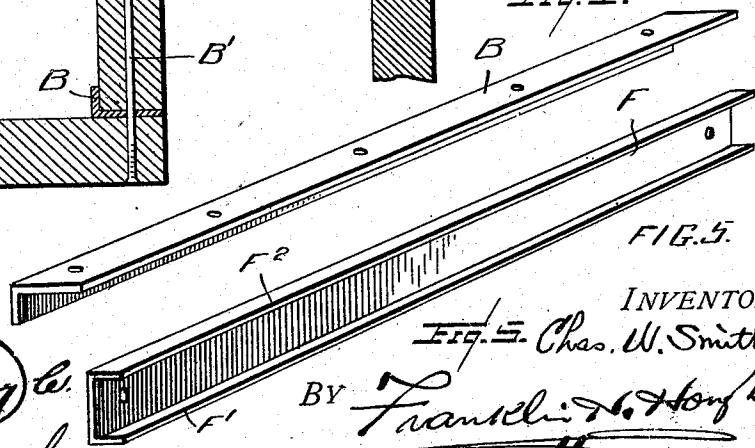
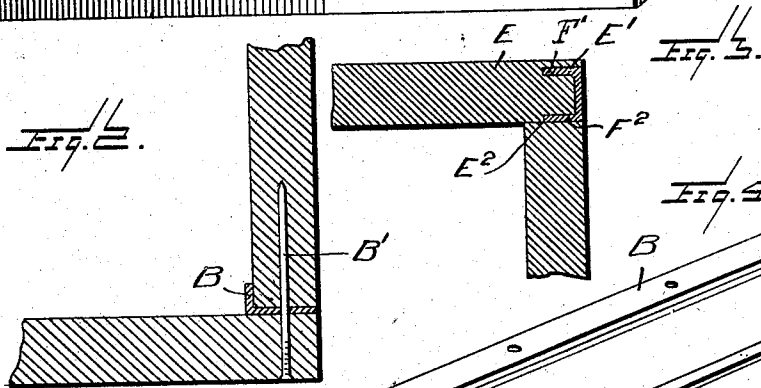
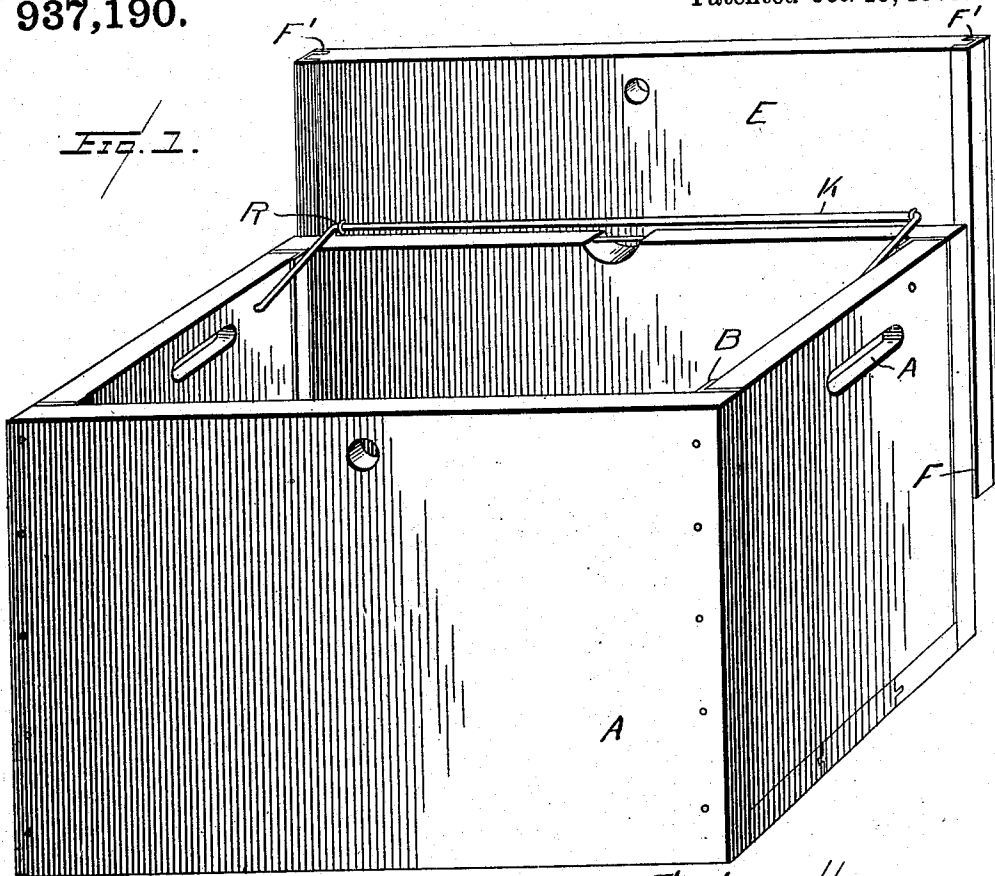


C. W. SMITH.
 REINFORCING MEANS FOR SHIPPING CRATES.
 APPLICATION FILED NOV. 9, 1908.

937,190.

Patented Oct. 19, 1909.



WITNESSES:

H. F. Hoyle
Adm. R. Fowler

INVENTOR
Fig. 5. Chas. W. Smith
 BY *Franklin D. Hoyle*
 Attorney

UNITED STATES PATENT OFFICE.

CHARLES W. SMITH, OF SANDUSKY, OHIO.

REINFORCING MEANS FOR SHIPPING-CRATES.

937,190.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed November 9, 1908. Serial No. 461,806.

To all whom it may concern:

Be it known that I, CHARLES W. SMITH, a citizen of the United States, residing at Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Reinforcing Means for Shipping-Crates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in reinforcing means for shipping crates and closures therefor and the object of the invention is to produce a simple and efficient means whereby the closure may be prevented from warping and the joints of the receptacle reinforced.

More specifically, the invention comprises an angled plate adapted to be seated in the opposite ends of the closure of a receptacle and having one flange engaging a recess in the edge of the closure, while the face of the strip and outer surface of each flange are flush respectively with the edge and under surface of the closure.

The invention comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claim.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of a shipping crate showing my invention as applied thereto. Fig. 2 is a horizontal section through a portion of the body portion of the box or crate. Fig. 3 is a vertical sectional view through a closure and side wall of the box. Fig. 4 is a detail view of an angle strip intermediate the joints of the sides of the crate, and Fig. 5 is an enlarged detail view of one of the closure engaging strips.

Reference now being had to the details of the drawings by letter, A designates a receptacle which may be of any suitable construction and which, in the present instance,

is shown in the shape of a box with hand openings A' for convenience in lifting the same. Angle irons B are interposed in the seams between the side and end walls of the box and held in place by means of pins B' passing through the sides and engaging the ends in the manner shown in Fig. 2 of the drawings.

The closure, designated by letter E, has recesses or grooves E' formed in the ends thereof, and F designates metallic strips having longitudinal flanges F' and F² upon the marginal edges thereof, one of said flanges F' being adapted to engage the groove E' formed in the end of the closure and the other flange F² engaging a recess E² formed in the under surface of the closure near its ends, as clearly shown in Fig. 3 of the drawings. When the metallic strip F is adjusted in place, it will be noted that the outer surface thereof will be flush with the end of the closure while the outer face of the flange F² will be flush with the under surface of the closure and will rest upon the upper edge of the end of the box or crate. A bail K has its ends engaging apertures in the ends of the crate and has pivotal connection with the closure by means of the eyes R.

By the provision of a shipping crate made as shown and described, it will be noted that the closure having the flanged metallic strip engaging the same, as illustrated, will serve to prevent the closure from warping and, when closed, the face of the flange of the metallic strip upon the closure will rest upon the upper ends of the angle irons interposed between the joints of the body portion of the box or crate, thus relieving the edges of the box or crate from any excessive pressure which might come upon the same.

What I claim to be new is:—

In combination in a shipping box and closure therefor, the opposite edges of said closure having grooves extending the entire width thereof, said grooved edges having a recess extending into the inner face of the closure, a metallic strip having parallel flanges along its longitudinal edges, said strip adapted to seat in said recess with one of its flanges engaging the groove therein,

the outer face of said strip being flush with the edge which projects beyond the recess, the outer face of the flange of the strip which extends in the recess in the inner face of the closure being flush with the latter, and metallic angled strips intermediate the joints of the box and upon the ends of which angled strips the closure and metallic strip

seated therein are adapted to rest, as shown and described.

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

CHARLES W. SMITH.

Witnesses:

GEO. W. RITTER,
JOHN RAY.