

(No Model.)

E. A. ATWATER.
CRATE FOR TRUNKS.

No. 432,925.

Patented July 22, 1890.

Fig. 1.

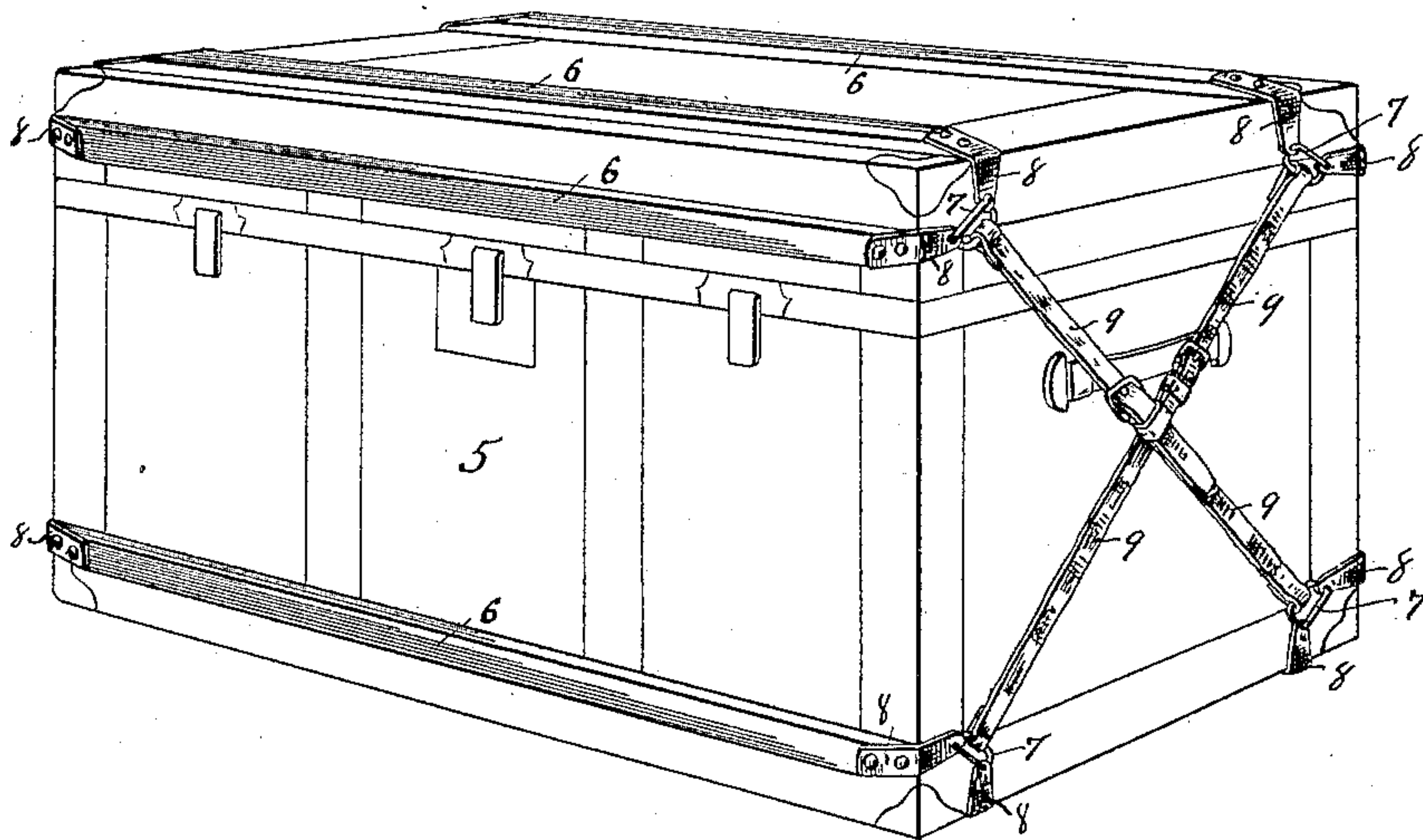


Fig. 2.

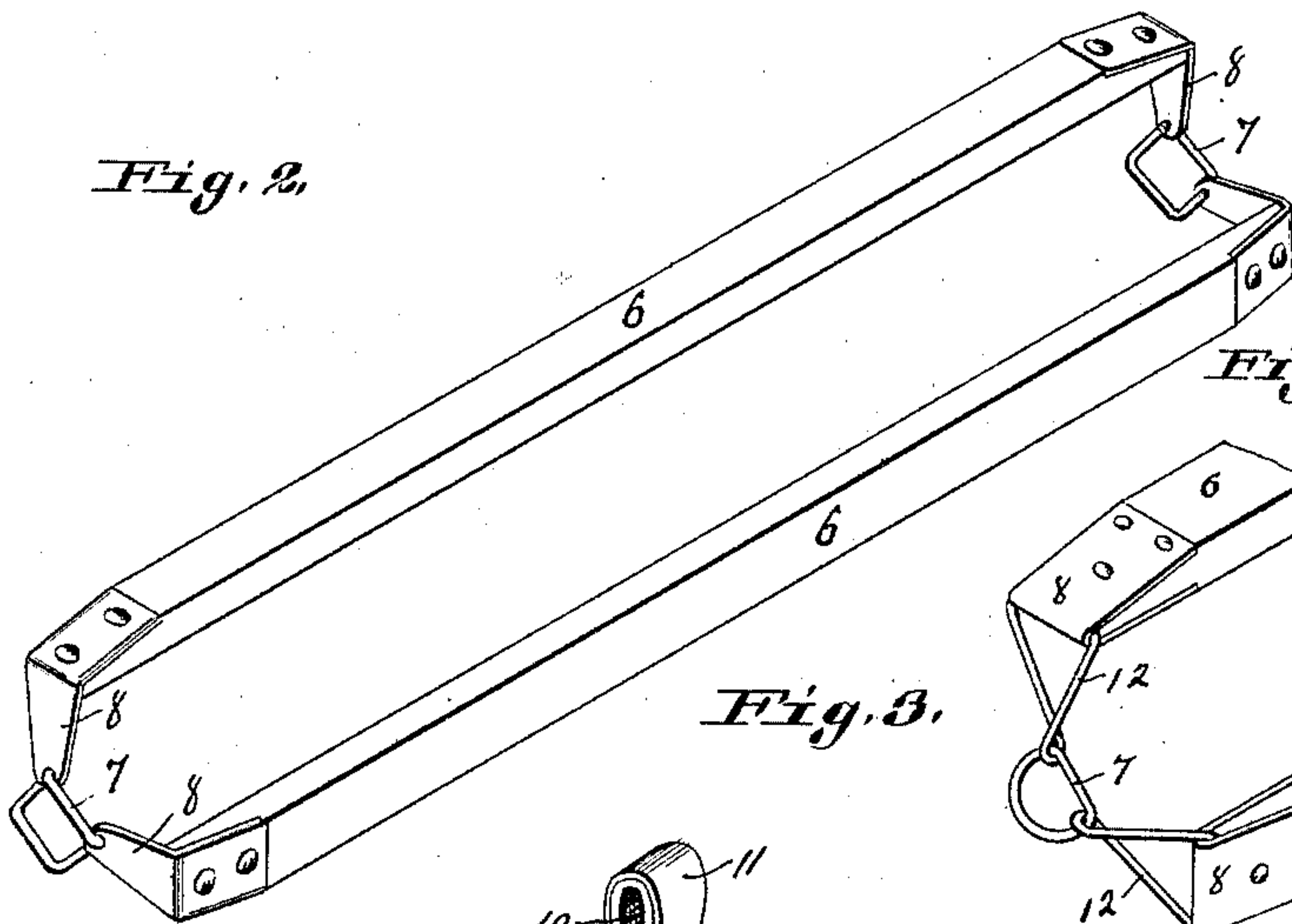


Fig. 4.

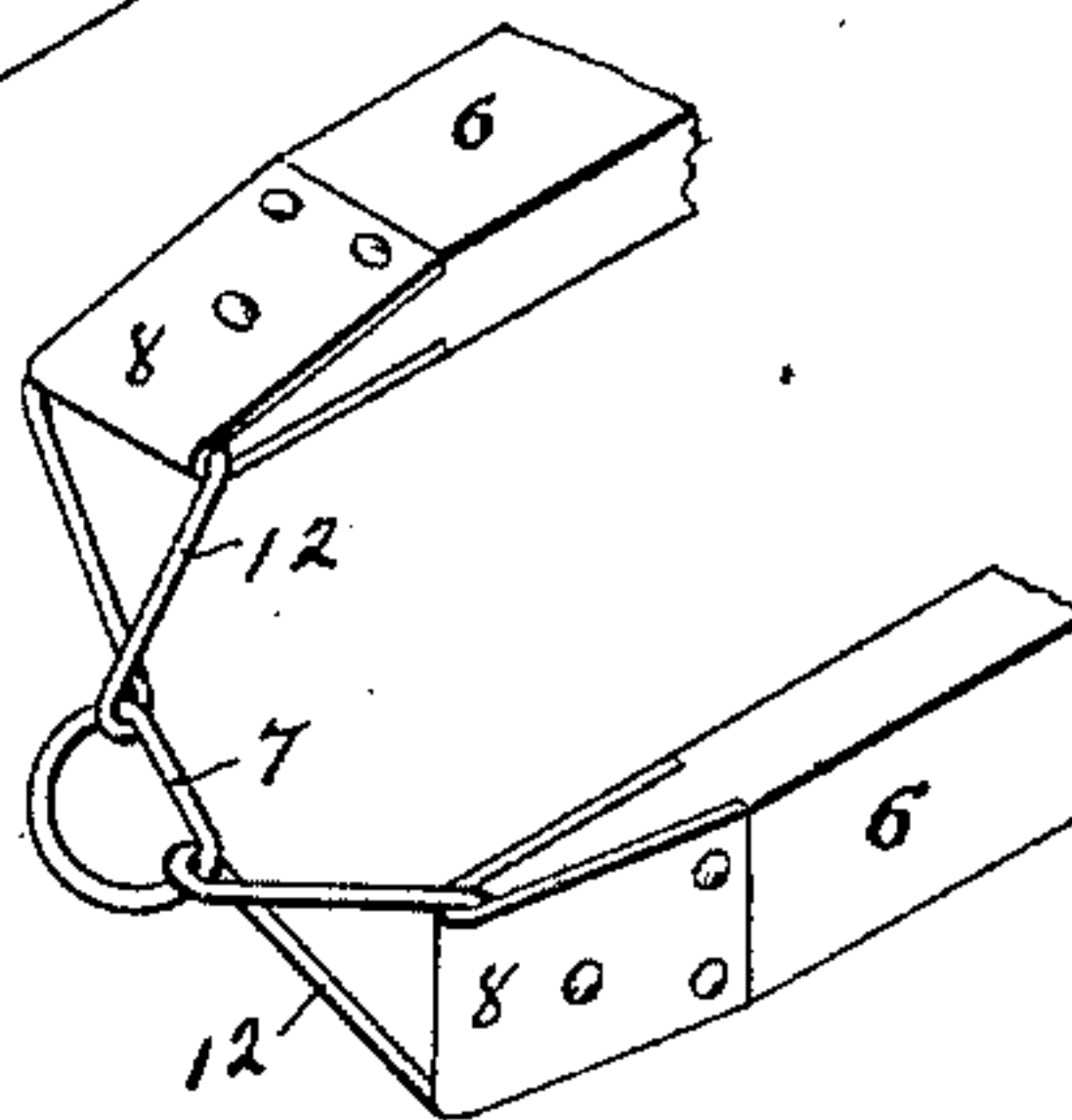
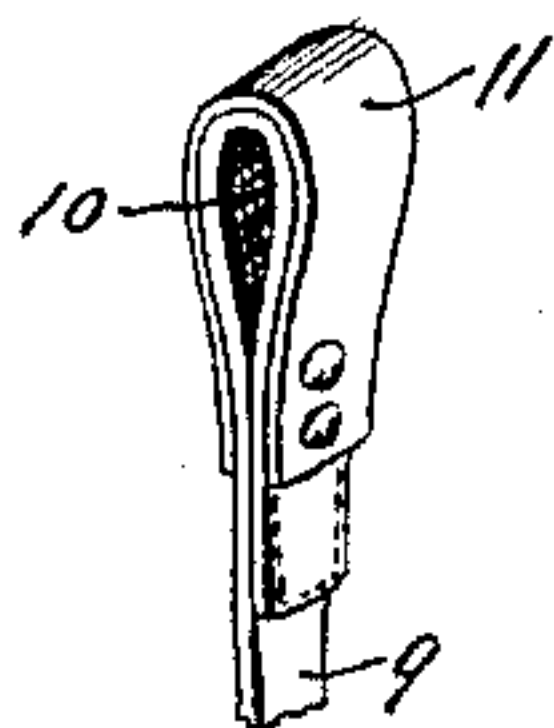


Fig. 3.



Witnesses:

W. S. Reeder.

A. Friedman.

Inventor:

E. A. Atwater
By Fowler & Fowler
Attorneys.

UNITED STATES PATENT OFFICE.

EUGENE A. ATWATER, OF ST. LOUIS, MISSOURI.

CRATE FOR TRUNKS.

SPECIFICATION forming part of Letters Patent No. 432,925, dated July 22, 1890.

Application filed April 24, 1890. Serial No. 349,210. (No model.)

To all whom it may concern:

Be it known that I, EUGENE A. ATWATER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a certain new and useful Crate for Trunks, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to prevent the breakage of trunks in transit and to hold together the parts of a trunk when broken.

The invention consists of protective pieces applied, by preference, along the edges of a trunk, which pieces are joined together, if preferred, by flexible connections, preferably across the ends of the trunk.

The invention will best be understood by referring to the accompanying drawings, in which—

Figure 1 is a perspective of a trunk having a crate made in accordance with my invention applied thereto. Fig. 2 is a perspective of the protective pieces that are applied along the edges of the trunk, and which, when fastened together by the flexible connections referred to, constitute the crate. Fig. 3 is a perspective of a detail. Fig. 4 is a perspective of a modification.

The same figures of reference indicate the same parts throughout the several views.

5 is a trunk, traveling case or box of any form, size, or kind. Preferably along the longitudinal edges of the trunk I apply protective pieces 6 6, which are pivoted together in pairs by links 7, the two parts of the links being, by preference, bent at right angles to each other.

To each of the ends of the protective pieces 6 are secured angle-irons 8, the free ends of which are perforated to receive the links 7, hereinbefore referred to. The protective pieces 6 may be of any suitable material, but in practice would be made of wood. The links 7 serve to pivotally affix the protective pieces together, so that when two of said protective pieces are joined together they may be readily adjusted to the sides of a trunk.

A pair of these protective pieces so pivoted together may be applied to the longitudinal

edges of the trunk and the diagonally-opposite pairs fastened together by flexible connections across the ends of the trunk, preferably by straps 9, which engage the links 7, as clearly shown in Fig. 1. These straps cross each other, as shown in Fig. 1, and firmly bind the parts of the crate and trunk together, thereby protecting the trunk from breakage or holding the parts together when broken. It will be noted that the straps across the ends of the trunk give a diagonal or triangular bracing to the same and impart greater rigidity and strength to the trunk. Trunks are very often moved from place to place by holding them on their ends in an inclined position and revolving the same upon the corners, and as the ends of trunks are usually rectangular or have more than three edges the edges may change their angular position with relation to each other without changing their length. My invention, however, gives a triangular trussing to the trunk, and the edges of the trunk cannot change their angular position to each other without changing the length of the parts, which of course is impossible unless the straps break. The advantage of this triangular trussing will be appreciated when it is remembered that bridges and all truss structures depend upon triangular trussing to impart rigidity to them. This rigidity cannot, of course, be given to a trunk by the ordinary trunk-strap.

The apparatus is as readily applied to and removed from a trunk as the ordinary trunk-strap and protects the trunk from undue strain and breakage, which the ordinary trunk-strap does not do.

In Fig. 3 the end of the strap that engages the link is shown as turned over to form a loop 10, and is then re-enforced by a metal piece 11, which passes around the loop, the whole being riveted together. The metal piece 11 protects the loop from wear and is quite essential, as trunks are often placed on their ends and the wear would then come on the loops 10.

In Fig. 4 I have shown a modification. I have found in practice that baggage-men will almost invariably handle trunks by taking hold of the straps across the ends when my crate is applied thereto. This forms a ready

means of handling trunks, and is one of the incidental advantages of my invention. It will, however, unless the angle-irons 8, as shown in Figs. 1 and 2, be made particularly strong, cause the same to break near where they join the protective pieces. To obviate this objection, and to allow the straps to be used in handling trunks without decreasing the strength of the crate, I affix the link 7, as shown in Fig. 4, to the protective pieces by the links 12, which are pivotally fastened to the protective pieces by angle-irons 8, which in this instance are bent over and fastened to said protective pieces upon the two sides thereof. In other words, I flexibly attach the link 7 to the protective pieces 6, and thus permit the straps 9 to be taken hold of with impunity in handling trunks. This modification is my preferred way of securing the straps to the protective pieces.

It will be obvious, of course, that the protective pieces and crate may be applied along the other edges of a trunk without materially changing the invention. It will be apparent, also, that changes may be made in the construction and arrangement of the apparatus without departing from the spirit of the invention. I do not wish, therefore, to confine myself to the exact details of construction herein set forth; but

What I desire to claim and secure by Letters Patent of the United States as my invention is—

1. A crate for trunks, consisting of removable protective pieces applied adjacent to and substantially parallel with the edges of a trunk

and joined together diagonally by detachable flexible connections, substantially as and for the purpose described.

2. A crate for trunks, consisting of protective pieces pivoted together in pairs and applied to a trunk or other object, with flexible connections for fastening the same together to form a crate, for the purpose described.

3. A crate for trunks, consisting of protective pieces having angle-irons at each end and pivoted together in pairs by links, the said protective pieces being applied along the edges of a trunk and joined together by straps, for the purpose described.

4. A crate for trunks, consisting of rigid protective pieces applied to a trunk, connections for joining said protective pieces together, and links pivotally affixed to said protective pieces for fastening said connections to the same.

5. A crate for trunks, consisting of rigid protective pieces pivoted together in pairs by flexibly-attached links and applied along the edges of a trunk or other object, and straps secured to said links for joining the diagonally-opposite pairs of the protective pieces together across the ends of a trunk, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal, this 19th day of April, 1890, in the presence of two subscribing witnesses.

EUGENE A. ATWATER. [L. s.]

Witnesses:

A. C. FOWLER,
GIST BLAIR.