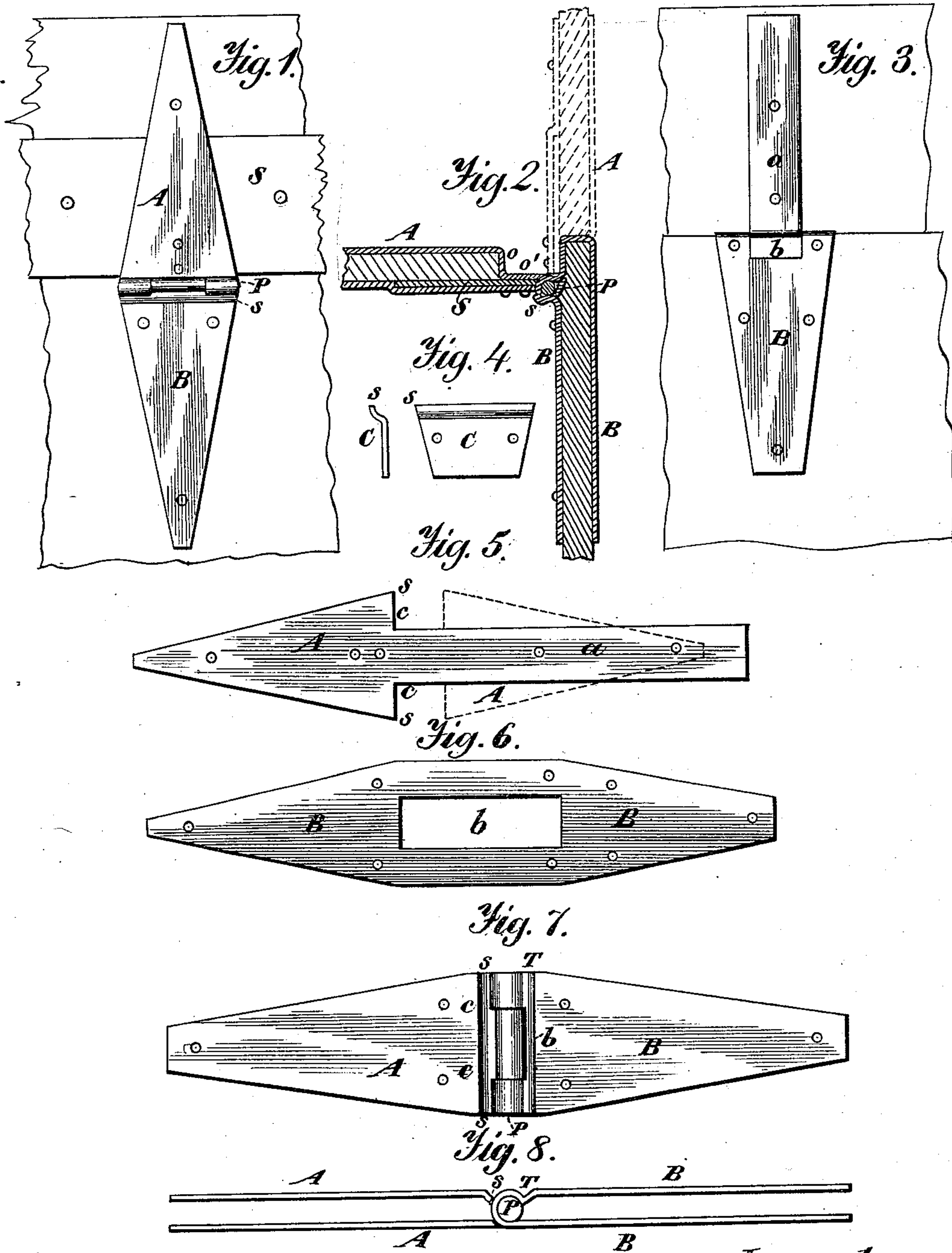


(Model.)

G. W. HEY.
TRUNK HINGE.

No. 282,635.

Patented Aug. 7, 1883.



Witnesses.
A. Ruppert,
L. A. Marceron

Inventor:
George W. Hey
by J. R. Nottingham
Att'y

UNITED STATES PATENT OFFICE.

GEORGE W. HEY, OF SYRACUSE, NEW YORK, ASSIGNOR OF ONE-HALF TO
CHARLES H. DUELL, OF SAME PLACE.

TRUNK-HINGE.

SPECIFICATION forming part of Letters Patent No. 282,635, dated August 7, 1883.

Application filed April 9, 1883. (Model.)

To all whom it may concern:

Be it known that I, GEORGE W. HEY, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Trunk-Hinges, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to improvements in what are termed "trunk-hinges," and is especially designed for use upon trunks, chests, and analogous articles. In the hinges heretofore used for this purpose there is great liability of breaking off in consequence of the fact that the rivets or screws which affix the hinge to the trunk have no support excepting their hold in the wood or material of which the trunk-box is made, and the weight of the lid brings all the strain on the fastenings, causing them to be wrenched off or pulled out in a very short time.

It is the object of my invention to overcome this defect, and I attain the desired result by providing a hinge composed of duplex plates, which embrace the part or parts of the trunk-box to which the hinge is attached, so that the rivets or fastening devices have a rigid metallic bearing at both ends; and I provide also stop devices, which limit the range of movement of the hinge on its joint, so as to relieve the joint-pin and fastening-rivets from undue strain.

The invention also consists in detail construction and arrangement of the parts where- by the hinge is combined with and adapted to be applied to a metallic strap or guard, which is applied to the lower part of the trunk lid or top overlapping the body of the trunk, all as hereinafter fully described, and pointed out in the claims.

In specifying my invention reference is had to the accompanying drawings, in which like letters indicate corresponding parts.

Figure 1 shows my improved hinge attached to a trunk having the metallic strap or guard extending around and projecting from the lower part of the lid. Fig. 2 is a vertical section of the same, showing the offset, stop, and method of applying the hinge for use, the open

and closed position of the lid being shown by full lines. Fig. 3 shows the reverse of Fig. 1 on inside of trunk. Fig. 4 shows blank of stop when made of a separate piece of metal; Fig. 5, blank of upper half of hinge shown in Fig. 1; Fig. 6, blank of lower half; Fig. 7, plan of hinge for trunks without metallic strap or guard; and Fig. 8, edge or side view of the same, showing stop formed by the cut-away portion of one half or leaf.

The letter A represents the upper half or leaf of the hinge, and B the lower half. Each part is composed of duplex plates, which are formed by bending up blanks of sheet or malleable metal, the blanks employed preferably being as shown in Figs. 5 and 6. The blank A is cut away at *c c*, and has an elongated extension, *a*, Fig. 5, and the blank B has an elongated slot, *b*, Fig. 6. The blanks are doubled and jointed together with a joint-pin, P, as shown in Figs. 1, 2, 7, and 8. The extremity of the blank A, when the said blank is bent in shape and jointed to B, comes against the portion T of B when the blank is opened so as to stand at right angles to B, and the range of movement of the hinge upon its joint-pin P is thereby limited. This construction provides a stop, relieving the joint and fastening-rivets from undue strain, and thereby greatly increases the durability of the hinge.

In Fig. 1 the hinge is shown applied to a trunk having a metal strap or guard attached to and projecting below the lid. The letter S represents the strap, which is usually made of hoop-iron and riveted on. When this strap is used the hinge is necessarily applied lower down on the body of the trunk, as sufficient allowance must be made to permit the strap to clear the body when the lid is opened. In this case the hinge is made up of the blanks constructed as described, the extension *a* of the upper blank being bent around the material of the lid inside of the strap S, forming an offset or shoulder, *o o'*, Fig. 2, which takes in the elongated slot *b* of the lower half or leaf, B, as shown in the reverse view, Fig. 3. This construction permits the lid, with its attached guard or strap, to open freely, and to make a snug joint when the trunk is closed. In this form of

hinge I preferably make the stop *s* of a separate piece, *C*, Fig. 4, which is riveted onto the blank *B*, as shown in Fig. 1.

It will be observed that by this construction great strength and durability are secured.

When the hinge is applied to ordinary trunks, the upper and lower blanks are similar in contour, the upper being formed as shown by the dotted lines in Fig. 5, and the lower blank the same as Fig. 6, excepting that the slot should be somewhat shorter. In this case the stop is formed directly by the extremity *s* of the cut-away portion *c*, which comes in contact with the portion *T*, as previously described.

It will be observed that the duplex plates embrace both sides of the material composing the trunk-box, thereby affording a rigid metallic bearing for each end of the fastening pins or rivets, which are headed down on both ends, and the stop, limiting the range of movement of the hinge, serves to relieve the joint-pin and fastening-rivets of undue strain.

The blanks may be struck up of sheet metal or cast of malleable metal, and the whole device is compact and readily applied.

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

1. A hinge composed of duplex plates arranged to embrace the parts to which it is applied, and provided with a stop on the outer face of the joint or knuckle to limit the movement of the parts.

2. The within-described trunk-hinge, composed of duplex plates embracing the part to which it is applied, one of the parts of the hinge having an offset-bend, bringing the pivot or joint below the guard-strap *S*, and the other part having the pivot-bearing in one of the plates.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 6th day of April, 1883.

GEORGE W. HEY. [L. S.]

Witnesses:

WM. C. RAYMOND,
FREDERICK H. GIBBS.