

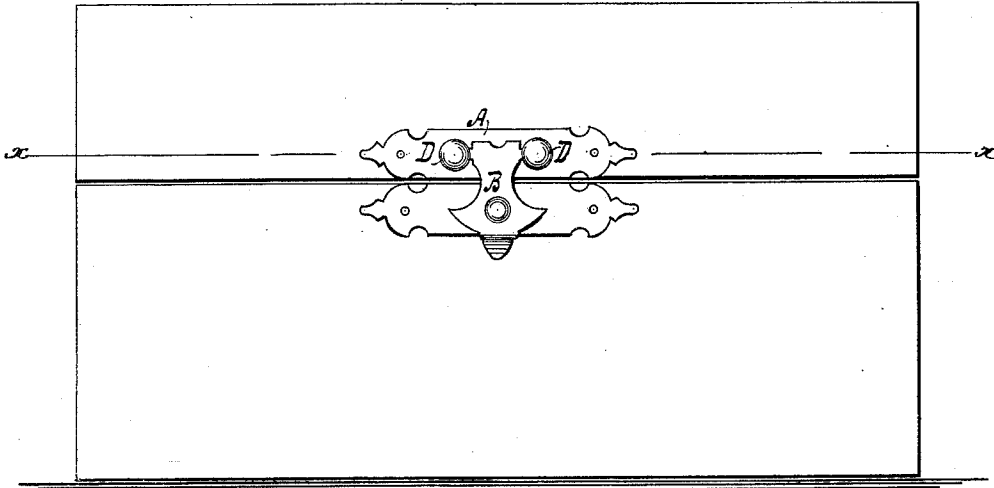
(No Model.)

T. M. HASS.  
CLASP FOR BOXES, &c.

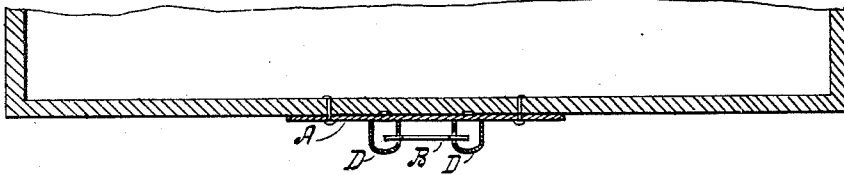
No. 433,240.

Patented July 29, 1890.

*Fig. 1.*



*Fig. 2.*



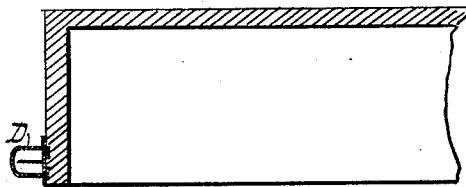
*Fig. 4.*



*Fig. 5.*



*Fig. 3.*



*Fig. 6.*



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# UNITED STATES PATENT OFFICE.

THEODORE M. HASS, OF NEW YORK, N. Y.

## CLASP FOR BOXES, &c.

SPECIFICATION forming part of Letters Patent No. 433,240, dated July 29, 1890.

Application filed January 2, 1889. Serial No. 295,182. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE M. HASS, of New York city, in the county and State of New York, have invented a certain new and useful Improvement in Clasps for Boxes, &c.; and I declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an improvement in the manufacture of light clasps for boxes, &c.; and the invention consists of a box-clasp constructed, combined, and arranged in the manner hereinafter shown, described, and claimed.

In the accompanying sheet of drawings, Figure 1 is a face view of the clasp applied to a box; Fig. 2, a horizontal section in the plane  $x x$ , Fig. 1; Fig. 3, a vertical section in a plane passing through the center of one of the studs. Figs. 4 and 5 are a side elevation and vertical section, respectively, of the studs. Fig. 6 is a view of the blank from which the studs are formed.

Similar letters of reference indicate like parts in the several views.

Clasps intended to be applied to light fancy boxes—such as stationery and glove boxes—must from necessity be light, neat, and inexpensive, but of course sufficiently strong to render them effective and durable. Clasps of this description are constructed with a base-plate A, to which heretofore studs have been riveted, the studs being made of solid metal, with their ends passed through the base-plate and by a hammer upset and riveted to the plate. In each stud was drilled a hole for the insertion of the pivots of the tongue B of the clasp. This manner of making the studs is expensive in material and manipulation, for each stud had to pass through a milling-machine and be drilled and finally riveted. To save this expense and to make studs equally

strong and in some respects better than the ones of solid metal above mentioned, I form these studs by first making a blank C of the shape shown in Fig. 6, and by the aid of suitable dies and a press draw the blank into the tubular form shown in Fig. 4, and when the blank is so drawn a stud D is completed, with a hole  $b$  formed therein and with lugs  $c$  projecting therefrom, so that the stud may be at once secured to the base-plate A by inserting the lugs  $c$  in corresponding slots in the base-plate and clinching the lugs on the under side of that plate, the pivots of the tongue B finding suitable bearings in the holes  $b$ , and being in that way united to the studs and the base-plate.

It is obvious from the construction of the studs of my clasp that less weight of metal is required and the manipulation cheapened without in any manner lessening the effectiveness of the studs. Besides, the tubular studs in this way made are susceptible of a higher degree of finish than are the solid studs before mentioned, since the crown  $d$  of the tubular studs is left in a smooth and rounded condition by the action of the dies in which the studs are formed, while the crown of the solid studs, unless afterward filed and burished, is too rough to take a bright polish.

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

The combination of the tubular studs D, each formed from a flat blank having lugs  $c$  and attached to the base A and having a hole  $b$  therein, a tongue B, pivoted to said studs, and a part to engage the tongue, as and for the purpose described.

THEODORE M. HASS.

In presence of—  
D. A. CARPENTER,  
E. C. SMITH.