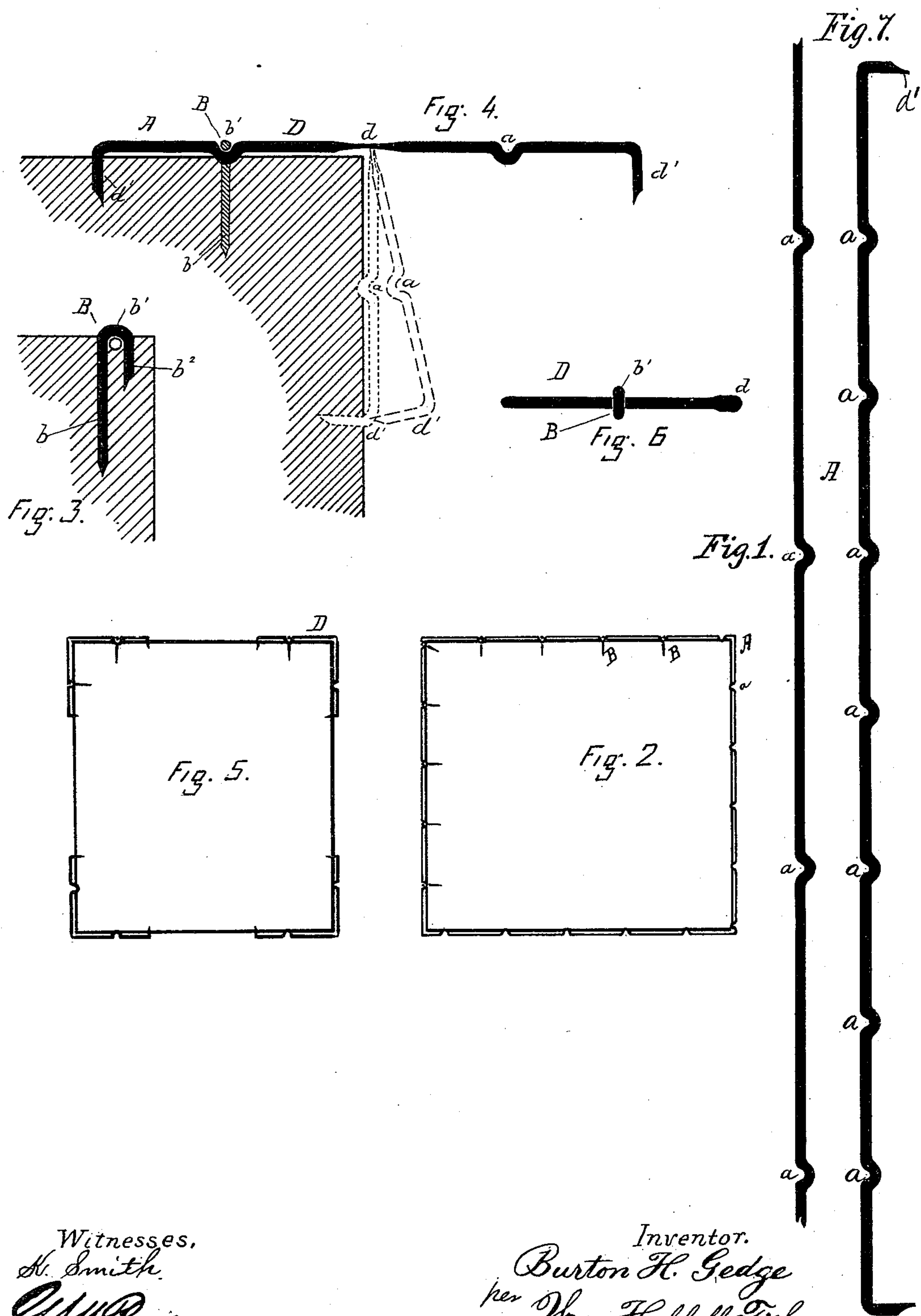


(Model.)

B. H. GEDGE.  
METALLIC STRAP FOR BOXES.

No. 403,530.

Patented May 21, 1889.



Witnesses,  
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Att'y

# UNITED STATES PATENT OFFICE.

BURTON H. GEDGE, OF COVINGTON, KENTUCKY.

## METALLIC STRAP FOR BOXES.

SPECIFICATION forming part of Letters Patent No. 403,530, dated May 21, 1889.

Application filed May 12, 1888. Serial No. 274,349. (Model.)

*To all whom it may concern:*

Be it known that I, BURTON H. GEDGE, a citizen of the United States, and a resident of the city of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Metallic Straps for Boxes, of which the following is a specification.

The several features of my invention and the advantages arising from their use conjointly or otherwise will be apparent from the following description.

In the accompanying drawings, forming part of this specification, Figure 1 is a view of a wire or strap embodying my invention. Fig. 2 represents a box wrapped with my improved box-strap. Fig. 3 is a sectional view illustrating the preferred means for holding the strapping in place. Fig. 4 is a sectional view illustrating my improved corner-strap and a means for holding it in place on the corner of a box. Fig. 5 represents a box provided with my improved corner-strap. Fig. 6 represents a top view of a corner-strap after it is bent and a staple has been applied to it. Fig. 7 represents a metallic strap embodying those of my improvements which directly pertain to the strap.

Wire A, of indefinite length, is indented at intervals more or less regular, forming the notches *a*, which are preferably as deep as the thickness of the wire. It is intended that wire so prepared shall be put up on reels or into bundles of any desired kind to be used in binding boxes, like the ordinary sheet-iron ribbon in common use. In using this wire it is wrapped tightly around the box, being cut off at the proper length. To hold the wire binding in place, nails or staples are employed. The preferable form of nail to be employed is that shown in the drawings and indicated by the letter B. This nail B consists of a shank, *b*, and a looped top, *b'*, which preferably terminates in a pointed extremity, *b<sup>2</sup>*.

When the nails B are used, they are so placed that the loops *b'* encircle the wire A at notches *a*. By this means the notches *a* of the said wire or strap are forced into the wood of the box, and the tops of the nails come flush with the top of the wire and with the outer surface of the box. For use about corners only, short pieces of the wire D are taken.

Each piece between two notches *a* should be flattened out, as shown at *d*, for purposes hereinafter mentioned. Its ends *d'* are also turned down and sharpened.

In use these corner-straps D are applied as shown more particularly in Fig. 4—that is, one half is fixed to one side of the box by a nail, B, and by having its end *d'*, if so provided, driven into the wood. The other half is then bent down to the other side of the box—a maneuver which is readily accomplished, because the flattened and flexible part *d* comes at the edge of the box. The bending over of the strap does not injure the edge of the box, as it would if the wire were not flattened, but fits snugly around the edge and serves to protect it. The point *d'* of the limb or half portion of this corner-iron last attached to the box enters the wood at an angle, (see the limb as shown by dotted lines in Fig. 4,) and in being driven to place draws the corner *d* of the iron close to the corner of the box, thereby causing the corner-iron to snugly fit the box.

It may be here remarked that in practice little or no space is present between the wire and the outer surface of the box.

In Figs. 2, 4, and 5 some space between the wire and box is shown to prevent confusion in the lines of the drawings and to enable the drawings to be more readily understood.

The use of a wire instead of a flat strip—as hoop-iron—is in itself a valuable feature. The wire is more compact and stronger for the space it covers, exposes less surface for rust, and by its lateral flexibility can be readily flexed sufficiently to enable the notches *a* to dodge the nails already in the box. The straps provided with the notches *a* and points *d'* may be of any desired length. Such straps of proper length to go part way around the box or encompass it one or more times are to be used as desired or needed. Such a strap is in general illustrated on a diminished scale in Fig. 7. The flattened spaces *d* shown in Fig. 4 may likewise be present in the longer lengths of strap, as well as in the short straps or corner-irons.

When for any reason it becomes desirable, the point or points *d'* of the strap may be omitted and the strap with its corrugations *a* be used, as aforescribed; but I prefer to em-



ploy the points  $d'$  in connection, as the strap thus makes a more perfect binding-piece.

What I claim as new, and desire to secure by Letters Patent, is—

5 1. The combination of a package, a binding-wire provided with notches or corrugations  $a$ , the said corrugations being embedded in the material of the package, and staples  
10 crossed in said corrugations, substantially as and for the purposes specified.

2. A binding-strap provided with corrugations  $a$  and points  $d'$ , the two elements lying in the same plane, substantially as and for the purposes specified.

15 3. A binding-strap provided with corrugations  $a$  and points  $d'$ , the two elements lying in the same plane, in combination with a package, substantially as and for the purposes specified.

20 4. A binding-strap provided with corrugations  $a$  and points  $d'$ , the two elements lying

in the same plane, in combination with a package and staples driven into the package across the corrugations, substantially as and for the purposes specified.

25 5. The combination of a package and a corner-strap of wire provided with pointed ends  $d'$  and corrugations  $a$ , the pointed ends and corrugations being embedded in the package, and staples crossed in the corrugations,  
30 substantially as and for the purposes specified.

6. A corner-strap of wire provided with pointed ends  $d'$  and corrugations  $a$ , lying in the same plane, and a central flattened space,  
35  $d$ , substantially as and for the purposes specified.

BURTON H. GEDGE.

Attest:

A. S. LUDLOW,  
G. A. W. PAVER.