



# UNITED STATES PATENT OFFICE.

LEVI L. TOWER, OF SOMERVILLE, MASSACHUSETTS.

## BINDING-STRAP.

SPECIFICATION forming part of Letters Patent No. 446,110, dated February 10, 1891.

Application filed August 27, 1890. Serial No. 363,198. (No model.)

*To all whom it may concern:*

Be it known that I, LEVI L. TOWER, a citizen of the United States, residing at Somerville, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Binding-Straps, of which the following is a full specification.

My invention consists of an improved adjustable binding-strap especially adapted for holding together bundles of papers, documents, and other articles for which rubber bands are commonly employed.

In the accompanying drawings, Figure 1 shows in perspective a package held together by my improved binding-strap. Fig. 2 is a sectional view, on an enlarged scale, showing how the ends of the strap are fastened together. Fig. 3 is a perspective view of the strap alone.

A is the strap, made, preferably, of metal, as brass or steel, and sufficiently thin to be flexible in the direction of its length, but quite stiff transversely. One end  $A'$  of the strap is perforated with a series of holes  $a'$ , extending back into the body thereof, while the other end  $A^2$  terminates in a tongue  $a$ , the width of which is slightly less than the diameter of the holes  $a'$ . The end  $A^2$  also has the hook  $a^2$  preferably struck down from the material of the strap, as shown, and in such a position thereon that when the tongue  $a$  is pushed into one of the holes  $a'$  as far as it will go the hook  $a^2$  will just engage with another of said holes  $a'$  in such a manner as to lock the strap firmly together. When arranged as in the drawings, the hook  $a^2$  engages with the third hole from the one into which the tongue  $a$  is inserted. By having the strap perforated for a considerable distance along the end  $A^2$  it will be seen

that a strap of a single size may be used for bundles or packages of various sizes, according to the hole into which the tongue  $a$  is inserted. Moreover, the strap may be clasped either tightly or loosely, as desired, thus being perfectly adjustable, it being a very simple operation to change the tongue  $a$  and hook  $a^2$  from one to another of the holes  $a'$ . The construction is such that the strap is doubly locked, so as to be incapable of being accidentally unclasped. Both the tongue  $a$  and the hook  $a^2$  acting together are essential to this end. Were the tongue  $a$  omitted, so that the clasping together of the strap depended alone upon the engaging of the hook  $a^2$  with one of the holes, the said strap would continually be liable to accidental unclasping by reason of the fact that a loose projecting end would be left beyond the hook  $a^2$  to be easily caught when the bundles are being moved about, besides being liable to tear papers, &c., in contact therewith. With the tongue  $a$ , however, interlaced into the strap previous to hooking there is no loose end to catch and tear papers and absolutely no danger of accidental unclasping.

I claim—

A binding-strap one end of which is provided with a series of holes, while the other is provided with a tongue adapted to enter one of said holes, and a hook back of said tongue adapted to engage at the same time with another of said holes, whereby the strap is doubly clasped, substantially as described.

In witness whereof I have hereunto set my hand.

LEVI L. TOWER.

Witnesses:

WM. B. H. DOWSE,  
ALBERT E. LEACH.