

1,043,770.

L. S. HOWE.
BOX STRAPPING.
APPLICATION FILED MAR. 18, 1912.

Patented Nov. 5, 1912.

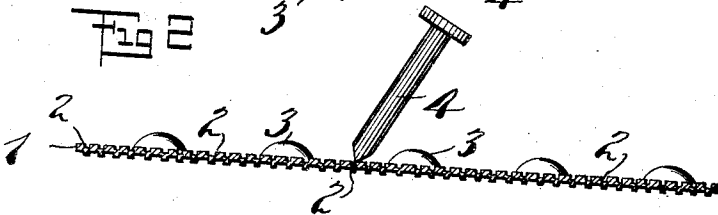
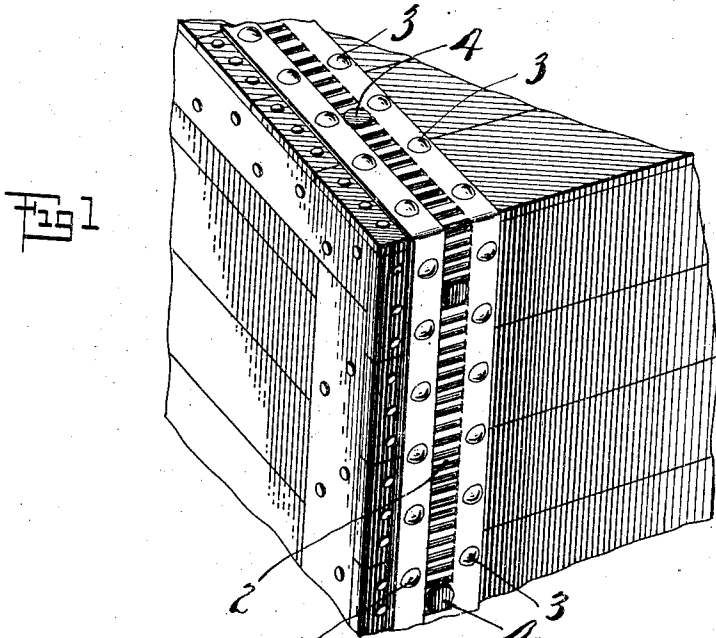


Fig 3

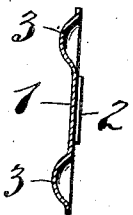
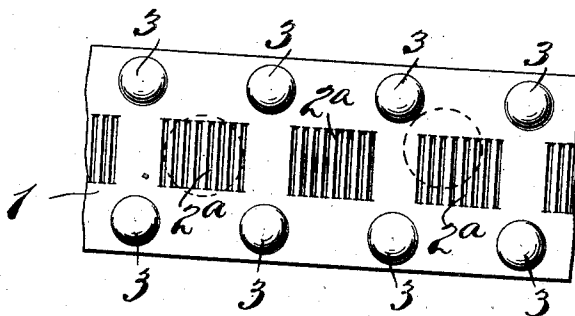


Fig 4



WITNESSES

Chas. A. Rand
Edw. M. Hunsicker

INVENTOR

L. S. HOWE

BY

Paul B. Mumme
Walter C. Mumme
ATTORNEYS

UNITED STATES PATENT OFFICE.

LEON S. HOWE, OF NEW YORK, N. Y., ASSIGNOR TO THE STANLEY WORKS, OF NEW
BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BOX-STRAPPING.

1,043,770.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed March 18, 1912. Serial No. 684,508.

To all whom it may concern:

Be it known that I, LEON SAWTELLE HOWE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Box-Strapping, of which the following is a full, clear, and exact description.

My invention relates to metallic box strapping, the main object being to provide an improved construction whereby such strapping may be easily nailed in place on a box, and whereby when in place it will guard the nail head or heads from contact with the floor, so that the box to which the strap is applied may be easily pushed over the floor without scratching or tearing the same.

Box strapping, as ordinarily employed, is made from plain metal strips which are nailed at intervals to the box. In applying such straps, it is more desirable to drive the nail obliquely, so that as the nail is driven in, the draft of each nail will be in a direction to tighten the strap. In view of the smooth surface of the ordinary strap, it is practically impossible to puncture the metal with a nail which stands obliquely when it is being driven. Consequently it is common practice to first puncture the metal by driving the nail through the strap with the nail placed vertically. When the puncture is made, the nail is turned obliquely, as aforesaid, and the driving is continued. The swinging of the nail from the vertical to the oblique position tends to produce some unnecessary slack in the strap, so that the drag of the nail as it is receiving the last few blows, is insufficient to properly tighten the strap. By my improvement the nail may be placed at an angle to the strap preparatory to puncturing the latter, and may be driven without danger of slippage, every blow on the nail being in a direction to produce a drag on the strap which will take up the slack and cause said strap to hug tightly to the box. These and other advantages will be apparent to the mechanic skilled in this art, from a reading of the following specification.

In the drawings Figure 1 is a view of a corner of a box with my improved strap in place. Fig. 2 is a central longitudinal sectional view of the strap shown in Fig. 1. Fig. 3 is a cross sectional view. Fig. 4 is a plan view of a modification.

1 represents the main body of the strap. The outer side of the strap along a central line is knurled or corrugated transversely as at 2.

3-3 are raised bosses on the outer surface of the strap and on opposite sides of the knurled portion 2. In Fig. 1, the strap is knurled throughout its length. In Fig. 2, I have shown a nail 4 standing obliquely, with its sharp end resting in one of the knurls to hold it from slipping when a blow is given to the nail sufficient to penetrate or to puncture the strap. Continued driving of the nail, after puncture occurs, causes the point of the nail to enter the wood in a direction to tighten up on the strap so as to take up slack to the rear of the nail, causing said strap to hug tightly to the box. When the nail is fully driven into place, the head thereof will stand below the tops of the bosses 3-3, so that when the box is placed upon the floor, said bosses will support the box and enable it to be moved around on the floor without tearing the latter. The bosses may be provided in any suitable arrangement, the arrangement shown being preferable, they being provided at sufficiently close intervals to guarantee a full protection to the nail heads used in securing the strap in place.

The knurled portion 2 may extend throughout the length of the strip, as shown in Fig. 1, but, if desired, may only occur at intervals, as shown at 2^a-2^a, Fig. 4. It is preferable to provide the knurled portions in all instances between adjacent sets of bosses, so that the nail heads will be protected by more than one or two bosses. Again, by so locating the knurled portions between the bosses, the nails will be entered and driven at a point sufficiently remote from the bosses so that the hammer head used is not likely to encounter the bosses and flatten them down. By having the bosses occur at intervals, as shown, the space between successive bosses on one side furnishes a space for the overlapping edge of the nail head should the latter not be entered on a strictly centered line. In Fig. 4 I have shown by dotted lines one nail head overlapping a line of bosses on one side.

The strips may be formed in any suitable way, the particular method of manufacture being immaterial, although ordinarily the knurled portions would be formed by cor-

rugating the metal and the bosses would be formed by punching up the metal from the rear, as indicated in Fig. 3.

By this improved form of strapping, it is obvious that the said strapping may be marketed either in straight lengths, or rolled up in a coil, inasmuch as the strap can be easily bent, owing to the fact that there are no longitudinal corrugations to resist bending in a direction to coil the strap.

In the claims I may, for the want of a better term, refer to the raised bosses 3 as elevated bearings.

What I claim is:

1. In a metallic box-strap for packing cases and the like, a main body, a plurality of separated raised bearings arranged longitudinally thereof, that part of the strap between said bearings and adjacent thereto being roughened and adapted to hold the

point of a nail to prevent slippage thereof, whereby said nail may be driven at an angle relatively to the strap to take up slack therein in the act of applying the same.

2. In a metallic box-strap for packing cases and the like, a main portion, a plurality of separated raised bearings arranged longitudinally of the strap and adjacent to the opposite edges thereof, the surface of said strap between said bearings being roughened and adapted to hold the point of a nail to prevent slippage thereof, whereby said nail may be driven at an angle relatively to the strap to take up slack therein in the act of applying the same.

L. S. HOWE.

Witnesses:

E. E. MORSE,
CHAS. A. PEARD.