## L.E.MINOTT

Relaining Strap for
Bending Timber

117664

PATENTED AUG 1 1871

Fig. 1

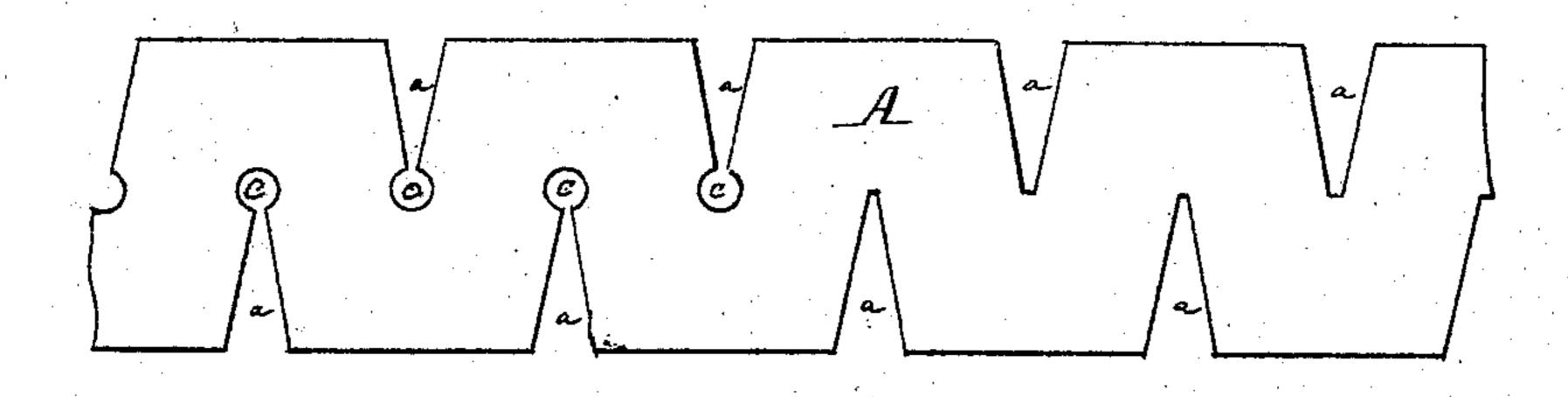


Fig. 2

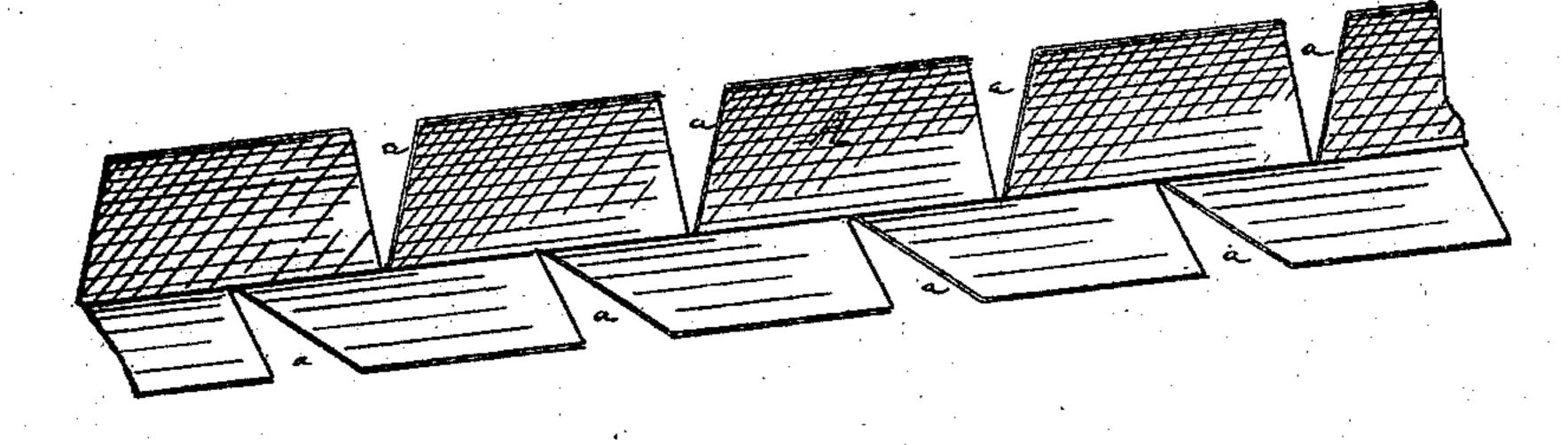
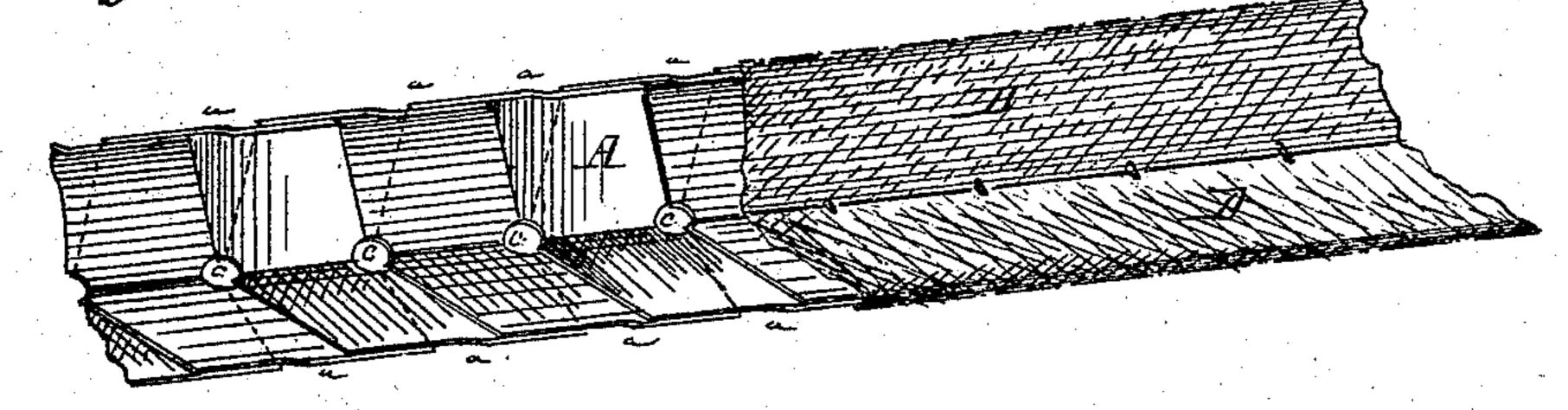


Fig. 3



Witnesses: MM Lunday Sulius Wilche

Inventor: Levi Elmon

## UNITED STATES PATENT OFFICE.

LEVI E. MINOTT, OF SHEBOYGAN, WISCONSIN.

## IMPROVEMENT IN RETAINING-STRAPS FOR BENDING TIMBER.

Specification forming part of Letters Patent No. 117,664, dated August 1, 1871.

To all whom it may concern:

Be it known that I, Levi E. Minott, of Sheboygan, in the county of Sheboygan and State of Wisconsin, have invented a new and useful Improvement in Retaining-Strap for Bending Timber; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a plan view of a metal strip as formed previous to bending it into the shape shown at Fig. 2, which is a perspective view of a single-ply strap, made in accordance with my invention; and Fig. 3 is a perspective view of a double-ply strap, showing the canvas covering

partly removed.

This invention relates to a strap for holding timber or wood in the process of bending it around a form, to hold it to the form evenly, and to prevent in great measure the crimping and splintering of the wood; and my invention consists of one or more metal straps, notched along the sides at regular intervals with V-shaped notches, terminating at the center of the strip, and occurring alternately upon opposite sides. The strip so notched is bent longitudinally along its center at right angles and forms a flexible metallic strap. Where greater strength is required two such straps are united by interlacing and the whole covered with stout canvas; all of which will be more fully and explicitly hereinatter set forth.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with particularity, making use in so doing

of the aforesaid drawing.

A is a flat metal strip, of proper width and of tough material, cut at regular intervals along its sides with V-shaped notches a. This strip is bent longitudinally along its center into the right-angled form shown at Fig. 2, and constitutes thus a single-ply strap, which for light bending is sufficiently strong; but, where a great strain is to be endured, I prefer to employ a double ply, consisting of two such straps interlocked

or interlaced, in the manner shown at Fig. 3. The interlacing should be done before the strap is bent into the angle form, as this precludes the possibility of either joining or separating the strips. To facilitate this interlacing I find it expedient to enlarge the apexes of the V-shaped notches into apertures c, which may be conveniently formed with a common punch. For the purpose of further increasing the strength, and also to present an unbroken surface to the wood, I apply a stout canvas covering, D, secured to the metal strap by stitching the back and front part of the canvas together at the edges, and by also stitching it together down the middle through the hole c.

The strap so made is applied to the piece of wood to be bent in the customary manner, being, however, particuliarly adapted to bending sticks "diamond-wise," as it is termed. The strap is placed upon the outside of the stick or piece of timber when being formed and prevents splintering or crimping most effectually.

It is not desirable that the strain of the work should come upon the strap if it can be avoided, and I therefore usually employ an auxiliary strap of stout doubled canvas, which is placed loosely around the outside of the strap while, and during the process of, bending. This auxiliary strap takes all the strain upon itself, or as much thereof as is necessary to relieve the principal strap, while the principal strap gives the desired rigidity and form and prevents the crimping and splintering above mentioned.

Having described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The strap A for bending wood, notched substantially in the manner described, and bent lon-

gitudinally at right angles.

2. The combination of two interlaced straps, A, with the canvas covering D, substantially as specified.

L. E. MINOTT.

Witnesses:

J. W. MUNDAY, F. B. MUNDAY.