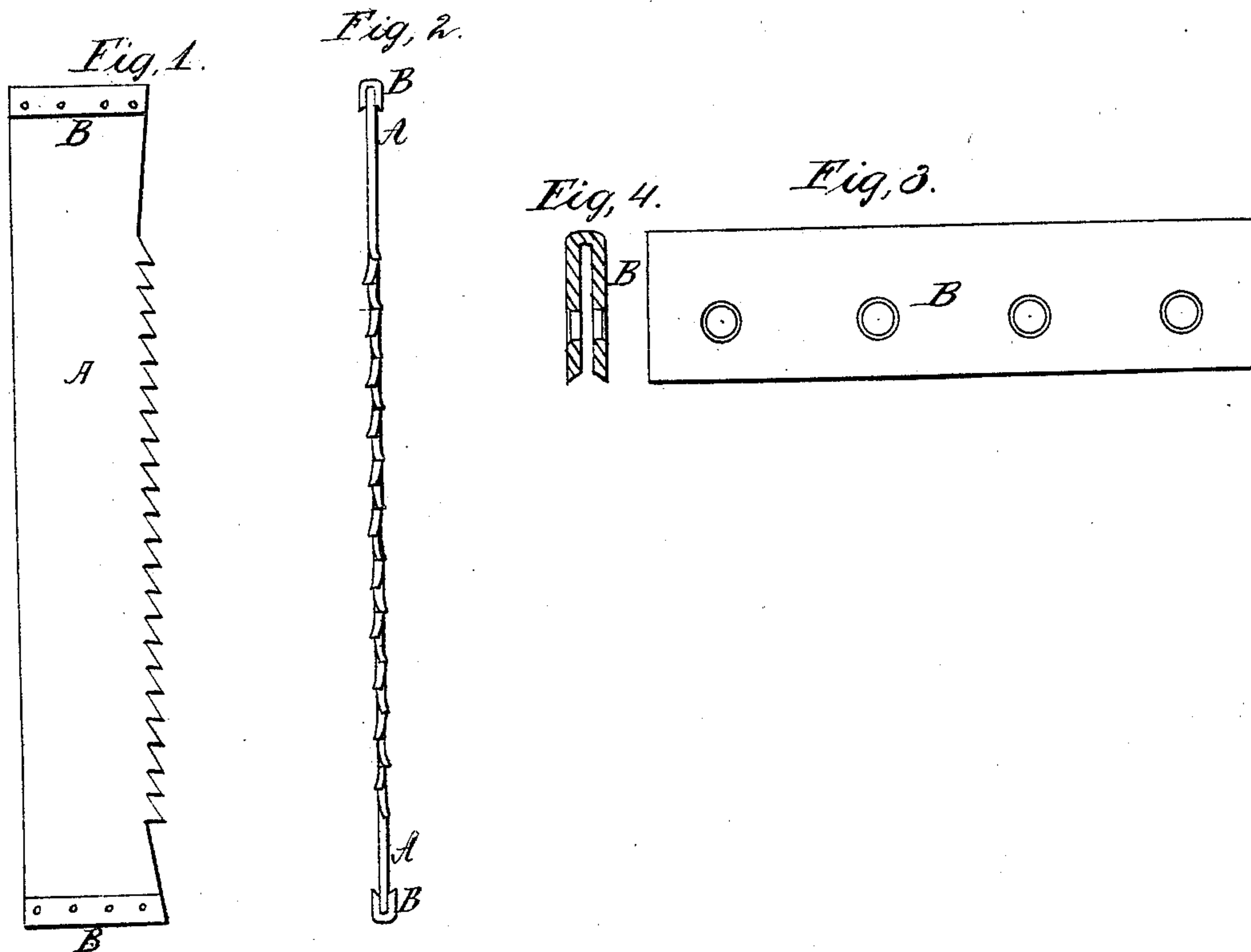


E. Andrews,

Saw Strap.

No. 90,623.

Patented June 1, 1869.



Witnesses,
William M. Baer
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EMANUEL ANDREWS, OF WILLIAMSPORT, PENNSYLVANIA.

Letters Patent No. 90,623, dated June 1, 1869; antedated May 21, 1869.

IMPROVEMENT IN STRAP FOR SAWS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, EMANUEL ANDREWS, of Williamsport, county of Lycoming, in the State of Pennsylvania, have invented a new and improved Mode of Strapping the Ends of Reciprocating Saws; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a side view of a saw with straps attached.

Figure 2 is an edge view of the same.

Figure 3 is a side view of strap detached.

Figure 4 is an edge view of the same.

The nature of my improvement consists in the making of straps to be used at the upper and lower end of saws, in such a manner that they may be easily and correctly applied.

The straps, as heretofore used, consist of two pieces or strips of metal, one of which is applied to each side of a saw, and attached thereto by riveting. It is found very difficult to put them on correctly, owing to various causes, sometimes to a slight deviation in punching the holes, and sometimes the rivets used do not fill the holes, and in riveting, one or both straps will move out of position, and the edges will not be parallel or even. When one strap is lower than the other, the inequality must be corrected, or a saw cannot be properly strained.

Another objection to the use of two straps, when used in connection with narrow hangings, is that they are liable to break when the strain is applied about the middle of the strapping.

To remove these difficulties is the object and aim of this improvement.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Fig. 1. A is the saw, of the usual kind used in saw-mills.

B B, the straps, which are made of one piece of metal, and bent in the middle, as shown in fig. 4.

Before bending, I punch a sufficient number of holes on one edge. It is then bent in proper form, and the holes are punched through the opposite side, the first holes being used to direct the punch. The holes will then agree.

The strap is then passed through a milling-machine, and the proper bevel is given to the edges, and at the same time they are made parallel with each other.

It is readily seen that straps, when made as herein described, must be even, and the edges parallel, one with the other, when applied to the end of a saw, and by making the straps of one piece of metal, the connection at the top prevents breakage, when used with narrow hangings.

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

The straps B, for the ends of reciprocating saws, formed of one piece of metal, when made and arranged as described, and for the purposes set forth.

Witnesses:

EMANUEL ANDREWS.

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NATHAN W. CROUSE.