

(No Model.)

A. LAWSON.
TENSION BRACE.

No. 253,927.

Patented Feb. 21, 1882.

Fig. 1.

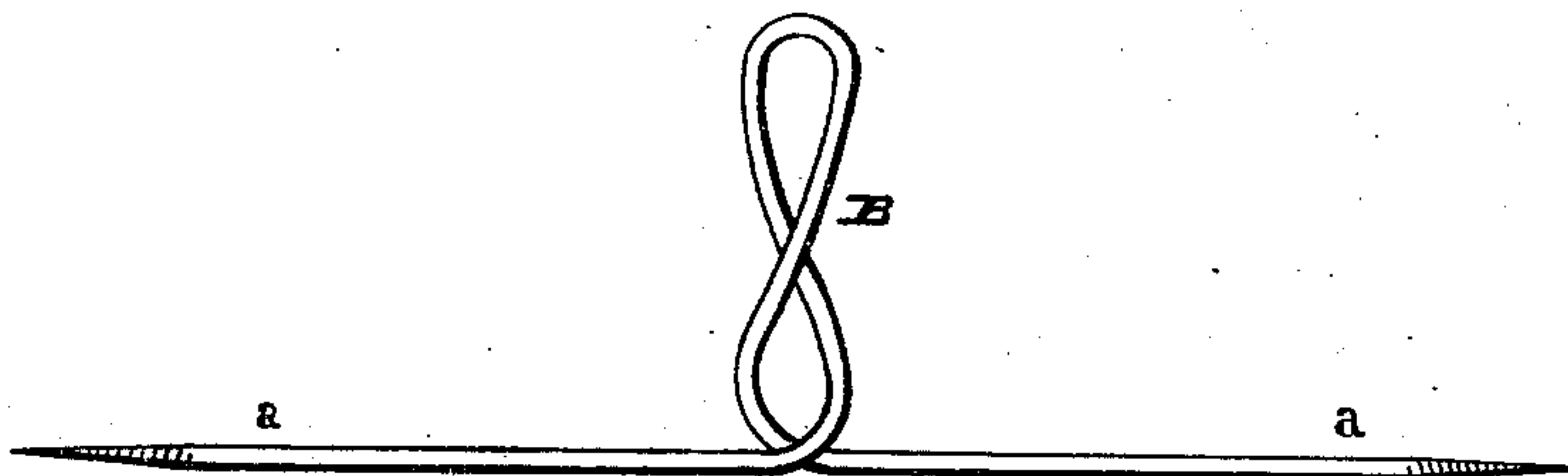
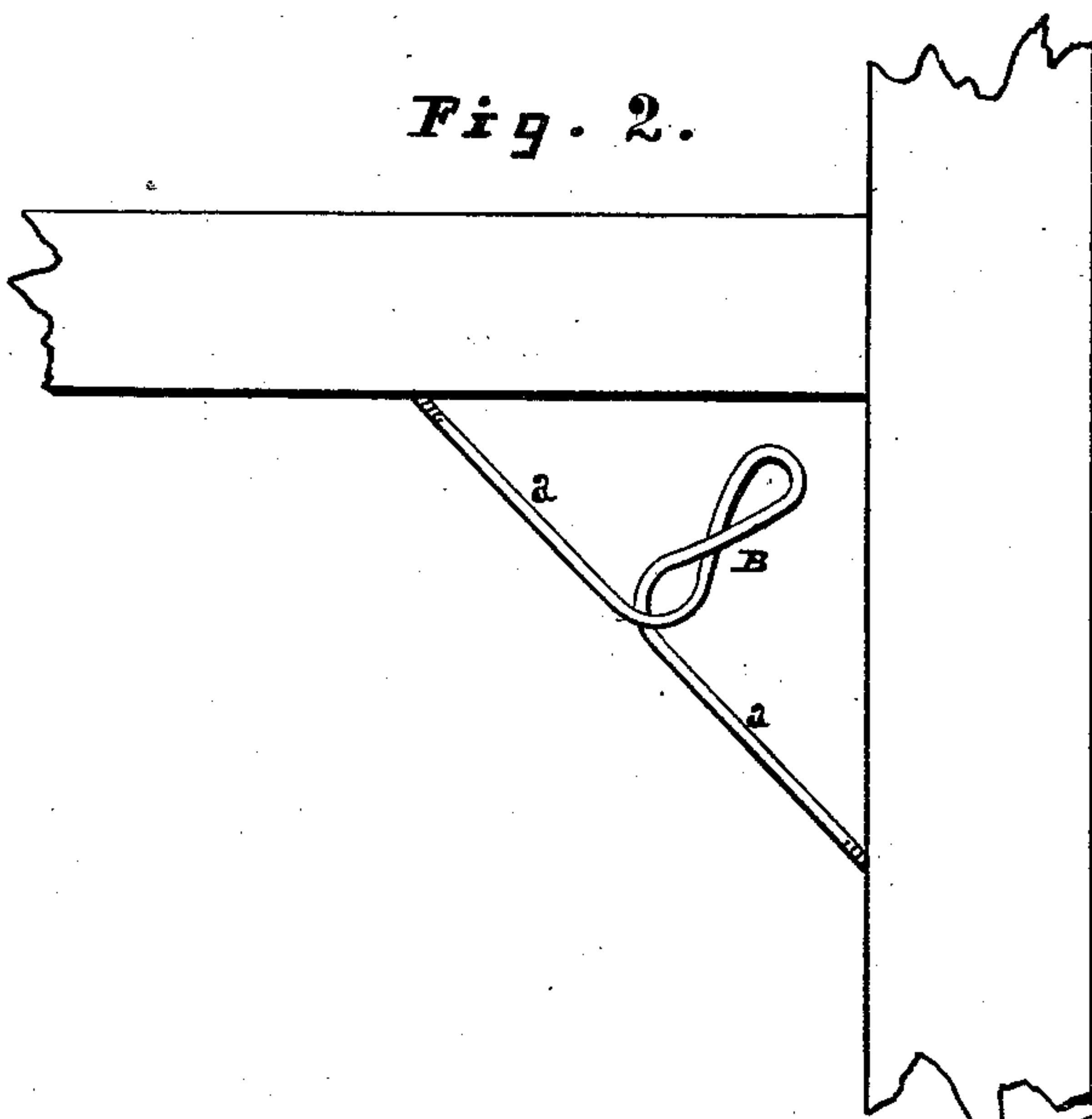


Fig. 2.



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AARON LAWSON, OF GILROY, CALIFORNIA.

TENSION-BRACE.

SPECIFICATION forming part of Letters Patent No. 253,927, dated February 21, 1882.

Application filed September 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, AARON LAWSON, of Gilroy, county of Santa Clara, State of California, have invented a Tension-Brace; and I hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to what I call a "tension-brace;" and it consists in a wire or other flexible rod so twisted at its middle as to form a double loop somewhat in the form a figure 8. The ends of the wire project in opposite directions and at right angles with the loop, and are provided on their tips with screw-threads. These threads are formed on one end to make a right-hand screw and upon the other a left-hand screw, so that when screwed in place they draw in opposite directions and pull tight upon the central loop, which locks itself, all of which will hereinafter more fully appear, reference being made to the accompanying drawings, in which—

Figure 1 is a view of my device. Fig. 2 shows its operation.

The brace is made of wire or a flexible rod or other suitable substance. In the drawings, I designate the projecting ends of the wire by *a a*. It is bent or twisted in the middle to form a double loop, B, in the shape of a figure 8, as shown, the ends crossing each other at the bottom and projecting in opposite directions. If an outward strain be exerted upon the ends, the bottom loop of the figure 8 will close up until its sides come in contact and the limit of tension is reached. The ends *a a* are provided with screw-threads, one being a right-hand and the other a left-hand thread.

I have called the device a "tension-brace," in contradistinction to a strut or thrust brace, because its operation is in the outward strain or tension; consequently its use is confined to articles the joints of which are liable to separate and need holding together. An example of this may be seen in a bedstead. The brace is screwed across the angle at the four corners, and may be screwed up as tight as desirable, or to its limit when it is locked by the lower loop. The strain on the bedstead tends to separate the joints, and therefore the tension-brace

is applicable. It may in like manner be applied to chairs and tables or to any article the joints of which are loose and require to be held together. In all these cases the brace requires to be screwed up tight. Another use to which it may be put is to form a spring-bed. It may be made long enough to extend across the bedstead and be screwed into the side or end rails. A number of them may be thus screwed in at a distance from each other determined by the length of the loop, so that when all are laid horizontally the loop of one shall extend to and lie upon the loop of another. Each is so screwed at first that the loop shall be vertical, so as to allow succeeding ones to pass, and is then turned, so as to be horizontal, when each loop will lie on the succeeding one. In this case they must not be screwed in tight enough to close the upper loop. This must remain open, so that it forms a spring when a weight is put upon top. When arranged in this way they may support a mattress and form a spring-bed.

In any available corner one of these braces may be screwed and its projecting loop act as a hat-rack or a hook or peg upon which to hang articles. In this use it is possible because of its end screws allowing it to be readily inserted and tightened at pleasure. It is adapted to be screwed in wood, so that the screws feed themselves forward, and no nails need be driven to mar or disfigure the wall. A kindred use is that of a curtain-rod or a rod upon which any curtain adapted to slide with rings may be hung. It may be screwed into opposite sides, and its ends *a a* act as guide-rods, upon which the curtain-rings slide to the center or to the sides.

It is obvious that while acting chiefly as a tension-brace the device may be made to serve a variety of uses, some of which I have enumerated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A tension-brace consisting of a wire or other flexible rod bent or twisted at its center to form the double loop B or equivalent locking-loop, and having its ends *a a* formed into

or provided with screws, one of which is a right-hand and the other a left-hand screw, substantially as and for the purpose herein described.

2. A tension-brace consisting of a wire or
5 other flexible rod having its ends *a a* in line, and provided with right and left hand screws, and its center so bent that the ends may be allowed considerable end play for the purpose of inserting them, said center being so crossed

that when drawn up its sides will lock, so that the whole will form a rigid rod, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

AARON LAWSON.

Witnesses:

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