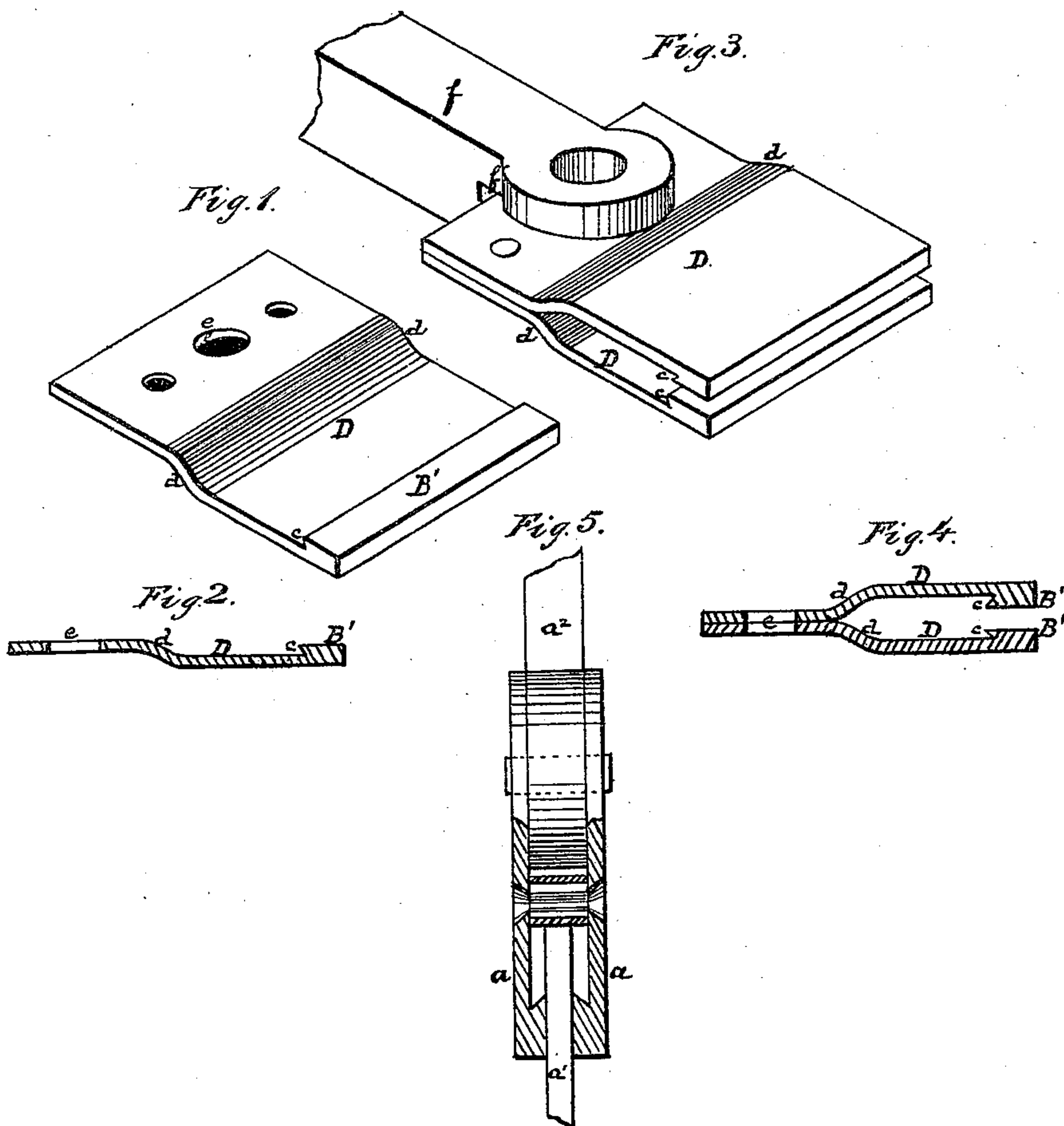


**C. W. HUBBARD.**  
**Saw-Buckles.**

No. 141,225.

Patented July 29, 1873.



WITNESSES  
R. E. Henderson,  
James J. Kay.

INVENTOR  
Charles W. Hubbard,  
by Bakewell, Christy & Kerr,  
his attys.

# UNITED STATES PATENT OFFICE

CHARLES W. HUBBARD, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN SAW-BUCKLES.

Specification forming part of Letters Patent No. **141,225**, dated July 29, 1873; application filed December 2, 1872.

*To all whom it may concern:*

Be it known that I, CHARLES W. HUBBARD, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Buckles for Saw-Mills; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 represents such a blank as finished, and which constitutes one-half of the buckle. Fig. 2 is a sectional view of Fig. 1. Fig. 3 is a perspective view of the buckle complete and its hook or hanger. Fig. 4 is a sectional view of the buckle, part of Fig. 3; and Fig. 5, by a sectional view, illustrates the construction of the old saw-buckle, to which my present improvement relates.

Like letters of reference indicate like parts of each.

My invention relates to an improvement in what is commonly known as the Crosby saw-buckle; and also in the buckle itself.

This buckle, as patented to Pearson Crosby October 4, 1859, is, so far as relates to the present invention, substantially shown in Fig. 5, in which  $a$  represent the two halves of the buckle;  $a^1$ , the saw; and  $a^2$ , the hook or hanger.

It has been found by experience that the hook  $a^2$  frequently breaks; as a consequence some difficulty has been experienced in introducing it into general extensive use; also, the buckle as made by Crosby was of cast metal, and was liable to break. By my improvement I obviate both the defects.

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

The buckle-blanks are cut from bars rolled to a suitable width and thickness, and with a

rib along the edge of one face, such as when properly planed will give the hook,  $c$ , desired. The bars are cut to suitable lengths to form the blanks, each blank so cut off forming one-half the buckle proper. By suitable means the body  $D$  of the blank is then bent, as at  $d$ , so that when two blanks are put together and welded or riveted, as in Fig. 3, the inwardly-bent ends shall come face to face and the lower ends be in proper position for receiving the end of the saw and its straps. An eye,  $e$ , is punched or drilled in each blank, through which the pin is passed by which to attach the buckle to the hook or hanger  $f$ . This hanger is bifurcated at its lower end, and one arm of the bifurcation passes over each outer face of the upper end of the buckle, as shown; and as each arm  $f'$  of the bifurcation may be made equally as strong as the single hanger, shown in Fig. 5, I am enabled to use the Crosby buckle in mills where the strain on the hangers is so great as to render the use of the old buckle with the single hook or hanger impracticable.

I hereby disclaim the construction shown in Fig. 5.

What I claim as my invention, and desire to secure by Letters Patent, as an improvement on the Crosby buckle, is—

A saw buckle and hanger composed of a bifurcated hanger,  $f$ , and blanks  $D$   $D$ , bent as at  $d$ , so that their upper ends may come face to face, while room is left between their opposite hook-ends for the insertion of the saw and straps, substantially as set forth.

In testimony whereof I, the said CHARLES W. HUBBARD, have hereunto set my hand.

CHARLES W. HUBBARD.

Witnesses:

A. S. NICHOLSON,  
G. H. CHRISTY.