

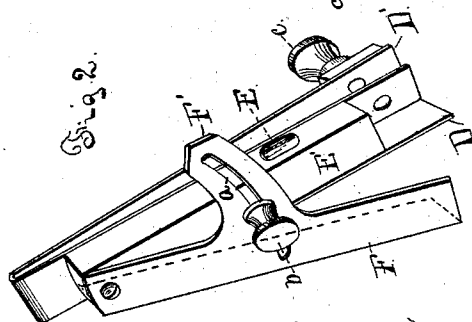
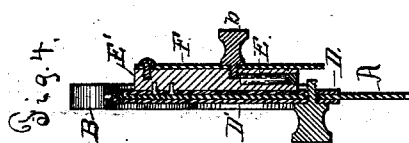
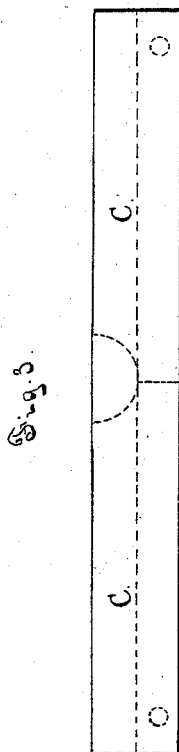
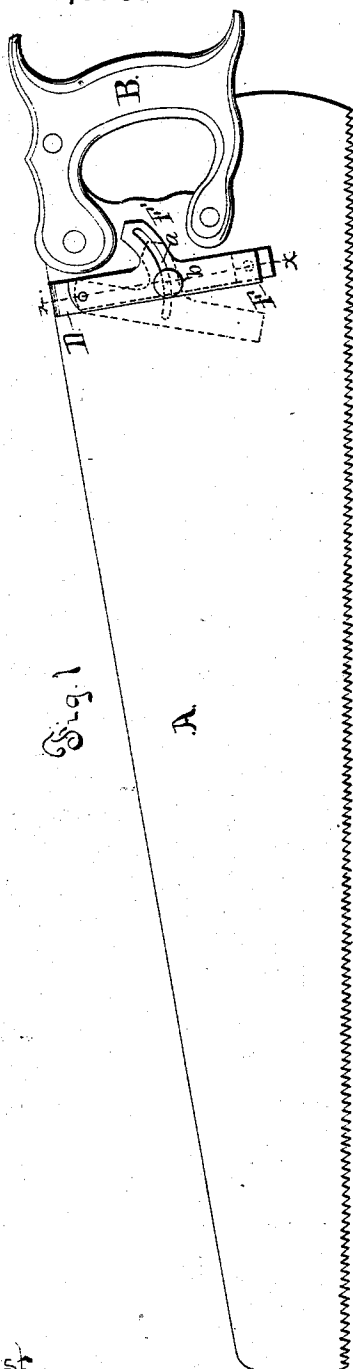
(No Model.)

E. ANDREWS.

BEVEL ATTACHMENT FOR HANDSAWS.

No. 283,319.

Patented Aug. 14, 1883.



Attest
W. A. Clark,
Jno. C. Schroeder.

Inventor,
Emanuel Andrews
by Geo. W. Atzer.

UNITED STATES PATENT OFFICE.

EMANUEL ANDREWS, OF WILLIAMSPORT, PENNSYLVANIA.

BEVEL ATTACHMENT FOR HANDSAWS.

SPECIFICATION forming part of Letters Patent No. 283,319, dated August 14, 1883.

Application filed January 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, EMANUEL ANDREWS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Attachments for Handsaws; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The invention, hereinafter described, relates to an attachment for handsaws, said attachment consisting of an united and combined cheap and durable square, bevel, and spirit-level capable of ready attachment and removal.

For the accomplishment of the above the invention consists in the novel construction, arrangement, and combination of the several parts, all as will be fully hereinafter described and claimed.

For the better understanding of the invention, and in order that those skilled in the art to which it pertains may know how to make and use the same, I will now proceed to describe it in detail, having frequent reference to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of a handsaw provided with my improved attachment, the different positions of the bevel portion being shown in dotted lines; Fig. 2, a view in detail of the attachment removed from the saw; Fig. 3, a view showing the blank from which the square proper is formed, the bent and broken-away portions being indicated by dotted lines; and Fig. 4 is a vertical section on the line *xx* of Fig. 1.

Like letters refer to corresponding parts in the several views.

In the drawings, A represents a straight-back saw-blade, and B the handle of the same, both of these parts being of ordinary construction, with the exception of a notch made in the back of the blade and a hole made through said blade, the former to accommodate my improved attachment and the latter to receive the thumb-screw, by means of which said attachment is secured to the blade.

The square or main portion of the attachment consists of a strip of metal, C, bent at a right angle longitudinally and cut out or re-

cessed at its center, as shown, and there bent until the two ends of said strip meet, forming (what may appropriately be termed) two jaws, designated in Fig. 2 by the letters D and D'. 55

E is a spirit-level, which is incased in a rectangular block, E', said block being rigidly secured to the jaw D in the recess formed by the two angles of the same.

F is the bevel, which is pivoted, as shown, 60 to the upper end of the block E' upon the outside of the spirit-level. This bevel consists of a metallic strip bent longitudinally at right angles, (corresponding in shape and size with the two faces of the strip C,) and provided at 65 the center of the portion fitting over the block E' with a segmental extension, F', which is in turn provided at its center with a segmental slot, *a*, through which and into the block E' passes a set-screw, *b*. By this construction 70 and arrangement the bevel F can be adjusted to any angle within the limit of the length of the slot *a* and then be secured by means of the screw *b*.

The attachment constructed as above described is applied to the blade of the saw (the spirit-level facing the handle) by fitting the jaws D and D' over the same and inserting the connecting-ends of said jaws in the notch made in the back of the blade, as hereinbefore 80 referred to. The whole is then firmly secured to the saw-blade by means of a set-screw, *c*, which passes through a washer secured to the lower end of the jaw D', and through a hole in the blade A and jaw D. When thus ap- 85 plied and secured the attachment holds a position at exactly a right angle to the back of the saw.

It will be manifest from the foregoing description that this attachment combines with 90 a saw three very essential and convenient tools of great assistance to a carpenter in a great variety of work, particularly in framing timber. Its advantages and superiority over other similar devices will be more manifest from 95 the fact that it can be attached to and removed from any saw with but a slight change in the construction of the saw and without injury to the blade. It will be understood that these three tools combined into one can be used sep- 100 arately as well as when in combination with the saw, if so desired.

I am aware that saws have been provided with combined squares and spirit-levels, but such have been permanently attached to the saw, and I therefore lay no claim to such arrangement, as my invention is for an attachment comprising a square, bevel, and spirit-level, adapted to be attached to and removed from any saw.

What I claim is—

10 1. A square attachment for handsaws, consisting of a strip of metal bent at a right angle longitudinally, and again bent at its center to form two jaws, which embrace the saw-blade, and which are removably attached thereto by a set-screw passing through a perforation in the end of each jaw, and through a corresponding perforation in the saw-blade, substantially as described and shown.

20 2. A combined square and spirit-level attachment for handsaws, consisting of a strip of metal bent to form two jaws, as described and shown, and a spirit-level incased in a rectangular block, secured to one of said jaws in the recess formed by the two angles of the

same, the several parts being constructed, arranged, and removably attached to the saw-blade, substantially as described and shown.

3. The combination, with the blade of a handsaw provided with a notch and perforation, as described, of an attachment composed of a square and spirit-level, constructed, arranged, and removably attached thereto, as described, and a bevel pivoted at its upper end to the casing of the spirit-level, and consisting of a strip of metal bent at a right angle longitudinally, and provided at the center of one of its sides with a segmental extension, having at its center a segmental slot, through which into the casing of the spirit-level passes a set-screw for adjusting the angle of inclination of said bevel, substantially as described and shown.

In testimony whereof I affix my signature in presence of two witnesses.

EMANUEL ANDREWS.

Witnesses:

A. B. NEYHART,

W. T. ANDREWS.