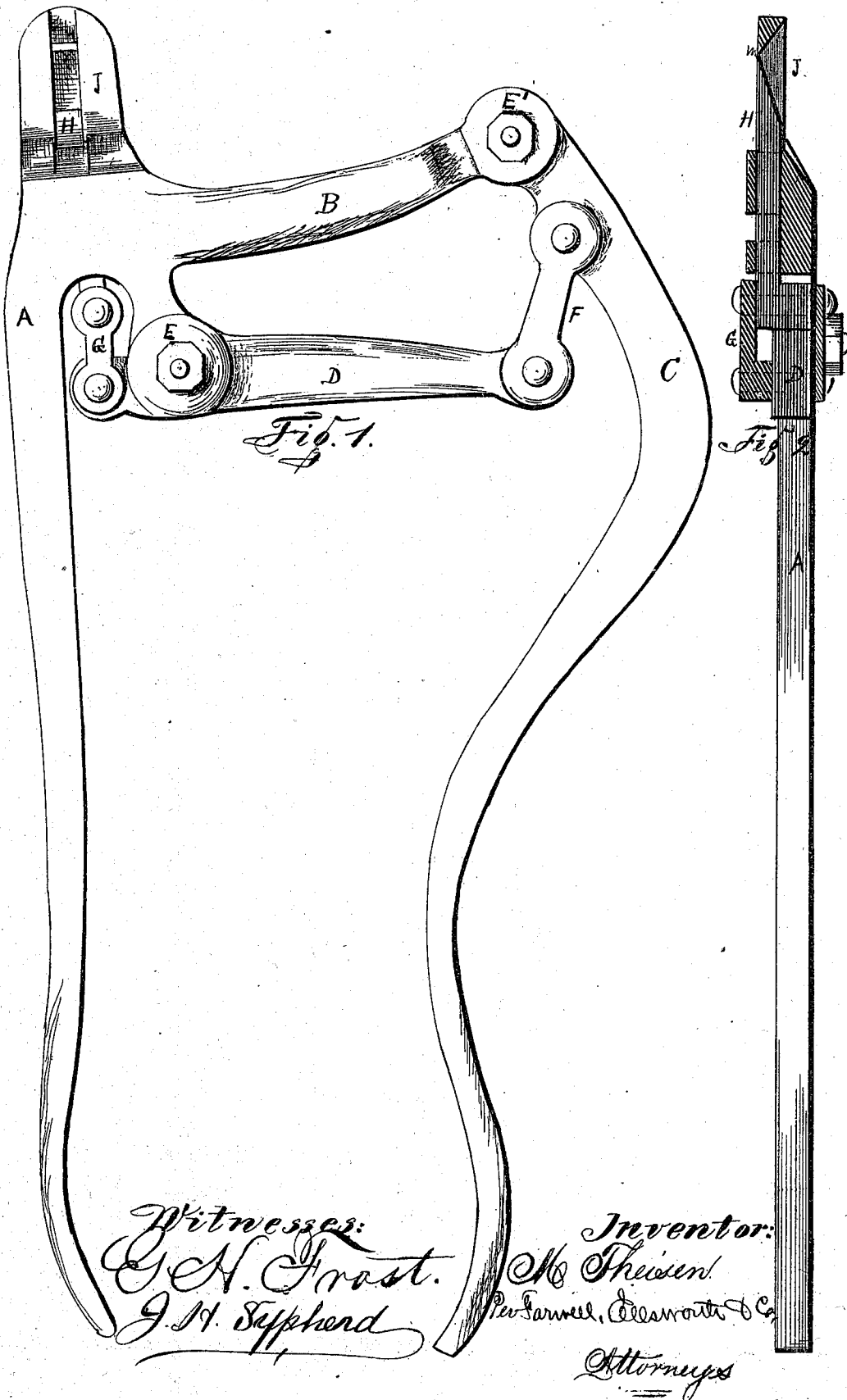


M. THEISEN.
BOLT AND RIVET TRIMMER.

No. 104,509.

Patented June 21, 1870.



Witnesses:
G. N. Frost.
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MATHIAS THEISEN, OF WAUKON, IOWA.

Letters Patent No. 104,509, dated June 21, 1870.

IMPROVED BOLT AND RIVET-TRIMMER.

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

To all whom it may concern:

Be it known that I, MATHIAS THEISEN, of Waukon, in the county of Allamakee and State of Iowa, have invented a new and useful Improvement in Bolt and Rivet-Trimmers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a side elevation of my improved bolt and rivet-trimmer.

Figure 2 is a transverse section of the same in the plane of the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts in the several figures of the drawing.

My invention has for its object to provide an improved device for cutting or trimming bolts and rivets, and, to this end,

It consists in the combination of parts, as will be hereinafter more fully described.

In the accompanying drawing—

A is the jaw and handle, carrying the cutters, provided, upon one side, with the lateral arm B, to which the operating-lever or handle, C, is pivoted.

D is a short lever, of the first order, with its fulcrum in the short projection, E, extending from the lower side of the arm B, as shown in fig. 1.

The longer arm of this lever is connected to the lever-handle O, near the fulcrum E of the latter, by means of a pivoted link or links, F, and its shorter arm is connected by a similar link, G, to a chisel, H,

arranged at right angles to the arm B, as shown in fig. 1.

By this arrangement a compound lever is formed of great power to operate the cutting-chisel.

J is an extension, formed upon the front end of the handle, and slotted, for the reception of the chisel.

At the outer end of the slot the extension is beveled inward to form a fixed cutter, *m*, between which and the edge of the chisel the bolts and rivets are placed to be cut or trimmed, as will be readily understood.

The chisel is guided in its movements by means of loops or bands secured to the back of the extension, as shown in fig. 2.

By extending the part J, together with the chisel, the device may be applied to cutting the heads of rivets in small pipes or boiler-flues.

This arrangement is of special advantage, inasmuch as the extension, being the only portion of the tool inserted within the pipe, can be made of such size as to apply to the smallest boiler-flues.

Having thus described my invention,

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

In combination with the jaw and handle A B, and the lever-handle O, the pivoted lever D, pivoted links F G, fixed cutter *m*, and sliding chisel H, substantially as described, for the purpose specified.

MATHIAS THEISEN.

Witnesses:

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