

DAVID SATTLER.
No. 121,007.

Improvement in Saws.
Patented Nov. 14, 1871.

Fig. 1

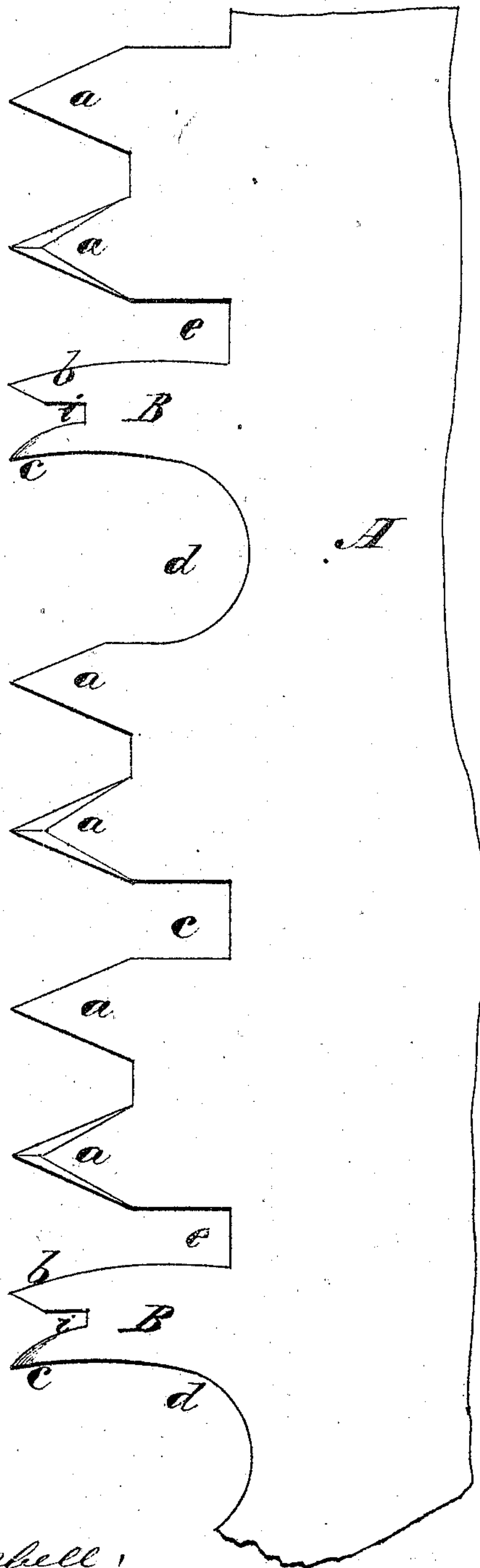


Fig. 3

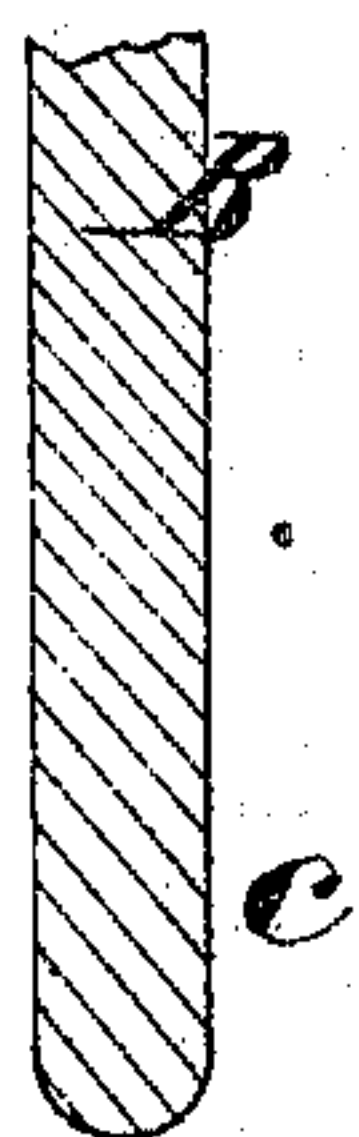
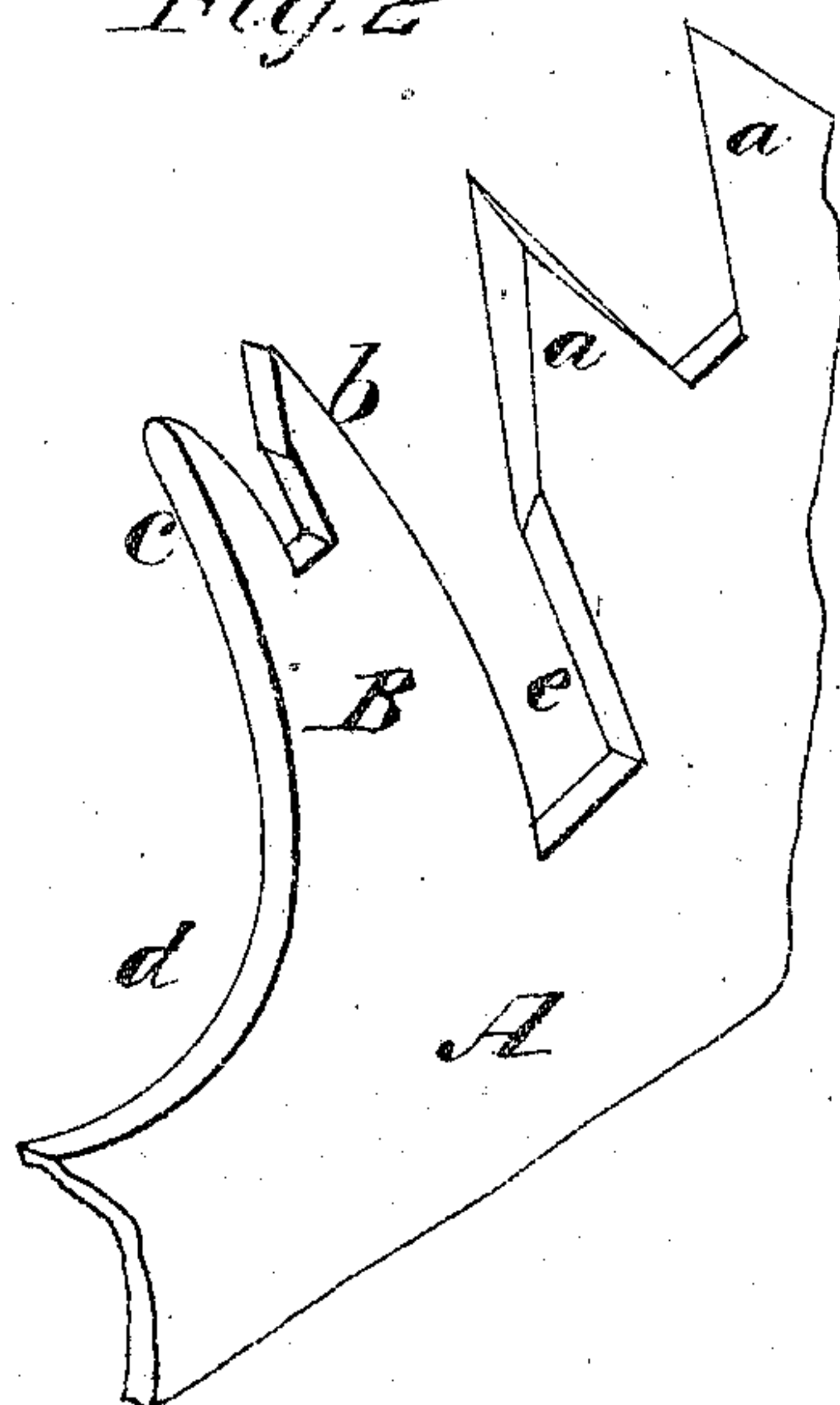


Fig. 2



Witnesses.
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UNITED STATES PATENT OFFICE.

DAVID SATTLER, OF NAPOLEON, OHIO.

IMPROVEMENT IN SAWS.

Specification forming part of Letters Patent No. 121,007, dated November 14, 1871.

To all whom it may concern:

Be it known that I, DAVID SATTLER, of Napoleon, in the county of Henry and State of Ohio, have invented an Improvement in Saw-Teeth; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a portion of a saw-blade, showing the improved teeth formed on it. Fig. 2 is a perspective view. Fig. 3 shows an edge view of a routing-tooth.

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

This invention relates to an improvement which is applicable to large cross-cut saws, sometimes called two-hand saws, wherein it is desired to employ between the regular sawing-teeth raking-teeth, which will not only clear out the kerfs, but which will rake down the angular ridges left by the regular saw-teeth at the end of the kerf. For this purpose chisel-edged, straight, and hooked rakers have been arranged between pairs of sawing-teeth. These are objectionable for various reasons; and it is the object of my invention to remedy the objections by the means hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it:

In the accompanying drawing, A represents a portion of the blade of a reciprocating saw, on which sawing-teeth *a a* of a triangular form are arranged in pairs and separated by straight

notches *c*. These teeth are the well-known **W**-shaped sawing-teeth. Between these pairs of sawing-teeth *a a*, and separated therefrom by notches *c* and gullets *d*, are hooked shanks B. Each one of these hooked shanks has a square-edged raker, *b*, and a rounded-edged ranter, *e*, formed on it, and separated by means of a notch, *i*. The raker *b* presents a curved-convex back and a double-bevel edge, and the ranter presents a hooked edge, continuous with the gullet *d*, and a rounded or convex back edge, and a transversely-rounded cutting or scraping-edge, as shown in the drawing.

After the pairs of sawing-teeth pass they are succeeded by a ranting-tooth, *e*, which takes down the center of the ridge left at the end of the kerf and leaves a groove in its place. This ranter is then immediately succeeded by the raker *b*, which squares the end of the kerf for the following pairs of saw-teeth.

The chips and dust from the ranting-teeth are received into the large gullet *d* and readily discharged from the kerf.

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

A saw provided with scoring-teeth *a*, routing-teeth *e*, and rakers *b*, constructed and arranged as herein shown and described.

DAVID SATTLER.

Witnesses:

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