(No Model.)

O. J. MARSH.

SAW FILING DEVICE.

No. 373,148. Patented Nov. 15, 1887.

Fig. 1.

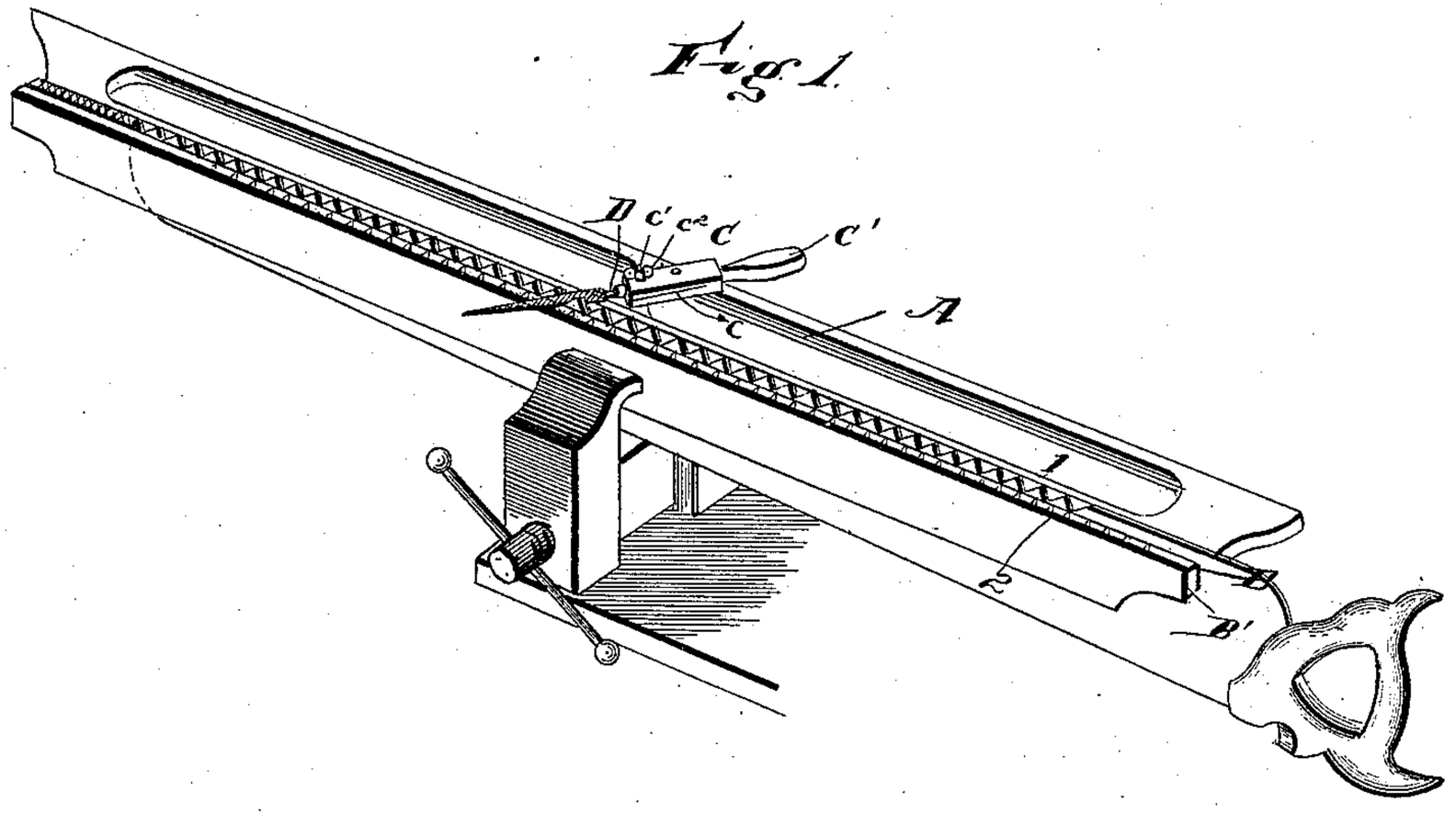

Fig. 2.

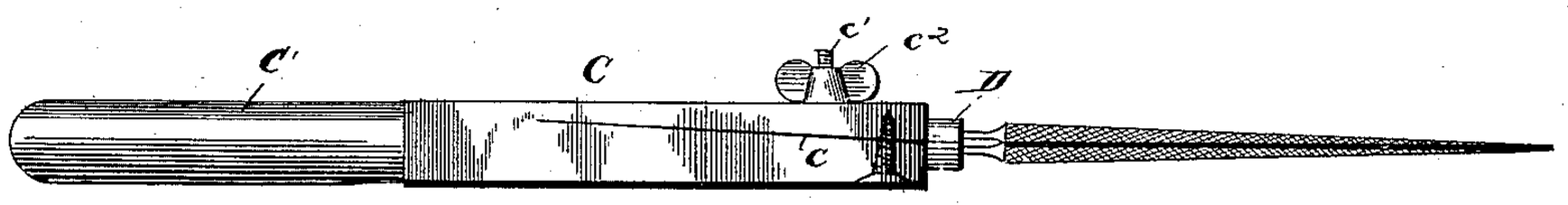

Fig. 4.

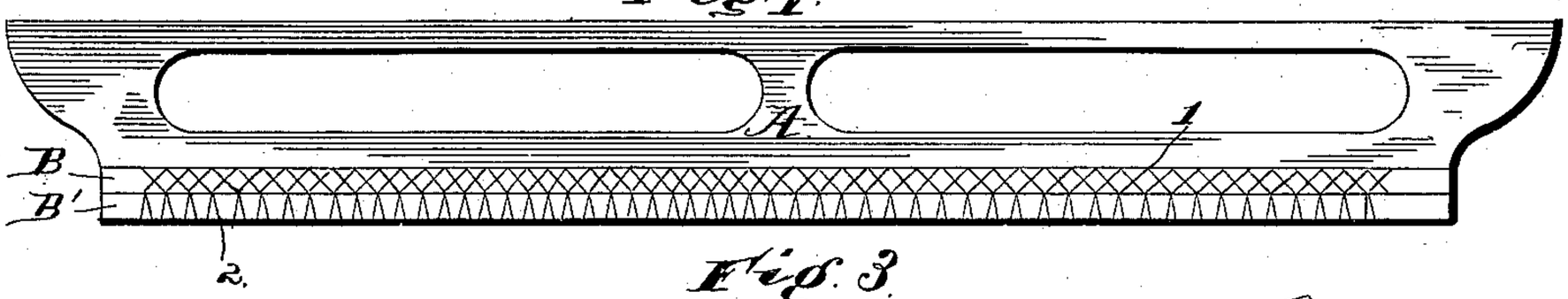

Fig. 3.

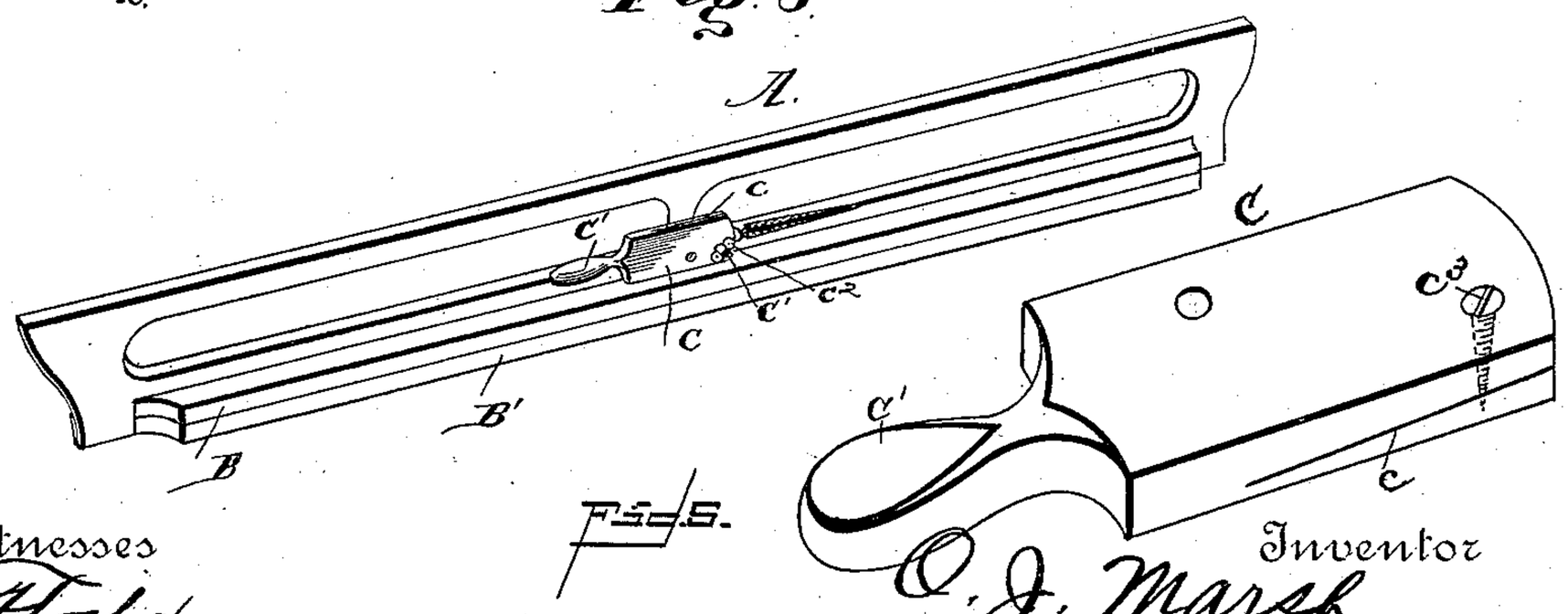

Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

ORLO J. MARSH, OF TITUSVILLE, PENNSYLVANIA.

SAW-FILING DEVICE.

SPECIFICATION forming part of Letters Patent No. 373,148, dated November 15, 1887.

Application filed April 19, 1887. Serial No. 235,399. (No model.)

To all whom it may concern:

Be it known that I, ORLO J. MARSH, a citizen of the United States, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented a new and useful Improvement in Saw-Filing Machines, of which the following is a specification.

My invention relates to saw-filing machines; and it consists in the novel construction and arrangement of the several parts, which will be more fully hereinafter described, and pointed out in the claims.

The object of my invention is to provide a saw filing or sharpening machine adapted for use in connection with any kind of saw, and which provides for convenience and utility, being of simple and effective construction, readily handled and used, strong and durable, positive in its result, compact in form, and cheaply manufactured. I attain this object by the mechanism illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of my device, shown as secured in a vise, with a saw therein and the file arranged in the tool-holder in operative position. Fig. 2 is a side elevation of the tool holder or clamp, with a file-handle and tang mounted in connection therewith. Fig. 3 is a perspective view of the machine as it appears when arranged for transportation and the trade. Fig. 4 is a top plan view of the machine. Fig. 5 is a detail perspective view of the file-holder, looking at the bottom side thereof.

A indicates an apron or rest of suitable construction and of material applicable to the purpose. This apron A projects outward a suitable distance for convenience and as a means of rest or support, and has a strip, B, secured to the rear portion thereof, which extends downward therefrom at right angles from the lower side of said apron A and slightly above the upper surface thereof. Another strip, B′, similar in dimension and configuration to the strip B, is constructed and removably secured or clamped against the rear side of the said strip B. These strips B and B′ are adapted to clamp and hold the saw to be sharpened between them, and are extended downward below the apron A, for the purpose of insertion and retention in a vise, as shown in Fig. 1. The top surfaces of the strips B and B′ are provided with scales or gages, as 1 and 2, which act as guides, whereby the different cuts may be acquired in any style or form of saw.

By this construction means are provided for the perfect formation of and regularity in the cut desired, without the deviation from a proper cut which would result were the eye depended on alone.

In connection with my improved saw-filing rest, I provide a tool holder or clamp, C, which is adapted to be furnished with every machine. This tool-holder C consists of a wooden block having an operating-handle, C′. The end thereof opposite to the handle C′ is provided with an opening for the reception of the tool-handle D. A saw-kerf, *c*, is formed in the said tool-holder, which extends from the end adapted to receive the tool-handle D rearwardly some distance, and is slightly inclined upward. The upper portion of the block is therefore made thinner, and consequently provided with considerable resilience, which grips and springs downward upon the file-handle without springing the lower portion of the block out of a true line. Through one side of the block a clamping-screw, c' passes, and is engaged by a clamping winged nut, c^2, which is adapted to secure the tool-handle D in a firm position in the tool-holder. In order that the upper face of the tool-holder shall remain in a level position when the clamping-nut c^2 has been screwed down to bind on the tool-handle D, a screw, c^3, passes partially through the opposite side of the block to that on which the clamping-nut is situated, and acts to keep the upper part of the block level when the said clamping-nut is screwed down. For convenience in shipping, the tool-holder C is secured to the under side of the apron A, as shown in Fig. 3.

The operation of my improved filing device is as follows: The tool-handle D is removed from the holder C, and the file-tang is firmly driven therein, and the handle D, carrying the file-tang, is then again inserted in the holder C and clamped therein, as heretofore set forth. The holder C is then placed on the apron A at the proper angle with the saw to be sharpened or filed. The end of the file-tang is then held

with the left hand and the handle C′ of the holder C with the right hand, and the file is then shoved forward and drawn backward parallel with the desired marks forming the gage on the upper edges of the strips B and B′. A gage to set the file at the proper pitch may also be furnished with my improved device, though any pitch and fleam can be given to the teeth by placing the file accordingly.

The novelty and great utility of my invention consists in the construction of a compact and complete saw-filing apparatus which can be obtained at a small cost, and, though light and readily portable in construction, is capable of accomplishing the most difficult work required of a saw-filing machine.

It is obvious that many minor changes in the construction and arrangement of the parts might be made and substituted for those shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, I claim—

1. A saw-sharpening device comprising an extended apron or rest provided with two saw holding and clamping strips which extend downward therefrom at right angles and are adapted to be placed in a vise, and gages or scales of different angles or pitch arranged on the upper edges of the said clamping-strips, substantially as described.

2. A saw-sharpening device comprising an apron or support, two saw holding and clamping strips secured to the rear portion of the said apron and having gages or scales of different pitch formed on their upper edges, and a flat file clamp or holder, as set forth, adapted to retain the file in the proper position, substantially as described.

3. A saw-sharpening device comprising the apron A, saw-clamping strips B and B′, arranged and secured at the rear portion of the said apron, and having gages or scales 2 formed on the top portion thereof, and a tool-holder, C, having a suitable clamping-screw and means for leveling the outer surface thereof, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ORLO J. MARSH.

Witnesses:

J. J. HOLDEN,

P. A. PAINTER.