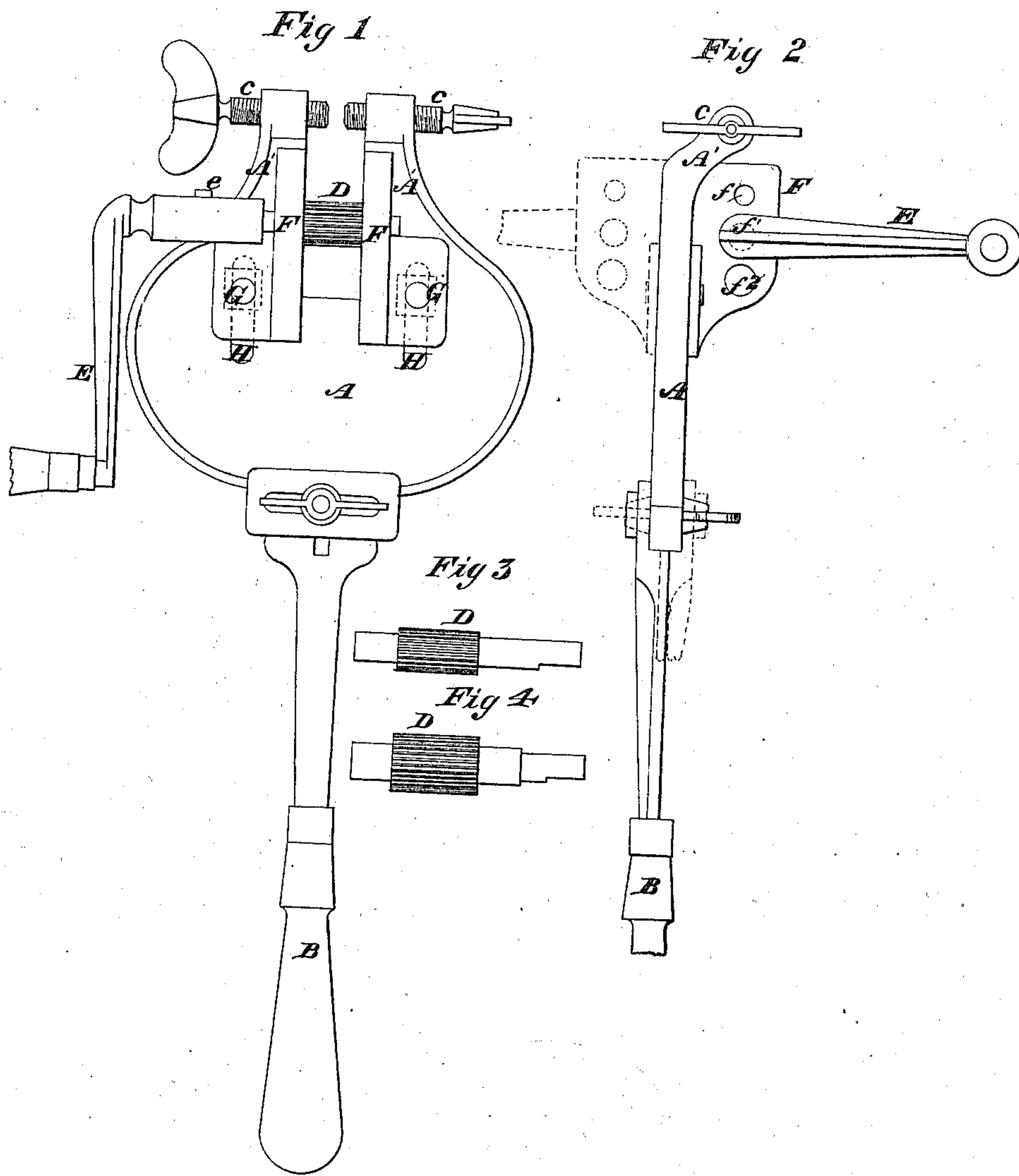


J. E. Emerson.

Saw-Gummer,

N^o 66,693.

Patented July 16, 1867.



WITNESSES:

Chas. D. Smith
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United States Patent Office.

JAMES E. EMERSON, OF TRENTON, NEW JERSEY.

Letters Patent No. 66,693, dated July 16, 1867.

IMPROVEMENT IN SAW-GUMMERS.

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, JAMES E. EMERSON, of Trenton, in the county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Saw-Gummers; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a plan of a saw-gummer, illustrating my invention; and

Figure 2 is a side elevation of the same.

Figures 3 and 4 are detached views, illustrating burrs or cutters of different sizes.

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

This invention relates to certain improvements on the saw-gummer for which Letters Patent of the United States have been granted to me, the same being numbered 62,948, and bearing date March 19, 1867. That gummer embraces features which are exhibited in this, and which therefore need not be particularly described, to wit, the clamp or thumb-screws acting as pivots, the rotary cutter operated by a crank-handle, and the adjustable handle by which the instrument is held when in operation. In the aforesaid patented gummer provision is made for the employment of a cutter of one size only, which cutter is not adapted for adjustment, which I have found to be necessary in order to bring it into the most convenient position for operation. In the gummer, the subject of this invention, provision is made for the employment of cutters of different sizes, and also for the adjustment of the operating cutter toward or away from the thumb-screws, as well as from one side to the other of the stock or holding-frame.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe it in detail.

In the accompanying drawings, A may represent the stock or body of the instrument; B, the adjustable handle; and C C, the thumb-screws for clamping the instrument to the saw-blade. D represents the rotary burr or cutter, operated by means of the crank-handle E, which is attached to the projecting axis of the said cutter by means of the thumb-screw *e*. F F represent a two-part tool-holder, in which the cutter D is mounted to rotate. One feature of this improvement consists in providing the tool-holder F F with apertures or bearings *f f*, *f' f'*, which are respectively adapted to accommodate the axes or journals of large and small cutters, different sizes of which are represented in figs. 3 and 4. Hence the cutter in the tool-holder may be replaced by a larger or a smaller cutter, according to the size of the teeth of the saw to be operated upon. The tool-holder F F is cast or formed separately or independently of the stock A, and is secured to the same by the set-screws G G, to receive which the stock is provided with slots at H H, which enable the tool-holder to be adjusted so as to set the cutter D toward or away from the thumb-screws C C. This adjustment adapts the cutter to be brought to the root of the teeth or point of operation thereon when the clamp-screws cannot be conveniently applied so as to attain that end. It will be seen that the nature of the work oftentimes renders it desirable, if not necessary, to transfer the cutter D and crank-handle E to the opposite side of the stock A. In this device the set-screws G G enable the tool-holder F F, together with the crank-handle E and cutter D, to be shifted from side to side at will, the position of the handle B being reversed accordingly. This change of position is represented in red in fig. 2. The stock A is formed with a curve, A', at its upper end, to adapt it to the different shapes and sizes of saws and saw-teeth, so that by placing the cutter-bearings on one side or the other of the stock the position of the cutters, relatively to the pivot-screws *c*, may be varied as required.

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

The adjustable and reversible bearings F F, constructed and applied to the curved stock A A', in the manner and for the purpose set forth.

J. E. EMERSON.

Witnesses:

CHAS. D. SMITH,

CHAS. A. PETTIT.