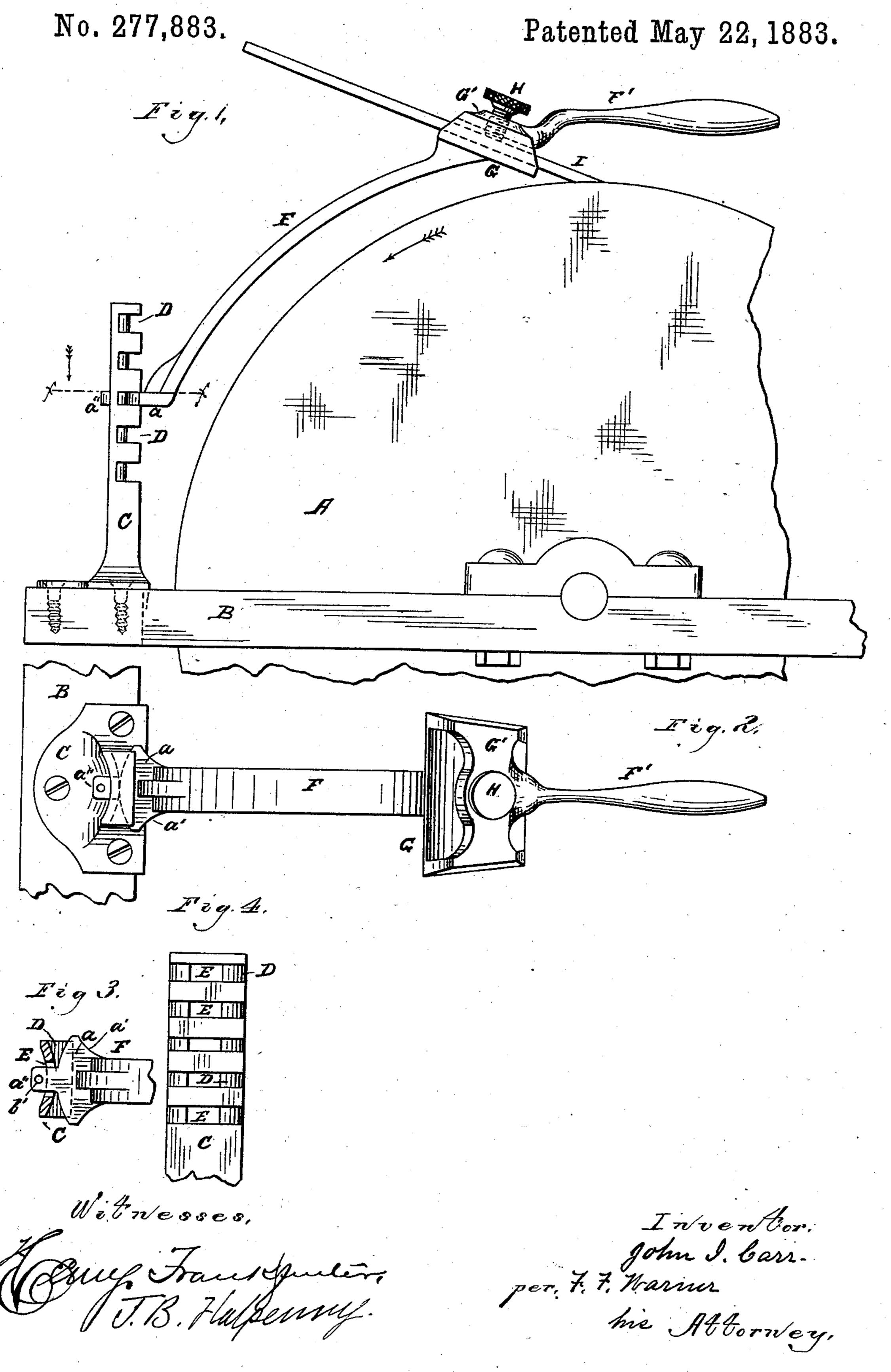
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TOOL HOLDER FOR GRINDSTONES.



United States Patent Office.

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TOOL-HOLDER FOR GRINDSTONES.

SPECIFICATION forming part of Letters Patent No. 277,883, dated May 22, 1883.

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To all whom it may concern:

Beitknown that I, John I. Carr, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tool-Holders for Grindstones, of which the following, in connection with the accompanying drawings, is a specification.

In the drawings, Figure 1 is a side view of a tool-holder embodying my invention. Fig. 2 is a top view of the same. Fig. 3 is a section in the plane of the line xx of Fig. 1, viewed in the direction indicated by the arrow there shown; and Fig. 4 is a front view, in detail, of the standard.

Like letters of reference indicate like parts. A represents a grindstone, and B is the grindstone-frame.

C is a standard applied to the frame B.

D D are grooves or recesses in that face of the standard which is toward the grindstone.

E E are holes passing rearward through the grooved parts of the standard. The backs or inner or vertical faces of the grooves. D D are curved or bowed outwardly, as indicated.

F is a curved arm or lever, terminating, by preference, at its forward end in a handle, F'. The rear end of the arm F has thereon a flat and comparatively broad part, a, having a curved edge, a'; and a" is a small tongue projecting from the edge a'.

G is a plate or table on the forward part of the arm F, and G' is an arch or bridge on the plate G.

His a set-screw passing through the bridge G'.

I is a tool clamped between the plate G and its bridge by means of the screw I. I cast the arm F, the plate G, and bridge G' all in

To use this holder I pass the tongue a"
through one of the holes E E—for example, through the central hole—as shown in Fig. 1.
The part a fits nicely, but not tightly, in the central groove, D, so that the arm F will be firmly supported over the grindstone. The tongue a" passes loosely through the central hole, E. I then arrange and bind the tool as shown and turn the grindstone. By bearing gently down upon the handle F' the edge of the tool will press sufficiently against the stone, and will be so inclined that a beveled edge will be ground.

While the tool is being ground it may be moved back and forth sidewise by swinging or moving the arm F laterally, the arm turning in the standard C. To prevent the arm F from 55 being accidentally drawn from the standard, I pass a small pin, b', into a hole in the tongue a''. I make the plate G broad enough to permit the tool to be set at angle therein, so that an angling edge may also be ground.

In practice tools have cutting-edges which differ in the slope of the bevel. To adapt my tool-holder to this circumstance I make a number of grooves, D D, in the standard C, and these grooves increase regularly in height or 65 between their upper and lower surfaces, the highest and lowest grooves being largest, measured between the said surfaces, and these measurements decreasing until the central groove is reached, which neatly fits the plate 70 or part a', as before stated, all of which is clearly represented in Figs. 1 and 4. By this means the arm F, and consequently the tool, will be tilted to a greater or less degree with relation to the stone, and the bevel on the 75 cutting-edge will therefore be more or less broad, as may be desired, and the tool will at all times be retained at the inclination necessary for grinding it to the bevel to be produced. These grooves I intend to number, so 80 that each groove, after a little practice, will easily become associated in the mind of the operator with a bevel having a corresponding slope, and so that, wishing to produce a particular bevel, he will know in what groove to 85 place the arm F in order to accomplish his purpose.

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

The combination, substantially as specified, of the arm or lever F with its bridged table or plate G G' thereon near its forward end, the screw H, entering the said bridge, and the standard C, having therein grooves or recesses 95 arranged one above the other and adapted to receive the rear end of the said arm, substantially as and for the purposes set forth.

JOHN I. CARR.

Witnesses:

F. F. WARNER, GEORGE N. STONE.