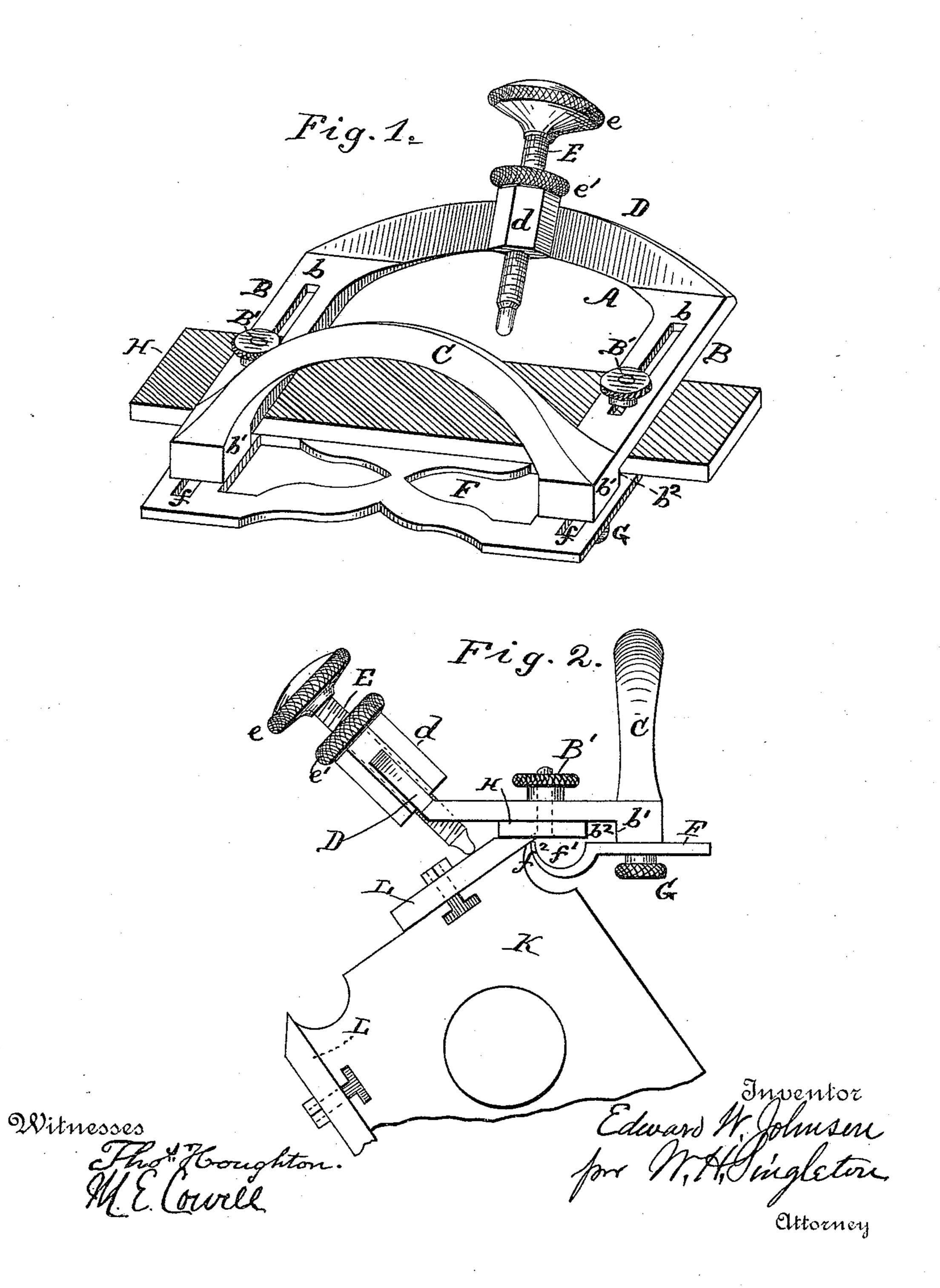
E. W. JOHNSON.
HOLDER FOR FILES.

No. 438,271.

Patented Oct. 14, 1890.



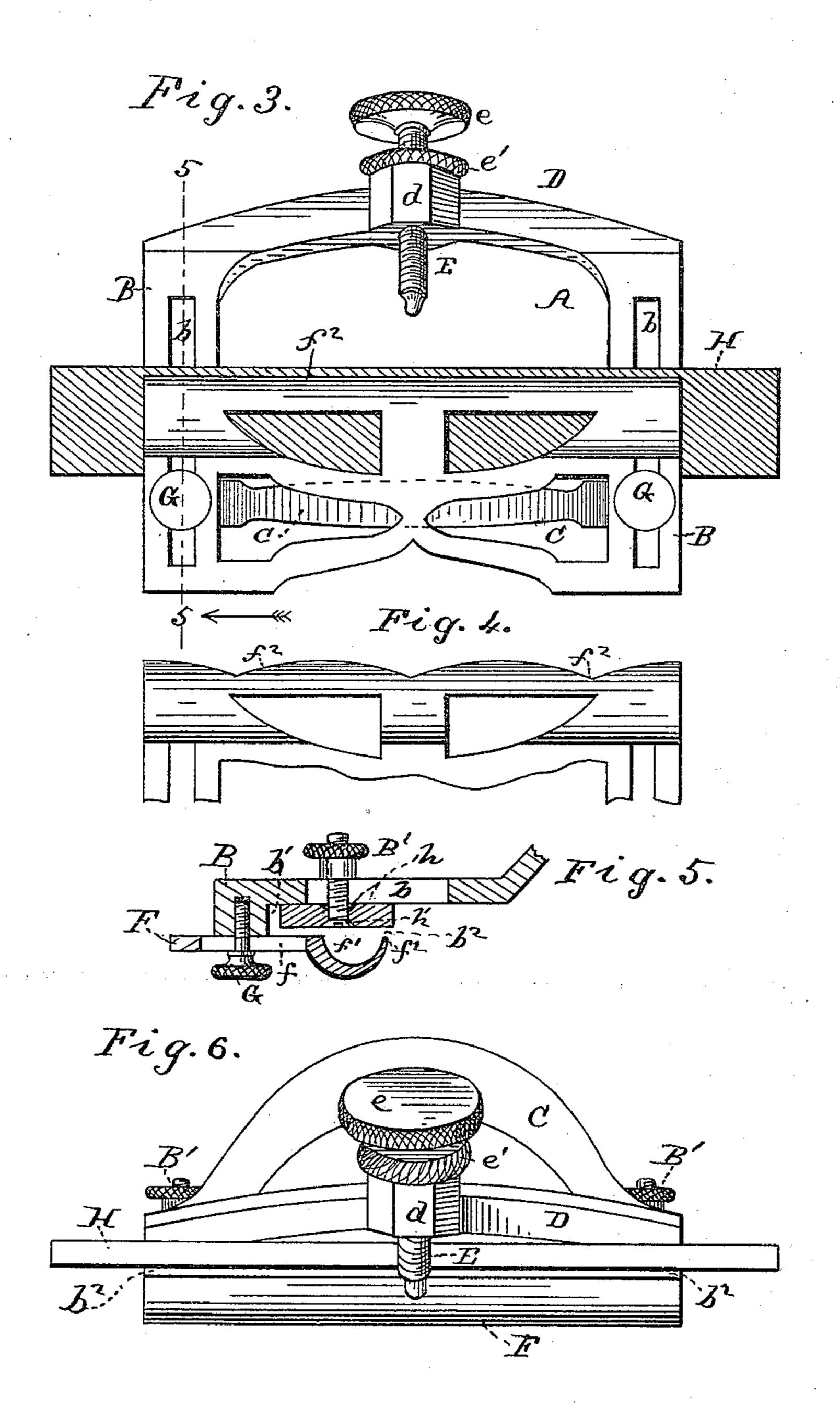
(No Model.)

3 Sheets—Sheet 2.

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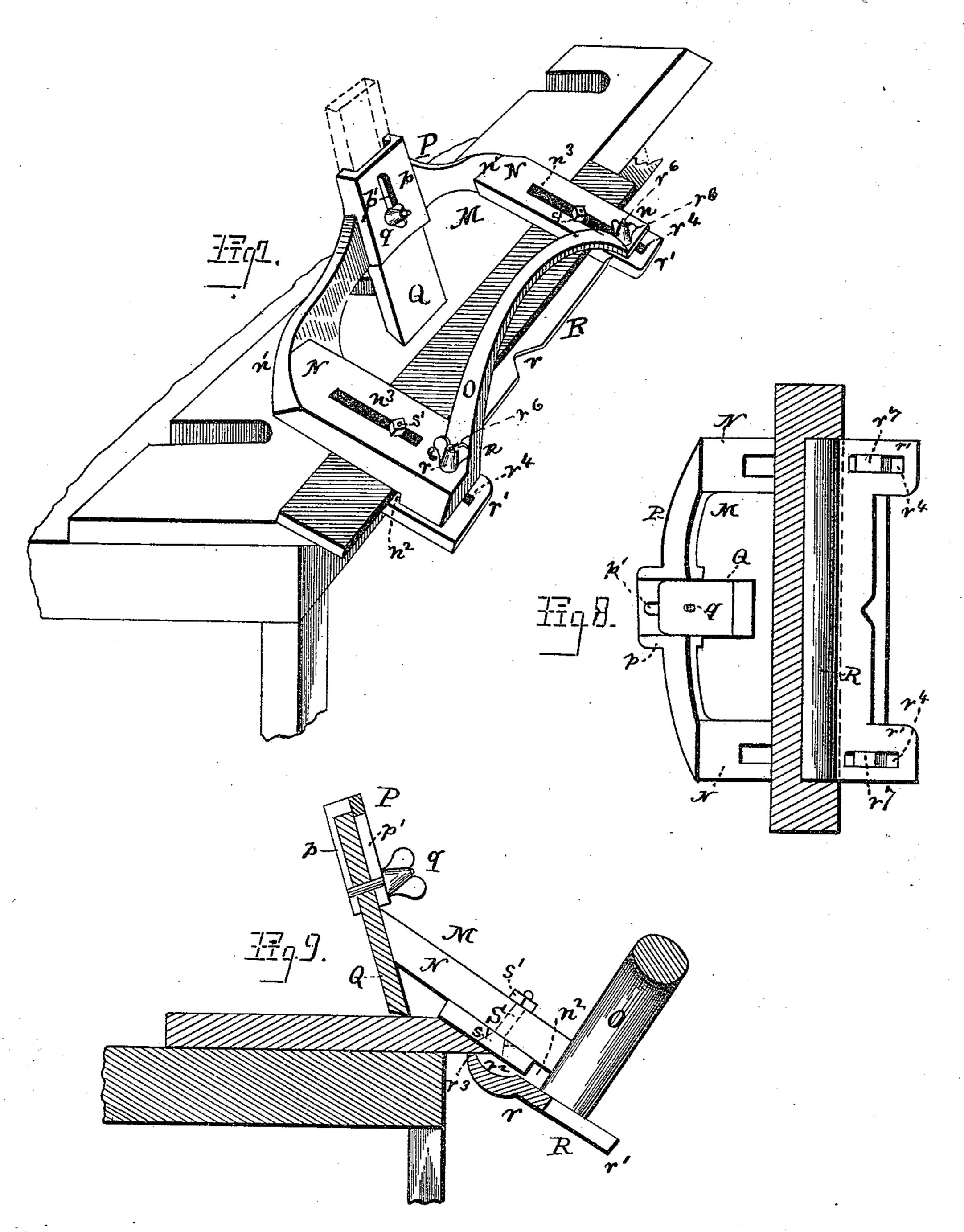
Witnesses Houghton.

Edward W. Johnson.
By his attorney
M. H. Jangleton.

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Witnesses M.E. (ourll. Thos Houghton.

Edward H. Johnson, for M. H. Singleton.

## United States Patent Office.

EDWARD W. JOHNSON, OF OLEAN, NEW YORK.

## HOLDER FOR FILES.

SPECIFICATION forming part of Letters Patent No. 438,271, dated October 14, 1890.

Application filed April 15, 1890. Serial No. 348,025. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. JOHNSON, a citizen of the United States, residing at Olean, in the county of Cattaraugus and State 5 of New York, have invented certain new and useful Improvements in Holders for Files; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of one form of the holder. Fig. 2 is an end view showing the position of the device when in use. Fig. 3 is a view from underneath. Fig. 4 is a modified form of the gage-plate. Fig. 5 is a sec-20 tion on line 5 5 of Fig. 3. Fig. 6 is an elevation. Fig. 7 is a perspective view of a modification in use. Fig. 8 is a bottom view thereof.

Fig. 9 is a section of Fig. 7.

This invention relates to an improvement

25 in holders for files.

In the ordinary use of files they are held by handles at one end or both ends thereof and are drawn over the object to be filed. In the employment of such devices, especially 30 as has been found in sharpening straight-edged cutters, there is a tendency to concave the edge of the knife.

The object of the present invention is to provide the file with such a form of holder 35 that the whole face of the file is drawn with a "draw-cut" over the edge to be sharpened, which gives a straight smooth finish to this edge, and effectually obviates any tendency to

"concave" the cutter.

To this end the invention consists in the

construction hereinafter set forth.

In the annexed drawings, the letter A indicates a file-holding frame having the side bars B B, the handle C, and the yoke D. In 45 the middle of the yoke D is a threaded boss d, through which passes the threaded pin E, ! side bars B B are made the slots bb, in which are set-screws B' B'. Under this frame A is 50 the gage-plate F, which may be a skeleton the tapered edge  $r^3$ . The offsets r' r' have

transverse slot f, coinciding with a side bar B. Passing through this slot and engaging a hole in such side bar is a set-screw G. The inner edge of this gage-plate is curved so as to have 55 a longitudinal trough f' on top and a tapering lip  $f^2$ . At the point of attachment between the gage-plate and the side bars the latter have offsets b' b', so that there is a space  $b^2$  between the gage-plate and said side 60 bars.

A holder thus constructed is ready to be

applied to a file.

A file H, having apertures h, with countersinks h' h', is secured in place lengthwise of 65 the holder, the set-screws B'B' engaging such apertures. When the file is in place, there is a clearance between the tapering lip  $f^2$  and such file.

In Fig. 2 is shown a use of the device. K 70 shows a cutter-head with the cutter-knives L. The holder containing the file is placed, as shown, against the cutter to be sharpened. The edge of the knife comes into the clearance between the lip  $f^2$  and the file. The lip bear- 75 ing on the under side of the cutter-knife keeps the file squarely against the edge of the cutter, insuring a straight draw-cut. By adjusting the gage-pin E the angle of the edge of the cutter can be varied as desired.

As the filings are made they drop into the

trough and pass off out of the way.

In Fig. 4 the edge  $f^2$  is shown scalloped, so as to reduce friction.

In Figs. 7, 8, and 9 are shown a modification 85 of the device. The letter M indicates the fileholding frame. This frame M consists of the side bars N N, connected at their rear ends nby the handle O and at their front ends n'by the upwardly-curved bar P. At its mid- 90. dle this yoke P has the guide p and slot p'. Within the guide p is a slide Q, held therein adjustably by a binding-screw q, passing through the slot p'. Secured to the rear ends n of the bar N is a gage R. This gage R con- 95 sists of a plate r, extending the whole length of the frame M from the outsides of the bars having the head e and the jam-nut e'. In the [N N], and offsets r' r' at the bars [N N], projecting rearwardly. The plate r is curved transversely, having the trough  $r^2$  on top and 100 for lightness. At each end of this plate is a | slots  $r^4$   $r^4$ , through which pass binding-screws

 $r^6$   $r^6$ , which have heads  $r^7$   $r^7$  resting against the offsets, said screws having the thumb-nuts  $r^8$   $r^8$  on top of the bars N N. At their rear ends n n these bars N N are thicker than at the front, which forms a space  $n^2$  between said bars and the gage R. These bars N N also have slots  $n^3$   $n^3$ .

With this holder is to be used the specially-adapted file having the countersinks. These countersinks are to be the same distance apart as the slots  $n^3$   $n^3$  of the holder. Bolts S S, having tapering heads s s, are placed in these holes, and their shanks, coming through the slots  $n^3$   $n^3$ , engage nuts s' s' on top of the holder.

The file is first to be secured to the holder,

and then the gage R is put in place.

In Fig. 1 the device is shown in position for use, the letter T representing a planer-knife, 20 t being its cutting-edge, which is to be sharpened.

The operation of the device is as follows: The slide Q and the gage R are adjusted to fit the thickness and bevel of the planer-25 knife. The file is so adjusted as to bring an unused part or any desired part upon the edge of the planer-knife. The device is then placed upon the planer-knife, the file, the slide Q, and the gage R furnishing supports that guide it, and it is slid forward and back until the knife is sharpened.

The advantages of this device are:

First. There is economy in files, as the whole surface of the file may be used by successive adjustments in dressing only that part of the planer-knife that is desired.

Second. There is economy in time. The device can be used without taking the knife from the planer. The operator has a better 40 grasp upon his file, and can therefore use it

more effectively, and the file, by moving parallel with the edge of the planer-knife, cuts away more rapidly.

Third. The file, by moving parallel with the edge of the planer-knife, keeps the edge of 45 the knife straight and the bevel uniform, thereby requiring less grinding of the knife and less attention when grinding, while at the same time the planer will produce better work.

Having thus described my invention, what I claim is—

1. The file-holder provided with the adjustable gage-plate, as set forth.

2. The file-holder provided with the adjust- 55 able gage-plate and the gage-pin, as set forth.

3. The file-holder consisting of a frame and the adjustable gage-plate spaced from the frame, as set forth.

4. The frame for holding files, having a 60 yoke with adjustable gage-pin and below it an adjustable gage.

5. The frame for holding files, having slotted arms for the screw-bolts to hold the file and holes and screw-bolts to sustain the gage. 65

6. The combination of the frame having the adjustable gage-pin and the gage-plate underneath, having slots in the arms, and the screw-bolts.

7. The combination of the frame having a 70 yoke in which is an adjustable gage, slotted arms provided with screw-bolts, a file with holes countersunk on each side, an adjustable gage-plate, and a curved handle.

In testimony whereof I affix my signature in 75

presence of two witnesses.

EDWARD W. JOHNSON.

Witnesses:

THOS. HOUGHTON, GRAHAM L. GORDON.