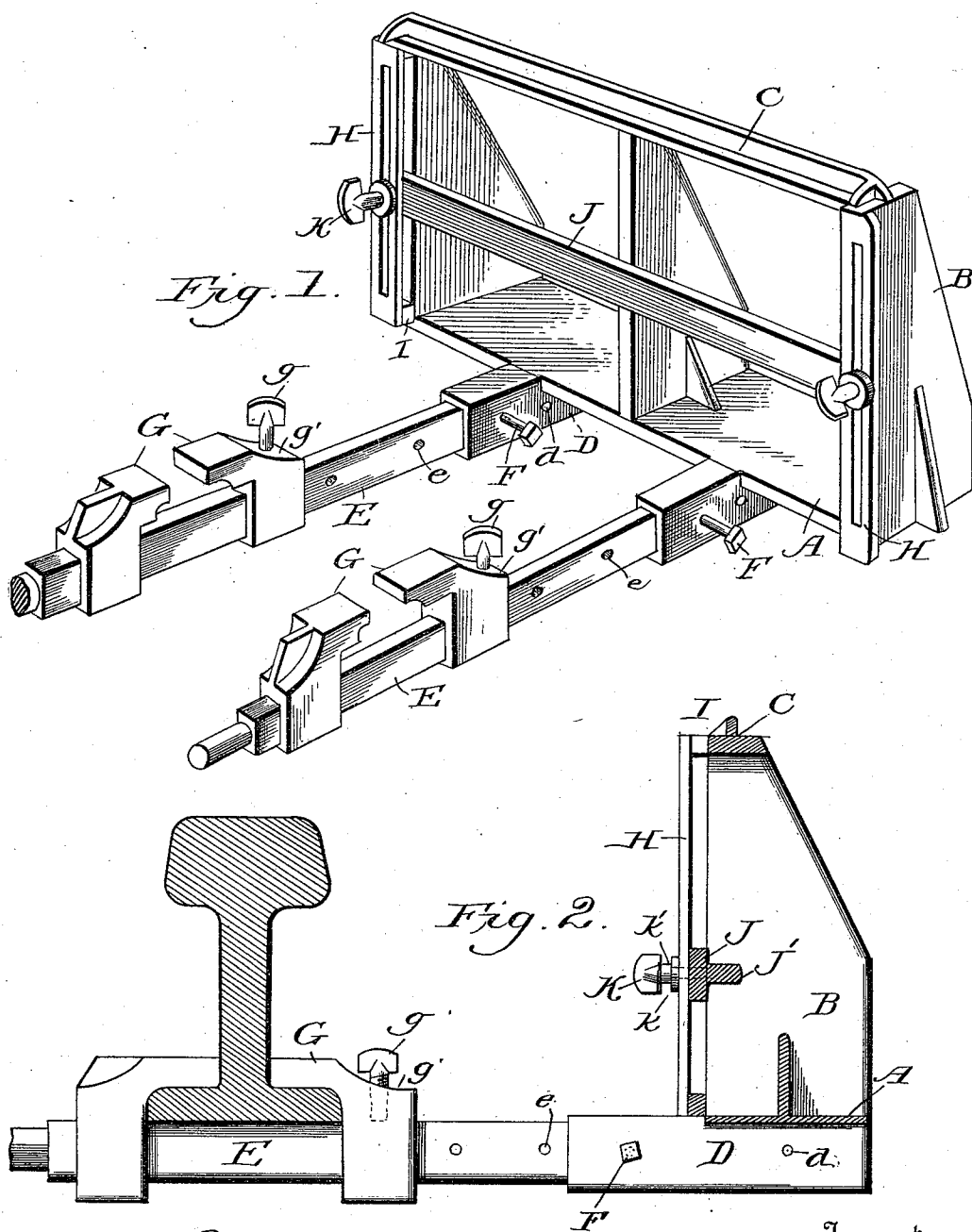


(No Model.)

J. C. JONES.
PORTABLE DRILL FRAME.

No. 532,881.

Patented Jan. 22, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES C. JONES, OF PHILADELPHIA, PENNSYLVANIA.

PORTABLE DRILL-FRAME.

SPECIFICATION forming part of Letters Patent No. 532,881, dated January 22, 1895.

Application filed July 23, 1894. Serial No. 518,361. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. JONES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Portable Drill-Frames; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in portable drill frames or machines, and it has for its objects among others to provide a simple and cheap frame having adjustable arms provided with clamps designed to be clamped to a railroad rail to hold the frame firm while the drilling is being done. The frame carries a vertically-adjustable bar for supporting the drill.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention in this instance resides in the peculiar construction, and the combinations, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improvement. Fig. 2 is a vertical section of the same applied to a railroad rail in position for use.

Like letters of reference indicate like parts in the different views.

Referring now to the drawings A designates the base plate of the frame which may be of any suitable dimensions and from which rise the end and intermediate uprights B which are joined at their upper end by the top plate C, the uprights being braced and strengthened if desired by braces or ribs as indicated. Upon the under side of the base plate are the socket plates D which are arranged at right angles to the length of the base plate and are

provided with a plurality of transverse openings *d* for the reception of pins or bolts as will hereinafter appear.

E are rods fitted to slide in the sockets as shown and these rods are provided with a plurality of transverse openings *e* for the reception of the bolts or pins that serve to hold the said rods in their adjusted position, the said pins or bolts *F* passing also through the holes in the side walls of the socket plates as shown. The outer ends of these rods may be fashioned into handles if desired so that they may be more easily manipulated. Upon these rods are fitted to slide the clamps *G* which are shaped to fit and embrace the tread and web of a railroad rail as shown and they are held in their adjusted positions by set screws *g* held therein and engaging the upper sides of the rods, the clamps being cut away or hollowed out as shown at *g'* to provide for the head of the screws so that they will be within the area of the clamps as shown.

To one side of the uprights are secured the vertically-slotted rails *H* which are held at a distance from the edge of the uprights in any suitable manner as by the blocks *I*, and in the space thus provided between the edge of the uprights and the adjacent faces of the rails is fitted to slide the bar *J* upon which is mounted a drill. This bar is adapted to be held in its adjusted positions by means of the thumb screws *K* which pass through the slots of the rails and into the ends of the bar, suitable washers *k* being provided as shown against which the shoulders *k'* on the thumb screws bear. The blocks at the top and bottom of the uprights not only serve to space the rails but they serve also as stops to limit the movement of the bar.

My device is applied by securing the clamps *G* in the manner described, around the lower flange of the rail adjacent to the web thereof and moving the frame *B* to or from the said rail and adjusting it at the proper distance therefrom by means of the pins *F* engaging the plates *D* and rods *E*. By moving the bar *J* up or down, the position of the drill relative to the web of the rail can be adjusted in a convenient manner. By raising or lowering the bar *J* the drill may be adjusted to engage

the rail at a higher or lower position as may be desired.

What I claim as new is—

1. A portable drill frame consisting of the
5 combination of a base having integrally
formed therewith the tubular plates D in
which are adapted to move the bars E to be ad-
justed therein by means of pins F passing
through the plates D and bars E, clamps at the
10 ends of the bars E by which the frame may be
secured to a rail joint or other object upon
which the drill is adapted to be used, a bar J
adapted to hold the drill, the said bar mov-
ing in guides in uprights on the said frame
15 and adapted to be adjusted in any desired
position by means of screws K moving in elon-
gated vertical slots in said uprights, substan-
tially as and for the purposes specified.

2. The combination of the base plate with
20 its socket plates, uprights and top plate, of
the vertically-slotted rails spaced from the up-

rights, the bar fitted to slide between the rails
and uprights, and the thumb screws passed
through the slots of said rails and into the
said bar, as set forth.

3. The device described consisting of the
base plate with socket plates at right angles
thereto, the uprights, the top plate, the slot-
ted rails, the bar slidingly fitted between said
rails and uprights, the thumb screws for hold-
ing the bar in its adjusted position, the rods
adjustable in the sockets, the clamps adjust-
able on the rods and the means for holding
the rods and clamps in their adjusted posi-
tions, all substantially as shown and specified.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

JAMES C. JONES.

Witnesses:

JOSEPH O. CLINE,
ROBINSON C. WRIGHT.