J. F. PARKER.

ADJUSTABLE DRILL REST.

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905,095.

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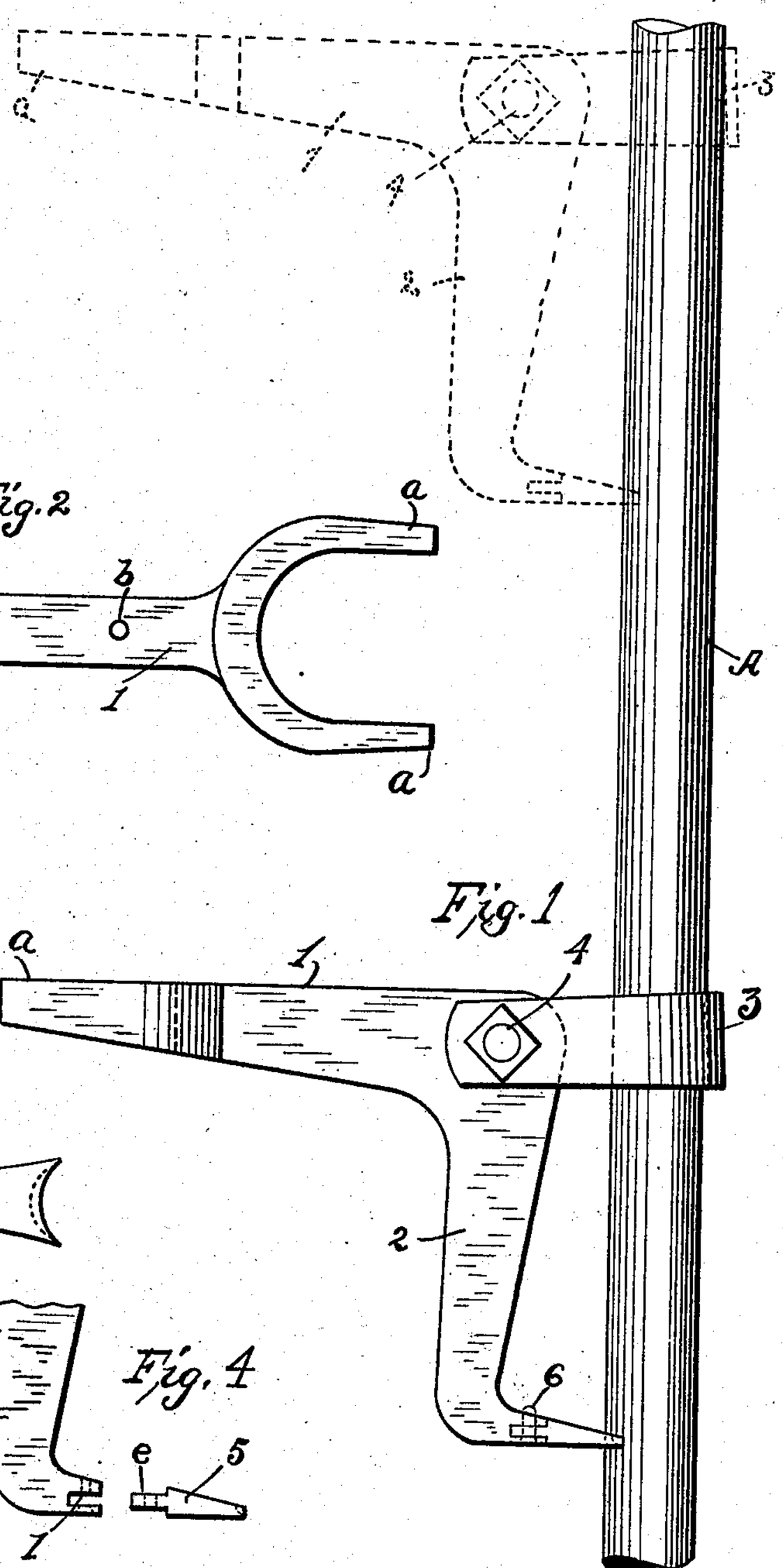

Fig. 1

Fig. 2

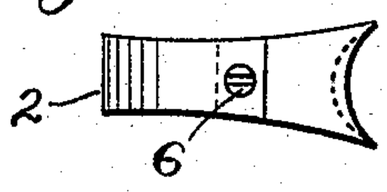

Fig. 3

Fig. 4

Fig. 5

Witnesses

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UNITED STATES PATENT OFFICE.

JESSE FULGHUM PARKER, OF FOUNTAIN CITY, INDIANA.

ADJUSTABLE DRILL-REST.

No. 905,095. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed January 13, 1908. Serial No. 410,540.

To all whom it may concern:

Be it known that I, JESSE FULGHUM PARKER, a citizen of the United States, residing at Fountain City, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Adjustable Drill-Rests, of which the following is a full, clear, and accurate specification of the best manner for its construction, being such as will enable others to make and use the same with absolute exactitude.

The object of my present invention, broadly speaking, is to provide an adjustable drill-rest which will be strong and durable in construction, easily operated and controlled, and which can be manufactured and sold at a comparatively low price.

More specifically stated, my object is, to provide a self securing drill-rest which may be easily and quickly adjusted to the height desired where it will automatically engage itself without the use of screws, bolts, or the like, and when adjusted to the point desired it will not inadvertently slip or become disengaged.

Other subsidiary objects and particular advantages will be brought out in the course of the ensuing specification. One manner for its construction is shown in the accompanying drawings, and that which is new and useful will be correlated in the appended claim.

The preferred manner for the carrying out of the principles of my invention is shown most clearly in the accompanying drawings, in which—

Figure 1 shows a side elevation of my invention in operative and adjusted position. Fig. 2 shows a top plan view of invention. Fig. 3 is a detail view showing the underside of the foot and the manner of its attachment to the leg. Fig. 4 is a detail side elevation of the foot and a portion of the leg, showing said parts separated. And Fig. 5 is a detail view showing the foot as integral with the leg.

Similar indices denote like parts throughout the several views.

The principles of my invention are quite simple and, as will be apparent, the advantages that it will possess are many and decisive, and the construction and operation thereof I will now describe as briefly and as comprehensively as I may.

Referring now to the drawings: The letter A denotes a vertical drill-stem or the like, which is usually round in cross-section, and which may be secured in connection with a drill-press in any well known manner.

The numeral 1 denotes an arm, and 2 a leg, the arm and leg being formed integral with and at substantially right-angles to each other. The outer portion of the arm 1 diverges forming the two fingers *a*—*a*. Formed vertically through the arm 1 is an aperture *b* to afford means for securing a work-support or disk (not shown), which may be extended out over and be supported by said fingers.

Numeral 3 denotes the loop member, which is adapted to extend around the stem A as shown, with its ends contacting with the juncture of the arm 1 and the leg 2 where it is connected, pivotally, by the bolt 4, thereby forming a hinge as indicated.

The lower portion of the leg 2 is turned back horizontally at right angles to the body of the leg, and formed horizontally across the face of the end is a channel or groove *d*.

Numeral 5 denotes the foot, having the tongue *e* adapted to fill said channel *d*, the said foot being of an outline such as to have the appearance of being a continuation of the lower horizontal portion of the leg, as indicated.

The numeral 6 denotes a screw, or bolt, which is disposed vertically through an aperture therefor formed through the tongue *e*, and corresponding apertures in the rearwardly extending portion of the leg 2, by which said foot is detachably secured in position as in Fig. 1. The outer free end of the foot 5 is expanded and hollowed out to fit against the stem A, the edge of the foot being formed sharp to contact stem A.

It is evident that the foot 5 and the leg 2 may be integral with each other if desired, as indicated in Fig. 5, but there are advantages in having them detachable: The leg and the foot may be of different metals, or different degrees of hardness, the foot being of harder material in order to provide the sharp edge to engage the stem, although this is not absolutely necessary; and there may be different lengths of the feet 5, by which the angle of the upper face of the arm 1 and the fingers *a*—*a* may be changed as desired by changing the length of the foot.

While I have described my invention as applicable to a drill-rest, it should not be limited to this use, for it is evident that it

may be employed for other purposes if desired, as for a shelf or bracket, which it may be desired to mount adjustably to a vertical post or stem.

From the above it is evident that my invention may be adjusted to any height desired and when released its own weight will cause it to engage the stem, the two principal factors in this result being,—the hinged or pivoted connection of the loop 3 with the arm and leg, which allows the loop to turn slightly at an angle to engage the stem; and the sharp edge of the foot pressing squarely against the stem below said loop. It is also apparent that the more weight there is applied on the fingers, or the upper face of the arm 1, the tighter the device will hold upon the stem, but at same time being free to be quickly moved to a new position, as indicated by the dotted lines in Fig. 1.

It will be noted that one of the important objects of my invention is to provide a drill-rest which is, under all circumstances and all conditions, freely rotatable about its stem as a pivot, to suit the varying exigencies of the situation and the requirements of the particular operator; and that I have successfully accomplished this by the peculiar construction which has now been fully described in the foregoing specification. I consider this virtue of capability of the drill-rest being swung at will on its stem as a pivot at all times and under all circumstances, as one of the decided advantages flowing from my peculiar structure.

It will be observed that the formation of the bite engaging edge of the foot 5 is advantageous in that when said member engages the stem A the stem is partly received by the foot because of the curvature of its engaging edge, and the engagement of its member with the stem serves to a certain extent to prevent lateral play of the member 1 which would tend to loosen the parts and increase vibration to a certain extent at least.

I desire that it be understood that various changes may be made in the details of construction without departing from the spirit of my invention or sacrificing any of the advantages thereof.

Having now fully shown and described my invention, what I claim and desire to secure by Letters Patent of the United States, is—

In combination, a vertical supporting stem, a supporting member mounted thereon and consisting of an angular shaped body, said body including a horizontal arm provided at its outer end with means for supporting the work, a leg formed integrally with the horizontal arm and extending downwardly therefrom adjacent to the supporting stem aforesaid, said leg being provided at its lower end with a stem engaging foot, said foot having a curved biting edge to partially receive the stem, and means pivotally supporting the supporting member aforesaid and consisting of a strip of metal embracing the stem between its ends and having its ends connected pivotally with the supporting member at the angle of the body thereof, the curved biting edge of the engaging foot of the supporting member being adapted to prevent lateral play thereof.

In testimony whereof I have hereunto subscribed my name to this specification in the presence of two subscribing witnesses.

JESSE FULGHUM PARKER.

Witnesses:

R. E. Randle,

R. W. Randle.