

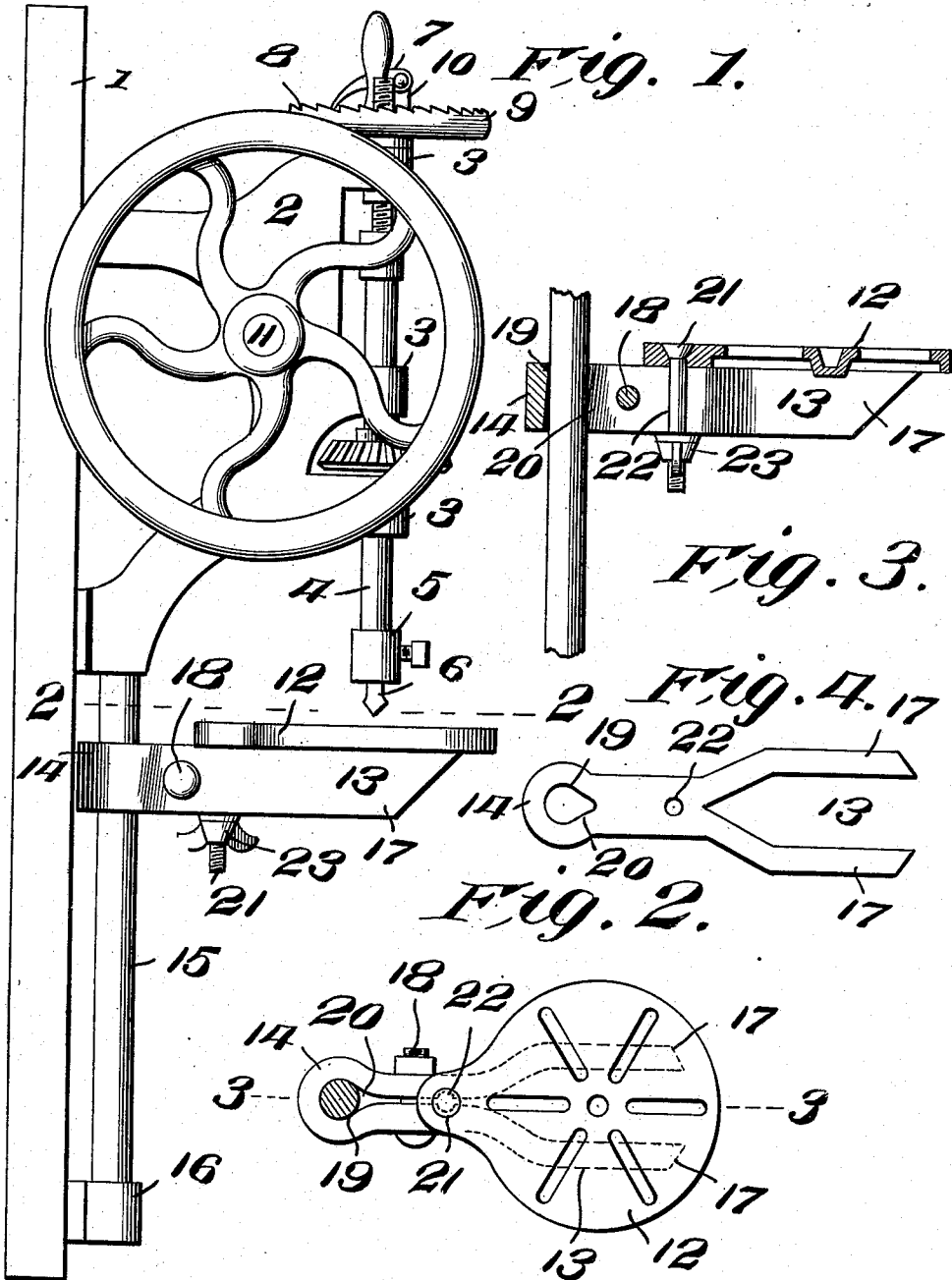
W. L. HARBERT.

DRILL.

APPLICATION FILED MAR. 28, 1907. RENEWED NOV. 25, 1908.

910,920.

Patented Jan. 26, 1909.



WITNESSES:

Thomas Riley
W. J. Fitzgerald

INVENTOR

W. L. Harbert

By

W. J. Fitzgerald & Co
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM LUTHER HARBERT, OF LUMBERPORT, WEST VIRGINIA.

DRILL.

No. 910,920.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed March 28, 1907, Serial No. 365,068. Renewed November 25, 1908. Serial No. 464,509.

To all whom it may concern:

Be it known that I, WILLIAM LUTHER HARBERT, a citizen of the United States, residing at Lumberport, in the county of Harrison and State of West Virginia, have invented certain new and useful Improvements in Drills; 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.

My invention relates to new and useful improvements in drills and more particularly to that class adapted to be used in machine shops or other places for drilling holes in metallic substances and my object is to provide a support for the drill table.

A further object is to provide means for holding the support in its adjusted position. Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a side elevation of a drill showing my improved support secured thereto. Fig. 2 is a sectional view as seen on line 2—2 Fig. 1. Fig. 3 is a sectional view as seen on line 3—3 Fig. 2, and Fig. 4 is a top plan view of a slightly modified form of support.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views; 1 indicates a bracket which may be constructed in any preferred form and is adapted to be secured to a wall and 2 the frame of the usual or any preferred form of drill, said frame having bearings 3 thereon in which is rotatably mounted a drill shaft 4, the lower end of which is provided with a socket 5 in which is to be secured any suitable form of drill 6.

The upper end of the drill shaft 4 is provided with the usual form of feeding mechanism which consists of a latch 7 which is adapted to engage notches 8 on the usual form of hand wheel 9, the latch 7 being mounted upon a shifting arm 10 which is operatively connected in any preferred manner to the driving shaft 11 so that as the driving shaft is rotated to rotate the drill shaft, the arm 10 is operated to automatically lower the drill shaft and direct the drill into engagement with the work to be drilled.

In order to hold the work in position to be engaged by the drill I provide a bed plate 12 which is movably mounted upon my improved form of support 13 which is provided at one end with an eye 14, through which extends a column 15 one end of which is fixed to the drill frame 2, while the opposite end thereof is secured in a bearing 16 at the lower end of the bracket 1, said column being disposed in a vertical position.

The support 13 is preferably formed by bending a length of material at its center to form the eye 14 while the two ends thereof are disposed parallel with each other for a distance and separated at their outer ends to form supporting arms 17 and in order to prevent the paralleling portions of the support from spreading I direct a bolt 18 through the support between the eye 14 and supporting frame 17.

The bore 19 in the eye 14 is slightly tapered and a crevice 20 is provided in that portion of the bore adjacent the paralleling portions of the support, the faces of the crevice being slightly curved and tapered so that the weight of the support will cause the curved faces of the crevice to impinge the column 15 and hold the support in its adjusted position and the walls of the bore are so arranged that when the support is in its operative position, said support will be in a horizontal plane and by slightly elevating the free end of the support above the horizontal, the bore will be concentric around the column 15 and by holding the support in this position the same may be moved upwardly or downwardly upon the column, as soon, however, as the free end of the support is released the crevice will immediately impinge the surface of the column and again hold the support in its adjusted position.

The bed plate 12 is secured to the support 13 in any preferred manner as by directing a bolt 21 through one portion of the bed plate and through an opening 22 in the support, said plate being held in its adjusted position by directing a wing nut 23 on the lower end of the bolt 21.

If preferred the support 13 may be cast in one piece thereby dispensing with the use of the bolt 18 to hold the parts from spreading, such construction being shown in Fig. 4 of the drawings and I reserve the right to use either form as desired.

It will now be seen that I have provided a

very cheap and economical means for supporting the bed plate for a drill and one that can be readily and quickly adjusted to move the bed plate towards or from the drill.

5 What I claim is:

10 The combination with a drill and its supporting frame; of a vertically arranged column mounted beneath the frame, the upper end of said column finding bearing in the frame, a support having an eye surrounding the column, said support projecting from the column at approximately right angles, a reinforce passing transversely of the support, a bed plate secured to the support, the eye of

said support having a tapered crevice in one portion thereof and being offset, whereby the column will be engaged when the support is brought into horizontal position and disengaged when the outer end of the support is raised. 15

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

WILLIAM LUTHER HARBERT.

Witnesses:

J. H. HORNOR,
W. G. CAMBRIA.