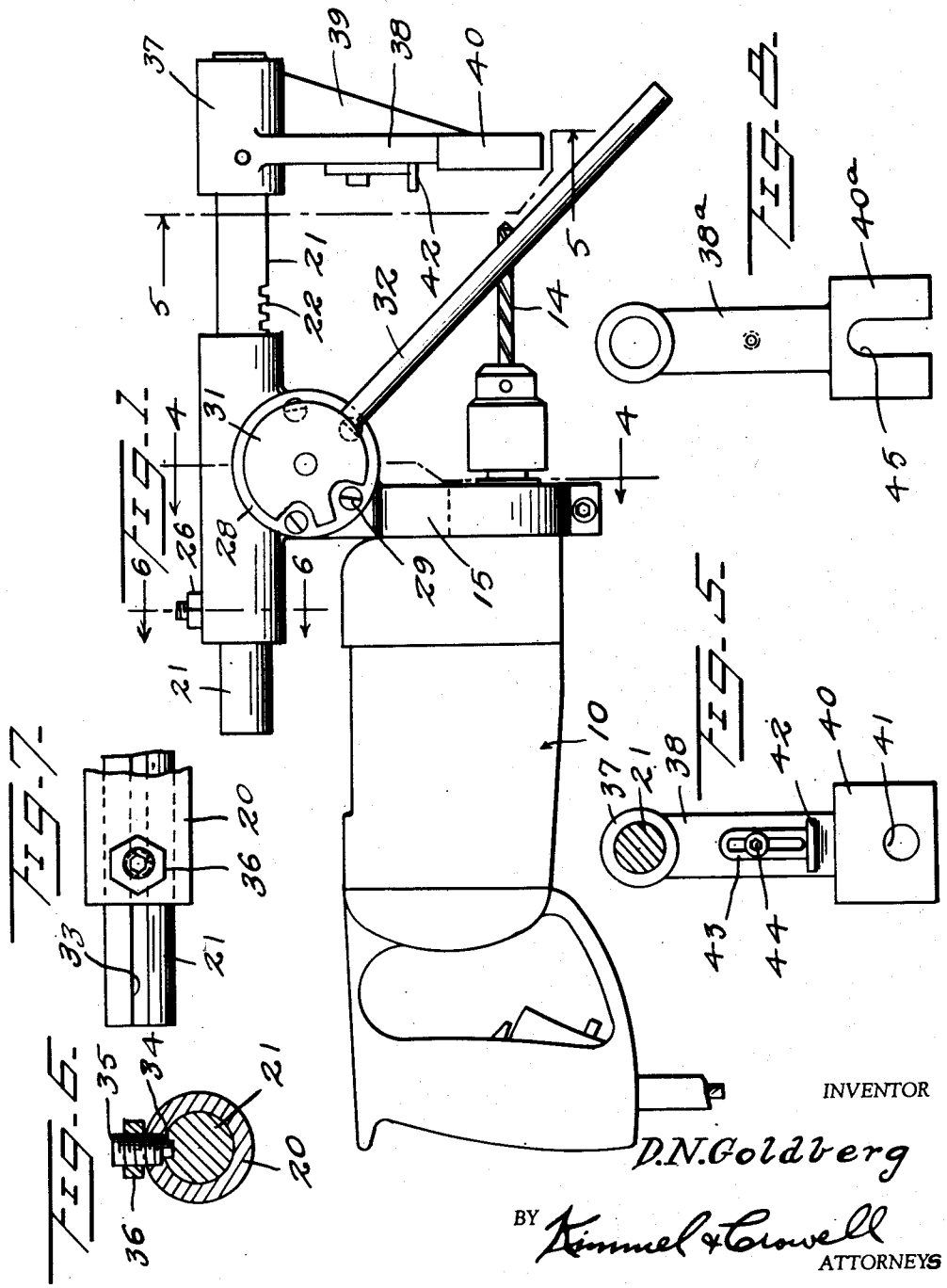
June 23, 1953 D. N. GOLDBERG 2,642,761

DRILL PRESS ATTACHMENT

Filed July 9, 1951 2 Sheets-Sheet 1



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FIG. 2.

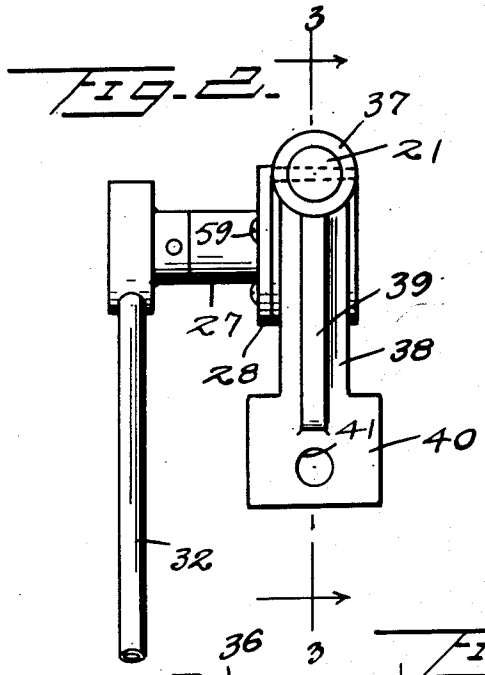


FIG. 4.

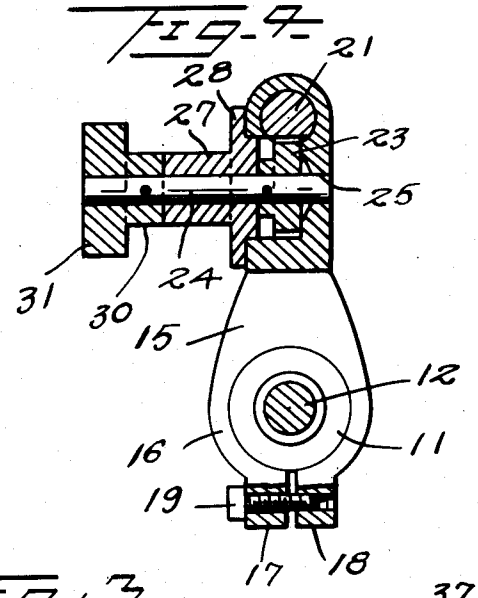
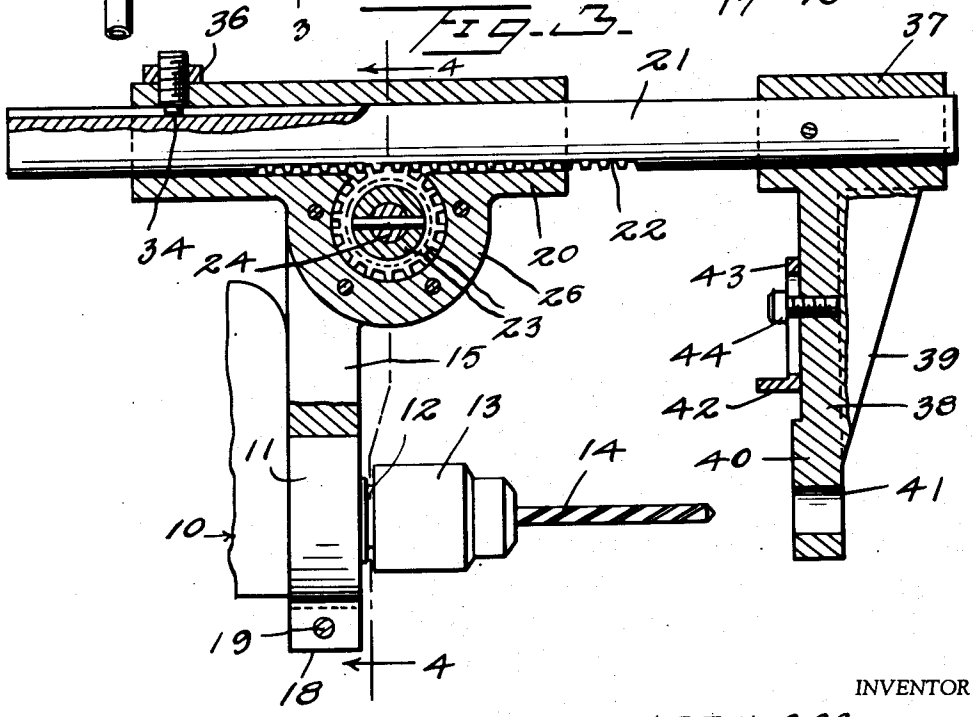


FIG. 3.



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DRILL PRESS ATTACHMENT

David N. Goldberg, Wheeling, W. Va.

Application July 9, 1951, Serial No. 235,730

2 Claims. (Cl. 77—7)

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This invention relates to a drill press attachment for a portable power drill and is an improvement over the construction embodied in my copending application Ser. No. 203,504, filed December 29, 1950, for Drill Press Attachment.

An object of this invention is to provide an attachment which can be mounted on the forward end of an electric hand drill which is designed to move the workpiece toward the drill.

Another object of this invention is to provide an attachment of this kind which includes a rest or guide for the work which is adjustable relative to the axis of the drill.

A further object of this invention is to provide an attachment of this kind which is simple in construction and can be quickly attached to the drill or removed therefrom.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a detailed side elevation of a hand drill having a drill press attachment constructed according to an embodiment of this invention mounted thereon.

Figure 2 is a detailed front elevation of the attachment.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a sectional view taken on the line 4—4 of either Figures 1 or 3.

Figure 5 is a sectional view taken on the line 5—5 of Figure 1.

Figure 6 is a sectional view taken on the line 6—6 of Figure 1.

Figure 7 is a fragmentary plan view of the attachment.

Figure 8 is a modified form of table or rest.

Referring to the drawings, the numeral 10 designates generally an electrically operated hand drill which includes a bushing 11 through which a spindle 12 rotatably engages, and a drill chuck 13 is mounted on the spindle 12 and is adapted to hold a drill bit 14. In order to provide a means whereby a workpiece may be disposed in front of the drill bit 14 and moved toward the bit, I have provided a drill press attachment which includes a bracket arm 15 having a split clamping ring 16 engageable about the bushing 11.

The clamping ring 16 includes a pair of ears 17 and 18, and a clamping bolt 19 extends loosely through the ear 17 and is threaded into the ear 18. A right angularly disposed guide sleeve 20 is carried by the outer or upper end of the bracket arm 15, and a shaft 21 is slidable in the guide 20.

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The shaft 21 is formed with gear teeth 22 on the lower or inner side thereof, and a spur gear 23 which is carried by a shaft 24 is adapted to mesh with the gear teeth 22. The shaft 24 is extended through a bearing opening 25 formed in an offset boss 26 carried by the bracket arm 15 and is also journalled in a bearing bushing 27 having a flange 28 which is secured by fastening means 29 to the offset plate 26.

A bushing 30 is fixed to the outer end of the shaft 24 and includes an annular flange 31 within which the inner end of a shaft rotating lever 32 is fixedly secured. The bearing bushing 27 and the bushing 30 are of such length as to dispose the operating lever or handle 32 laterally of the drill 10 in order that the lever 32 may be freely rotated.

The upper side of the shaft 21 is provided with a longitudinally extending key-way 33 within which a key pin 34 carried by a screw 35 loosely engages. The screw 35 is locked in adjusted position by means of a locknut 36. The forward end of the shaft 21 has fixed thereon a bushing or sleeve 37 and a right angularly disposed arm 38 braced by a bracing web 39 extends from the bushing 38 in the direction of the drill bit 14. The arm 38 has fixed to the inner end thereof or formed integral therewith a work table or plate 40 having an opening 41 aligning with the drill bit 14.

A rest 42 is disposed on the inner side of the arm 38 and includes a slotted base 43 through which an adjusting bolt 44 engages. The rest 42 is adapted to be moved toward or away from the opening 41 and serves as a positioning means for holding the work against lateral shifting in at least one direction relative to the drill bit.

Referring now to Figure 8 there is disclosed a slightly modified form of worktable or rest wherein the supporting arm 38a is provided at its inner end with a plate or table 40a having an elongated and downwardly opening slot 45.

In the use and operation of this device the attachment is mounted on the bushing 11 of the drill member 10 by the split clamping ring 16. The drill 10 may be disposed in a vertical position with the outer end of the shaft 21 engaging on a horizontal surface so that the table 41 will be horizontally disposed.

The rest 42 is adjusted relative to the work and to the drill bit 14 so that the work may bear

against the rest 42. Operating lever 32 is then rotated to move the drill 10 and the drill bit 14 toward the work.

In the event the article is in an angular position either vertical or oblique the article may be drilled by engaging the platform 40 against one side of the article whereupon the lever 32 is rotated to move the drill 10 and the bit 14 toward the work. In certain instances the drill 10 may be clamped to a suitable support whereupon the work may be held against the table 40 and the table and the work then moved to the left toward the drill bit 14.

What is claimed is:

1. A drill press attachment for an electric hand drill comprising a supporting bracket arm, clamping means carried by said arm engageable with the drill to dispose said arm at right angles relative to said drill, a guide sleeve carried by the outer end of said arm and disposed parallel with the longitudinal axis of said drill, a shaft slidable in said sleeve, a longitudinal groove in said shaft, a screw threaded stud carried by said sleeve engageable in said groove, gear teeth carried by said shaft, a feeding device comprising a gear shaft rotatably carried by said bracket arm, a gear fixed on said gear shaft meshing with said gear teeth, an operator fixed to said gear shaft, a work support including a sleeve surrounding and fixed to said shaft parallel with said arm, a work rest including a boss having a longitudinal slot therein, and a right angularly disposed work supporting flange, and a stud extending through said slot and threadably engaging in said work support permitting longitudinal adjustment of said work rest relative to said support.

2. A drill press attachment for an electric hand drill comprising a supporting bracket arm, clamping means carried by said arm engageable with the drill to dispose said arm at right angles relative to said drill, a guide sleeve carried by the outer end of said arm and disposed parallel with the longitudinal axis of said drill, a shaft slidable in said sleeve, a longitudinal groove in said shaft, a screw threaded stud carried by said sleeve engageable in said groove, gear teeth carried by said shaft, a feeding device comprising a gear shaft rotatably carried by said bracket arm, a gear fixed on said gear shaft meshing with said gear teeth, an operator fixed to said gear shaft, and a work support including a sleeve surrounding and fixed to said shaft parallel with said arm.

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