

[54] PORTABLE ELECTRIC HAND DRILL
ACCESSORY

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[58] Field of Search 408/88, 91, 99, 110, 111,
408/112, 87, 20, 14

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Primary Examiner—Gil Weidenfeld

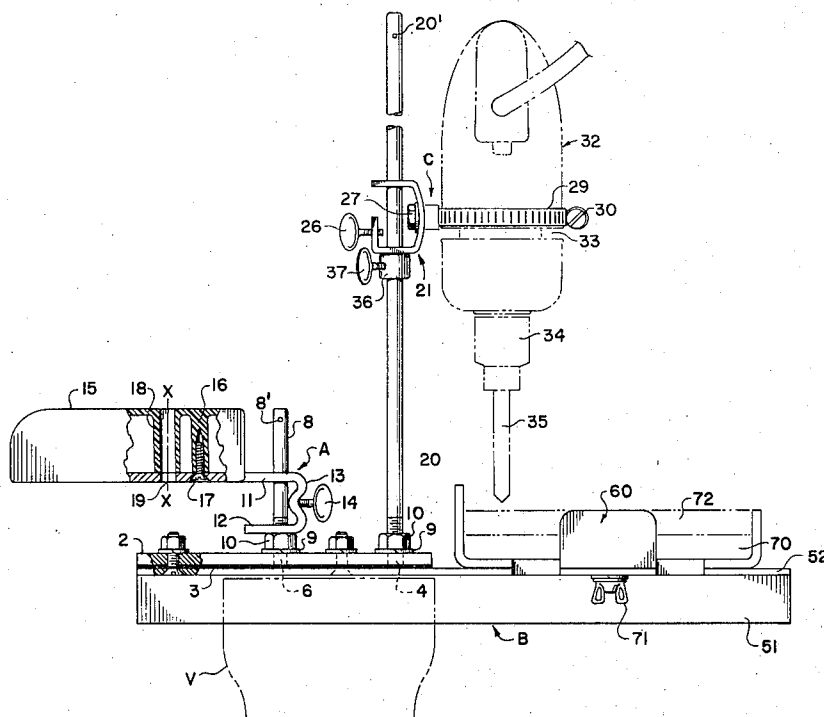
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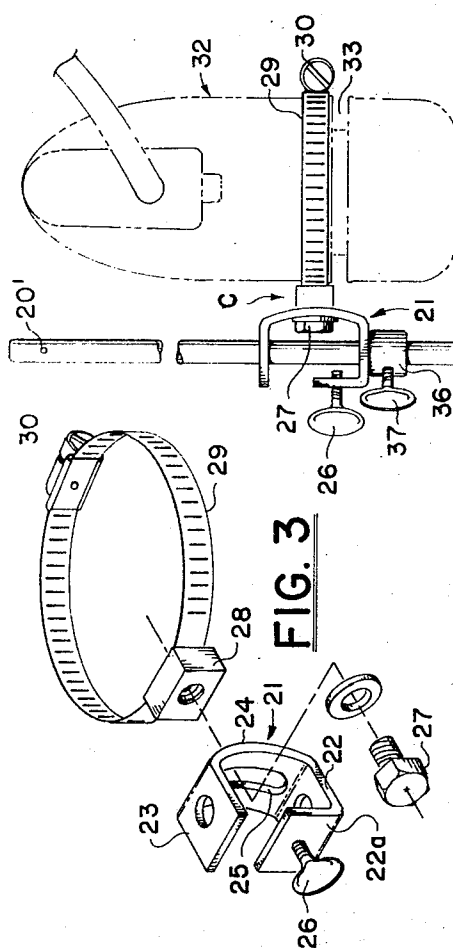
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ABSTRACT

A portable electric drill stand and guide has a base with a handle removably carried on a post intermediate the ends of the base and a tall post secured into an opening forwardly of the handle. A yoke slidable on the post carries a flexible clamping band in which the drill is clamped, and the arrangement enables adjustment to bring a drill bit in the drill into parallelism with a long post. Bolt holes in the base enable it to be removably fixed to a work table or to the horizontal leg of an angle bar for holding the stand in a vise. The angle bar also has a work-supporting table thereon. The taller post may be removed and its threaded end secured to an arm pivoted on a bracket to swing in a vertical arc while the bracket is then fixed on the base in the same hole as that from which the taller post was removed by a bolt which provides a pivot about which the bracket may be rotated in a horizontal arc and releasably held in a selected position.

15 Claims, 9 Drawing Figures





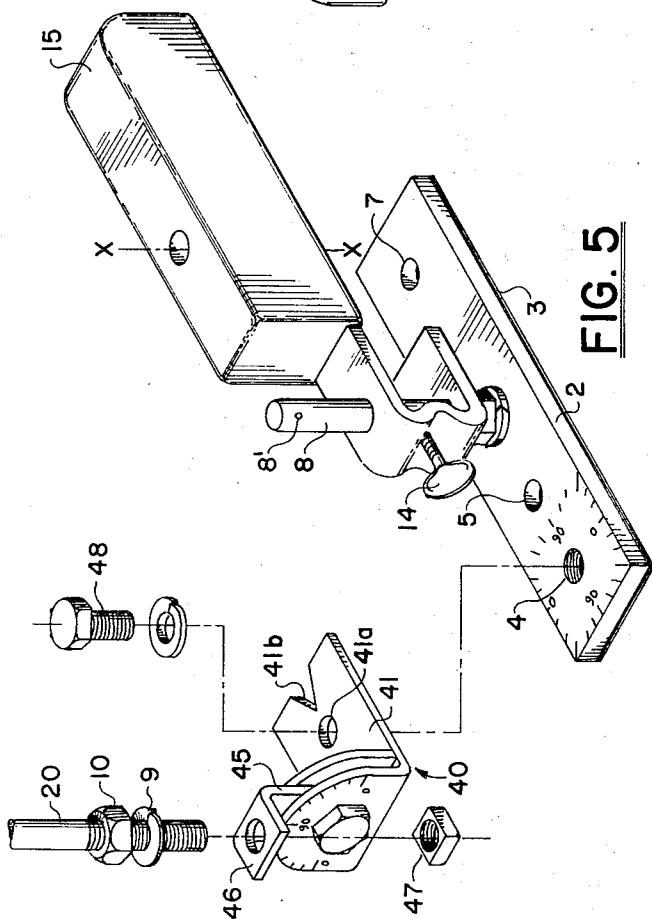


FIG. 5

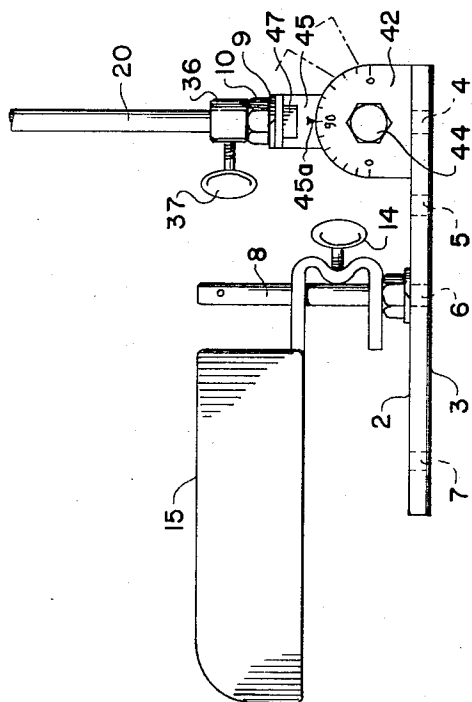


FIG. 4

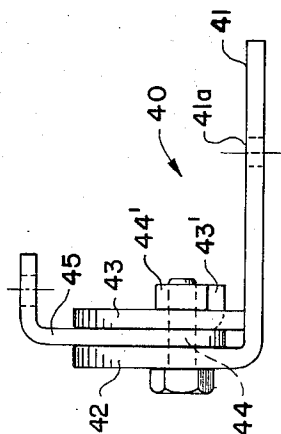


FIG. 7

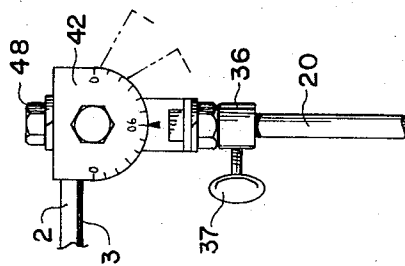
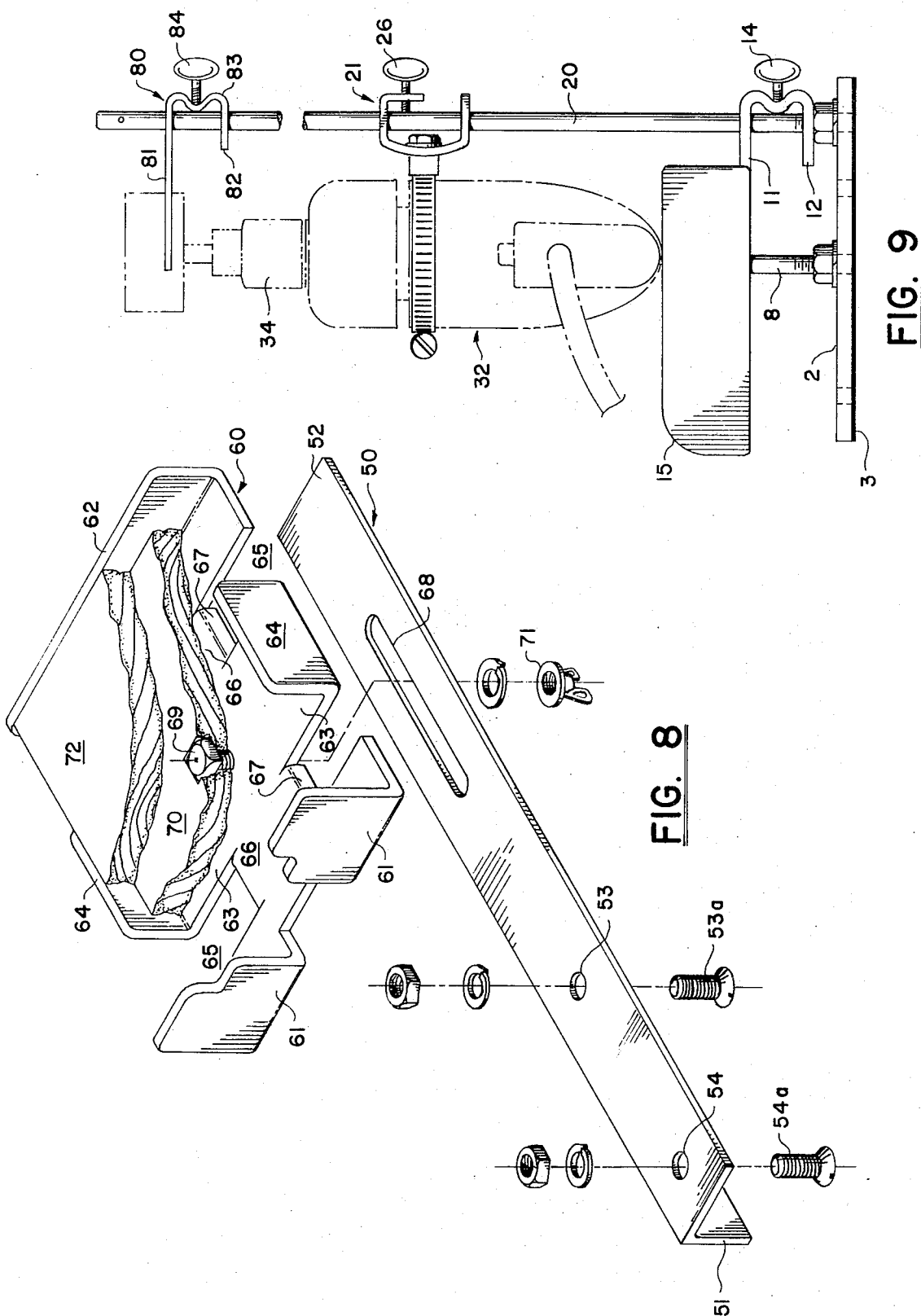


FIG. 6



PORTABLE ELECTRIC HAND DRILL ACCESSORY

This invention is for an accessory for use with an electric hand drill designed to increase the utility of the drill for home users and for others who may need to adapt a hand drill to the performance of many operations where the drill bit should be guided, or the drill supported in a favorable manner or to facilitate the use of the drill in various operations. It may also serve much the same purpose as a drill press but provide much more flexibility.

Heretofore various arrangements have been proposed for adapting an electric hand drill to the performance of drilling operations, usually at a work bench. There is in these devices some structure which, when an electric hand drill is mounted in it, provides a drill press, and even a drill press in which the drill bit can be accurately guided into the work at a widerange of selected angles.

Such arrangements, however, defeat the mobility of the electric hand drill for users in various locations and for a wide variety of operations to be performed away from the work bench. The accessory of this invention provides a portable unit arranged to be used on the job, wherever it may be, in addition to being adapted for use at a work bench, and from which the drill may, of course, be readily removed for use apart from the accessory and then readily replaced therein.

According to this invention, there is provided a basic unit having a supporting base with a handle by which it may be held in position on or against a support and on which an elongate rod or post is carried, provision being made whereby the rod or post may be perpendicular to the base or tilted through a wide range of angles relative to the base. A yoke is provided with spaced arms having aligned holes therethrough so that the post may be passed through the holes and slid along it. This yoke is attached to a flexible steel band or strap which provides an adjustable loop into which the housing of any one of a number of electric hand drills now on the market may be clamped, the connection between the yoke and the strap being also adjustable to enable the axis of rotation of the drill chuck to be adjustably fixed parallel to the axis of the post. With the drill so clamped, it may be moved along the post and a drill bit in the drill will be guided parallel with the post. However, when desired, it may be set at various angles relative to the post. An adjustable stop collar on the post may be used to limit the penetration of the drill into the piece in which a hole is to be drilled only to a limited depth and not entirely through the piece.

The accessory further comprises a section of angle bar to the horizontal leg of which said supporting base may be removably secured while the vertical leg of the angle is clamped in a vise or braced against a block on the work surface with the horizontal flange or leg of the angle in the block and the vertical leg held against the block where a vise may not be available or conveniently used. The same angle bar may be of a length such that it will receive a holder or work support, preferably slidable along the angle into which a block of wood may be placed and on which a piece of work to be drilled may be set in the manner of the work support of a drill press.

Other elements and utilities of the invention will hereinafter appear in the following detailed description of the invention in connection with the accompanying

drawings illustrating a preferred embodiment of the invention and in which:

FIG. 1 is a side elevation of the assembly including the angle section which may be clamped in a vise, as indicated in dot-and-dash lines, and on which a work-supporting platform is provided, the drill itself, which is a conventional unit, being shown in dot-and-dash lines;

FIG. 2 is a perspective view of the basic unit removed from the angle section and with the top of the tall post broken away;

FIG. 3 is an exploded view of the yoke and clamping band apart from the rest of the assembly, the broken line indicating the relationship of the parts;

FIG. 4 is a side elevation of the unit shown in FIG. 2 with an adjustable mounting bracket for the long post replacing the fixed mounting of this post in the base plate as in FIGS. 1 and 2;

FIG. 5 is an exploded view of FIG. 4 with the dot-and-dash lines indicating the relation of the parts;

FIG. 6 is a fragmentary side view of one end of FIG. 4 with the post mounting inverted;

FIG. 7 is a side elevation, in full scale, of the bracket shown in FIGS. 4, 5 and 6;

FIG. 8 is an exploded perspective view of the angle bar portion shown in FIG. 1 with those parts shown in FIG. 2 removed and with the longitudinally-adjustable work support thereon, the broken lines indicating the relation of the parts one to another in the assembly, the wood pieces in the work support being broken away; and

FIG. 9 is a side elevation of the basic unit as shown in FIG. 2 with the drill inverted in relation to FIG. 1 and the end of the drill resting on the handle, with a small diameter grinding wheel in the drill chuck, this view also showing a modified form of stop that may be used as a support for the work piece being ground, the electric drill, as in FIGS. 1 and 2, being shown in dot-and-dash lines.

Referring to the drawings and with reference first to FIG. 1, A designates generally the basic unit, B is an angle section to which A is removably secured and on one end of this section is the adjustable work-holding support, and C is the drill-holding clamp and guide unit.

The basic unit, as shown in FIGS. 1 and 2, comprises a metal plate 2 having a flat bottom surface over which is a thin film or layer 3 of an anti-slip material, such as certain sheet plastic material having a high coefficient of friction. There are four holes through the base arranged in spaced relation to one another along the longitudinal center line of the base. The first of these, designated 4, is at the right end of the plate as viewed in FIGS. 1 and 2 and at the left end of the plate as viewed in FIG. 5. This hole is internally threaded. Next to it is hole 5 which need not be threaded. Next to this, near the center of the plate, is another threaded hole 6, and near the opposite end is hole 7, which is also not threaded.

There is a short post 8 having a threaded lower end removably screwed into the hole 6 in the base while a lock washer and jam-nut 9 and 10, respectively, hold the post securely against unwanted free rotation. The primary purpose of this post is to provide a mounting for a handle assembly. For purposes of convenience, a small hole 8' may be drilled through post 8 near the top through which a nail may be removably passed to pro-

vide means by which the post may be turned to tighten or loosen it. This assembly, as here illustrated, has a terminal portion at one end of a horizontal grip, said terminal portion comprising a heavy metal shank member having a long arm 11 and a short arm 12, which is spaced below arm 11, and there is a connecting portion joining the two designated as 13. There are aligned openings in the arms 11 and 12 to slidably fit on the short post 8. A thumb screw 14 is provided for holding the handle at a selected height and at a selected angle relative to the base. It will hereinafter more fully appear that the handle may sometimes be rotated in a horizontal plane about the post 8. To more effectively increase the holding power of the set screw, the post may be flattened on one or more sides or provided with counter-sunk recesses, not shown.

The long arm 11 of the shank member is perpendicular to the axis of the post 8 and the greater portion of its length is received in a countersink or groove in a plastic, wooden or other handle grip 15. The handle grip 15 here shown is a hollow molded plastic body in which there is a post 16 that contacts the top of arm 11 and a self-threading screw 17 passing upward through the arm 11 enters the post to secure the handle grip to the shank. There is a second tubular post 18 formed in the handle grip parallel with post 16, but which is open from top to bottom. The bottom registers with a hole 19 in the arm 11 of the same diameter. The tubular element 18 will be hereinafter referred to as a tubular guide.

There is normally a long post 20 with a threaded lower end removably screwed into the hole 4, the post also having a washer and jam-nut 9 and 10 as with the short post 8. This post, 20, when so held in place, is parallel with the short post 8 and, therefore, also parallel with the center line $x-x$ of the tubular post 18 of the handle. When this unit is in use, the long post is the one on which the electric drill is mounted, as next described. Post 20, for convenience has a hole 20' there-through near the top for the same purpose as hole 8' in post 8.

For removably mounting the drill on the post 20 to slide along it there is a yoke 21 (shown in detail in FIG. 3) having a lower leg 22, an upper leg 23 (as viewed in FIG. 3), these legs being connected by an arcuately curved connector 24 with a vertically-extending slot 25 along its center from near one end to near the other end. The two legs have aligned openings therethrough in which the post 20 has a sliding fit. The yoke 21 and associated parts may be referred to as a slide. The lower leg has a reversely-turned end portion 22a in which there is a thumb screw 26. Since the piece 21 usually slides on the post 20, the thumb screw 26 is not usually required to be tightened against the post. The diameters of post 20 and post 8 are the same and the internal diameter of tubular guide 18 is such that these posts may have a smooth sliding fit therein. Moreover, the center-to-center distance from post 8 to tubular guide 18 is the same as the center-to-center distance between post 8 and post 20 when the post is set on the base panel as shown in FIGS. 1 and 2.

A bolt 27 passes through the slot 25 and is screwed into a boss or block member 28 fixed on the exterior of a flexible metal band 29 with an adjusting screw arrangement 30 of a well-known type connecting the ends of the band. By adjusting this band, any one of most of the so-called $\frac{1}{4}$ inch and $\frac{3}{8}$ inch electric hand

drills may be inserted in the collar and the collar tightened about it by turning the screw 30, this being a usual type of clamping arrangement for tools of this kind. In FIG. 1 the body of an electric drill with a pistol grip, of which there are many well-known makes, is schematically shown in broken, or dot-and-dash lines, clamped in the adjustable band, and it is designated 32. Nearly all such housings have an annular series of slots being indicated at 33. The band 29 is set parallel with this series of openings, either above as shown or below, depending on the size and make of drill, to assure that the axis of rotation of the drill is parallel with the axis of the loop in which the drill housing is clamped.

In the drawings, the drill chuck is indicated 34 and a drill bit 35 is indicated in the chuck. If the drill bit is not parallel with the post, it may be corrected in one plane by loosening the screw 27 and moving the block 28 with the band 29 up or down along the convex outer surface of portion 24 of the yoke 21. For lining the bit up parallel with the post in a plane at right angles to the first, the band with the drill housing is rotated about the bolt 27 as an axis. This adjustment is also useful where the drill is to be set at an angle to the post.

For assuring that the drill bit is parallel with the post 20, a drill bit 35 is selected for this purpose (or a special rod may be provided) of a diameter which has a sliding fit in the tubular guide 18 in the handle. The thumb screw 14 for the handle is loosened and the handle is swung in an arc about the post 8 and the drill is swung about the post 20 toward the handle and at some point the paths of travel of the tubular guide in the handle and of the drill bit intersect. The drill is then lowered and the drill adjusted relative to the yoke 21 until the bit slides freely through the guide 18 in the handle. The bolt 27 is then tightened, clamping the drill and bit in this position. Since the guide 18 has its vertical axis parallel with post 8 and posts 8 and 20 are parallel, the drill bit will be parallel with post 20 so that, as the drill is thereafter slid down on the post 20, the drill bit will drill perpendicularly into the object on which the base panel 2 is set.

In FIG. 1 there is shown an adjustable sleeve or collar 36 on the post 20. It has a thumb screw 37 for releasably holding it at a selected elevation there it will limit the downward travel of the yoke on the post 20 and thereby limit the penetration of the drill bit into the work piece where it is desirable to limit the depth of the hole which is being bored. In FIG. 1, for purpose of illustration, this collar is set at an elevation higher than it normally would be. The normal would, of course, be low enough to enable the drill bit to penetrate the work piece to the selected depth.

The panel 2 is of a length and width convenient for portability and of a size to provide firm support on the work piece, board or whatever it may be rested upon, but not large enough to be relied upon as a free-standing drill guide, so that the operator in using the unit generally grasps the handle grip 15 with one hand while grasping the pistol grip of the drill with the other and the non-slip layer 3 helps to hold the base against slipping when the point of the drill bit is lined up over the place where a hole is to be drilled. Since the post 8 on which the handle is carried is near the center of the panel, the pressure on the handle is transmitted to the panel at the place where it is generally most effective.

Although in most cases the post 20 will be carried on the base panel 2 in the manner just described, greater versatility can be provided by unscrewing the post 20 from the hole 4 in the base. In its place a right-angle bracket member 40 is provided having a horizontal leg 41 and an upstanding leg 42. There is a rigid upright plate 43 at the rear of the upright leg 42 but entirely separate therefrom. This plate, which I may refer to as a clamping plate, has a hole therethrough aligned with a similar hole in the upright leg 42 when the flat lower edge of plate 43 rests on the horizontal leg, as in FIG. 7.

There is a short arm 45 extending down between the upright leg 42 of the bracket and the plate 43, which is a clamping plate. A bolt 44 passes through registering holes in upright leg 42, the lower end of arm 45, and plate 43. It is screwed into a square nut 44' which is held from turning by a lug 43' struck out from the lower edge of the clamping plate 43. By tightening up on the bolt 44 the arm may be clamped in any position to which it is adjusted. By loosening it, the arm may be moved. By removing the bolt, the arm can be reversed so that the laterally-turned upper end 46 may turn outwardly, as in FIG. 5, or inwardly as in FIG. 7. The front of the upright leg 42 is calibrated to indicate in angle markings. An indexing mark 45a on the lever shows the operator the angle to which the lever is set.

The laterally turned upper end 46 of arm 45 has a hole therethrough and when this arm is used, the lower end of the post 20 is passed through it and a square nut 47 is held in position to screw onto the end of the post below the end portion 46 of the arm while the post is turned. Then, by adjusting the clamping nut 10 above the end portion 46 of the arm, the post may be firmly held on the upper end of the arm. Thus the post 20 may be adjusted to various angles in the bracket. The bracket, in turn, is held in place on the base panel 2 by a bolt 48 which passes through hole 41a in the horizontal leg 41 of the bracket and which screws into the threaded hole 4 of the panel. The free end of the leg 41 of the bracket is notched at 41b. This is because it is often desirable to rotatably adjust the bracket in a horizontal plane about bolt 48, and notch 41b in conjunction with the degree markings about the hole 4 (FIG. 5) enables the user to determine the angle to which the bracket is rotatably adjusted.

By reversing the arm 45 so that the laterally offset upper end 46 turns inwardly over the bracket instead of outwardly, as in FIG. 5, the position of the drill may be changed so that the drill bit can be projected downwardly into the piece being drilled closer to the right longitudinal edge of the base panel 2 as viewed in FIG. 5 or further from the left longitudinal edge of this panel. It should also be kept in mind that the drill may be rotated about the post 20 in any of the arrangements previously described for drilling parallel holes at any selected location in an arc concentric about the post with a radius of the arc equal to the distance from the center of the post to the center of the drill bit.

The total number of different methods of using the apparatus for drilling holes in various objects and locations is much too extensive to attempt to suggest in this specification and the user will no doubt contrive others. In some cases it may be desirable to change the positions of the posts 8 and 20, especially where the bracket 40 is used in a position where the post swings in an arc off the side of the base 2, where clearance or

other reasons require, and, in such case, the handle may be set crosswise to extend to the opposite side and, when so used, it may be more convenient for the positions of the two posts to be reversed.

The holes 5 and 7 in the base 2 provide for the drill support to be secured to a work table or other support by bolts or screws. Also, in many cases, one or more C clamps (not shown) may be used to clamp the base panel 2 to the edge of a work table or other support. For conveniently using the base unit in a vise as a substitute for a drill press, the attachment shown in FIG. 1 and shown detached in the exploded view in FIG. 8 may be used.

This part of the apparatus comprises a length of angle bar 50 with a vertical leg or flange 51 and a horizontal leg or flange 52. The angle bar is preferably at least twice as long as the base 2 and desirably slightly longer. There are spaced holes 53 and 54 in the horizontal flange 52 spaced to match the spacing of holes 5 and 7 in the base panel 2 of the basic unit so that when the basic unit is set on the flange 52, as shown in FIG. 1, the holes 5 and 53 will register, and holes 7 and 54 will register and bolt and nut assemblies 53a and 54a, respectively, may firmly but detachably secure the panel 2 to the top of the flange 52 of the angle bar. The vertical flange 51 may be clamped between the jaws V of a vise as indicated by the dot and dash outline in FIG. 1.

To increase this utility of the arrangement, a work support may be slidably set on the end of the angle bar 50 opposite the basic assembly. This may be variously constructed but, as here shown and as best seen in FIG. 8, it comprises a metal supporting base 60 with spaced end flanges 61 at that end which confronts the panel 2 and an opposite end flange 62. There are opposed intermediate laterally extending portions 63, each with a side flange 64 at its outer end. There are cutout areas 65 at each side of each of the lateral extensions 63, and along the center line of the support there are connecting portions 66 with down-turned flanges 67 at each side thereof, the arrangement being such that the support may be set astraddle of the angle bar with the flanges 67 guiding the support and holding it from rotating on the top of the angle bar. There is a slot 68 extending lengthwise along the flange 52 of the angle bar, and a bolt 69 centered in a lower wood block 70 and passing through the member 60 extends through the slot 68 and has a wing nut 71 on its lower end for releasably clamping the support in adjusted position on the angle bar. A second wood block 72 is fitted in the support 60 over block 70. Wooden blocks may be readily replaced and, since a drill passing through a workpiece placed on the support will penetrate the wood, ready replacement is important.

As showing still another utility for the basic unit, reference is made to FIG. 9. In this view the handle assembly is mounted on the post 20, while the post 8 enters the guide opening 18 that passes through the hand grip. The electric drill and yoke assembly is inverted on the post 20 and allowed to slide down this post until the then lower end of the electric drill motor housing comes to rest on the handle grip. The lower arm 12 of the shank member will, at this time, be resting on the nut 10 at the base of column 20. Instead of a drill bit, a small grinding tool, or brush, or buffing pad or other tool is held in the drill chuck in a vertical position in which it may be conveniently used. In FIG. 9, I have

shown a modified form of stop to replace the sleeve 36 of FIG. 1. This stop, designated generally as 80 is much like the handle shank member, but smaller. It has a long upper arm 81, a short lower arm 82, and a connecting portion 83 in which is a thumb screw 84 for clamping the member to the post 20, the two arms 81 and 82 having aligned holes through which this post passes. It can be used as a depth stop, as in FIG. 1, but as used in FIG. 9, it provides a support for the tool or work piece which is to be held against the grinding wheel. In this case, thumb screw 26 is tightened against post 20 to prevent the drill from rotating about the post.

If it is desired that the axis of rotation of the grinding wheel in FIG. 9 be horizontal, bolt 27 in the yoke may be slightly loosened so that the drill may be turned 90° and lowered to rest crosswise on the handle 15.

I claim:

1. An electric hand drill-holding and guiding accessory comprising:

- a. a base panel;
- b. a post on the base panel;
- c. means for slidably supporting an electric drill on the post comprising an adjustable band arranged to be clamped about an electric hand drill;
- d. an internally-threaded element secured to the band;
- e. a slide member slidably and rotatably fitted on the post comprising a yoke having opposite end portions through which the post extends joined by a longitudinally-slotted curved connecting portion at one side of the post which passes through the said end portions, and
- f. a bolt passing through the slot in said connecting portion and screwed into said internally-threaded element on the band whereby the drill-holding clamp is adjustably fixed on said curved connecting portion for movement in an arc such that the lower end of a drill bit in the electric hand drill may be adjusted toward or away from the post and the electric hand drill also adjusted in an arc about said bolt as a pivot.

2. An electric hand drill-holding and guiding unit as defined in claim 1 in which there is a handle element on the base panel having a grip portion which extends in a generally horizontal direction with means on at least one end of the grip for securing it to the panel and keeping it elevated at a level above the panel.

3. An electric drill-holding and guiding accessory as defined in claim 1 wherein said post is pivotally supported on the base panel for selective adjustment about a horizontal axis in a range of at least 90° to each side of a vertical position.

4. An electric drill-holding and guiding accessory as defined in claim 1 wherein there is a separate bracket having a horizontal leg and a vertical leg secured to the base panel, said post being secured to said vertical leg by a horizontal pivot, clamping means selectively operable to hold the post in a position to which it may be moved about the horizontal pivot and the bracket being pivotally secured to the base by a vertical pivot spaced from the vertical leg so that the post with the drill carried thereon may be selectively moved in an arc concentric about the vertical pivot, and clamping means for holding the bracket in any position to which it may be moved about the vertical pivot.

5. An electric drill-holding and guiding accessory as defined in claim 4 in which said bracket is releasably

clamped on the base panel for adjustment about a vertical axis, said vertical pivot being removable whereby the bracket may be reversibly secured to the panel whereby the vertical leg of the bracket and the post secured to it may extend downwardly below the plane of the panel as well as upwardly.

6. An electric drill-holding and guiding accessory as defined in claim 5 in which there is a handle having a horizontally-elongate grip portion and a supporting terminal portion at at least one end arranged to support the grip portion elevated above the panel, a vertical pivot passing through the terminal portion of the handle and carried by the panel for selective movement of said handle in a horizontal arc of at least 90° each side of a position where the long axis of the grip portion of the handle is in line with the post.

7. An electric drill-holding and guiding accessory comprising:

- a. an elongate rigid base panel with an anti-slip covering on its under surface, the panel having one screw-threaded hole therein near one end, a second screw-threaded hole therein spaced from the first, both holes being in a line parallel with the long axis of the panel;
- b. a short post having a threaded lower end which may be interchangeably screwed into either of said threaded holes;
- c. a longer post of the same diameter as the short one which also may be interchangeably screwed into either of said screw-threaded holes;
- d. a handle assembly having a grip portion and a terminal portion, the terminal portion being positioned directly over the panel and securing the grip portion with the panel at a level above the base.

8. An electric drill-holding and guiding accessory as defined in claim 7 in which the base panel is removably secured to the horizontal leg of an angle bar the vertical leg of the angle bar providing means by which the panel may be clamped in and held by a vise.

9. An electric drill-holding and guiding accessory as defined in claim 8 in which the longer post is mounted on one end of the base panel and the said angle bar is longer than said base panel and one end of the bar extends beyond that end of the panel on which the longer post is mounted, and a work support carried on said one end of the angle bar.

10. An electric drill-holding and guiding accessory as defined in claim 9 in which said work support is movable along said one end of the angle bar toward and away from the panel and longer post, and means for releasably clamping the support in any position to which it may be so adjusted.

11. An electric drill assembly as defined in claim 7 in which the longer post is screwed into the threaded hole near one end of the base and the shorter one is screwed into said other threaded hole and the handle can be moved in a horizontal arc on said shorter post, the handle having a grip portion with a guide hole therethrough with its axis parallel with the longer post and so located that, when the handle is swung toward the post and the drill in the holder is rotated about the post, the arc of a drill bit in the drill will intersect the arc of travel of the guide hole in the handle and the drill and drill bit may then be lowered, the connection between the slide and the drill-holding clamp being arranged to enable the drill bit to align itself as it enters and passes through the guide hole in the handle to thereby adjust

the drill bit into parallelism with the longer post, said connection between the slide and drill-holding clamp being operable to releasably clamp the drill-holding clamp against movement relative to the slide when the drill bit is so positioned in the guide hole in the handle. 5

12. An electric drill-holding and guiding accessory as defined in claim 6 in which there is a bracket having a horizontal leg and a vertical leg, said bracket being pivotally secured to the base panel by a selectively-removable pivot passing through the horizontal leg of said bracket, the post being pivotally mounted on the vertical leg of said bracket for selective movement in a vertical arc about a horizontal pivot. 10

13. An electric drill-holding and guiding accessory comprising: 15

- a. a base panel;
- b. a post secured to said base panel near an edge thereof;
- c. an electric drill-holding unit slidably and rotatably fitted on the post arranged to hold an electric drill thereon eccentric to the post so that the bit-holding chuck of the drill is in a position where a bit held in the chuck may be lowered to engage a work piece beyond the edge of the base panel; 20
- d. a handle assembly having a grip portion and a terminal portion, the terminal portion being posi- 25

tioned directly over the panel and securing the grip portion with the panel at a level above the base; and

- e. the terminal portion of said handle assembly being pivotally connected with the base panel for rotation about a vertical axis through an arc of at least 180° and means being provided for locking said handle in any position along said arc, whereby the grip portion of the handle assembly may be positioned to extend eccentrically from the panel in a direction to counteract the eccentricity of the weight of the drill with respect to the post and panel.

14. An electric drill-holding and guiding accessory as defined in claim 13 wherein said handle assembly has a vertical opening so positioned that the handle may be selectively rotated relative to the base in a direction where the said opening in the handle assembly is centered under the axis of rotation of a drill bit in the drill chuck for aligning the axis of rotation of the bit parallel with the axis of the post.

15. An electric drill-holding and guiding accessory as defined in claim 13 in which there is a second post on the base spaced from said first post, the terminal of the handle being interchangeably mountable on either post.

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