Oct. 20, 1959 I. O. CHESTNUT 2,909,083

DRILL PRESS STAND ATTACHMENT

Filed June 13, 1958

Fig.1

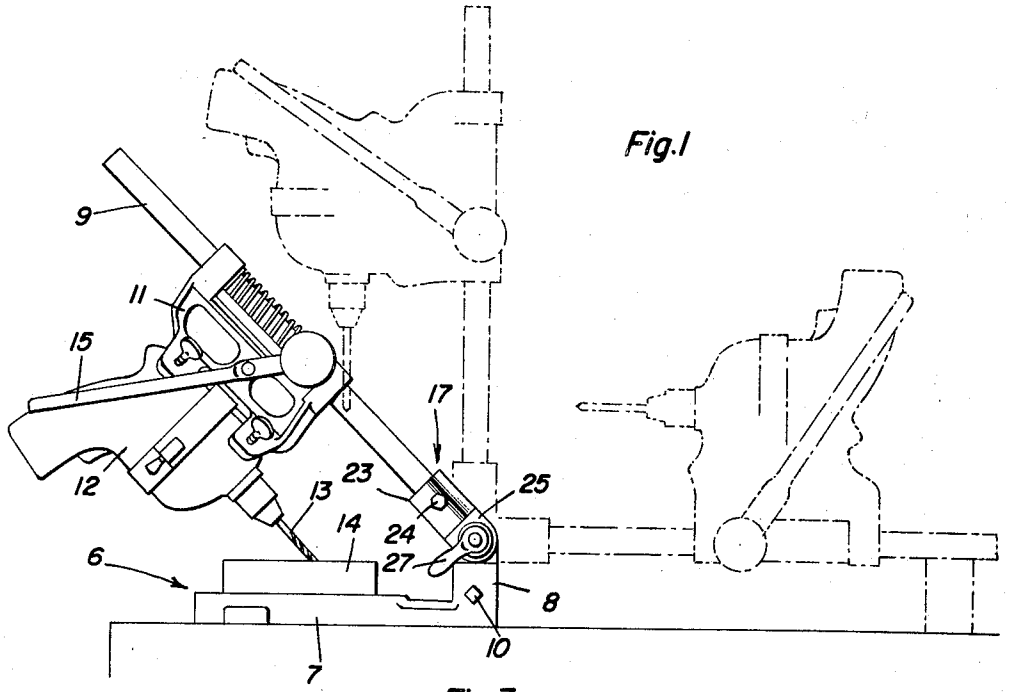


Fig.3

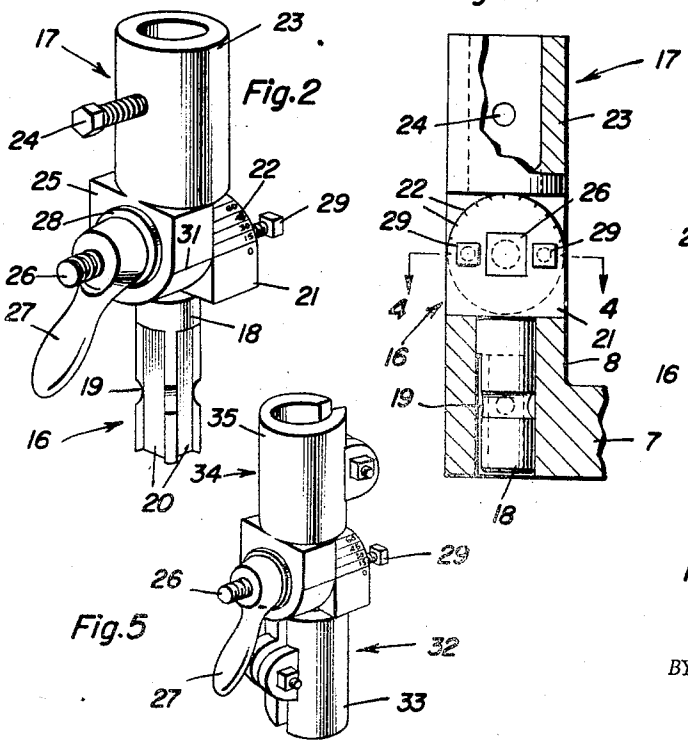


Fig.2

Fig.4

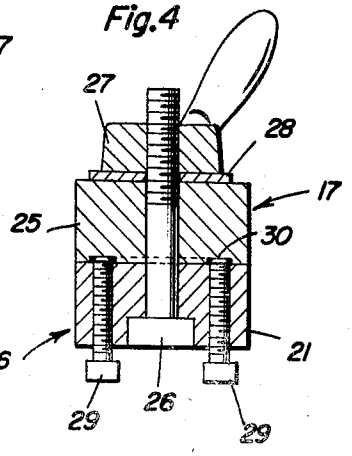


Fig.5

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DRILL PRESS STAND ATTACHMENT

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1 Claim. (Cl. 77—19)

The present invention relates to new and useful improvements in drill press stands and has for its primary object to provide, in a manner as hereinafter set forth, novel means for rendering such stands universally adjustable.

Another important object of the invention is to provide a drill press stand attachment of the character described comprising unique means for firmly securing the various adjustments.

Still another important object of the present invention is to provide an attchment of the aforementioned character which may be readily incorporated in conventional drill press stands without the necessity of altering the same structurally.

Other objects of the invention are to provide a drill press stand attachment of the character set forth which will be comparatively simple in construction, strong, durable, compact, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a view in side elevation, showing an attachment embodying the present invention in use;

Figure 2 is a perspective view of the device per se;

Figure 3 is a view in side elevation of the device with the upper portion thereof broken away in section, showing said device mounted on the base or table of the drill stand;

Figure 4 is an enlarged view in horizontal section, taken substantially on the line 4—4 of Figure 3; and

Figure 5 is a perspective view, showing a modified form of the invention.

Referring now to the drawing in detail, it will be seen that reference character **6** designates generally a conventional drill press stand. The stand **6** comprises a base or table **7** which includes the usual vertical sleeve or socket **8** in which the column or post **9** is usually secured through the medium of a setscrew **10**. Reference character **11** designates a conventional drill press on the post **9**, said press having clamped thereon a portable electric drill **12**, the tool **13** of which is engageable with the work on the table or base **7**, as indicated at **14**. The drill press **11** includes the usual feed **15**.

The embodiment of the present invention which has been illustrated in Figures 1 to 4, inclusive, of the drawing comprises lower and upper members or sections **16** and **17**, respectively, of suitable metal. The attachment is adapted to be interposed between the base **7** and the post **9** of the drill stand **6**. Toward this end, the lower member **16** includes a stem **18** which is adapted to be inserted in the socket or sleeve **8** in lieu of the post **9** and secured in adjusted position through the medium of the setscrew **10**. At an intermediate point, the stem **18**

has formed therein a circumferential groove **19** for the reception of the setscrew **10**. The stem **18** is further provided with a pair of flat, longitudinal channels **20** which interrupt the groove **19**. As shown to advantage in Figure 2 of the drawing, the channels are at right angles to each other and are adapted to receive the setscrew **10** for selectively securig the attachment in either of two predetermined positions. The lower section or member **16** of the attachment further includes a laterally offset segment **21** which is integral with the upper end of the stem **18**, said segment **21** being provided on its periphery with a scale **22**.

The other section or member **17** of the attachment comprises a socket **23** in which the post **9** is removably and adjustably secured by a setscrew **24**. A laterally offset segment **25** on the lower end of the socket **23** is in face-abutting engagement with the segment **21**. The segment **25** is journalled for swinging adjustment on a countersunk bolt **26** in the segment **21**. A hand nut **27** is threaded on the bolt **26** for securing the adjustment. A washer **28** is interposed between the nut **27** and the segment **25**. The adjustment is further secured and the assembly stabilized through the medium of a pair of setscrews **29** which are threadedly mounted in the segment **21** and engaged with the segment **25** on opposite sides of the pivot bolt **26**. An annular groove or channel **30** is provided in the face of the segment **25** in which the setscrews **29** are engaged.

It is thought that the use of the device will be readily apparent from a consideration of the foregoing. Briefly, the stem **18** is inserted in the sleeve or socket **8** of the stand **6** and secured through the medium of the setscrew **10**. The post **9** is then inserted in the socket **23** and secured by the setscrews **24**. By loosening the setscrew **10** the post **9** with the drill press **11** thereon may be rotated in a complete circle to any desired position. As hereinbefore stated, the flat channels **20** in the stem **18** which receive the setscrew **10** facilitate rotary adjustment to either of two predetermined postions. By loosening the nut **27** and the setscrews **29** the post **9** may be swung in a vertical plane to the desired position, as suggested in full and dotted lines in Figure 1 of the drawing. The scale **22** facilitates setting the post **9** at the desired angle or inclination. The segment **25** is provided on its periphery with marks **31** to be read against the scale **22**.

In the modification of Figure 5 of the drawing, reference character **32** designates a lower section or member comprising a split clamp or sleeve **33** for attachment to the drill press stand base or table. Reference character **34** designates generally an upper section or member mounted for swinging adjustment on the lower member **32** and comprising a split clamp or socket **35** for the reception of the post **9**. In other respects this form of the invention is substantially similar to the embodiment of Figure 2 of the drawing.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

An attachment for mounting a post of a drill press stand for universal adjustment on a base of the type including a vertical sleeve and a setscrew threadedly mounted therein, said attachment comprising a stem mounted for rotary adjustment in the sleeve, a pivot bolt mounted horizontally on the upper portion of said stem, a socket journaled for swinging adjustment in a vertical plane on said pivot bolt and adapted to rotatably adjust-

ably receive the post, a nut threaded on said pivot bolt for securing the socket in adjusted position, and a setscrew threadedly mounted in the socket for securing the post in adjusted postion, said stem having longitudinal channels therein for the reception of the first named setscrew, said channels including flat bottom walls extending at an angle to each other for receiving said first named setscrew thereon for positively securing the stem in predetermined rotatably adjusted postions, said stem further having a circumferential groove therein intersecting the

channels for receiving the first named setscrew for retaining the stem in the sleeve while said stem is being rotatably adjusted.

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