May 5, 1931. E. F. TERRY, JR 1,804,187

DRILL MOUNTING SHELL

Filed April 16, 1928

Fig. 1.

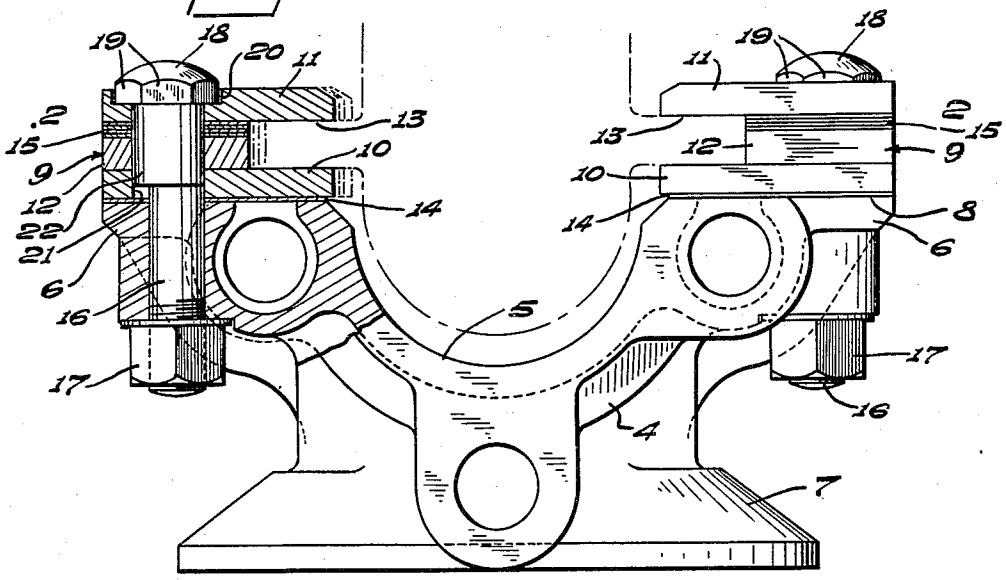


Fig. 2.

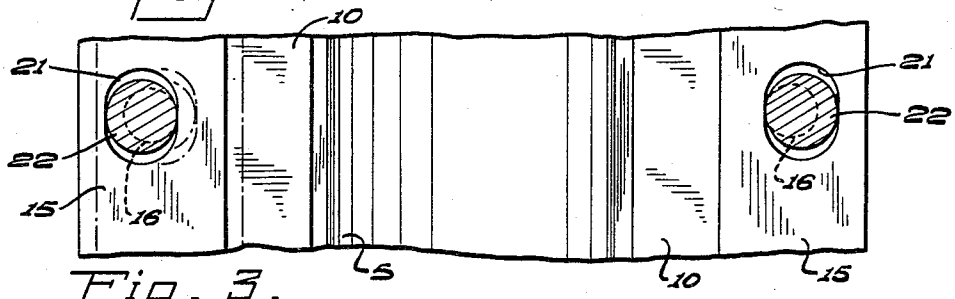
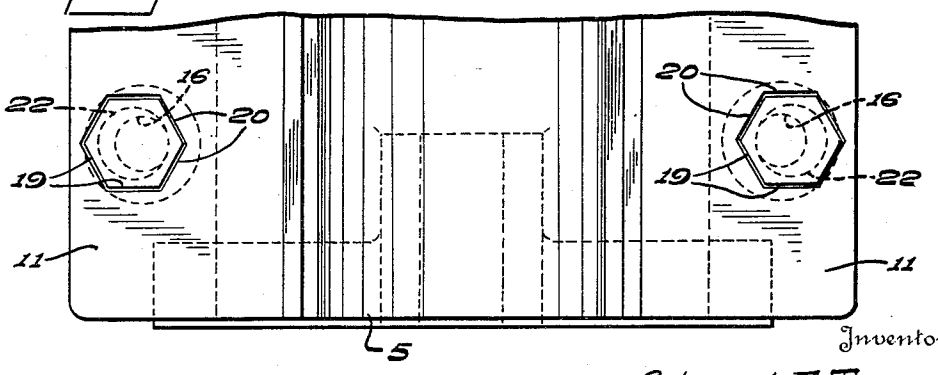


Fig. 3.



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UNITED STATES PATENT OFFICE

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DRILL MOUNTING SHELL

Application filed April 16, 1928. Serial No. 270,550.

The object of the present invention is to provide simple and effective means whereby wear of the parts in the mounting of a drill can be taken up and said parts effectively held in their adjusted relations.

In the accompanying drawings:

Figure 1 is a cross sectional view through a guide shell embodying the present invention.

Figure 2 is a sectional view on the line 2—2 of Figure 1.

Figure 3 is a plan view of a portion of the shell.

In the embodiment disclosed, the body 4 of the shell may be of substantially the usual form, including a cradle 5 having side walls 6 and carrying a mounting cone 7. The side walls 6 have flat upper faces 8.

Mounted on said flat faces are laterally adjustable guideways 9. These guideways preferably comprise bottom wear plates 10, top plates 11, and an intermediate plate 12, forming grooves 13, in which the flanges of the drill body slide in a well known manner. Beneath the bottom plate 10, shim strips 14 may be placed and the vertical width of the grooves 13 may be variably determined by shim plates 15 interposed between the top plate 11 and the intermediate plate 12.

For the purpose of holding the guideways 9 on the side walls 6 and also securing the various parts of said guideways together, vertical bolts are employed. These bolts consist of shanks 16 that are rotatably mounted in the side walls 6 and have nuts 17 on their lower ends. The upper ends of the bolts have heads 18 with angularly disposed side faces 19. These heads fit in correspondingly shaped sockets 20 formed in the top plates 11. The bottom plates 10, top plates 11 and intermediate plates 12 are provided with longitudinally elongated openings 21 and the portions of the bolts, which pass through said openings, are in the form of cams 22, whose diameters are the width of the slots 21.

With this structure, obviously if it is desired to support the guideways 9 at any desired height on the side walls 6 of the body, one or more shims 14 may be employed. The vertical width of the guide grooves 13 can also be varied by using different numbers of shims 15. The guideways 9 as an entity can furthermore be adjusted towards or from each other. To do this, it is only necessary to loosen the nuts 17, raise the bolts until the heads 18 are out of the sockets 20 and rotate the bolts, whereupon the cams 22 will be rotated, causing the guideways 9 to be moved in or out, as indicated in dotted lines in Figure 1. The bolts are then dropped back with the heads engaged in the sockets 20 and when the nuts are tightened, these bolts are effectively held against rotation, so that the guideways are thus secured in adjusted relation.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim, is:

1. A shell for rock drills comprising a body, a guideway comprising bottom, top and intermediate plates forming a groove in which the flange of the drill body slides, and a bolt holding the guideway and the body together and holding the plates of the guideway together, said bolt having a cam portion engaged with all of said plates to cause them as a unit to be adjusted when the bolt is rotated.

2. A shell for rock drills comprising a body, a guideway comprising bottom, top

and intermediate plates forming a groove in which the flange of the drill body slides, said plates having longitudinally disposed alined slots, and a bolt holding the guideway and the body together and holding the plates of the guideway together, said bolt having a cam portion in the alined slots of the plates and engaged with the opposite side walls thereof to cause the plates as a unit to be adjusted when the bolt is rotated.

In testimony whereof, I affix my signature.

EDWARD F. TERRY, JR.