March 11, 1930. G. G. MARSH 1,750,415

FOOT REST FOR STOPING DRILLS

Filed Dec. 29, 1927

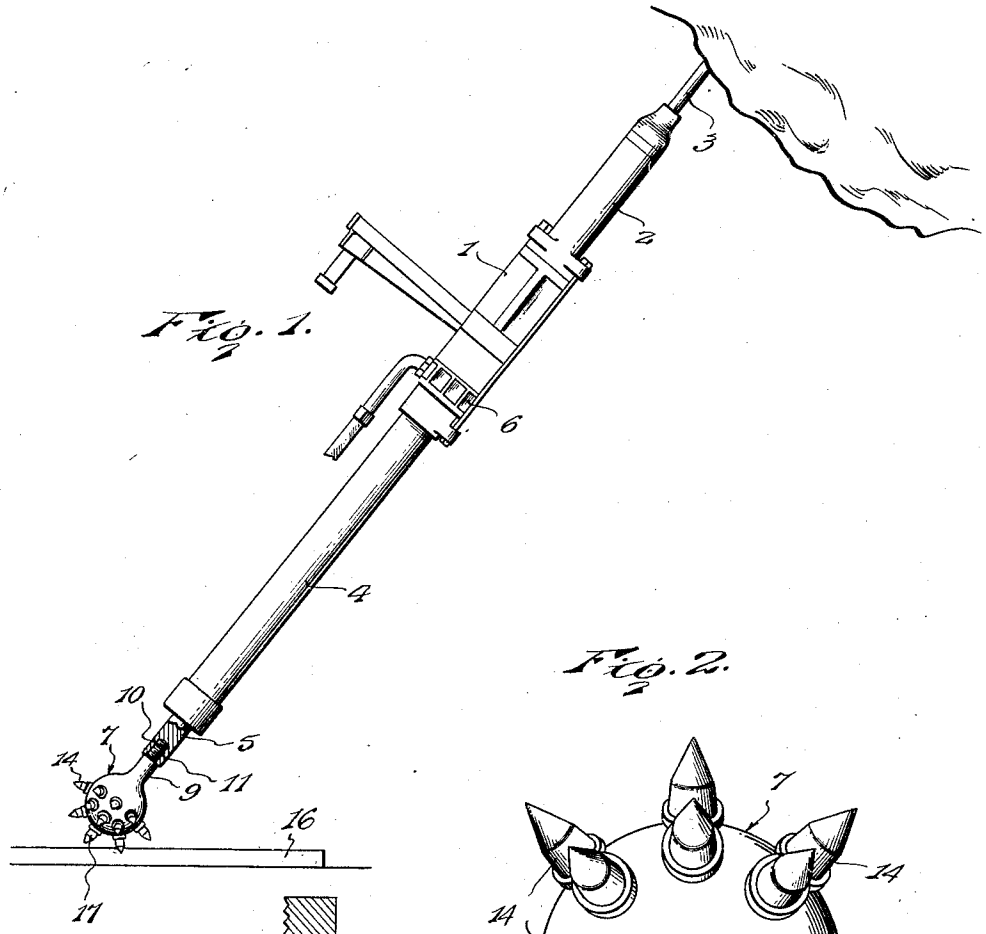
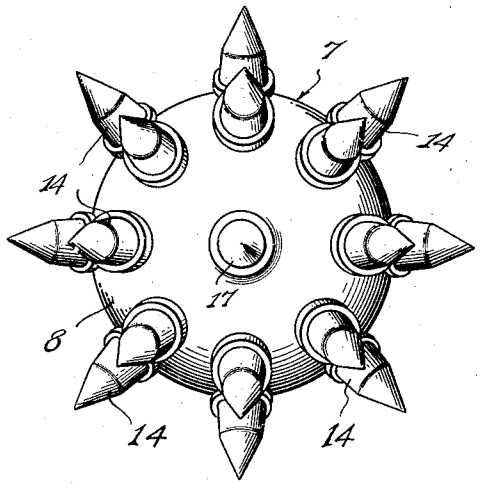


Fig. 1.

Fig. 2.



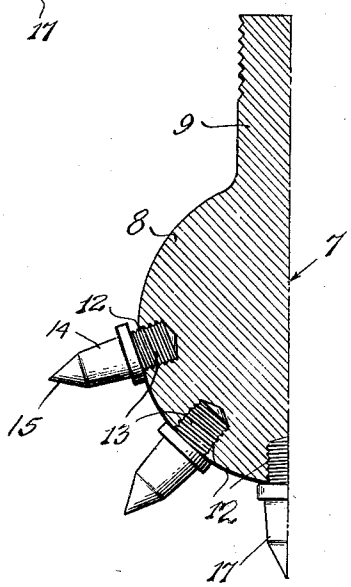


Fig. 3.

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UNITED STATES PATENT OFFICE

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FOOT REST FOR STOPING DRILLS

Application filed December 29, 1927. Serial No. 243,379.

The present invention is directed to improvements in foot rests for stoping drills.

The primary object of the invention is to provide a device of this character so constructed that the drill can be operated at any angle without the danger of the same slipping.

Another object of the invention is to provide a device of this kind which, when engaged upon the lower end of the feed piston of a stoping drill will enable the drill runner to operate the drill in a vertical position, or at various angles.

With these and other objects in view, this invention resides in the novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which,—

Figure 1 is a side elevation of the drill, showing the device in place thereon.

Figure 2 is an end view of the foot piece.

Figure 3 is a detail sectional view through the foot piece.

Referring to the drawing, 1 designates the cylinder of a stoping drill and 2 the front head thereof, which, as usual has engaged therein the drill steel 3. The pneumatically operated feeding means includes, as usual, a barrel 4 in which is slidable the feed piston 5, the barrel being connected to the back head 6 of the drill.

The foot piece 7 includes a substantially ball-shaped body 8 having an integral shank 9, said shank having a threaded stem 10 adapted to engage the threaded socket 11 formed in the lower end of the feed piston 5, as clearly shown in Figure 1 of the drawing.

The body is formed with upper and lower circularly alined threaded sockets 12 which have threaded therein the shanks 13 of the calks 14, said calks having pointed ends 15 which are adapted to bite into the board 16. It will be observed that the calks are inclined downwardly in order that one or more will bite into the boards when the drill is in an inclined position, or when substantially horizontal for drilling lift holes.

In addition to these calks a calk 17 is secured in the same manner in direct alinement with the shank 9 and will obviously bite into the board when the drill is in a vertical position.

The foot piece of a drill of this type usually has its lower end pointed in order that the same will bite into a board when the drill is used for drilling raises, but when it is desired to widen drifts it is necessary to operate the drill in an inclined position, which being the case, the pointed end will ofttimes slip. This objection has to some extent been overcome by placing a cleat upon the board against which the foot piece rests. The presence of the cleat upon the board will obviously interfere with mucker's shovels, and it will be obvious that by providing a foot piece with a plurality of angularly disposed calks, the cleat can be dispensed with.

Having thus described the invention, I claim:

A foot piece of the character described comprising a ball shaped body, said body having spaced series of circularly alined sockets formed therein, calks engaged in the sockets and disposed in angular relation with respect to the longitudinal axis of the body, a single calk connected with the body in alinement with the longitudinal axis thereof for engagement with a support when the longitudinal axis of the body is perpendicular, the calks of the circular series being adapted to engage the support when the longitudinal axis of the body is in an inclined or horizontal position.

In testimony whereof I affix my signature.

GAIL G. MARSH. [L. S.]