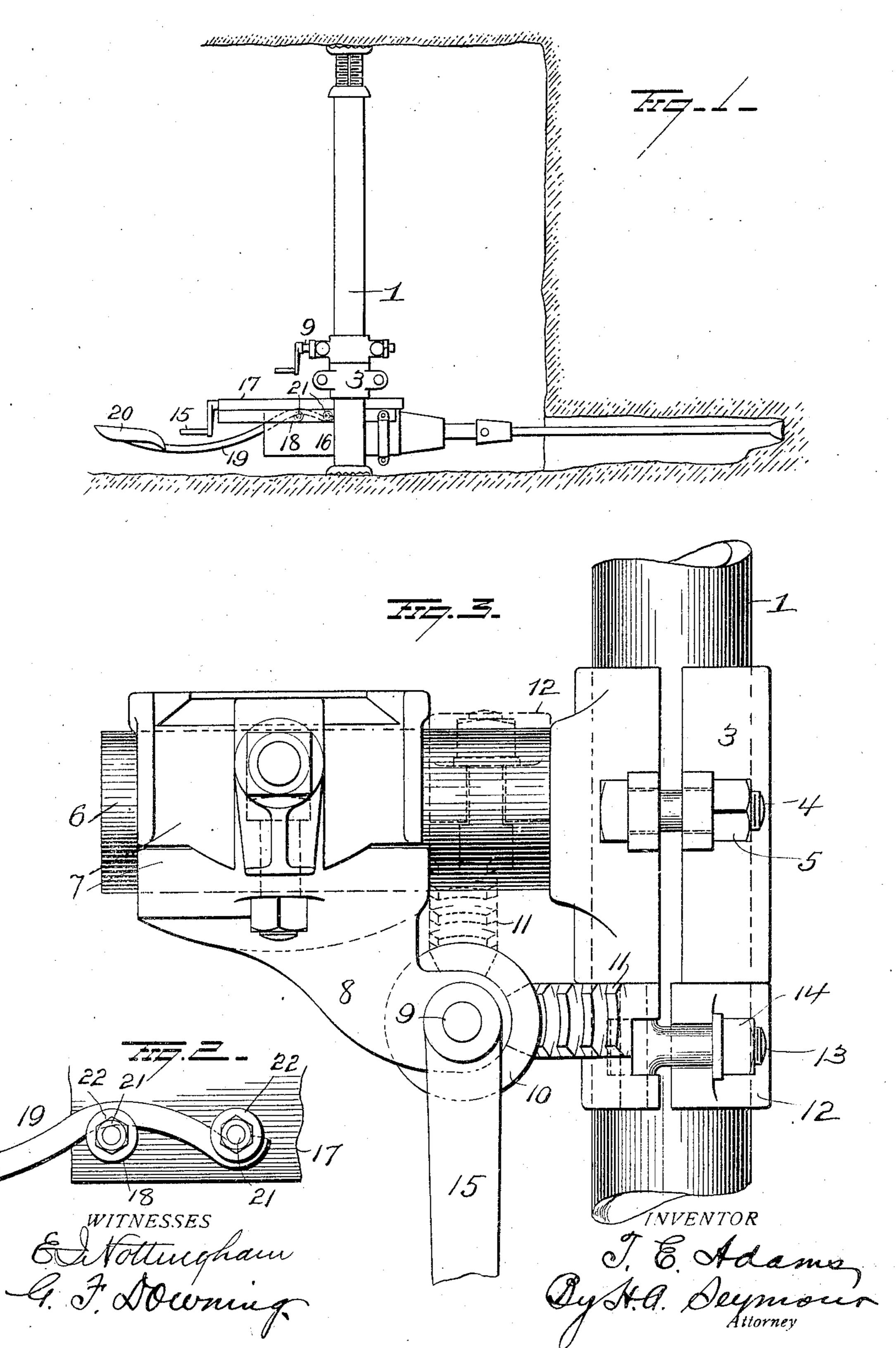
T. E. ADAMS.

ATTACHMENT FOR ROCK DRILLS.

APPLICATION FILED AUG. 6, 1904.



## United States Patent Office.

THOMAS EDGAR ADAMS, OF CLEVELAND, OHIO.

## ATTACHMENT FOR ROCK-DRILLS.

SPECIFICATION forming part of Letters Patent No. 789,704, dated May 16, 1905.

Application filed August 6, 1904. Serial No. 219,759.

To all whom it may concern:

Be it known that I, THOMAS EDGAR ADAMS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and 5 useful Improvements in Attachments for Rock-Drills; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make 10 and use the same.

My invention relates to improved attachments for rock-drills, and more particularly

to an improved seat attachment.

The object of the invention is to provide 15 simple and efficient means for attaching a seat to a rock-drill in such manner and position as to enable the operator to keep within easy reach of the controlling devices.

A further object is to provide means capa-20 ble of use for attaching a seat to a drill of any

ordinary construction.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, 25 as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a drill, showing the application of my improvements thereto. Fig. 2 is an en-30 larged detail view of the seat attachment. Fig. 3 is a view showing the devices for swing-

ing the drill.

1 represents a column of ordinary construction. A split sleeve 3 is located on the col-35 umn 1 and adapted to be adjustably secured thereto by means of bolts 4, provided with nuts 5. An arm 6 projects outwardly from the sleeve 3, and on this arm another split sleeve, 7, is secured by means of clamping de-40 vices. The sleeve 7 is provided with a forked bracket 8, in which a shaft 9 is mounted, and a worm 10 is secured to said shaft between the arms of the bracket. The worm 10 meshes with a segmental gear 11 on a split collar 12, 45 which is shown rigidly clamped to the column 1 by means of bolts 13, having nuts 14; but

said collar may be secured to the arm 6. A crank-arm 15 is secured on one end of the shaft 9 to permit ready turning of the worm 10 and the consequent swinging adjustment 50 of the sleeve 3 on column 1. A drill-guide 17 is secured to the sleeve 7, and on said guide the drill-body 16 is mounted to move longitudinally. When the segment is secured to the column, as shown in full lines in Fig. 3, 55 the operation of the crank 15 will cause the drill to be swung relatively to the column; but when the segment is secured to the arm 6, as shown by the dotted lines in Fig. 3, the operation of the crank 15 will cause the drill 60 to be swung relatively to said arm.

The drill-guide 17 is provided with two pins or studs 18 18, spaced a comparatively short distance apart to receive an arm 19, to the free rear end of which the seat 20 is secured. 65 The forward end of the arm 19 is bent to form a double curve, so as to rest upon one of the pins or stude and be disposed under the other, as clearly shown in Fig. 2. Each stud may be provided on its end with a nut 21, and between 7° each nut and the arm 19 a washer 22 is placed to prevent any possibility of lateral displace-

ment of the arm 19.

My improvements are very simple in construction, enable the application of a seat to 75 any drill of ordinary construction, and are effectual in the performance of their functions.

Various slight changes might be made in the details of construction of my invention without departing from the spirit thereof or 80 limiting its scope, and hence I do not wish to limit myself to the precise construction shown.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a drill-body, a guide therefor and means for supporting the guide, of an operator's seat and means for attaching said seat to said guide.

2. The combination with a drill-supporting 9° attachment adapted to swing on a column, of means for swinging said attachment, a drillguide on said attachment, and seat-supporting means removably attached to said drill-guide.

3. The combination with a drill-support and pins or studs projecting therefrom, of an operator's seat, and an arm secured to said seat and removably attached to said pins or studs.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS EDGAR ADAMS.

Witnesses:

J. H. Worbs, John R. Orputt.