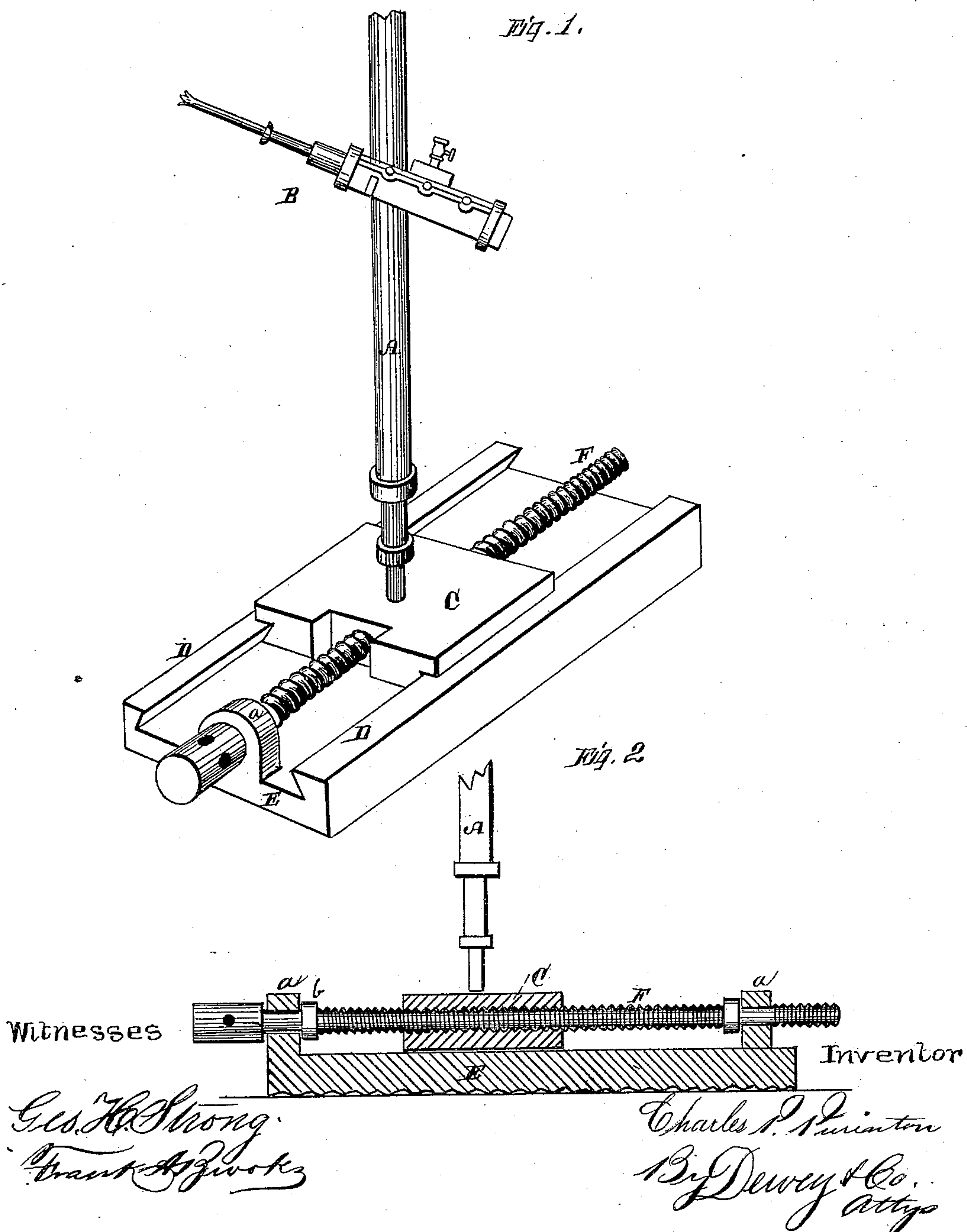


(No Model.)

C. P. PURINTON.
Adjusting Attachment for the Posts of Power Drills.

No. 238,712.

Patented March 8, 1881.



UNITED STATES PATENT OFFICE.

CHARLES P. PURINTON, OF OAKLAND, CALIFORNIA.

ADJUSTING ATTACHMENT FOR THE POSTS OF POWER-DRILLS.

SPECIFICATION forming part of Letters Patent No. 238,712, dated March 8, 1881.

Application filed December 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. PURINTON, of Oakland, county of Alameda, State of California, have invented an Adjusting Attachment for the Posts of Power-Drills; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in the adjustment of power-drills; and it consists of an attachment for the posts by which such drills are supported, this attachment serving to change the position of the post and the drill, after they have been set and secured in place, without the necessity of resetting the post, as will be more fully described by reference to the accompanying drawings, in which—

Figure 1 shows a drill-post having my invention attached. Fig. 2 is a section of my device, showing its operation.

In setting the posts to which power-drills are attached, and by which they are supported, so as to drill in any desired direction, the post has its head and foot properly set, so that it may, by the usual screws or other devices, be held strongly between the roof and floor, or between the walls of the shaft or tunnel, and thus sustain the drilling apparatus and resist the strain and pressure of its operation. Considerable time and care are needed to properly set a post, and it often happens that after the drill has been started and run in to a considerable depth a seam will be encountered, which will turn the drill and cause it to bind in the hole. With the ordinary manner of setting posts this renders it necessary to commence a new hole, as it would be almost impossible to move the post and reset it in the proper line for the new direction which the drill must take.

My invention consists of a head and base plate, which are adapted to receive the head and foot of the post, and which travel in guides, so that they may be moved horizontally to adjust the post without loosening it.

A is a post, which is adapted to support a drill, B. This post may be of the usual forms now employed to support power-drills, with devices for lengthening it and straining it rigidly between its end supports.

C is a block, which is preferably made of

iron, and has its upper surface fitted to receive the bottom of the post, or a blocking upon which the post will set, and hold it securely and without slipping. This block C has its edges channeled to fit the guides D upon the permanent base E. The base E has its lower surface corrugated or roughened, so that it will not slip, and this base is set so that the post A will stand at right angles with it when in position. The upper surface of the base E is made smooth, and the lower surface of the block C is also smooth, so that when it lies upon the base it forms a perfectly solid support for the post. The guides D simply retain it in position, and allow it to be moved along from side to side between them. The block C has screw-threads cut through it parallel with the guides, or is otherwise fitted to receive a strong screw, F, upon which it travels. This screw is supported in boxes *a a* at one or both ends, and has suitable shoulders or collars, *b b*, to retain it in place, so that it rotates without moving endwise. A large head upon this screw has holes to receive a lever or bar, by which the screw may be turned and the block C advanced in one direction or the other.

I have here described the device for supporting the foot of the post A; but it will be seen that an exactly similar one reversed will be required to receive the head of the post, as shown.

When the post is to be set the upper and lower bases, D, will be placed so that the guides are parallel with the face of the wall into which the hole is to be drilled, or so that the drill will run at about right angles with them. The post is then set with its ends resting against the blocks C, and is screwed up so as to be rigidly braced against the blocks. The drill is supported upon the post in the proper position to form the hole in the desired direction and is set at work. If the drill should run a little out of line, on account of seams in the rock, or for other reason, so as to bind, it will only be necessary to turn one or both the screws F a little, when the blocks C will be advanced at, or nearly at, right angles with the direction of the drill, and will relieve the latter, so that it may continue its work, and no time will be lost by stopping to reset the post or to start a new

hole. The post need not be loosened at all, as the screws F will be strong enough to move the blocks C traveling upon the smooth surface of the base.

5 I am aware that a variety of devices have heretofore been known and used wherein feeds and adjustments of tool-holders have been had by means of screws, and hence I make no broad claim to such devices; but,

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

The improved adjusting device for power-

drills, consisting of the bed-plate E, provided with the side guides, D, and journals *a*, in combination with the traveling block C, provided with projections fitting into guides D, and screw F, provided with collars *b b*, all constructed, arranged, and operated as described. 15

In witness whereof I have hereunto set my hand. 20

C. P. PURINTON.

Witnesses:

S. H. NOURSE,

FRANK A. BROOKS.