(No Model.)

J. McCULLOCH.

STAND FOR SUPPORTING ROCK DRILLS.

No. 513,365. Patented Jan. 23, 1894.

Fig. 2

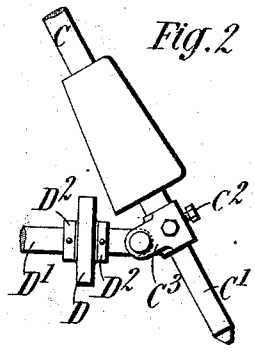

Fig. 3.

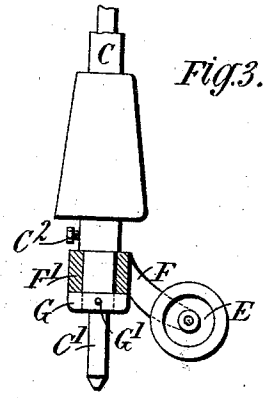

Fig. 1

Witnesses
J. A. Saul.
G. W. Rea.

Inventor
James McCulloch.
by James L. Norris.
Atty.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES McCULLOCH, OF WOLVERHAMPTON, ENGLAND.

STAND FOR SUPPORTING ROCK-DRILLS.

SPECIFICATION forming part of Letters Patent No. 513,365, dated January 23, 1894.

Application filed October 2, 1893. Serial No. 486,983. (No model.)

To all whom it may concern:

Be it known that I, JAMES MCCULLOCH, engineer, a subject of the Queen of Great Britain, and a resident of Wolverhampton, England, have invented certain new and useful Improvements in Stands for Supporting Rock-Drills, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to stands for supporting rock drills, and has for its object to render such stands more readily removable from place to place. Rock drills are supported and held up to their work in various ways, one method being to attach to the drill casing or cradle, three or more legs which rest on the ground, or a bar or shaft may be mounted on three or more legs in any suitable manner and the drill attached to the said bar or shaft. The legs of these stands are preferably made telescopic the lower portions of the legs being capable of sliding relatively to the upper portions of the same so that one or more of the legs may be shortened when the drill is to be used on uneven ground. Hitherto it has been necessary when one hole has been drilled and it is required to drill another hole or to remove the drill for blasting purposes some distance away, to lift up the drill and stand and carry both away bodily, or to dismount the drill and stand and carry them separately.

According to my invention I obviate the inconvenience arising from these methods of procedure in the following manner—that is to say, I mount wheels or rollers on the upper parts of the legs of the stand. When the said legs are lengthened and the drill is working the wheels or rollers are raised from the ground, but when the drill is required to be moved to drill another hole or for blasting or other purposes the legs are shortened until the wheels rest on the ground and the stand and drill can then be very readily moved to any desired position.

In the accompanying drawings, Figure 1 is a perspective view showing by way of example how my invention may be applied to one well known form of tripod support for rock drills. Figs. 2 and 3 are detail views of parts of the same.

Like letters of reference denote similar parts in all the figures.

A is the drill.

B is a bar or shaft supported on three legs C, C, C. Each leg of the tripod is made in two parts, the upper part C being firmly secured or pivoted to the shaft B, the lower part C′ being adapted to slide in the upper part which is furnished with set screws C^2 for clamping the two parts of the leg together when required.

D, D are two wheels or rollers rotatably mounted on a bar D′ but prevented from sliding thereon by collars D^2. The said bar D′ is secured to lugs C^3 at the bottom of the fixed parts C of the legs as clearly shown in Fig. 2. The third leg of the tripod is provided with a single wheel E mounted to turn in bearings provided in a lug F. The said lug is not directly secured to the leg but extends from a collar F′ mounted on the upper part of the same. The said collar is prevented from sliding off the leg by a collar G and pin G′ but is capable of being turned round the leg so that the wheel E may run in any direction when on the ground in a similar fashion to an ordinary swiveled furniture caster. This is shown in Fig. 3.

When the drill is working the legs are extended to such a length that the wheels D, D and E are raised off the ground, but when it is required to move the drill for drilling a fresh hole the clamping screws C^2 are slackened and the legs of the tripod shortened until the wheels rest on the ground, whereupon the entire drill and stand may be very easily wheeled to a new position. The legs are then lengthened so as to firmly support the drill and raise the wheels off the ground again.

I have shown in the drawings a drill stand of tripod form but it is obvious that my invention can be applied in a similar manner to drill stands having more than three legs. The legs of the stand need not be telescopic as shown but may be made extensible in any other suitable manner as long as the wheels can be raised from the ground when necessary. Also I do not restrict myself to the precise method of mounting the wheels which is shown in the drawings. For instance I may dispense with the bar D′ and furnish all the legs with separate wheels which may or may not be arranged to turn round the said legs. Other methods of mounting the wheels may

also be used which will readily occur to an engineer.

What I claim is—

1. The combination with a rock-drill stand having extensible legs, each composed of a stationary section, and a lengthwise adjustable section, of wheels mounted on the lower end portions of the stationary leg sections and placed in contact with the ground by retracting the lengthwise adjustable leg sections, substantially as and for the purposes described.

2. The combination with a rock-drill stand having three extensible legs, of a bar attached to the upper portions of two of said legs, wheels mounted on said bar and capable of rotating but not sliding thereon, and a wheel mounted on the upper portion of the third leg, so that when the legs are extended the wheels are raised from the ground, and when the legs are shortened the wheels are resting on the ground, substantially as described, for the purpose specified.

3. The combination with a rock-drill stand having three telescopic legs, of a bar attached to the upper portions of two of said legs, wheels mounted on said bar and capable of rotating but not sliding thereon, and a wheel adapted to rotate in bearings attached to a collar mounted on the upper portion of the third leg, substantially as, and for the purpose, specified.

In witness whereof I have hereunto set my hand this 16th day of September, 1893.

JAMES McCULLOCH.

Witnesses:

C. LEMESLE ADAMS,

Solr. and Notary, Wolverhampton, England.

WM. JNO. JAMES,

His Clerk.