

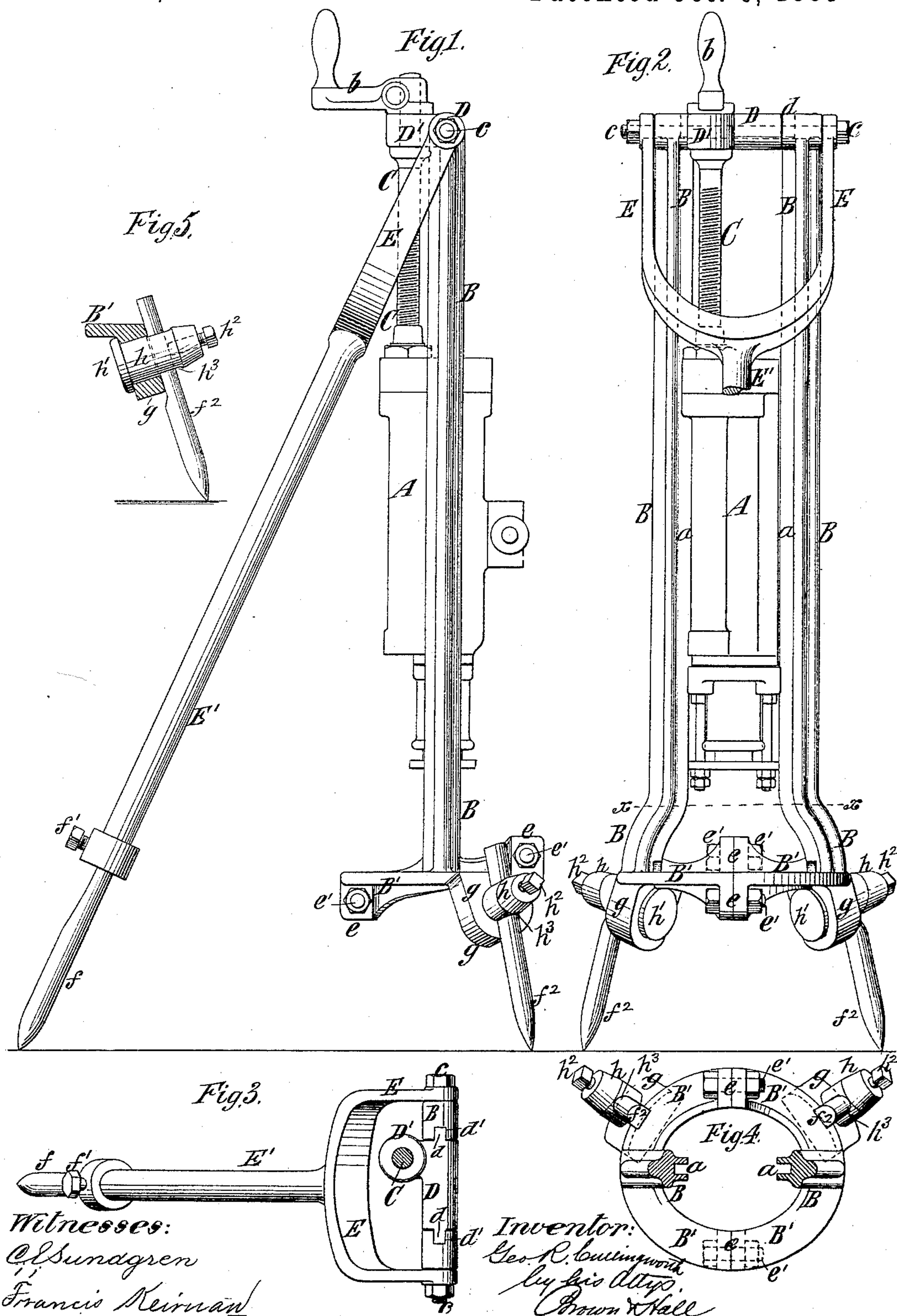
(No Model.)

G. R. CULLINGWORTH.

ROCK DRILL TRIPOD.

No. 327,923.

Patented Oct. 6, 1885





# UNITED STATES PATENT OFFICE.

GEORGE R. CULLINGWORTH, OF NEW YORK, N. Y.

## ROCK-DRILL TRIPOD.

SPECIFICATION forming part of Letters Patent No. 327,923, dated October 6, 1885.

Application filed January 26, 1885 Serial No. 153,951. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE R. CULLINGWORTH, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Rock-Drill Tripods, of which the following is a specification.

My invention is applicable to rock-drills working with steam or air, and an important object of my invention is to provide a tripod of light and simple construction in which there are but few parts, any one of which may be renewed at small cost in case of breakage.

The cylinder and other parts may be of any ordinary or suitable construction. The tripod is principally composed of two parallel bars having on the inner sides guides for the cylinder, and connected at the lower ends by a divided ring or brace composed of two sections formed integrally, one with each bar, and bolted together. Each section of the ring or brace has a foot adjustably connected with it in a novel manner, hereinafter described, and the two parallel bars are connected at their upper ends by a cross brace or sleeve interposed between them and secured by a bolt passing through the cross-brace and bars. This cross-brace has formed in it a bearing for the usual feed or cylinder-adjusting screw. I also employ a back leg, the upper end of which is forked to embrace the two parallel bars and their interposed cross brace or sleeve, and is secured by the same bolt which joins the said parallel bars and cross brace or sleeve.

In the accompanying drawings, Figure 1 is a side elevation of a tripod embodying my invention. Fig. 2 is a rear elevation thereof, the back leg being broken away. Fig. 3 is a plan of the back leg, the upper ends of the parallel bars and their cross-brace. Fig. 4 is a transverse section on the dotted line *x x*, Fig. 2, and Fig. 5 is a sectional detail view illustrating the means for securing the feet adjustably in place.

Similar letters of reference designate corresponding parts in all the figures.

A designates the drill-cylinder, which, with its appurtenances, may be of any suitable construction.

B B designate two parallel bars, which diverge slightly at their lower ends, and are of

cast metal. They have on their inner sides guides or slideways *a*, to which the cylinder is fitted, and along which it may be adjusted by a feed-screw, C, having a handle, *b*, at the upper end.

Between the upper ends of the bars B is interposed a cross brace or sleeve, D, which is there secured by a bolt, *c*, passing through the brace or sleeve and bars B, and also through the ends of a fork, E, which embraces the bars B, and is at the upper end of a back leg, E'.

To prevent the sleeve from turning, it and the bars B are locked together by tongues and grooves *d d'*, as shown in Fig. 3, and to a bearing, D', on the brace or sleeve D is fitted the screw C. The lower ends of the bars B are connected by a lateral brace, here shown as made nearly in the form of a circle and composed of two sections B', cast with the two bars, each section being integral with a bar. At the meeting ends of the brace-sections B' are lugs or ears *e*, through which are inserted bolts *e'*, for screwing the sections together.

The back leg, E', is provided with an adjustable foot, *f*, which may be secured in place by a set-screw, *f'*, and on each brace-section B', is secured a foot, *f'*, as best shown in Fig. 5, but also shown in the other figures.

On each brace-section B' is cast an inclined lug or ear, *g*, and through this lug or ear is inserted a post, *h*, having at one end a head, *h'*, and in the other end a set-screw, *h'*. This post is slotted to receive the foot through it, as shown in Fig. 5, and this slot *h'* extends within the lug near *g*. The foot is slipped into the slot *h'*, and the screw being set up against the foot, the latter is clamped against the face of the lug *g*, while the head *h'* of the post is drawn tightly against the back of the lug. In this way the foot is secured adjustably in place, and by loosening the screw the foot will be released, and may be slid to the proper point and again secured by tightening the screw.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the cylinder of a rock-drill, of two parallel bars forming guides for the cylinder and connected at their lower ends by a brace composed of two sec-

tions cast one with each bar and bolted together, feet upon said brace, and a back leg and foot, substantially as herein described.

2. The combination, with the bars B B, and  
5 the annular sectional brace connecting their lower ends and formed of sections cast with the bars and bolted together, of feet  $f^2$  on said brace, and a back leg and foot, substantially as herein described.

10 3. The combination, with the parallel bars B, and the sectional brace B', formed part with each bar, and bolted together, of the cross-brace or sleeve D, interposed between the upper ends of the bars and comprising a bearing  
15 for a feed-screw, a back leg forked at the upper end to embrace said bars, and the bolt c, passing through the fork, the bars, and the interposed sleeve or brace, substantially as herein described.

4. The combination, with a rock-drill frame 20 having a lug or ear,  $g$ , of a post,  $h$ , having at the back end a head,  $h'$ , bearing against the inner side of the lug or ear, and also having a transverse slot,  $h^3$ , through which a foot,  $f^2$ ,  
25 is inserted in front of the lug or ear, and a set-screw,  $h^2$ , screwed into the outer end of the slotted post and bearing against the foot  $f^2$ , substantially as herein described, whereby the tightening of the screw  $h^2$  will draw the head  $h'$  tightly against the back of the lug or  
30 ear and force the foot  $f^2$  tightly against the front of said lug or ear.

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Witnesses:

FREDK. HAYNES,  
MATTHEW POLLOCK.