G. B. SEDDON & W. McFAUL.

Rock-Drill.

No. 169,121. Patented Oct. 26, 1875.

Fig. 1.

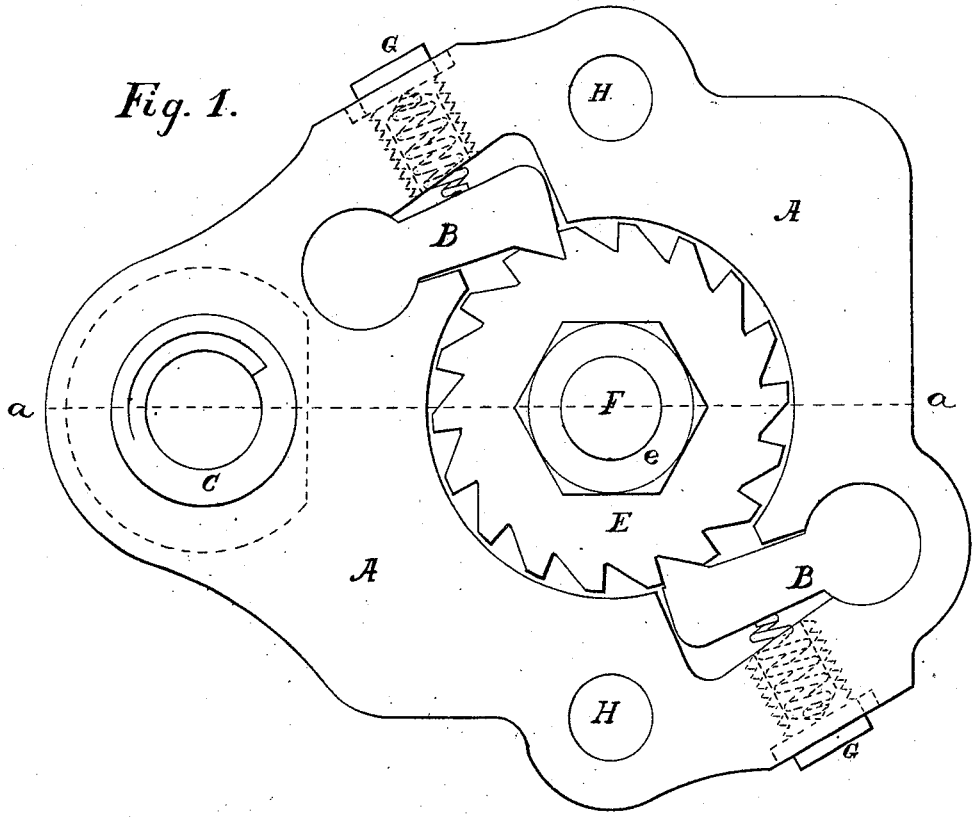
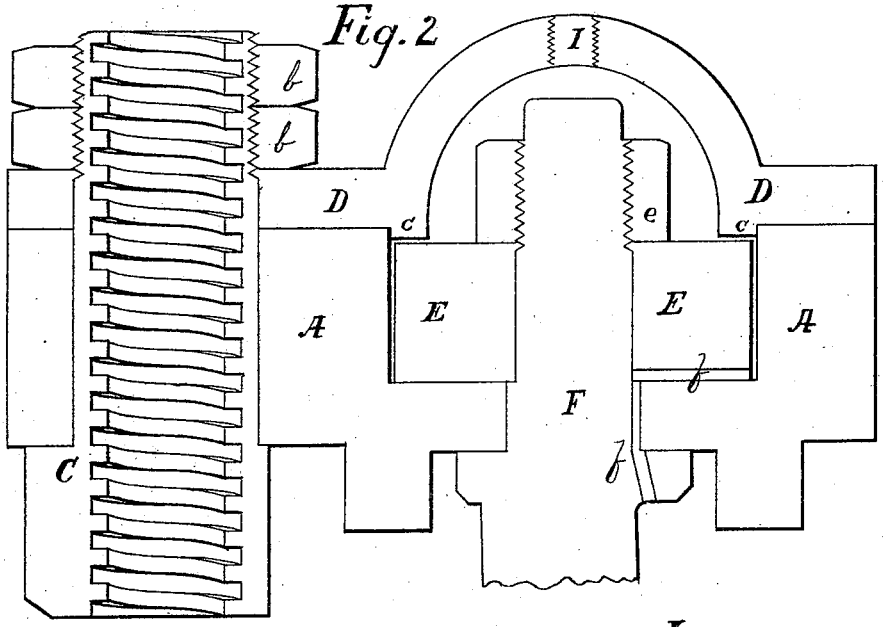


Fig. 2



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UNITED STATES PATENT OFFICE.

GEORGE B. SEDDON AND WILLIAM McFAUL, OF NEW YORK, N. Y.

IMPROVEMENT IN ROCK-DRILLS.

Specification forming part of Letters Patent No. **169,121**, dated October 26, 1875; application filed September 15, 1875.

To all whom it may concern:

Be it known that we, GEORGE B. SEDDON and WILLIAM McFAUL, of the city of New York, State of New York, have invented a new and useful Improvement in Rock-Drills, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

Our invention relates to rock-drills that are driven by steam or compressed air; and consists in the novel form and arrangement of the pawls acting on the rotating ratchet-wheel, combining freedom of action with great strength and durability, and also in the combination of the head and cover with the pawls and feed-nut.

The accompanying drawings are as follows: Figure 1 is a plane view of the head with the cover removed. Fig. 2 is a longitudinal section of the same, with the cover in place, through the line *a a* on Fig. 1.

The head A A is provided with suitable recesses in which the pawls B B are fitted. These pawls are made the same thickness as the ratchet-wheel, and are kept in contact with it by spiral springs let into hollow plugs which are screwed into the head, as shown at G G, Fig. 1. One end of the pawls is made circular, and fits into the recess in the head, as shown at B B, Fig. 1. This circular end forms a hinge in connection with the circle of the recess, and enables the pawl to swing as easily as if it were on centers, and at the same time furnishes a substantial support to receive the strain to which the pawl is subjected, and adding greatly to the strength of the pawls.

D D is the cover for protecting the rotating mechanism from the accumulations of dirt, and also for providing an efficient means of oiling the interior mechanism of the drill through the hole at I, Fig. 2, the oil passing around the outside of the ratchet-wheel E through an oil-hole in the rotating bar, as shown at *f'*, Fig. 2, into the interior of the cylinder. The cover has a projecting rim, as shown at *c c*, Fig. 2, which operates as a washer to keep the pawls from working up from their places. The cover is held securely in its place by bolts passing through the holes H H, Fig. 1, and also by the jam-nuts *b b*, Fig. 2. C C is a steel feed-nut, which is fitted to the head and cover and held securely by the jam-nuts *b b*, Fig. 2, and held from turning by a flat formed on one side, which fits against the back of the cylinder, as shown by the dotted line at C, Fig. 1.

We claim as our invention—

1. The cover D D, provided with an oiling-aperture, I, and a projecting rim, *c c*, substantially as and for the purpose specified.

2. The nut C, having a flat on one side, and secured to the upper head and cover by means of nuts, substantially as shown and described.

3. The combination of the head A A, the pawls B B, the feed-nut C, and the cover D D, constructed and arranged substantially as and for the purpose specified.

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