(No Model.)

H. C. SERGEANT.

ROCK DRILL SUPPORT.

No. 407,257. Patented July 16, 1889.

Fig. 1.

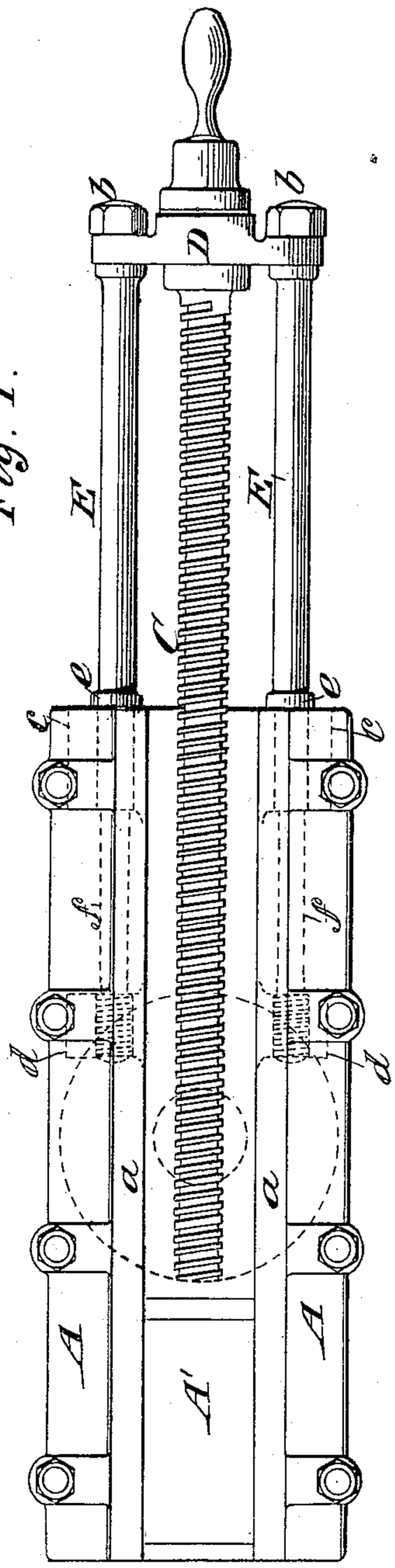
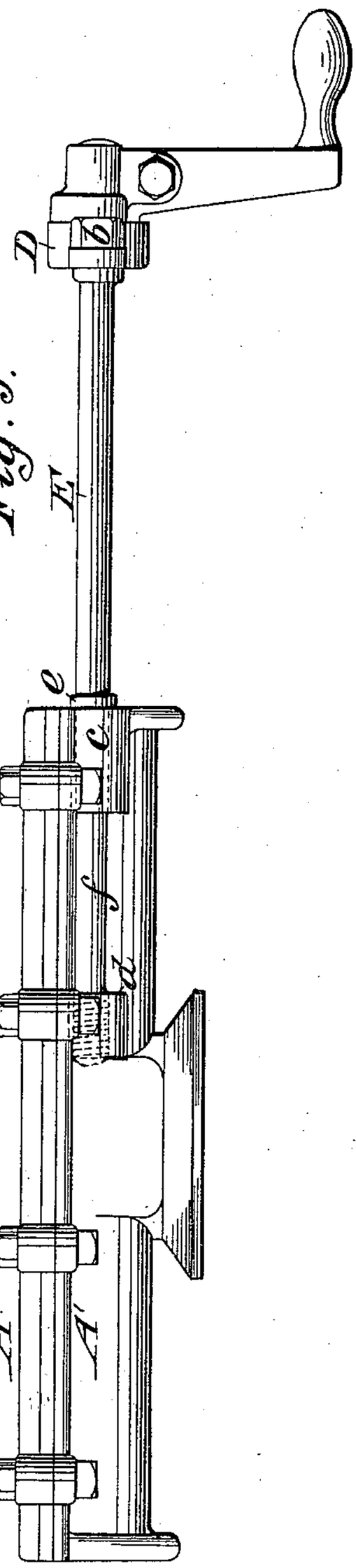


Fig. 2.

Fig. 3.



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HENRY C. SERGEANT, OF NEW YORK, N. Y., ASSIGNOR TO THE INGERSOLL-SERGEANT ROCK DRILL COMPANY, OF SAME PLACE.

ROCK-DRILL SUPPORT.

SPECIFICATION forming part of Letters Patent No. 407,257, dated July 16, 1889.

Application filed October 19, 1888. Serial No. 288,576. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. SERGEANT, of New York, in the county and State of New York, have invented a new and useful Improvement in Rock-Drill Supports, of which the following is a specification, reference being had to the accompanying drawings.

I will describe in detail a rock-drill support embodying my improvement, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a face view of a rock-drill support embodying my improvement. Fig. 2 is a detail view of one of certain standards employed in the support. Fig. 3 is a side view of the support.

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

A A′ designate plates secured together, as here shown, by means of bolts. Between the plates A A′ are formed guideways *a* in a well-known manner, in which may slide a plate bearing the operating-engine for a drill. C designates a screw by which the said engine (not shown) may be moved to advance the drill to its work. This screw has no longitudinal motion. It is journaled near its outer end in a cross-head D. The cross-head D is supported by means of standards E passing through suitable apertures in said cross-head and secured thereto by nuts *b*. Said standards extend through suitably-formed lugs *c* upon the sides of the plate A′, and also through similarly-formed lugs *d*, formed upon the plate A′ inward of the lugs *c*. As shown, the portions of the standards which extend through the lugs *c* have a frictional engagement only with said lugs. The inner ends of the standards have, however, a screw-threaded engagement with the lugs *d*. Collars or annular rims *e* on the standards prevent their being moved too far inwardly. The portions *f* of the standards between the lugs *c d* are reduced in diameter, whereby those portions of the standards are rendered capable of flexure, the distance between the lugs *c d* being sufficient to admit of this. By this means the jar incident to the operation of the drill is taken up between the bearings *c d*, and the threaded portions of the standards engaging the lugs *d* are prevented from wearing loose, while the standards will be very firmly maintained in position.

I am aware that supports for rock-drills have been constructed wherein the standards pass through lugs arranged at both ends of the support, and are screw-threaded near the lugs upon one end of the support to receive nuts.

I am also aware that the standards have been screw-threaded near one of their ends to directly engage single lugs arranged at one end of the support. In neither of these instances have there been any reduced portions of the standards whereby flexure was obtained.

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

1. In a rock-drill support, the combination, with standards, of bearings upon the support receiving said standards, certain of said bearings being inward of the others, so that spaces will be left between them, the standards having a screw-threaded engagement with the inner of said bearings, substantially as and for the purpose herein described.

2. In a rock-drill support, the combination, with standards, of bearings on the support receiving said standards, certain of said bearings being inward of the others, so that spaces will be left between them, the portions of the standards between said bearings being reduced in diameter, substantially as and for the purpose herein described.

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