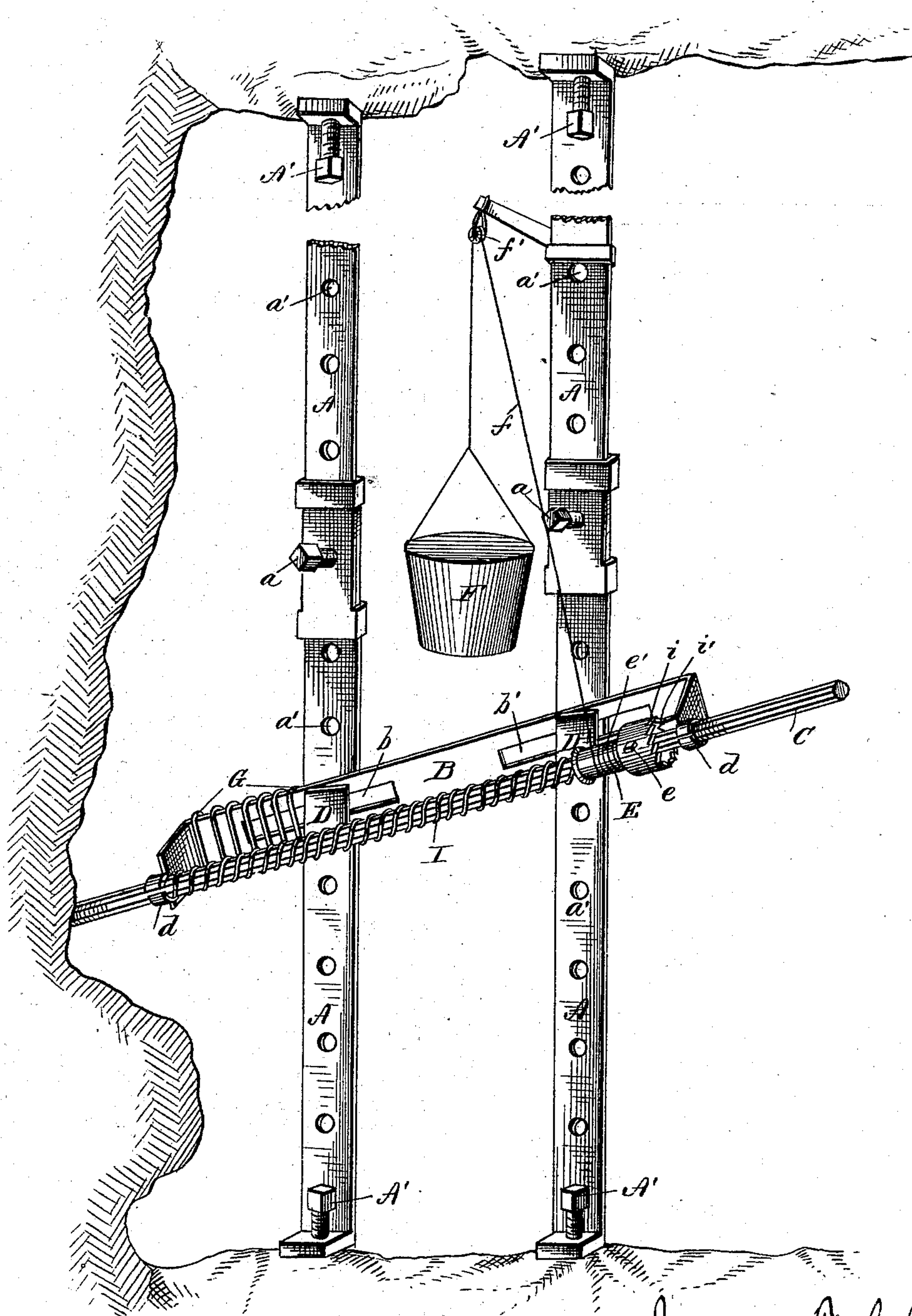


(No Model.)

J. T. CLARK.
STONE DRILLING MACHINE.

No. 271,792.

Patented Feb. 6, 1883.



WITNESSES
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JAMES T. CLARK, OF BATH, CALIFORNIA.

STONE-DRILLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 271,792, dated February 6, 1883.

Application filed August 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. CLARK, a citizen of the United States, and a resident of Bath, in the county of Placer and State of California, have invented certain new and useful Improvements in Stone-Drilling Machines, reference being had to the accompanying drawing, which forms a part of this specification.

My invention has relation to devices for operating mining-drills, and its object is to facilitate the handling of the drill and more rapidly accomplish the boring or drilling than heretofore; and to that end the novelty consists in the construction of the same, as will be hereinafter more fully set forth, and particularly pointed out in the claim.

The figure in the drawing is a perspective view of my improved drilling mechanism in operation.

A A are the extension-standards, which are secured to the top and bottom of the mine by the screws A', and the adjustability of the standards is secured by the screws a passing through the holes a'.

B is a frame provided with slots b, by means of which it is secured to the standards A A by the bolts D, which permit a lateral adjustment of the frame to the limit of the slots.

d d are guides, in which the drill-bar C is mounted and rotates, and E is a collar slipped on the drill-bar C and held in place by the key e. The body of this collar E forms a drum, e', upon which is wound the cord f, passing over the pulley f' to the weight F, and the face of the collar is provided with ratchet-teeth

i, which engage with the stationary detent i' on the frame B.

I is a spiral spring encompassing the drill C between the guides d, one end of the spring pressing against the collar e and the other against the lower guide, d. The collar being adjusted on the drill C, so as to allow a limited play, the spring I will force the ratchet-teeth i into contact with the detent i', while, if the drill be pushed forward, the teeth are released and the drill makes a partial revolution, which is interrupted by the rebound of the drill, and the teeth are again forced into contact with the detent. It will thus be seen that as succession of blows are given the drill the weight F, cord f, teeth i, detent i', and spiral spring I operate to allow a partial revolution of the drill after each blow.

A spring, G, encompasses the forward end of the frame B, and its front end is secured to the frame, while the rear end comes in contact with the standard A. This serves to force the frame and drill forward and keep the drill up to its work as fast as the hole is bored.

Having thus described my invention, what I claim is—

The frame B, provided with slots b b', spring G, and detent i', in combination with the drill C, spring I, collar e, having teeth i, and the cord f, and weight F, substantially as set forth.

J. T. CLARK.

Attest:

S. B. BURT,
O. A. BILKEY.