

(No Model.)

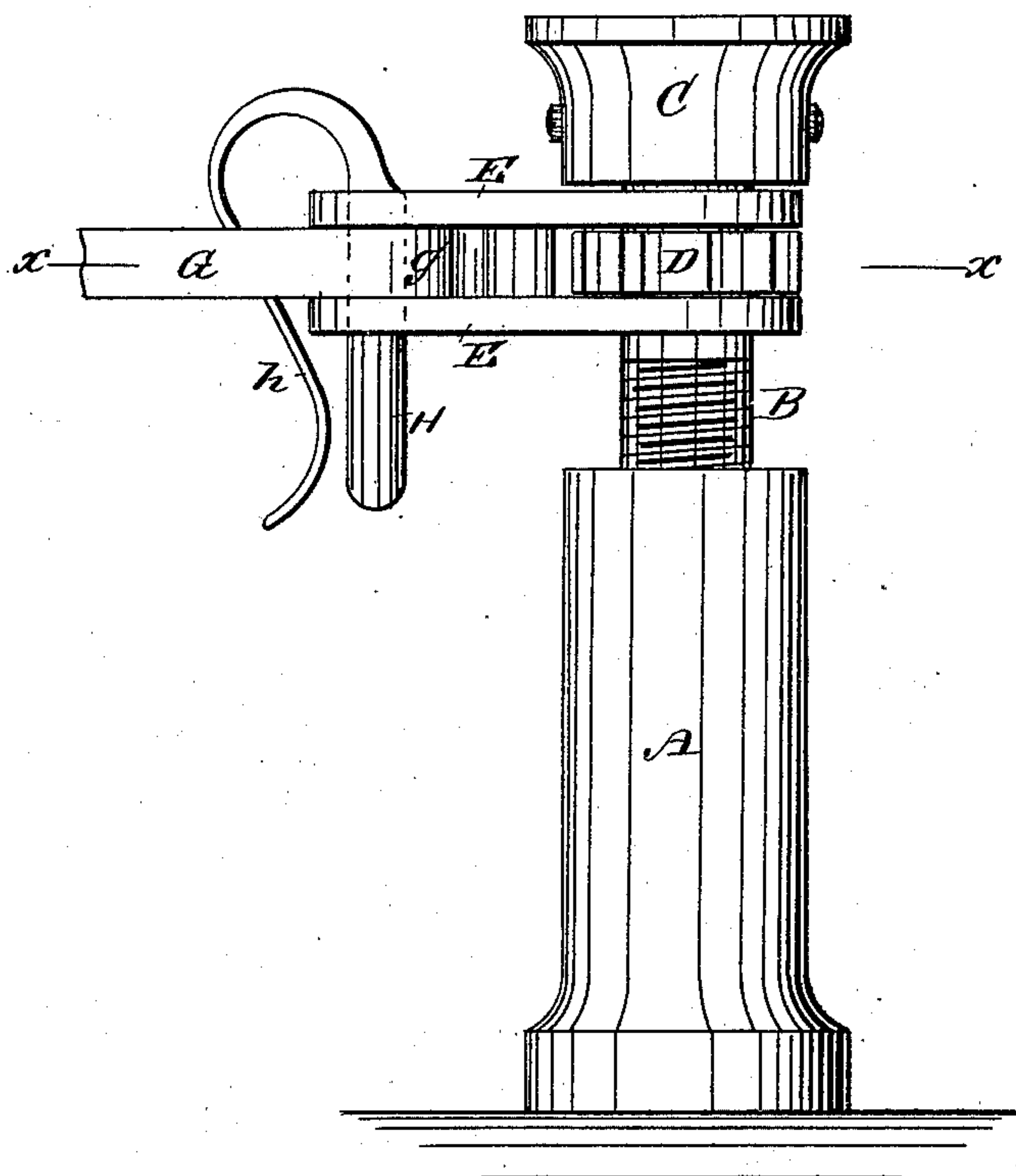
J. HERITAGE.

SCREW JACK.

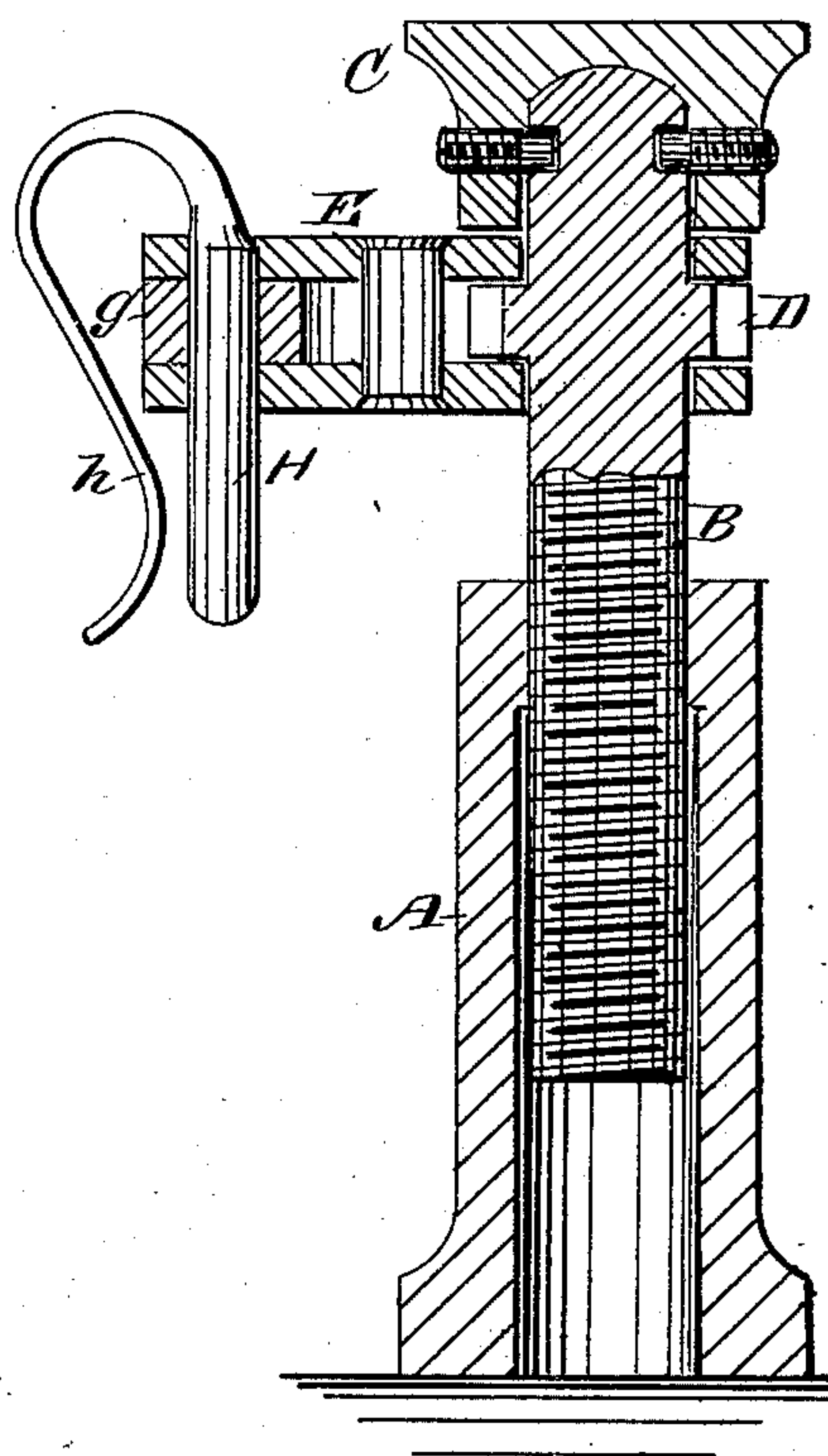
No. 279,753.

Patented June 19, 1883.

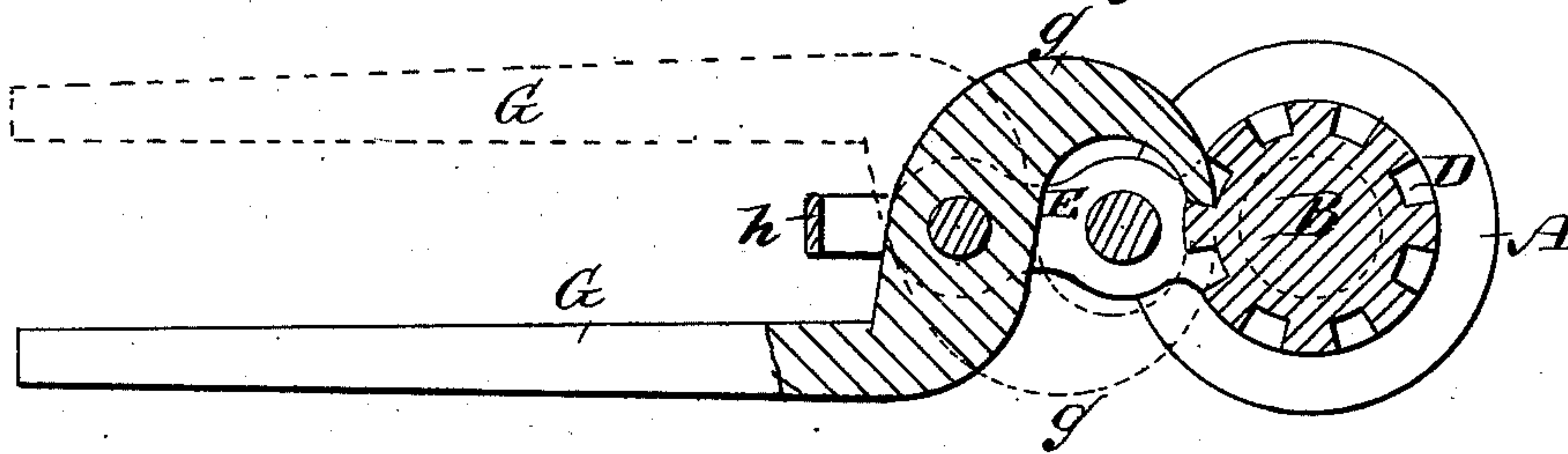
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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*C. Sedgwick*

INVENTOR:

*J. Heritage*  
BY *Munn & Co*  
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# UNITED STATES PATENT OFFICE.

JOSEPH HERITAGE, OF WARREN, MASSACHUSETTS, ASSIGNOR TO CHARLES HERITAGE, OF SAME PLACE.

## SCREW-JACK.

SPECIFICATION forming part of Letters Patent No. 279,753, dated June 19, 1883.

Application filed December 4, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HERITAGE, of Warren, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Screw-Jacks, of which the following is a full, clear, and exact description.

The invention consists in a combination, with the ratchet on the screw of a lifting and lowering jack, having its teeth constructed to provide for its turning the screw in opposite directions, of a reversible ratchet-tooth-shaped bar and freely-rotating link-piece carrying said bar; also, in a removable coupling pin or pivot for the bar, whereby said bar may readily be turned over or reversed to raise or lower the screw within a very small space or compass, and there is no liability of the removable coupling-pin to become accidentally detached.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a side elevation of a screw-jack embodying my invention; Fig. 2, a vertical section of the same, and Fig. 3 a horizontal section thereof on the line *xx* in Figs. 1 and 2.

A in the drawings indicates the stand, base-piece, or box of the jack; B, its screw working within said box, and C the lifting and lowering head, fitted to the upper end of said screw, so as to permit of the screw turning without rotating the head.

D is the ratchet by which the screw B is turned, and which is fitted fast on the screw. This ratchet has both sides of its teeth radial, or is otherwise constructed to provide for its turning the screw in reverse directions, and may be described as a mere notched or circumferentially indented fast collar on the screw.

E is a radially-projecting link-piece fitted to turn loosely on the screw, and embracing the notched collar or ratchet D within it. This link-piece serves to carry the ratchet-bar G, which is constructed with a lateral hook-shaped tooth, *g*, at its forward end to engage with the ratchet D on the screw. Said bar G is coupled or connected with the link-piece E by a removable pivot or pin, H, arranged to pass

through its forward bent or toothed portion, *g*, and providing for the turning of the ratchet-bar G upon it to engage with the teeth of the ratchet. This pin H is constructed with a curved spring locking-arm, *h*, extending downward from the top of the pin, outside of the link-piece E, and shaped so that it projects on its lower inside face slightly beneath the link-piece and meets or nearly meets the lower portion of the pin, whereby the pin is prevented from becoming accidentally detached, and cannot be removed by drawing it upward without springing its automatic locking-arm *h*. Said spring portion *h* also forms a handle by which to withdraw the pin H when required. By withdrawing the pin H the hook-toothed ratchet-bar G may be turned over, so as to present either face of the tooth *g* uppermost, as shown by full and dotted lines in Fig. 3, and the pin H be replaced to work the screw B in reverse directions, or, in other words, to raise or lower it, as required.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a screw-jack, the combination, with a ratchet on the screw, constructed to provide for turning the screw in reverse directions, of a reversible ratchet-bar having a laterally-arranged tooth on its forward end, and a link-piece to which said bar is pivoted and which is free to turn on the screw, substantially as specified.

2. The combination, with the reversible ratchet-bar G, having a lateral hook-shaped tooth, *g*, of a removable spring coupling pin or pivot for said bar, the link-piece E, the screw B, fitted to turn freely within or through said link-piece, the ratchet D, constructed to provide for turning the screw in opposite directions, and the screw-box A, essentially as described.

3. The coupling or pivot pin H, provided with a spring locking-arm, *h*, constructed to also form a handle, and serving to hold the pin in place, substantially as specified.

JOSEPH HERITAGE.

Witnesses:

WILLIAM H. KELLEY,  
GEORGE WOODBURY.