

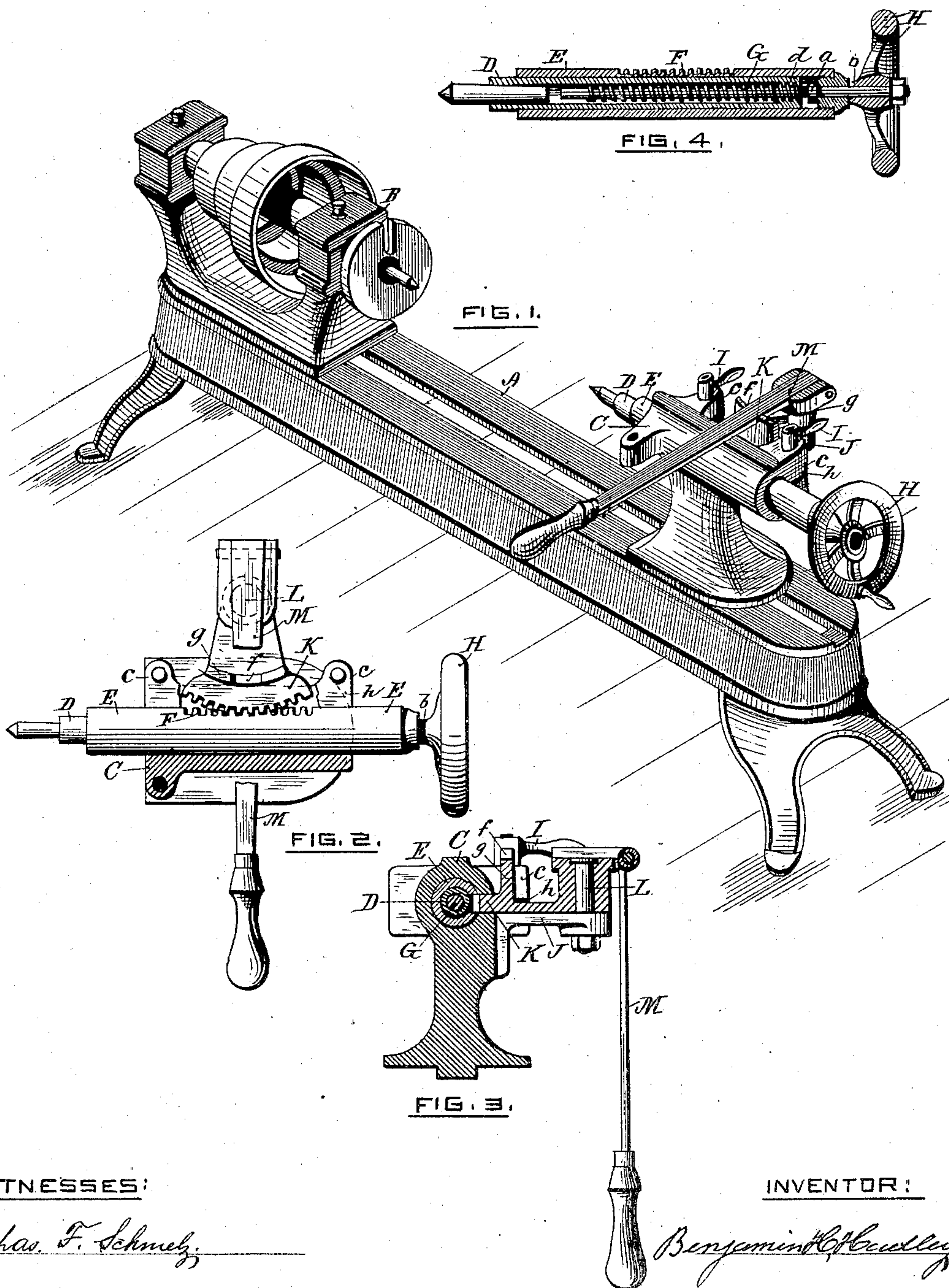
(No Model.)

B. H. HADLEY.

DRILLING LATHE.

No. 314,574.

Patented Mar. 31, 1885.



WITNESSES:

Chas. F. Schuch

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INVENTOR:

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UNITED STATES PATENT OFFICE.

BENJAMIN H. HADLEY, OF PROVIDENCE, RHODE ISLAND.

DRILLING-LATHE.

SPECIFICATION forming part of Letters Patent No. 314,574, dated March 31, 1885.

Application filed May 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN H. HADLEY, of Providence, in the State of Rhode Island, have invented an Improvement in Drilling-Lathes, of which the following is a specification.

My invention consists in the combination of a hand-lever with the center spindle of the tail-block and its operating-screw, whereby either the lever or the hand-screw may be used to move the spindle, as desired.

Figure 1 is a perspective view of a drilling-lathe provided with my improvement. Fig. 2 is a top view of a tail-block, with a portion of the upper part of the same removed to show the segment-gear of the hand-lever. Fig. 3 is a transverse section of the tail-block. Fig. 4 is a section view of a portion of the tail-block showing the rack.

In the accompanying drawings, A is the bed of the drilling-lathe, B the driving-head, and C the tail-block. The center spindle, D, of the tail-block is inclosed by a cylindrical shell, E, at one side of which is cut the rack F. The spindle D is also provided at its rear with a female screw, *d*, adapted to receive the operating-screw G, which is loosely held at the rear end of the shell E by means of the collar *a* and the hub *b* of the hand-wheel H. The tail-block C is provided with a slit, *h*, made longitudinally through the ears *c c* to the side of the bore for the spindle, and provided with the hand-screws I I, which serve to clamp the inclosed shell E firmly whenever the spindle D is to be operated by means of the hand wheel and screw; but when the hand-screws I

I are drawn back, thus loosening the shell E within the bore of the tail-block, the shell E and center spindle, D, may be caused to move together, and for this purpose I cut a rack, F, at one side of the shell E, adapted to engage with the segment-gear K, which is pivoted to an arm, J, projecting from the back of the tail-block by means of the stud L.

To the upper end of the hub of the segment-gear K is pivoted the lever M, which, when brought forward for use, as shown in Fig. 1, is also held in a notch, *f*, made in the flange *g*, which extends upwardly from the side of the segment-gear K. When the lever M is not in use, it may be turned back so as to hang from its pivot, as shown in Fig. 3.

The hand-lever instead of being pivoted to the segment-gear may be rigidly attached thereto, and may have the form of a hand-wheel, if preferred.

I claim as my invention—

1. In a tail-block for lathes, the combination of the spindle hand-screw, the spindle, the inclosing-shell having rack-teeth, the segment-gear, and the pivoted hand-lever adapted to operate the spindle, substantially as described.

2. In a tail-block for lathes, the combination of the spindle hand-screw, the spindle, the inclosing-shell having rack-teeth, the segment-gear, and means for operating the same, substantially as described.

BENJAMIN H. HADLEY.

Witnesses:

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