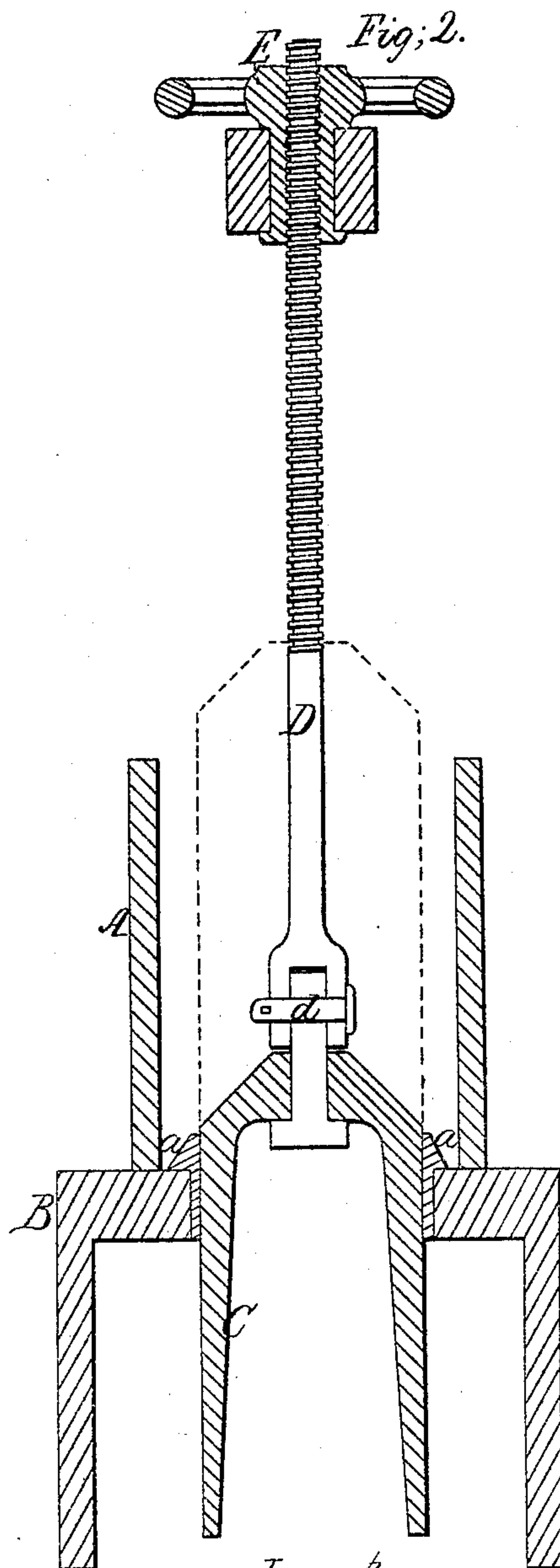
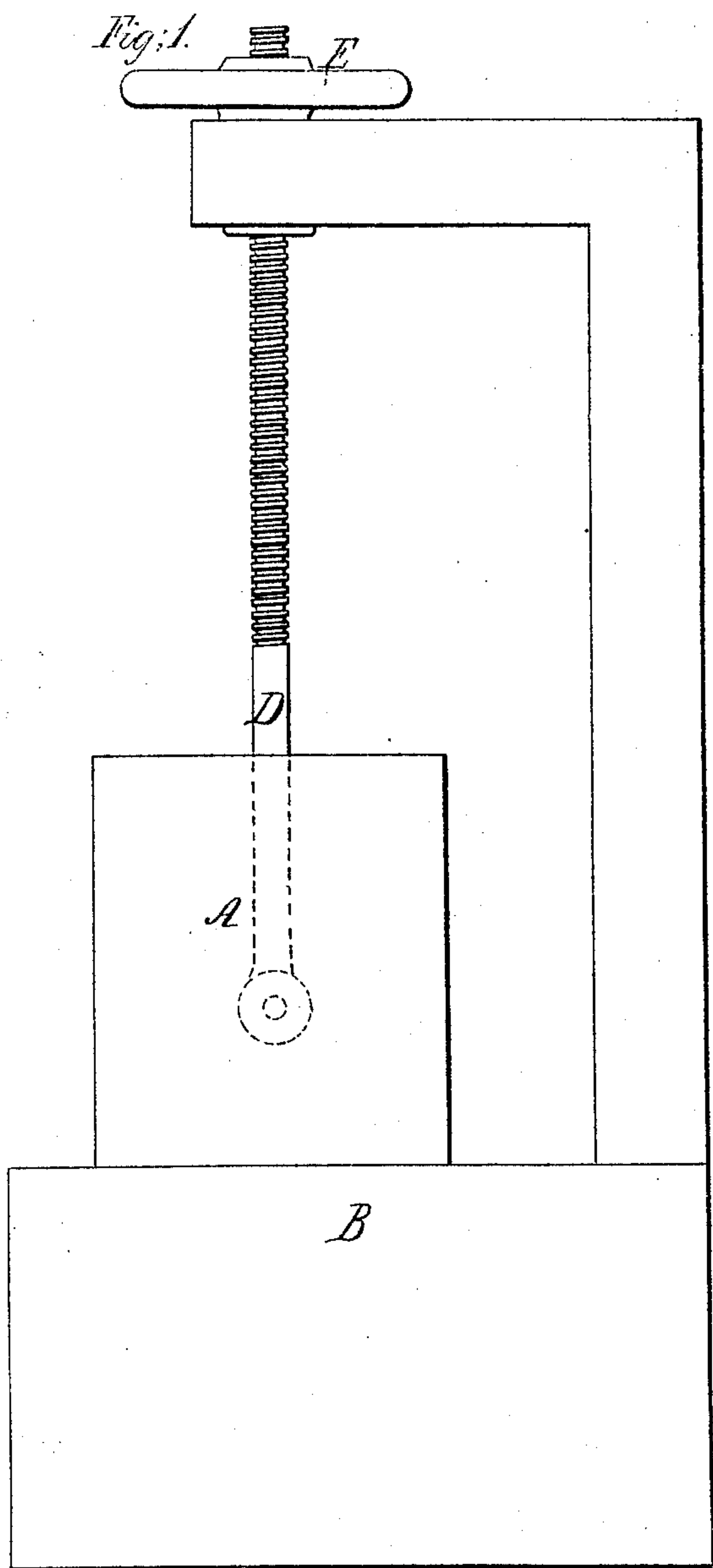


*J. E. Earle,*  
*Tile Machine,*  
*No. 49,827, Patented Sept. 5, 1865.*



Witnesses.  
*William H. Clark.*  
 *Rufus Sanford.*

Inventor.  
*John E. Earle.*

# UNITED STATES PATENT OFFICE.

JOHN E. EARLE, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO J. P. LINDSAY, OF SAME PLACE.

## IMPROVEMENT IN MACHINES FOR MAKING CEMENT PIPE.

Specification forming part of Letters Patent No. **49,827**, dated September 5, 1865.

*To all whom it may concern:*

Be it known that I, JOHN E. EARLE, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Machines for Making Cement Pipe; and I do hereby declare the following to be full, clear, and exact description of the same, when taken in connection with the accompanying drawings and the letters of reference marked thereon, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, and in Fig. 2 a vertical central section.

In the manufacture of cement pipe the core and case forming the flask have heretofore been fixed, and the stock placed around the core and pressed or tamped down. Owing to the narrow space around the core (between the core and case) the operation of filling and tamping is attended with considerable difficulty.

The object of my invention is to overcome this difficulty, and consists in the arrangement and construction of the core so that it may be lowered to the bottom of the flask and gradually raised as the flask is filled, thus giving the entire diameter of the case for the convenience of the workman.

To enable others skilled in the art to make and use my invention, I will proceed to fully describe the same as illustrated in the accompanying drawings.

A is the case, of any known construction, set upon a base, B.

a is a ring set within the flask to form one end of the pipe, and may be of any approved form.

C is the core. It is a cylinder of the diameter of the interior of the pipe to be made.

D is a screw-rod, and may be raised or lowered by turning the wheel-nut E accordingly. To this said rod the core C is secured by a pin, d, or in any other manner, so as to be easily detached.

When beginning to fill the flask the core should be down, as Fig. 2, and gradually raised as the flask is filled, and when filled the core will stand in the position denoted in red; then the rod D may be detached from the core and the upper end of the pipe formed in the usual manner, and when the pipe is completed the core may be drawn out by means of the screw-rod or forced down, at the pleasure of the operator.

If thought better, the core may be raised from the bottom instead of the top, as described.

I am aware that the core has been drawn from the flask after the pipe is finished, as in the patent of Henry Knight, May 31, 1864; but in that, as in all other cases, the core is stationary and stands at its full height in the flask while the pipe is being formed, causing a difficulty which is fully overcome by my invention. Therefore I do not claim raising the core from the flask after the pipe is formed; but

What I do claim as new and useful, and desire to secure by Letters Patent, is—

Raising the core in the flask during the process of filling, and only as fast as the flask becomes filled, so that the top of the core is always down in the flask at or near the point of filling, substantially as and for the purpose specified.

JOHN E. EARLE.

Witnesses:

WILSON H. CLARK,  
RUFUS SANFORD.