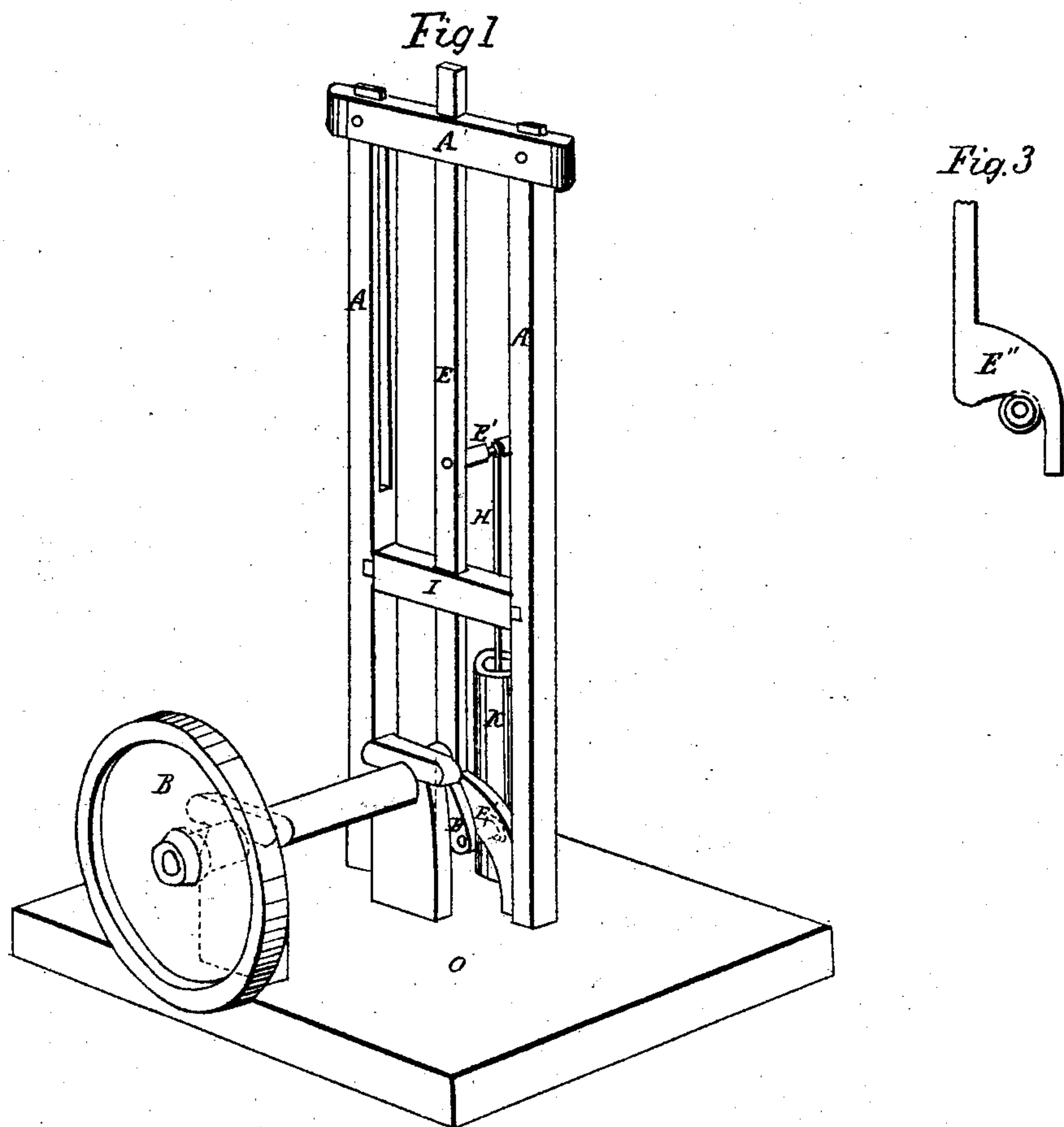


G. Mott,

Artesian Well Drill and Pump.

N^o 55,693.

Patented June 19, 1866.



Witnesses

C. P. Martin

Lawrence Murphy.

Inventor

Genham Mott

Inventor

by
D. P. Weller & Co
his attorneys.

UNITED STATES PATENT OFFICE.

GERSHOM MOTT, OF BIG RUN, OHIO.

IMPROVED DRILLING-MACHINE FOR WELLS.

Specification forming part of Letters Patent No. 55,693, dated June 19, 1866.

To all whom it may concern:

Be it known that I, GERSHOM MOTT, of Big Run, in the county of Athens and State of Ohio, have invented a new and useful Machine for Drilling Wells; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, made part of this specification.

Figure 1 is a perspective view of the machine when arranged to work a drill. Fig. 2 is a section of the toe of the tripping-beam of a drill.

O is a framed platform, to which the machinery is attached. A A is a gallows-frame erected upon the platform, consisting of two upright posts with the cross-head A' framed on the upper end. The posts A A have a dovetailed groove to receive the tie I when the machine is operated with a drill. E is the tripping-beam, to which the drill is attached by ordinary means to the stud E'. Holes mortised through the cross-head and tie serve as guides for the tripping-beam, which passes freely through them. The toe of the tripping-beam E'' is formed as shown in Fig. 3, resting upon its lower end upon the platform when down, and raised by the crank D, which has a rolling collar working on its crank-pin to avoid friction. The crank D receives motion from a shaft driven by any kind of power.

In the case shown in the drawings the crank revolves from right to left, or against the sun.

When the crank is in the lower arc of its revolution and passes the center, beginning to ascend, it strikes the point of the tripping-beam as it passes toward the right; it raises the beam so that when the crank is horizontal it has raised the beam nearly one-half of the diameter of the circle described by the crank. When the crank passes the perpendicular it disengages the tripping-beam, which falls with its own gravity, and the drill falls with it freely. One stroke of the drill is made to every revolution of the crank, which may be varied at will. The upward slope of the lower face of the toe E'' has the effect of diminishing the upward movement of the tripping-beam and drill, thus giving a gradually accelerating motion, and avoiding the shock which would endanger the machinery if full action were at once communicated.

Having fully described the character of my improvements, what I claim as my invention, and seek to secure by Letters Patent, is—

The tripping-beam E, having its toe E'', shaped as shown, in combination with the crank D, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GERSHOM MOTT.

Witnesses:

VIRGINIA C. LADD,
W. W. WICKHAM.