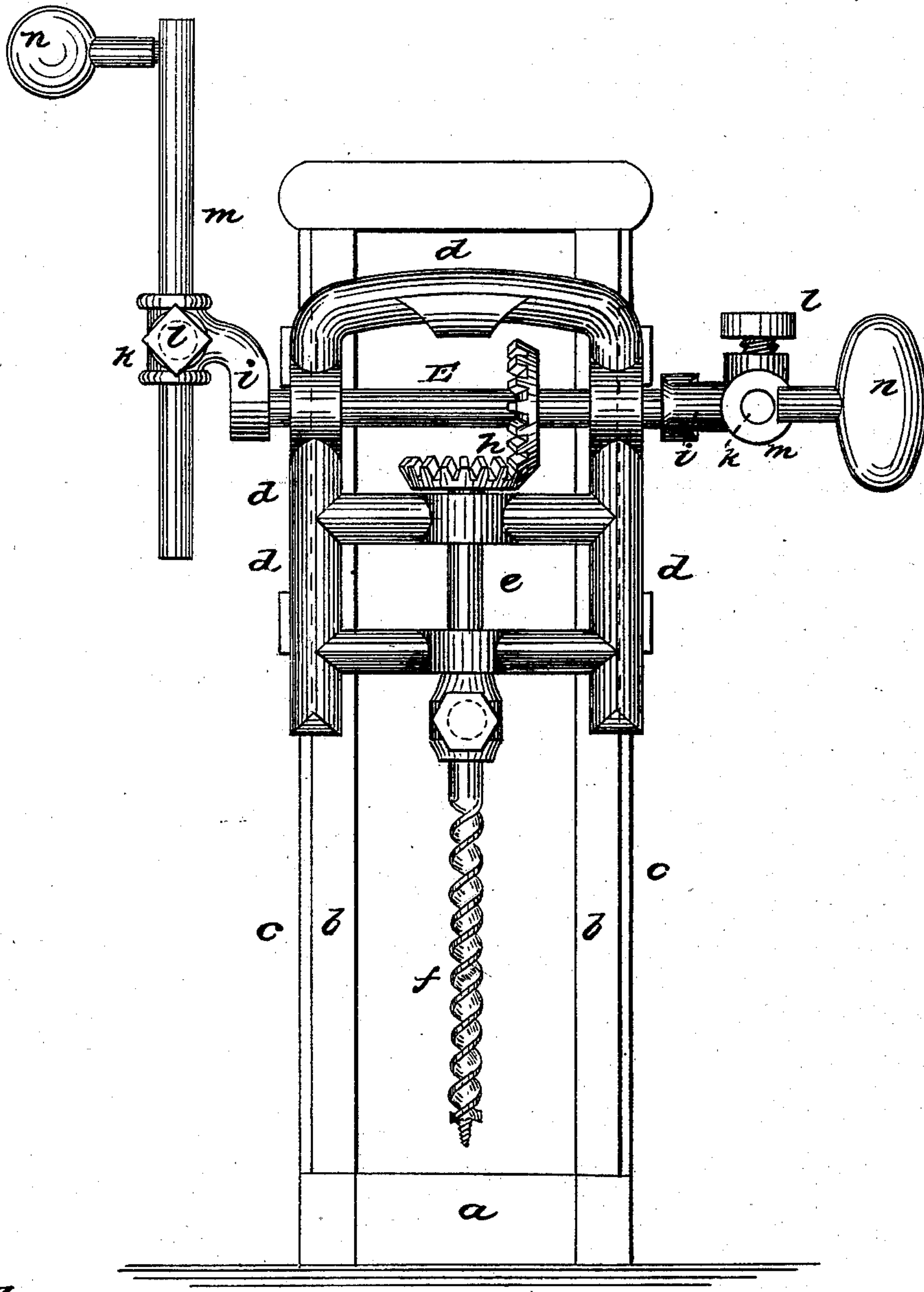


Crank for Boring Machines.

Patented Dec. 10, 1867.



Chas H Smith.

Geodulaker.

Inventor:

G. C. Taft
per L. W. Snell

Atty.

United States Patent Office.

GEORGE C. TAFT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO THEODORE MACE, OF SING SING, NEW YORK.

Letters Patent No. 72,114, dated December 10, 1867.

IMPROVEMENT IN VARIABLE CRANK FOR BORING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE C. TAFT, of Worcester, in the State of Massachusetts, have invented and made a certain new and useful Variable Crank for Boring-Machines, &c.; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein I have represented a boring-machine with my improved cranks applied thereto.

In the boring-machines heretofore constructed, the cranks are of a definite length, and hence in boring large-sized holes the labor is very severe, because there is not sufficient leverage by the cranks, and the contrary is the case when boring small holes, there being a loss of time, because the workman's hands have to move through an unnecessarily large circle.

The nature of my said invention consists in two variable cranks, at right angles to each other, constructed in such a manner that the handle may be placed at any desired distance from the axis, and combined with boring-mechanism; thereby a large leverage can be obtained for heavy work, or a short leverage employed for light work, so that the hands of the workman will only have to describe the proper-sized circle to produce the power required in rotating the auger or drill.

In the drawing, *a* represents the base, *b* the standards, and *c* the slides, receiving the frame *d*, spindle *e*, auger *f*, horizontal shaft *g*, and gearing *h*. These parts being of any usual or desired character, do not require further description as to their construction or mode of operation, they being well known and in use.

My variable cranks are each formed of an arm, *i*, keyed or otherwise secured upon the ends of the shaft, and at the end of the arm *i* is a hub, *k*, standing at right angles to the shaft *g*, and provided with a clamping-bolt or screw, *l*. *m* is a rod, either round or polygonal, passing through the hub *k*, and *n* is a handle, of any suitable size or shape, standing off at right angles to the rod *m*, and these cranks are to be placed at right angles to each other on the ends of the shaft *g*.

It will now be understood that the crank-handle *n* can be placed at any desired distance from the axis or shaft *g* by sliding the rod *m* in the hub *k*, and clamping it, and thereby the leverage applied to rotate the drill or auger can be varied as desired for the purposes aforesaid.

What I claim, and desire to secure by Letters Patent, is—

The two variable cranks, constructed as specified, and applied in the manner shown, to the shaft or axis of the boring-machine, as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this twentieth day of May, A. D. 1867.

GEO. C. TAFT.

Witnesses:

GEO. C. TAFT, Jr.,
RUBIN CARPENTER.