L. F. Nance,

Turning Irregular Forms.

No. 22,302. Patented Dec. 14, 1858.

Fig: 1.

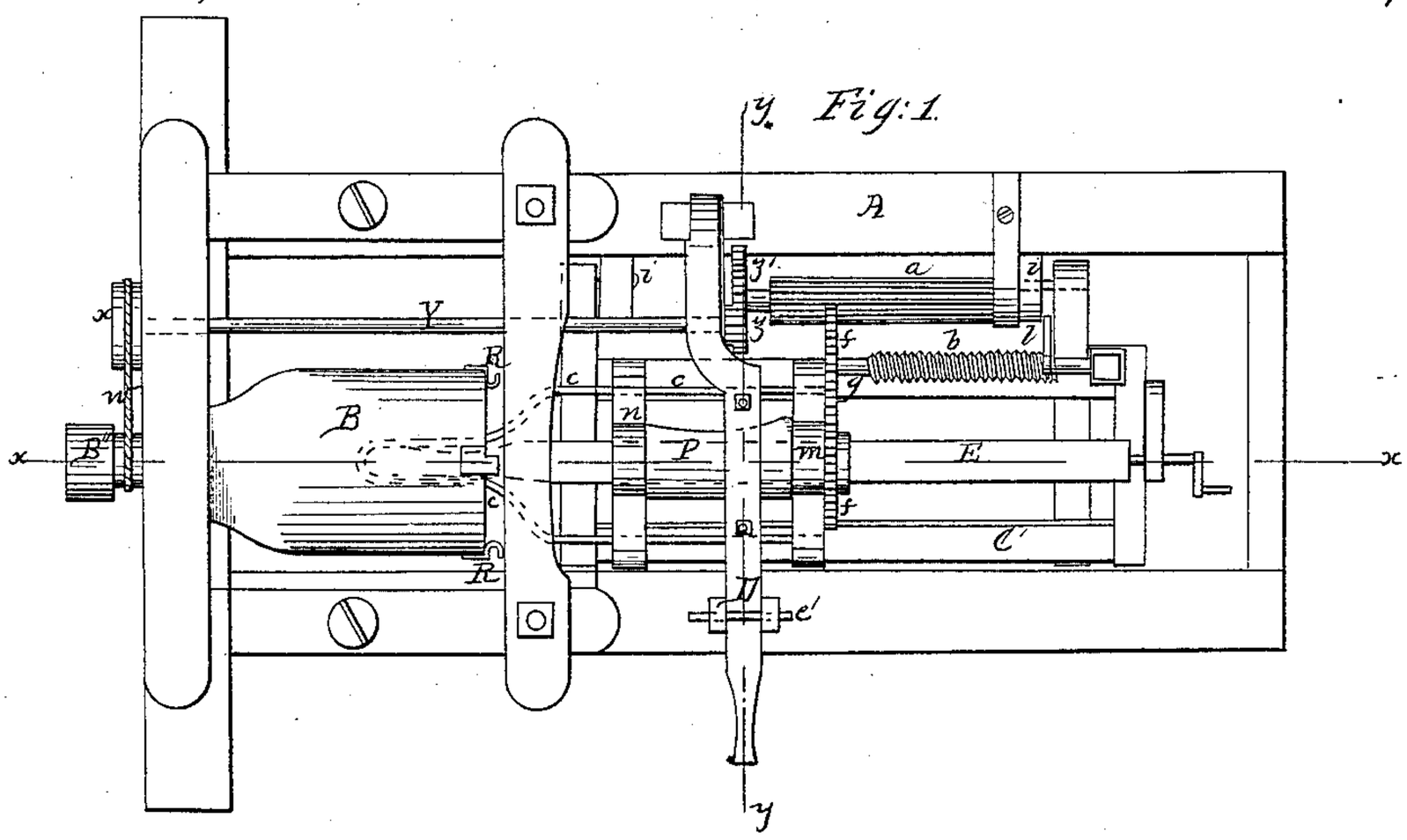


Fig: 2.

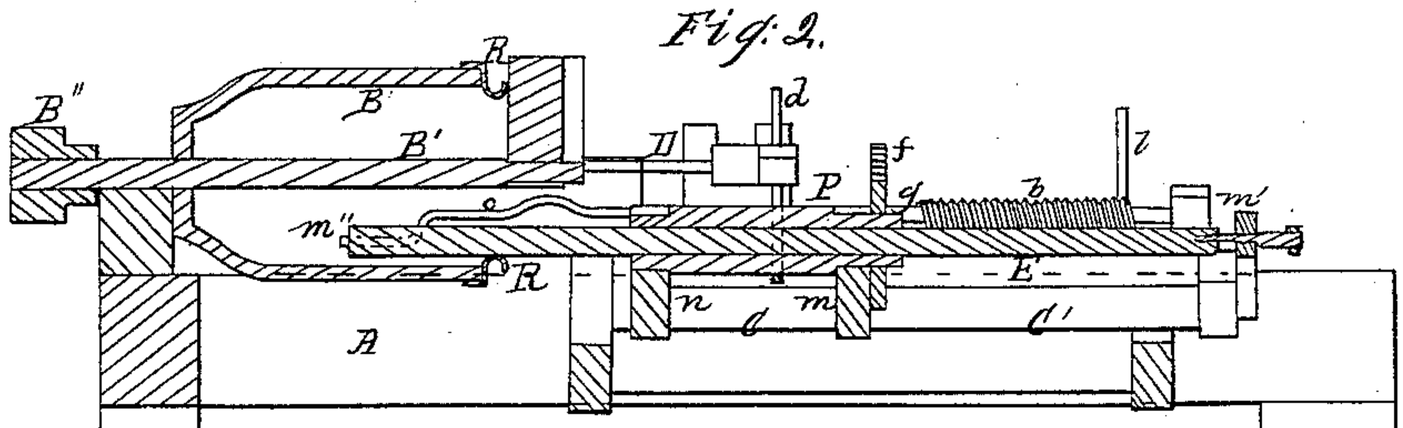
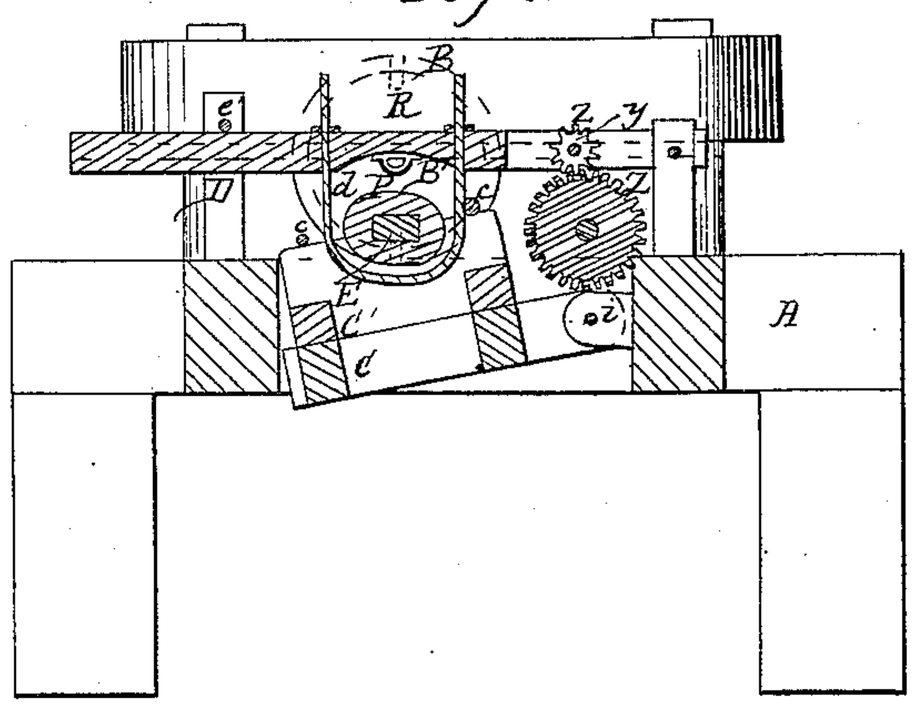


Fig: 3.



Witnesses.
N. H. Barnes
John H. Bowry 2

Inventor.
L. F. Nance

UNITED STATES PATENT OFFICE.

Z. F. NANCE, OF RICHMOND, VIRGINIA.

MACHINE FOR TURNING IRREGULAR FORMS.

Specification of Letters Patent No. 22,302, dated December 14, 1858.

To all whom it may concern:

Be it known that I, Z. F. NANCE, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Machines for Turning Irregular Forms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1 is a top view of the machine. Fig. 2 is a vertical section on *x x*. Fig. 3 is a vertical section on *y y*.

The nature of my invention consists in certain devices hereinafter to be described for turning irregular forms.

In the drawing A is the main frame. C is a secondary frame swinging from frame A upon pins *i*, and supporting the pattern carriage C′. The cutter head B is hollow, and rotates upon shaft B′ driven by pulley B″. Around its mouth are arranged the cutters R.

Upon the carriage C′ is the pattern P, journaled at *m* and *n* and rotated by cog wheel connection *f f′*; the former upon the pattern and the latter on screw shaft *g*, meshing with the long pinion *a* on main frame; said long pinion being rotated from the driving pulley B″ by reason of band *w*, pulley *x*, shaft *y*, and wheels *z z′* as shown in Figs. 1 and 3.

The screw Z meshes with the nut of lever *l* upon secondary frame C, and by its rotation produces the traversing of the carriage C′.

The pattern P is hollow and has the stick to be turned passing through it, as seen at E. This piece E is centered at each end as shown at *m′ m″*; the frame C having an extension *c* for that purpose.

Across the main frame runs a lever D, having an adjustable bow *d* embracing the pattern P; so that when the lever D is held down by a pin *e′*, the frame C will rise and fall as the inequalities of the pattern press against the bow *d*. This movement of the pattern gives a similar movement to the piece E revolving with it, causing the cutters to impart to the piece a form similar in every respect to the pattern P.

The lever D constitutes one bearing of shaft *y*, so that by removing pin *e′* and lifting lever D, wheel *z* will be raised from wheel *z′* and frame C elevated. This frame movement carrying the piece E clear of the cutters.

I claim—

Passing the piece to be turned through the pattern, and the combination of the same with the swinging frame C and parts connected therewith as and for the purposes set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

Z. F. NANCE.

Witnesses:

GEO. PATTEN,

W. I. CLARY.