A. P. C. Bonte,

Turning Orals.

No. 78,919. Patented June 16, 1868.

Fig: 1.

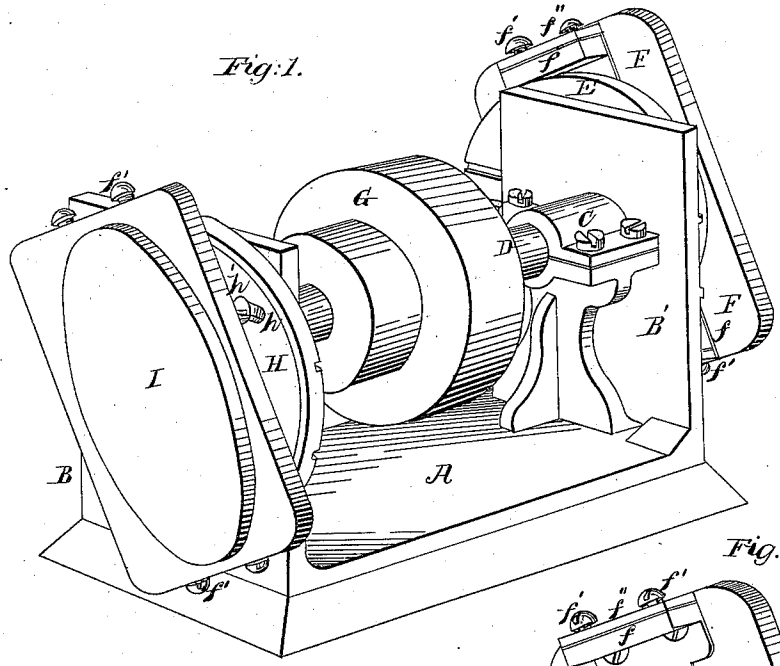


Fig: 2.

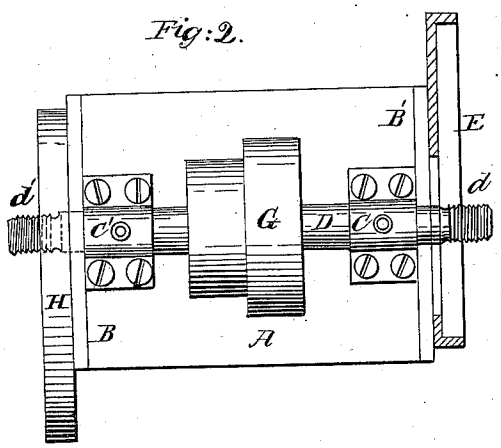
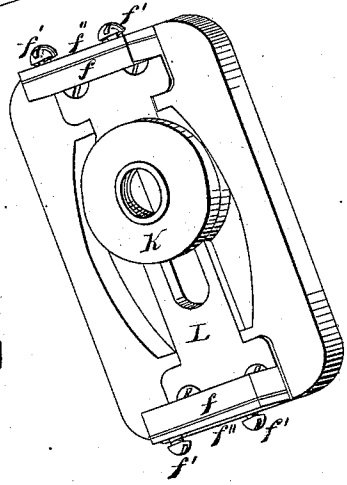


Fig: 3.



Witnesses:
Chas. Bowes.
Jas. H. Layman.

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UNITED STATES PATENT OFFICE.

ALBERT P. C. BONTE, OF CINCINNATI, OHIO.

IMPROVEMENT IN WOOD-TURNING LATHES.

Specification forming part of Letters Patent No. **78,919**, dated June 16, 1868.

To all whom it may concern:

Be it known that I, ALBERT P. C. BONTE, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Lathe for Turning Elliptical Forms; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to that class of lathes employed for turning elliptical forms, and consists in the provision of a counterpoise to prevent the sway or lurching motion to which such lathes are subject.

Figure 1 is a perspective view of a lathe embodying my invention. Fig. 2 is a top view of the same without the face-plates, and having one of the eccentrics represented in section. Fig. 3 is a rear perspective view of a face-plate detached.

The base A and the heads or standards B B′ of the head-stock I prefer to form of one casting, in order to insure stability; and still further to insure this condition, the casting may be continued in the form of a box or shell on either or both sides, as far as consistent with the traverse of the belt,

C C′ are the head and tail journal boxes or bearings of the spindle D.

E and F represent, respectively, the adjustable eccentric and the face-place which form the customary oval-turning or elliptical chuck, and G is a customary belt-pulley.

The tail end of the lathe is provided with a supplementary eccentric, H, adjustable in the opposite direction to the eccentric E, and, like it, having slots *h* and screws *h′*, or equivalent devices, to enable it to be shifted and secured to any specific adjustment.

I is a supplementary face-plate, designed to counterbalance the face-plate F, and thus to neutralize the swaying motion customarily incident thereto.

The face-plate I, like the face-plate F, is provided with gibs *f*, preferably of hard wood, the end of whose grain is presented toward the periphery of the eccentric, and said gibs are adjusted toward and from said periphery by means of set-screws *f′*, tapped within flanges *f″*, cast in one piece with and projecting rearwardly from the guide-bar L upon the back of the face-plate.

It is found in practice that the weight of the above-described supplementary face-plate should be about half that of the face-plate proper.

Each face-plate has an interiorly screw-threaded hub or nut, K, of which that belonging to the face-plate proper engages on a right-hand screw, *d*, on the front end of the spindle, while that of the supplementary face-plate engages on a similar but left-hand screw, *d′*, on the tail end of said spindle.

The guide-bar L, with its attached face-plate, slides in the hub K, as the latter is rotated, in the usual manner with oval-turning lathes.

While preferring the herein-selected illustration of my invention, I reserve the right to vary the same. For example, the counterpoise may be located immediately in rear of the head or standard B, or at any other point on the shaft D.

I claim herein as new and of my invention—

The adjustable counterpoise H I, constructed substantially as described, and arranged relatively to the chuck E F of an eccentric or elliptical turning-lathe, to operate in the manner and for the purpose specified.

In testimony of which invention I hereunto set my hand.

ALBERT P. C. BONTE.

Witnesses:
GEO. H. KNIGHT,
JAMES H. LAYMAN.