T. Lippiatt,

Rose Engine Lathe,

No. 57,158, Patented Aug. 14, 1866.

Fig. 1.

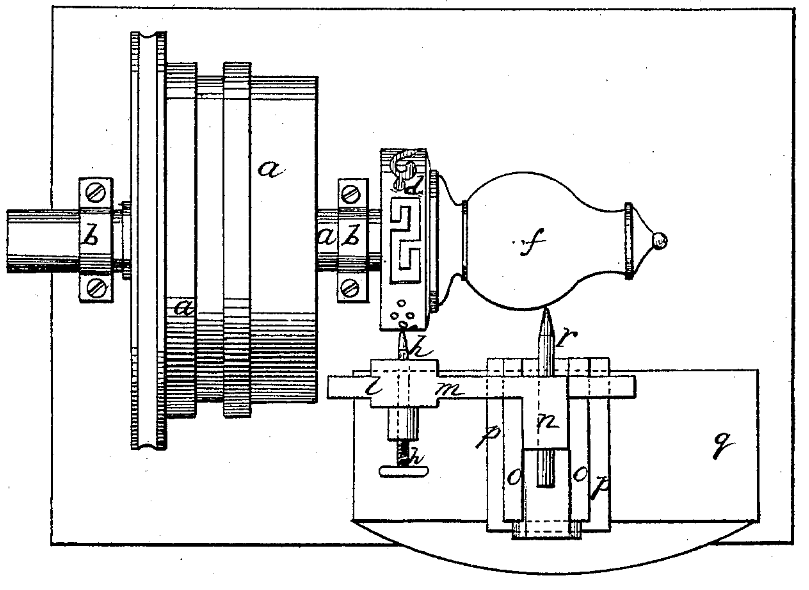
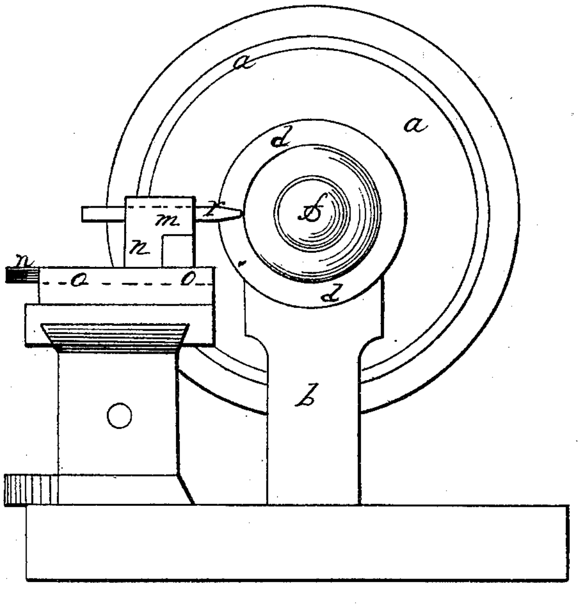


Fig. 2.



Witnesses.

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Atty

UNITED STATES PATENT OFFICE.

THOMAS LIPPIATT, OF NEW YORK, N. Y.

IMPROVEMENT IN ROSE-ENGINE LATHES.

Specification forming part of Letters Patent No. **57,158**, dated August 14, 1866.

To all whom it may concern:

Be it known that I, THOMAS LIPPIATT, of the city, county, and State of New York, have invented new and useful Improvements in Rose-Engine Lathes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

In the present invention the dictator, in lieu of being stationary, with the mandrel vibrating, as has heretofore been the case in rose-engine lathes, is arranged so as to be susceptible of a lateral play as the mandrel is revolved, according to the depressions or figure of the pattern secured on the mandrel, the cutting-tool being connected with the dictator in such a manner as to partake of its movements, thus transferring to the article placed in the lathe to be turned a similar configuration to that of the pattern.

In accompanying plate of drawings my improvements are illustrated, Figure 1 being a view of one side of the lathe, and Fig. 2 a view of one end of the same.

As the arrangements of the various parts composing the lathe are substantially similar, except so far as my improvement extends, to those in lathes now in use, I have not deemed it necessary to show them in the drawings, except so far as my invention is connected with them, and in the following description will also correspondingly limit myself to such parts.

a a in the drawings represent the mandrel of the lathe, hung in a horizontal position, and turning in bearings of fixed standards or posts *b b* of the bed-plate or frame *c* of the lathe, to which mandrel motion is communicated in the ordinary manner.

On one end of the mandrel *a* the pattern-cylinder *d* is secured, having upon and around its periphery any desired configuration or pattern, such as a "Grecian border," so called, &c.; *f*, the article, secured also upon the mandrel, to and upon the surface of which it is desired to produce the configuration of the pattern, which article may be a napkin-ring, goblet, pitcher, &c., the pattern-block or cylinder and the article to be turned thus revolving around a common center or axis, as in ordinary rose-engine lathes; *h*, the dictator, set in the outer end, *l*, of a horizontal projecting arm, *m*, of the sliding rest *n*, arranged so as to move toward and from the mandrel of the lathe in a guide or way, *o*, of a sliding block or stand, *p*, of a fixed bar or frame, *q*, of the bed-plate of the lathe, the block *p* being arranged so as to slide longitudinally with the axis of the lathe-mandrel, or, in other words, at right angles to the movement or play of the sliding rest *n*.

The dictator *h* is to be arranged within the arm *m* in such a manner that it can be adjusted therein, which may be done in a similar manner to that now employed, so as to bring it in the proper position for the pattern; *r*, the cutting-tool inserted in the same sliding rest as the dictator, and arranged so as to be susceptible of adjustment with regard to the article to be turned.

In the use of the lathe the dictator and cutting-tool are adjusted in substantially the same manner as now practiced in ordinary lathes, and the article to be turned also secured by any suitable means upon the mandrel, when, motion being communicated to the engine-lathe in any proper manner, the mandrel is revolved, thus causing the dictator to be actuated according to the configuration, whereby the cutting-tool imparts to the article a corresponding configuration, as is obvious without further description, the dictator and tool-rest being moved in the direction of the length of the lathe or across the width of the pattern-block by means of a ratchet-wheel and pawl, as in ordinary rose-engine lathes.

By arranging the dictator in the manner described, or so as to be operated by the pattern-block, I am enabled to have mandrel turn in stationary and fixed bearings, the oscillation of which has heretofore been extremely disadvantageous in many respects.

I claim as new and desire to secure by Letters Patent—

The combination of the movable dictator *h* and cutting-tool *r*, projecting arm *m*, sliding rest *n*, and sliding block *p*, arranged relatively to each other and operating in the manner as and for the purpose herein specified.

The above specification of my invention signed by me this 11th day of August, 1865.

THOS. LIPPIATT.

Witnesses:

M. M. LIVINGSTON,

ALBERT W. BROWN.