

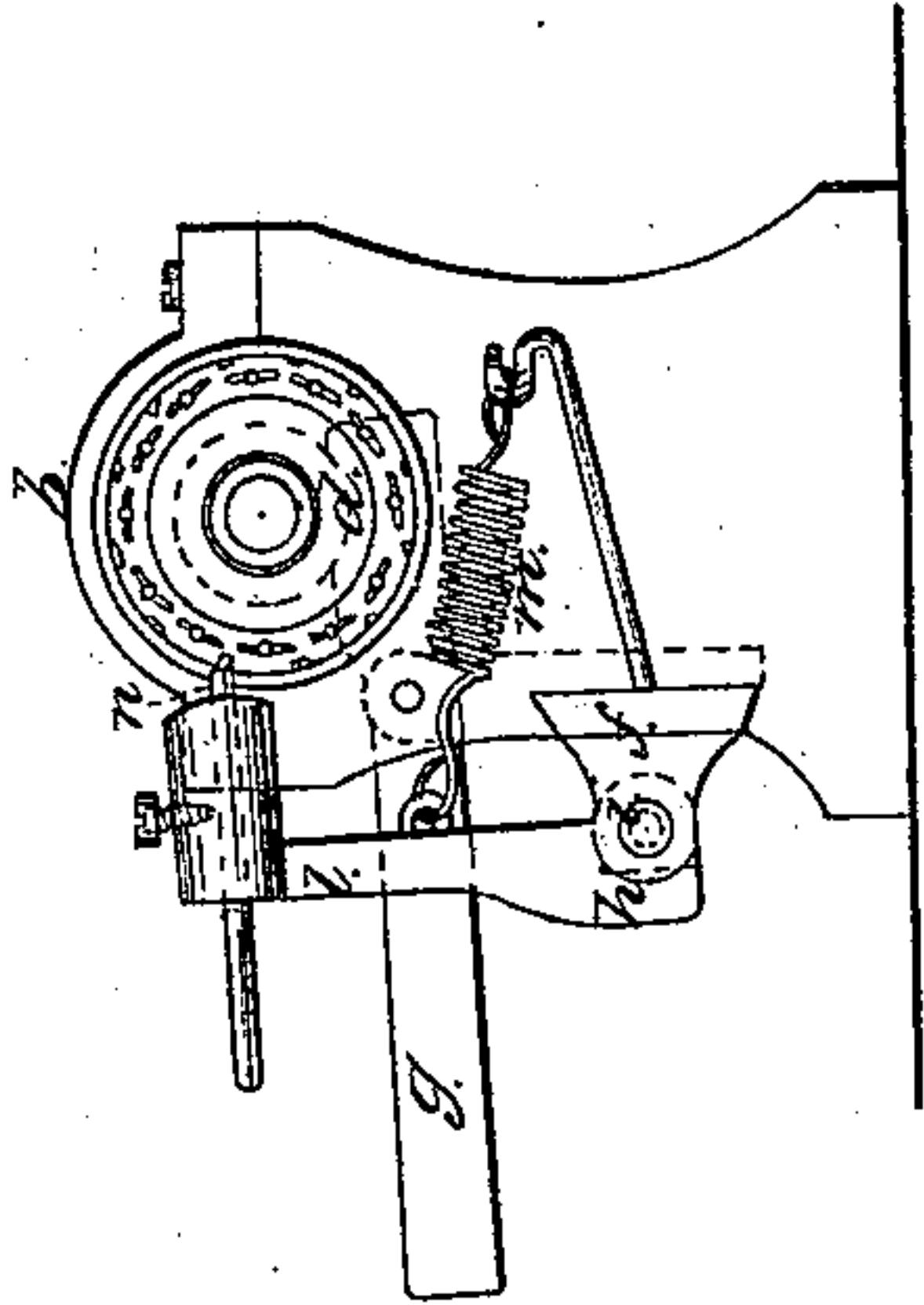
*H. W. Hayden,*

*Rose Engine,*

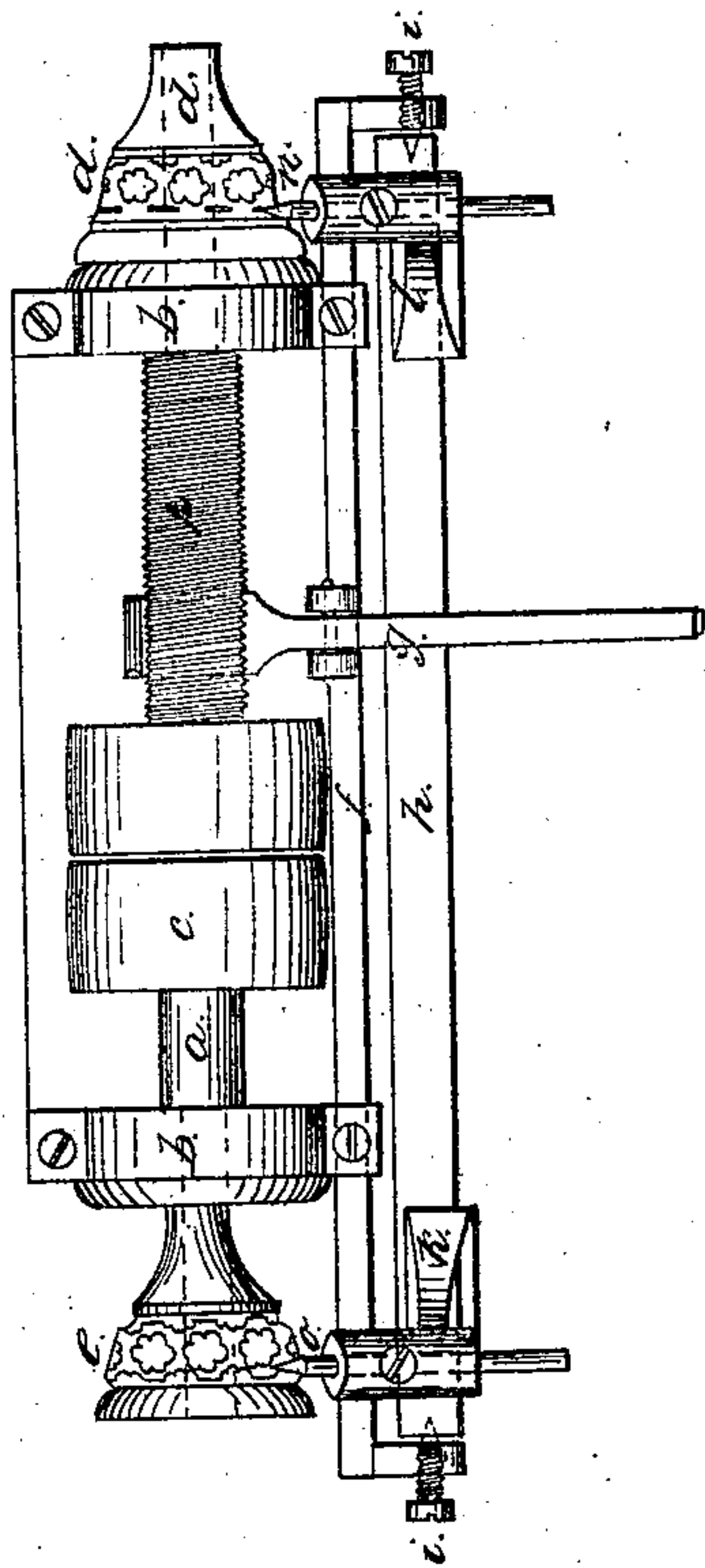
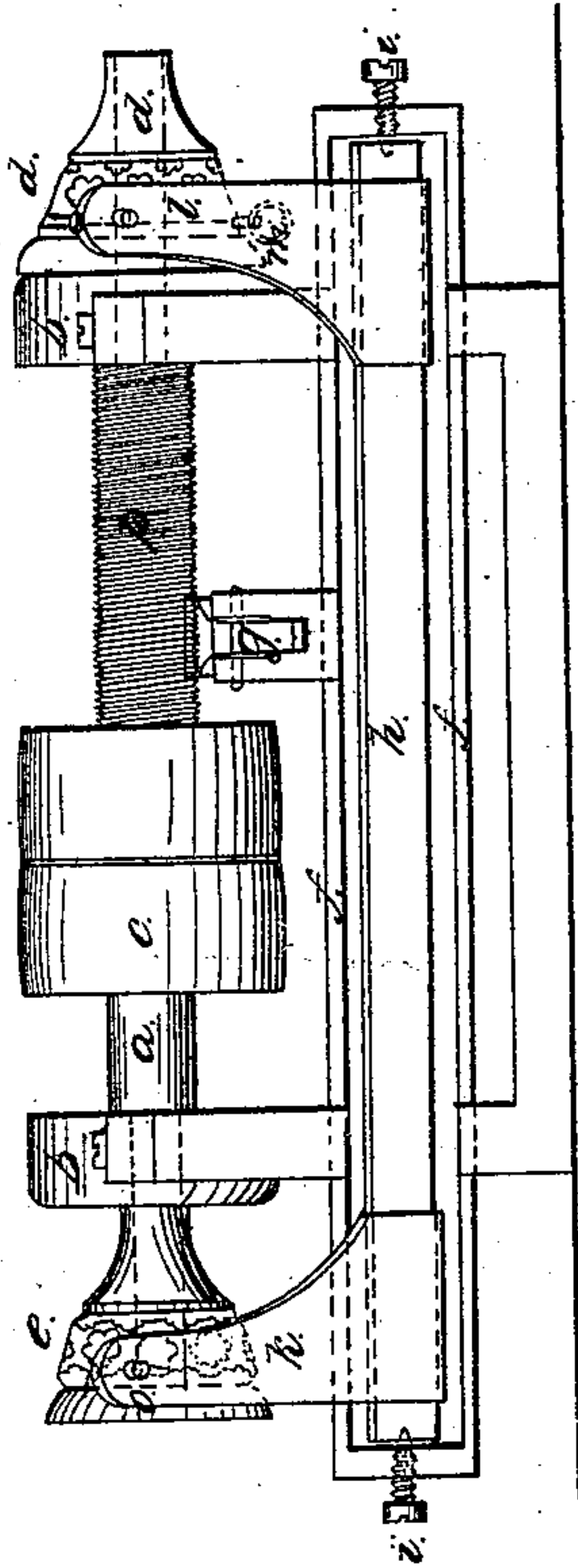
*Patented June 9, 1863.*

*No 38,823.*

*Fig. 3.*



*Fig. 1.*



*Witnesses:*

*Asa J. D. King*  
*Theodore S. King*

*Inventor:*

*H. W. Hayden*

# UNITED STATES PATENT OFFICE.

HIRAM W. HAYDEN, OF WATERBURY, CONNECTICUT.

## MODE OF ORNAMENTING LAMP-STANDS, &c.

Specification forming part of Letters Patent No. 38,823, dated June 9, 1863.

*To all whom it may concern:*

Be it known that I, HIRAM W. HAYDEN, of Waterbury, in the county of New Haven and State of Connecticut, have invented, made, and applied to use a certain new and useful Improvement in Ornamenting Lamp-Stands and Similar Articles; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a side view of an apparatus employed by me for ornamenting said articles. Fig. 2 is a plan of the same, and Fig. 3 is an end view.

Similar marks of reference indicate the same parts.

Various articles—such as silver-ware and pencil-cases—have been ornamented by means of a die or a roller with the design engraved thereon and pressed upon the surface to be ornamented, and a chaser or engraving-tool has been employed to ornament pencil-cases, &c., by longitudinal lines, straight or wavy, intermitted or continuous.

The nature of my said invention consists in a method of ornamenting lamp-stands and similar articles by a series of parallel lines engraved upon the surface of such articles by a standing tool, against which said article is caused to rotate, and which tool is raised from the surface at certain points, so as to leave the said surface plain at such points, to produce the figure or pattern of the ornamentation.

To enable others to ornament lamp-stands and similar articles with this character of engraving, I have represented a device which is very simple and easily employed for this purpose.

*a* is a mandrel, sustained in the heads *b b* and driven by competent power applied to the pulley *c*. At one end of this mandrel *a* the lamp-stand *d* or other article is attached in any convenient way by setting upon a corresponding shape or otherwise. At the other end of this mandrel is a pattern, *e*, corresponding in size and shape to the exterior of the article to be engraved. Upon this pattern *e* is marked out the design to be engraved, and the parts that are to be ornamented on the

lamp-stand by the engraved lines are cut out, removed, or countersunk.

*f* is a slide rest, that is caused to progress longitudinally and parallel to *a* by a screw-thread on *a*, taking the end of the lever *g*, and this slide rest *f* is fitted with a rock-shaft, *h*, on centers *i i*, and said shaft *h* carries standards *k* and *l*, and *m* is a spring to keep *l* toward *d*. In or supported by the standard *l* is an engraving-tool, *n*, and *o* is a tracer in *k*. These parts of the instrument are adjusted so that the distance between *n* and *o* is the same as between *d* and *e*, and when the tracer *o* rests on the surface of *e* the tool *n* is clear of the surface of *d*; but so soon as the tracer enters a depression in the pattern the said tool begins to cut by being drawn to *d* by the spring *m*. By this means the lamp-stand or similar article is ornamented by a series of spiral or nearly horizontal lines by the said tool acting when the tracer *o* is in the cavity or depression in *e*, and being relieved when the tracer rests upon the surface of *e*, so that the interruption of the engraved line produces the pattern, and the screw *p* causes the movement of the slide *f*, in order that the entire surface to be ornamented may be traveled over.

By this mode of engraving, circular articles—such as lamp stands, &c.—can be ornamented with great rapidity and beauty.

If colored lacquer or enamel is applied to the article previous to engraving, a very bold and handsome appearance is given to the ornamentation. In this instance a transparent lacquer should afterward be employed.

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

The method herein specified of ornamenting a lamp stand or similar article by interrupted parallel lines engraved upon the surface of such article by a tool in contact with such surface while the said article is being rotated, as specified.

In witness whereof I have hereunto set my signature this 23d day of February, 1863.

H. W. HAYDEN.

Witnesses:

NATHAN J. BUEL,  
THEODORE S. BUEL.