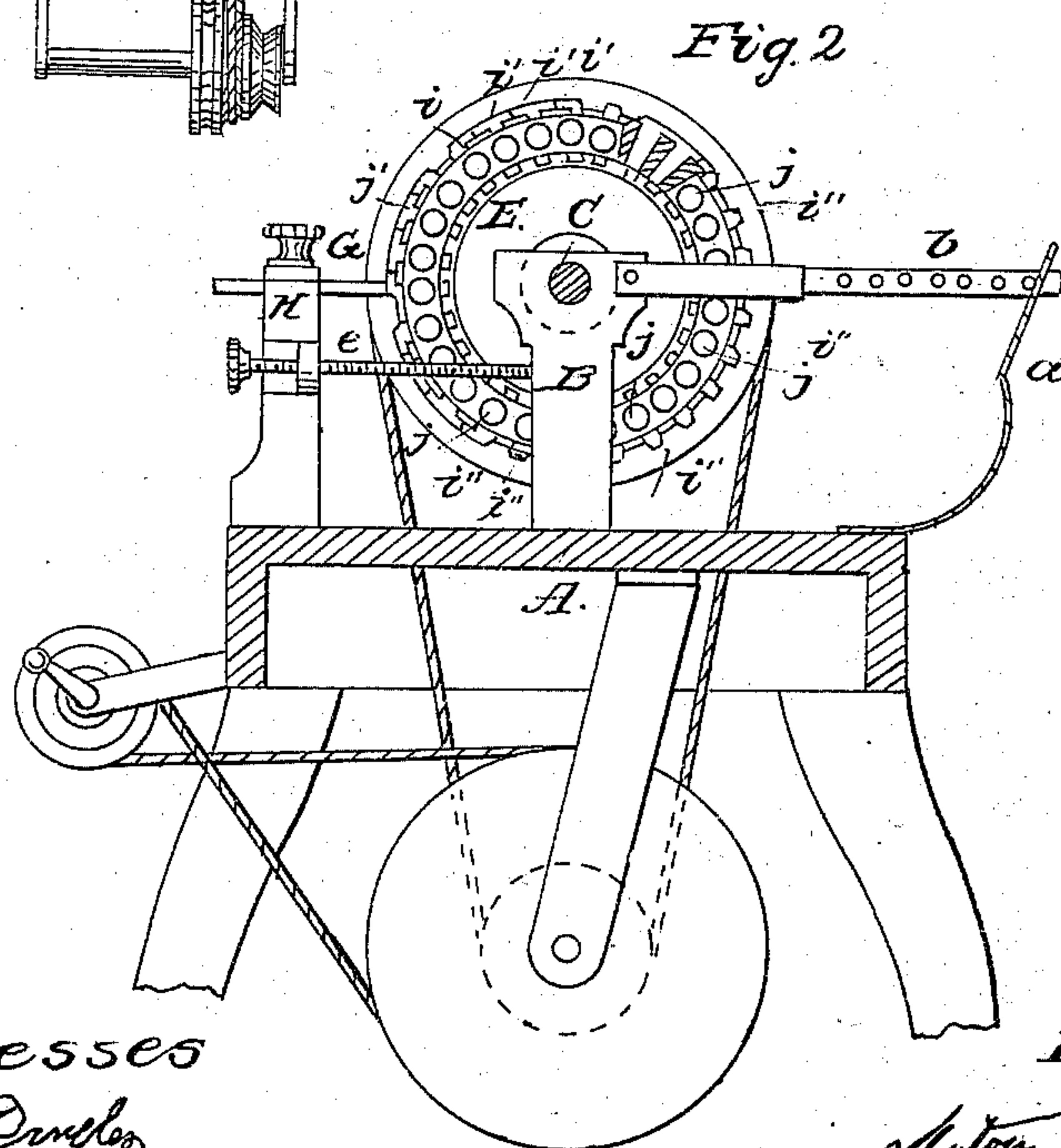
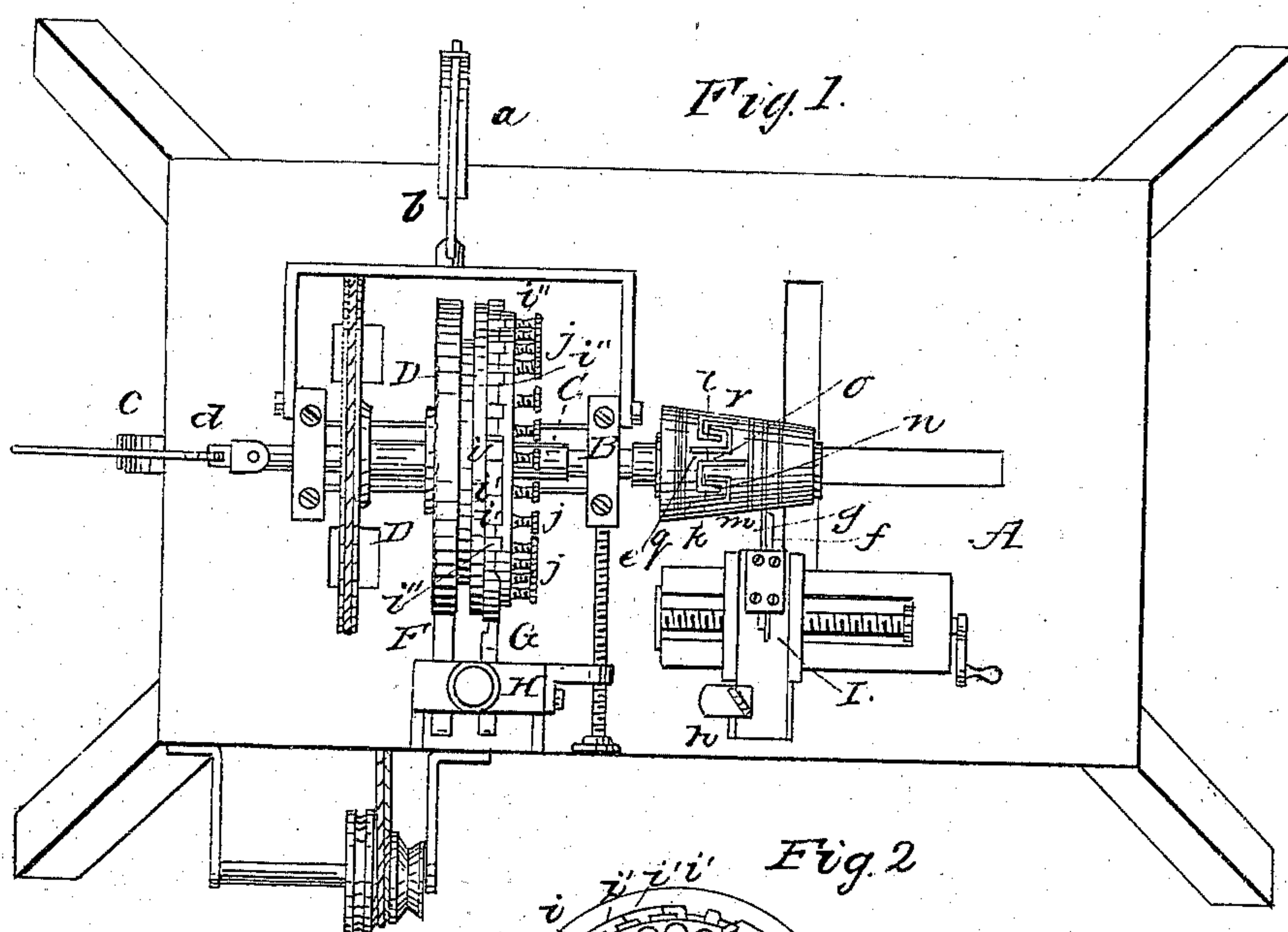


A. SCHWITTER.
Engine Turning Machine.

No. 39,755.

Patented Sept. 1, 1863.



witnesses
Wm. H. Dwyer
J. W. Coombs

Inventor
Anton Schwitter

UNITED STATES PATENT OFFICE.

ANTON SCHWITLER, OF NEW YORK, N. Y.

IMPROVEMENT IN ENGINE-TURNING MACHINES.

Specification forming part of Letters Patent No. 39,755, dated September 1, 1863.

To all whom it may concern:

Be it known that I, ANTON SCHWITLER, of the city, county, and State of New York, have invented a new and useful Improvement in Engine-Turning Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan or top view of my invention. Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference in both views indicate corresponding parts.

This invention consists in the employment or use of movable blocks or guides of different shape, in combination with the rosette of an engine-turning machine in such a manner that by combining said blocks in various ways different lines and configurations can be produced on the article intended to be ornamented by the engine-turning machine.

To enable others skilled in the art to make and use my invention, I will proceed to describe it.

A represents the frame of an ordinary engine-turning machine, made of wood or any other suitable material. This frame supports the head-block B, which forms the bearings for the spindle C.

D is the ordinary, and E the improved, rosette, which may both be used conjointly, or the ordinary rosette may be dispensed with and the improved rosette can be so arranged that it will serve for all purposes. The head-block B is hung on pivots, so that it can swing toward and from the guide-bars F G, and a spring, *a*, acting on the arm *b*, forces said head-block toward the points of the guide-bars. The spindle C has a longitudinal sliding motion in its bearings, and it is subjected to the action of a spring, *c*, which, by pressing against a pin inserted into an arm, *d*, has a tendency to force said spindle back. The arm *d* connects with the spindle by a universal joint, so that the same does not interfere with the rotary motion of the spindle nor with the oscillating motion of the head-block, and the arm *b* is connected to the head-block by a double hinge-joint, so that it interferes as little as possible with its motions. The guide-

bars F G are inserted into a rest, H, which is firmly secured to the frame A. The guide-bar F is opposite the ordinary rosette D, and it is so arranged that it can be made to bear on the circumference or on the side of said rosette. In the former case it imparts an oscillating motion to the head-block with the spindle and work, and in the latter case a longitudinal sliding motion is imparted to the spindle. The guide-bar G is intended to bear on the circumference of the improved rosette E, or it may be so arranged that it can be brought to bear on either side of the same. The throw of the head-block is regulated by the set-screw *e*, which screws into a lug projecting from the rest H and bears against the edge of said head-block. The cutter *f* is inserted into the slide-rest I, which is secured to the frame A, and a stop, *g*, prevents the points of the cutter from sinking into the surface of the work any deeper than desirable. An adjustable clasp, *h*, serves to hold the points of the cutter in the desirable position.

By comparing the two rosettes, D E, it will be seen that the ordinary rosette is provided with a series of corrugations on its circumference and its sides. These corrugations allow of producing one configuration on the surface of the work, and not more. If the configuration is to be changed, another rosette is required.

The improved rosette is provided with a series of blocks or guides, *i i' i''*, which are adjusted in its circumference by means of set-screws *j*. By inserting a series of blocks, *i''*, in the circumference of the rosette at uniform distances apart, the effect produced will be the same, or nearly so, as that by an ordinary rosette; but if it is desired to produce on the work an ornament such as shown in Fig. 1 of the drawings, the case is altered. If the tool cuts, for instance, on the line *k l*, the rosette must be so arranged that the point of the tool strikes the surface of the work at *m, n, o, p, q, r*, and *s*, and so forth. Between *m* and *n* the point of the tool must be relieved for a short interval, and between *n* and *o* for a long interval, and so on. In this case the blocks *i i'* are used and arranged in such relation to each other that the tool is allowed to cut at the desired points, and that it will be relieved at

the proper intervals. For another ornament, the intervals at which the tool cuts and is relieved may be varied at pleasure, and ornamental configurations of a great variety can be produced with the same rosette.

It is obvious that the blocks *i i' i''* can be easily so arranged that they produce a longitudinal sliding motion of the spindle, and my improved rosette, therefore, can be used with equal advantage to produce ornamental designs or configurations on the circumference and also on the ends or faces of articles.

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

The employment or use of adjustable blocks or guides *i i' i''*, in combination with the rosette E of an engine-turning machine, constructed and operating substantially as and for the purpose set forth.

ANTON SCHWITLER.

Witnesses:

THOS. S. J. DOUGLAS,
J. W. COOMBS.