

I. Lindsley,
Carving Wood,
No. 18,917,
Patented Dec. 22, 1857.

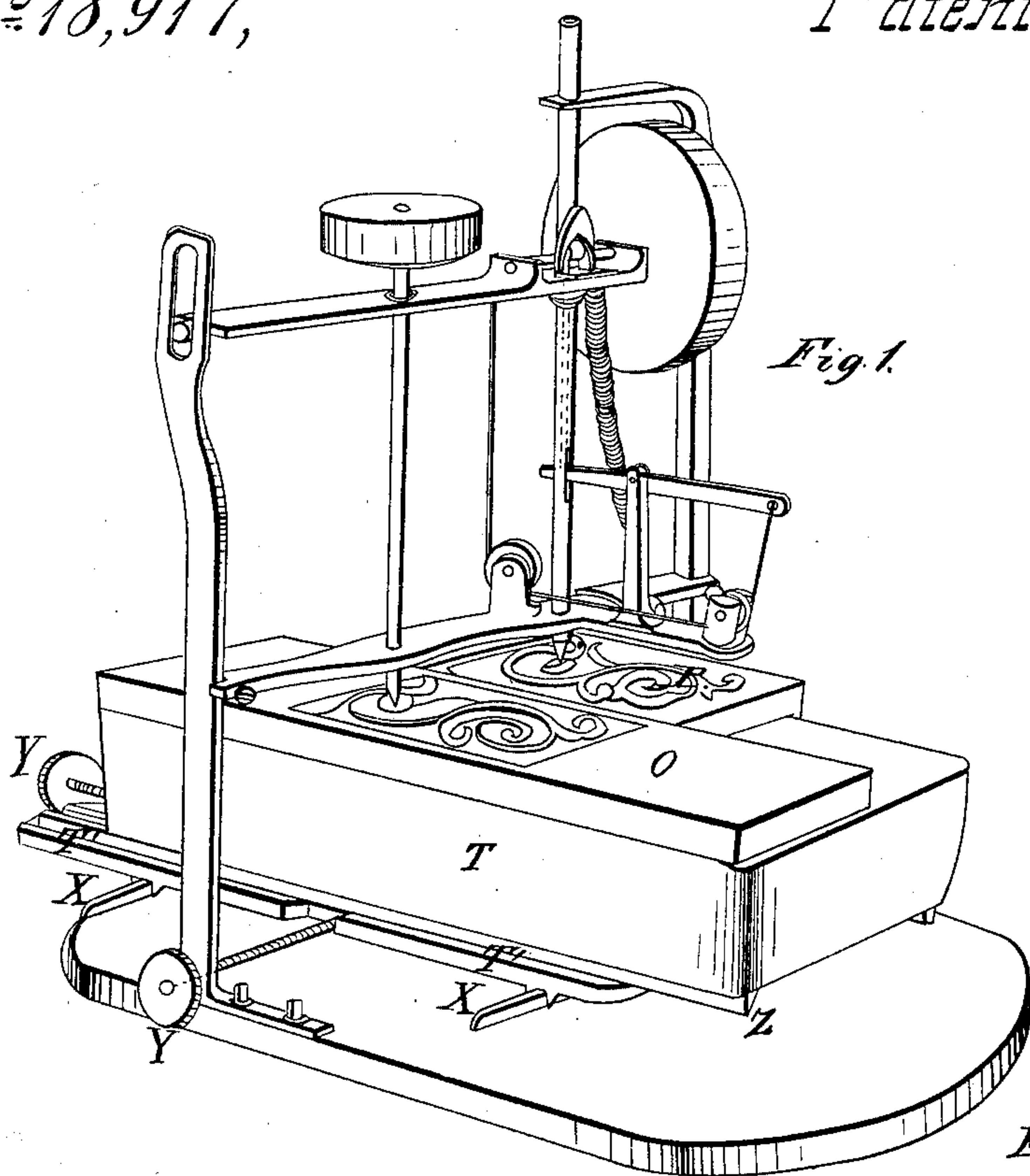


Fig. 1.

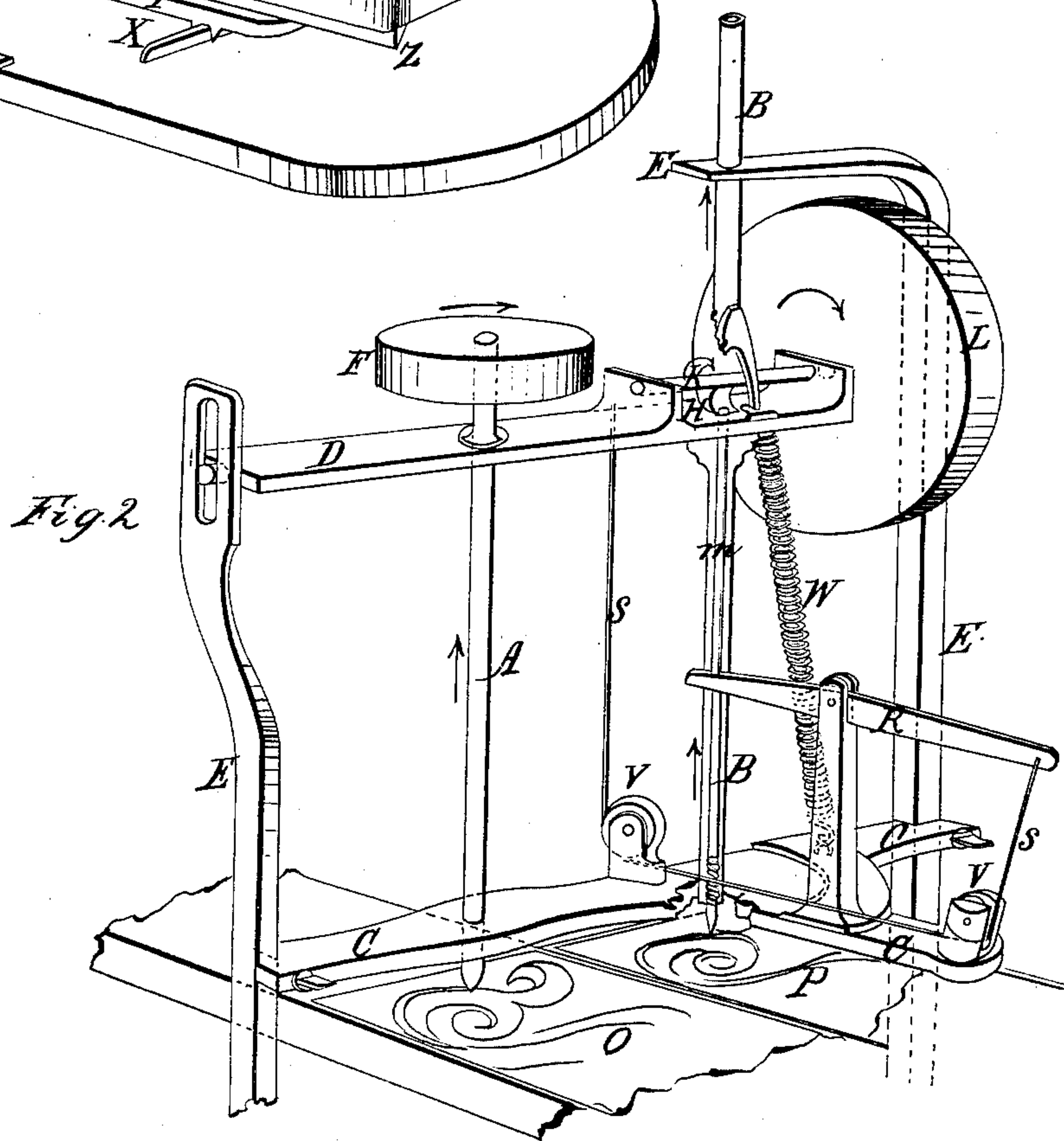


Fig. 2.

UNITED STATES PATENT OFFICE.

ISAAC LINDSLEY, OF PROVIDENCE, RHODE ISLAND.

MACHINE FOR CARVING WOOD.

Specification of Letters Patent No. 18,917, dated December 22, 1857.

To all whom it may concern:

Be it known that I, ISAAC LINDSLEY, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Machine for Carving Wood and other Materials; and I do hereby declare that the following is a full, clear, and exact description of the construction and operations of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, is a perspective view, and Fig. 2, a view of the working parts of the machine, with a portion of the tracing tube removed to show the cam motion of the tracer. In Fig. 2, A is the revolving cutter which may be pointed in any desirable form.

B, is the tracer. A, and B, are adjusted to slide up and down through the stationary cross-piece C. The cross piece D, is adjusted to move up and down in the slots formed in the frame or supports E, E. The cutter A, and tracer B, with their attachments are adjusted in D, and move up and down with it. The cutter A, is revolved by means of an independent band operating upon the pulley F. The cam H, is adjusted upon the shaft K, in such a manner, that when K is revolved by means of the pulley L, the cam is brought at each revolution of K, in contact with the upright bar M,—and so elevating at each revolution of K, the cross bar D, with the cutter A, tracer B, and their respective pulleys and connections.

The revolution of K, is regular and constant as the work progresses, and the effect of the cam motion of H, is such, that no matter how sharp may be the angles of ascent and descent of the pattern, the tracer will always readily follow them, and can never be impeded or arrested in its progress, since it is being continually freed at each stroke of the cam; thus enabling the sharpest and most difficult designs to be traced with entire uniformity and certainty. The bar M, is adjusted to slide either up or down as the work progresses, inside or alongside of the shaft of the tracer B, and the lower end of M is adjusted to rest upon one end (as represented,) of the lever R. To the other end of the lever R is attached the cord or chain S, which passing over

the pulleys V, V, is in turn attached to the sliding cross-bar D, the lever R, is adjusted by the cord or chain S, in such a manner that whatever may be the changes, up or down, as the work progresses, in the position of D, the bar M will always be held in appropriate position, to afford a rest for the cam H to act upon, so that the lift and fall of the tracer by the cam will be as to distance, uniformly the same in every stage of the work, no matter how great may be the ascent or descent of B in tracing the pattern. The lift and fall of the tracer will of course be dependent upon the stroke of the pan, which may be graduated according to the requirements of the work to be done. The spring W is for the purpose of holding the tracer and cutter firmly to their appropriate places, or quickly to return them when lifted by the cam H.

In Fig. 1 O is the work being carved and P is the pattern, both being firmly secured upon the bed T. The bed T is adjusted to slide by means of the ways Z, Z, upon the bed T', and T' is adjusted to move upon the ways H, H, at right angles to Z Z. The screws Y, Y, are for the purpose of operating the beds T and T' upon the ways Z, Z, and X, X.

The arrows in Fig. 2 indicate the working movements of the various parts of the machine when in operation.

I do not claim as my invention the use of a revolving cutter and accompanying tracer, as these have long been known and used. But—

What I do claim as new and of my own invention, and desire to secure by Letters Patent, is—

1. The use in carving machines of the lift and fall motion of the tracer, for the purpose of enabling the same to trace out any design however sharp or difficult the same may be,—as herein set forth.

2. I claim the bar M lever R and cord S, in combination with the cross-bar D, substantially in the manner and for the purposes herein set forth.

ISAAC LINDSLEY.

Witnesses:

MONTGOMERY MAZE,
DANIEL F. TOMPKINS.