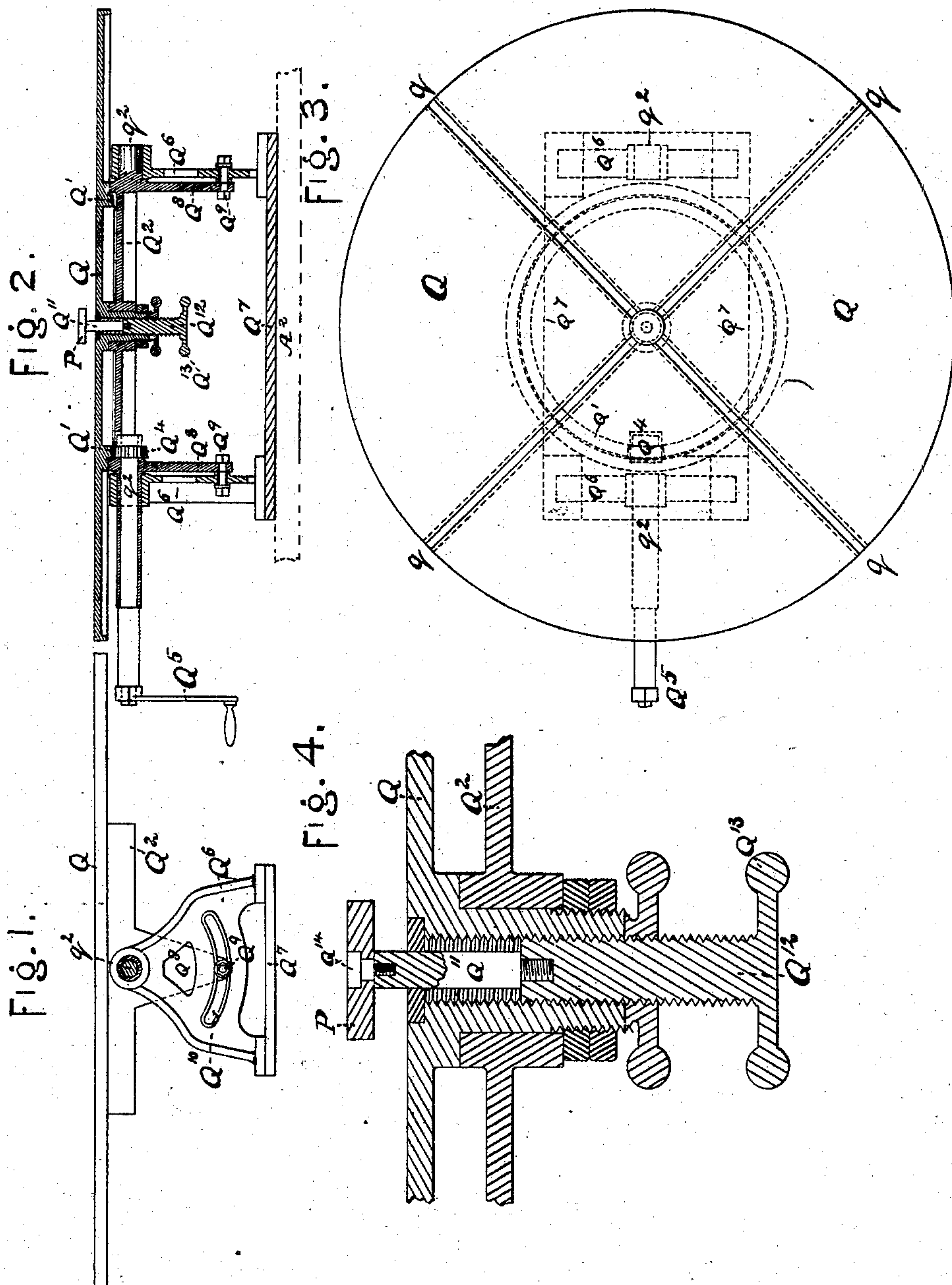


N. JENKINS.
Machine for Dressing Wood, Stone, &c.

No. 238,290.

Patented March 1, 1881.



WITNESSES:

W. C. Brookes

Chas. C. Stetson

INVENTOR:

Nicholas Jenkins
by his attorney, J. S. Stetson

UNITED STATES PATENT OFFICE.

NICHOLAS JENKINS, OF NEW HAVEN, CONNECTICUT.

MACHINE FOR DRESSING WOOD, STONE, &c.

SPECIFICATION forming part of Letters Patent No. 238,290, dated March 1, 1881.

Application filed January 11, 1879.

To all whom it may concern:

Be it known that I, NICHOLAS JENKINS, of the city and county of New Haven, in the State of Connecticut, have invented certain new and useful Improvements Relating to Machinery for Dressing or Shaping Wood, Stone, or other material; and I do hereby declare that the following is a full, clear, and exact description thereof.

According to this invention I employ what I term a "revolving variety table," adapted to aid in executing circular work. This table is also, by peculiar provisions for tilting or assuming an oblique position, adapted to allow a single cutter to produce a variety of effects by acting at different angles or with different degrees of inclination on the material.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form part of this specification.

Figure 1 represents a side view, Fig. 2 a vertical section, and Fig. 3 a plan view, of apparatus constructed according to my invention; Fig. 4, a sectional view of part of Fig. 2, on a larger scale.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

This device is adapted for working with a revolving cutter, the templet being guided by a pin below. One peculiarity in this mechanism is the capacity of the table for being tilted and adjusted to various inclinations. When the table is tilted the effect of the cutter on the material varies according as the material is applied on the lower or on the upper side. It is optional with the attendant to press the material up from the lower side of the inclined table, and cause the cutting to be done throughout on that side of the cutting-spindle, in which case the edge may be undercut if a suitable form of cutter be employed, or to press the material down from the upper side of the table, and to cause the cutter to act against the material on that side only, as the material is continuously moved along in tracing the pattern indicated by the templet, which lies under the material, and is pressed against the pin which projects up from below, as represented.

When the material is pressed against the pin, not from the lower side nor from the upper side, but in an intermediate direction, and is therefore presented to the cutter in a corresponding intermediate position, the cutting will not be modified in the same manner, but the form of the molding or pattern of the edge which is produced will be varied by the fact that the plane of motion of the cutters does not coincide exactly with the plane of the templet and of the wood or other material lying thereon. This mode of handling the material is mainly intended for use with wood, but may be used with marble, slate, and material in general. I will describe it as wood.

The tilting table is marked Q. It is by preference of circular form and supported by an under table, Q², as shown, and is provided on its under side with a series of teeth, Q', which gear into and are capable of being turned around by the small pinion Q⁴, having its bearings in the table Q², and operated by a hand-crank, Q⁵. The under table, Q², tilts on centers q², which are mounted in uprights Q⁶, held firmly on a plate, Q⁷, which may be fixed by a single bolt to the table A².

The cutter is or may be held stationary during the use of the device. Arms Q⁸ extend downward from the under table, Q², and are held by screw-bolts Q⁹ in any desired position in segmental slots Q¹⁰. The top table, Q, may be horizontal, or it may be inclined within wide limits by changing the positions of the bolts Q⁹ in the slots Q¹⁰.

I have above described how this table may be used when the templet (not represented) and the material fixed therein are held on the table and moved about by hand. The mechanism may be used for holding the material rigidly on the table and moving it slowly by mechanism.

There are in the upper surface of the table Q four radial grooves, q, which may receive adjustable clamping-pieces for holding the material onto the table. A piece of plank or other material to be wrought may be laid flat on the table Q, and held firmly by the four or other number of clamps, and the table Q being set level it may be moved by traversing the supporting-carriage A², or by turning the crank Q⁵, and thus rotating the table Q. In

the latter case circles or parts of circles may be readily described, the radius of which will depend on how much the carriage A^2 has been moved, so as to bring the center of the table Q out of the line of the cutter above. (Not represented.)

Various other devices may be cut by this machine thus mounted by moving the cutter-spindle (not represented) to the right or the left and compounding that motion with the motion of the main supporting-table A^2 , and at the same time rotating the plate Q.

For many varieties of work in this manner it is necessary to remove the central guide-pin, Q^{11} , or to sink it out of the way. I provide for the latter by mounting the central pin, Q^{11} , in an adjustable screw, Q^{12} . (See Figs. 2 and 4.) By turning the latter screw by means of its large head or hand-wheel Q^{13} the pin Q^{11} may be raised to any moderate elevation required, or it may be sunk flush with or below the upper surface of the table Q. A changeable collar, P, may be applied to this central pin, as shown in Figs. 2 and 4. In the arrangement shown I employ a removable screw, Q^{14} , to hold the changeable collar P in position; but a spring ring or clip may be employed, if desired. Constructed as shown it is necessary to remove the screw Q^{14} and collar P when the central pin is to be sunk out of the way. When this part of the apparatus is used in the manner first described, with the wood moved by hand on the surface of the table Q, controlled only by the contact of the templet against the central pin, Q^{11} , a skillful workman can produce varied effects by not presenting wood uniformly, either on the lower or upper side of the pin, or in any intermediate position, but varying the side on which it is presented as the work progresses, as above explained. Various spiral conditions of the edge can be thus produced. In cutting the wing of a bird, or a leaf of foliage, a proper templet being pro-

vided, and the material fixed thereon by points projecting upward from the templet or otherwise, the workman may commence by pressing the templet against the pin Q^{11} on the upper side to produce one end of the wing or leaf, and gradually shifting it around, first into an intermediate position, and finally to the lower side of the pin, in executing the other end of the leaf. The effect produced may make the foliage appear to stand out by being undercut at one end while it is not at the other. Other curves may be thus varied by skillful manipulation.

Modifications of this device may be made within wide limits by any competent workman, and I can vary the shape of the table Q, if desired, for producing any particular description of work.

I propose to employ the invention for dressing or shaping wood, stone, or other material capable of being treated by cutting.

I claim as my invention—

1. The tilting table Q, with suitable adjusting and confining means, in combination with a cutter and with guiding means, as herein specified.

2. The combination of the table Q with provisions for slowly revolving or partially revolving at will, and also with provisions for tilting or holding in various inclined positions, adapted for use with suitable cutting means, as herein specified.

3. The guide-pin Q^{11} , with means for adjusting its rise, in combination with the table Q, adapted for use with suitable cutting means, as herein specified.

In testimony whereof I have hereunto set my hand this 22d day of June, 1878, in the presence of two subscribing witnesses.

NICHOLAS JENKINS.

Witnesses:

W. COLBORNE BROOKES,
CHAS. C. STETSON.