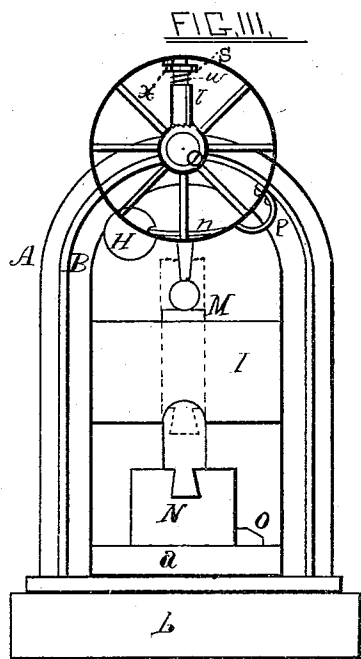
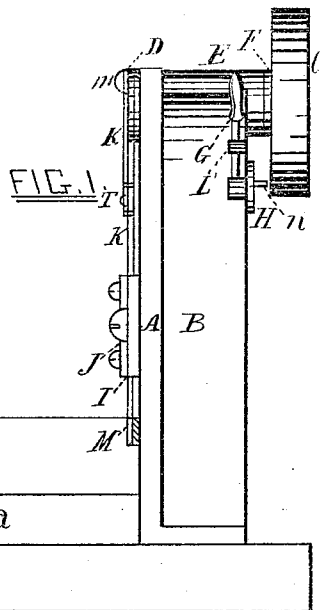
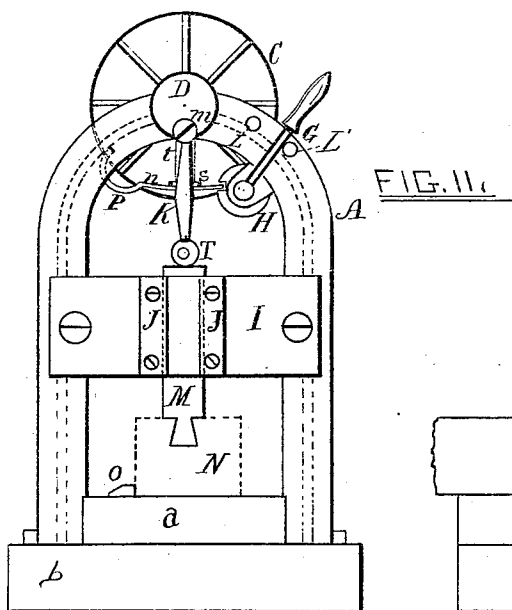


W. F. MOODY.
Dovetailing-Machines.

No. 148,840.

Patented March 24, 1874.



WITNESSES

Chas. Chapin
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INVENTOR

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WILLIAM F. MOODY, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF,
CHARLES L. AMES, AND ABEL H. FROST, OF SAME PLACE.

IMPROVEMENT IN DOVETAILING-MACHINES.

Specification forming part of Letters Patent No. **148,840**, dated March 24, 1874; application filed
September 29, 1873.

To all whom it may concern:

Be it known that I, WILLIAM F. MOODY, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Dovetailing-Machines, of which the following is a specification:

The object of the present invention is so to improve the dovetailing-machine patented by me April 1, 1873, and numbered 137,315, as to provide means for removing the chips from the dovetails by withdrawing the stuff, being worked, from the machine; and its nature consists in a radial arm which is attached to the shaft of the crank-wheel, driving the chisel, and rotated with it. The outer end of the arm is provided with a spring-collar, which is so operated upon by a spring-notched wheel and lever as to be moved in on the arm, and escape a stop in the internal periphery of the drive-wheel when the chisel is to remove the chips from a dovetail, the spring moving the collar outward to catch the stop on the internal periphery of the wheel when the chisel is to have a reciprocating motion. The notched wheel is operated by a lever, governed by two stops in its movement, as the whole is hereinafter fully described and shown.

In the drawing, Figure 1 is a side elevation of my improvement in dovetailing-machines; Fig. 2, a front elevation thereof; Fig. 3, a rear elevation.

A B represent an arched frame-work and a bed or foundation supporting the arch, constructed in substantially the same manner as the same parts in the patent referred to. *a* is the table on which the stuff to be dovetailed may be put. *M* represents the chisel running in guides J J on a cross-piece, I, and being operated by a pitman, K, connecting-joints T t, and a crank-wheel, D, the latter being driven by a wheel, C, in the same manner as it is driven in the machine in my said patent, except as hereinafter described. The wheel C in this improvement runs loosely on the shaft F of

crank-wheel D, and is only made to turn said shaft and operate the chisel M by the following means: An arm, *t*, is fastened to the shaft F, and on its outer end is placed a sliding collar, S, which is forced outward by a coil-spring, *w*, so as to catch on a stop, X, attached to the internal periphery of wheel C. This arrangement is such that when the wheel C rotates the stop will carry the arm *t* around, and consequently turn the crank-wheel D. The collar S is carried inwardly so as to allow the wheel C to rotate without driving the chisel, by means of a spring, *n*, which is fastened to the arched frame B, and it projects into a notch in a wheel, H, so that when the latter is turned by a lever, G, operating its shaft, the spring *n* will catch under the collar S, as shown by its position in Fig. 2, and raise it on arm *t*, so as to allow the stop *x* on the wheel C to clear the arm and rotate without carrying it. This arrangement is such that the chisel M will be brought to a dead stop when it is at the bottom of the dovetail, as shown in all the figures, and in that position permit the dovetailed stuff to be withdrawn to remove the chips from the dovetail. The lever G, bearing against the stop or pin L', is in position to hold the arm *t* on the spring *n*; but when the wheel C is to carry or rotate the arm, the lever G is to be locked against the pin or stop L. Such locking causes the wheel H to turn and release the spring *n*, and loosen the collar S, so as to catch on the stop X.

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

In a dovetailing-machine, the spring *n*, loose wheel C provided with a stop, X, in combination with the notched wheel H, chisel M, pitman K, and crank-wheel D, substantially as and for the purpose set forth.

WILLIAM F. MOODY.

Witnesses:

G. L. CHAPIN,
HARRY COLEMAN.