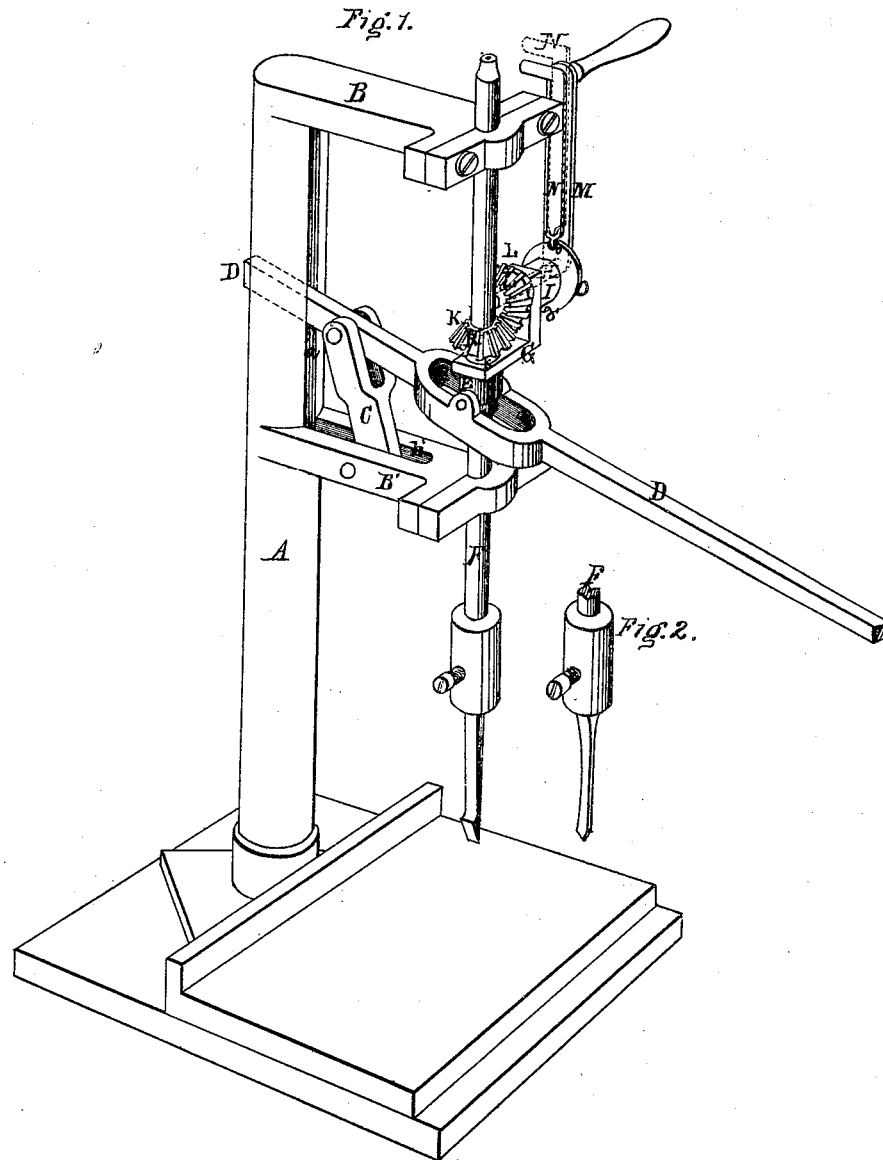


Patented Jan. 31. 1871.



Witnesses { George E. Buckley
Wm. R. Knight

Inventor.
Jacob Peters,
by his atty.,
Horace Binney, Esq.

United States Patent Office.

JACOB PETERS, OF LEBANON, PENNSYLVANIA, ASSIGNOR TO SIMON J. STINE, OF SAME PLACE.

Letters Patent No. 111,472, dated January 31, 1871.

IMPROVEMENT IN BORING AND MORTISING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JACOB PETERS, of Lebanon, in the county of Lebanon and State of Pennsylvania, have invented a new and useful Improvement in Mortising and Drilling-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use my invention, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a perspective view of my invention with the chisel applied for mortising, and

Figure 2 is a detached view of part of the shaft with the drill applied.

From the standard A project the brackets B B', the latter of which is slotted at b'; and within the said slot is pivoted the link or yoke C, to which is pivoted the lever D.

To the lever D is pivoted the sleeve or collar E, in which the shaft F revolves.

The bearing G of the crank-shaft H is cast in one piece with or otherwise conveniently attached to the collar E and the collar I, in which latter the crank-shaft revolves.

Below the collar E is a ring, J, on the shaft F, which prevents the shaft from rising in the said collar; and it is prevented from falling in this collar by the collar K on the bevel-gear L, which is keyed or otherwise fastened to the shaft, so that the shaft F is free to revolve in the collar E; and vertical motion is given to it by elevating or depressing the said collar by means of the lever D.

The brackets B B', through which the shaft passes,

act as guides, within which it may be elevated or depressed; and the standard A is slotted at a, to permit the motion of the lever.

To the crank-shaft H are attached the driving bevel-gear L and the crank M.

On the crank is a sliding catch, N, which may engage with either of the notches o o' in the plate O on the collar I.

When the machine is to be used for mortising, the chisel is attached to the shaft F and the catch N is made to engage with the notch o, as shown in fig. 1. The shaft being thus prevented from turning in the collar E, the chisel is operated by alternately elevating and depressing the lever D.

When it is desired to reverse the action of the chisel, the catch is disengaged from the notch o, the crank turned half way round, and the catch made to engage with the notch o', by which operation the chisel is turned half round and retained in that position.

When the machine is to be used for drilling metal or other hard substances, the drill is attached to the shaft, as shown in fig. 2, and the catch disengaged from the plate O. The drill is then revolved by turning the crank, and the requisite pressure given by bearing on the long arm of the lever D.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The combination of the lever D, collar E, shaft F, and link C, when all these parts are constructed and operate as described.

JACOB PETERS.

Witnesses:

WM. G. WARD,
JOHN C. STINE.