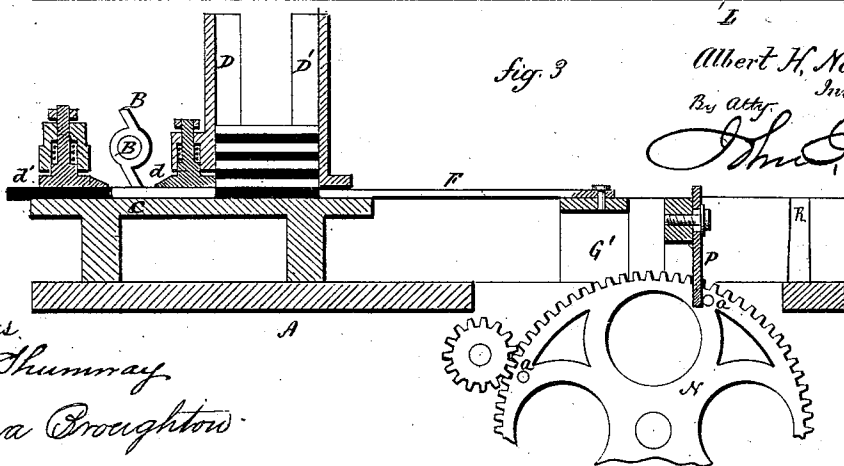
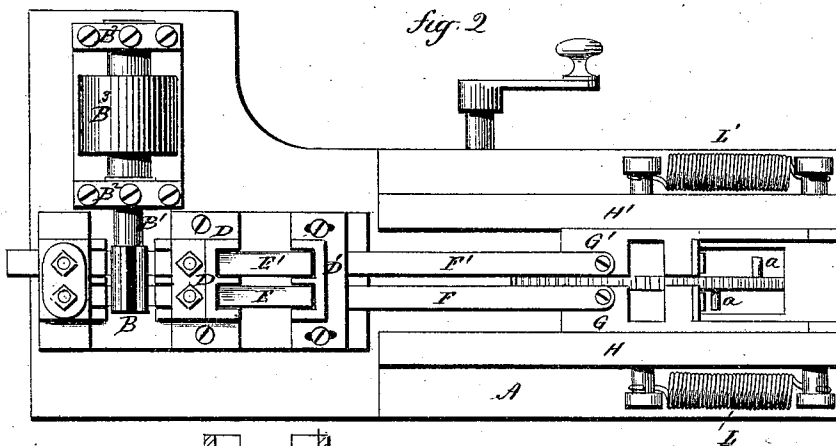
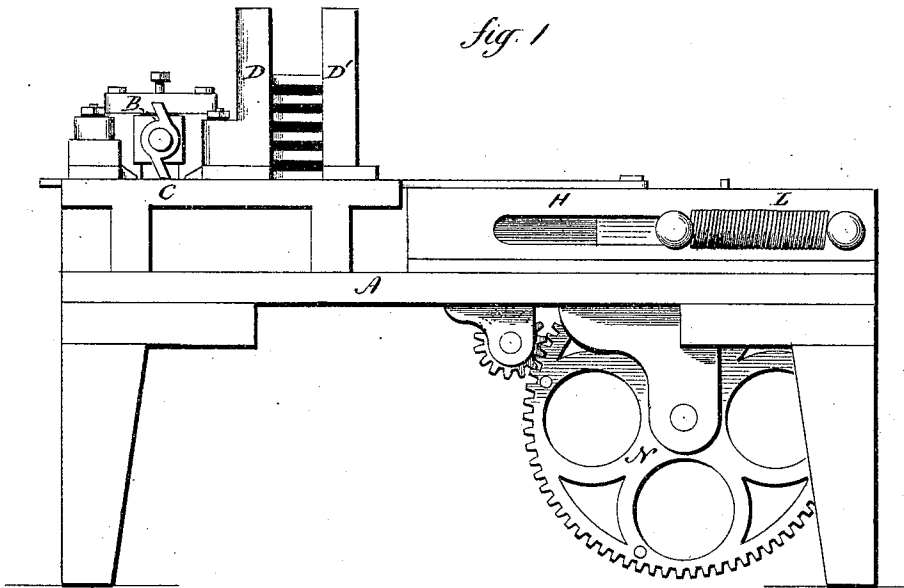


A. H. NORTH.

MACHINES FOR PLANING KNIFE SCALES.

No. 178,322.

Patented June 6, 1876.



Albert H. North
Inventor

By Atty.

Thos. E. Conley

Witnessed.

J. H. Shumway

Clara Broughton

UNITED STATES PATENT OFFICE.

ALBERT H. NORTH, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
LANDERS, FRARY & CLARK, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR PLANING KNIFE-SCALES.

Specification forming part of Letters Patent No. **178,322**, dated June 6, 1876; application filed
March 2, 1876.

To all whom it may concern:

Be it known that I, ALBERT H. NORTH, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improvement in Machines for Planing Knife-Scales; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, side view; Fig. 2, top or plan view; Fig. 3, longitudinal central section.

This invention relates to a device for planing knife-scales—that is to say, dressing the surface of the scale which is to lie upon the tang, the object being to automatically feed the individual scales to a cutter which will dress the scales as they are successively presented; and it consists in the mechanism as hereinafter described and recited in the claim.

A is the bed of the machine; B, a revolving cutter mounted on a shaft, B¹, in bearings B², and caused to revolve rapidly by the application of power thereto, through a pulley, B³. Beneath this cutter is the planing or working bed C, and adjacent thereto is a hopper, consisting of two parts, D and D'. These parts are adjustable relatively to each other, so that different lengths of scale may be introduced, and it is preferably formed in two divisions, so as to receive two series of scales, E and E'. This hopper is supported above the planer the thickness of the scale-blanks or a little more, as seen in Fig. 3, so that one blank will lie below the lower end of the hopper. Into the divisions of this hopper a series of blanks are introduced, one upon another, the surface of each to be dressed uppermost. In rear of the hopper, and in line with the respective divisions below the hopper, are arranged followers F and F' corresponding to the respective divisions. These followers are

attached to independent slides G and G', each supported in its respective guide H H', and each provided with a spring, L, or weight, or equivalent device, the tendency of which is to draw the followers away from the hopper.

In a convenient position a cam-wheel, N, is arranged, on which projections *a* more or less in number are placed, so that as the wheel revolves the said projections will successively strike the respective slides and force the follower forward until the slide escapes from the cam, and so continuing the cam and the springs will impart a reciprocating movement to each of the followers, and at each forward movement the bottom scale in the hopper will be forced forward beneath the cutter, and each succeeding scale will force the next preceding along beneath the cutter, and so continue so long as the machine is in operation and the hopper supplied with blanks.

In the path of the blank, both forward and back of the cutter, pressure-pads *d* and *d'* are respectively arranged to bear upon the scale-blanks and hold them firmly upon the bed in their passage beneath the cutter.

The extent of movement of the followers is adjusted by moving the cam-bearing P to or from the cam, so that the hold of the cam will be for a greater or less length of time.

The number of hoppers may be more or less; two, however, is found to be as many as one person can conveniently attend.

To make the arrest of the follower on its return easy, an elastic bunter, R, is placed at its rear.

I claim—

The combination of the hopper D, the reciprocating follower F, the revolving cutter B, and pressure-pads *d* and *d'*, substantially as described.

ALBERT H. NORTH.

Witnesses:

C. S. LANDERS,
J. C. ATWOOD.