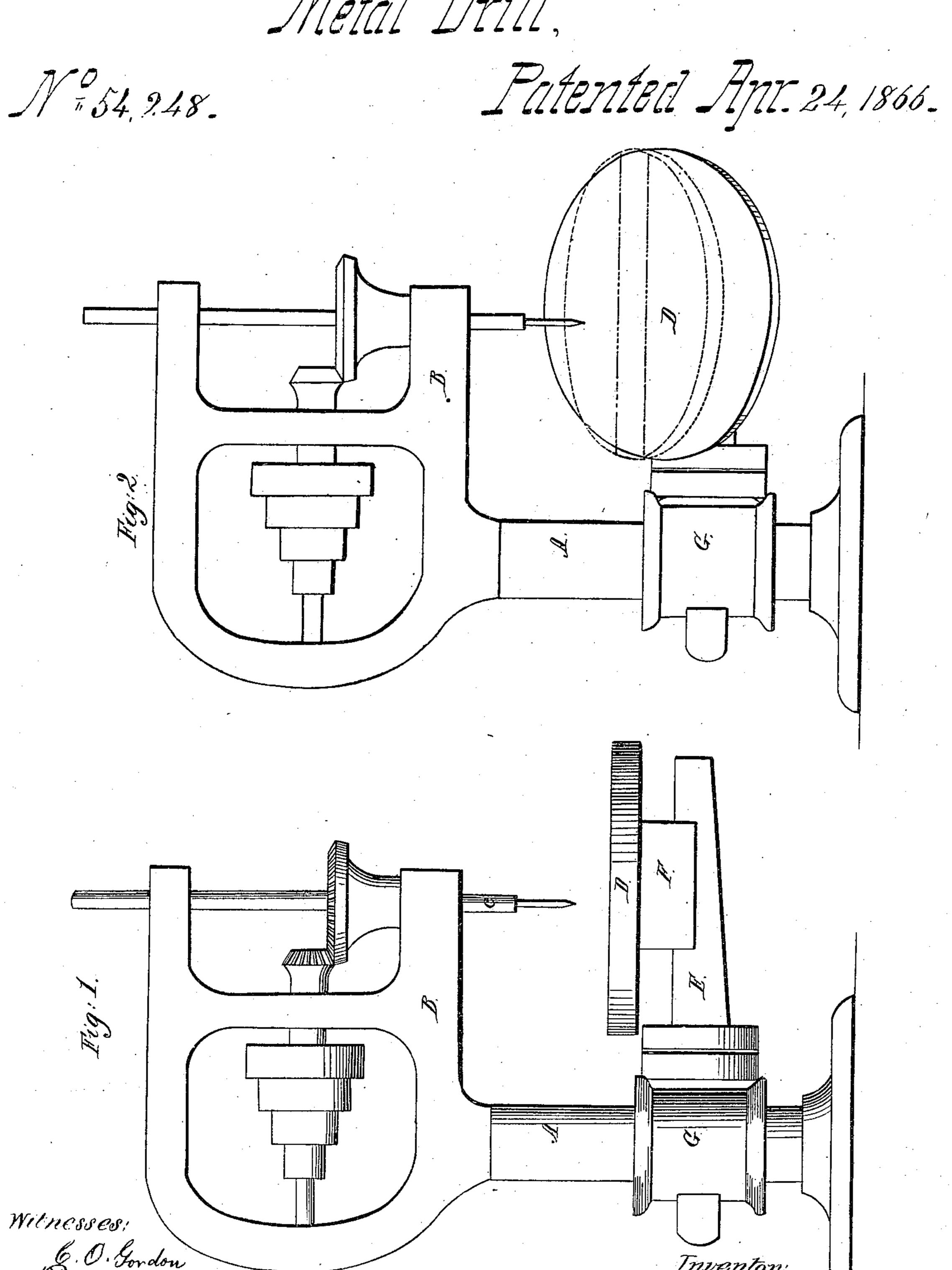


Metal Trill,



United States Patent Office.

NELSON P. EDDY, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND WM. M. HAWES, OF SAME PLACE.

IMPROVEMENT IN MACHINE-DRILLS.

Specification forming part of Letters Patent No. 54,248, dated April 24, 1866.

To all whom it may concern:

Be it known that I, Nelson P. Eddy, of Fall River, in the county of Bristol and State of Massachusetts, have invented, made, and applied to use certain new and useful Improvements in the Construction and Operation of Machine-Drills for Drilling Metals and other Substances; and I do declare the following to be a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation of my improved machine-drill, the feed-table being shown in the horizontal position; Fig. 2, a side elevation of my improved machine-drill, the feedtable being shown in the position to admit of the metal placed upon the same being drilled

angularly.

In the drawings like parts of the invention are designated by the same letters of reference.

The nature of my invention consists in combining with a machine-drill a feed-table constructed and operating substantially as described, for the purposes hereinafter set forth.

To enable those skilled in the arts to make and use my invention, I will speak of its con-

struction and operation.

A shows the post, to which is attached the frame B, supporting the drill C, held over and above the feed-table D. This drill is driven in the usual way—namely, by gearing and a cone-pulley.

E shows the arm for supporting the table D, which is provided with a slot in which the table-support F moves freely to and fro. The sides of this arm E are also provided with the elongated grooves, into which projecting pieces upon the inside of the support F fit snugly.

D shows the feed-table, provided with the spindle inserted in the opening in the support F.

The arm E for supporting the feed-table is attached to the movable support G, placed over the post A, and so arranged that it may be raised or lowered upon the post A whenever desired.

My improved machine-drill being thus constructed, the operation may be thus described: The drill having been placed in position in the frame B, and the metal or other substance to be drilled having been placed upon the feedtable D, the drill (motion having been imparted to the same through the cone-pulley and gearing shown) is caused to descend upon and through the metal or other substance to be drilled.

It will be observed that while the feed-table may be raised or lowered upon the post A and swung around the same, I have so constructed my improved machine-drill as to allow the arm holding and carrying the feed-table to be turned sidewise or out of the horizontal position, thus bringing the feed-table at an angle to the drill, and allowing the metal to be. drilled angularly, if desired. This is effected by making the arm E independent of the movable support G, and attaching and holding the same to it by means of bolts or in any convenient way.

By unscrewing the bolts the table may be placed at any angle from the horizontal position, as shown in Fig. 2, and having been placed in this position is secured and held there by tightening the bolts previously loosened.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

Combining with a machine-drill a feed-table constructed and operating substantially as described, for the purposes specified. NELSON P. EDDY.

In presence of— JAMES M. MORTON, Jr., JOHN F. CHASE.