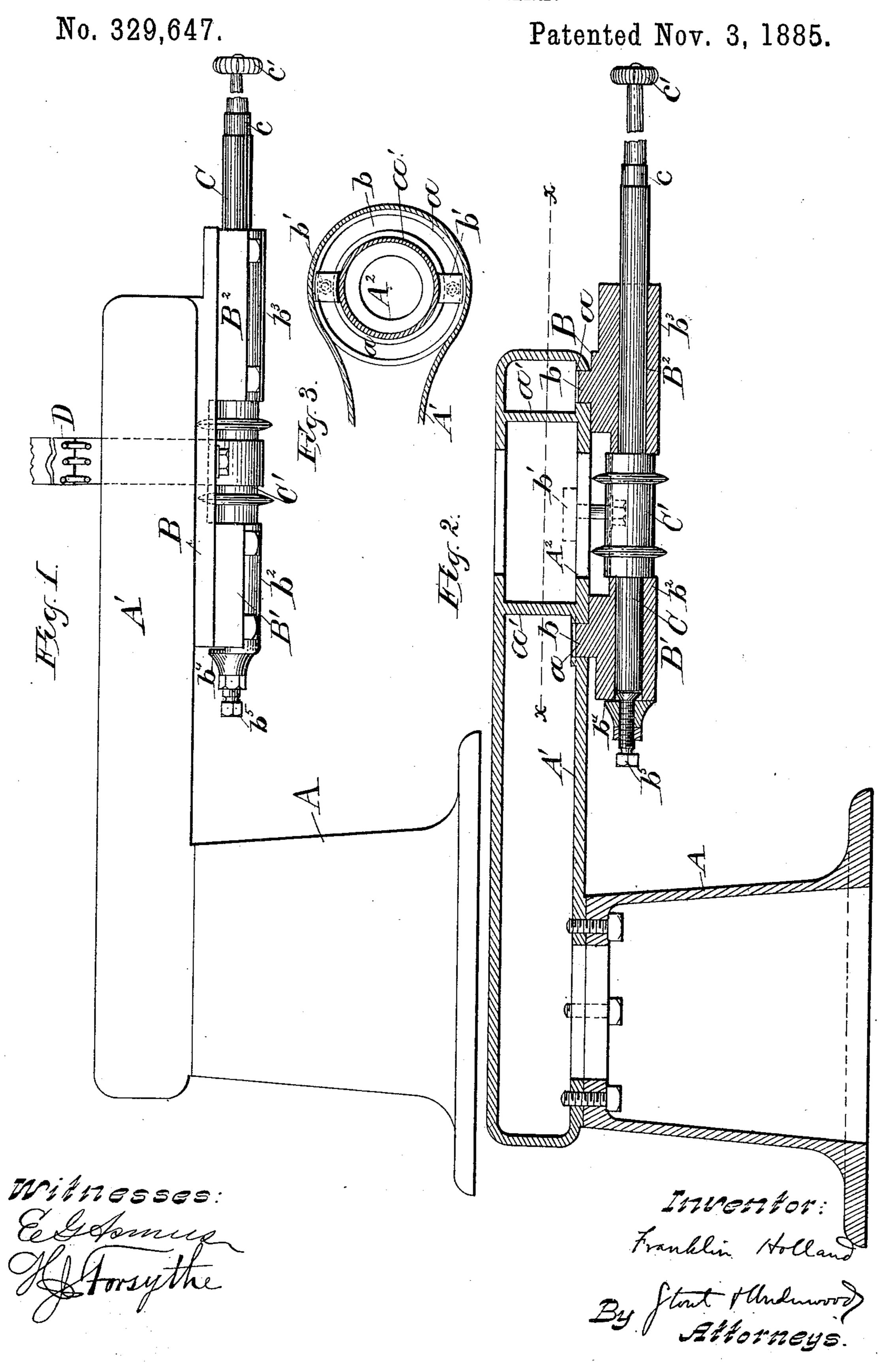
F. HOLLAND.
CARVING MACHINE.



## IJNITED STATES PATENT OFFICE.

## FRANKLIN HOLLAND, OF GRAND RAPIDS, MICHIGAN.

## CARVING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 329,647, dated November 3, 1885.

Application filed October 21, 1884. Serial No. 146,090. (No model.)

To all whom it may concern:

Be it known that I, Franklin Holland, of Grand Rapids, in the county of Kent, and in the State of Michigan, have invented certain 5 new and useful Improvements in Carving-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in 10 carving or ornamenting machines, and will be fully described hereinafter.

In the drawings, Figure 1 is a side elevation of a carving-machine embodying my invention. Fig. 2 is a vertical section through the center 15 of the machine; and Fig. 3 is a sectional top

plan view on line x x of Fig. 2. A A' indicate the frame of my device, the horizontal arm A' of which has in the under side face of its outer end an amular slot, a a, where-20 in is loosely fitted the annular flange b b, formed in the upper face of the yoke B. This yoke is thus adapted to be freely swung in the supporting-frame, and is, moreover, held thereon in any adjustment desired by means 25 of any suitable clamping device, as shown at b' b', between the outer wall and inner circular wall, a', of A'. The yoke carries in its under side the bearing-boxes B' B2, the upper halves of which are made integral with or 30 fastened to the said yoke, while the caps  $b^2$   $b^3$ are fastened to the boxes in the usual manner. The rear cap,  $b^2$ , is provided with a step,  $b^4$ , having a screw-threaded perforation, wherein works the step-screw  $b^5$ , designed to firmly 35 hold in position against the box B<sup>2</sup> the spindle C. This latter is provided between the bear-

ing-boxes B' and B2, in which it is journaled, with a flanged pulley, C', and this is connected | in the presence of two witnesses. with any driving mechanism through the belt 40 D, which passes upward into the circular open-

ing made at A2 in the rounded outer end of the arm A'. The spindle C is lengthened by I

means of the center c, to the outer end of which may be fitted any one of the multiform cutters generally in use, as shown at c'.

It will be readily understood that by the arrangement described above the operator of the machine will be enabled to swing the spindle C in any direction in the plane in which the yoke B is hung in the frame, and 50 to hold the said spindle in the adjustment desired as long as is needed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a carving or ornamenting machine, the combination of a horizontal supportingarm having an annular groove in its under side, a yoke provided with an annular flange working in the arm-groove, and with vertical 60 adjusting clamp-bolts to hold the said yoke in any desired adjustment, and a spindle adapted to be rotated in box-bearings of the yoke, substantially as and for the purpose set forth.

2. In a carving or ornamenting machine, 65 the combination of the frame A, having horizontal supporting-arm A', with annular slot a a on the under side, and central circular opening, A<sup>2</sup>, the swinging yoke B, having annular flange b b, adjusting clamp-bolts b' b', 70 and bearing-boxes B' B<sup>2</sup>, with caps  $b^2$   $b^3$ , and step  $b^*$  and step-screw  $b^5$ , for adjusting the spindle, and the spindle C, carrying the pulley C' and its center c, with cutter c', substantially as shown and described, and for the purpose 75 set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Grand Rapids, in the county of Kent and State of Michigan,

FRANKLIN HOLLAND.

Witnesses:

WM. WISNER TAYLOR, J. W. Holcomb.