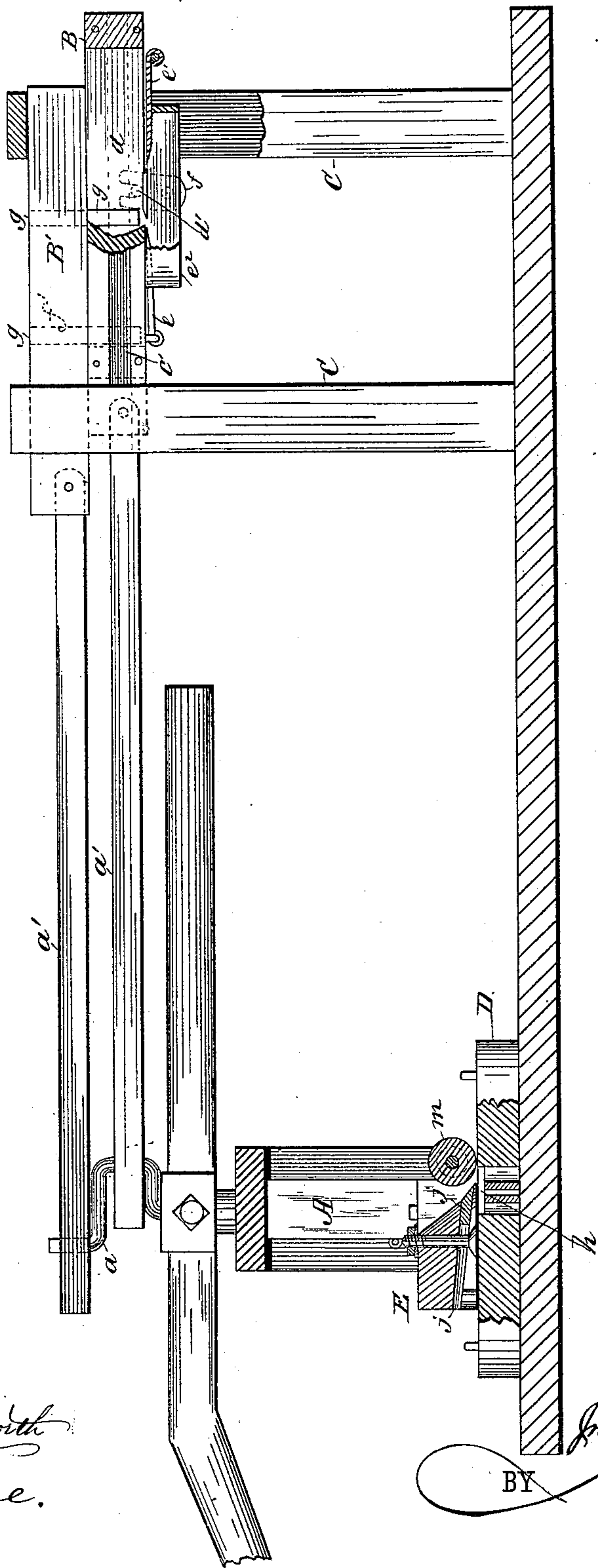


(No Model.)

J. P. BOWLING.
SHINGLE MACHINE.

No. 272,639.

Patented Feb. 20, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN P. BOWLING, OF GUTHRIE, KENTUCKY, ASSIGNOR OF ONE-HALF TO
EDWARD BRYAN, OF SAME PLACE.

SHINGLE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 272,639, dated February 20, 1883.

Application filed September 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. BOWLING, of Guthrie, in the county of Todd and State of Kentucky, have invented a new and useful Improvement in Shingle-Machines, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, forming part of this specification.

The object of this invention is to provide a riving device for a shingle-machine, which shall be adapted to rive bolts of the harder woods, as hereinafter fully explained.

In the drawing is shown a side elevation, partly in section, of a shingle-machine embodying my improved riving device.

A represents an upright wrought-iron or steel shaft, about two inches in diameter, supported in suitable bearings, and having a double-acting crank, *a*, secured to its upper end. The throw of each wrist of the double crank is to be about five and one-half inches from the center of said shaft, and to the wrists are connected the pitman-bars *a'* *a'*, which are pivoted respectively to the wrought-iron hopper-boxes B B'. The box B is to be supported in the frame C by means of projections on the frame fitting in grooves *c'* at the sides of the box in such manner that the latter may be given a reciprocating movement within the frame, while the box B' is supported upon the upper surface of box B. The box B is constructed with a chamber, *d*, extending nearly from one end thereof to the other, with a two-edged knife, *d'*, secured to the under sides of the box crosswise at the center, and two gages or adjustable bottoms, *e e'*, are hinged to the box B, on opposite sides of the knife, with their free ends toward each other. The gages are to be about sixteen inches in length, and their inner ends are to be about three inches from the adjacent edges of the knife to leave room for the piece rived off the bolt to drop out at either side of the knife. The gages are supported in position to close the chamber *d* at the bottom by means of a frame, *e*², which extends from the center of one gage to that of the other, and which is pivoted at its center, on opposite sides, in the vertically-adjustable supports *f*.

The box B' is constructed with a chamber, *f'*, in the ends of which are secured pieces *g*, which project downward into the chamber *d* of box B, and serve to form the hopper in

which the bolt is to be placed. With this construction the bolt is made to move, with the box B', against the knife, which moves with the box B in the opposite direction, whereby only one-half the stroke is required that would be necessary if either the bolt or the knife were stationary. The weight of the bolt upon either of the gages *e e'* will cause the balanced frame *e*² to dip at that end, whereby that part of the bottom of chamber *d* will dip the thickness of a shingle below the knife, while the other part of the bottom will rise to a level with the knife to allow the rived shingle to pass underneath the knife. By means of the slotted support *f* the balanced frame *e*² may be adjusted vertically, so that the gages may have greater or less play to vary the thickness of the shingles.

At the lower end of the vertical shaft A is shown a planing device for planing the piece rived off the bolt. This device consists of a bed-piece, D, having seats *h* for the shingle to be planed, a planing-knife, *j*, connected to the shaft A, and a roller, *m*, for holding the shingle firmly in its seat during the operation of planing. As this part of the shingle-machine is made the subject-matter of a separate application, it is not claimed in the present application.

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

1. The combination of the lower box supported in the frame and adapted to have longitudinal movement therein, the upper box having a hopper for the bolt projecting down into the lower box, upon the edges of which the upper box is adapted to slide, and the knife and gages secured underneath the lower box, substantially as shown and described.

2. The combination of the upper box having a hopper for the bolt projecting downward into the lower box, the lower box having a two-edged knife at the center, the hinged gage or bottom at each side of the knife, arranged with its free end inward, and the balanced frame adjustably supported under the said gages, substantially as shown and described, and for the purpose set forth.

JOHN P. BOWLING.

Witnesses:

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