No. 771,264. PATENTED OCT. 4, 1904.

J. J. NOLAN.

BEVELING TOOL.

APPLICATION FILED MAR. 5, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

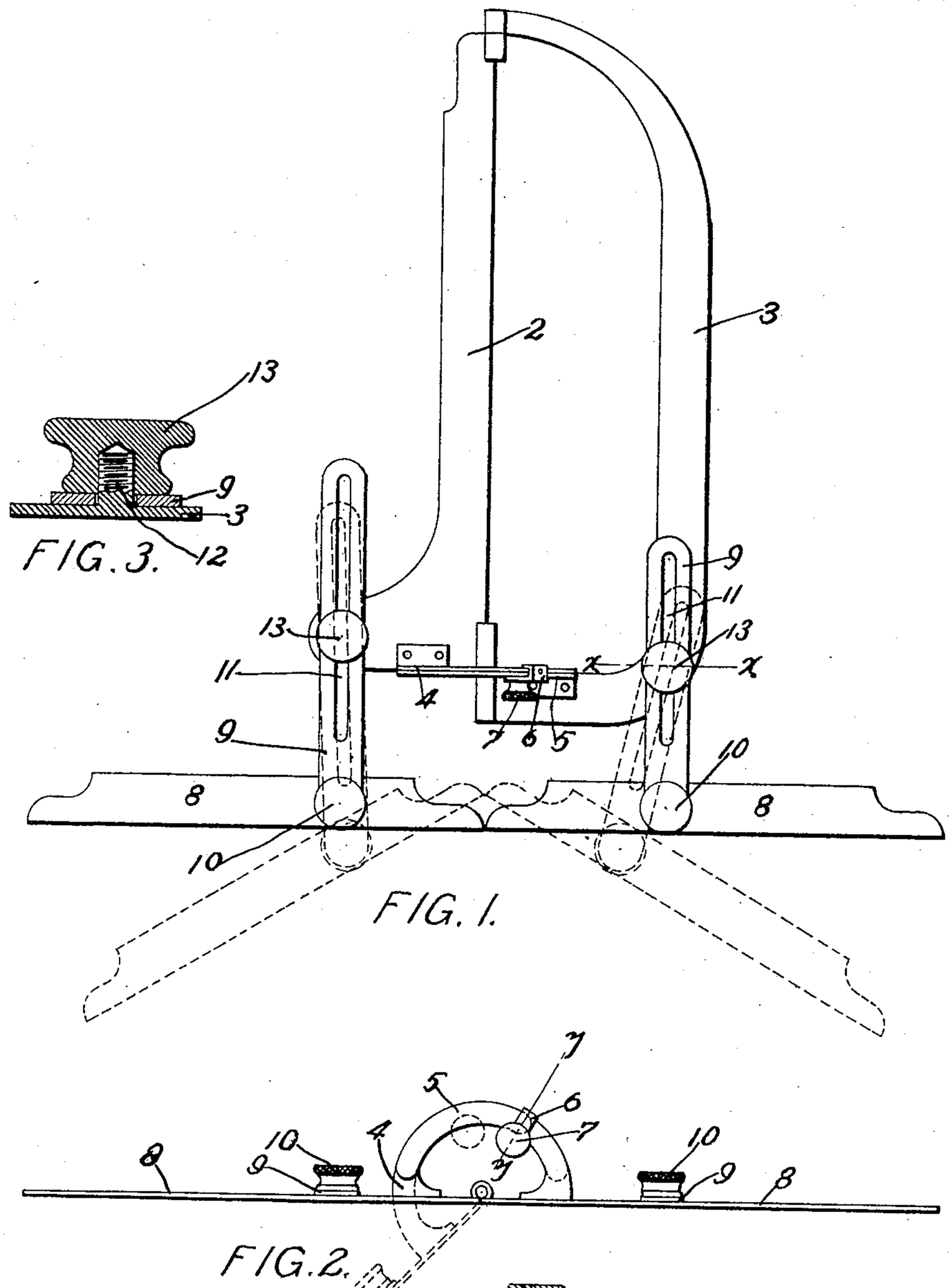

FIG. 3.

FIG. 1.

FIG. 2.

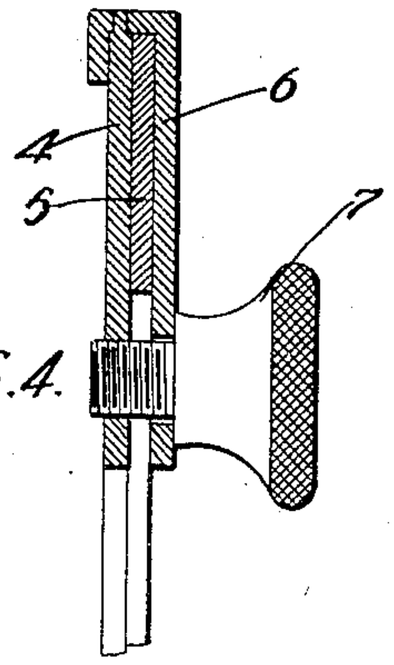

FIG. 4.

WITNESSES

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NO MODEL. 2 SHEETS—SHEET 2.

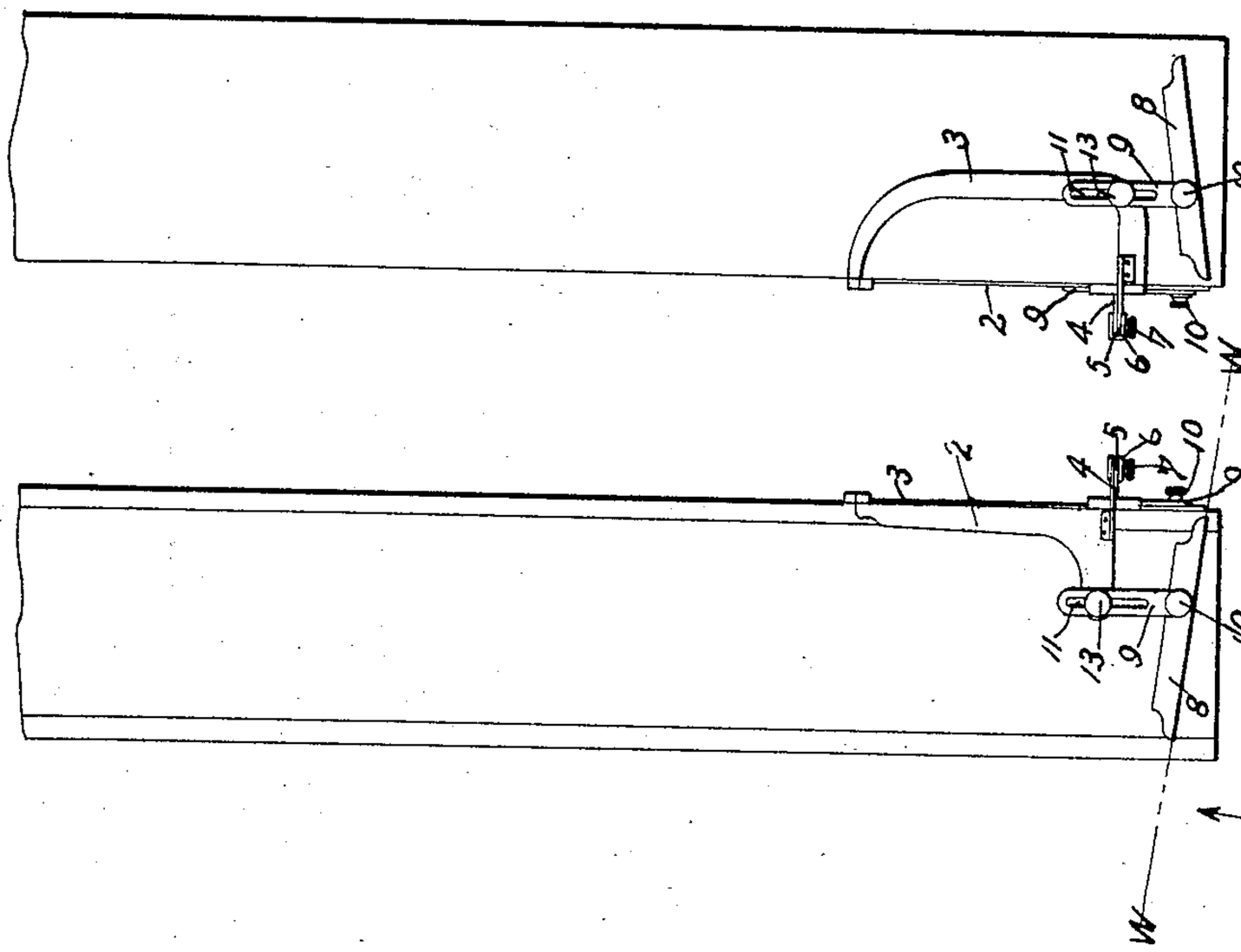

FIG. 9.

FIG. 8.

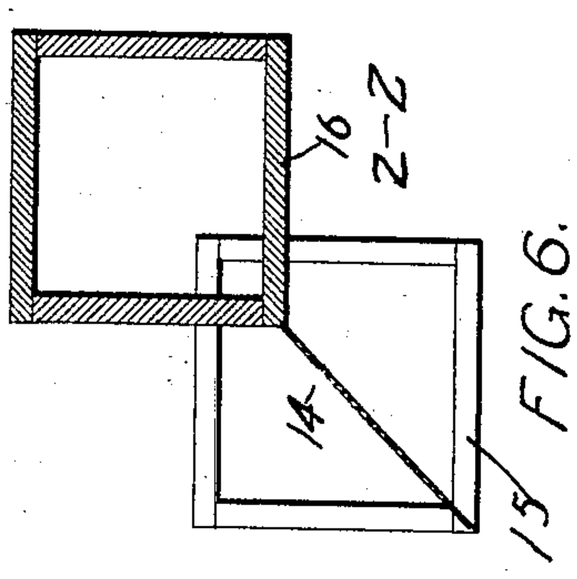

FIG. 6.

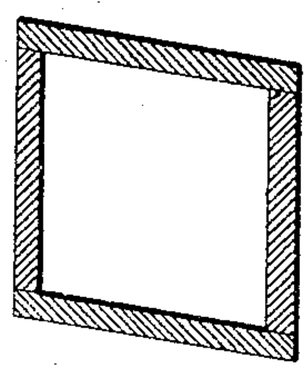

FIG. 7.

FIG. 5.

WITNESSES

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No. 771,264. Patented October 4, 1904.

UNITED STATES PATENT OFFICE.

JOHN JOSEPH NOLAN, OF WAVERLY, MINNESOTA.

BEVELING-TOOL.

SPECIFICATION forming part of Letters Patent No. 771,264, dated October 4, 1904.

Application filed March 5, 1904. Serial No. 196,660. (No model.)

To all whom it may concern:

Be it known that I, JOHN JOSEPH NOLAN, of Waverly, Wright county, Minnesota, have invented certain new and useful Improvements in Beveling-Tools, of which the following is a specification.

In the construction and operation of a flour-mill it is frequently necessary to spout from a hole in one floor to a corresponding hole in a floor beneath. These holes are sometimes in line with each other or slightly offset, in which case the proper cut or bevel at the ends of the spout can be easily and readily determined; but it frequently happens that the spout-holes are not only offset from one another, but diagonally arranged, requiring a spout that is diamond-shaped in cross-section and correspondingly beveled at the ends. The proper bevel for such a spout cannot be readily determined by ordinary methods; and the object of my invention is to provide a tool with which a carpenter or millwright having located the holes between which the spout is to be placed can easily and quickly determine the proper bevel for the ends of the spout to make it accurately fit such holes.

The invention consists generally in two plates having contiguous hinged edges and bevel-squares adjustably mounted on said plates at one end thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a beveling-tool embodying my invention. Fig. 2 is an end view. Fig. 3 is a detail sectional view on the line $x\ x$ of Fig. 1. Fig. 4 is a similar view on the line $y\ y$ of Fig. 2. Fig. 5 is a view showing the tool in use. Fig. 6 is a section on the line $z\ z$ of Fig. 5. Fig. 7 is a section on the line $w\ w$ of Fig. 8. Figs. 8 and 9 are views of a spout, showing the tool placed thereon after the proper bevel for the end of the spout has been obtained.

In the drawings, 2 and 3 represent plates that are hinged together at their contiguous edges and adapted to swing back and forth to vary the angle between them. 4 and 5 are semicircular bars secured, respectively, on said plates, and the bar 4 is provided with a strap 6, having a locking thumb-screw 7, with which the operator can clamp the bar 5 firmly between said strap and the bar 4 and lock the plates 2 and 3 at any desired angle with respect to each other.

Upon each of the plates 2 and 3 I provide a bevel-square consisting of a blade 8, having a straight lower edge adapted to fit a flat surface around a spout-opening and to which blade an arm 9 is pivoted by means of a thumb-nut 10, which allows the adjustment of the blade at any desired angle with respect to the arm. The arm 9 is provided with a longitudinal slot 11 to receive a threaded stud 12, whereon a thumb-nut 13 is arranged. By loosening this thumb-nut the arm 9 can be adjusted lengthwise with respect to the plate 2 and forward or back to accommodate the bevel-square blade to the surface upon which it is placed.

In using the device a cord 14 is run from one corner of the box 15, inclosing the hole in the lower floor, to the corresponding corner of the box 16 in the floor above. The tool is then placed on the box 15, and the bevel-square blade is adjusted to fit the box, the hinged plates 2 and 3 having previously been adjusted to bring the cord 12 into the angle formed by the junction of said plates. When the tool has been adjusted so that the cord fits into this angle and the bevel-square blades are fitted to the surface around the hole, the thumb-nuts are tightened and the tool removed and placed upon the corner of the spout. The angle of the bevel-blades will then determine the proper bevel for the spout ends, and it is marked and sawed accordingly. The proper bevel for the upper end of the spout is then determined in a similar manner.

With this device the proper bevel for the ends of a spout where the openings are diagonally arranged and a spout diamond-shaped in cross-section is required can be quickly and accurately determined.

I claim as my invention—

1. A beveling-tool comprising two plates having their contiguous edges hinged together, beveling-squares carried by said plates and comprising straight-edged blades, and arms pivotally connected therewith and adjustably mounted on said plates.

2. A beveling-tool comprising a suitable frame composed of sections hinged together and adapted to swing back and forth to vary the angle between them, and bevel-squares comprising blades and arms pivotally connected therewith and adjustably mounted on said sections.

3. A beveling-tool comprising members having their longitudinal edges hinged together, means for locking said members at any desired angle with respect to one another, bevel-square blades, and arms pivotally connected to said blades and to said members, substantially as described.

In witness whereof I have hereunto set my hand this 1st day of March, 1904.

JOHN JOSEPH NOLAN.

In presence of—

JOHN M. CASEY,

L. M. CASEY.