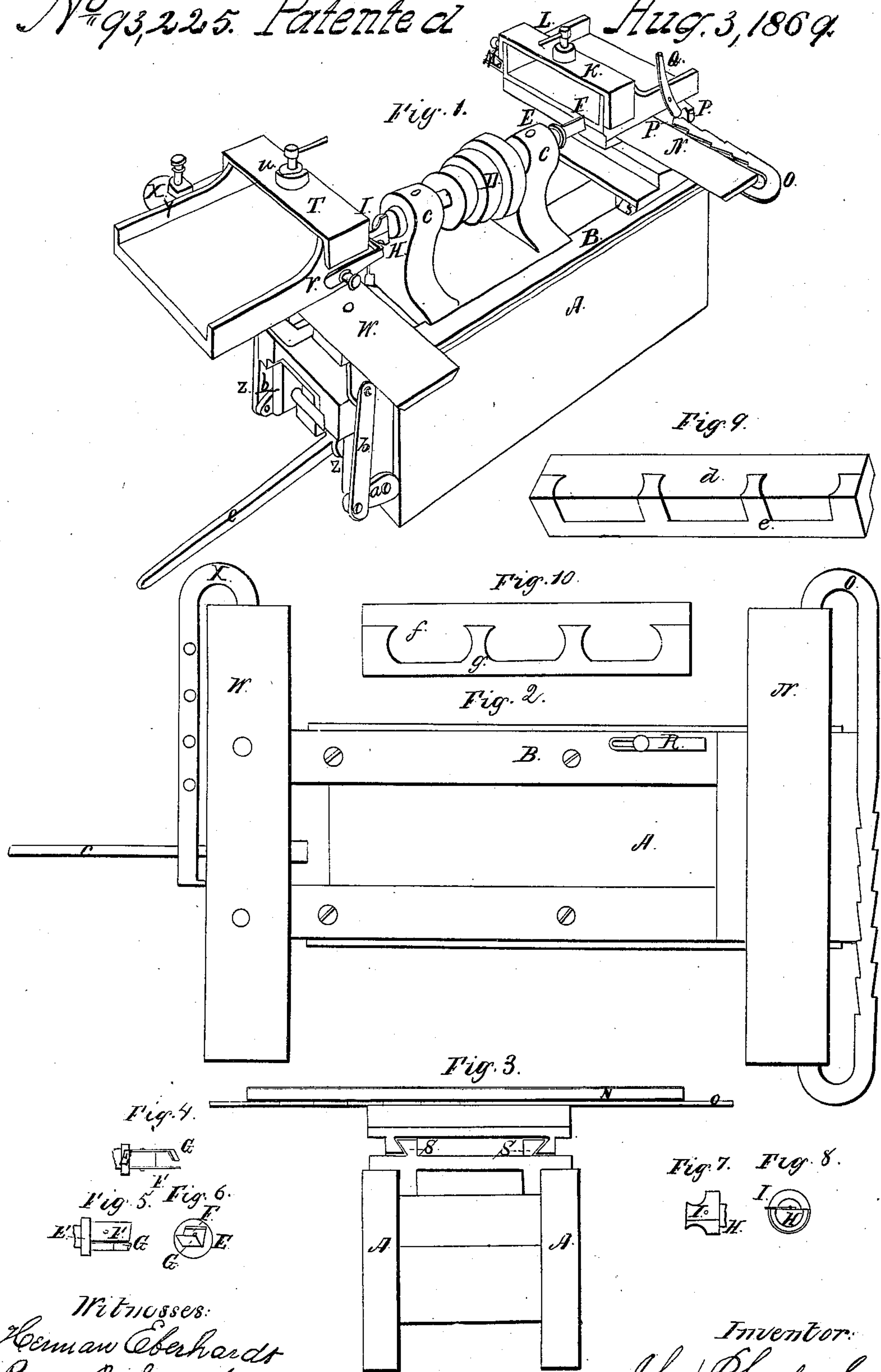


J. Philips, Jr.
Dovetailing.
No 93,225. Patented Aug. 3, 1869.



Witnesses:
Herman Oberhardt
Perry B. Smith

Inventor:
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United States Patent Office.

JOHN PHILLIPS, JR., OF CHICAGO, ILLINOIS.

Letters Patent No. 93,225, dated August 3, 1869.

IMPROVEMENT IN DOVETAILING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JOHN PHILLIPS, JR., of the city of Chicago, and county of Cook, and State of Illinois, have invented a new and useful Improvement in Dovetailing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, a top view of the stationary frame-work.

Figure 3, a back-end view.

Figure 4, one of the cutting-heads, with the cutting-knives attached, showing the cutting-knives edgewise.

Figure 5, view of same cutting-head, showing the straight knife flatwise.

Figure 6, end view of same cutting-head.

Figure 7, the other cutting-head, with its cutting-knife attached.

Figure 8, end view of same cutting-head.

Figure 9, section of dovetailed work for rear end of drawers.

Figure 10, section of dovetail-work for front of drawers.

Similar letters of reference in each of the figures indicate corresponding parts.

My invention consists in certain arrangements of parts, by which dovetailing can be done in an expeditious and neat manner.

A is the frame.

B, bed-plate.

C, mandrel-stand.

D, mandrel, with driving-pulleys on its centre, and a cutting-head on each end.

E, cutting head to cut the wide dovetail-slots.

F, flat, straight knife, its outer end bevelled.

G, cutting-knife, with its cutting-end turned inward toward the knife F, forming a bevelled lip.

K, a sliding keeper, on which to put a piece to cut the wide dovetail.

L, set-screw, to hold the piece firmly.

M, an adjustable stop, to regulate the depth of the dovetail.

N, way on which the keeper K slides crosswise.

O, gauge.

P, stops, pivoted on the bottom of keeper K, their outer ends connected by a chain.

Q, lever to throw stops P out and in the notches in the gauge O.

R, stop to regulate the movement of the sliding works K and N, so as to have the piece to be dovetailed come up to the cutting-head to the desired point to cut the dovetail the required depth.

S, sliding ways on the bed-piece B, on which slide N is moved.

Operation.

To cut the wide slots, place the end of the lumber to be slotted in the sliding keeper K, adjust the stop M so as to have the piece project through the keeper the required distance, having the piece pushed through against stop M; then set down set-screw L so as to hold the piece firmly, adjust stop R, on the bed-piece B, at the proper point to let the sliding bed N approach the cutter-head as near as required; then slide keeper K so as to bring the cutting-head as near the side of the piece to be slotted as required; then, by the lever Q, set one of the stops P against the gauge O, in one of its notches; then shove the piece up to the cutting-head, which will enter the piece, cutting the required depth; then throw stop P out of the notch in the gauge, and slide keeper K over the required distance, which will be regulated by the notches in the gauge, the cutting-head will cut the slot as desired; then draw back the keeper K, and shove it on the slide-way the required distance to leave the proper amount of wood between the slots; and then cut another slot as before, the cutting-head being operated by a belt over pulley D.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement of the cutting-head E, with its knives F and G, sliding keeper K, sliding way N, gauge O, stop P, stop M, and set-screw L, and sliding way S, and stop R, when constructed to operate substantially as described.

JOHN PHILLIPS, JR.

Witnesses:

HERMAN EBERHARDT,
JAMES W. KERR.