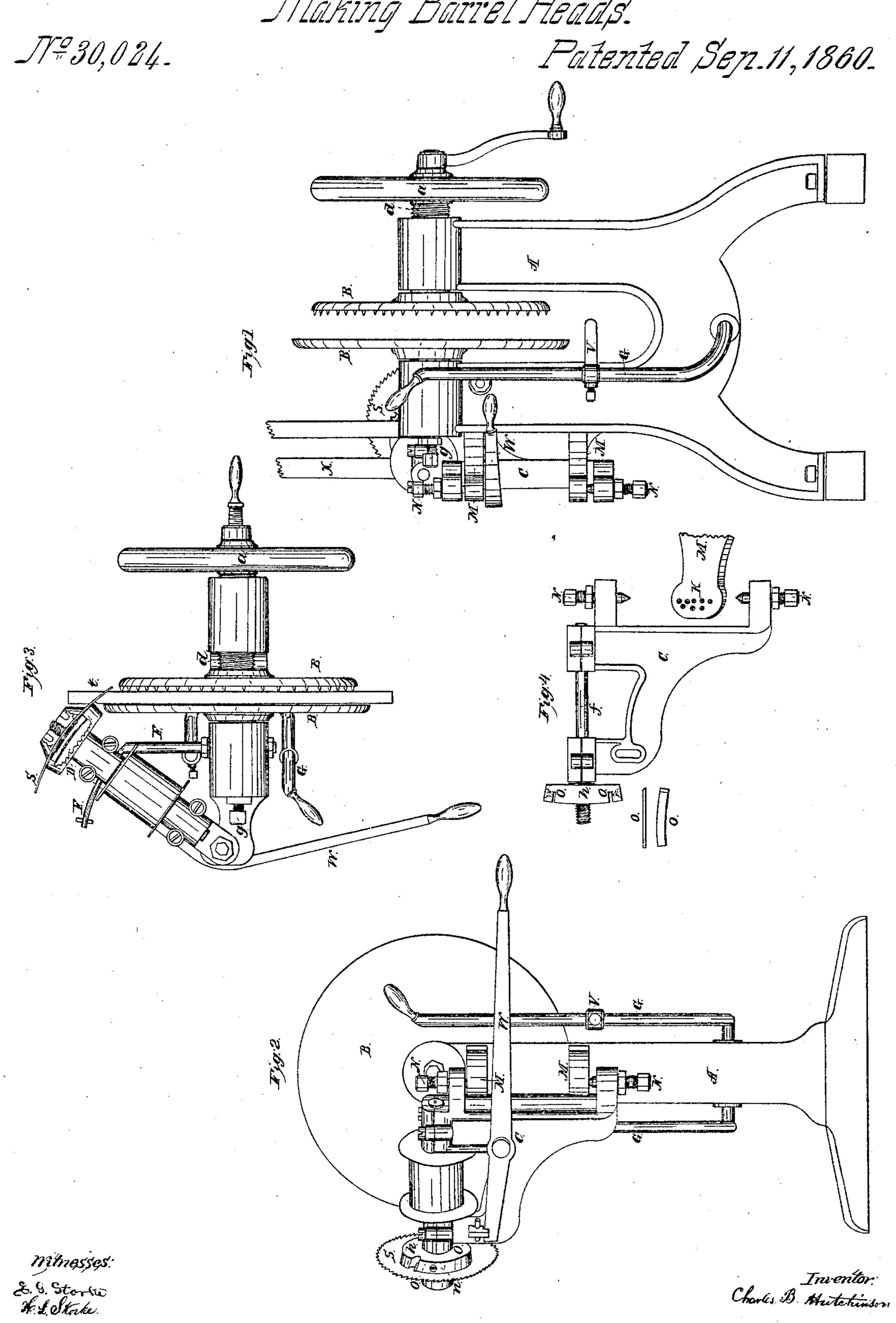
C.B. Hutchinson, Making Barrel Heads.



## UNITED STATES PATENT OFFICE.

CHARLES B. HUTCHINSON, OF AUBURN, NEW YORK, ASSIGNOR TO R. A. HUTCHINSON, OF SAME PLACE.

## HAND HEAD-MACHINE.

Specification of Letters Patent No. 30,024, dated September 11, 1860.

To all whom it may concern:

Be it known that I, CHARLES B. HUTCH-INSON, of the city of Auburn, in the county of Cayuga and State of New York, have in-5 vented a new and useful Improvement in Machines for Making Heads for Barrels, Tierces, Hogsheads, &c.; and I do hereby declare the following to be a full, clear, and exact description of the construction and op-10 eration of the same, reference being had to the accompanying drawings, and the letters appended thereto, making a part hereof, in which—

Figure 1, is a front view of the machine; 15 Fig. 2, is a side view of the same; Fig. 3, is a top, or bird's-eye view, and Fig. 4, is the crane, or pier detached; showing the center-points, or screws N, N, the cutter head, h, and the circular cutters O, O, which are 20 placed, and fastened in the same; the beveling chisels, or cutters q, q, and one of the projections M, which support the crane, detached, and turned down to show the indentations K, for the center-points, and which, by being changed from one to another, adapt the machine to heads of different sizes, and in combination with the set-screw g, varying the position of the face plate or disk y, gives the desired bevel to 30 large, or small heads.

Similar letters of reference indicate corresponding parts in each of the several fig-

ures.

A, is a strong cast-iron frame the con-35 tour of which is substantially as represented, and in which are the bearings and nuts for the shafts which support and move the clamp disks B, B, the projections M, M, that support the swing crane or pier C, and 40 all the other working parts of the machine.

B, B, are two circular clamp disks between which are to be placed the pieces of board or heading stuff. Those disks are opened or held and pressed firmly together 45 by the screw, d, and the hand wheel a, and are turned on their axis at the pleasure of the operator.

C, Fig. 4, is the swing crane or pier which is attached at its top and base to projections 50 M, M, from the frame A by adjustable center points or screws N N, with set nuts on which points the crane may be swung freely to the right or left by the lever w thus obtaining a horizontal circular motion and by I

a change of the points it is adapted to heads 55

of larger or smaller diameters.

Upon the top of this crane or pier is mounted the saw arbor f, Fig. 4, and upon the extreme end of it is placed the concave, circular saw S, and upon its inner face the 60 cutter head h, in which are made slots for the insertion of the new and peculiarly constructed circular cutters O, O, Fig. 4. These cutters correspond exactly with the concavity of the saw as shown at D, Fig. 3, and are 65 therefore easily put in and taken out on the curvature of the saw and are held firmly in their places by the set screws n, n. By this arrangement two advantages are gained viz., ease of adjustment and constant accuracy of 70 position however much they may be worn.

F, Fig. 3, is a curvilinear locking bar, projecting from the main frame, and passing through a slot in the pier; it has notches in which the lever w, catches, and thus fixes 75 the saw, either into, or out of, the work as

may be necessary.

G, Fig. 1, is a lever projecting from each side of the main frame having dogs v, Fig. 1, which support the heading stuff when 80 being placed between the clamps. These dogs may be raised, or lowered, to suit varying sizes of heads, and removed at once

whenever the stuff is clamped.

From the foregoing description of this 85 machine, and the drawings thereof, to which reference is made, its construction and mode of operation will, I trust, be easily, and distinctly seen, yet to guide the operator in its use, I will concisely state, that the pieces of 90 heading stuff, cut of suitable lengths, are dropped between the clamp disks B, B, and rest upon the dogs v, v. These disks are then immediately and firmly pressed together, by turning the hand-wheel a, and the dogs re- 95 moved by the lever G, the concave saw, already in motion by the belt x, is then swung into the work, as shown at t, Fig. 3, and when it has cut through the stuff the extreme end of the lever, w, enters the inner 100 notch of the locking bar F, and thus fixes the saw in its place. The operator then gives the disks one revolution, which completes the work leaving the heads neatly sawed, beveled and fit for use.

What therefore I claim as new, and desire to secure by Letters Patent, is—

1. The cast iron frame A supporting all

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the working parts, and constructed substantially as, and for the purposes specified.

2. The swing crane or pier C, the lever w, the locking bar F, the center points N N, the form of the cutters O, O, and their mode of attachment in the cutter head, h; in combination with the projections M, M, and their

indentations K substantially as described and for the uses and purposes set forth.

CHARLES B. HUTCHINSON.

In presence of—
H. L. Storke,
E. G. Storke.