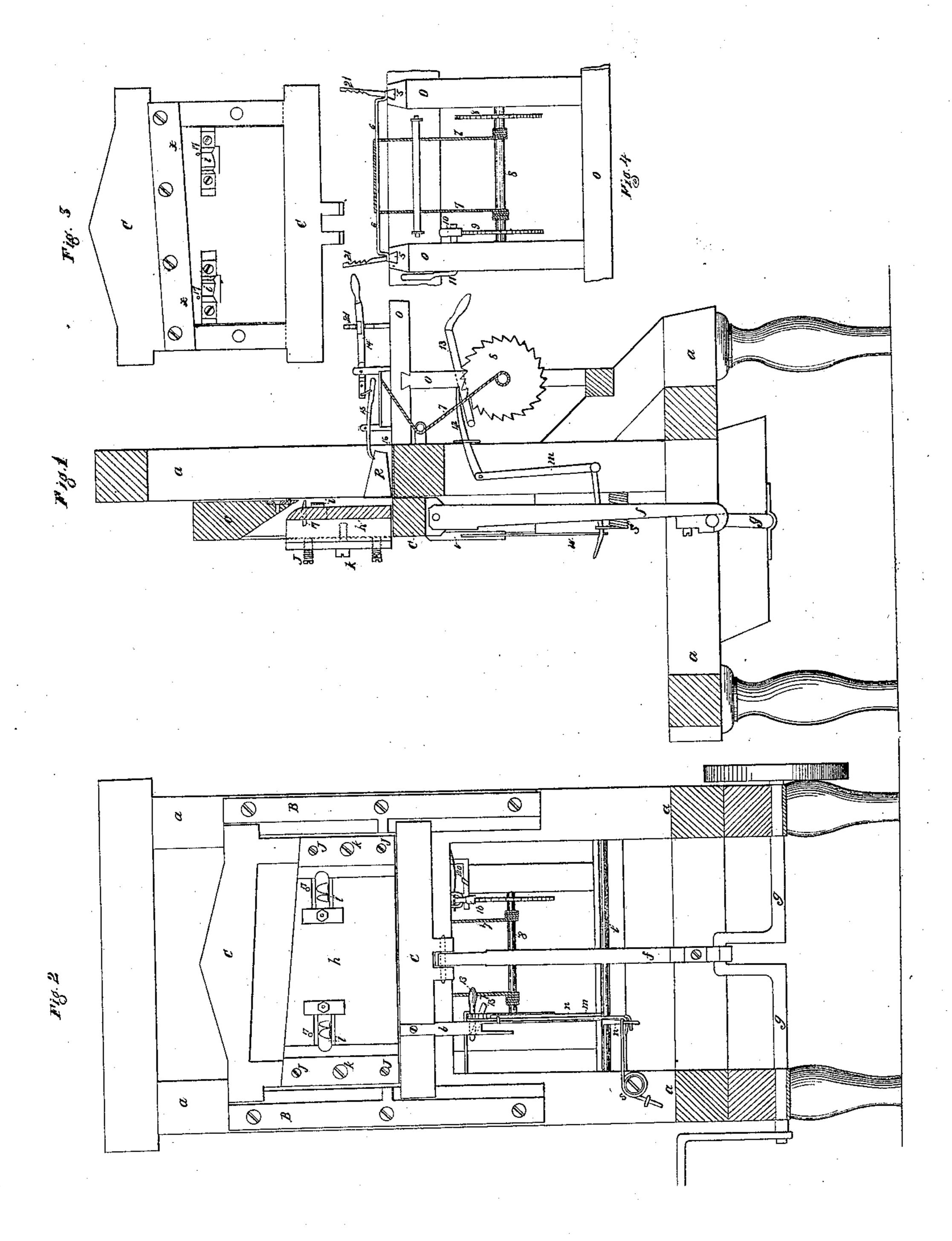
F1. H217171. Making Staves.

Nº 19,853.

Patented Azzr. 6, 1858.



## UNITED STATES PATENT OFFICE.

A. HUPP, OF LANCASTER, OHIO.

## HOLDING AND FEEDING THE BOLT IN STAVE-MACHINES.

Specification of Letters Patent No. 19,853, dated April 6, 1858.

To all whom it may concern:

Lancaster, in the county of Fairfield and State of Ohio, have invented a new and use-5 ful Improvement in Machines for Dressing Staves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters and 10 figures of reference marked thereon and made to form part of this specification.

Similar letters refer to like parts of the

improvement.

The nature of my improvement consists in 15 the means employed for adjusting and holding that portion of the machinery for cutting different thicknesses of staves and the combined arrangement of machinery for moving and holding the piece of timber to 20 the cutter from which the staves are cut.

To enable others skilled in the art to make and use my improvement I will proceed to describe its construction and operation by referring direct to the accompanying draw-

25 ings.

Figure 1 is a longitudinal sectional elevation of the machine. Fig. 2 is a transverse sectional elevation of the machine. Fig. 3, is a separate rim of the gate carrying the 30 knife and croze cutters. Fig. 4, is a portion of the frame work for supporting the machinery for feeding and holding the timber to the cutters.

(A, A,) represents the general frame of 35 the machine, (B, B,) the slides on which the gate C, C, works—and is operated with the

pitman f and bell crank shaft (g, g).

The gate (C, C,) is furnished with a cutter X X for cutting the stave from the block 40 of timber R and is provided with a plate (p)which plate is furnished with croze cutters (i, i,) and cutters 17, 17, for cutting off the end of the stave—and the plate p thus provided with cutters is held and adjusted to 45 the gate (C, C,) by means of the screens (JJ) and K the screws K are made to pass into the gate (C, C) for holding the piece (p) up to the gate (C) while the screws J, J, are employed for forcing the piece (h, h, h)

50 away from the gate (C, C,) thus the screws k react against the screws J, in the manner represented so that the face of the plate

Be it known that I, Авганам Норг, of p, can be set and held any required distance from the cutter (X, X) on the gate (C, C)for regulating the thickness of the stave 55 being cut.

The means for holding the piece of timber R, from which the stave is cut, consist of the levers 14 and 15 dovetail slides 5, 5 furnished with a point (16) for holding the 60 timber and catch rods 21 all constructed as represented in Fig. 1, there are two of each of the several parts mentioned for holding the piece of timber at each end, and the means employed for feeding the timber to 65 the cutters consist of the lever (n, n) shaft (t) and lever m, pawl (12) ratchet wheel and shaft 8, cord 7, 7, plate (6) and slides 5, 5, combined and arranged as represented and operated with the forked piece (b) and 70 rod w attached to the gate (C, C,) and made to work the lever (n) by the forked piece vstriking the lever (n) and depressing it which draws back the pawl (12) and then the spring (S) acts on the lever (n) and 75 moves the timber (R) to the cutter by means of the lever (m,) pall (12) ratchet wheel and shaft (8) cord (7, 7,) plate (6 6) and slides (5, 5,).

(13, 13,) is a lever for raising the pawl 80 (12) from the ratchet wheel (8), when the plate 6 6 is to be drawn back to secure another piece of timber, and on one end of the shaft (8) there is another ratchet wheel (9) placed for holding the feeding appara- 85 tus to its place when in operation by means of the pawl (10) and spring (20) and the lever (11) is for raising the pawl out of gear when the plate (6, 6,) is to be drawn back to receive another piece of timber.

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

The combined arrangement of the levers (14,) and (15,) catch rod (21) and slides (5, 5,) arranged with the levers (n, n,) and 95 (m) pawl (12), ratchet wheel (8), cord 7, 7, and plate 6, 6, all for holding and feeding the timber (R,) to the cutter as represented and for purposes mentioned in the foregoing specification.

ABRAHAM HUPP.

Witnesses:

J. RADEBAUGH, A. I. DILDINE.