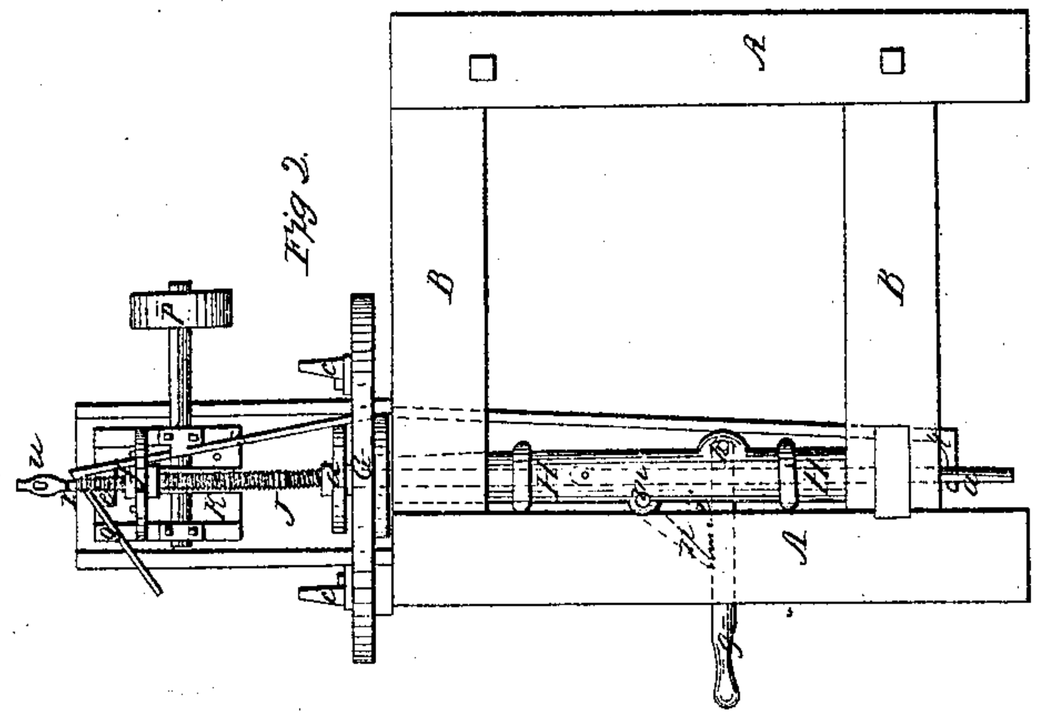
T. Blanchard,

Making Tackle Blocks.

Patented Aug. 10, 1836.

Fig 2.



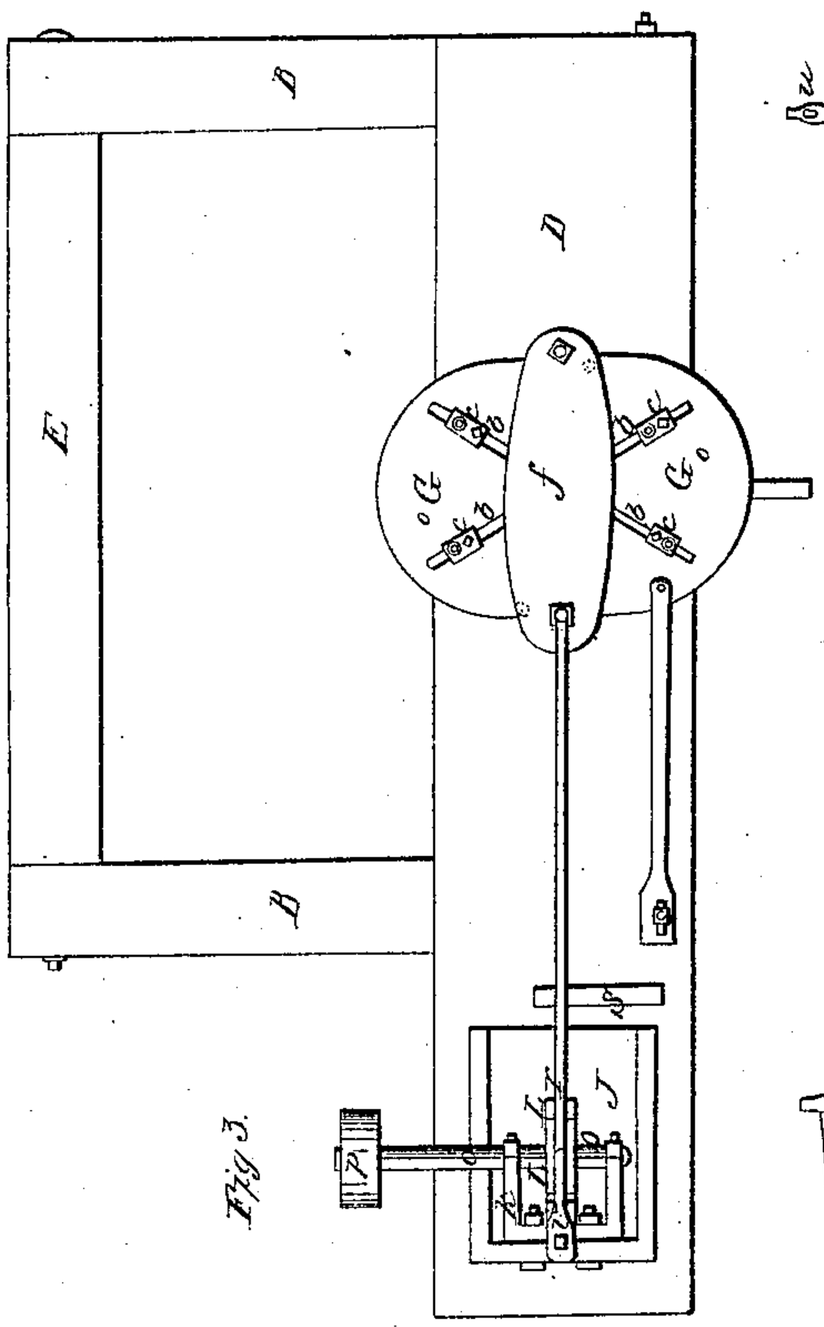
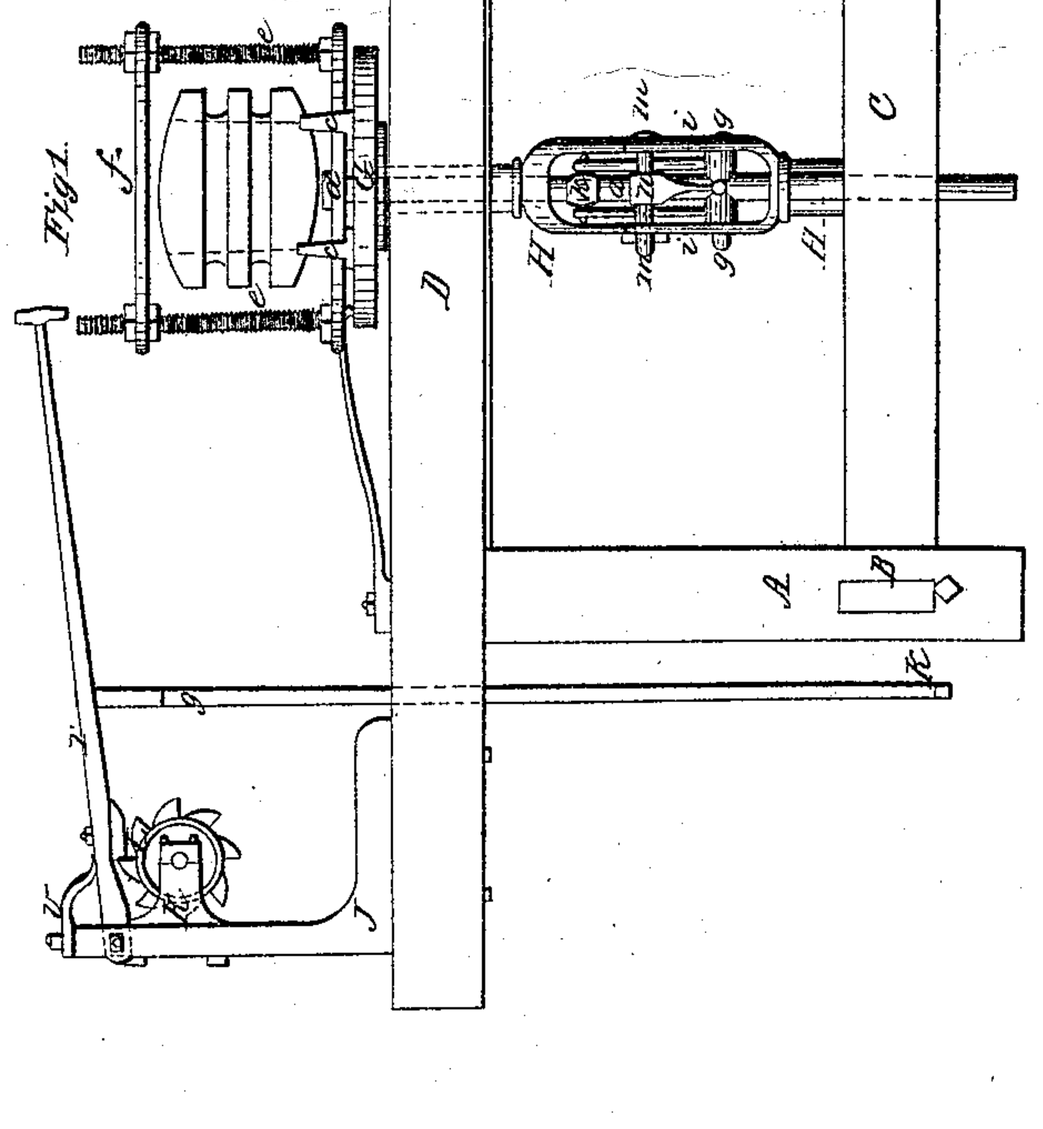


Fig 3.

Fig 1.



A.M. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

THOMAS BLANCHARD, OF NEW YORK, N. Y.

METHOD OF RIVETING PLANK OR MADE BLOCKS.

Specification of Letters Patent No. 9, dated August 10, 1836.

To all whom it may concern:

Be it known that I, THOMAS BLANCHARD, late of Springfield, in the county of Hampden and State of Massachusetts, but now of the city, county, and State of New York, have made and invented and applied to use certain new and useful Improvements in Methods of Riveting Plank or Made Blocks, which said improvements, with the machinery and method of constructing and using the same, are fully described and set forth in the following specifications and in the drawing annexed to and making part of this specification, wherein—

Figure 1, is the orthographical projection of the front, or principal view of the machinery. Fig. 2 is a like projection of the end view of ditto and Fig. 3, is a horizontal plan of the same figures, and letters of reference being used to denote the similar parts in all the figures.

A, A, A, A, are four posts.

B, B, B, B, are four cross-timbers.

C, is a longitudinal timber.

D, is the upper bedpiece.

E, is a tie across the back of the machine.

A, is a spindle going through C, and through the carriage H, which is secured to the anvil block, or plate G, which is made with diverging slots *b*, *b*, *b*, *b*. Over each slot is fitted a small anvil *c*, *c*, *c*, *c*, each having a flanched end to secure them by means of a bolt through the slots *b*, to the anvil block G. The spindle *a*, is elongated above, and through the center to receive the flanch *d*, to each end of which is secured the screw bolts *e*, *e*, which are made of a sufficient length to receive the upper flanch *f*, which is secured by means of nuts, on the screw bolts, *e*, above, and below the flanch *f*, working around the spindle *a*, and above the timber C, is a carriage H, which is lifted to receive a forked lever *g*, made with racket teeth in the upper edge jointed to a pin *h*, at the back of the carriage H, this lever is attached at one end to a pair of slings *i*, *i*, the other end of the slings being secured to pins upon the collar K. On the spindle *a*, in the front of the carriage is the pin *m*, to which is attached the pane *n*, working into the ratchet teeth on the lever *g*.—The bedpiece D, is elongated at one end to receive the carriage I, to which is attached an internal carriage K, fitted to slide up and down in slots in the back of I. To the carriage K, is attached a pair of arms which receive, and support the arbor O, on the center of which between the arms is the trip wheel L, driven by a pulley *p*, from any first mover, on the upper part of the carriage K, is jointed the end of the hammer shaft *v*, which is fitted to work as a trip hammer with the spring *v*, over it to increase the descending power, and adjusted to work over the anvils.

S, is a stop by means of which the hammer is raised up when not wanted, and the trip wheel L, is suffered to run free, *t*, is a treadle for the workman to throw the hammer out of work by.

On the bed piece D, is W, a spring index bar with slots to adjust it to length, and a stud working into holes in the anvil block G, by which the workman adjusts the position of the anvils under the hammer.

When it is desired to rivet a plank, or made block, the machine having been first adjusted by measure to the proper distances, and the index bar adjusted the pawl *n*, is first disengaged, and the lever *g*, is raised, so as to cause the slings *i*, *i*, to raise the spindle *a*, and the flanches *d*, and *f*, thereby increasing the distance between the upper flanch *f*, and the anvil block *c*, the workman then places the block to be riveted under the upper flanch *f*, and on the points of the anvil *c*, with the heads of the rivets, which were riveted at one end previous to their being driven through the block downwards, and on the anvils, he then places his foot on the lever *g*, and pressing it downwards at the same time entering the pawl *n*, into the teeth of the ratchet, draws the spindle *a*, and flanch *f*, downward with great force onto the block to be riveted thus compressing, and securing it firmly for riveting, he then turns the anvil so far round as to bring one of the pins to be riveted under the trip hammer *u*, and rapid rotary motion being given to the trip wheel L, by withdrawing the stop S, from under the hammer shaft, the hammer will commence striking a rapid succession of blows on the head of the pin to be riveted, and thus secure that pin. The workman then throws the hammer out of work, and turning the anvil, and block partly around brings the other rivet in succession under the hammer as before. When the block is finished riveting the workman releases the pawl, and raising the lever *g*, disengages the block to put in others in succession to be riveted in a similar manner. And I the said THOMAS BLANCHARD, do hereby declare

that I do not claim as my invention any of the separate parts of the above described machine, but I do claim as my invention, and improvement—

The combination of the various parts of the above machine in the manner above described, and set forth, or in any other manner substantially the same, and as applied to the purpose of riveting plank blocks while under a powerful pressure by the means above described, or any other substantially the same. In this way, and by means of the above machine, a plank block may be made much better, and cheaper than heretofore, and when finished is stronger, and more durable.

THOS. BLANCHARD.

Witnesses:

J. P. STAPLES,

C. S. SHERMAN.