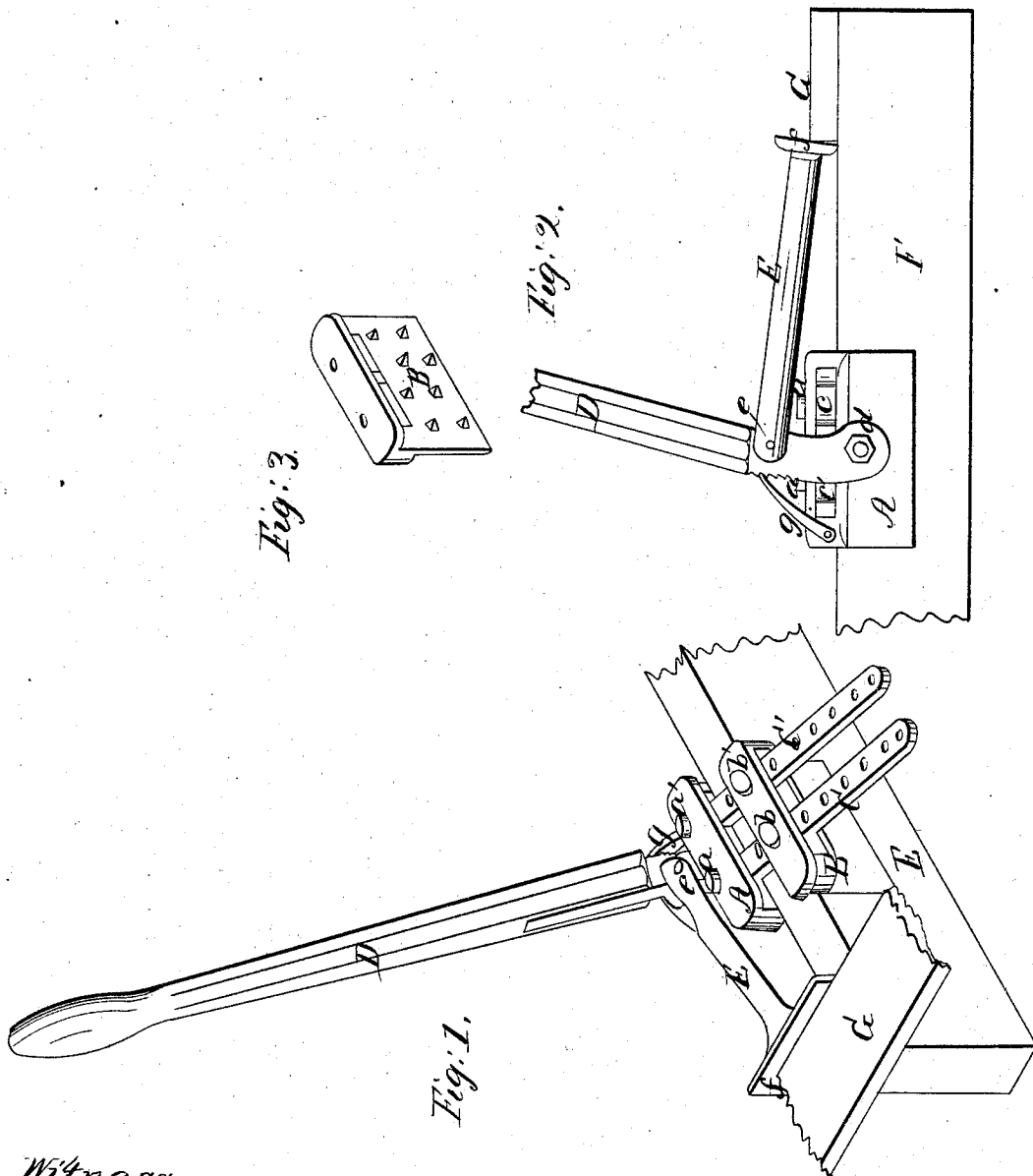


*J. L. Clough,
Wood Clamp.*

No 32,120.

Patented Apr. 23, 1861.



*Witnesses,
William R. Riddle
Milton Bradley*

*Inventor,
J. L. Clough.*

UNITED STATES PATENT OFFICE.

JAMES L. CLOUGH, OF SUFFIELD, CONNECTICUT.

FLOOR-CLAMP.

Specification of Letters Patent No. 32,120, dated April 23, 1861.

To all whom it may concern:

Be it known that I, JAMES L. CLOUGH, of Suffield, in the county of Hartford and State of Connecticut, have invented a new and useful Builder's Grip; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine in operation. Fig. 2 is a side view of the same, and Fig. 3 a view of a portion of the machine in detail.

It is the design of my invention to produce a mechanical device for holding floor boards or ship plank in their proper place till they can be confined by nails or other permanent fastening. For instance in laying a floor if a board or plank is crooked, instead of straightening it by sawing off a portion from each side, I lay the concave edge against the board or plank last laid, and apply a pressure to the other edge sufficient to bring the board to its proper place and thereby save the waste in sawing, and also the trouble and time used in such an operation provided my device for straightening is more convenient than sawing, and it is such a device that I claim to have invented.

A, B, are two parallel plates or jaws connected by the two parallel bars C, C' pivoting on the pins *a*, *a'*, and *b*, *b'*.

D, is a hand lever attached to the jaw A by the pin *d*, as a fulcrum.

E, is a pressure bar attached to the lever D, by pin *e*, and having a flat foot *f*.

g, is a pawl working in a ratchet on the lever D, to hold it in place.

F, is a floor timber and G, a board being operated upon.

The jaw plate B, is seen more clearly in Fig. 3, which shows the teeth or projections on its inner surface, thereby differing in that respect from A, which is smooth, *i. e.*, has no projections to operate as teeth.

Now the operation is as follows, having adjusted the distance between the faces of A, and B, as nearly to the thickness of the floor timber as possible, by means of the pin holes in the bars C, C'.—Place the machine on one of the floor timbers, (running at

right angles to the boards,) bringing the timber between the plates, A, B, and the foot of the pressure bar against the edge of the board to be straightened, the lever D, being thrown back to a perpendicular position. Now by pulling forward on the top of lever D, the jaw plate A, is slipped back on the timber, thus gradually drawing the two parallel faces of the jaw plates nearer together until they grip the floor timber sufficiently to form a permanent fulcrum for the lever D, the teeth on the face of B, only serving to hold B, from slipping when the force is first applied to the lever, as after the gripping of the timber commences, the more force there is applied to the lever the more firmly the machine grasps the timber, therefore the teeth need not be large enough to injure the timber as is often done by driving in dogs or spikes. Now supposing the workman to have found a board that has become crooked since it was sawed and it is desirable to spring it back, he lays it down as before stated the concave edge against the edge of the board last laid. He next starts in some nails in suitable positions to hit the floor timbers, then takes the "grip" and placing it on the timber about opposite the center of the crook in the board, pulls on the hand lever with his left hand, thus springing the board into place and drives the nails with his right hand at the same time. In case it is not convenient to operate the machine with one hand the pawl *g* can be used which will hold whatever pressure is applied, until the board is nailed. By removing the hand lever from its fulcrum pin and putting it on with the other side against the jaw plate a right handed machine is formed.

Now the peculiar points of convenience and utility in this machine are, first, the facility with which it can be adjusted to any thickness of floor timber; secondly, the convenience in applying it at any point in the length of the timber, without injury to the timber; thirdly, the cheapness of its construction, all of these qualities combining to form a cheap, useful and effective machine for the use for which it is designed.

Now having fully described the construc-

tion and operation of my invention, what I claim as new and desire to secure by Letters Patent is—

1. The jaw plates A, and B, connected by
5 one or more bars C, C', when constructed substantially as here shown and used for the purpose substantially as herein described.

2. The combination of the lever D, pressure bar E, and jaw plates A and B substantially as herein described.

JAMES L. CLOUGH.

Witnesses:

WILLIAM R. RIDDLE,
MILTON BRADLEY.