J. R. Group,

Boring Posts

No. 111,532. Patented Feb. 7. 1871.

Fig. 1.

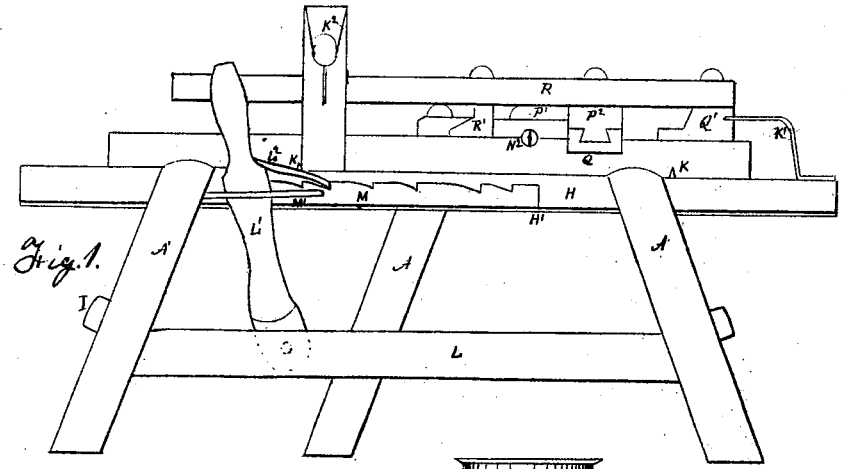


Fig. 2.

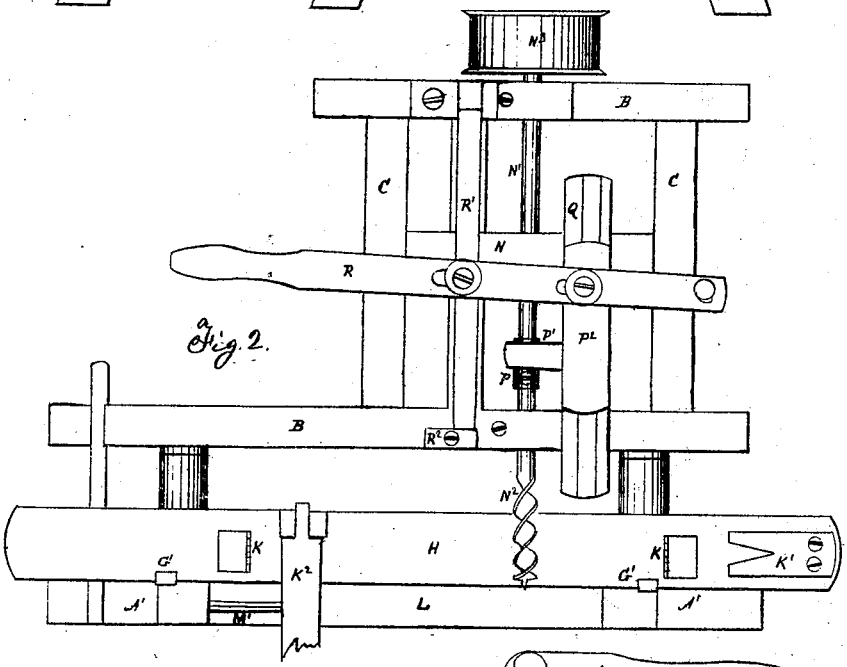
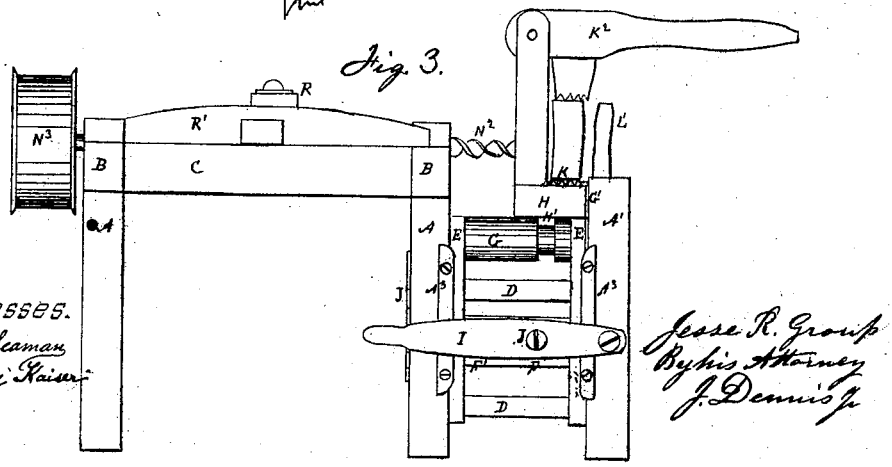


Fig. 3.



Witnesses.
Wm. Hoeaman
Henry Kaiser

Jesse R. Group
By his Attorney
J. Dennis Jr.

United States Patent Office.

JESSE R. GROUP, OF IDAVILLE, PENNSYLVANIA.

Letters Patent No. 111,532, dated February 7, 1871.

IMPROVEMENT IN MACHINES FOR BORING POSTS.

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, JESSE R. GROUP, of Idaville, Adams county, in the State of Pennsylvania, have invented certain new and useful Improvements in Machines for Boring Posts and other articles; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing, forming part of this specification.

The nature or essence of my invention consists in the particular construction and arrangement of devices forming the improvements in machines for boring holes in posts and other articles described in the following specification and represented in the accompanying drawing.

In the accompanying drawing—

Figure 1 is an elevation of the front of the machine.

Figure 2 is a plan or top view.

Figure 3 is an elevation of one end.

In the above-mentioned drawing—

A A are four posts, supporting the rails B B, which are connected by the bars C C, forming a strong frame, to which the other parts are fastened or connected.

In addition to the four posts A A, there are two other posts, A′ A′, connected to the posts A A by the bars D D, which bars have a notch cut in them next to the posts, to form seats for the stiles E E to traverse in, which stiles are connected by the bar F to form a traversing carriage, F′, carrying the grooved roller G, for the post-carriage H to traverse on.

To traverse the carriages F′ F′, I make the levers I I to vibrate on the screws in the posts A′, and connect the levers to the carriages by the screw J, and fasten a notched plate, J′, on the post A, to catch the lever and hold the carriage at such height as may be desired.

To hold the carriages F′ in place, and allow them to traverse, I fasten the cleats A^3 A^3 to the posts A and A^1.

The carriages F′ raise and lower the carriage H to adapt its height to the post or article being bored.

This carriage H is provided with a rib, H′, on its under side, to run in the groove in the roller G, and the carriage is held down by the lugs G′, fastened to the posts A^1.

The posts to be bored are laid on the carriage H, and held in place by the spurs K K, hook K^1, and lever K^2, pressed down on the post by the workman who traverses the carriage.

The posts A^1 are connected by the bar L, to which the lever L^1 is fastened, which carries the pawl L^2, which catches in the rack M, on the side of the carriage H, when the lever is drawn back to the post by the workman, and then pushed forward against the stop M′, the pawl L^2 catches another notch in the rack, and moves the carriage and post a proper distance to bore another hole in the post.

The rack M may be graduated in such a manner as to bore the holes as desired.

Midway between the rails B B, I fasten the bar N to the bars C C, and fasten journal-boxes on each of the three bars for the pulley-shaft N^1 and auger N^2 to turn in, when a band from some moving power is applied to the pulley N^3 to turn the shaft and auger fastened in it by the screw P.

The shaft N^1 has a groove around it for the traversing plate P^1, fastened to the block P^2, which traverses on the guide-bar Q, fastened to the bar N and rail B for that purpose.

The block Q′ is fastened to the bar C for the pivot of the lever R, which traverses the block P^2, and also the friction stop-bar R^1, which traverses in guides on the rail B and bar N.

This bar R^1 is stopped by the block R^2 on the rail B, when the auger has bored through the post, to prevent the twist of the auger from drawing the pulley N^3 up against the rail B; and when the auger N^2 is drawn out of the post, the back end of the bar R^1 comes against the pulley N^3, to apply friction and prevent the machine from running too fast, or injure the machine when the auger is not boring.

Having constructed and completed my improved machine, as above described, and applied a band to the pulley N^3 to turn the auger, I put the upper end of the post to be bored under the hook K^1, and lay it on the spurs K K, and bring the lever K^2 down on the post to hold it firmly on the carriage H, while the left hand vibrates the lever R and brings the auger up and bores a hole and then draws the auger back, when the carriage H with the post is traversed forward by the lever L^1 a proper distance for another hole, when the auger is brought up again, and another hole bored, which operation may be repeated until the required number of holes are bored in the post, when it may be removed and another put in its place.

Having described my improvements,

I claim—

In a boring-machine, the combination of the lever R, operating the auger-stock P, the friction-bar R^1, operating in its return motion as a friction brake against the pulley N^3, substantially as and for the purpose described.

JESSE R. GROUP.

Witnesses:

DANIEL H. MARKLEY,

ISAAC GROUP.