I. S. HEDDINGS.

Fence-Post Boring-Machine.

No. 218,023. Patented July 29, 1879.

Fig. 1.

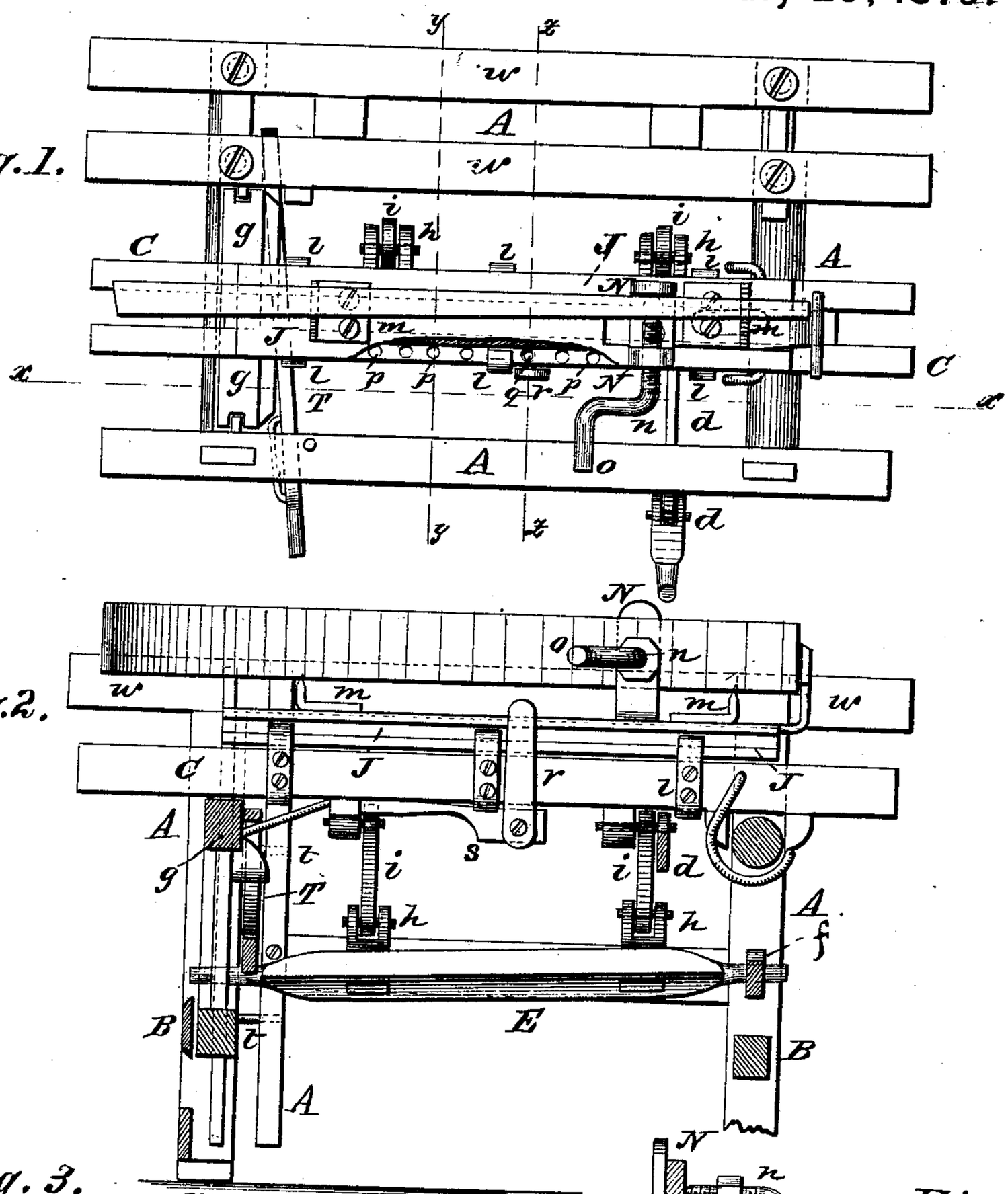


Fig. 2.

Fig. 3.

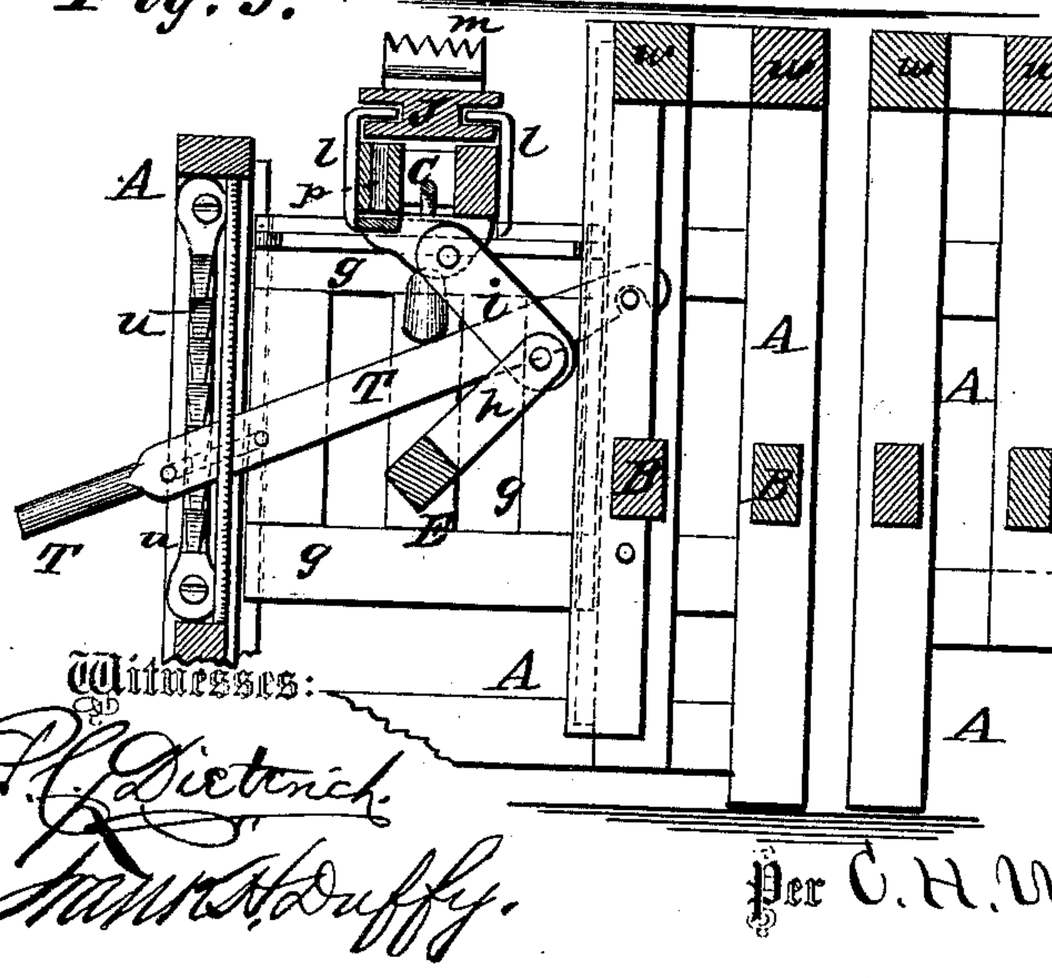
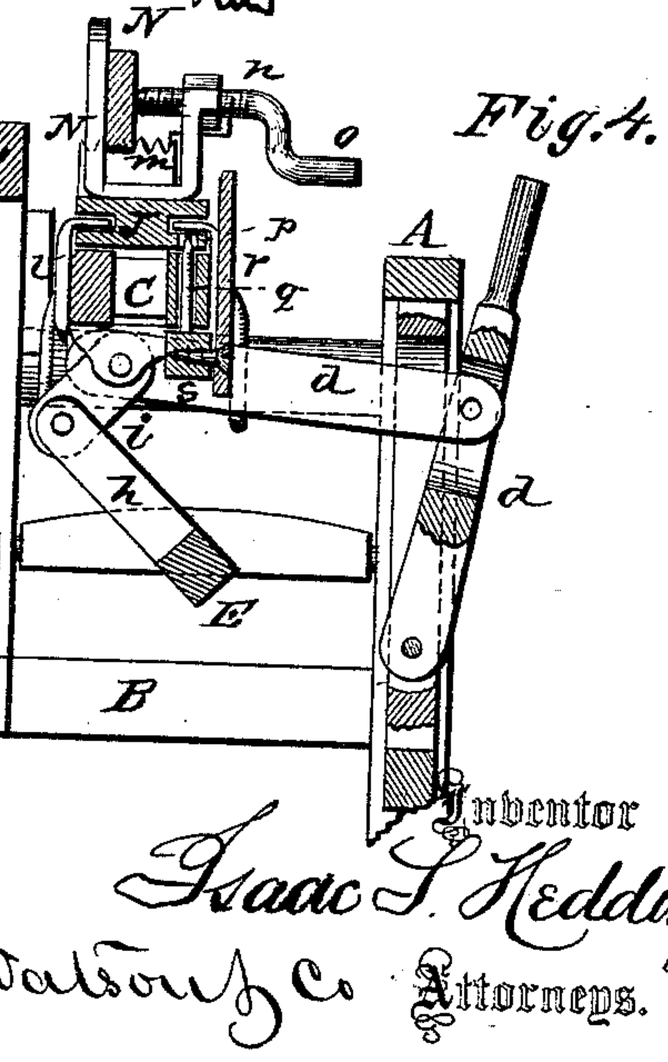


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

ISAAC S. HEDDINGS, OF MIFFLINBURG, PENNSYLVANIA.

IMPROVEMENT IN FENCE-POST-BORING MACHINES.

Specification forming part of Letters Patent No. **218,023**, dated July 29, 1879; application filed May 8, 1879.

To all whom it may concern:

Be it known that I, ISAAC S. HEDDINGS, of Mifflinburg, in the county of Union and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Boring Fence-Posts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to machines for boring fence-posts, in order to form mortises therein; and consists in certain improvements in the construction and combination of certain operative parts, as will be hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a top or plan view of a machine constructed in accordance with my invention. Fig. 2 is a central vertical section taken on line *x x*, Fig. 1. Fig. 3 is a transverse vertical section taken on line *y y* of Fig. 1. Fig. 4 is a similar view taken on line *z z*, Fig. 1.

A refers to the vertical and horizontal timbers of the main frame, and B the lower cross-bars upon the same. C represents the adjustable or shifting carriage, and *d* the lever for shifting the same toward or away from the auger, which I have not deemed it necessary to illustrate.

E designates a rock-shaft, journaled at one end in the rocking bar *f* of the frame A, and at the other end in a frame, *g*, which is adapted to slide vertically between two of the end vertical timbers of the frame A. These timbers have guides which fit into suitable grooves formed in the sides of the said frame *g*. Projecting from the rock-shaft are arms *h h*, and these are connected with the carriage by links or pieces *i i*, so as to give the same an even motion when the lever is operated.

J refers to the table, which is arranged to slide upon the carriage, and which is maintained in position thereon by the side angle-irons, *l*, having their upper ends projecting into grooves formed along the sides of the table. The table is furnished with the plates *m m*, having their upturned ends serrated, and also with an angular-shaped plate at one end. This angular plate sits in a recess in the table, so that its upper portion is about flush with the surface of the table, and it is slotted, so that it may be adjusted, when required, by loosening the bolt or screw which passes through its slot.

N is the clamp-frame, mounted upon the table; and *n*, the clamp-screw, having a crank-handle, *o*, for operating the same.

In order to maintain the table in proper and determinate positions upon the carriage, I form a series of holes, *p*, in its under side, and arrange a spring catch or pin, *q*, so that it will engage with said holes. This pin passes up through one of the side timbers of the carriage, and is operated by a small lever, *r*, which connects with the spring-piece *s*.

T refers to a lever-bar adapted to elevate the carriage at one end, so as to bring the central line of the post opposite to the auger. At the fulcrum-point of this lever I form a notch, and this notch I fit over either one of the two short rods *t*, which are secured between two vertical timbers of the frame. Near the handle portion of the lever I form a lug or projection, and upon one of the vertical corner posts I secure a rack-bar, *u*, in such position that the lug of the lever will engage with its teeth of the rack, and hence enable the operator to set the lever at various angles.

If desired, three or more rods, *t*, may be employed, the object of the same being that when necessary the lever can be lifted from one rod and placed upon another, thereby affording fulcrum bearing-points for the same of various heights.

The carriage is so hinged at one end to a cross-timber of frame A that it may be readily shifted by the lever *d* toward or away from the auger.

Among other advantages the post may be bored from either side without pushing the carriage back for each post. The carriage can also be stopped at any point with great facility.

When the lever T is raised it acts against a projection upon the vertically-sliding frame, and hence elevates both the carriage and table, so that logs of any size or crookedness can be brought to the required level.

In practice, the auger extends toward the carriage from the center of one side of the frame, and the fly-wheel which I propose using is mounted upon and between the timbers *w w*.

Having thus described my invention, what I claim is—

1. In combination with the pivoted table and carriage, the lever T and its bearing-rods *t*, the said lever being adapted to be moved from one rod to another, substantially as set forth.

2. The vertically-sliding frame *g*, in combination with the table, hinged carriage, operative lever, and rack-bar, substantially as specified.

3. The table and carriage, in combination with lever *d* and the rock-shaft E, having projecting arms and connected by toggle-levers with the shifting carriage, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ISAAC S. HEDDINGS.

Witnesses:
WM. R. WAGNER,
SAML. GETZEN.