G. W. Lewin.

Lathe-Carriage

No. 75,933. Patented Mar. 24. 1868.

Fig. 1.

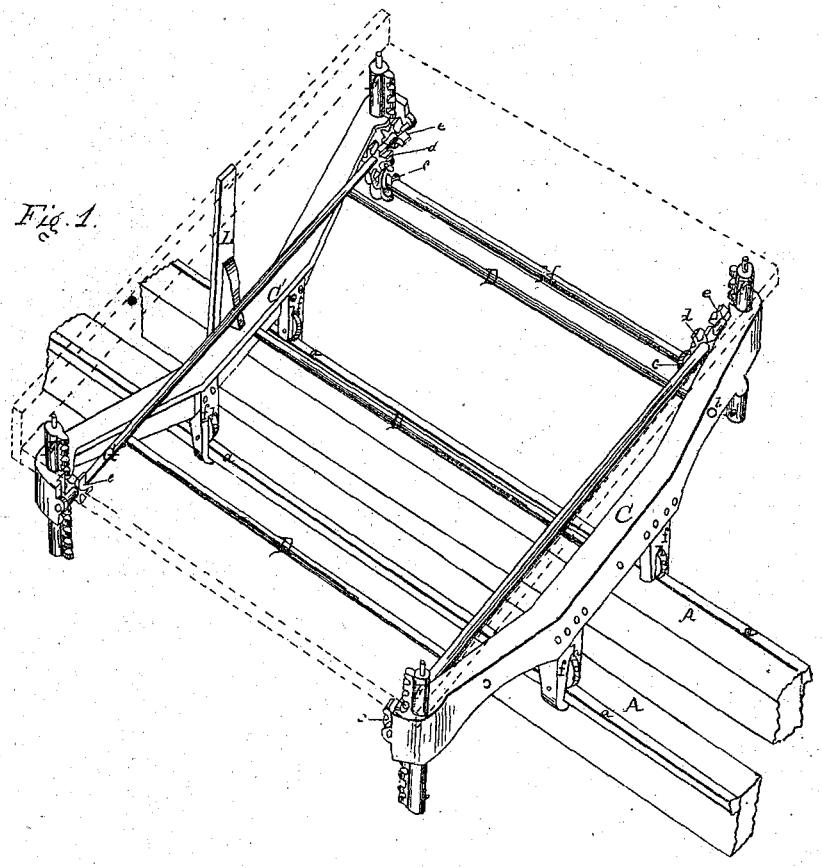
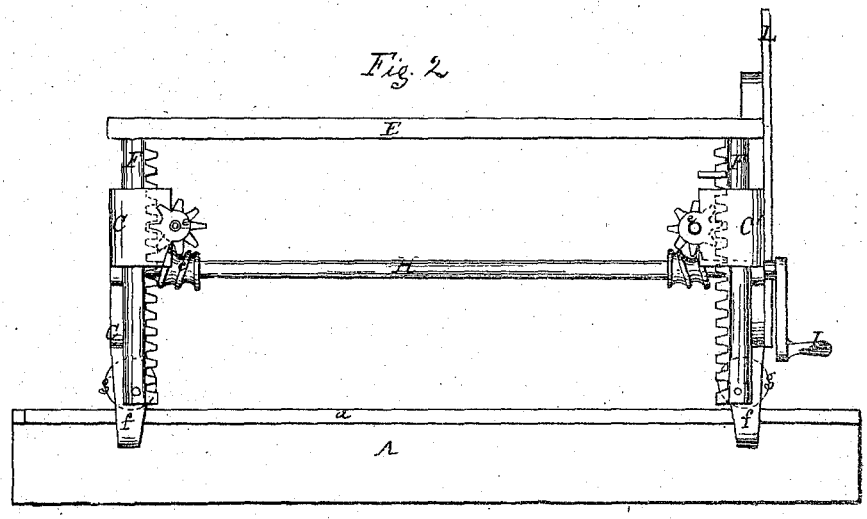


Fig. 2.



Witnesses
D. B. Ventres
R. S. Turner

Inventor. Geo. W. Lewin
By his Attorney
R. D. Smith

United States Patent Office.

GEORGE W. LEWIN, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 75,933, *dated March* 24, 1868.

IMPROVED LATHE-CARRIAGE.

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, GEORGE W. LEWIN, of Worcester, in the county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Lathe-Carriages; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of my invention, and

Figure 2 a side elevation of the same.

My invention consists in an improved device for holding the plates of stoves, or other castings or forgings, in a horizontal positi onwhile any operation, such as drilling, &c., is performed upon them, and retaining them in such position to whatever height it may be desired, within the limits of the machine, and at the same time allowing free movement in a lateral direction.

In order that others may understand the construction and operation of my invention, I will proceed to particularly describe it.

A, fig. 1, represents the frame or ways of a lathe, on which the carriage B rests, and they may be made of wood or iron, as desired. The carriage B consists of the two bent metal beams C C, connected together and secured by the three transverse rods D D D. The form of the beams C C, shown in fig. 1 of the drawings, is well adapted to all the requirements of the machine, but it is obvious that any desired form may be given to them without preventing the proper working of the same. To the under surface of each of the beams C C, and at equal distance apart, are secured the legs *f f* of the carriage, which hold the wheels *g g* in the slots *h h*. The outer parts of these legs extend downward below the wheels, and turn under the flanges *a a*, or their equivalent, in order to prevent the carriage from being raised up from the ways. The outer end of each beam C is enlarged and bent inward, and a vertical hole is made in it to receive the posts F F F F, or supports of the platform E. A portion is cut away on the inner side of each beam, at this vertical hole, to allow the rack of the posts F to pass freely up and down. The end of each beam is turned inward a sufficient distance to receive the ends of the pinion-shafts G G, which are parallel to the inner surfaces of the beams C C, the pinions of which work in the racks on the posts F F, moving them up or down as desired. These shafts G are turned by the endless screws *e e* on the shaft H, which is supported in the beams C C at the points *b b*, motion being communicated by the handle I, fig. 2. The screws *e e* work into the cog-wheels *d d*, which are firmly secured to the pinion-shafts G G, and as the shaft H is turned by the handle I, the shafts G G are turned, and the pinions *e e*, at each end of the shafts G G, work in the racks of the posts F F, causing them to move together, either up or down, as desired. To the top of these four posts is secured the platform E, made of wood or metal, and on which the plate to be drilled is secured. On the front face of the beam C′, and at equal distance from the ends, is an upright post, L, securely fastened, against which the platform E is pressed, when in use, so as to take off a portion of the lateral pressure on the posts F F.

By the arrangement and devices herein described, the entire platform, and the plate resting thereon, are carried up uniformly with a single crank-movement.

Having thus described my invention, what I claim as new, is—

The arrangement of the endless screws *e e*, rack and pinion of the posts F F, with the platform E, as and for the purpose described.

GEORGE W. LEWIN.

Witnesses:

JOHN DAVIS,

E. W. BIGELOW.