

F. VARIN.

Improvement in Track-Lifters.

No. 131,724.

Patented Sep. 24, 1872.

Fig. 1.

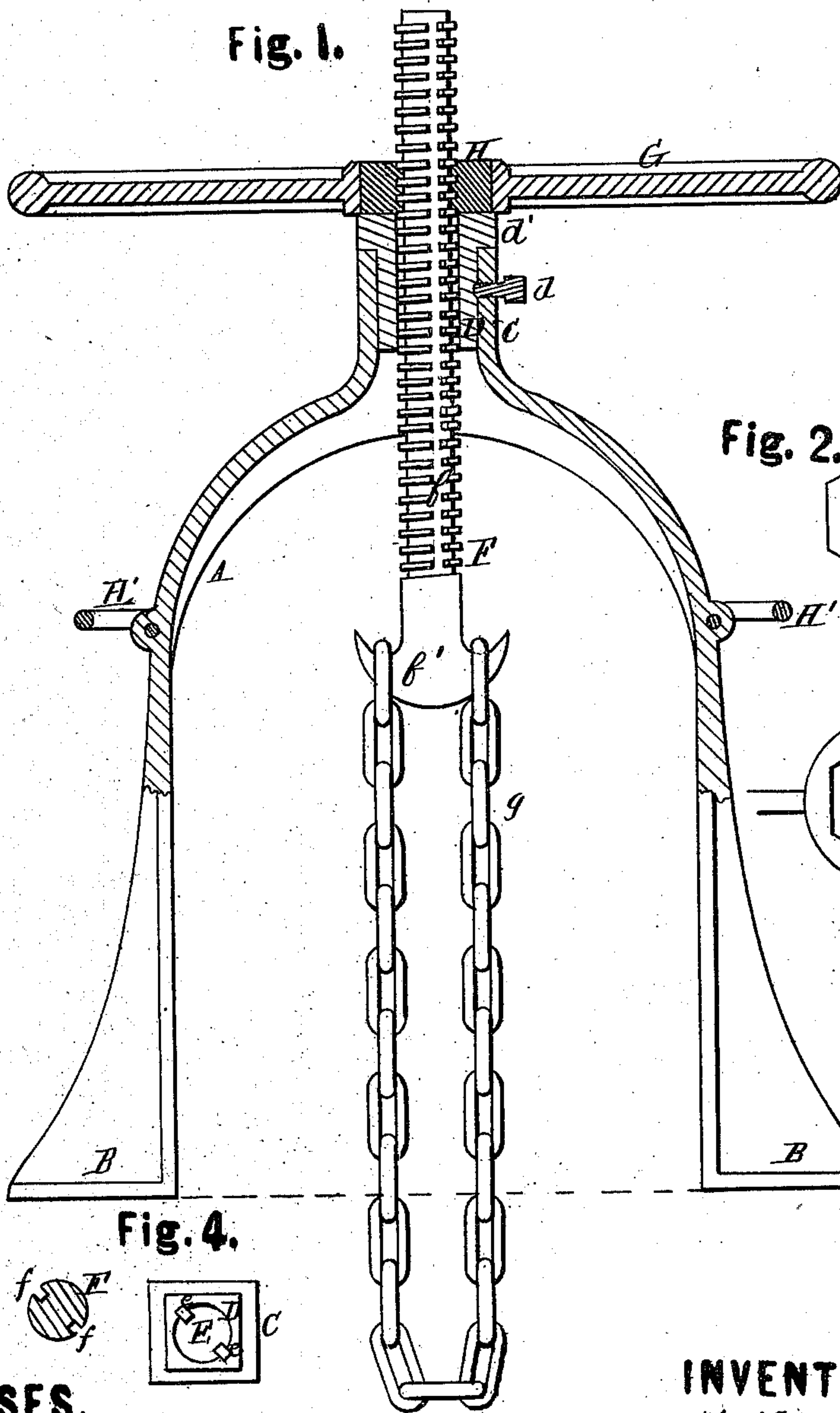


Fig. 2.

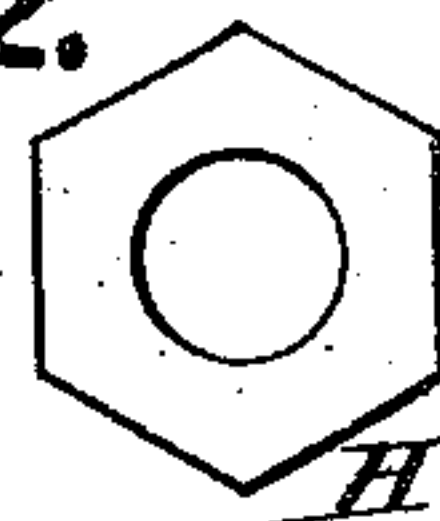


Fig. 3.

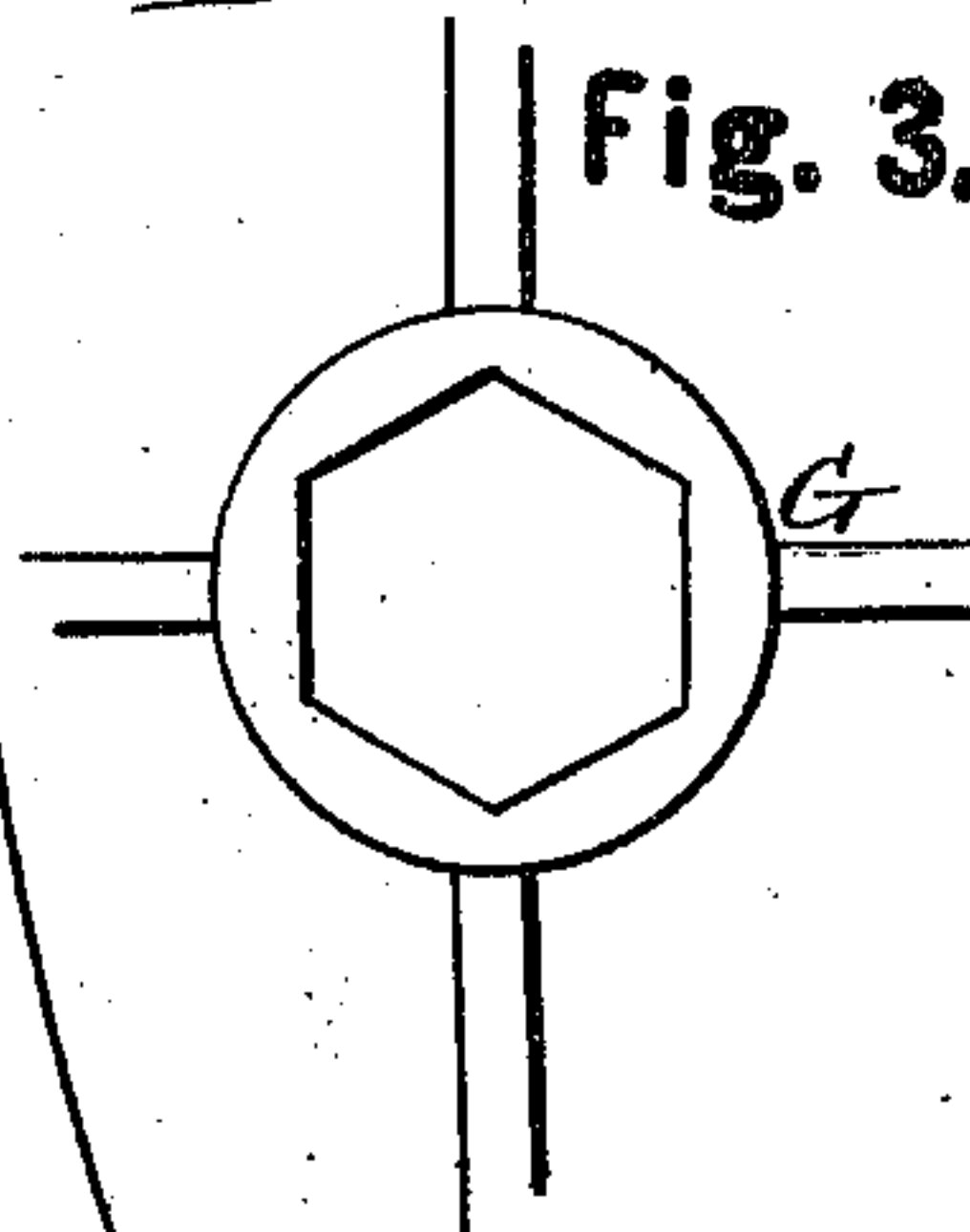


Fig. 4.



WITNESSES.

C. A. Bates.

Geo. Elphinstone

INVENTOR.

F. Varin.

Chipman & Foster & Co.,

Attys.

UNITED STATES PATENT OFFICE.

FABIEN VARIN, OF HUNTSVILLE, ALABAMA.

IMPROVEMENT IN TRACK-LIFTERS.

Specification forming part of Letters Patent No. 131,724, dated September 24, 1872.

To all whom it may concern:

Be it known that I, FABIEN VARIN, of Huntsville, in the county of Madison and State of Alabama, have invented a new and valuable Improvement in Track-Lifters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my invention; Fig. 2 is a detail view; and Fig. 3 is a detail view.

My invention has relation to track-lifters; and it consists in the construction and novel arrangement of devices constituting an apparatus by means of which railroad rails and ties may be easily raised and held up for repairs, substantially as hereinafter more fully described.

Referring to the drawing, A designates a metallic arched frame, terminating at the lower ends of its supporting-standards in broad plates or feet B, which cause it to remain steadily in any position while the apparatus is in use. C designates a box cast with and at the top of the arched frame. Through the center of said box is a vertical rectangular opening or socket containing a block, D, adjustable therein and secured at any position by means of a set-screw, *d*. A flange or shoulder, *d'*, extends around the upper part of said block, and in shape and horizontal dimension or width corresponds with the box C, upon the top of which it is intended usually to rest, as shown in the drawing at Fig. 1. The block D has a hole, E, cut through its center, as shown, and is provided with two vertical ribs or feathers, *e*, on opposite sides of said hole. A screw-shaft, F, having grooves F to receive the feathers *e* and a double hook, *f*, at its lower end to hold a chain, *g*, passes through the hole E and also through a polygonal nut, H, which occupies the center of a horizontal hand-wheel, G,

of suitable diameter and weight to insure a considerable amount of leverage.

In using the track-lifter the chain *g* is passed under a rail or tie and the same raised by turning the wheel G, which moves the screw-shaft in a vertical direction, the feathers *e* preventing it from turning with the wheel. The frame A is of a convenient form to allow it to be placed over the object to be raised. The machine may be operated by one man, who, after raising the rail or tie, is at liberty to otherwise assist in the work to be done.

H' designates handles pivoted to the standards of the frame A and used in moving the machine from place to place. As will be observed, the wheel G may be removed from the nut H, to allow the frame to be more easily carried.

The weight is readily centered under the screw, and the form of the double hook obviates any tendency to lateral straining or binding of said screw in its socket.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The improved track-lifter, having the arched frame A, adjustable screw F with hooks or equivalent *f*, chain *g*, and hand-wheel G, substantially as specified.

2. The arched frame A, having the box C containing the adjustable block D provided with the central aperture E and feathers *e*, in combination with the grooved screw F, nut H, removable hand-wheel G, and chain *g*, substantially as specified.

3. The adjustable block D, having the central aperture E, feathers at *e*, and arranged within the box C, substantially as described.

4. In a track-lifter having the frame A and adjustable screw F, the nut H and removable hand-wheel G, substantially as specified.

FABIEN VARIN.

Witnesses:

JOHN A. ERWIN,
WILLIAM J. HALSEY.