E. PRESCOTT.
Carriage-Jack.

No. 207,442. Patented Aug. 27, 1878.

Fig: 3.

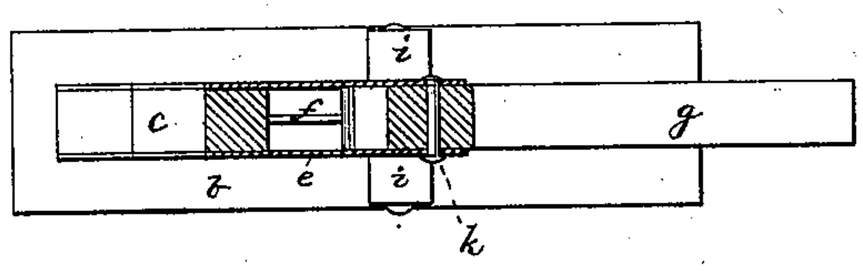


Fig: 1.

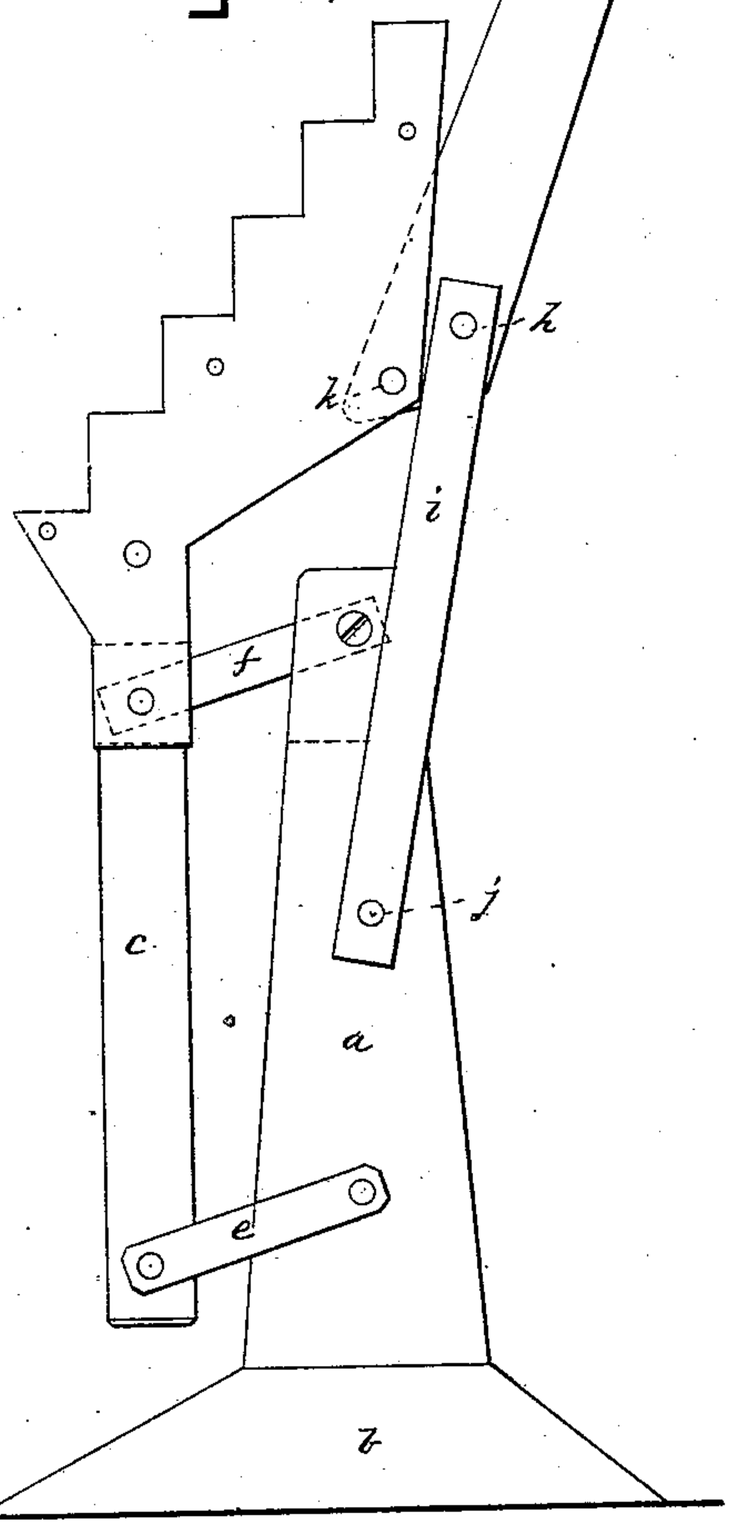
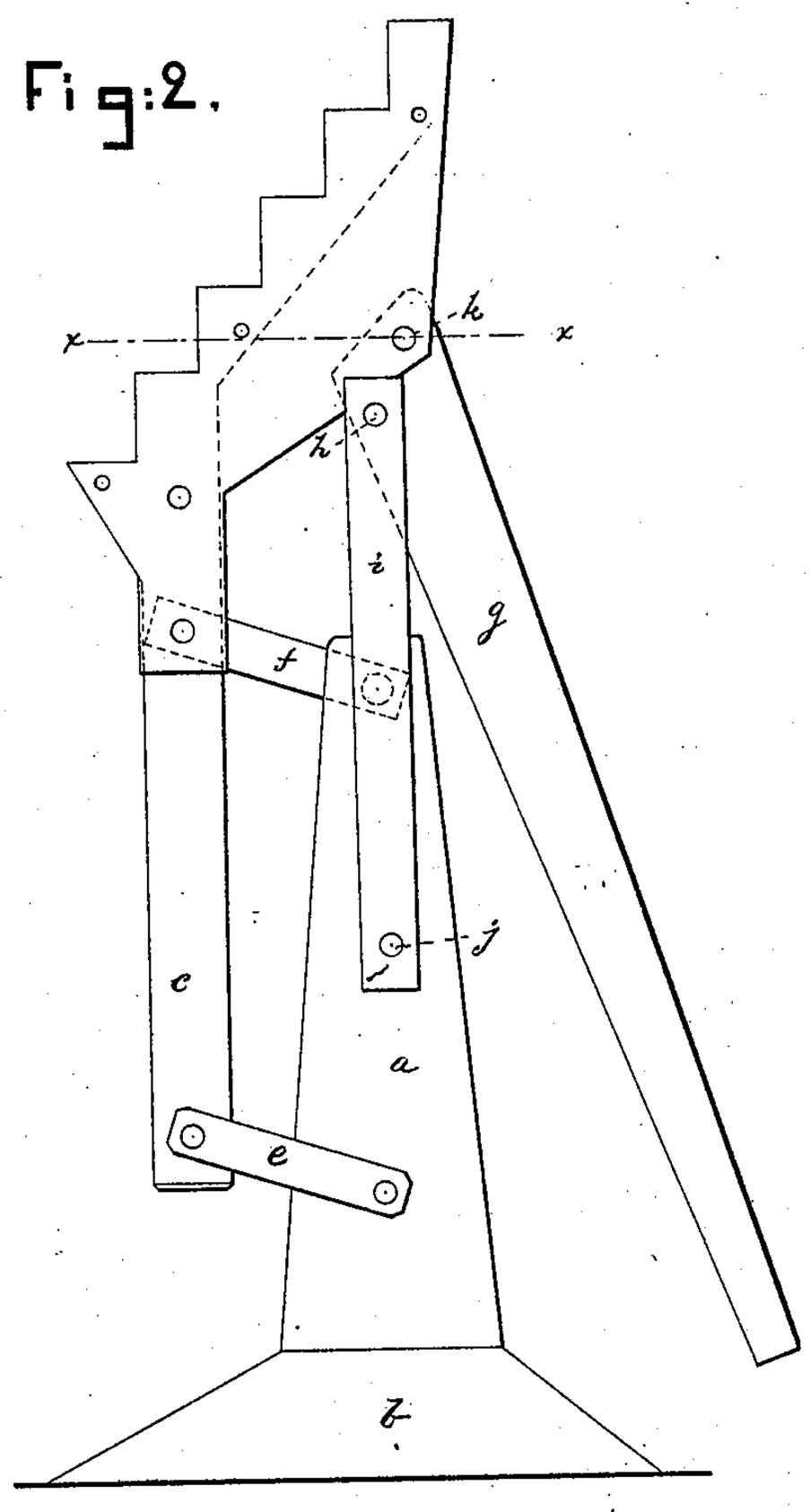


Fig: 2.



Witnesses.
N. E. Whitney
L. F. Connor

Inventor.
Edwin Prescott
by Crosby & Gregory Attys

UNITED STATES PATENT OFFICE.

EDWIN PRESCOTT, OF HAMPTON FALLS, NEW HAMPSHIRE.

IMPROVEMENT IN CARRIAGE-JACKS.

Specification forming part of Letters Patent No. **207,442**, dated August 27, 1878; application filed June 22, 1878.

To all whom it may concern:

Be it known that I, EDWIN PRESCOTT, of Hampton Falls, county of Rockingham, State of New Hampshire, have invented an Improvement in Carriage-Jacks, of which the following description, in connection with the drawings, forming part thereof, is a specification:

This invention relates to carriage-jacks, and has for its object the production of a simple and easily-operated jack at small cost, and which will in operation be liable to but the minimum of friction.

Figure 1 represents in side elevation my improved jack, the lifting-bar being in substantially its lowest position. Fig. 2 is a side elevation, showing the lifting-bar raised and held elevated by the change in position of the movable fulcrum-lever, and Fig. 3 a section on line *x x*, Fig. 2.

The jack is composed of an upright, *a*, attached to a suitable foot-piece, *b*, if one is used, of a lifting-bar, *c*, notched at its top, as at *d*, or otherwise adapted to fit the axle, the bar being connected with the upright at two or more points by links *e f*, and of a handle or lever, *g*, having its fulcrum on a pin, *h*, at or near the upper end of a fulcrum-lever, *i*, suitably pivoted to the upright at *j*.

The handle or lever *g* is, at its short end, connected by pin *k* with the lifting-bar, and has no connection whatever with the links which attach the lifting-bar to the upright.

As the lever *g* is lowered from the position shown in Fig. 1 to that in Fig. 2, the lifting-bar raised with the weight upon it, by the action of the lever *g* alone, is guided and steadied by the links *e f*, so that the lifting-bar moves nearly in a vertical direction; and it will be noticed that in such movement there is no friction between the moving parts except that generated by the turning of the links or other movable parts of the jack upon their pivotal pins. As the lever *g* begins to pass below a horizontal position the lever-fulcrum at its upper end commences to assume a more nearly-vertical position, and as the lever *g* reaches its lowermost position the lever-fulcrum passes the fulcrum-pin of the lever *g* inside of a vertical line drawn through the connection of the lever *g* with the lifting-bar and the fulcrum-lever with the upright.

It is immaterial whether or not the fulcrum-lever or the links *e f* be of one or two pieces to fit the outer sides of, or a slot in, the upright.

Instead of employing the lever *g*, pivoted upon the fulcrum-lever, it is obvious I may use any well-known device commonly employed in carriage-jacks to raise the lifting-bar, and that the said bar, when lifted by other means than those herein shown, will move without friction or rubbing of parts by reason of the links *e f*.

If the lifting-lever *g* for raising the lifting-bar had its fulcrum at the same point with the upper link, the fulcrum of the lifting-lever would have to be placed at considerable distance from the lifting-bar in order to raise it for any considerable vertical distance, and consequently there would be a loss of leverage.

In my plan the links *e f* at the lowermost and uppermost portions of the lifting-bar are parallel, and they remain so during the entire movement of the lifting-bar, and are used simply for connecting the lifting-bar and upright, and not for lifting the bar.

It will be noticed that the lifting-bar *c* is held by the links away from and free of the upright, so as to avoid friction or reduce it to the minimum.

I claim—

1. A carriage-jack provided with an upright and a lifting-bar connected together by links, which are independent of the handle or lifting-lever, the said links working in parallel planes in all positions of the lifting-bar, so as to direct the lifting-bar in substantially a straight line and keep it free of the upright, substantially as specified.

2. The improved carriage-jack consisting of an upright, a lifting-bar connected with it by links at two or more points, and a lifting-lever on a fulcrum independent from the fulcrum of the links, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN PRESCOTT.

Witnesses:
G. W. GREGORY,
N. E. WHITNEY.