(No Model.)

W. N. SPRINGER.

WAGON JACK.

No. 334,057. Patented Jan. 12, 1886.

Fig. 1

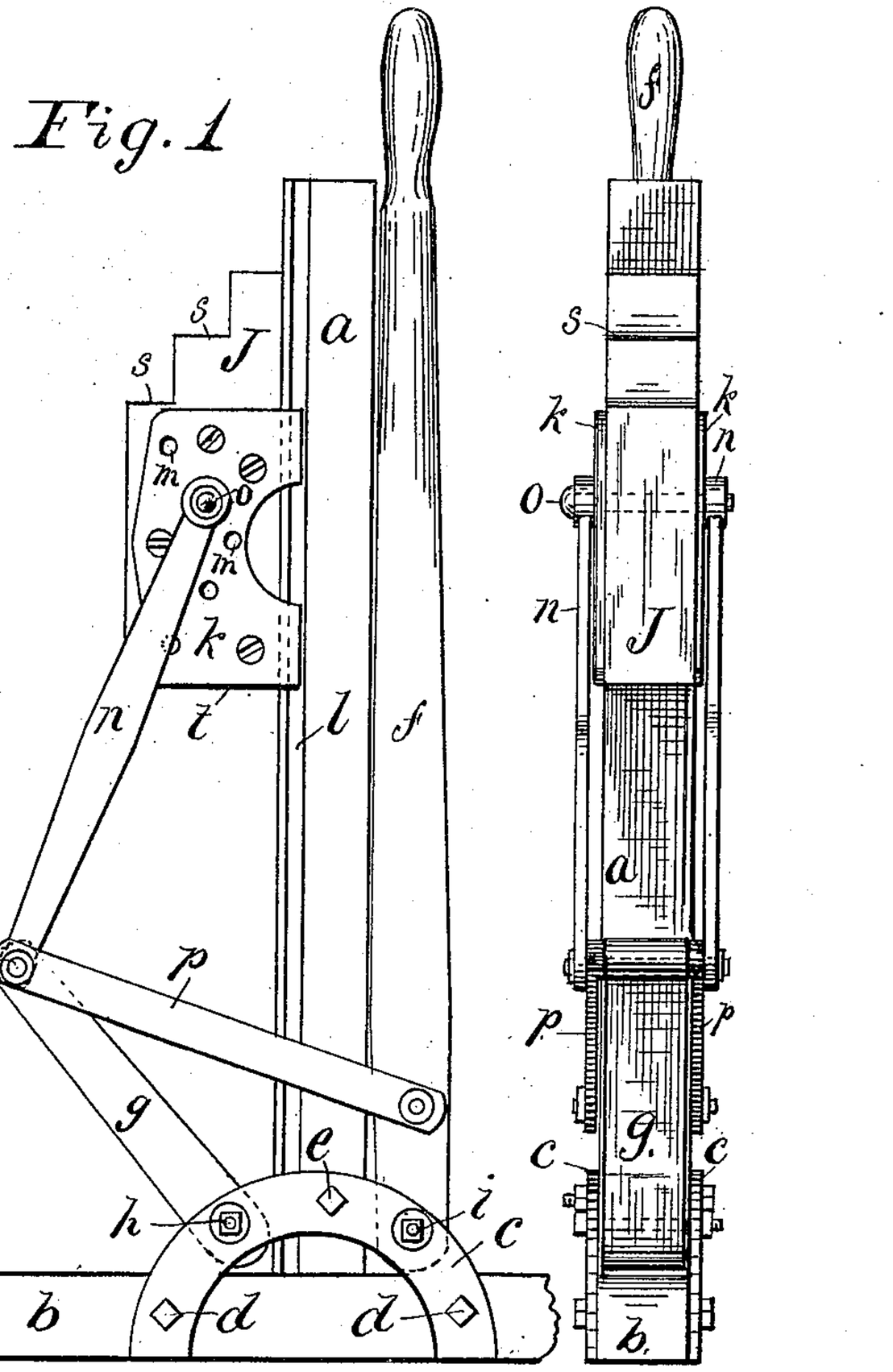

Fig. 3.

Fig. 2.

WITNESSES:
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WILLIAM N. SPRINGER, OF INDIANAPOLIS, IND., ASSIGNOR OF ONE-HALF TO THOMAS L. SPRINGER AND HEZEKIAH SMART, BOTH OF SAME PLACE.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 334,057, dated January 12, 1886.

Application filed December 3, 1885. Serial No. 184,633. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. SPRINGER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improved Wagon-Jack, of which the following is a specification.

My invention relates to that class of lifting-jacks known as "wagon-jacks;" and it consists in the construction and arrangement of parts in the manner hereinafter fully specified.

The accompanying drawings illustrate my invention.

Figure 1 is a side elevation showing the parts in position to receive the wagon-axle; Fig. 2, a similar view showing the position of the parts when the wagon is raised, and Fig. 3 a front elevation.

The body of the jack consists of a vertical wooden post, *a*, framed into a horizontal foot-piece, *b*. A pair of semicircular metal plates, like *c*, are secured at their ends, one on each side, to the foot-piece *b* by bolts *d d*, and to the vertical post by a bolt, *e*. Said plates form braces for the vertical post and foot-piece, and also points of pivotal attachment for the levers *f* and *g*, which are secured between said plates by bolts *h* and *i*.

J is a sliding support for the wagon-axle, having secured to its opposite sides a pair of plates, *k*, which engage a pair of vertical grooves, *l*, in opposite sides of post *a*, the purpose being to hold said axle-support against the face of the post and permit a vertical sliding movement thereon. Said plates *k* are provided with a series of holes, *m*, which pass also through the support J, and are for the purpose of connecting the support at different points with a pair of arms, *n n*, by means of a pin, *o*. The free ends of arms *n* are pivotally connected to the free end of lever *g*, and form therewith the toggle-joint, which is operated by means of lever *f* and a pair of connecting-rods, like *p*, there being one on each side.

The arrangement of the post *a*, the knuckle *r* of the toggle-joint, and the points of pivotal connection of the toggle-joint with plates *c* and support J is such that when said knuckle is drawn toward post *a* the support is raised, and when the knuckle passes a line drawn from pin *o* to bolt *h* the free end of lever *g* will rest against the post, and the sliding support with its load will be sustained independently of the lever *f*.

For the purpose of adapting the sliding block J to different heights of axles to a limited extent without changing the position of pin *o*, one end of said support is formed into a series of steps, *s*, which are adapted to receive an ordinary steel axle; and for the purpose of engaging large wooden axles, which would not rest properly on said narrow steps, the opposite end, *t*, of the support is made with one broad surface, the intention being to reverse the support and place said broad surface uppermost in such cases.

In operation lever *f* is raised to a vertical position, as shown in Fig. 1. The sliding support J is then placed under the axle to be raised, and lever *f* drawn down to the position shown in Fig. 2, thus raising the support and its load and locking it in position, as before explained.

I claim as my invention—

1. The grooved vertical post, the foot-piece, the sliding axle-support arranged to engage the grooves in the post, the toggle-joint, the lever *f* and rods *p*, connecting said lever and toggle-joint, all combined and arranged to cooperate in the manner and for the purpose set forth.

2. In a wagon-jack, the combination, with the vertical post, the foot-piece, and levers *g* and *f*, of the pair of curved plates, *c*, arranged to form braces for said post and foot-piece, and also supports for said levers, substantially as shown and described.

3. In a wagon-jack, the combination, with the grooved vertical post, the foot-piece, the toggle-joint, and the lever *f*, of the reversible axle-support J, adapted to engage the grooves in the post, and connected with said toggle-joint, and having a broad bearing-surface on one end and a series of steps on the opposite end, substantially as and for the purpose specified.

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