F. H. Furniss,

Lifting Jack,

No. 28,268. Patented May 15, 1860.

Fig: 1

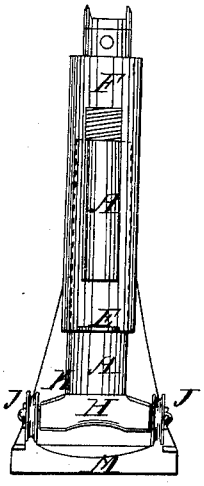


Fig: 2

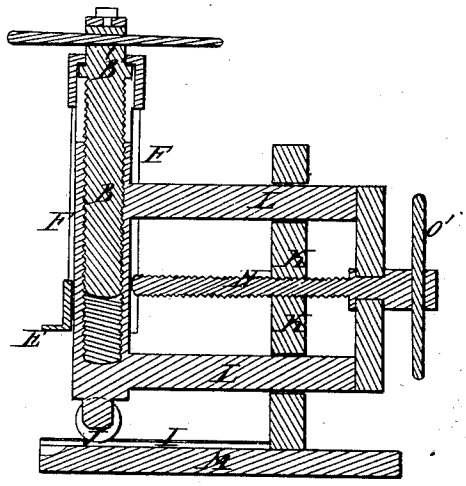
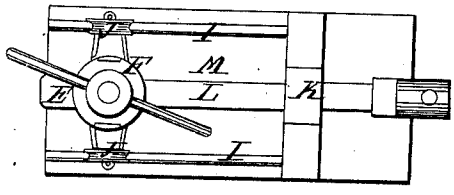


Fig: 3



Witnesses
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F. H. FURNISS, OF CLEVELAND, OHIO.

RAILROAD-JACK.

Specification of Letters Patent No. 28,268, dated May 15, 1860.

To all whom it may concern:

Be it known that I, F. H. FURNISS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Railroad-Jacks; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a front view of the jack. Fig. 2, is a longitudinal vertical section. Fig. 3, is a top view.

Like letters denote like parts in the several views.

The nature of my invention consists, in the construction of a jack, in which the main or lifting screw can be carried sidewise, for the purpose of easily replacing a car, that has jumped off the track, back again upon the rail. In connection therewith, is an arrangement of a sleeve, on the outside of the standard, and lifting screw, which has an arm at the lower end, that is placed underneath cars; lying flat on the ground, for the purpose of elevating them high enough to place the head of the lifting screw under them.

In Fig. 1, A, is a hollow standard, which forms a nut to the screw B. This standard is about three feet high, and three inches in diameter, or it may be of any convenient size. F, is the sleeve that is external to the screw and standard, and made to slip up and down over the standard, and rests on a collar B′, of the screw B, as, seen in Fig. 2. E, in the several figures, represents, the arm of the sleeve. H, in Fig. 1, is the axletree, that supports the standard; having wheels J, J, on each end. These wheels move on the tracks I, I, Fig. 3. M, is the bed plate, that supports the entire jack. K, is an upright post, made heavy and strong, and is firmly attached to the bed plate M.

The frame L, Figs. 2, and 3, is secured to the standard A, and slides in the post K. N, is the screw that produces the sidewise motion, one end of which terminates at the standard A, and the other end forms a head, that passes through the frame L, in which it turns, shoulders being on each side, to retain it in place. In the heads of the lifting screw B, and side screw N, are pins O, and O′, by which the screws are turned. The post K; acting, as a nut to the side screw N, the standard A, can be moved either way by turning the screw; and with the greatest ease, because the standard is moved by means of the revolution of the wheels J, J, on the rails I, I.

The manner in which the sleeve and arm operates is as follows: As the sleeve rests on a collar B′ of the lifting screw B, it moves up and down with the screw. In this way, the arm can be lowered to the desired place, and put under the car; turning the lifting screw B, by the pin O, the car can be elevated high enough, to place it on the top of the jack; it can then be blocked up, and the jack removed and screwed down, when the head of the lifting screw can be brought under the car. Cars when they are thrown from the track, often have the trucks knocked from under them, and they are flat on the ground, it is then very difficult to raise them high enough to put under the jack, but with the arrangement of the sleeve and arm, they can easily be elevated to the desired height. The arm being lowered until it can be placed beneath the car, then screwed up, as has before been described.

The advantages of the sidewise movement are as follows: When a car is thrown entirely off the track, two or more jacks may be used, one at each side. The jacks are placed firmly upon the ground, the bed plate C, at right angles to the track; turning the side screws according to the direction it is desired to move the car, then by placing the heads of the lifting screws under the sill of the car, the car can be lifted up to a sufficient height, for the wheels to clear the track, then by turning the side screws simultaneously, the car can be carried, with ease and certainty over the track. And by reversing the movement of the lifting screw B, the car can be lowered upon the rail.

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

The arrangement of the sleeve (F) with the arm (E) and screw (B) and standard (A) in combination with the sliding jack frame, when operating conjointly in the manner and for the purpose specified.

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Witnesses:

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