

W. J. Willits.

Stake Holder

N^o 77,943. Patented May 12, 1868.

Fig. 1.

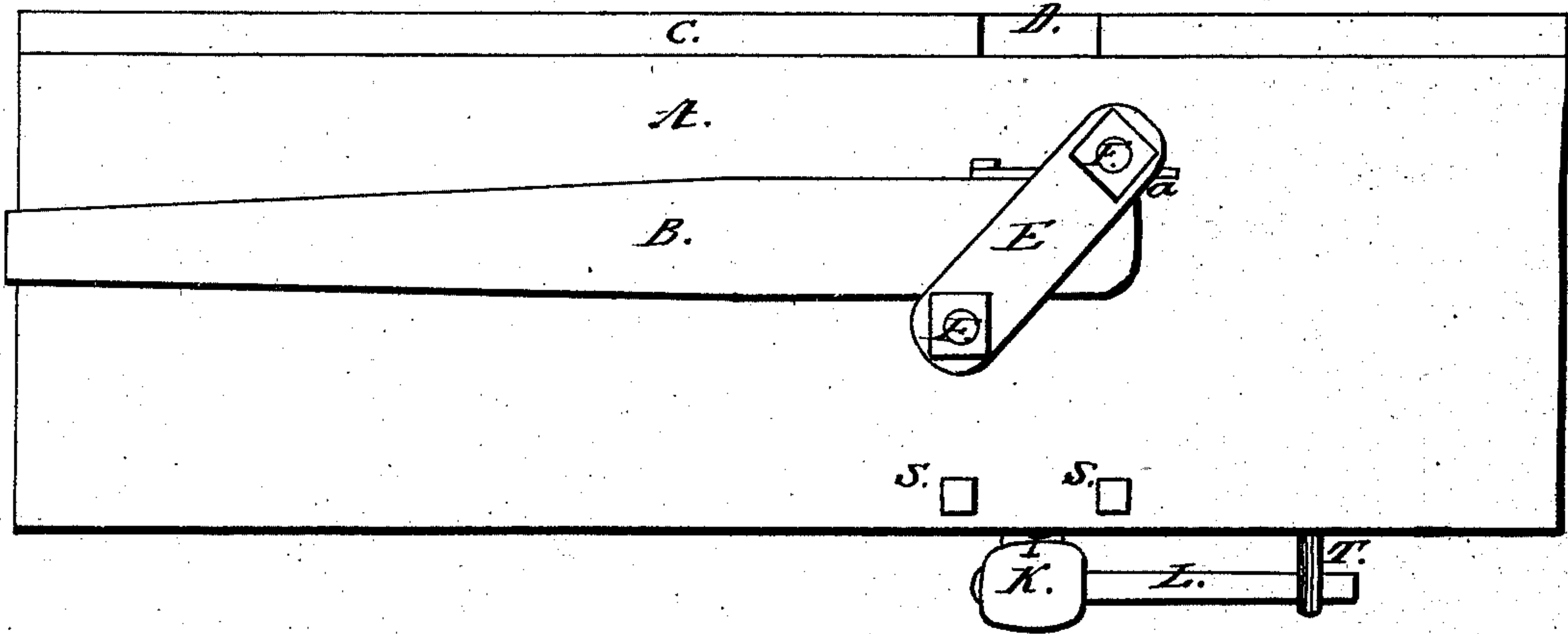


Fig. 2.

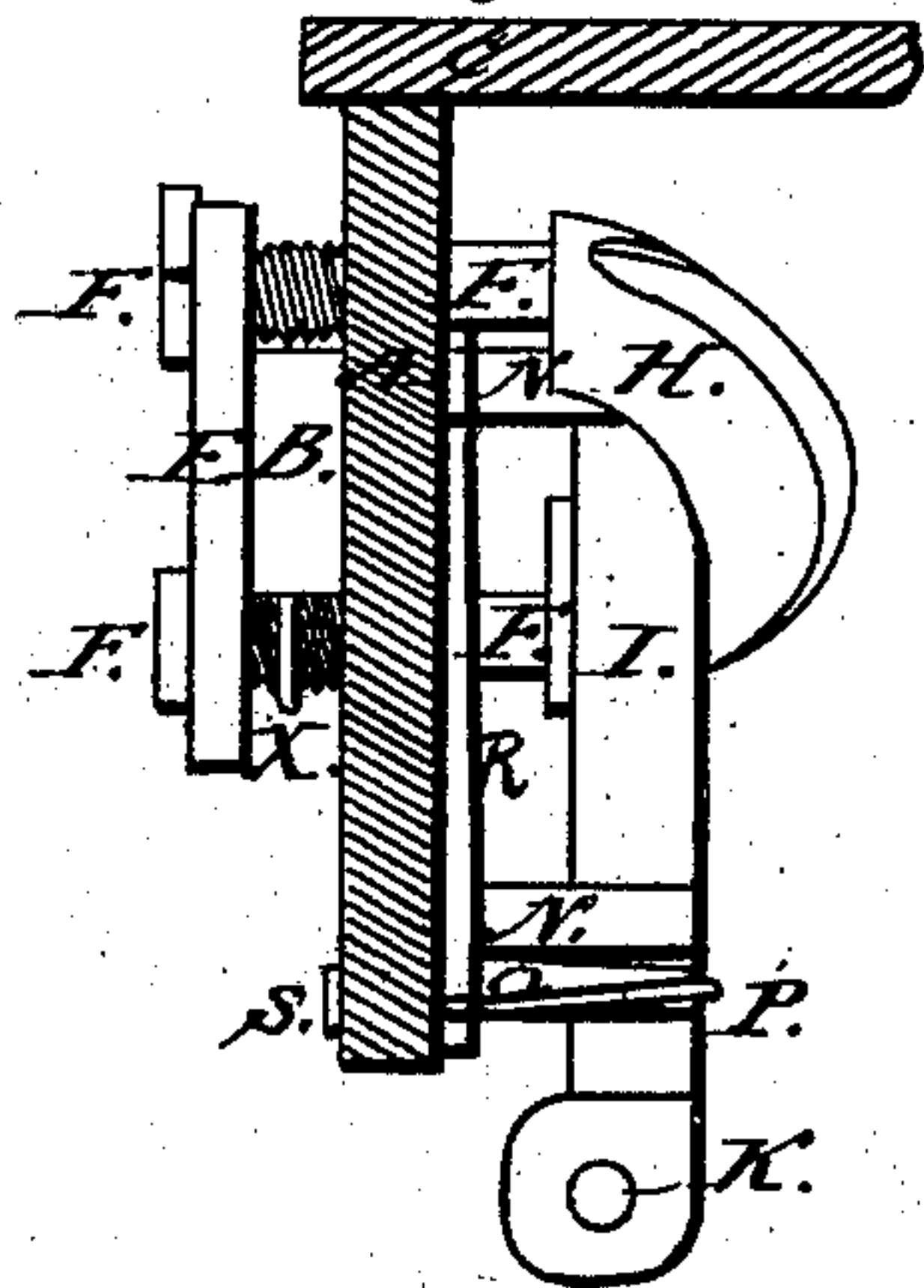
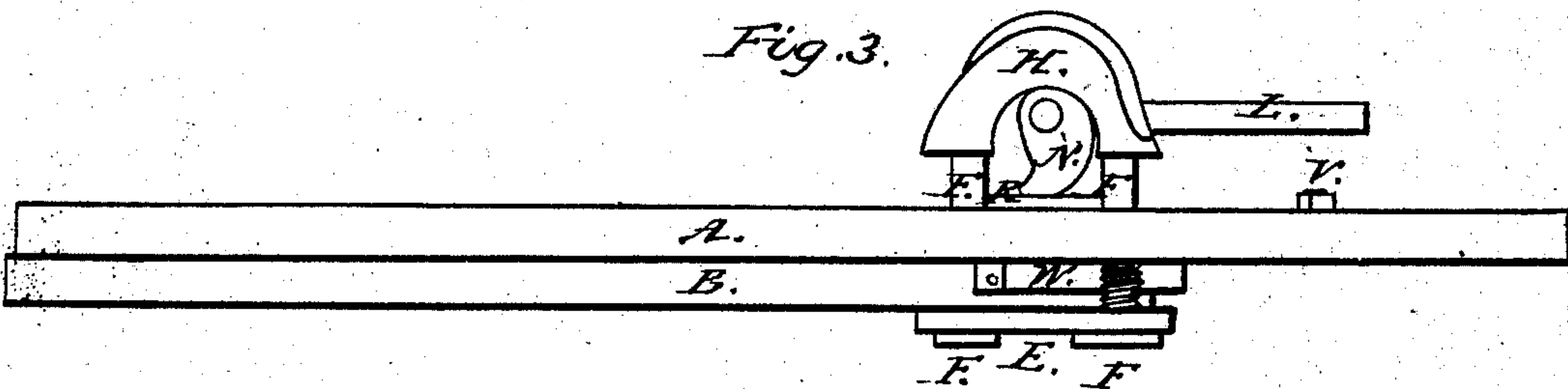


Fig. 3.



Witnesses:
H. F. Everts
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United States Patent Office.

WILLIAM J. WILLITS, OF DETROIT, MICHIGAN.

Letters Patent No. 77,943, dated May 12, 1868; antedated April 28, 1868.

IMPROVED PLATFORM-CAR STAKE-HOLDER.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, WILLIAM J. WILLITS, of Detroit, in the county of Wayne, in the State of Michigan, have invented a new and useful Improvement in Platform-Car Stake-Holders; and I do declare that the following is an accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, being a part of this specification.

Figure 1 represents a partial side view of a platform-car with stake attached.

Figure 2 is a sectional view of one side of a platform-car, showing the method of attaching the stake.

Figure 3 is a view of the apparatus from the top, with the floor of the car cut away.

The same letters of reference refer to similar parts in each figure.

To the sill A, I attach the stake B, by means of the clamp E, held in place by the staple-bolts F F, &c. The stake A is fastened to one of the staple-bolts F, by the ring X, fig. 2. The staple-bolts F F, &c., pass through the sill A, and a spiral collar, H, is fitted to them, against which the arm I is forced by the cams N N, which are cast upon the arm I.

At the opposite ends of these cams N N, they press upon the plate R. Through the head K, of the arm I, I pass a lever, L, with which to put on or take off the force or pressure of the cams N N.

O is a projection, cast on the plate R, to prevent the arm I from dropping out of place, by allowing one of the cams to rest upon it. The plate R is secured to the sill A by the staple-bolt P and nut S.

C is the floor of the car, and D a gain cut into the floor to receive the stake when in an upright position.

W is a metal plate, attached to the stake A, to prevent abrasion of the same when in a horizontal position.

T is a stop, suspended at V by a bolt, to prevent the lever L from getting out of position.

Having thus described the construction of my apparatus, I will explain the mode of using it.

By pulling the lever L to the front, after raising the stop T, the pressure of the cams N N against the collar H and the plate R is relieved, which allows the staple-bolts F F, &c., to become loose, so that the stake A can be moved to the required position, when the lever L is pushed back, the stop T dropped, and the stake is firmly held. By this apparatus the stake can be thrown down easily, no matter how great the pressure of the load may be against it when standing perpendicular.

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

1. The arm I, cams N N, collar H, staple-bolts F F, &c., clamp E, plate R, projection O, staple-bolt P, nut S, and lever L, for the purpose designed.

2. The combination and arrangement of the stake B, the sill A, the gain D in the floor C, the clamp E, the staple-bolts F F, &c., the collar H, the arm I, the head K, the lever L, the cams N N, the projection O, staple-bolt P, the plate R, the ring X, and the stop T, arranged substantially as described for the purpose designed.

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Witnesses:

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