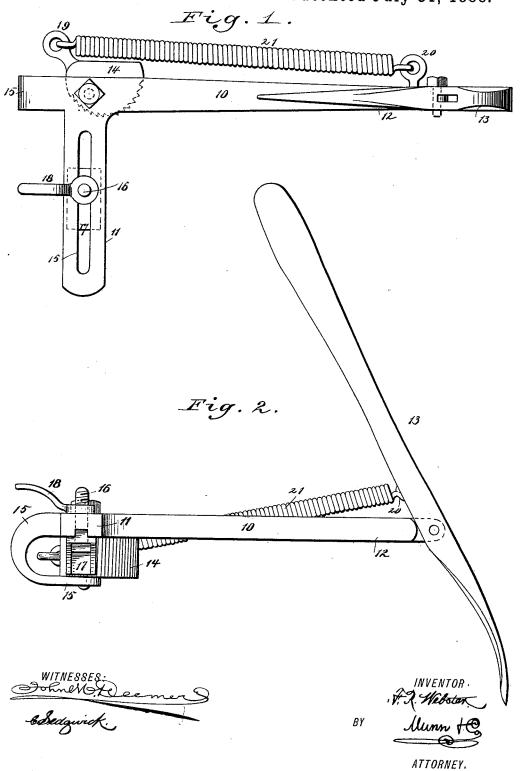
## F. R. WEBSTER.

DRAFT LEVER.

No. 386,946.

Patented July 31, 1888.



## UNITED STATES PATENT OFFICE.

FREDERICK ROBERT WEBSTER, OF NASHUA, NEW HAMPSHIRE.

## DRAFT-LEVER.

SPECIFICATION forming part of Letters Patent No. 386,946, dated July 31, 1888.

Application filed April 17, 1888. Serial No. 270 903. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK ROBERT Webster, of Nashua, in the county of Hillsborough and State of New Hampshire, have invented a new and useful Improvement in Draft-Levers, of which the following is a full, clear, and exact description.

My invention relates to an improved draftlever, and has for its object to provide a sim-10 ple, effective, and durable apparatus whereby a railway-rail and heavy timbers may be expeditiously and conveniently moved without injury thereto and with slight exertion on the part of the operator.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a plan view of the device, and

Fig. 2 is a side elevation of the same. My invention is adapted, as aforesaid, for moving railway-rails and heavy timbers and other like material, the invention being especially useful in adjusting railway-rails.

It is a well-known fact that railway-rails 30 when laid upon heavy grades gradually work down grade, owing to expansion and contraction. The rails when so displaced are usually forced to place by means of a common crowbar or by striking the ends with a heavy sledge. The former method is objectionable, in that it is tedious and expensive, requiring a large force of workmen, and by the latter means the ends of the rails are more or less battered and

chipped, rendering the joint very defective.

To overcome these difficulties is the object of the present invention, and to that end I provide a frame, 10, which frame is angular in contour, consisting of a short member, 11, and a longer member, 12, which latter member constitutes the body of the frame. To the extremity of the member 12 a lever, 13, is pivoted, which lever is curved at the lower end and provided with a more or less sharpened extremity for insertion in the ground, as best 50 shown in Fig. 2, the upper end of said lever | handle is again moved backward, and so on 100

constituting the handle whereby the same is manipulated.

At the intersection of the member 11 with the member 12 of the frame, and to the under side of said frame, a segmental cam, 14, is pivoted, the cylindrical surface of which cam is serrated or otherwise roughened. The cam is held to oscillate by carrying the member 12 downward and curving the same toward the opposite end to form a hook, 15, (best 60 shown in Fig. 2,) the said cam being pivoted between the upper face of the hook and the under face of the frame. The member 11 is provided with a longitudinal slot, 15, adapted to receive a threaded stud or pin, 16, carrying 65 a jaw, 17. The jaw 17 is adapted to slide to or from the roughened face of the cam 14, and is held at any desired position upon the member 11 through the medium of a wing-nut, 18, traveling upon the said stud 16.

Upon the plain face of the cam, at the end farthest from the lever 13, an eye, 19, is secured, a similar eye, 20, being attached to the lever 13, and the cam 14 is operated from the said lever 13 by means of a spring, 21, con-75 necting the same, attached to the aforesaid eyes 19 and 20.

In operation the jaw 17 is carried in the direction of the cam 14 until the space intervening the two is of less width than the width of 80 the article to be moved. The device is now rested upon the face of the article and the end permitted to pass between the cam and the jaw. By carrying the device forward the cam gives way and permits of free movement in 85 that direction. The end of the lever 13 is then placed upon the ground, or, if the article to be moved is a railroad-rail, upon the ties or sleepers, and the handle carried in the direction of the operator, which draws the device back- 90 ward by reason of the spring-connection between the lever and the cam. This rearward movement of the former causes the serrated surface of the latter to bind against the sides of the object and clamp the same, whereby the 95 said object follows the rearward movement of the frame. The handle of the lever may now be carried forward again, whereupon the device is slid farther up upon the object and the

until the said object is carried backward its entire length, or partially so, as desired.

Having thus fully described my invention, what I claim as new, and desire to secure by

5 Letters Patent, is-

1. The combination, with an angular frame consisting of a long and short member and a lever pivoted at the extremity of the longer member, of a cam pivoted beneath the frame at the angle thereof, a jaw sliding in the shorter member, and a spring connecting the said cam and lever, as and for the purpose specified.

2. The combination, with an angular frame consisting of a long and short member, the short member whereof is slotted, and a lever pivoted at one end of the longer member, of a cam pivoted beneath the frame at the angle thereof, provided with a roughened face, a jaw sliding in the slotted member, a spring

connecting the lever and cam, and a means, 20 substantially as shown and described, for securing the jaw in a fixed position, as and for

the purpose specified.

3. The combination, with an angular frame consisting of a long and short member, the 25 short member whereof is slotted, and a lever pivoted to one extremity of the longer member, of a segmental cam pivoted beneath the frame at the angle thereof, having its cylindrical face serrated, a jaw sliding in the short 30 slotted member provided with a lock nut, and a spring connecting the said cam and lever, as and for the purpose specified.

FREDERICK ROBERT WEBSTER.

Witnesses: GEO. A. WASON,

EDWARD H. WASON.