

(No Model.)

J. H. PARKINSON.
CABLE RAILWAY GRIP.

No. 315,325.

Patented Apr. 7, 1885.

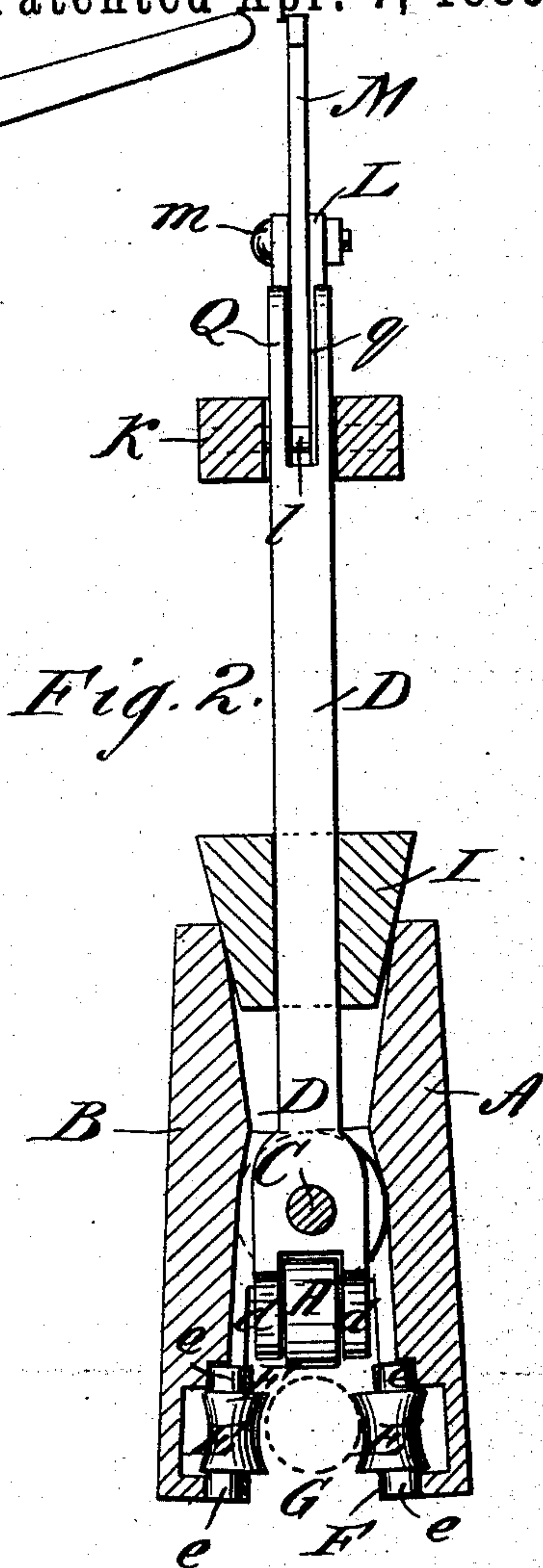
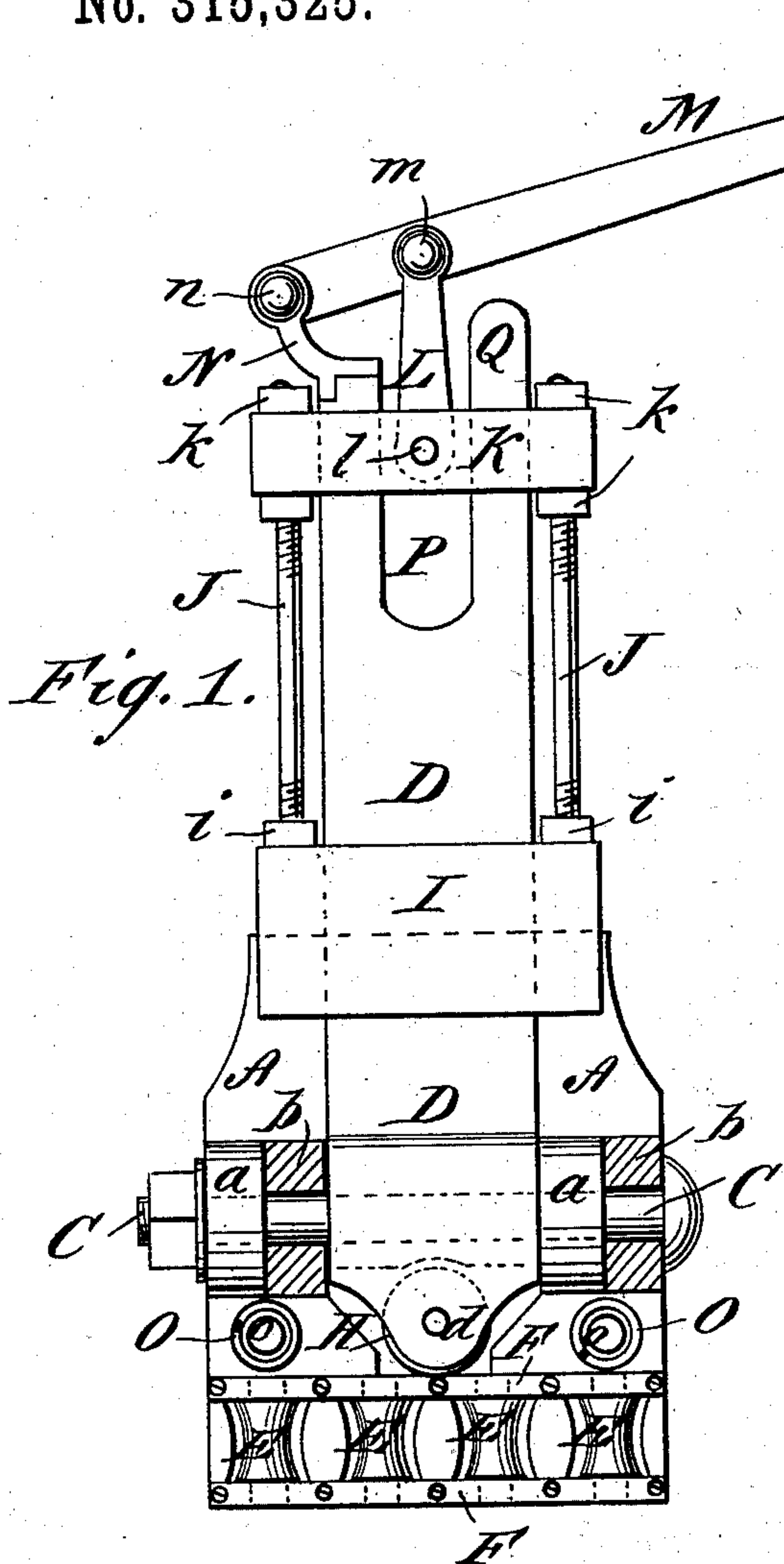
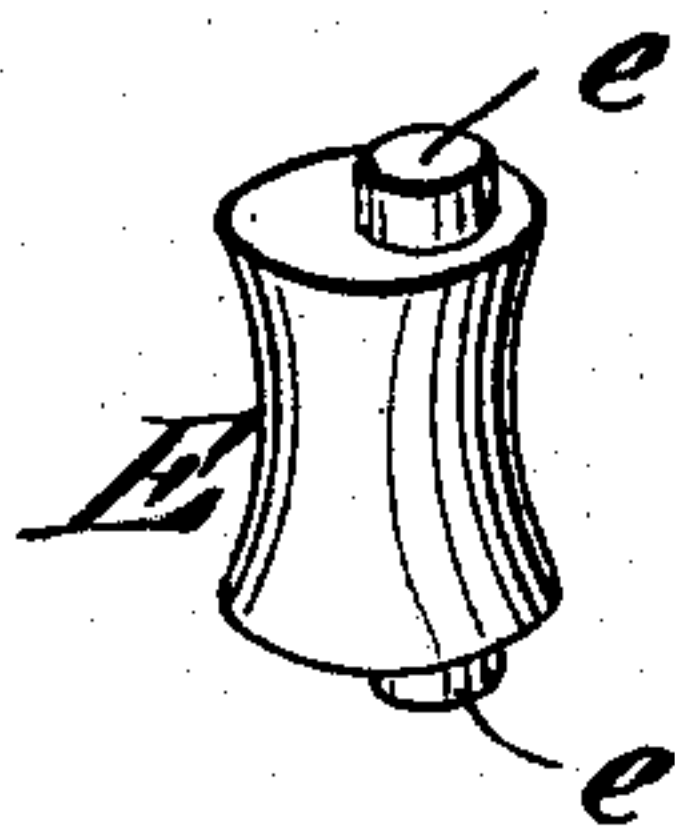


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN H. PARKINSON, OF BODIE, CALIFORNIA, ASSIGNOR TO HIMSELF AND
JOSEPH D. KERBAUGH, OF SAME PLACE.

CABLE-RAILWAY GRIP.

SPECIFICATION forming part of Letters Patent No. 315,325, dated April 7, 1885.

Application filed July 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. PARKINSON, of Bodie, in the county of Mono and State of California, have invented a new and Improved
5 Cable-Railway Grip, of which the following is a full, clear, and exact description.

My invention relates to improvements in cable-railway grips; and it consists in the peculiar construction and arrangement of parts,
10 as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate cor-
15 responding parts in all the figures.

Figure 1 is a sectional side view of my improved cable-grip with one of the jaws removed. Fig. 2 is a vertical cross-sectional
20 elevation of the grip, and Fig. 3 is a perspective view of one of the cable-gripping rollers.

The letters A B indicate, respectively, the two opposite jaws of the grip, which have fixed lugs *a b*, respectively, through which a heavy pin or pivot, C, passes, to hinge the two jaws
25 to each other. The pin C also passes through the enlarged lower end of a suitable heavy bar, D, whereby both the jaws A B, while being free to swing upon the pin C, will be held securely to the bar D.

30 At the lower end and at their inner faces both of the jaws A B are provided with a series of rollers, E, which are journaled by eccentrically-placed end pins or gudgeons, *e e*, in suitable bearings in the ends of the jaws, and so as to range vertically or lengthwise with
35 the jaws and at right angles with the pivot-pin C of the jaws.

I have shown metal plates or strips F F secured along the faces of the jaws over the journals *e e* of the grip-rollers, to hold the rollers to place; but any approved method of mounting the rollers in the jaws may be employed which will permit the rollers to grip the cable G by their concave peripheries. A roller, H,
45 fitted to revolve at the lower end of bar D between fixed lugs *d d* of the bar, is adapted to hold the cable G down to place between the opposite grip-rollers E E should the cable tend to rise, and as the roller H is free to turn

should the cable touch it neither the bar nor 50 the cable will be injured by the contact.

The letter I indicates a wedge which is fitted to slide upon the bar D, and is connected by the rods J J, one at each side of the bar, with a head-frame, K, which also is fitted to
55 slide on the bar D, and connects by an arm or yoke, L, pivoted to it at *l*, with a lever, M, to which lever M the arm L is connected by a pivot, *m*, and in front of the fulcrum-pin *n* of the lever, by which pin *n* the lever is pivoted
60 to an arm or bracket, N, held to the top of the bar D, and so that as the lever M is moved the wedge I will be moved correspondingly to close the jaws A B and carry the opposite rollers E E to the cable G to grip the cable and allow
65 the jaws to open to release the cable. A downward movement of the lever and wedge forces the opposite rollers E E toward each other to grip the cable for propelling the car, and as the wedge is lifted the springs O, placed upon
70 the pins *o o*, fixed to the inner faces of the opposite jaws, will expand and open the jaws to carry the opposite gripping-rollers away from the cable for stopping the car, as will be readily understood. The bar D is slotted at P to
75 give room for the descending arm L, and at Q the bar D is prolonged somewhat, and is slotted at *q* for the entrance of the lever M to lock it sidewise for greater security when lowered to its connections at *m n* with the yoke L and
80 arm *n*. The rods J J are threaded into the wedge I, and nuts *i k* are threaded on the rods above the wedge, and above and below the head, respectively, so that the wedge may be adjusted vertically with relation to the grip-
85 ping-jaws and the lever, as may be required. The grip will be held in any suitable manner to the frame of the car or vehicle to be propelled by the moving cable. It is evident that as the opposite rollers E E are tightened upon
90 the moving cable by the action of the wedge the rollers will be turned by the cable on their eccentrically-placed pivots *e e*, and so as to have a cam action on the cable to tighten thereon gradually and without violent shocks, which
95 would be liable to damage the grip or the car, while the hold will be secure, and the tendency of the cable to slip through the grip will be

much less than with other constructions, and, in fact, the slipping will almost wholly be prevented, and the action of the eccentrically-pivoted rollers will be the same whichever way the cable and car may run.

I am aware that a grip having jaws provided with rollers having eccentric-grooved faces and operated by a sliding wedge is old, and I therefore do not claim such invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a cable-railway grip, of the jaws A B, pivoted together and to the bar D on a pin, C, rollers E, eccentrically pivoted in the opposing faces of the jaws, an anti-

friction roller, H, journaled to the end of the bar D, a wedge, I, fitted to slide on the bar and to enter between the jaws, springs O to open the jaws, and the lever M, pivoted on the bar D and linked to the wedge by a yoke, L, head K, and rods J, substantially as shown and described.

2. The combination of the jaws A B, carrying the eccentrically-pivoted gripping-rollers E E, the bar D, wedge I, springs O, lever M, cross-head K, screw-rods J, and adjusting-nuts i k, substantially as shown and described.

JOHN H. PARKINSON.

Witnesses:

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