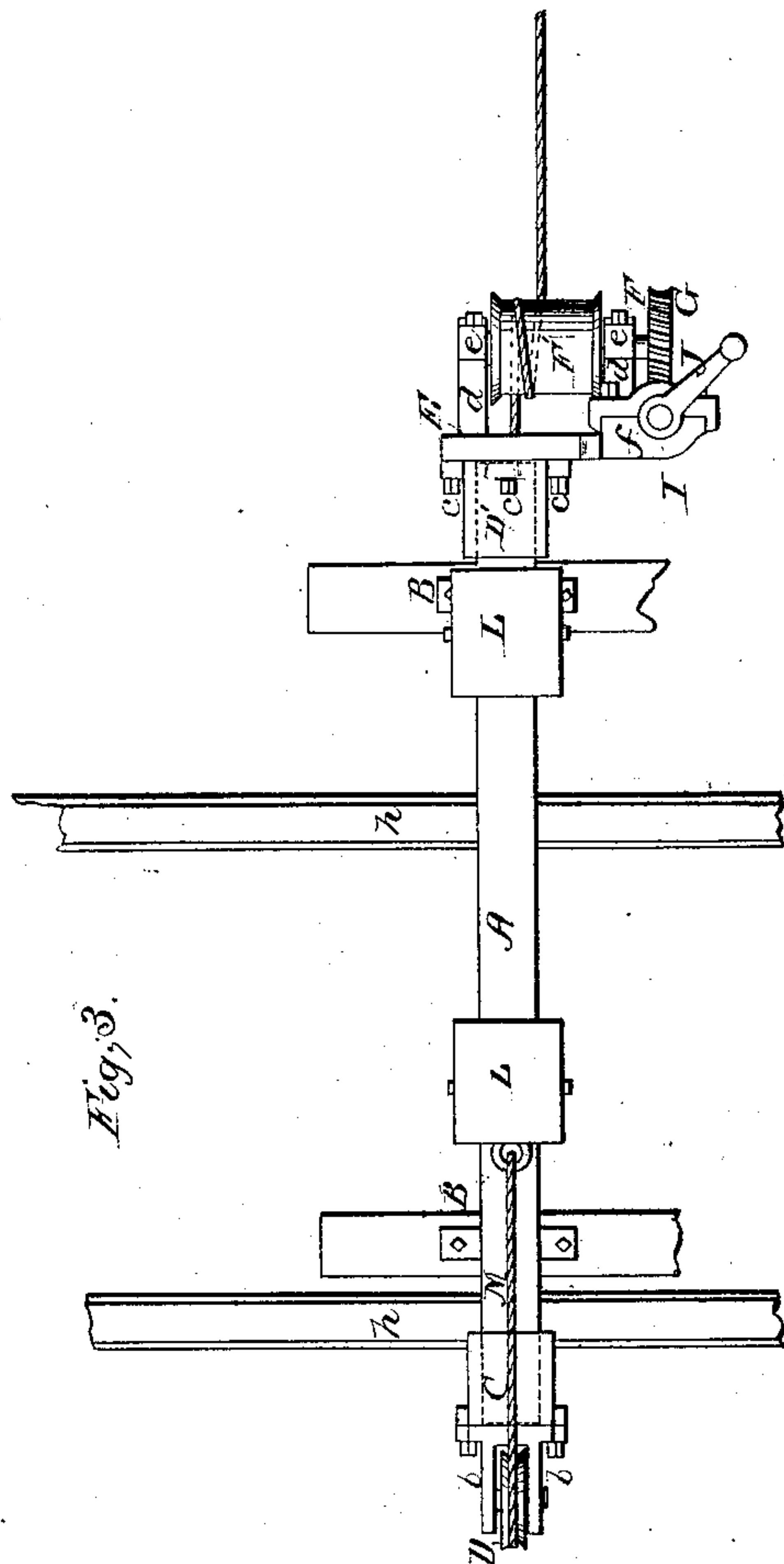
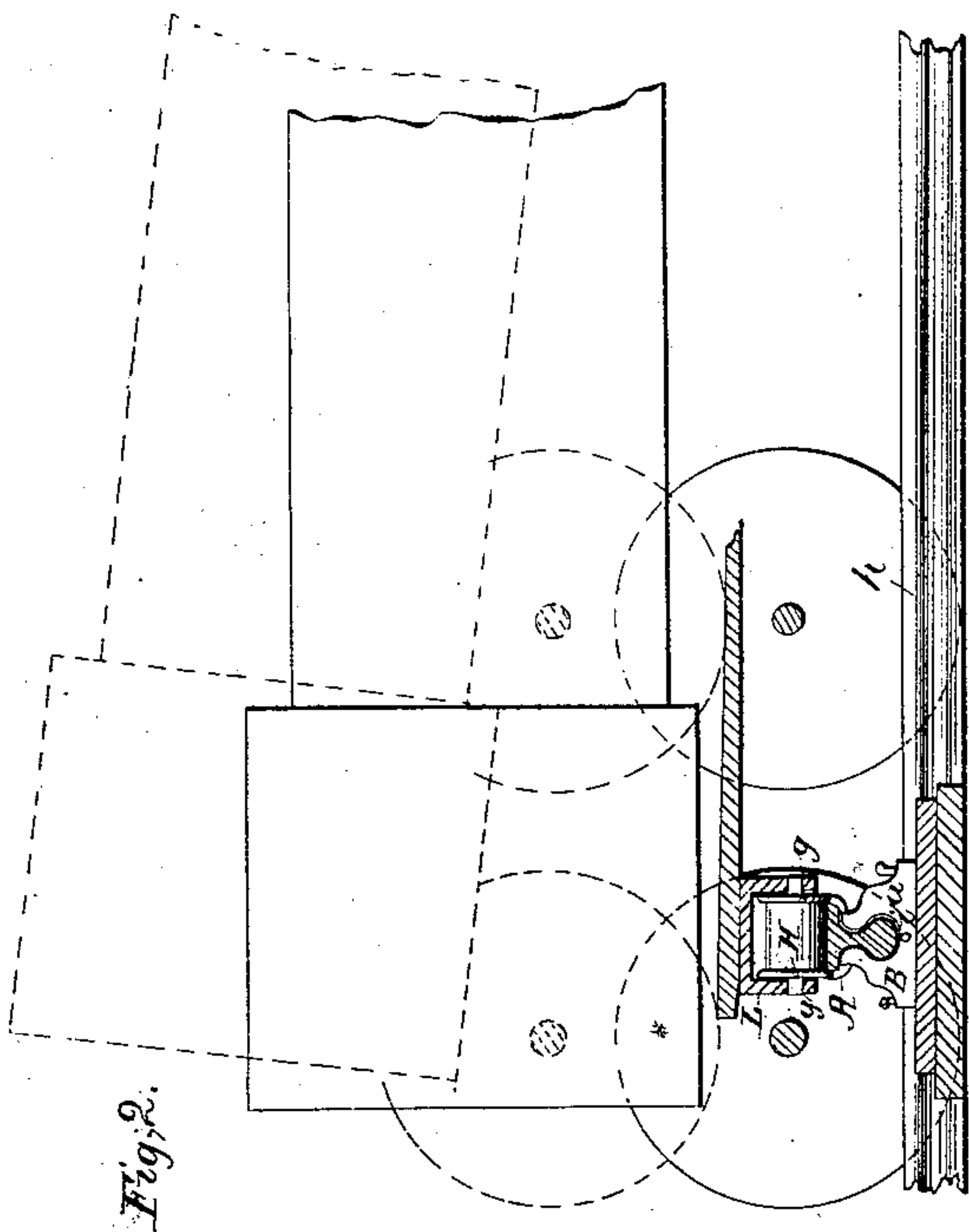
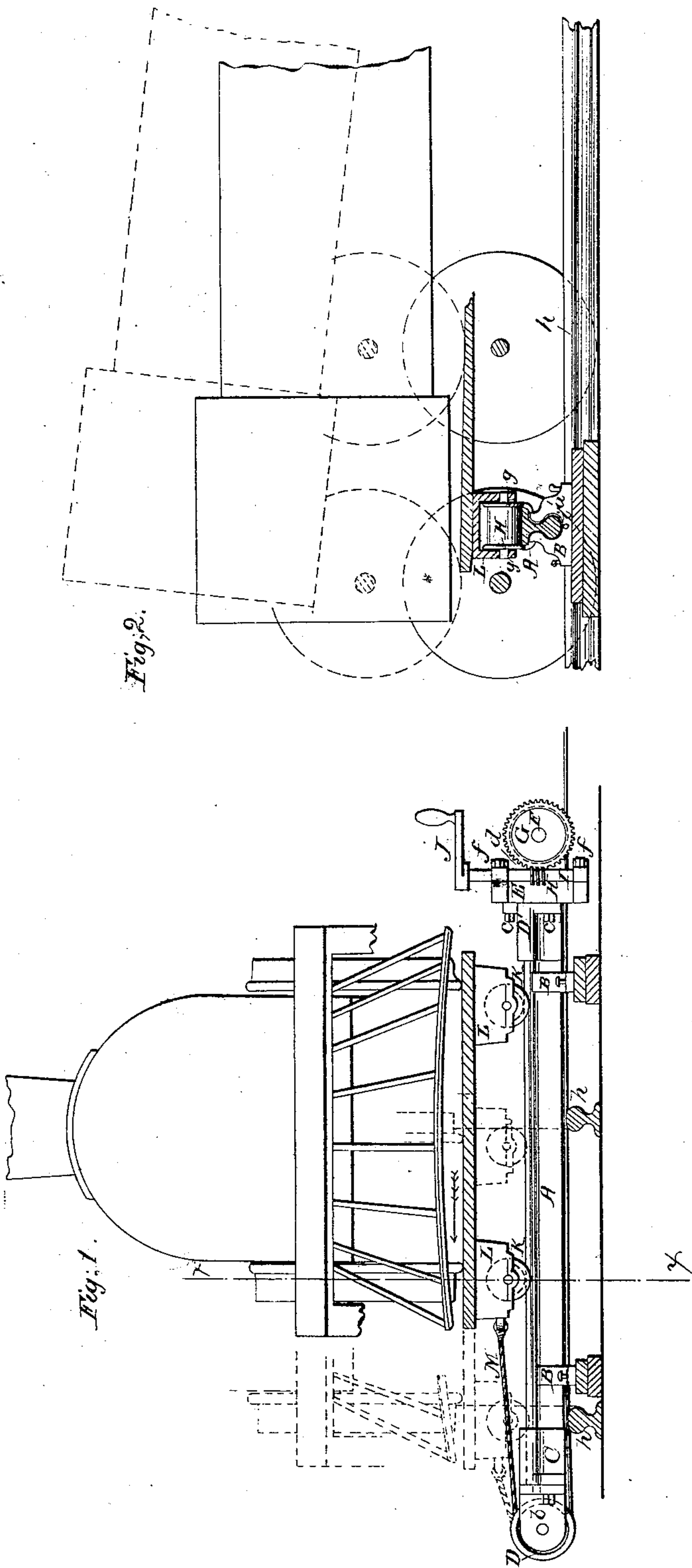


S. F. Coon.

Car Replacer.

N^o 13,080.

Patented Jun. 19, 1855.



UNITED STATES PATENT OFFICE.

S. PARK COON, OF MILWAUKEE, WISCONSIN.

APPARATUS FOR REPLACING RAILROAD-CARS UPON THE TRACK.

Specification of Letters Patent No. 13,080, dated June 19, 1855.

To all whom it may concern:

Be it known that I, S. PARK COON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and Improved Device for Adjusting Railroad-Cars and Locomotives upon the Track; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure, 1 is a front view of my improved device showing the manner in which it is used or applied. Fig. 2, is a transverse section of ditto, (x) (x) Fig. 1, showing the plane of section. Fig. 3, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and improved device for adjusting rail road cars and locomotives upon the track, and consists in the peculiar construction of the same as will be hereafter fully shown and described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, represents an ordinary T rail inverted, and B, B, are stocks which have recesses (a) cut in them so that they may fit over the face and sides of the upper part of the rail A, and support the rail in an inverted position, as clearly shown in Fig. 2. The stocks being allowed to slide on the rail so that they may be moved nearer together or farther apart as desired. At one end of the rail A, there is a socket C, see Figs. 1 and 3. The recess of this socket corresponds inversely in form with the rail so that said socket may be fitted snugly on the end of the rail. At the outer end of the socket there is a pulley D, the axis of which runs in projections (b) (b) attached thereto, both projections are shown in Fig. 3. The socket C, merely fits snugly on the rail, so that it may be readily adjusted on the rail and removed therefrom.

D', Figs. 1 and 3 is a socket constructed precisely similar to the socket C. This socket is placed on the opposite end of the rail A, and has a plate E, attached to it by screws (c) see Figs. 1 and 3. This plate E, is provided with projections (d) (d) in which the shaft E, of a drum F', works (e) (e) representing the bearings, see Fig. 3.

The shaft F, of the drum F', has a worm wheel G, on one end of it, in which worm wheel a screw H, gears said screw being on a small vertical shaft I, which works in suitable bearings (f) (f) attached to the plate E. The upper end of the shaft I, is provided with a crank J.

K, K, are rollers having flanches (g) at their ends as shown clearly in Fig. 2. These rollers are fitted within boxes L, L. The flanches (g) of the rollers just fit over the edges of the rail A, allowing the peripheries of the rollers to rest upon the rail and keeping them thereon, see Fig. 2. The upper surfaces of the boxes L, L, are flat.

The stocks B, B, boxes L, L, and sockets C, D', with their attachments are carried on the locomotive or may be stowed away in any convenient place in the baggage car of the train. Now in case of the locomotive or of a car getting off of the track, one of the rails is pried up from the track and inverted and the stocks B, B, two or more, fitted upon it. The detached rail, which is the one represented by A, in the drawings, is then placed transversely over the rails forming the track of the road and which are designated by (h) in the drawings, the rail A, also projecting underneath the car or locomotive. The car or locomotive is then elevated by the ordinary jacks and the boxes L, L, are placed underneath it the rollers K, of the boxes being upon the rail A. A rope or chain M, see Figs. 1 and 3, is then attached to the outermost box L, and passed under the pulley D, and through holes (i) see Fig. 2, in the lower part of the stocks and is then passed once or twice around the drum F'. The screw H, is then rotated by turning the crank J, and as the screw gears into the worm wheel G it, as well as the drum F, rotates, and the chain or rope M, draws the boxes L, L, and the locomotive or car which rests upon them over the rails (h) (h), forming the track, the slack of the rope or chain being "taken in" by an attendant as the drum F', rotates. When the locomotive or car is brought directly over the rails (h) (h) it is let down upon them, see Fig. 1, the blue lines representing a locomotive off of the rails (h) (h) and adjusted upon the boxes L, L. The red lines showing the locomotive when brought directly over the rails (h) (h) and ready to be let down.

The above invention is simple, and will

operate effectually, it may be carried without inconvenience upon the locomotive or placed within the baggage car as it does not occupy much room. It may be readily
5 applied in all cases and the expense of construction is trifling.

I am aware that a machine has been constructed in which lifting jacks have been mounted upon carriages, and such carriages
10 mounted upon a strong beam, and the carriages connected by means of a chain or rope and pulleys with a windlass at one end of the beam, by which windlass the carriage and jacks with any load placed thereon, are
15 moved along the beam. I am also aware that this apparatus has been proposed for the purpose of replacing railroad cars upon the track after they have run off, but it has never proved efficient for any practical purpose, on account of its great weight and
20 bulk which renders it extremely difficult to get beneath a locomotive or car, especially when the same has run off the track into soft earth; it is also costly, liable to get out
25 of repair and exceedingly inconvenient to carry on a train of cars, and to handle either preparatory to, or while being used. These defects which have prevented the introduction of this machinery into use upon rail
30 roads, it is the purpose of my invention to remedy, and I have attained this end by making the foot stocks, windlass, pulleys, tackle, and the carriages that run on the beam separate from the beam, and from
35 each other, and constructing them in such manner that they can be applied to, and used in connection with one of the lengths of the rail of the road on which it is designed to use them, so as to form a machine when
40 required. This dispenses with the necessity of carrying the heavy beam with its appendages in the cars, and also saves the labor of handling a heavy machine. Each part can easily be handled by itself, as it
45 is comparatively light and compact, and

when there is occasion to use the machinery, its parts can be set up in a few minutes on one of the rails of the road. Further, as the beam which supports the carriage from the great strain and heavy shocks to which it is
50 subjected, is very liable to bend, and becomes useless when bent, the carriages will not run on it properly, and the apparatus fails to perform its duty at the time when it is most needed. This difficulty is almost entirely
55 avoided in my improved machine, for when by accident one rail fails another is at hand to be used as a substitute, so that little delay or inconvenience results. The other parts of the apparatus are little liable to accident
60 and will rarely, if ever fail until worn out by continued use.

I apply my lifting jacks to raise the car, directly to the frame of the car, or I apply them to the beam or the stocks on which the
65 beam rests, as may be most convenient, but I never mount them in the carriages, as is done in previous machinery for like purposes, because that would increase unduly the height of the apparatus, and render it
70 difficult in most cases to introduce it beneath the car to be raised.

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

The construction of a windlass, pulley, 75 chain or rope, and foot stocks in such manner as to adapt and attach them to a section or length of rail-road-rail substantially in the manner herein set forth, to form an apparatus that can be used for replacing
80 railroad cars upon the track, and when this duty is done, the parts of which can easily be separated for more convenient transportation, and packed in the tool box of the tender or other appropriate receptacle.

S. PARK COON.

Witnesses:

S. H. WALES,
G. G. MASON.