

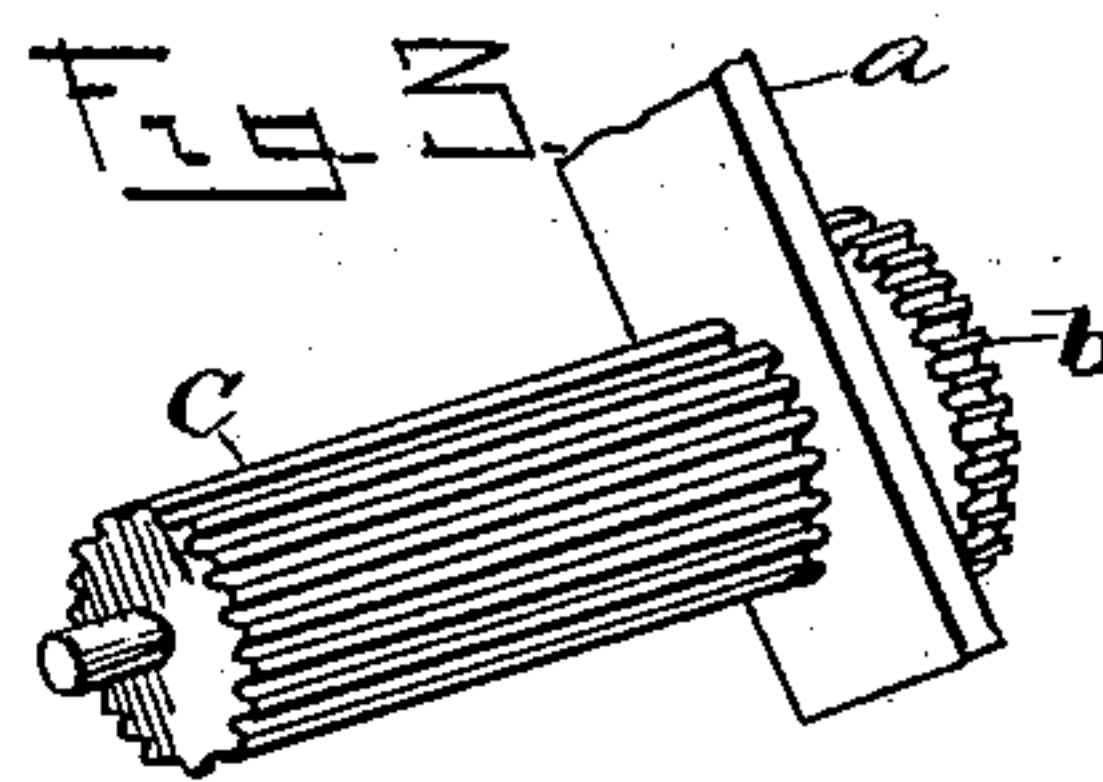
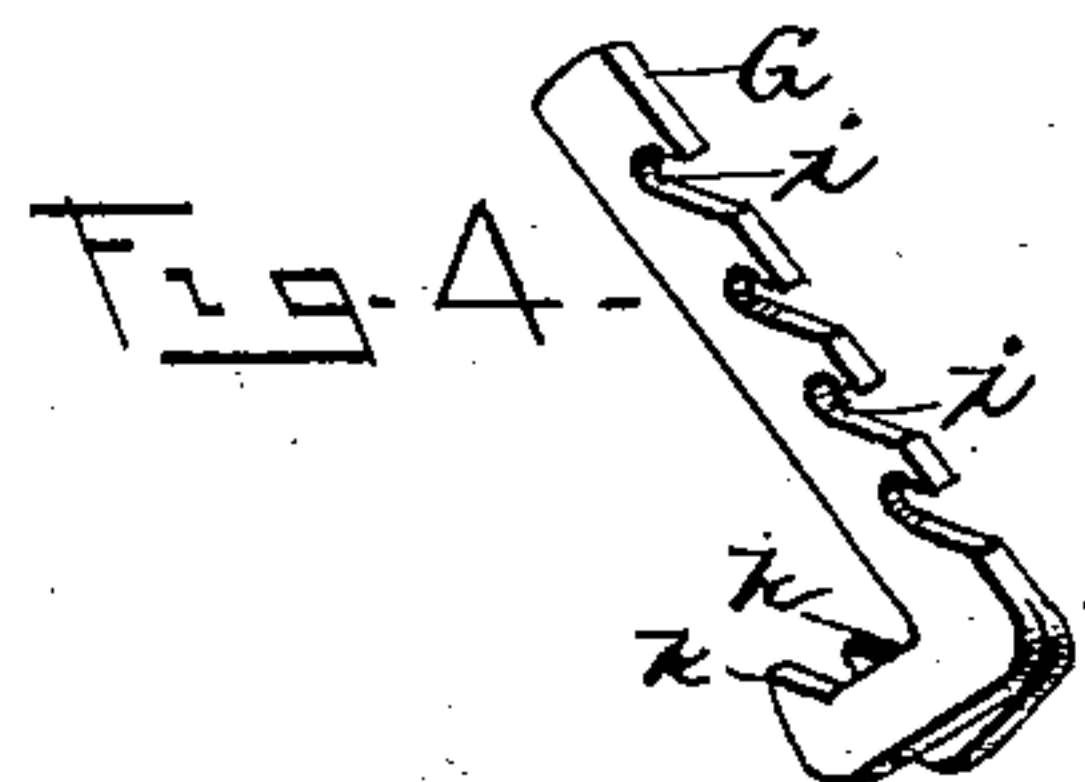
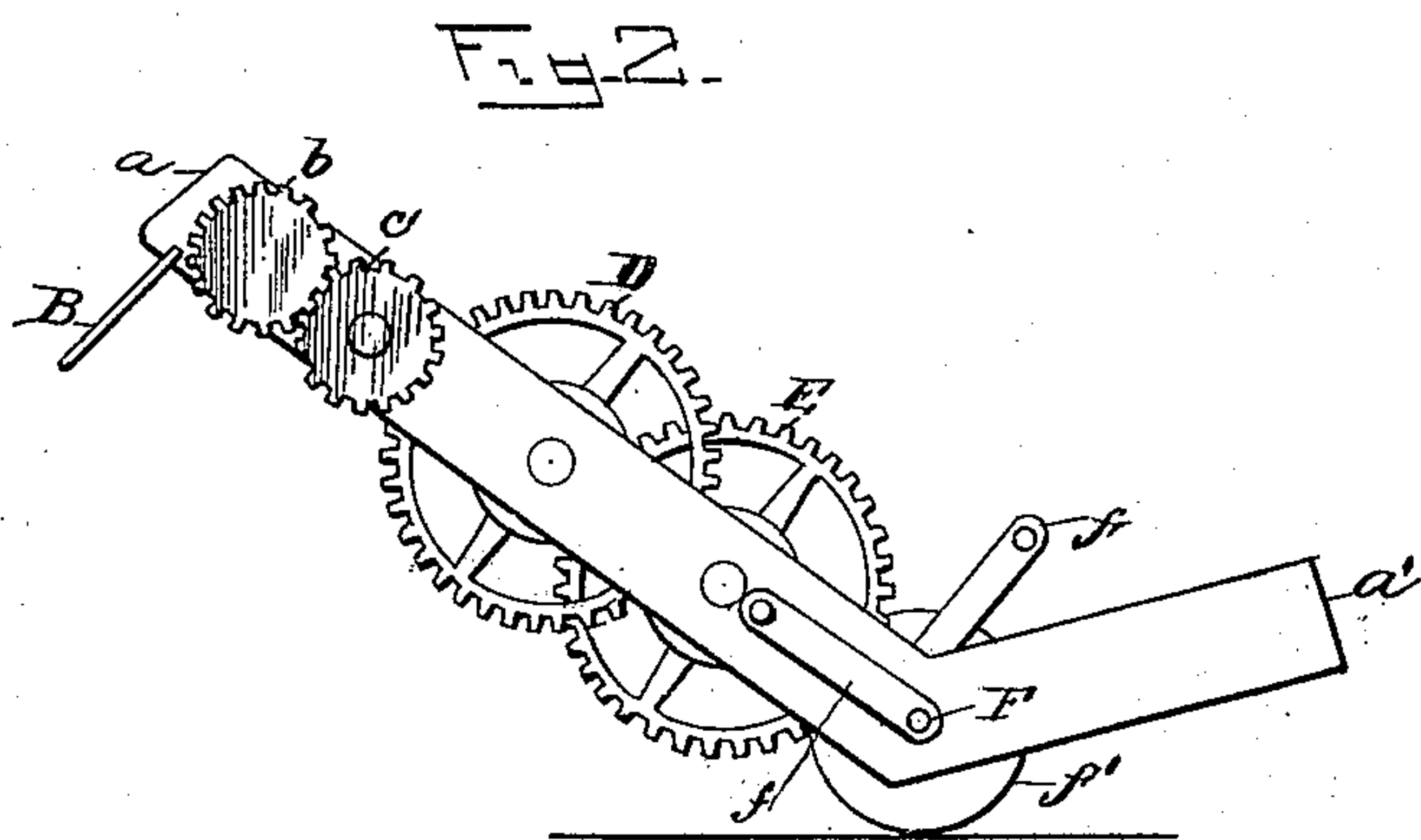
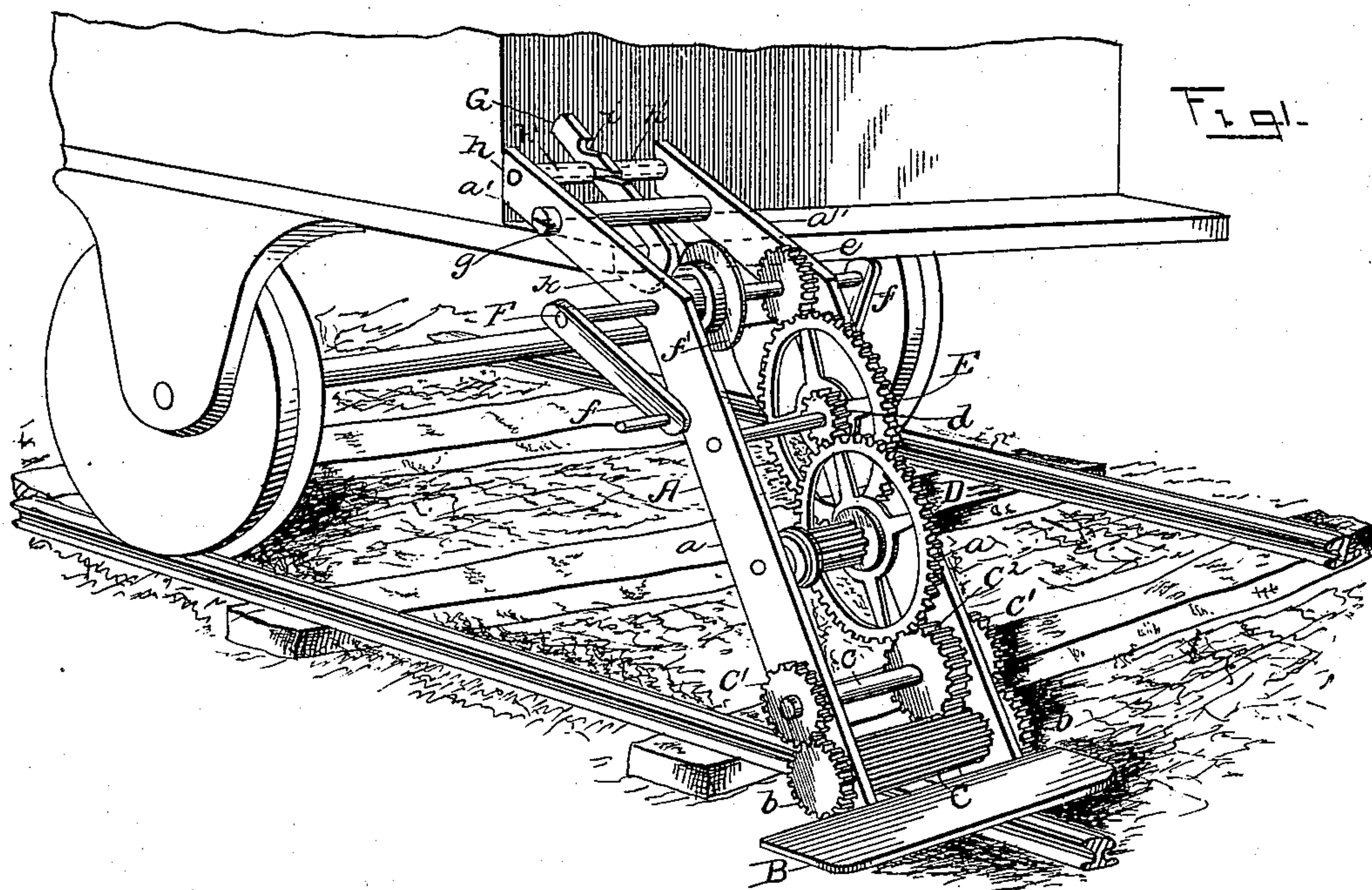
(No Model.)

S. SHACKELFORD.

CAR MOVER.

No. 330,744.

Patented Nov. 17, 1885.



Samuel Shackelford

Inventor

Invento  
by Geo Walzer

Attorney

Witnesses:

Morris A. Clark.

Jno. C. Schroeder.



# UNITED STATES PATENT OFFICE.

SAMUEL SHACKELFORD, OF BELLAIRE, OHIO, ASSIGNOR TO HIMSELF AND  
ISAAC N. ANDERSON, OF SAME PLACE.

## CAR-MOVER.

SPECIFICATION forming part of Letters Patent No. 330,744, dated November 17, 1885.

Application filed September 24, 1885. Serial No. 177,997. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL SHACKELFORD, of Bellaire, in the county of Belmont and State of Ohio, have invented a new and useful Improvement in Car Movers or Pushers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improved car mover or pusher for use in moving railroad and other cars from place to place upon the track; and it consists in the combination of a fluted or corrugated friction-roller and intermediate gearing with a hand-crank, whereby the car is given a steady, continuous, and regular movement in a forward direction along its track, whether the same is on a level or upgrade; and the invention further consists in the combination, with such car mover or pusher, of a detachable and adjustable grappling-hook, whereby the implement is adapted to be applied to cars with platforms of different height above the level of the track; and it consists, further, in a wheel mounted upon the shaft of the hand-crank, whereby the implement can be converted into a truck, so as to be wheeled from place to place, to suit circumstances, all as will be more fully hereinafter described and claimed.

For the better understanding of the details of construction and arrangement, attention is invited to the accompanying drawings, in which—

Figure 1 is a front elevation, in perspective, of the implement as applied to the platform or "dead-head" of a railroad-car; Fig. 2, a side view of the same in the position it occupies as a truck; Fig. 3, a detail of the fluted or corrugated friction-roller, and Fig. 4 a detail of the grappling-hook used to attach the implement to the car.

Like letters of reference indicate corresponding parts in the several views.

A denotes the frame of the car mover or pusher, consisting of two metal side pieces, *a a*, arranged, preferably, at an angle of about forty-five degrees to their front ends, *a' a'*, which are preferably horizontal, to meet its requirements as a truck. To the extreme

lower ends of these side pieces, *a a*, is secured the platform B, for the operator to stand upon when moving a car, and between these side pieces are mounted the fluted or corrugated friction-roller C and gearing for turning the same. This fluted or corrugated friction-roller C, which is made, preferably, from hard steel, is mounted in the frame next above the platform B and rests upon one of the rails, and its shaft or spindle, which has bearings in the side pieces, *a a*, is provided on each end, outside of the frame, with a small gear, *b*. With these gears *b b* mesh similar gears, *c' c'*, on the ends of a spindle, *c*, mounted in the frame next above the friction-roller C. This spindle *c* has a third gear, *c<sup>2</sup>*, on the inside of one of the side pieces, *a*, which gear is revolved by a large gear-wheel, *D'*, secured upon a shaft, *D*, arranged next above the spindle *c*, and said gear-wheel meshes with the toothed hub *d* of another large gear-wheel, *E*, which in turn is revolved by a small gear, *e*, on the driving-shaft *F*. This shaft is mounted in the frame at the point where the side pieces, *a a*, change their angle, and is provided on each end with a crank-handle, *f*, for turning the same. A wheel, *f'*, loosely mounted on this shaft between the two side pieces, *a a*, enables the implement to be converted into a truck, so as to be wheeled with ease from one place to another, as shown in Fig. 2. The front ends, *a' a'*, of the frame are secured together by means of a suitable bolt, *g*, and a pin, *h*. On this pin *h* is suspended the grappling-hook G, held in place upon the same by means of appropriate washers, *h' h'*. The stem of this grappling-hook G is made with a series of slots, *i*, in one edge of the same, which adapt it to be suspended and adjusted upon the pin *h*, and at its lower end is provided with a pair of hooks, *k k*, which enter the platform or dead-head of the car and secure the car mover or pusher thereto, as shown in Fig. 1. By turning the driving-shaft *F* revolution is imparted to the friction-roller C, and the weight of the operator upon the same will cause it to bite upon the rail and propel the car and the implement forward with a steady and regular movement. It will be apparent that as the car is moved forward the hooks of the grapples G will more firmly

embed themselves in the car, so that no accidental detachment can occur at this point.

The device is very simple in construction, comparatively cheap to manufacture, and exceedingly effective in its work, and therefore commends itself to the trade without enumerating its many advantages.

What I claim as new therein, and desire to secure by Letters Patent, is—

10 1. In a car mover or pusher, the combination of a fluted or corrugated friction-roller and gearing for operating the same, substantially as and for the purpose set forth.

15 2. The combination, with a car mover or pusher, of a detachable and adjustable grappling-hook for securing the same to the car, substantially as described.

3. In a car mover or pusher, the combination, with the driving-shaft, of a wheel mounted upon the same, substantially as and for the purposes set forth. 20

4. A car mover or pusher consisting of the frame A, provided with platform B and grappling-hook G, the fluted or corrugated friction-roller C, the driving-shaft F, and intermediate connecting-gearing, substantially as described, and for the purposes set forth. 25

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL SHACKELFORD.

Witnesses:

V. T. MORGAN,

JNO. W. EDWARDS.