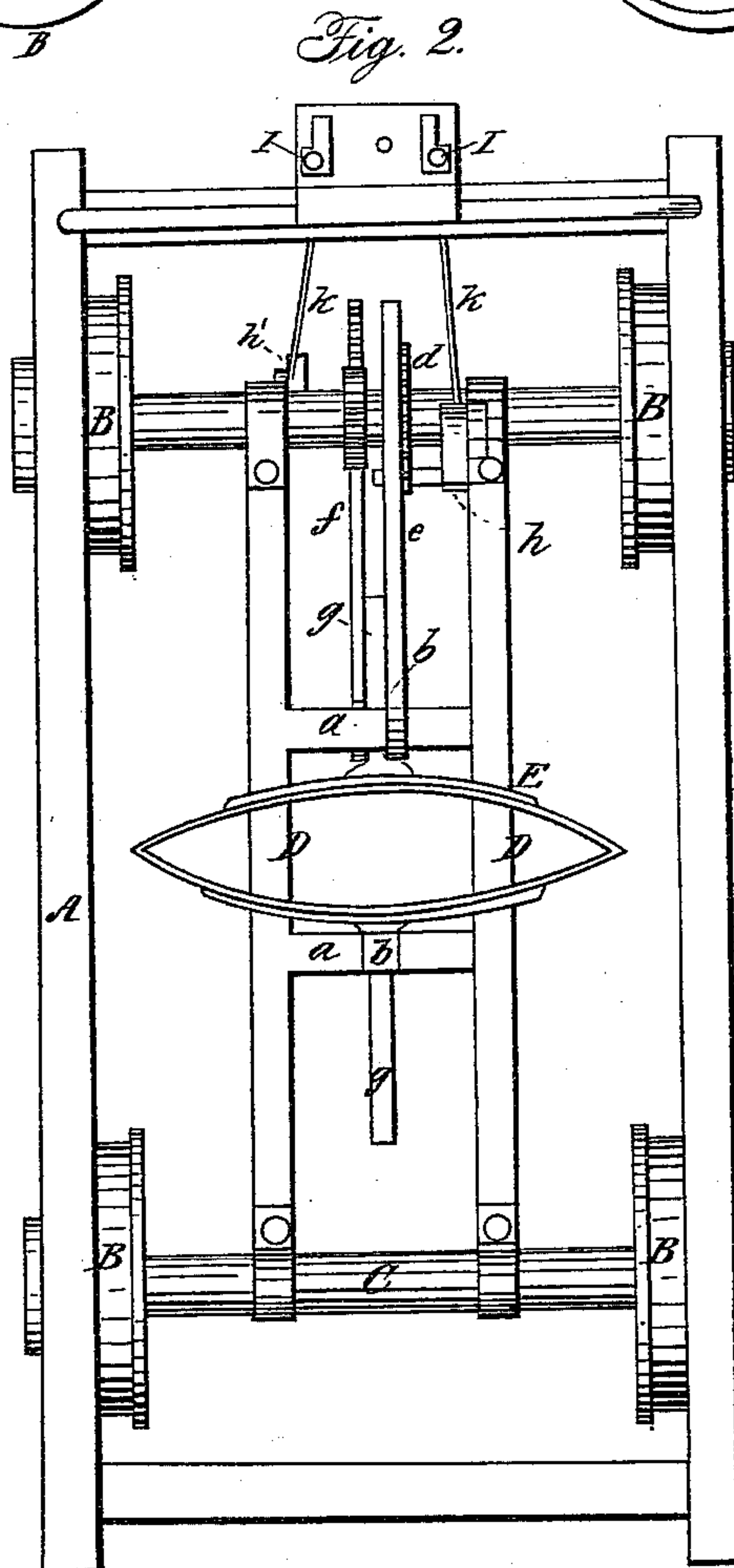
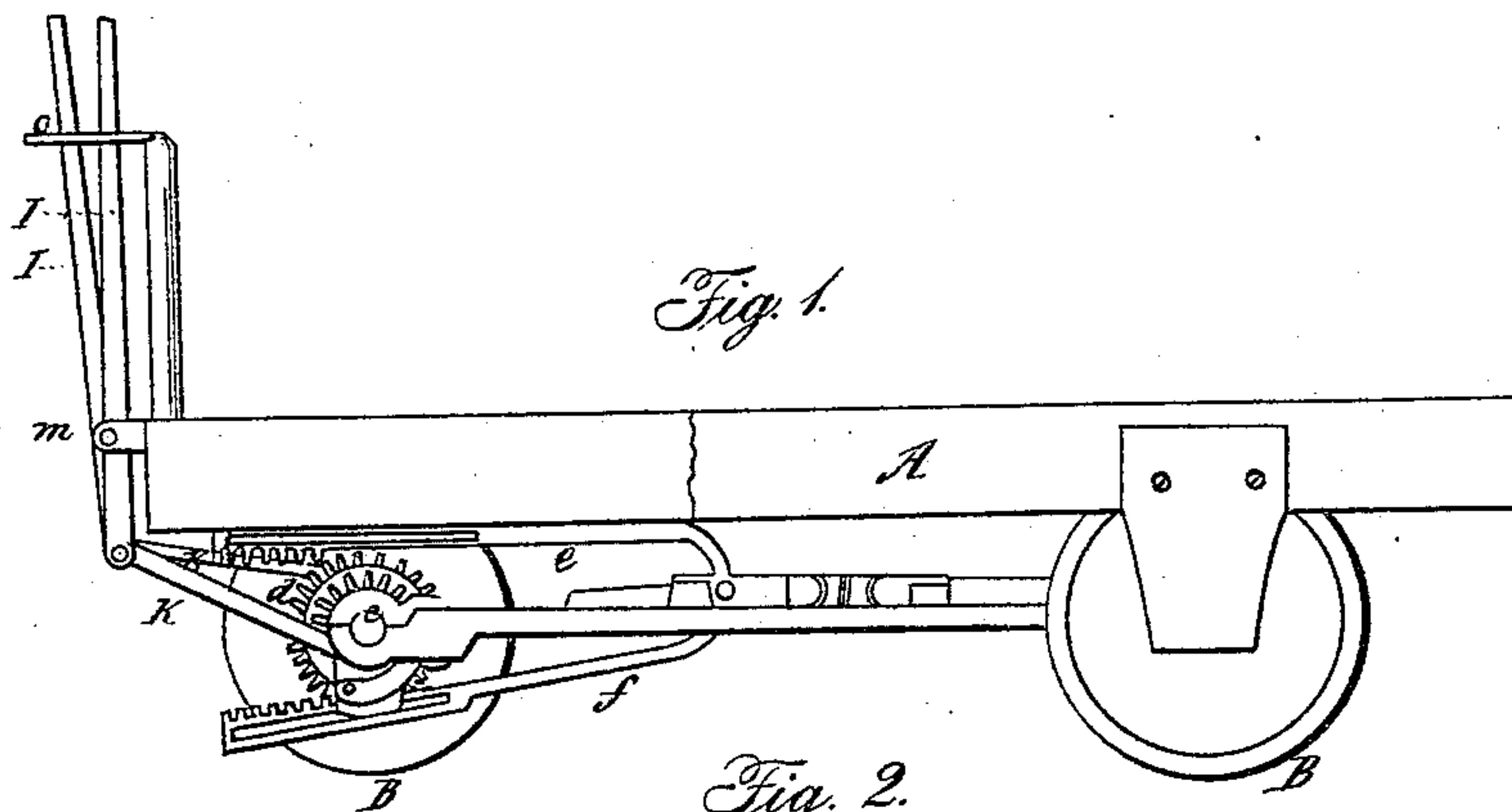


E. M. SCOTT.

Car Starter.

No. 64,373.

Patented Apr. 30, 1867.



Witnesses:

F. Lehmann
Robt Gumm

Inventor:

E. M. Scott
J. H. Alexander & Co.
attys

United States Patent Office.

EDWIN M. SCOTT, OF AUBURN, NEW YORK.

Letters Patent No. 64,373, dated April 30, 1867.

IMPROVED METHOD OF STARTING AND STOPPING STREET CARS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, E. M. SCOTT, of Auburn, county of Cayuga, and State of New York, have invented certain new and useful improvements in the Manner of Starting and Stopping Street Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 represents a side elevation; and

Figure 2 a plan view of my invention.

The nature of my invention consists in the combination and arrangement of the several devices hereinafter set forth.

In the annexed drawings, which form a part of this specification, A represents the frame of a car, B B the wheels, and C C the axles, which are connected by rods or bars D D; said rods are connected by cross-pieces *a a*, which are provided with guide-posts *b b*, the importance of which will be more fully seen hereafter. *c* represents a small pinion on axle C. *d* is a gear-wheel of about double the diameter of pinion *c*, secured to the same axle, as fully shown in fig. 1. *e* and *f* represent racks, the rack *e* working on the under side of pinion *c*, and rack *f* on the upper side of gear *d*; said racks are provided with slots, as seen in fig. 1. E represents an elliptic spring, to which are secured the guides *g g*; said guides work in the guide-posts *b b*, (see fig. 2.) To the forward guide are pivoted the racks *e* and *f*, between spring E and guide-posts *b*. *h h* represent elbows pivoted to a suitable piece of metal, secured to bars D D, as partly shown in fig. 2; said elbows are provided with an arm which works in the slots through racks *e* and *f*. *i i* are hand-levers, which are connected to elbows *h h* by means of the rods *k k*. *m* represents a piece of metal provided with ears, and secured to the front part of the car, and to which are bolted hand-levers *i i*. *o* is also a plate of metal, which is provided with slots and catches, as seen in fig. 2. The levers *i i* pass through these slots, and are retained and held firmly in their places in operating the machinery which has been described, by means of the catches.

The operation of my invention is as follows: We will suppose the car in motion, and to overcome that motion we pull the left-hand lever, which throws the rack *f* into the small pinion *c*, which at once, by means of said rack, forces the spring E back, thereby overcoming the momentum of the car. In starting, pull upon the right-hand lever *e*, thereby throwing the rack into the gear *d*, then throw the left-hand lever out, by which, it will be observed, is gained double the leverage upon the gear that is done on the pinion to start again. By pulling both levers we throw both racks into gear, by which the motion of the car-wheels is quickly checked.

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

1. The fixed pinion *c*, in combination with gear *d* and slotted racks *e f*, as and for the purpose specified.
2. In combination with the above I claim spring E, elbows *h h*, and levers *i i*, all arranged as and for the purpose set forth and described.

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

EDWIN M. SCOTT.

Witnesses:

E. L. TREMAINE,
WILLIAM WELLNER.