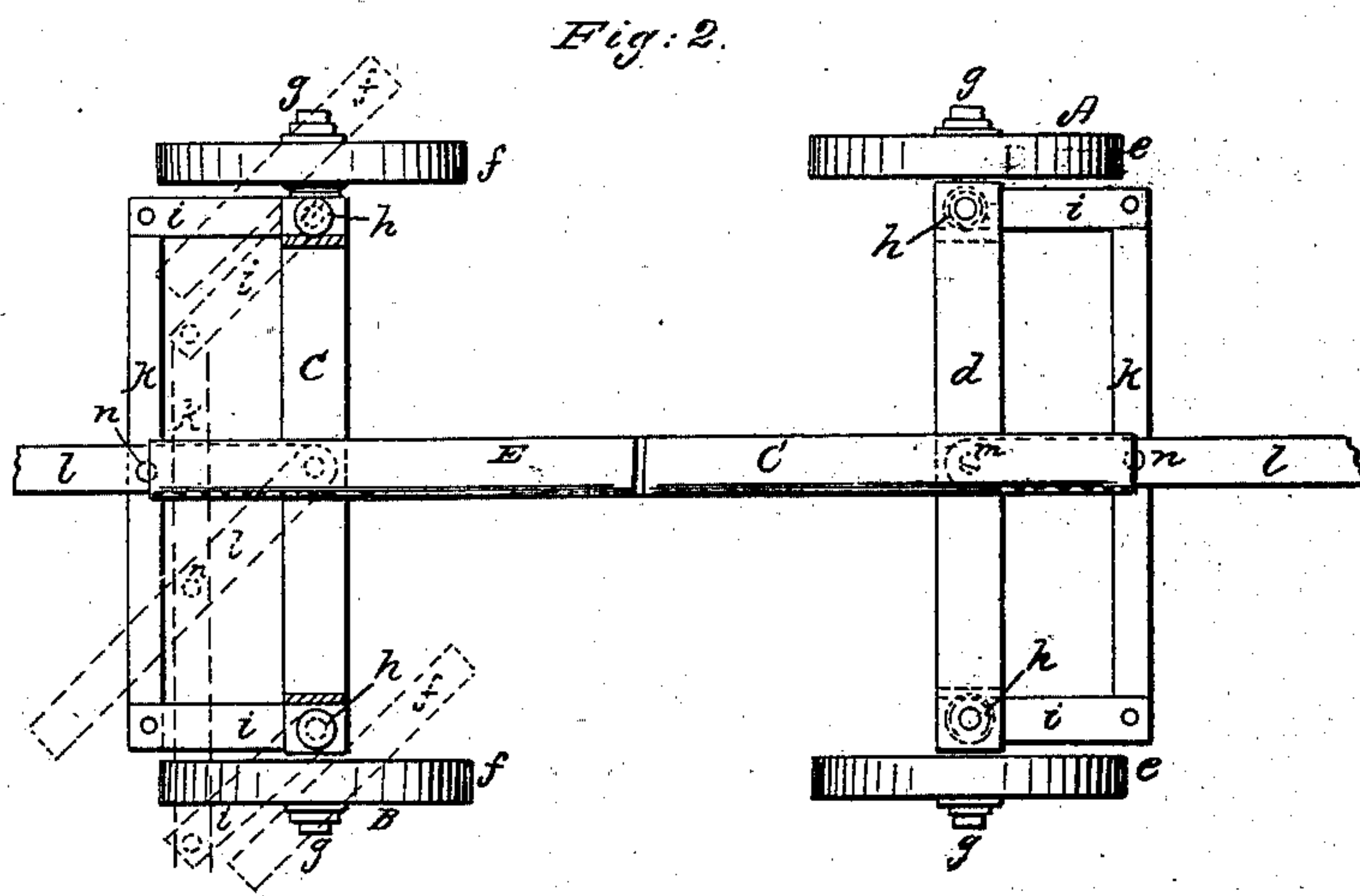
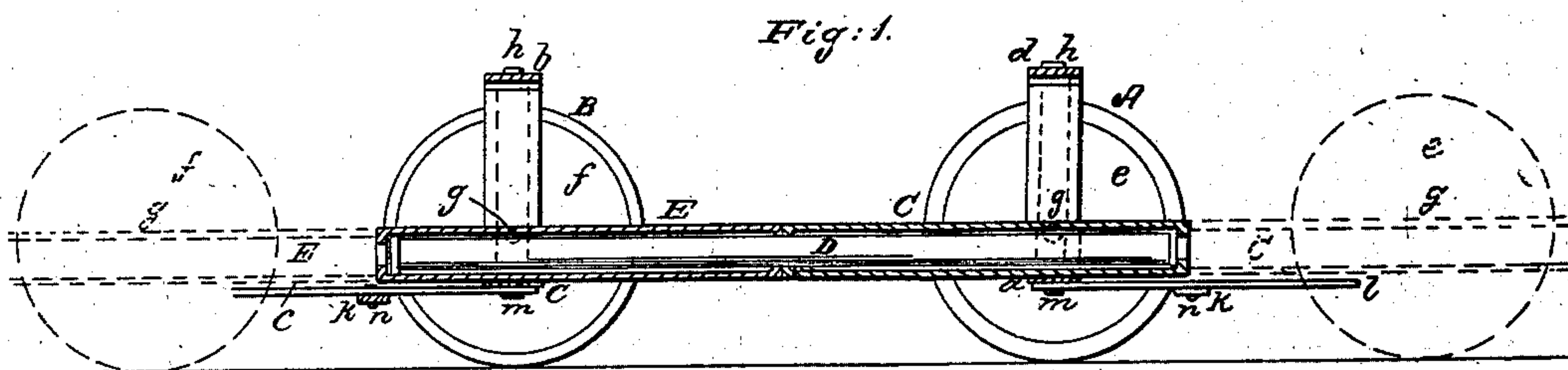


O. F. BURTON.

Truck.

No. 80,388.

Patented July 28, 1868.



Witnesses:
Arthur Kinner
Tellers

Dear F. Burton

United States Patent Office.

OSCAR F. BURTON, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 80,388, dated July 28, 1868.

IMPROVEMENT IN TRUCK.

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, OSCAR F. BURTON, of Jersey City, in the county of Hudson, and State of New Jersey, have invented a new and useful Improvement in Hook-and-Ladder and other Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a longitudinal sectional elevation of a truck or trucks embracing my improvements, said trucks being shown as closed or adjusted towards each other by black lines, and as expanded or drawn apart, by red lines.

Figure 2 is a partly sectional plan of the same.

Similar letters of reference indicate corresponding parts.

This, my improvement, while applicable, at least in one or other of its features, to other trucks, such as heavy or freight ones, will be best explained in connection with hook-and-ladder trucks; and my invention consists, firstly, in a novel combination of means or devices for cramping the trucks from, as independent centres of motion, vertical shafts or axes arranged near either wheel, and, secondly, in a peculiar or tubular telescopic construction of the perch by which two adjacent trucks are connected and adjusted towards or from each other.

While essentially differing in construction, it will facilitate description here to refer preliminarily to the hook-and-ladder truck or fire-escape, patented to myself and M. H. Hovey, August 7, 1860, and in which a combination of ladders was used, hinged in a reverse manner to adjacent trucks, also pivoted together where crossing each other, and each ladder resting, when the trucks are extended or drawn sufficiently apart from each other, at its free end or portion on the frame of the adjacent truck, so that, on pulling the trucks close up together, the ladders are elevated, and on pushing or drawing the trucks apart, said ladders are lowered.

To such a method of raising and lowering the ladders, this, my improvement, is specially though not exclusively applicable. Thus said ladders are hinged or jointed, the one to the lower portion, *a*, of the frame of one truck, A, resting at its free end or portion on the upper bar, *b*, of the frame of the other truck, B, and the other ladder hinged to the lower bar, *c*, of the frame of the truck B, and resting on the upper portion, *d*, of the frame of the truck A, and the two ladders, which may carry any suitable number of extension-ladders or other attachments, pivoted together where they cross each other.

To raise and lower the ladders by closing together or drawing apart the two trucks A and B, I connect the same by any desired number of metallic tubes; three, C, D, and E, here being shown, arranged in a telescopic manner, so as to form an extension-perch, drawing, say, when fully extended, by a suitable construction of their ends, the one upon the other, but, when closed, shutting up within each other, and the two outer tubes, C and E, which are rigidly secured, either in a permanent or adjustable manner, to their respective trucks, being, when closed, locked together at their inner ends by any suitable device, but preferably one of an automatic character.

Such metallic tubular perch, of a telescopic-extension character, forms a light and efficient connection between the trucks, to admit of their adjustment relatively to or from each other, as described, said hollow perch serving also, if desired, to allow of the passage through it of a rope for drawing together the trucks.

To cramp the trucks, as necessary in running round curves, and when elevating or after having elevated the ladders, instead of attaching either pair of wheels, *e e* and *f f*, to their respective trucks, so as to swing from or round a common vertical axis, occupying a central position in the frame of the truck, which, when the trucks are fully cramped, gives a wrong and insecure position to the base or support, as established by the wheels on the ground, for the ladders when raised, I hang said wheels on independent shafts or axles, *g*, forming lateral projections from separate vertical spindles or shafts, *h*, arranged to freely turn in the frames of the trucks at or near their ends, and connected so as to work in unison, that is, either pair of each truck, by levers or arms, *i*, and link-rod or bar, *k*, so that, by moving said rod or bar longitudinally from the shafts *h* as centres of motion, the wheels are more or less skewed or turned, as represented by red lines in fig. 2, in opposite directions,

accordingly as the bar *k* is moved to the right or left, or it may be made to approximate, as regards their faces, a parallel position to the truck-frame. This movement of either bar *k* may be effected by or through a lever, *l*, pivoted, as at *m*, to its respective truck-frame, and to the bar *k*, as at *n*, or the same may be done by an equivalent connection of the tiller or horse-pole with the bar *k*, that, combined with the levers or arms *i*, forms a simple parallel motion, by which the trucks may be cramped, without the intervention of toothed racks and gear, and a widely-spread or distant and secure base or support established, by or through the wheels when turned in cramping for the elevated ladders.

What is here claimed and desired to be secured by Letters Patent, is—

1. The combination herein described, for cramping the truck of the bar *k*, levers *i*, and vertical shafts *h*, the latter being arranged to freely turn in the truck-frame, on opposite sides or ends thereof, and carrying lateral projections, forming axles or shafts to the wheels of the truck, substantially as shown and described.
2. The combination, with adjacent or separate trucks, of an extension-perch, formed of metallic tubes, fitted together in a telescopic manner, essentially as and for the purpose or purposes herein set forth.

OSCAR F. BURTON.

Witnesses:

A. LE CLERC,
A. KINNIER.