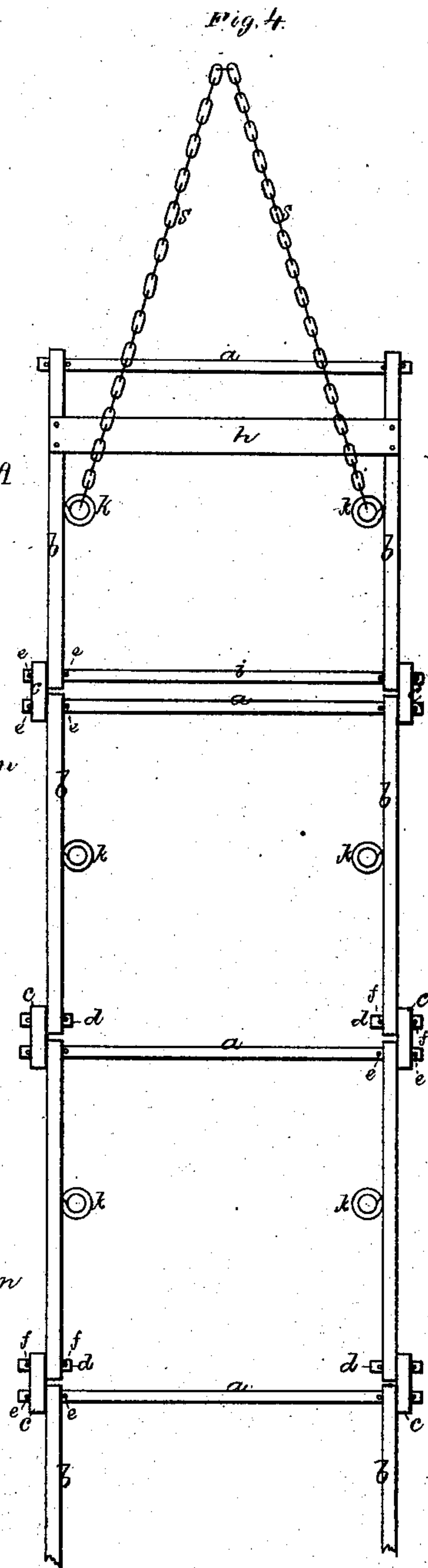
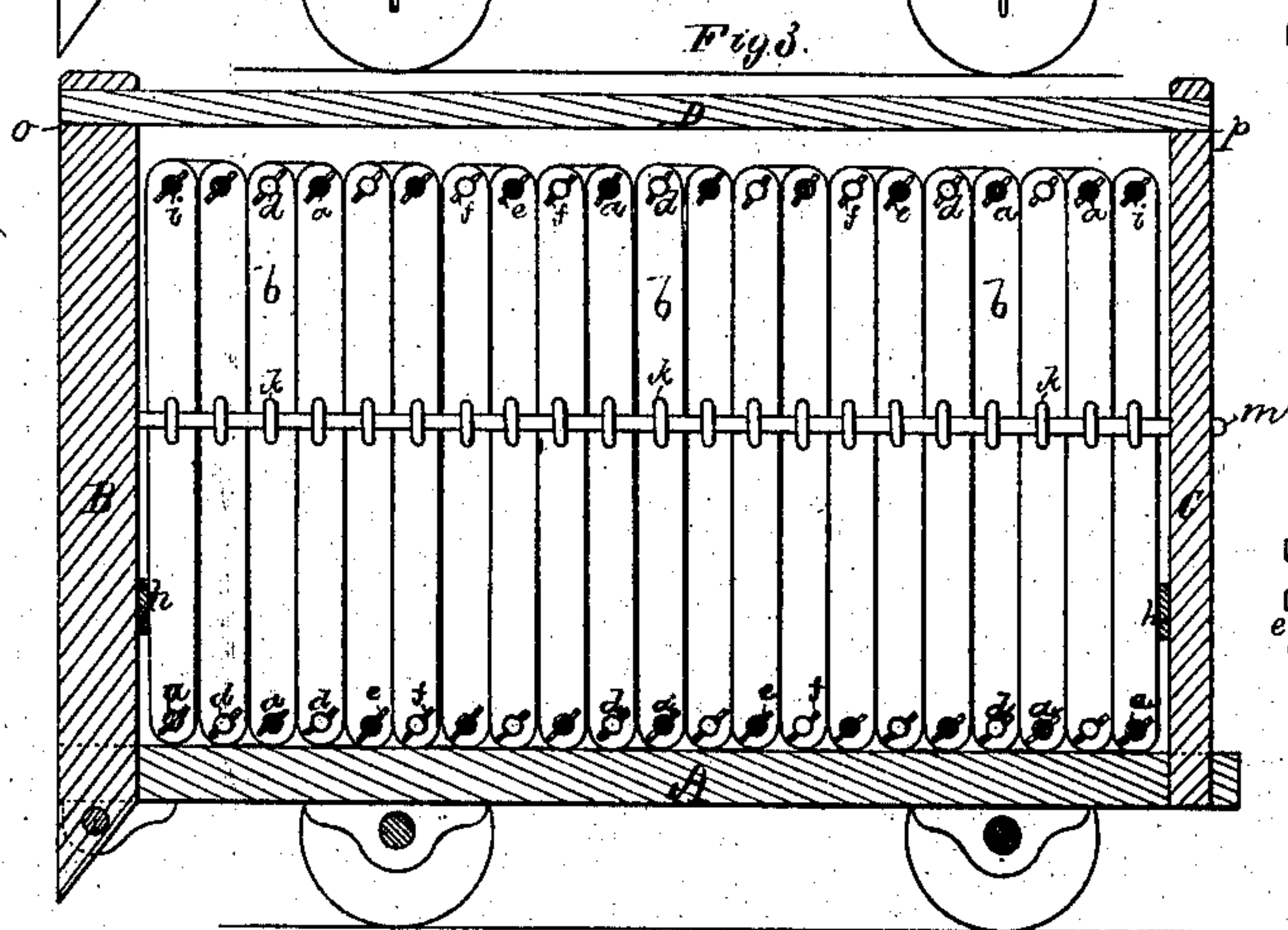
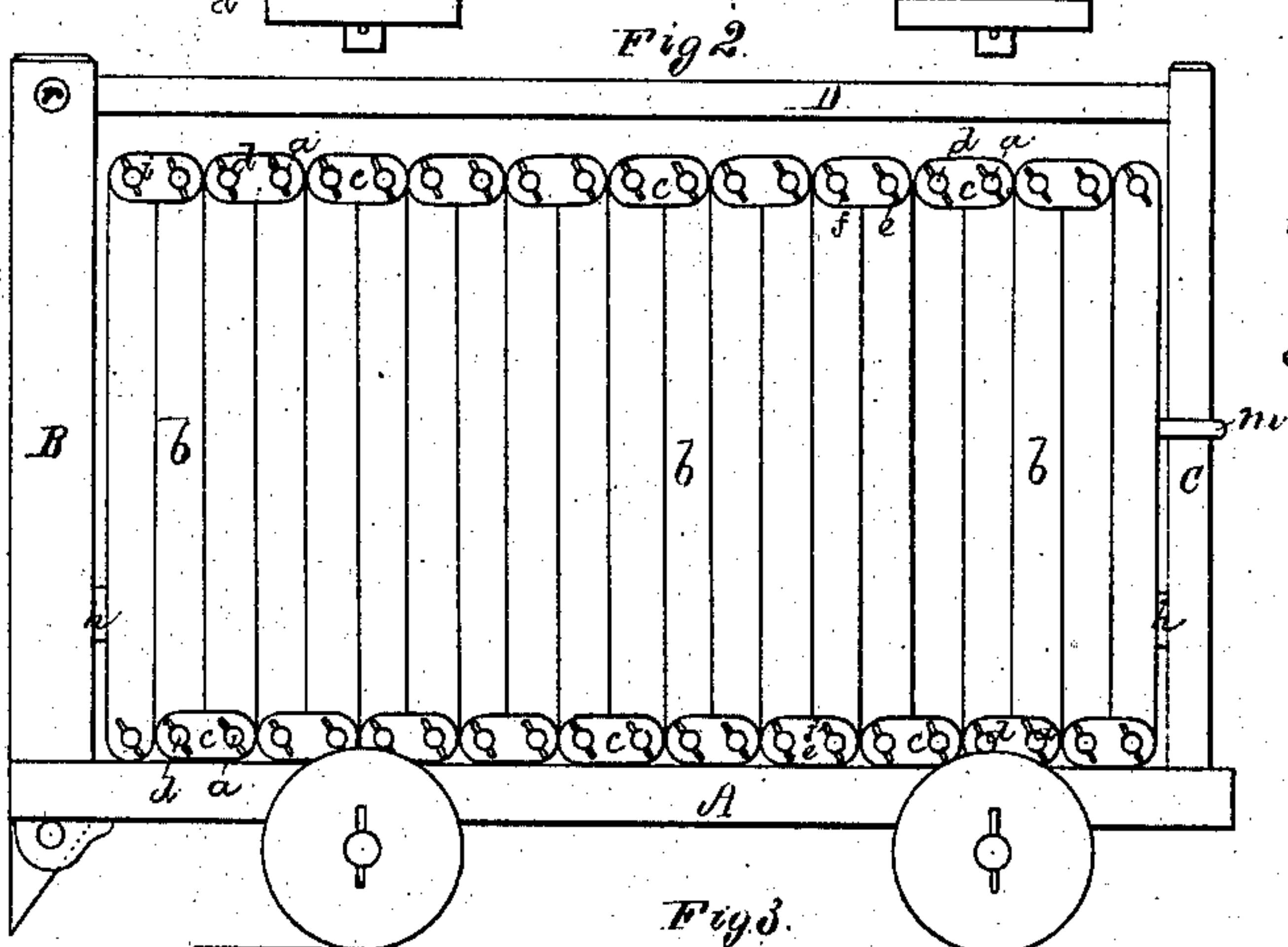
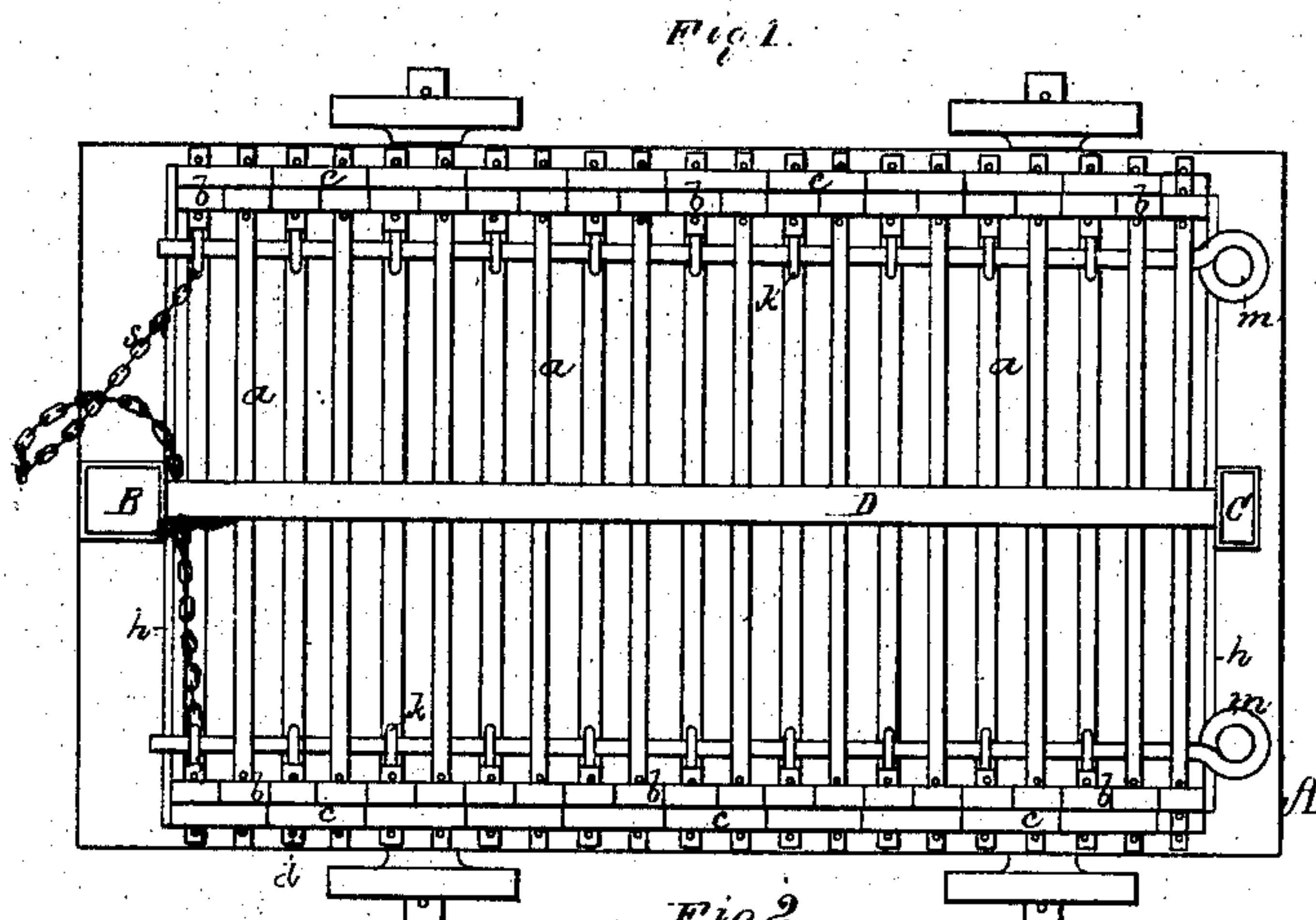


J. R. CONWAY.
Firemen's Ladders.

No. 154,647.

Patented Sept. 1, 1874.



Witnesses.
S. N. Piper
L. N. Hollen

John R. Conway.
by his attorney.
R. H. Ledy

UNITED STATES PATENT OFFICE.

JOHN R. CONWAY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN FIREMEN'S LADDERS.

Specification forming part of Letters Patent No. **154,647**, dated September 1, 1874; application filed July 2, 1874.

To all whom it may concern:

Be it known that I, JOHN R. CONWAY, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Fire-Escapes; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of one of my improved ladder fire-escapes. Fig. 4 is a side view of three of the ladder-sections.

The first part of my invention is a ladder composed of sections and junction-links, hinged together, and provided at the middles of the side bars of each section with two eyes, all being as hereinafter set forth. The second part of my invention is a carriage provided with standards and a connecting-bar, all being for supporting and transporting such ladder in a folded state.

Each section is composed of a single rung, *a*, and two parallel side bars, *b b*. These latter are arranged at a proper distance apart, and have the rung extended through and beyond each, and into and through two junction-links or pieces, *c c*. These junction-links lap on the side bars of the next section, (arranged in line with those of the preceding one,) and are connected thereto by short pivotal round pins *d d*, going loosely through the bars and links, as shown. Keys *e e* and *f*, arranged as represented, and going through the rung and the pivotal pins, serve to maintain connection of the parts and admit of the side bars of one section being folded over upon or against those of the other or brought into line with them. Each of the terminal sections of the ladder I usually strengthen by a cross-bar, *h*, extended from one side bar to the other, as shown, and nailed or fastened thereto. The first section,

at its lower end, may be provided with an auxiliary ring, *i*. Each side bar of each section, at its middle, has projecting from its inner side an eye, *k*. When the several sections are folded together and arranged upon the carriage A, rods *m* or ropes passed through such eyes serve to hold all the sections together.

The wheel-carriage A is provided with two standards or posts, B C, arranged at or near its opposite ends, and provided near their upper ends with a round rail, D, run through holes *o p* in them. One of these posts, viz., that marked B, is simply stepped or tenoned into the carriage, the other post, at its foot, being hinged to the carriage, so as to be capable of being turned down horizontally, or about so. It also has going through it laterally another hole, *r*, through which the bar or rail D may be inserted. These posts and bars not only serve to keep the folding ladder upon the carriage during its movement from place to place, but enable the carriage, when within a building, to be used near a window as a support for one end of the ladder, while such ladder may be hanging from the window or in use as a means of escape from the building in case of it being on fire. A bail or chain, *s*, may be fixed to the upper end of the ladder.

I do not claim a ladder having its sections connected by links.

I claim—

1. The ladder made in sections, connected by joint-links, and provided with eyes *k* to each section, all being substantially as specified.
2. The ladder-carriage provided with the standards B C and their connecting-bar D, all as and for use with the ladder, as explained.

JOHN R. CONWAY.

Witnesses:

R. H. EDDY,
S. N. PIPER.