

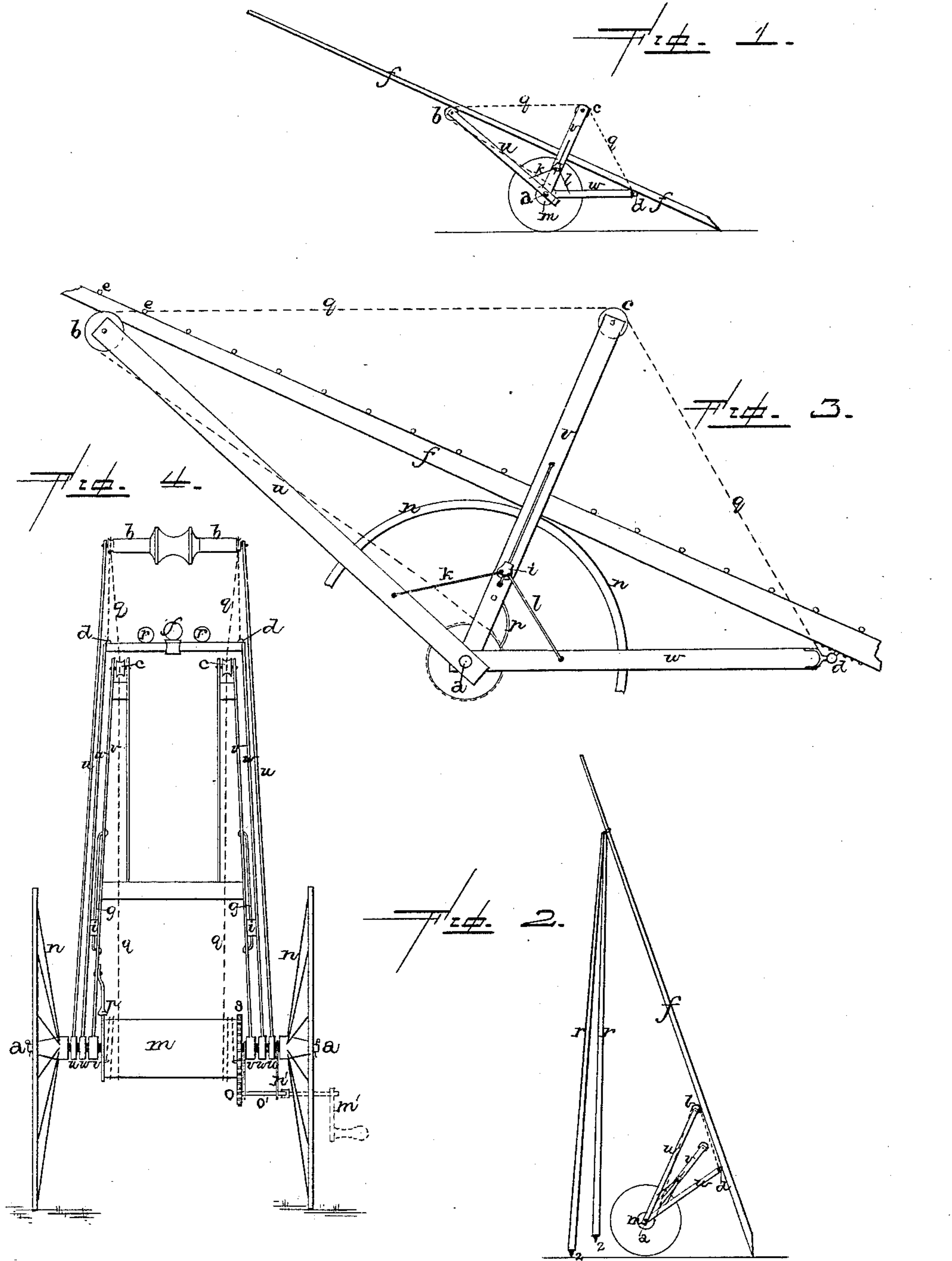
(No Model.)

W. C. CRONMEYER.

FIRE ESCAPE.

No. 318,600.

Patented May 26, 1885.



—Witnesses.—

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UNITED STATES PATENT OFFICE.

WILLIAM C. CRONEMEYER, OF PITTSBURG, PENNSYLVANIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 318,600, dated May 26, 1885.

Application filed March 24, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. CRONEMEYER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Escapes, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in fire-escapes; and it consists in a ladder resting on arms that, by means of ropes on a drum, are raised or lowered and lift the ladder to an upright or inclined position, the arms being journaled on the axle of a light two-wheeled carriage, as will be fully described hereinafter.

My object has been to furnish a fire-escape that can be rapidly transferred from one place to another and easily put in position by one person, if necessary.

The accompanying drawings represent my invention.

Figures 1 and 3 are side views of the ladder on its supporting-arms. Fig. 2 represents the ladder and braces. Fig. 4 is a plan of the whole.

The part marked *a* represents the axle of a light two-wheeled carriage, and *n* its wheels. Adjoining both wheels on the axle are journaled the bosses on arms *u w*, and on posts *v* in the order named, and between the posts *v* on the axle, revolves a drum, *m*. On one end of the drum is a ratchet, *p*, to check it when required, and around the other a toothed band or wheel, *s*, that gears with a pinion, *o*, on a shaft, *o'*, journaled at the ends of bars *n'*, fastened to the axle. The shaft *o* is reached by a removable crank, *m'*, passed between the spokes of the wheel, and when operated turns the drum. The arms *u w* are of unequal length, and between the ends of the longer pair, *u*, is journaled a roller, *b*, by which they are connected, the roller having near its journaled ends pulleys that revolve independently of the roller. At the ends of the shorter arms *w* are casters *d*, that, coming in contact with teeth on a plate fastened to the under side of the ladder *f*, prevent it from sliding out of place.

The posts *v* have at their upper ends pulleys *c*, over which the ropes *q* pass, of which ropes one end is fastened to the arms *w* and the others, by way of the pulleys *c* on the

posts *v* and over the pulleys on the arms *u*, to the drum *m*.

On the outside of the posts *v* are vertical rods *g*, of which the bent ends pass through the posts, and are secured by nuts. On the rods *g* are slides *i*, to which braces *k* and *l* are pivoted. The braces *k* and *l* are of unequal length, the longer, *k*, of which is fastened to the arm *u*, the shorter to the arm *w*, and when separated to their full extent the slides are drawn down to the foot of the rods *g*, holding the braces that support the arms.

On the casters *d*, at the end of the arms *w*, and on the roller *b*, between the ends of the arm *u*, a ladder, *f*, Figs. 1 and 3, is laid with its lighter end forward over the roller in a horizontal or slightly inclined position.

By applying and turning the crank *m'* the drum *m* winds up the rope *q*, lifts the arm *u*, and simultaneously the foremost end of the ladder, while the rear end, kept from sliding by the casters, gradually descends to the ground.

At the sides of the ladder are the movable braces *r*, hooked by rings or otherwise attached, which braces, when the ladder is not leaning against a wall or other support, uphold it, as shown at Fig. 2.

The advantages claimed for this invention are the facility of its locomotion, since it can by hand be pushed into places where the more cumbersome devices for saving lives or injury by fire cannot be introduced, and the facility with which its position can be changed from one place to another to meet danger, aside from the comparatively small cost of its manufacture.

Having thus described my invention, I claim—

1. The combination of the axle *a*, wheels *n*, and drum *m*, with the two arms *u w*, post *v*, ladder *f*, and the rope *q*, substantially as described.

2. The combination of the axle, the wheels *n*, the drum, and the arms *u w*, with the slotted post *v*, the slide *i*, rope *q*, ladder *f*, and the braces *k l*, substantially as set forth.

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

WILLIAM C. CRONEMEYER.

Witnesses:

T. F. LEHMANN,
LOUIS MOESER.