

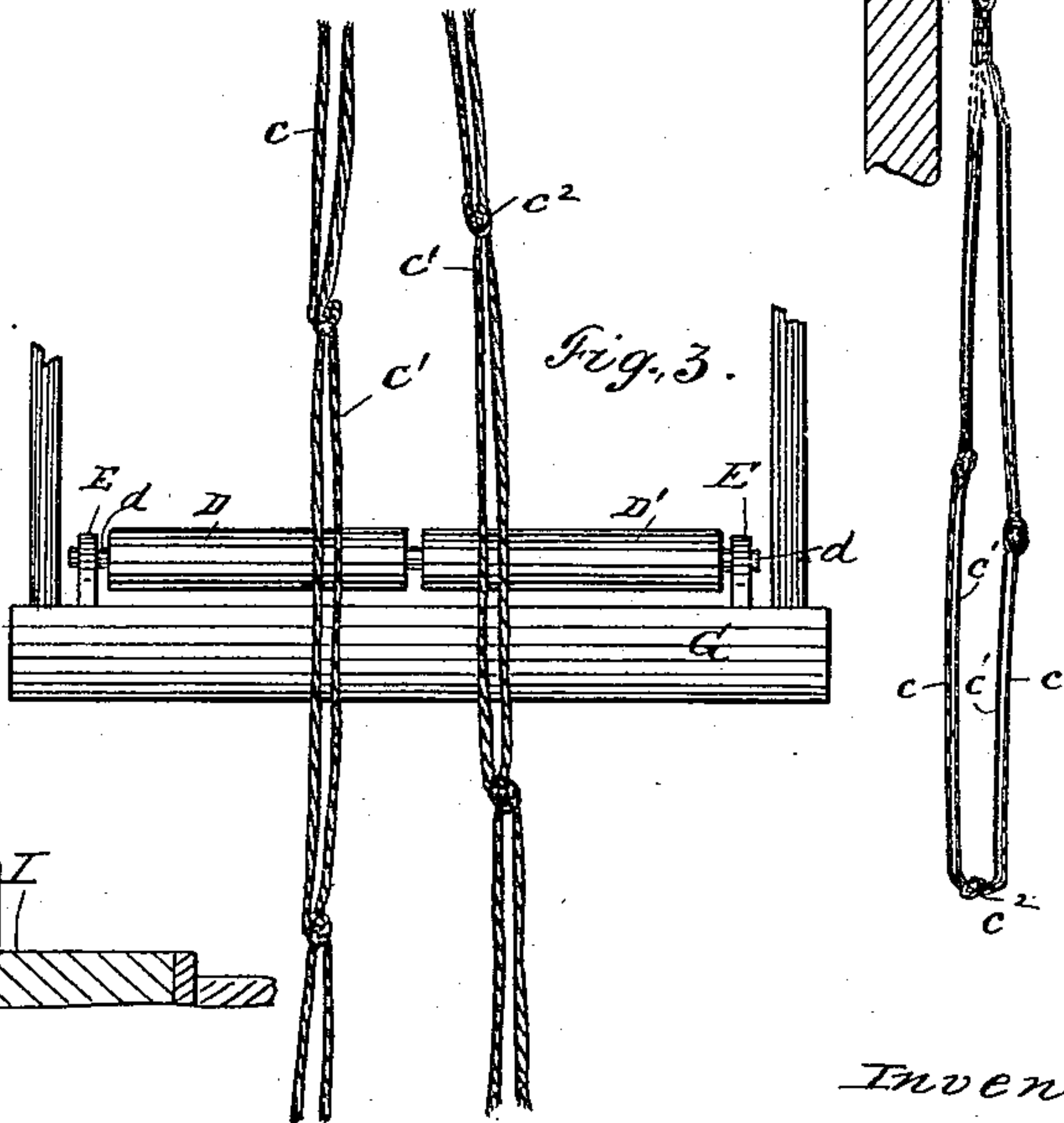
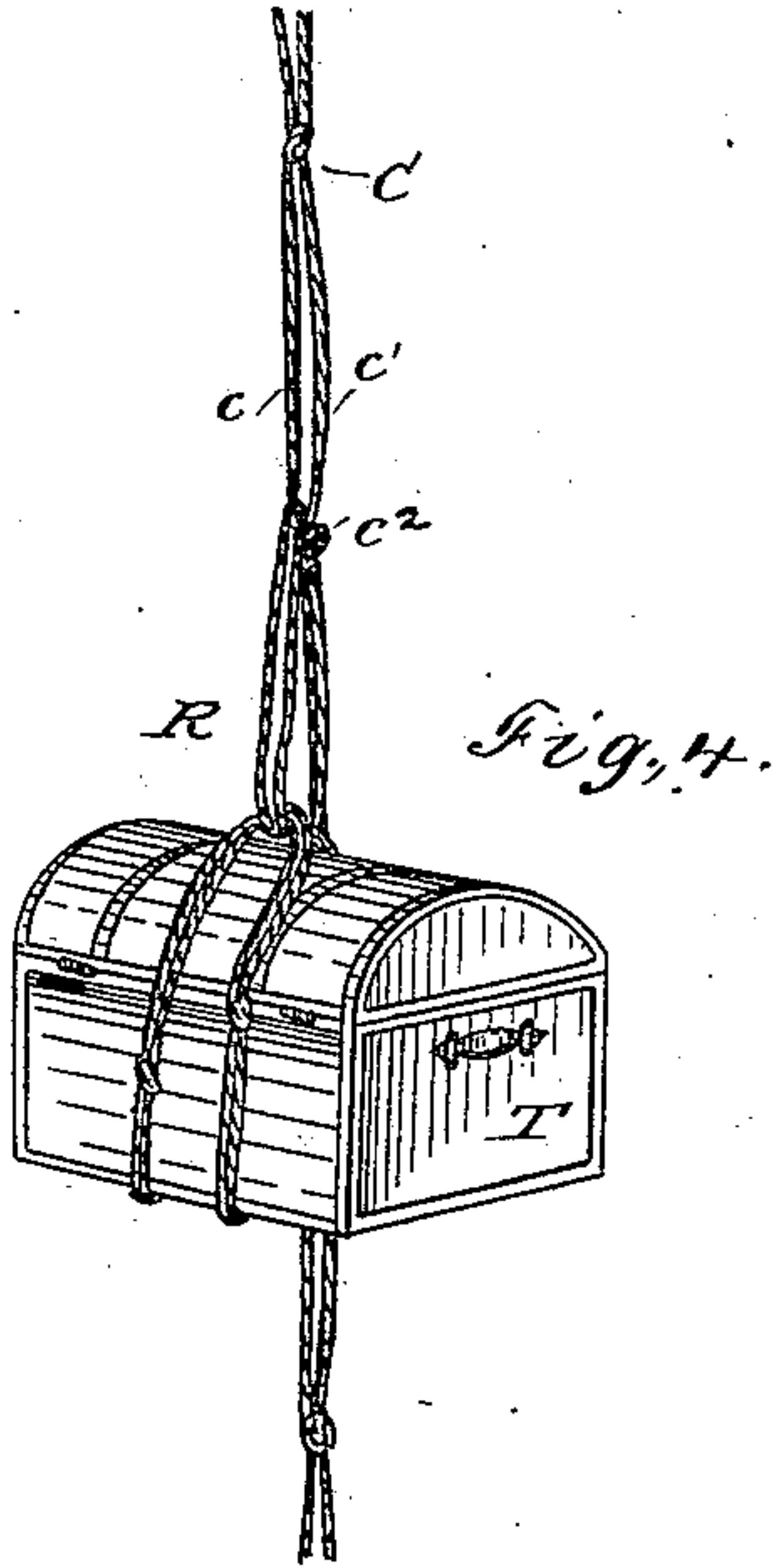
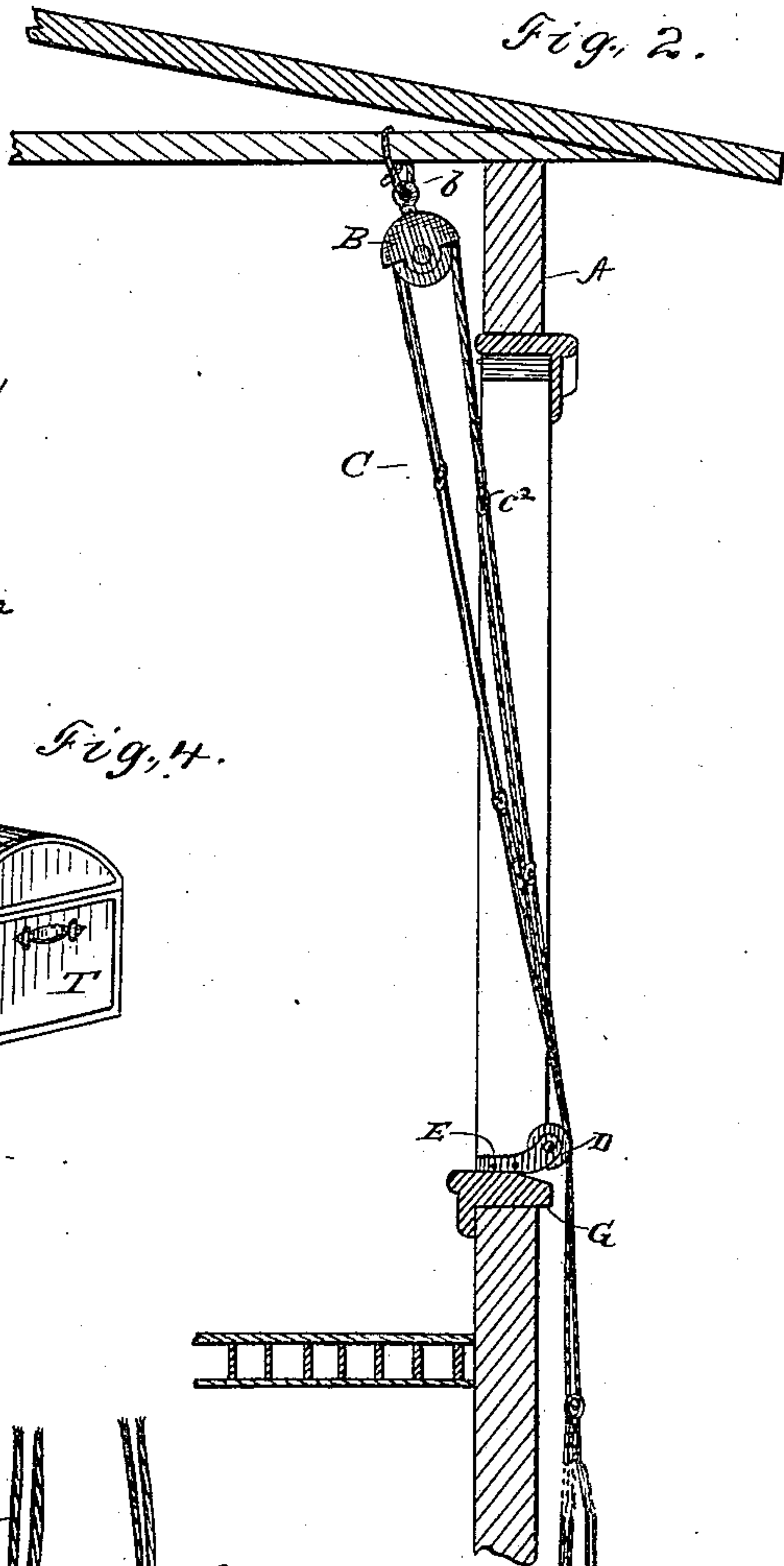
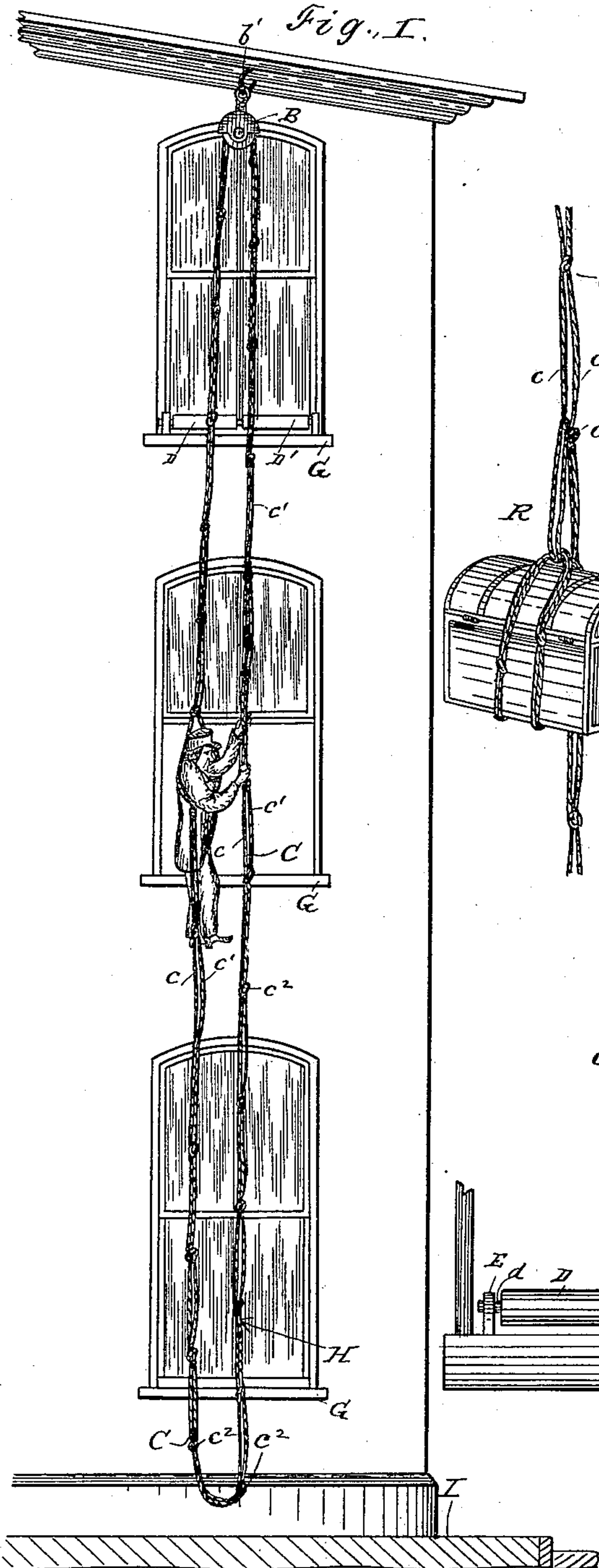
(No Model.)

J. W. WETMORE.

FIRE ESCAPE.

No. 333,182.

Patented Dec. 29, 1885.



Witnesses
William Downing
David N. Deems

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JEROME W. WETMORE, OF ERIE, PENNSYLVANIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 333,182, dated December 29, 1885.

Application filed May 23, 1885. Serial No. 166,520. (No model.)

To all whom it may concern:

Be it known that I, JEROME W. WETMORE, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Fire-Escapes, of which the following is a specification.

My invention relates to improvements in fire-escapes composed of pulleys and ropes; and the objects of my improvements are, first, to provide a flexible apparatus which is ready for use in removing persons and property at every point of its length and at every story of the building without returning any part of it after one descent has been made; second, to provide a fire-escape which can be used without change or special preparation to carry up an assistant to any story of the building for the purpose of removing property or aiding the comparatively helpless in being let down. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the apparatus applied along a line of windows in a building and hung on a hook in or above the upper window-casing. Fig. 2 shows a vertical section of the building through the upper window in a plane at right angles to the window and the apparatus suspended by attachment inside of the upper window and the ropes passing out over friction-rollers on the window-sill. (There may be four rollers instead of two.) Fig. 3, a face view of the window-sill and the friction-rollers. Two or four rollers are put on a shaft, because the ropes on them are running in opposite directions. The rollers are not essential; but when the pulley is suspended inside of the window the window sill or cornice in some cases having edges over which the knots do not slip readily, the rollers prevent a hitching or jerking motion. Fig. 4 represents an auxiliary rope ring which is first looped into one of the links of the double rope, and then by a slip-noose looped around the person or thing to be lowered. This auxiliary will be used when the person is too large or small or the object is not of the form to be readily held in one of the links of the double rope.

A represents the building; B, the pulley; C, the endless double rope; $c\ c'$, the links in the double rope C; c^2 , the knots in the rope

C, and D D' friction-rollers on the window-sill.

d is a round shaft on which the rollers turn. 55

E are standards to hold the shaft.

G is the window sill or cornice, and I represents the sidewalk.

H represents a point of the rope C when a party on the sidewalk may take hold of it to elevate a fireman or other assistant to the upper stories, or the assistant may elevate himself. 60

R is an auxiliary endless rope. This is first looped in one of the links of the double rope C, and by means of a slip-noose the person or thing may be let down or carried up. 65

T represents an object being lowered by means of the auxiliary rope R. This auxiliary rope would be particularly useful in lowering a child which cannot be safely held in one of the links. 70

L represents a person descending with one of the links under her arms, while she regulates her descent by holding the other side of the double rope C. 75

The knots are preferable from one and one-half to three feet apart. The links need not be of uniform length.

The apparatus is usually held by a hook at the proper window inside or out in the upper story. It is ready for use as soon as it is placed on the hook and thrown out of the window. It may be kept inside, suspended and ready for use or unattached and ready to be placed on a hook outside or inside. 80 85

The ordinary method of using the apparatus is to place one of the links $c\ c'$ over the head under the arms of the person wishing to descend. He can let himself down by passing hand under hand on the opposite side of the rope C, or, with friction gloves or blocks, letting it slip up through his hands. 90

A person in the upper story or on the sidewalk can let another down without effort by the party descending. 95

Instead of the sheave there may be a grooved friction-block in the pulley-block.

What I claim is—

1. A fire-escape consisting of an endless double rope knotted together at short distances to form a series of links or loops, either of which may serve as a body-holder for the person escaping or assisting others to escape, 100

together with a suitable pulley supporting the same, substantially as and for the purpose set forth.

2. A fire - escape consisting of an endless
5 double rope knotted together at short distances to form a series of links or loops for foot, hand, and body holds, a pulley supporting the same, and a suitable belt or band

adapted to be passed through the loops or links to suspend a person or thing when lowered from a building, substantially as and for the purpose set forth.

JEROME W. WETMORE.

Witnesses:

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