

(No Model.)

J. R. JONES.
FIRE ESCAPE.

No. 503,322.

Patented Aug. 15, 1893.

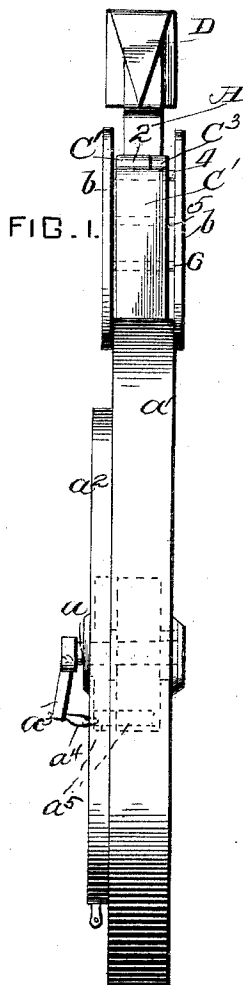


FIG. 2.

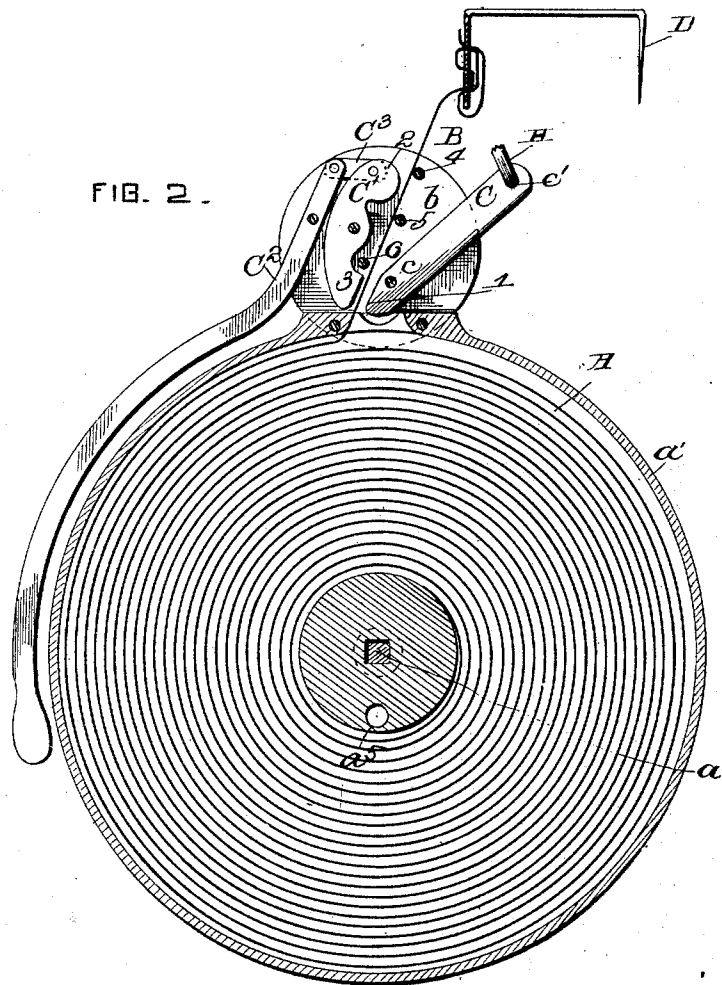
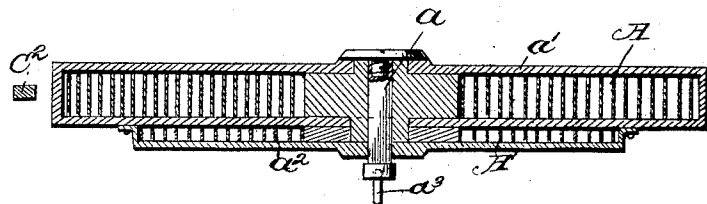


FIG. 3.



Witnesses
John D. Murie
Chas. E. Brock

Inventor
J. R. Jones
By *John Wedderburn*
Attorney

UNITED STATES PATENT OFFICE.

JOHN R. JONES, OF FRESNO, CALIFORNIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 503,322, dated August 15, 1893.

Application filed March 2, 1893. Serial No. 464,384. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. JONES, of Fresno, in the county of Fresno and State of California, have invented certain new and useful
5 Improvements in Fire-Escapes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to an improved portable friction fire escape, the object of the invention being to provide a device of this class that shall be very cheap, simple and compact, one that can be easily controlled by
15 any person, and one that can be easily returned to the elevation after a descent.

With these objects in view, my invention consists of a metallic tape wound upon an axle within a suitable case, a friction device
20 for regulating the unreeling of said tape, and a supplemental tape wound upon the same axle upon the exterior of the case, and in a direction opposite to that of the main tape, whereby the main tape may be wound, and
25 the escape elevated.

My invention consists also in certain details of construction and combination of parts, all of which will be fully described hereinafter, and pointed out in the claims.

30 In the drawings forming a part of this specification, Figure 1, is a side view of my improved escape. Fig. 2, is a longitudinal section, and Fig. 3, is a transverse section.

In carrying out my invention, I employ a
35 metallic tape A, which is wound upon an axle a , within a suitable case a' , of metal or other material. The axle a , projects beyond the case a' and upon this projected end is wound a supplemental finer tape A', and in-
40 closed by a suitable case a^2 , the supplemental tape being wound in a direction opposite to that of the main tape A. A winding, locking and unlocking crank a^3 is attached to the end of the axle similar to ordinary tape
45 measures, as the handle a^4 of said crank is adapted to be shoved into aligned openings a^5 in the hubs of the main reel and that upon which the finer tape is wound to lock said parts against revolution.

50 B, indicates the friction mechanism attached to the upper end of the case a' , for the purpose of regulating the descent of the es-

cape, and it consists of the two circular plates b , b , rigidly secured to the case a , at their lower ends, and properly spaced by means of
55 suitable bolts. A lever C, is pivoted between these plates upon a pin c , the upper end of said lever having an eye or loop c' secured thereon, upon which is hooked the snap hook of the harness, H. The lower end of the lever
60 is beveled as at 1, and is intended to contact with the tape as it passes from the case. A second lever C' is also pivoted between the plates opposite the lever C, and is provided with an upper head, 2, and lower head 3. A
65 hand lever C² is pivoted near its upper end between the plates b , b , and a link C³ is employed to connect the upper end of the hand lever with the lever C'. A series of friction
70 rollers 4, 5, and 6, is also arranged within the friction device, and against which the tape bears, the roller 6, being arranged adjacent to the lever C', while the rolls 4 and 5, are arranged upon the opposite side of the
75 tape.

A stout metal hook D, is secured to the end of the main tape, and is adapted to be placed upon a window sill or other suitable object, said hook being essentially rectangular in shape, so that it can be easily hooked upon any
80 convenient object. In case of fire, the hook D, is fixed upon a rigid object. The supplemental tape is then unwound if desired to a certain extent and lowered so that a person below, can draw the descending person away from
85 the building or sidewise to avoid passing line openings. The harness is then applied to the body and hooked to the end of the lever C. The body is then launched, and the descent begins. The moment the weight of the
90 body is thrown upon the lever C, it binds upon the tape, and at the same time operates upon the lower head of the lever C', forcing the upper head of said lever against
95 the tape, and also pressing said tape against the rolls 4, 5, and 6. By this means a maximum amount of friction is had upon the tape, and the descent is gradual and slow.

The actions above described, throw the hand lever away from the case a , and should
100 it be desired to descend faster, the hand lever is pressed toward the case, and the upper head of the lever C' is drawn away from the tape. When the device has been used once and it

is desired to return it for another descent, the supplemental tape is unwound, which re-winds the main tape, and draws the escape up to the primary elevation or any lower point desired.

Having thus described my invention, what I claim is—

1. In a fire escape, the combination with a main tape and case, of its axle and the supplemental tape wound thereon, the hubs on which said tapes are wound being provided with aligned openings, and a crank secured to the projecting end of said axle and having a handle adapted to be forced into said openings in the hubs substantially as shown and described.

2. In a fire escape, the combination, with a main tape and case, of a friction device having friction levers on each side of the tape, a hand lever for controlling speed, a supplemental tape adapted to wind up the main tape, an axle, on which said tapes are wound provided with openings and a crank on the projecting end of the axle having a handle to engage said openings of the hubs and lock the device against rotation substantially as shown and described.

3. In a fire escape, the combination, with a main tape and case, of a hand lever, and friction lever connected therewith, and a second lever to which the harness is attached, adapted to bear upon the tape, and operate

the first mentioned friction lever, substantially as shown and described.

4. In a fire escape, the combination, with a tape, of the circular plates, the friction lever on each side of the tape, the friction rolls also on each side of the tape, the hand lever, and link connecting said lever and one of the friction levers, and the harness attached to the other friction lever, substantially as shown and described.

5. In a fire escape, the combination of a main tape a casing inclosing said tape, two circular plates secured to the upper part of said casing, a lever C pivoted at its lower end between said plates and having an eye at its upper end, a second lever C' pivoted between the plates opposite the said lever C, a hand lever C² pivoted near its upper end between said plates and connected to the upper end of lever C', a series of friction rollers extending from one plate to the other, a supplemental tape, and a rectangular hook secured to the end of the main tape, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN R. JONES.

Witnesses:

C. FRED. BURKS;

WICK. W. PARSONS.