

(No Model.)

C. M. TRAVIS & C. H. STIBOLT.
FIRE ESCAPE.

No. 292,148.

Patented Jan. 15, 1884.

Fig. 1.

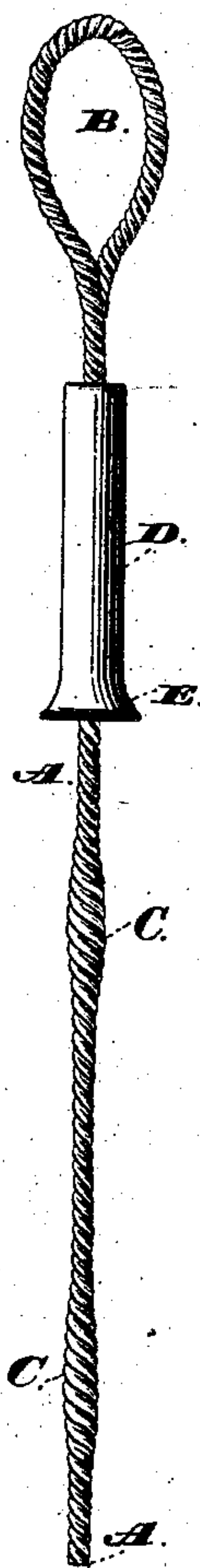


Fig. 2.



Fig. 3.



Witnessed:
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UNITED STATES PATENT OFFICE.

CHARLES M. TRAVIS AND CASPER H. STIBOLT, OF CRAWFORDSVILLE, IND.,
ASSIGNORS OF ONE-THIRD TO J. ROACH JOHNSON, OF SAME PLACE.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 292,148, dated January 15, 1884.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that we, CHAS. M. TRAVIS and C. H. STIBOLT, of Crawfordsville, in the county of Montgomery, State of Indiana, have invented certain new and useful Improvements in Fire-Escapes; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 shows a view in elevation of a portion of our fire-escape rope at the upper or attaching end thereof with the friction-sleeve in place ready for use; Fig. 2, a detail perspective view of the friction-sleeve, and Fig. 3 a longitudinal central section of the same applied to the rope as shown in Fig. 1.

The object of my invention is to provide an improvement in friction fire-escapes; and to this end it consists, principally, in the combination of a rope, formed with a series of swells or enlarged portions with tapering ends, with a yielding and pliable sleeve, as hereinafter set forth.

It also consists in the construction, combination, and arrangement of parts, as hereinafter described, and specifically pointed out in the claims.

In the drawings, A designates the rope formed with a loop, B, at its upper or attaching end, and with a series of swells, C C, at equal distances from each other. These swells are formed in the rope during the process of manufacture of the same.

The sleeve D is made of flexible or pliable material, being preferably a soft-rubber tube. Its internal bore is of a size to readily pass over the rope as constructed. Its lower end is provided with a hard ring, E, of hard rubber, wood, metal, or other desired material. This ring flares out from the tube, as shown, and its bore also flares from that of the tube, so that the sleeve can pass down over the rope without the possibility of the end of the tube being turned inward by frictional contact with the rope. The sleeve is of sufficient length to afford room for the grasp of both hands of the one using the escape. Its interior is roughened to increase its frictional hold upon the rope when the sides are pressed in by the grasp of the hands upon the sleeve. The rope is to be made of silk, hemp, cotton, or other suitable material interwoven with fine metallic wire,

and strong enough to bear the weight of the heaviest person. The wire interwoven or twisted in with the fibers forming the rope not only serves to strengthen said rope, but also to give it solidity and hardness enough to stand great wear and preserve its peculiar shape even during long continued use.

A rope formed in the manner and of the materials set forth can be made quite small and light in weight, while still having sufficient strength. The loop at the end furnishes ready means for attaching the escape to any articles of furniture in the room, or to a chimney or railing. If the object to which it is desired to attach the rope is too large for the loop to be passed over it, a running noose can be formed by passing the rope through the loop, and the noose so formed can be placed over or around the object.

The operation of our invention is as follows: The upper or loop end is attached to any fixed object, the rest of the rope being thrown out of the window. The user then grasps the sleeve with both hands and slides down the rope, supporting himself from the sleeve and regulating the speed of his descent by increasing or lessening the pressure of his hands upon the yielding sides of the said sleeve, and so increasing or diminishing the amount of friction between its inner roughened surface and the rope. As is obvious, the swells, shaped as shown, enable this friction to be applied to the best advantage.

Having thus fully set forth the nature of our invention, what we claim as new is—

1. In combination with the rope provided with a series of enlarged portions at intervals of its length, the sleeve formed of pliable material surrounding and adapted to slide upon the rope, substantially as and for the purpose set forth.

2. In combination with the rope provided with a series of enlarged portions or swells, the sleeve adapted to slide upon said rope, and formed of pliable material with a rigid enlarged portion at its lower end, substantially as and for the purpose set forth.

3. In combination with the rope formed of a series of enlarged portions or swells, the pliable sleeve with interior roughened surface, substantially as shown and described.

4. In combination with the rope formed with

a series of enlarged portions or swells, the pliable sleeve formed with interior roughened surface, and provided at its lower end with a hard ring flaring outward and downward from
5 the sleeve, substantially as shown and described.

5. The rope formed with a series of enlarged portions or swells, in combination with the soft-rubber sleeve roughened on its interior
10 surface, and provided with a hard flaring lower end, substantially as and for the purpose set forth.

6. The fire-escape rope for use with a frictional sleeve, made of suitable fibers interwoven or twisted with finer metal wires, and
15 formed with a series of enlargements or swellings along its length, substantially as shown and described.

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Attest:

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