

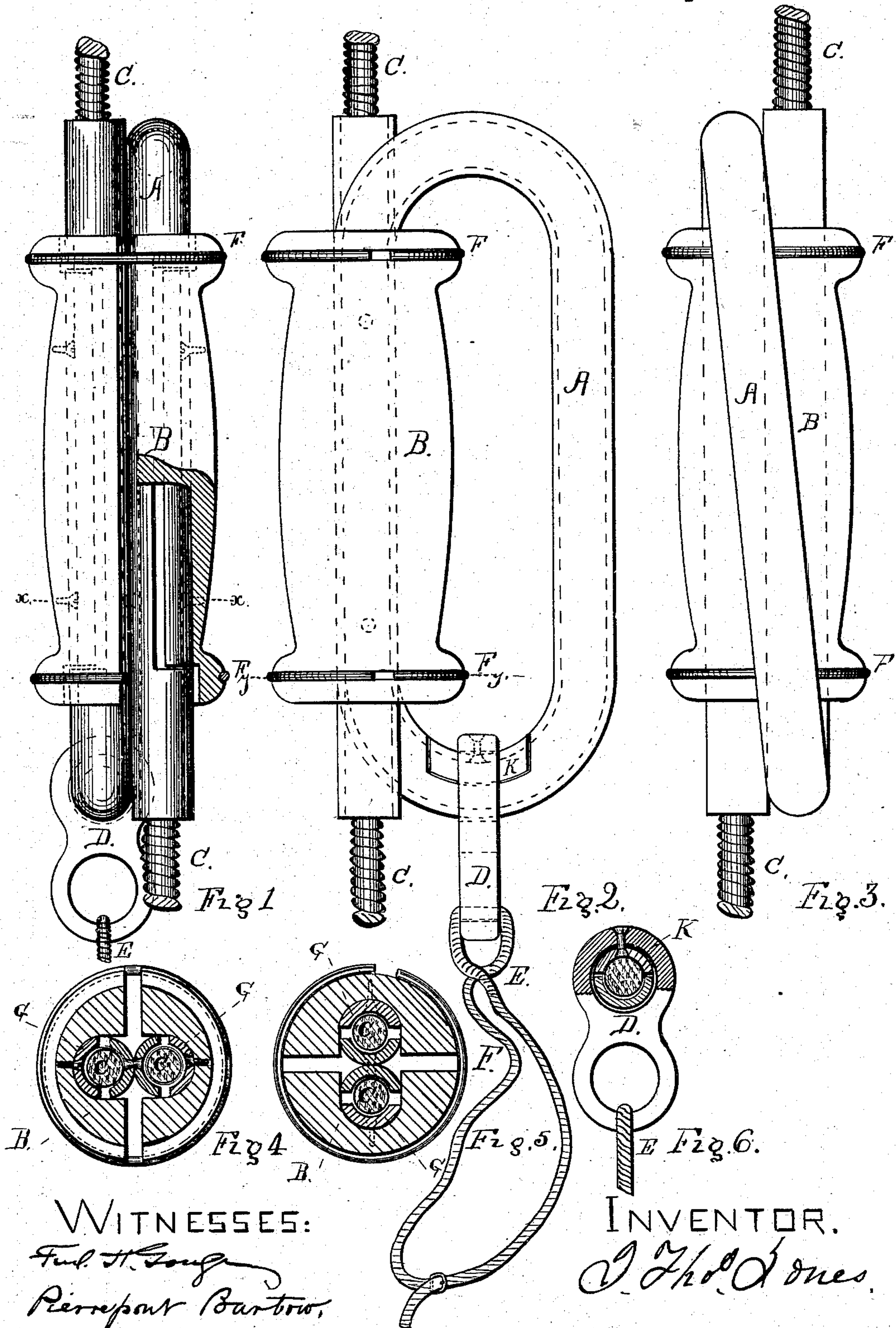
(No Model.)

J. T. JONES.

FRICTION CLAMP FOR FIRE-ESCAPES.

No. 284,305.

Patented Sept. 4, 1883.





# UNITED STATES PATENT OFFICE.

J. THOMAS JONES, OF UTICA, NEW YORK.

## FRICITION-CLAMP FOR FIRE-ESCAPES.

SPECIFICATION forming part of Letters Patent No. 284,305, dated September 4, 1883.

Application filed March 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN THOMAS JONES, of the city of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Friction-Clamps for Fire-Escapes and other Devices, of which the following is a correct description.

In fire-escapes the rope has been coiled around a friction rod or barrel, and pressure has been applied to regulate the speed of descent. In my improvement the rope passes as a loop through the handle, so that the friction results primarily from the weight drawing the rope powerfully into contact with the surfaces around which it is coiled; and, secondly, from more or less pressure by the hands in grasping the handle.

In the drawings, Figure 1 is a side view of said clamp attached to a rope; Fig. 2, a front view of the same; Fig. 3, a rear view of the same. Fig. 4 is a cross-section of the same at *x x*. Fig. 5 is a cross-section at *y y*, showing the spring, and Fig. 6 is a view of the link for the strap by means of which the person is suspended.

A is a metal tube, bent in the form of a coil, as shown, adapted to slide on the rope C, which passes inside of said tube all through said coil. The tube being made coil shaped, and preferably of one piece, serves to produce friction upon the rope, and to a greater or less degree to support the weight of the person descending the fire-escape.

B is a clamp-handle, constructed in two sections, which are held toward each other by the springs FF. These springs can be inside, so as to produce more or less friction upon the rope C, according to their size and the tightness with which they clasp said handle-sections together; or they can be made with spring-loops with set-screws to adjust the amount of friction or pressure placed on said rope C. Sections of the tube A on the straight parts that lap past each other are cut away on the outside about the length of the split clamp-handle B, and the tube is then riveted or fastened together. The sections G, that are cut out of said tube, are then securely attached to

the inside of the clamp-handle B, so that when said clamp-handle is grasped in the hands of the operator as the two sections are pressed together friction is produced on the doubled rope, that is between said clamp and the tube A, four distinct friction-surfaces being created thereby. By making the section G of rubber or other similar material friction is applied to the rope with less pressure upon the clamp-handle than though metal is used.

D is a link with double eyes, the upper eye surrounding the tube A, so that a rope or belt, E, can be passed through the lower eye of the link and attached to the operator.

A section of the tube A may be cut away, so that the shoe K, which is attached to said link D, presses against the rope C, and, producing friction on said rope, acts as a brake by the weight of the person suspended by the rope or belt E.

I claim as my invention—

1. The tubular shield for the rope, bent into the form of a loop, with two straight parallel portions where the parts of the rope lie side by side, in combination with the two-part clamp B, constructed and operating substantially as set forth.

2. The tubular shield for the rope, bent into the form of a loop, and parallel where the two portions of the loop lie side by side, in combination with the two-part clamping-handle B, and the tube-sections G, secured within the handle B, substantially as specified.

3. The tubular shield, formed as a loop, through which the rope passes, in combination with the link D and friction-shoe K, connected to such link and the suspending-strap or waist-belt, substantially as set forth.

4. In combination with the tubular shield and rope, the tube-section G, of india-rubber or similar material, substantially as specified.

Signed by me this 7th day of March, A. D. 1883.

J. THOS. JONES.

Witnesses:

MORTIMER G. THOMSON,  
JNO. A. ROBERTS.