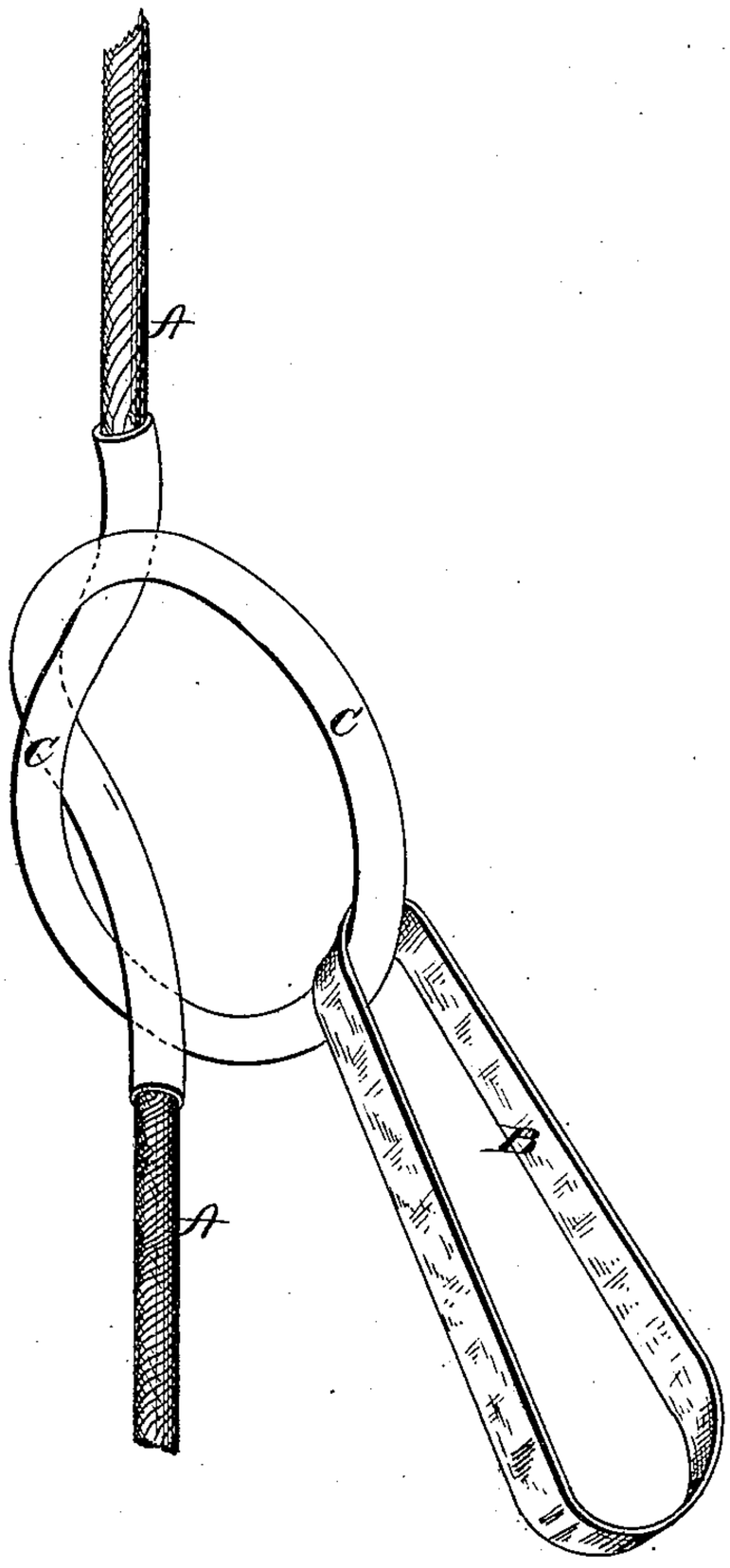
J. J. ADGATE.

Fire-Escape.

No. 202,504. Patented April 16, 1878.



WITNESSES

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JOSEPH J. ADGATE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES E. PARENT, OF SAME PLACE.

IMPROVEMENT IN FIRE-ESCAPES.

Specification forming part of Letters Patent No. **202,504**, dated April 16, 1878; application filed December 19, 1877.

To all whom it may concern:

Be it known that I, JOSEPH J. ADGATE, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Fire-Escapes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a fire-escape, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a perspective view of my fire-escape.

The fire-escape consists simply of a rope, A, a belt, B, and a metallic tubular knot, C, through which latter the rope passes. The metal pipe or tubing of which the knot C is made may be of any suitable length, and turned into the form of a knot, as shown, the ends of the tubing extending, of course, in opposite directions. The belt B passes through the metallic knot C, and the ends are sewed or otherwise permanently fastened together, without buckles or other extraneous fastenings.

Either end of the rope A may be fastened to a bed-post or other place inside of a room and the belt passed under the arms, and, the person then passing out through the window, the knot C will slide gently down on the rope, without the necessity of applying or using any brake or other device for such purpose to regulate the speed of the descent. It is only necessary for the person descending to give a pull on the rope below the metallic knot, and the descent is quickly and easily checked.

The fire-escape is simple and cheap, and at the same time portable, durable, and not liable to get out of order.

After one person has passed down, the rope may be hauled up and the ends thereof reversed, and the fire-escape ready for a second descent.

In my fire-escape no brake is required, the friction caused by the rope passing through the metallic knot answering the same purpose, thus simplifying and cheapening the fire-escape.

I am aware that a fire-escape formed of a metallic tube bent into one or more coils, and having the rope passed through the same, is not new.

The main object with my invention is to form the fire-escape of as little metal as possible, and form a device that will produce a great amount of friction on the rope when in use. By experiments I find that a tube bent in an open-knot form will produce a greater amount of friction than one made in coils, unless a number of coils are made in the tube. In such latter case it adds expense in construction and weight and space in carrying.

It is obvious that by giving the tube the form of an open knot I secure more changes of curvature (upon which the creation of friction of the rope passed through the same largely depends) with the same weight of tubing and bulk of the device than by other forms now known.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A fire-escape consisting of a metallic tube made in the form of an open knot—that is, with the two ends of the tube passed over and under, and extended above and below the ring—in combination with the rope passing through the same, and the belt for carrying the descending person, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of December, 1877.

JOSEPH J. ADGATE.

Witnesses:

FRANK GALT,

C. L. EVERT.