

No. 722,713.

PATENTED MAR. 17, 1903.

J. S. JOHNSON.  
FIRE ESCAPE.

APPLICATION FILED APR. 16, 1902.

NO MODEL.

FIG. 1.

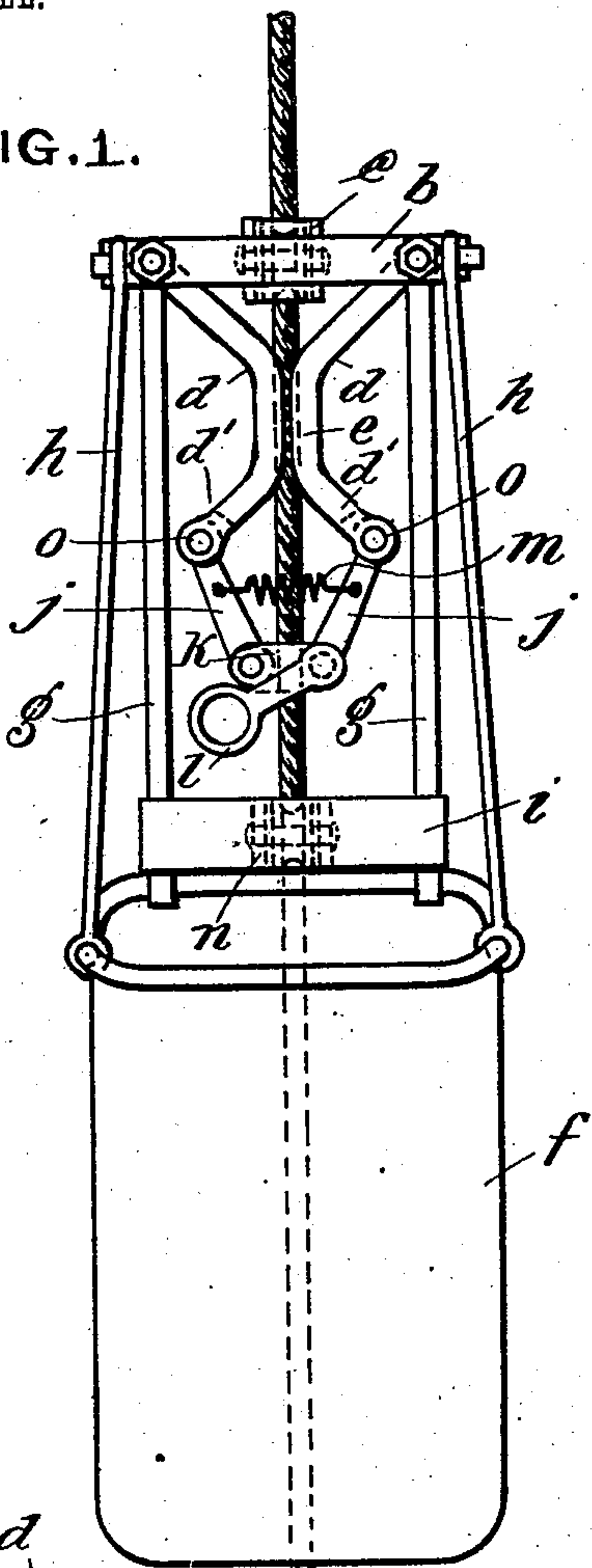


FIG. 2.

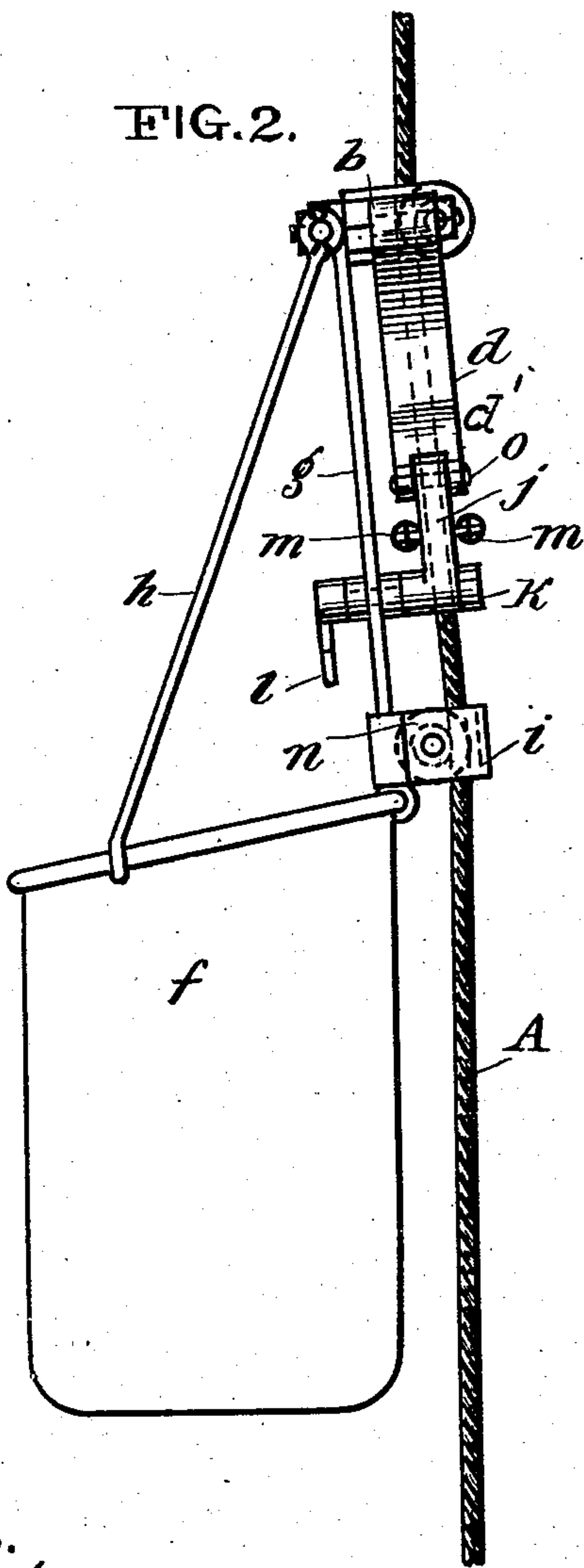


FIG. 5.

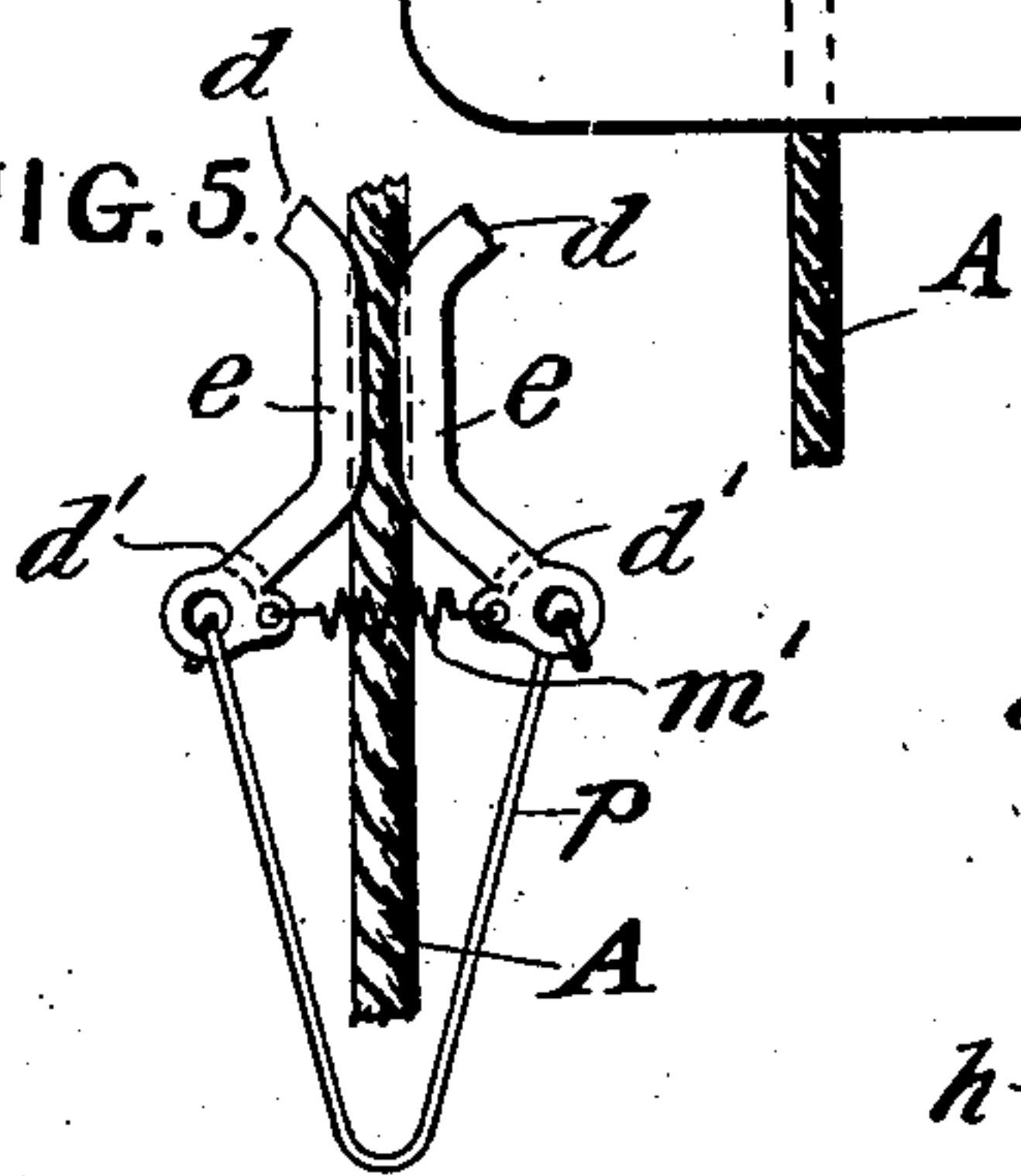


FIG. 3.

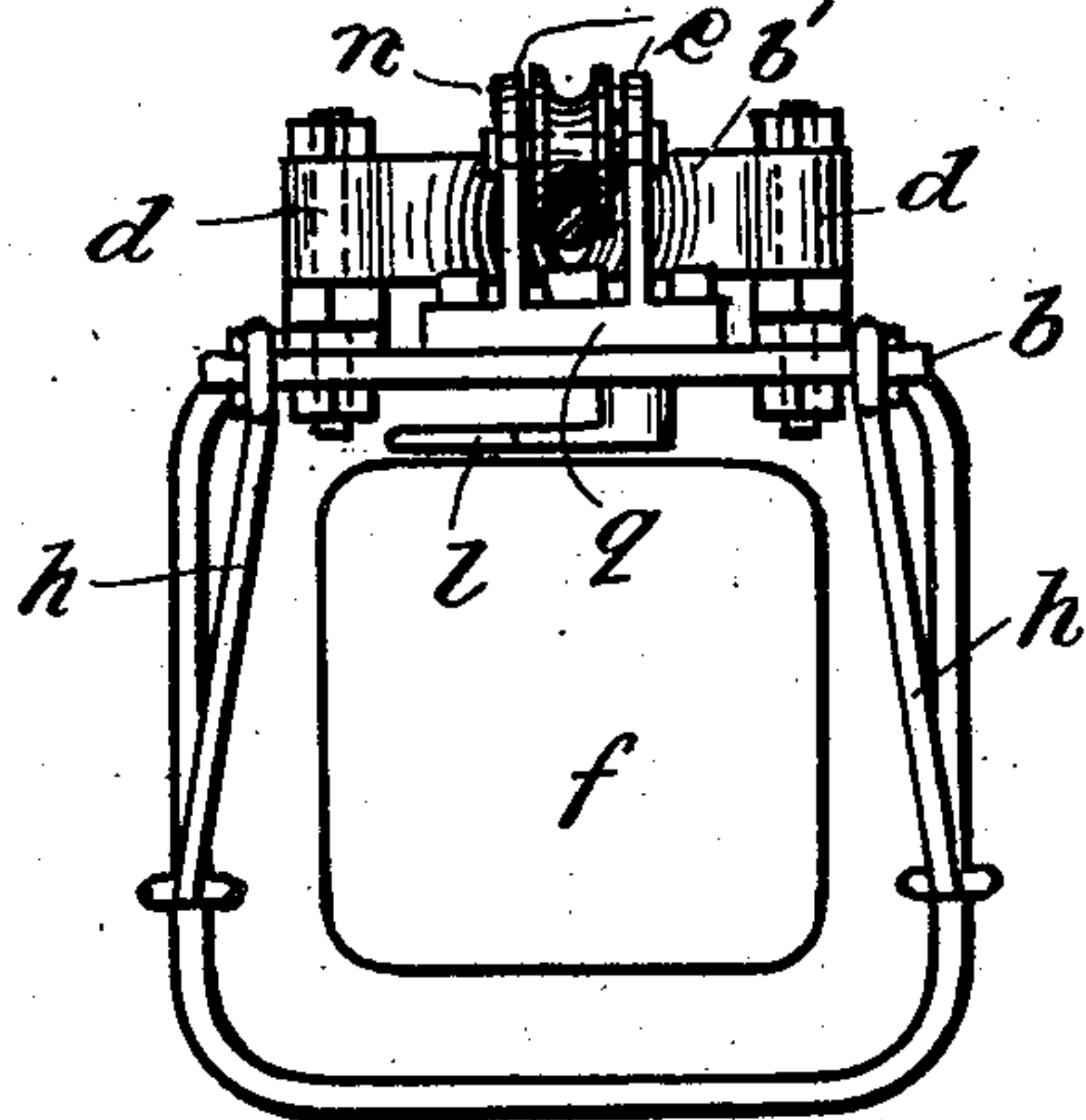
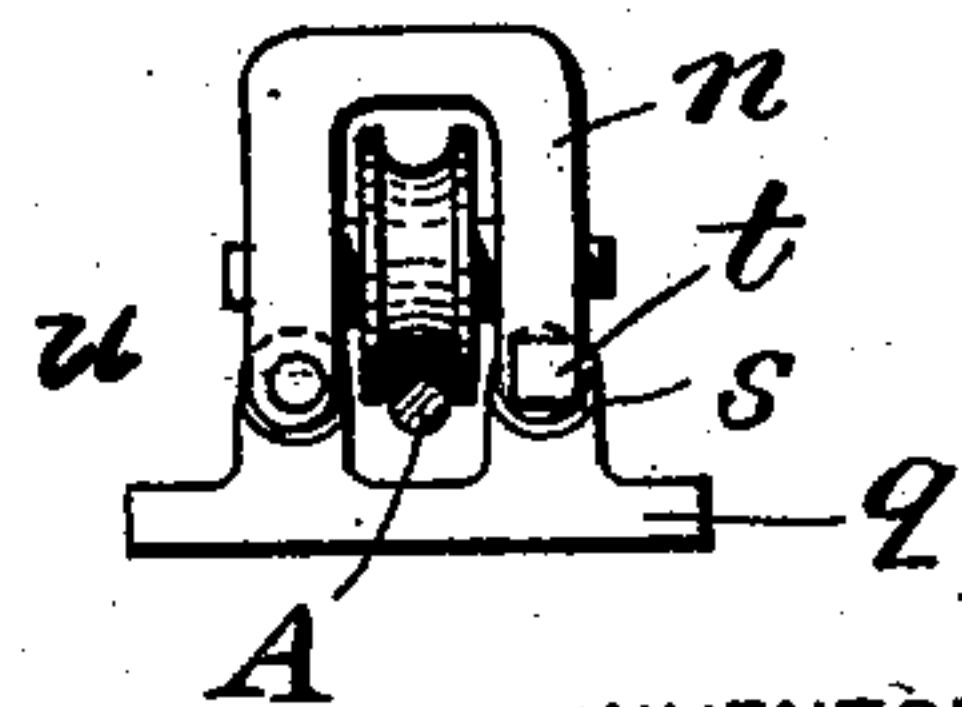


FIG. 4.



WITNESSES:

*C. Sedgwick*  
*J. M. Howard*

INVENTOR

*John S. Johnson*

BY

*A. D. Hayer*

ATTORNEY

# UNITED STATES PATENT OFFICE.

JOSEPH S. JOHNSON, OF NEW YORK, N. Y.

## FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 722,713, dated March 17, 1903.

Application filed April 16, 1902. Serial No. 103,232. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH S. JOHNSON, a citizen of the United States of America, and a resident of New York city, county and State of New York, have invented certain new and useful Improvements in Fire - Escapes, of which the following is a specification.

My invention consists of an improved rope-gripping friction traveling device and controlling apparatus with a sack, belt, or other attachment for suspending the user of the apparatus for escaping by a rope from a window of an upper story, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 represents a front elevation of my improved apparatus applied to a rope and contrived for the employment of a sack for carrying the user. Fig. 2 is a side elevation of the same. Fig. 3 is a top view with the rope in section. Fig. 4 is a detail showing detachable guides for connecting the apparatus to the rope. Fig. 5 represents a modified means of actuating the gripping-jaws.

A represents a wire or other suitable rope to be suspended from the upper part of a building in suitable proximity to a window for ready access to it.

b is a cross-bar carrying at its middle part a running-guide c, which traverses the rope. At the extremities of the cross-bar rope-gripping friction-jaws d are pivoted, respectively, which are adapted to grip the rope below the guide-runner when power is applied to the lower ends, tending to force the intermediate rope-gripping parts e onto the rope. From the ends of the cross-bar a sack f, or it may be a belt or other suitable device for containing or securing to the body of the user, is suspended from the cross-bar b by rods g and h or other suitable means, with a cross-bar i connecting the rods g and having a running-guide n on the rope. The lower parts d' of the jaws are projected divergently from the rope, so that pulling downwardly on the extremities of the divergent parts causes gripping force of the intermediate parts e on the rope. For applying such force links, as j, or

any equivalent pendent devices are provided suitable for the user occupying the sack or suspended by a belt to so operate the jaws and control the descent of the user of the apparatus, said links being pivoted to said lower ends d' of the jaws at o. In this example I represent the links j pivotally connected at their lower ends to a block k, to which a handle l is applied for the use of the operator; but any approved means may be employed. For instance, a rope p, attached at its ends to the ends of the jaws, respectively, with the bight of the rope hanging between them, may be employed.

To maintain grip on the rope A and retain the sack or belt while preparing for the descent, contracting coiled springs m or m' may be coupled to the links j or to the lower extremities of the gripping-jaws.

If it be desirable to make the apparatus readily detachable from the rope A, the guides c and i may be made to open, as represented in Fig. 4, in which the running-guide comprises a yoke n, pivoted at u to the base q, attached to bar b, and coupled at s by a pin t, that may be inserted and removed at will.

What I claim as my invention is—

In a fire-escape the combination with a rope, of a cross-bar having a guide midway of its ends to run on the rope, rope-gripping friction-jaws pendent from the ends of the cross-bar respectively, and adapted to grip the rope as the result of downwardly-applied force on them, means for suspending the user below the gripping-jaws from the said cross-bar and independently of said jaws, means for applying force downwardly on the gripping-jaws at the will of the suspended user and irrespective of the force of his suspended weight, and means for applying retaining-grip of the apparatus on the rope preparatory to the suspension of the user.

Signed at New York this 28th day of March, 1902.

JOSEPH S. JOHNSON.

Witnesses:

A. P. THAYER,  
C. SEDGWICK.