

No. 607,912.

Patented July 26, 1898.

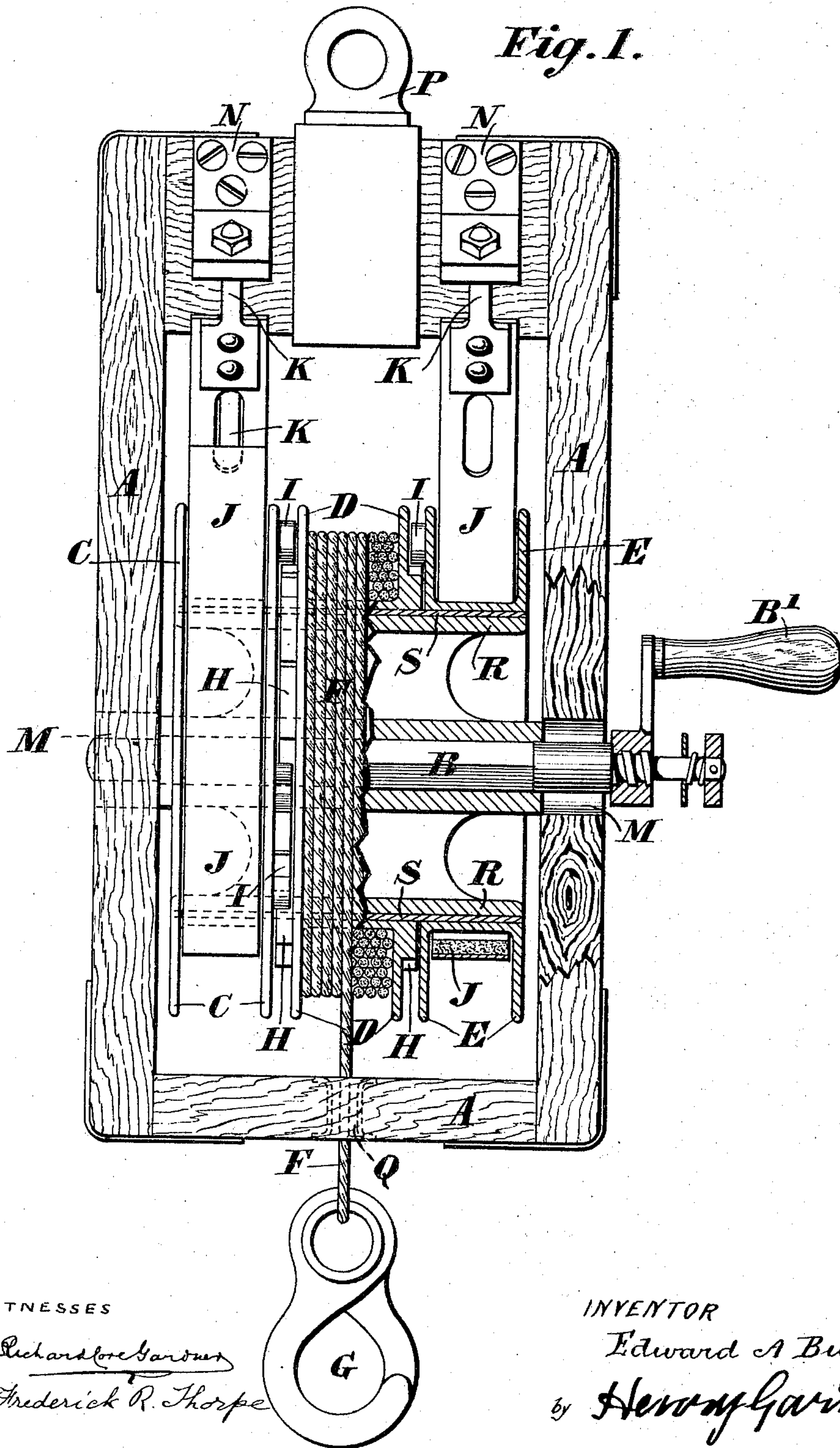
E. A. BULL.

APPARATUS FOR SAVING LIFE FROM FIRES, &c.

(Application filed Feb. 17, 1898.)

(No Model.)

2 Sheets—Sheet 1.



No. 607,912.

Patented July 26, 1898.

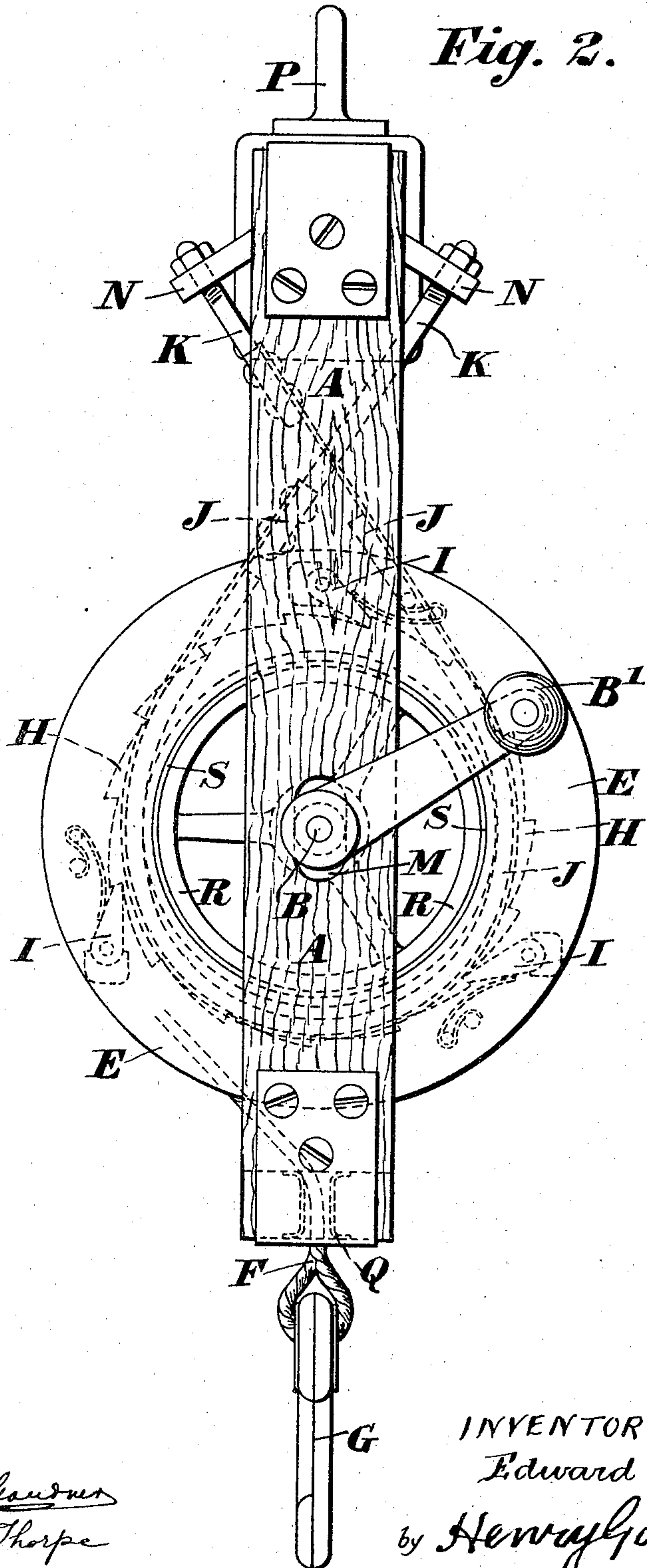
E. A. BULL.

APPARATUS FOR SAVING LIFE FROM FIRES, &c.

(Application filed Feb. 17, 1898.)

(No Model.)

2 Sheets—Sheet 2.



WITNESSES

*Richard Fore Gaudner*  
*Frederick R Thorpe*

INVENTOR

*Edward A Bull.*

by *Henry Gardner*  
AGENT



# UNITED STATES PATENT OFFICE.

EDWARD AUGUSTUS BULL, OF LONDON, ENGLAND.

## APPARATUS FOR SAVING LIFE FROM FIRES, &c.

SPECIFICATION forming part of Letters Patent No. 607,912, dated July 26, 1898.

Application filed February 17, 1898. Serial No. 670,675. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD AUGUSTUS BULL, a subject of the Queen of Great Britain, residing at St. Pauls Vicarage, Hounslow Heath, London, county of Middlesex, England, have invented certain new and useful Improvements in Apparatus for Saving Life from Fires, Applicable also for Lowering Goods, of which the following is a specification.

The object of my invention is to construct an apparatus for saving life at fires or for lowering goods from the upper part of buildings or for other similar purpose at a uniform rate of speed, such apparatus or part of same being adjustable to suit the varying weights to be lowered.

In the annexed sheet of drawings, Figure 1 is a part sectional elevation, and Fig. 2 a side view, of my device.

I form a framework A, which by its axle B carries three pulleys or drums C D E, the center of which, D, has the wire or other cord F, to which the person or goods to be lowered are attached either direct to the clip-hook G or to a sling or seat therefrom. This pulley or drum D is secured to the axle B, and the others, C E, on each side run loose in one direction and are in connection with the cord-pulley D for movement in the other direction by ratchet H and pawls I I or other device, the outer pulleys or drums being under control of leather-lined band-brakes J J, which can be tightened or loosened on the pulleys by screws K K or other means.

The axle B is arranged in slots M M or loose bearings of the framework A, so that the weight of the person or goods being lowered will cause the pulleys C D E to act upon the band-brakes, the end or ends of which are secured to the framework A, such as by the metal plates N N, so that the rate of speed can be regulated more or less, a perfect regulation being secured by the tightening or loosening of the band-brakes J J, which really take the weight of the descending body by their drop permitted by the loose fitting of the axle B.

The appliance may be secured to the house or building in any desired manner, but preferably by the eye P, the wire cord being rove through the central hole Q of the bottom cross-bar of the frame.

In action the lowering or paying out of the cord causes the ratchet and pawl or other device to carry the brake-pulleys with the cord-pulley and according to the weight to be lowered so the grip of the pulleys on the brake-straps is insured.

The axle B is provided with a handle for rewinding the wire or cord on the pulley ready for allowing the apparatus to be again used.

It is important that the cord be wound up in one direction only, and to prevent an error the axle is screw-threaded for the handle to engage for wind-up purposes and to unscrew if turned in the reverse direction, when its collar can abut against a spring-plate, a nut being secured to prevent the handle becoming lost.

The drums C E are mounted loosely on central block R, and to give freedom to rotate I arrange a hard-metal band S between it and the pulleys.

What I claim, and desire to secure by Letters Patent, is—

An apparatus for saving life, consisting of framework A, axle B arranged in slots M in said framework A, block R fixed on axle B, band S surrounding block R, fixed drum D, and loose drums C, E arranged around band S, teeth H formed on side of drum D, spring-action pawls I on inner sides of drums C E engaging teeth H, adjustable brake-straps J J secured to framework A and encircling drum C E and carrying drums D, C, E and axle B, block R and band S, rope F secured to drum D, substantially as described and as shown on the annexed drawings.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EDWARD AUGUSTUS BULL.

Witnesses:

HENRY GARDNER,

RICHARD CORE GARDNER.