

No. 801,707.

PATENTED OCT. 10, 1905.

W. H. BECKER & R. F. WILLIAMS.

HOLDER OR SOCKET FOR WIRE ROPES, CABLES, &c.

APPLICATION FILED MAY 4, 1905.

Fig.1.

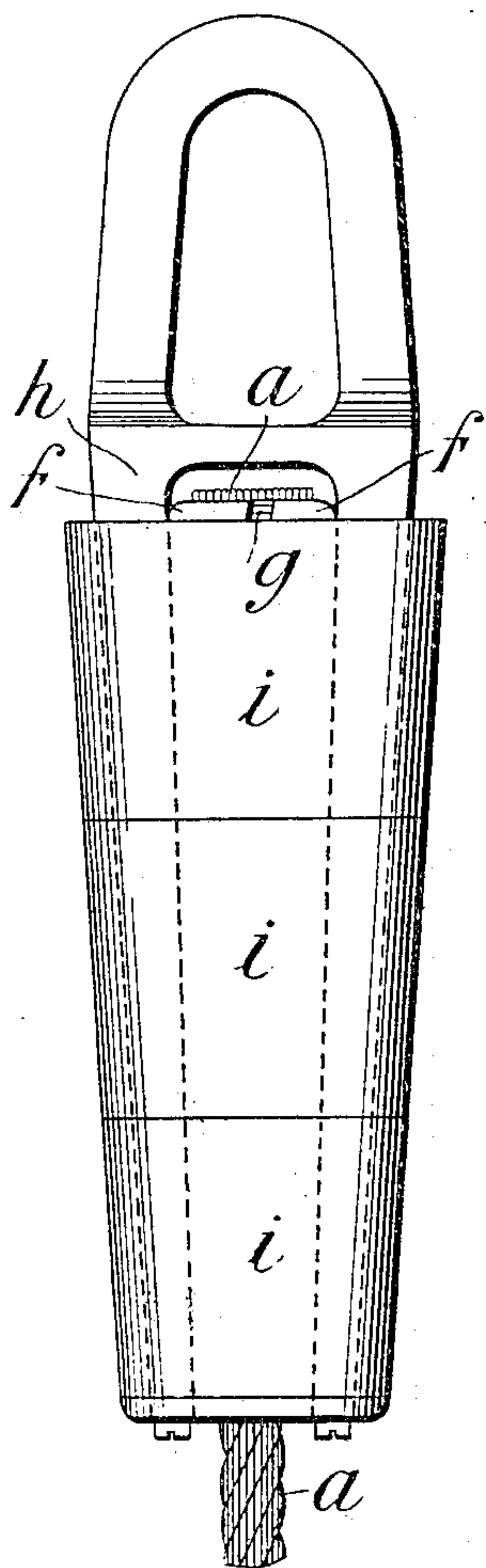


Fig.2.

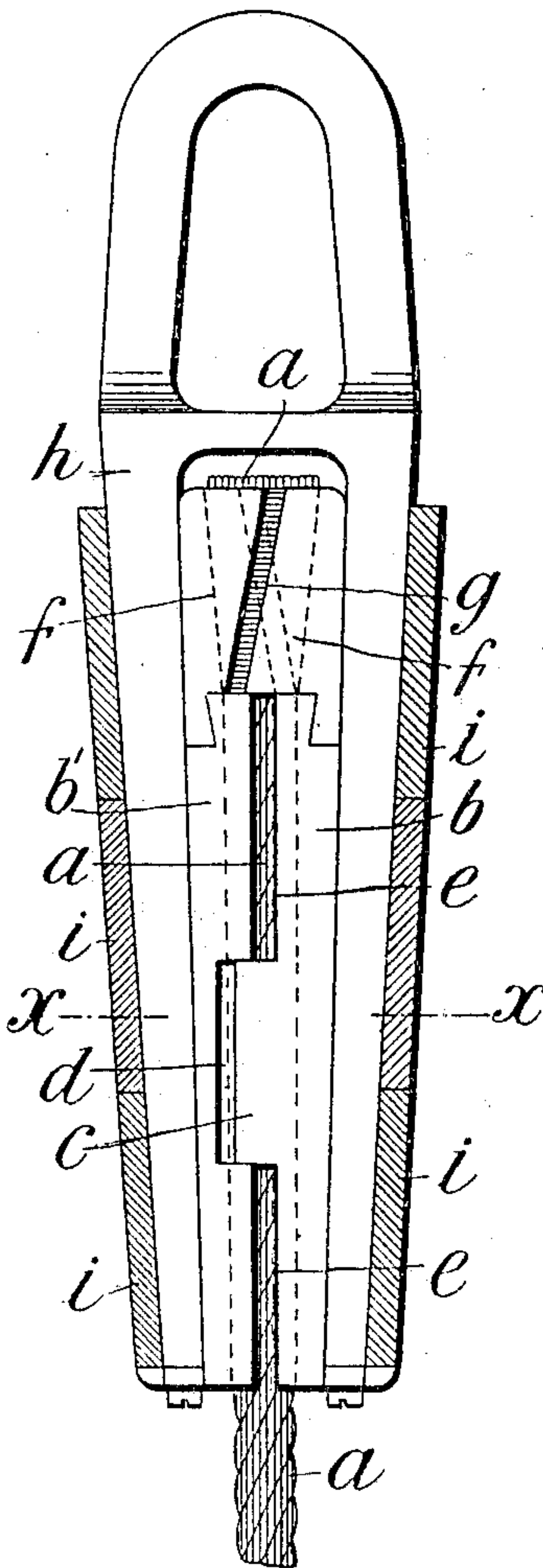


Fig.3.

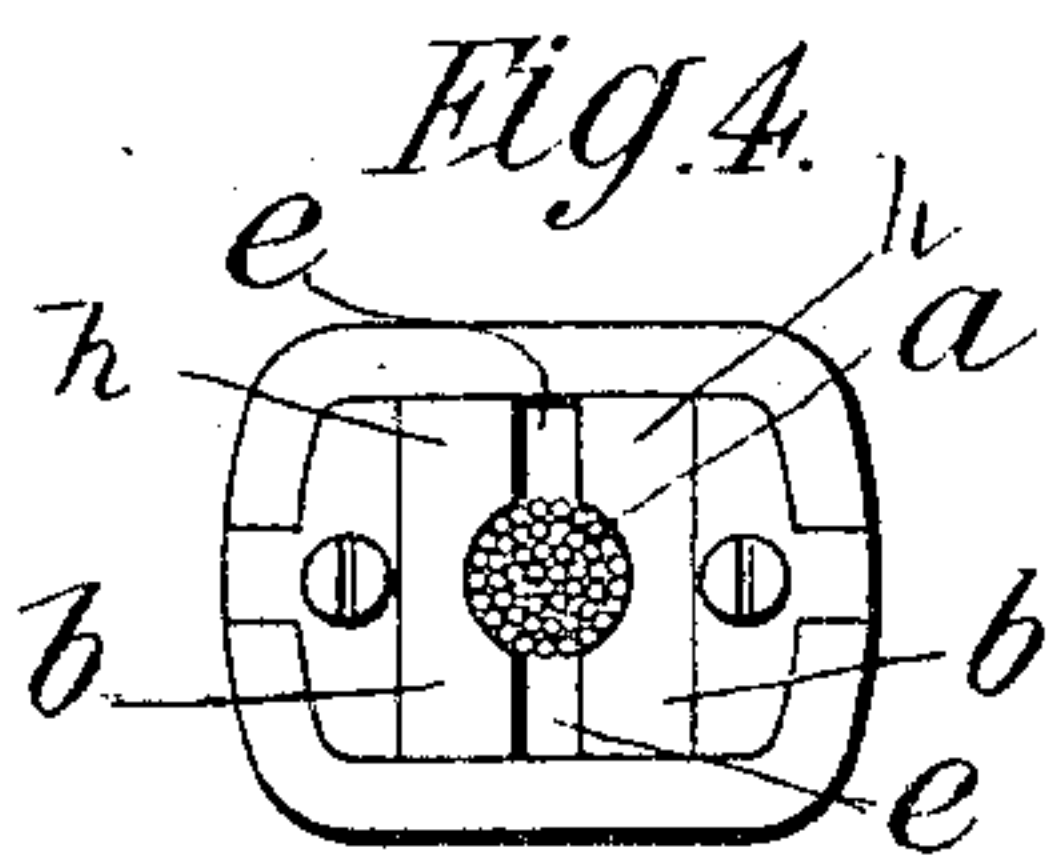
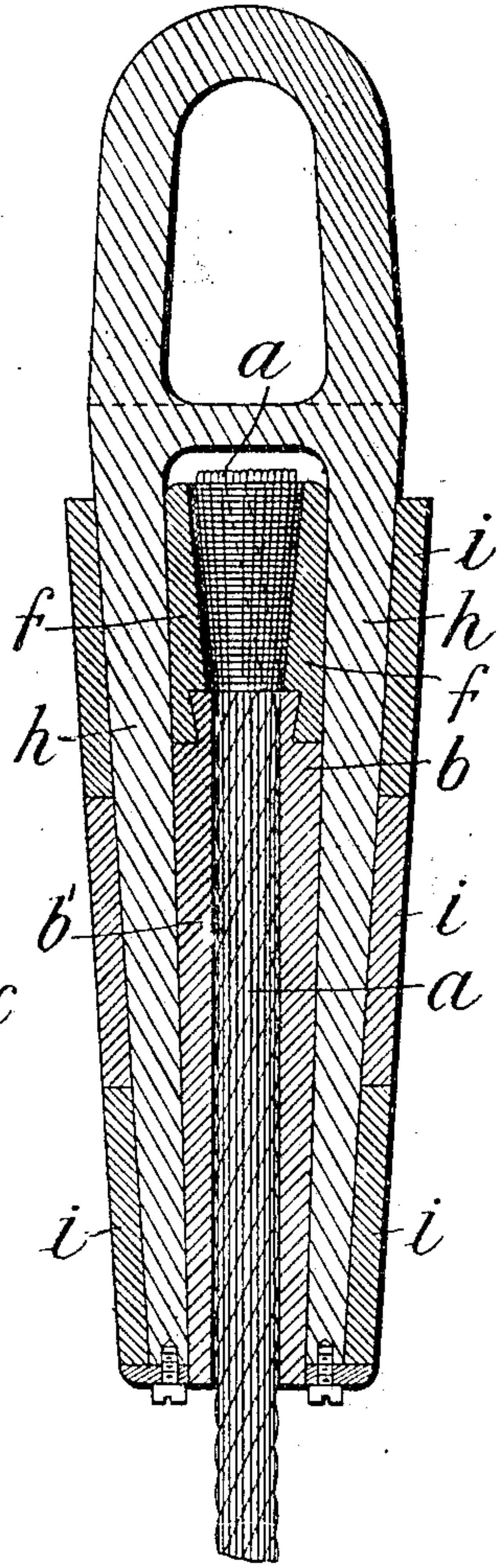


Fig.4.

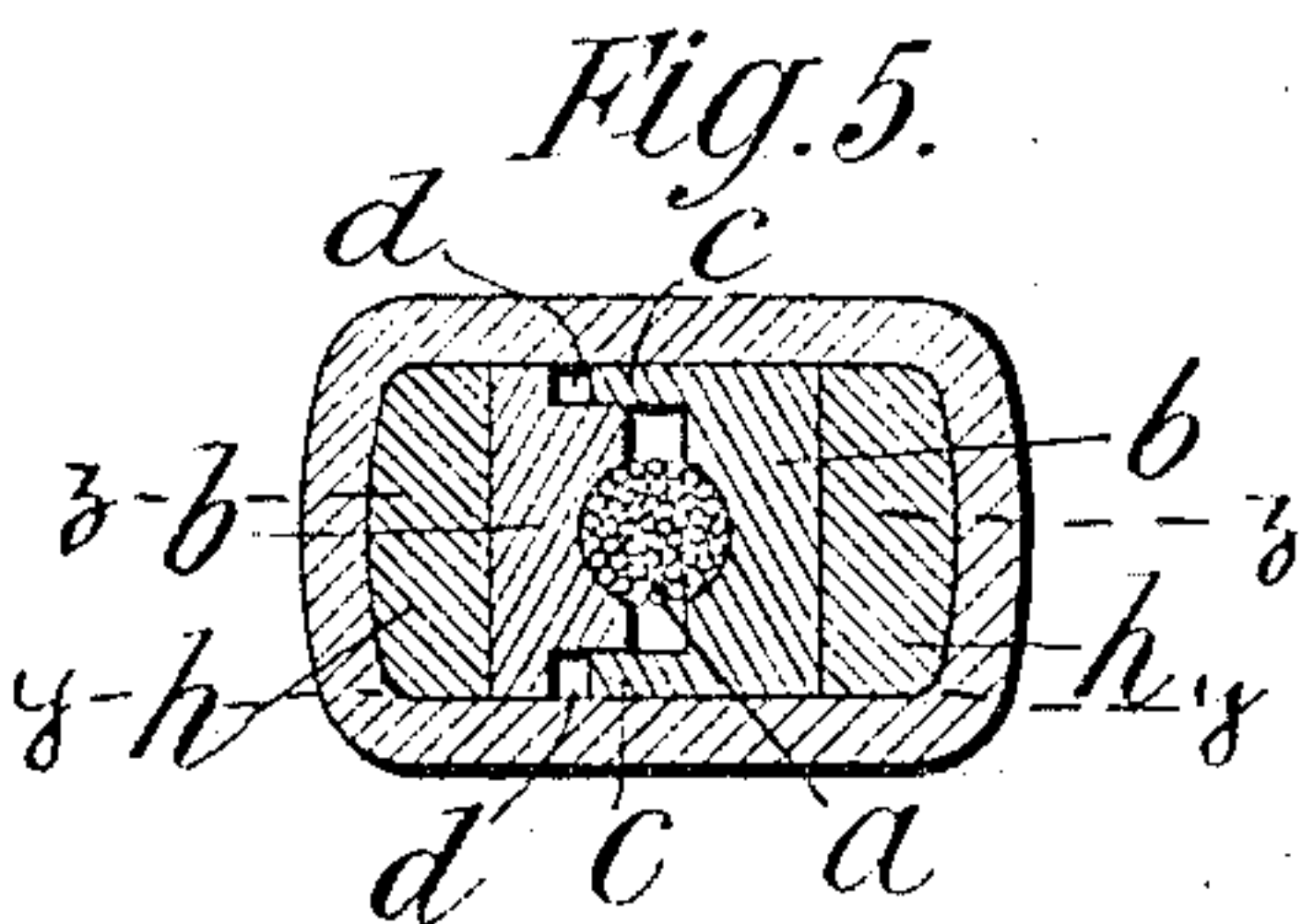


Fig.5.

WITNESSES.  
*Stephen Gustafson*  
*Adelaide B. Stelle*

INVENTORS.  
*William H. Becker*  
*Robert F. Williams*  
*By Wilkinson & Fisher*  
*their attorneys*



# UNITED STATES PATENT OFFICE.

WILLIAM HENRY BECKER AND ROBERT FRANCIS WILLIAMS, OF  
CARDIFF, ENGLAND.

## HOLDER OR SOCKET FOR WIRE ROPES, CABLES, &c.

No. 801,707.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed May 4, 1905. Serial No. 258,833.

*To all whom it may concern:*

Be it known that we, WILLIAM HENRY BECKER and ROBERT FRANCIS WILLIAMS, subjects of the King of Great Britain and Ireland, residing at Cardiff, Wales, England, have invented certain new and useful Improvements in Holders or Sockets for Wire Ropes, Cables, and the Like; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to holders or sockets for gripping wire ropes or cables toward the ends thereof as a means for connecting the same to pit-cages, hoists, lifts, railway wagons or trams or to a fixed anchorage.

This invention consists in an appliance for the aforesaid purpose having as its principal feature one pair or more of opposed rope-gripping wedges which are so associated as to freely operate toward and away from each other laterally, but interlocked relatively to longitudinal movement, whereby the wedge members move conjointly in the same direction longitudinally and in opposite directions laterally, the wedges being inclosed by a suitable socket or frame member having oppositely-directed inclined faces engaging the inclining outer faces of the wedges.

To more fully describe the invention reference is had to the accompanying drawings, illustrating an application of same, in which like letters designate the same parts in the several views, and in which—

Figure 1 represents in elevation our improved wire-rope holder or socket according to one form thereof. Fig. 2 is a section on line *y y*, Fig. 5. Fig. 3 is a section on line *z z*, Fig. 5. Fig. 4 is a bottom plan view, and Fig. 5 is a section on the line *x x*, Fig. 2.

*a* is the rope or wire cable, *b b'* the main wedge members longitudinally grooved on their inside faces to receive the rope or cable and held spaced apart thereby, as shown at *e*.

*c* indicates laterally-extending ears or tongues on the member *b*, set in recesses *d*, cut in the side faces of the member *b'*, the recesses *d* being of such dimensions as to lock the ears *c* against longitudinal movement, while permitting of a free lateral movement.

Superposed and suitably connected to the main wedge members are the opposed wedges

*f*, spaced apart, as at *g*, and when assembled having a tapering bore to receive the end of the cable, which is enlarged by the strands being doubled back upon themselves and secured. For purposes of illustration only the wedge members are shown connected to the wedge members *b* and *b'* by the usual dovetail joint.

*h* is a frame member comprising the eye-letted end portion and the forked arms.

Owing to the frame member's construction, the forked ends are adapted to be compressed to form upwardly-diverging inclined faces by the inclosing tapering ferrules or clamping-bands *i*, which in turn are adjustable longitudinally of the frame by adjustment-screws in the lower ends of the frame in operative engagement with the lowermost ferrule. Driving these bands or ferrules on the frame will initially bind the wedge members against the rope.

The operation of the device is obvious and needs no further description than that when under strains exerted on the rope *a* the top wedges *f* are drawn down they drive the wedges *b b'* down also, and these latter being interlocked move uniformly together, gripping the rope more tightly between them and preventing the rope from being pulled through the appliance.

What we claim is—

1. The combination with the frame member having inclined inner faces, of a pair of opposed wedge members longitudinally and laterally movable therein, and means for interlocking said members against independent longitudinal movement.

2. The combination with the frame member having depending inwardly-inclining spring-arms, of a pair of opposed wedge members operative therebetween, connections between said wedge members holding them interlocked against independent longitudinal movement and unlocked relative to their lateral movement, and clamping means for inwardly springing said arms into more intimate engagement with said wedge members.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM HENRY BECKER.

ROBERT FRANCIS WILLIAMS.

Witnesses:

ALBERT STANLEY PHILLIPS,  
MAGGIE BANNER.