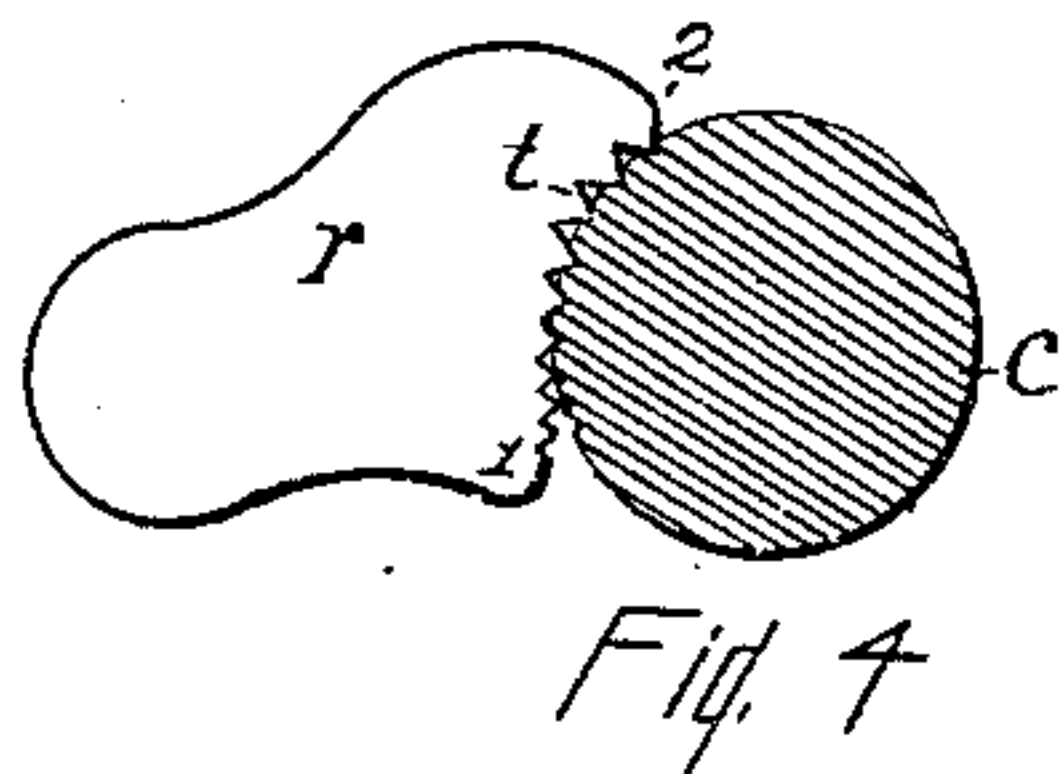
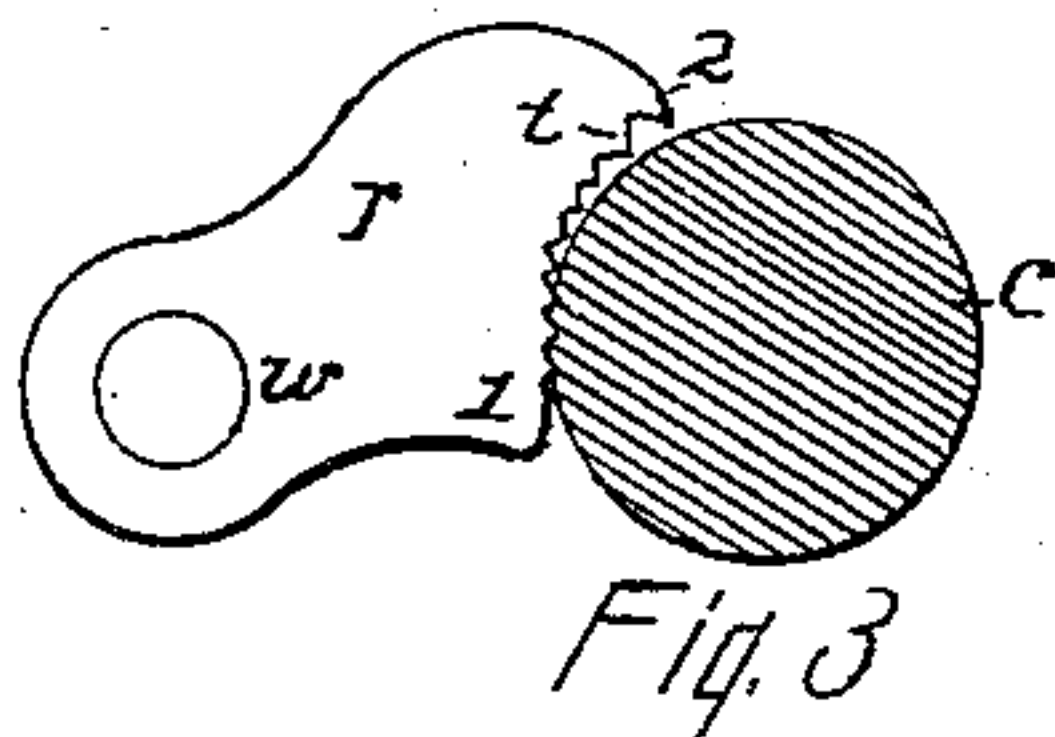
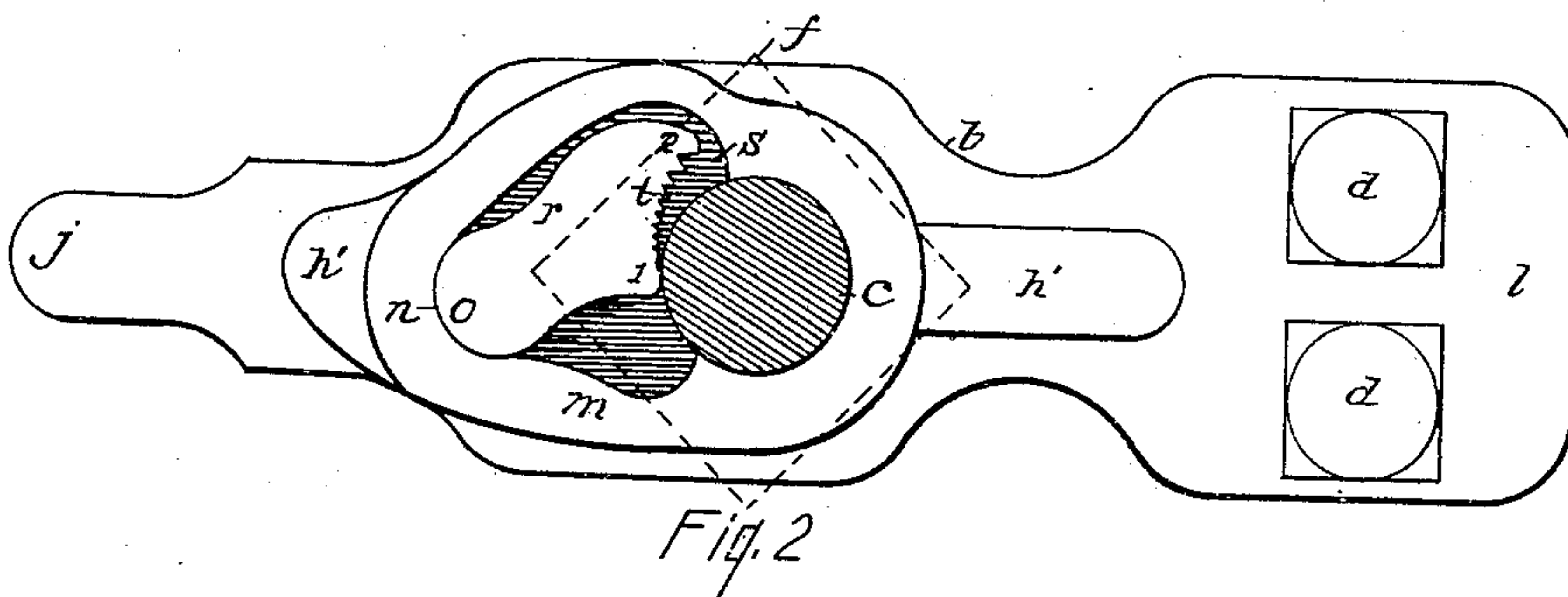
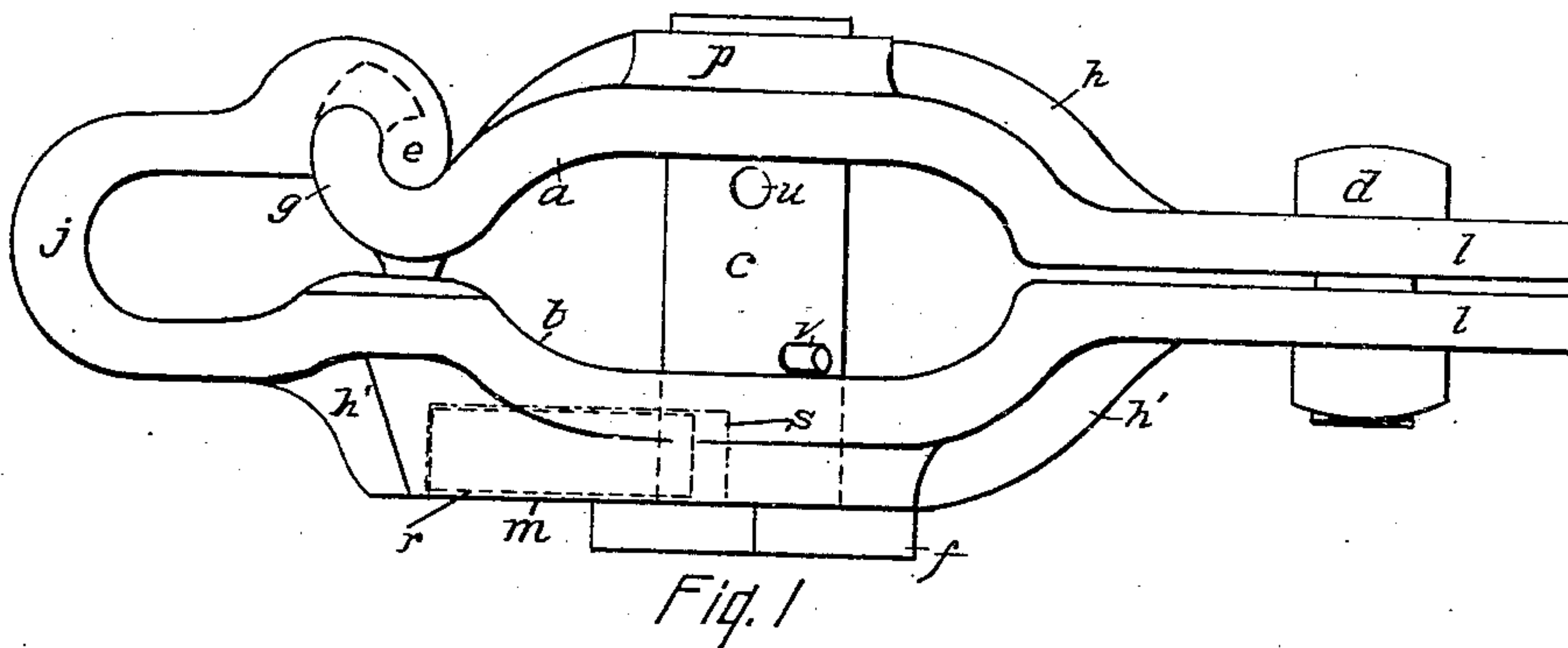


G. F. SWORTFIGER.
 ANCHOR HOOK, GUY CLAMP, AND STRETCHER.
 APPLICATION FILED FEB. 17, 1906.

929,996.

Patented Aug. 3, 1909.



WITNESSES:
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UNITED STATES PATENT OFFICE.

GEORGE F. SWORTFIGER, OF NEWARK, NEW JERSEY.

ANCHOR-HOOK, GUY-CLAMP, AND STRETCHER.

No. 929,996.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed February 17, 1906. Serial No. 301,533.

To all whom it may concern:

Be it known that I, GEORGE F. SWORTFIGER, a citizen of the United States, and resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Anchor-Hooks, Guy-Clamps, and Stretchers, of which the following is a specification.

This invention relates particularly to the stretching of guys by winding them up on drums or spindles, and has for its object an improved means of holding the drum or spindle from yielding to the unwinding of the guy therefrom.

The object is attained by the means set forth in this specification and the accompanying drawings, in which like letters refer to similar parts throughout the several views.

Figure 1 is an edge view of a combined anchor hook, guy clamp and guy stretcher. Fig. 2 is a side view of the combination device. Figs. 3 and 4 are illustrations of the devices covered by this invention.

It comprises two plates *a* and *b*, Fig. 1, having an interlocking joint *g*, *e*, at one end, and terminating in clamping plates *l*, *l*, at the other end. The plate *b* has a curved end *j* that constitutes an anchor hook. Between the hook and clamp-ends of the plates is an open formation in which is a drum or spindle *c*, on which the guy is to be wound. A pin *v* in the drum is to keep the drum in place. A hole *u* in the drum is for the attachment of the guy, the guy being drawn in between the clamping plates. The plate *a* has its drum bearing *p* reinforced with a rib, *h*, extending to the clamp *l*. The bolts *d*, Figs. 1 and 2, are for binding the clamps together as an extra security against the loosening of the guy.

Fig. 2 is a side view of the combination device. The plate *b* has a raised flange *m*, providing part of a bearing for the drum *c*, and also a chamber *s* for the cam *r*. Considerable strength is required in this part of the device, and the flange *m* is heavier proportionately than the bearing *p* in the plate *a*. Where the greatest strain comes upon the flanges they are reinforced by the ribs *h'*, *h'*.

A chamber *s* is provided in the plate *b*, Figs. 1, 2, having a depth as indicated by broken lines in Fig. 1. This chamber exposes a portion of the journal part of the drum, and its depth regulates the thickness of the loose cam *r*. The cam has a

circumferential bearing *o*, in the socket end *n* of the chamber. The cam may have a pivotal bearing, as indicated at *w* in Fig. 3. The outer curved notched end of the cam is called its face. The upper part of the curved face conforms to the circumference of the shaft with which it is to have contact. The lower point of the cam is of such length that when the drum is turned to the left the point 1 of the cam will press against the drum with force enough to resist a strong pull on the drum. As the pull increases the cam will be drawn in close contact with the drum, as shown in Fig. 3, the teeth in the center of the cam-face making an impression on the surface of the bearing. Still greater pressure will cause the teeth in the upper part of the cam to sink in the bearing as shown in Fig. 4. The adjustments in the construction of the several parts should be such that when the cam was in the position shown in Fig. 4 the drum would sustain any strain that the other parts of the device would resist. The teeth in the cam have an increment cut from the point 1 to the point 2, and the force with which the cam would hold as the point 2 was drawn upon the drum journal might be expressed by the same term.

Although I have described this invention in connection with a combination device, it is plain that it will have other useful applications where like results are desired. The chamber *s* is not an essential element in the use of this device, especially if the cam be used upon a pivot as at *w*, Fig. 3, in which case it is plain that the cam could be applied to either of the plates *a*, *b*, contiguous to the face of the drum part of the spindle *c*.

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

1. The combination in an anchor hook, guy clamp and stretcher, of side plates united to form the frame of the device, a drum supported in bearings in the side plates, one of the side plates provided with a chamber contiguous to and opening into the bearing of the drum, a cam in said chamber having a bearing therein and having a face curved to partly conform to the curve of the drum bearing, the face of the cam provided with transverse teeth for engagement with the surface of the drum.

2. A means for locking a winding drum comprising a drum supported in bearings,

one of the said bearings provided with a chamber contiguous to and opening into the bearing of the drum, a cam in said chamber having a bearing therein and having a face
5 curved to partly conform to the curve of the said drum, the face of the cam provided with transverse teeth for engagement with the surface of the drum.

Signed at New York city in the county of New York and State of New York this 10 30th day of January A. D. 1906.

GEORGE F. SWORTFIGER.

Witnesses:

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W. A. GRAHAM.