

No. 721,181.

PATENTED FEB. 24, 1903.

E. HANBY.
FODDER BINDER.

APPLICATION FILED NOV. 15, 1902.

NO MODEL.

Fig. 1.

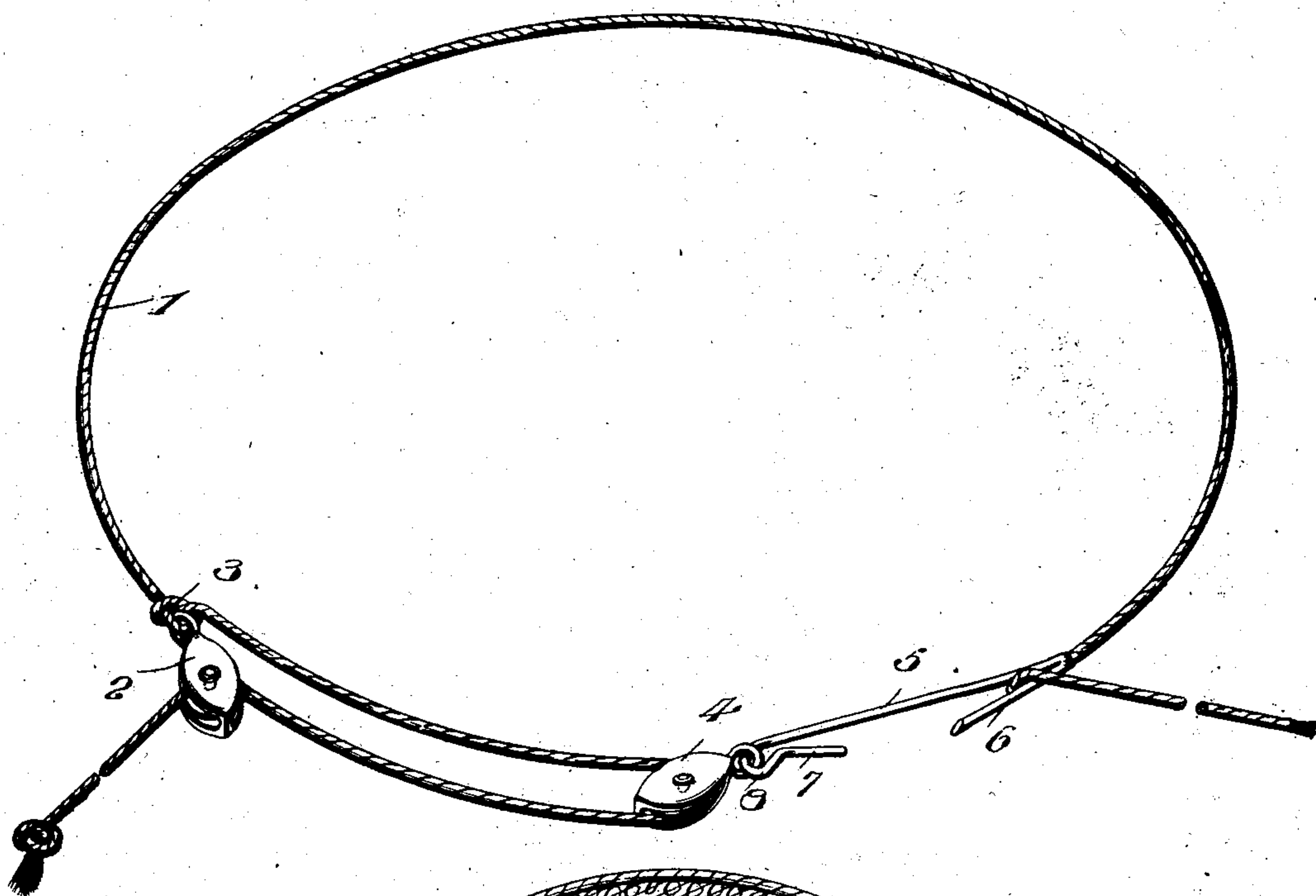
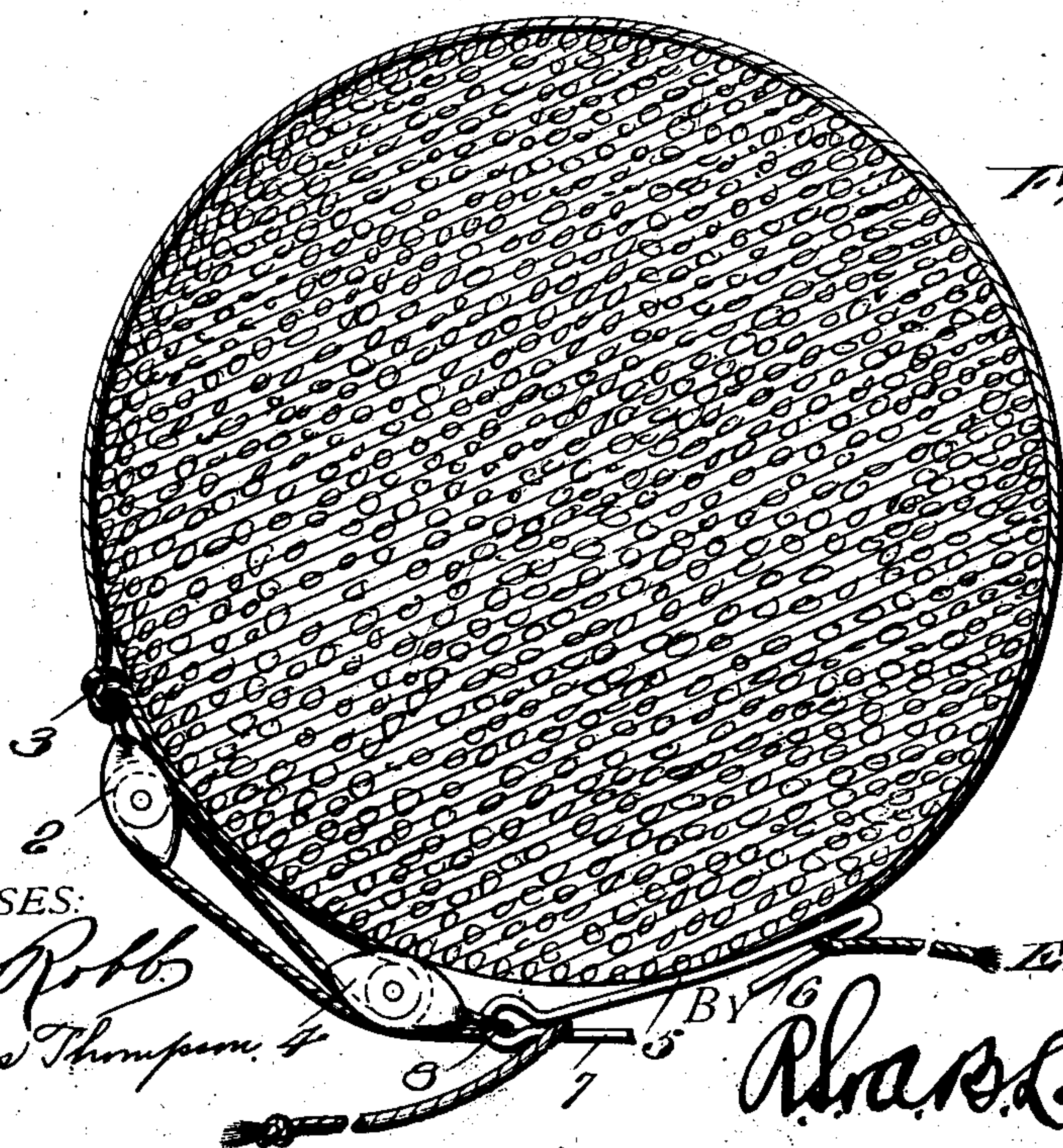


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD HANBY, OF WAYNESVILLE, OHIO, ASSIGNOR OF ONE-HALF TO
RICHARD A. CROSS AND ROBERT G. CROSS, OF WAYNESVILLE, OHIO.

FODDER-BINDER.

SPECIFICATION forming part of Letters Patent No. 721,181, dated February 24, 1903.

Application filed November 15, 1902. Serial No. 131,588. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HANBY, a citizen of the United States, residing at Waynesville, in the county of Warren and State of Ohio, have invented certain new and useful Improvements in Fodder-Binders, of which the following is a specification.

This invention provides a binder or tie for packages, bundles, and gavels or bunches of grain which may be used as a temporary holder, thereby enabling the permanent tie to be applied and secured, or which may constitute the tie proper.

The invention enables the tie to be drawn tightly about the package or bundle to be secured without permitting any slack, the construction likewise admitting of the tie being easily and quickly removed when required for any purpose.

The invention is particularly adapted for use in connection with grain and fodder, as it enables the bunches to be compressed and firmly held until bound by the tie, the binder being removed for subsequent repeated use with other bunches of fodder or grain.

The binder comprises a rope, cord, or analogous device adapted to encircle a package or bunch of grain, pulleys applied to an end portion of the rope or cord to admit of drawing the same tightly about the bunch or bundle to which the binder may be applied, and a clip for securing the ends of the rope or cord when drawn taut.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a binder or tie embodying the essential features of the invention. Fig. 2 is a detail view showing the invention applied.

Corresponding and like parts are referred to in the following description and indicated

in both views of the drawings by the same reference characters.

The device comprises, essentially, a rope or cord 1 or analogous flexible device for encircling the package or bunch to be bound. The sheave-pulley 2 is secured to the binder or tie 1 at a point between its ends, preferably by means of a knot 3. A companion sheave-pulley 4 is located in the bight formed by folding the end portion of the binder or tie upon itself. The loose end of the binder or tie after passing through the sheave-pulley 4 is passed around the sheave-pulley 2, thereby providing a system of block and tackle which enables the binder to be drawn tightly about a bunch or package with comparative ease. A clip 5 has one end attached to the sheave-pulley 4 and its opposite end provided with a clamp 6 for gripping the end portion of the binder or tie. A companion clamp 7 is provided at the opposite end of the clip for securing the loose end of the binder or tie after the same has been tightened about the package, gavel, or other article. The clip 5 is preferably formed of a length of stout wire having its end portions bent to form the clamps 6 and 7, the folded ends being inclined toward their extremities away from the body of the clip to facilitate the entrance into the tapering space of the end portions of the binder or tie. An eye 8 is formed at the fold of the end portion of the clamp 7, so as to receive the eye of the sheave-pulley 4. The eye 8 is closed to prevent casual displacement of the eye of the sheave-pulley from the clip and also to enable the loose end of the binder or tie 1 being firmly gripped by the clamp 7.

The component parts may be of any relative size, depending upon the special use of the invention. The rope or cord has an end portion forced into the tapering space of the clamp 6 after the tie has been passed around the package, bundle, or other article to be compressed and bound. The binder, after being placed in position, is drawn tight by pulling upon the loose end of the part passed through the sheave-pulley 2, the loose end being secured when the binder is drawn taut by being forced into the tapering space of the clamp 7, as shown most clearly in Fig. 2. A

gavel or bunch of fodder may be firmly compressed and securely held by means of the invention, thereby enabling the application thereto of the accustomed binder, after which
5 the invention may be detached for subsequent use. In this capacity the binder is used as a temporary holder and its use in this connection will be greatly appreciated, because of the convenience resulting from its application.

10 Having thus described the invention, what is claimed as new is—

1. In combination with a binder or tie, a sheave-pulley secured thereto at a point between its ends, an end portion of the binder
15 being doubled upon itself and passed through the said sheave-pulley, a second sheave-pulley supported in the bight of the binder, and means for adjustably connecting the second sheave-pulley with the opposite end of the
20 binder and serving to secure the loose end of the binder after it has been drawn taut, substantially as set forth.

2. In combination, a binder, a system of

sheave-pulleys applied to an end portion thereof, a clip applied to the outermost sheave- 25 pulley supported in the bight of the binder and adapted to adjustably connect said sheave-pulley with the opposite end of the binder, and means applied to the clip for securing the loose end of the binder after it has
30 been drawn taut, substantially as set forth.

3. In combination, a binder, a system of sheave-pulleys applied to an end portion thereof, and a clip having integral clamps at
35 opposite ends and an eye at one end connected with the outermost sheave-pulley, said clamps being adapted to receive and adjustably secure both loose ends of the binder, substantially as set forth.

In testimony whereof I affix my signature 40 in presence of two witnesses.

EDWARD HANBY. [L. S.]

Witnesses:

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CHARLEY SMALL.