W. A. KNOBLE.

FODDER TIE.

APPLICATION FILED JULY 17, 1908.

925,484. Patented June 22, 1909.

Fig. 1.

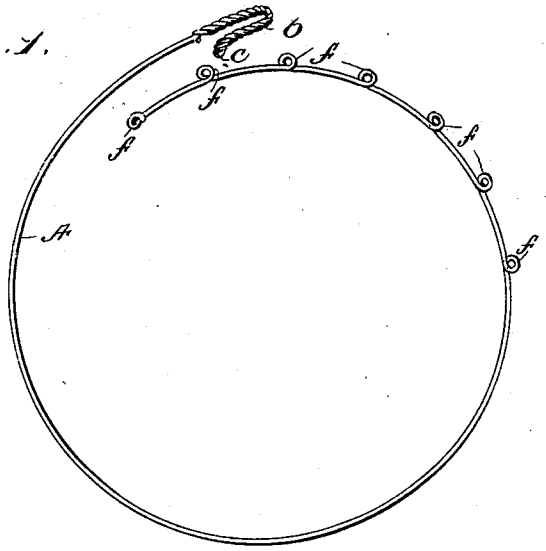


Fig. 2.



Fig. 3.

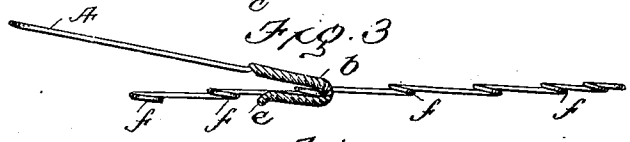
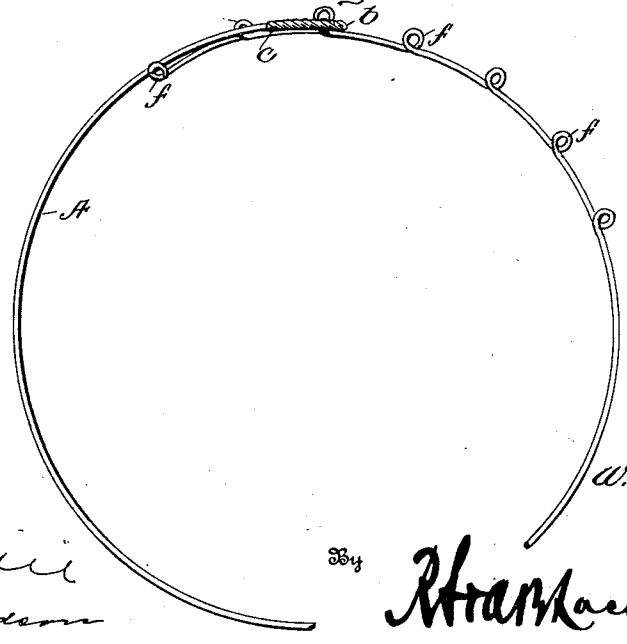


Fig. 4.



Witnesses

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WILLIAM A. KNOBLE, OF APPLE CREEK, OHIO.

FODDER-TIE.

No. 925,484. Specification of Letters Patent. Patented June 22, 1909.

Application filed July 17, 1908. Serial No. 444,083.

To all whom it may concern:

Be it known that I, WILLIAM A. KNOBLE, citizen of the United States, residing at Apple Creek, in the county of Wayne and State of Ohio, have invented certain new and useful Improvements in Fodder-Ties, of which the following is a specification.

This invention comprehends certain new and useful improvements in package ties of that type designed for binding fodder or hay or the like into shocks or bundles, and the object of the invention is an improved device of this character that is adapted to be constructed of an integral strip of wire, the ends of which are arranged for an interlocking engagement and are held in such engagement in a peculiar manner, so as to effectually tie the desired bundle, while at the same time being susceptible of being quickly disengaged to permit the ready detachment of the device when such is desired.

With this and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts that I shall hereinafter fully describe, and then point out the novel features thereof in the appended claim.

For a full understanding of the invention and the merits thereof, and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a side elevation of my improved tie, showing the ends disengaged; Fig. 2 is a top plan view thereof with the ends interlocked; Fig. 3 is a similar view, showing the position of the hook before the locking is completed; Fig. 4 is a side elevation with the ends interlocked.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing, by the same reference characters.

In constructing my improved tie, I take a piece of wire, designated by the letter A, of a length to correspond with the size of the bundle or package to which it is to be applied, and form a twisted end portion *a* that is doubled upon itself to form a hook *b*, the members of which are substantially parallel and spaced from each other a distance substantially equal to the diameter of a single strand of the wire A, the extremity of said hook being preferably slightly out-turned, as indicated at *c*. The body portion of the wire A is looped at regular intervals to constitute a series of spring coils *f* that are arranged for engagement by the hook *b* and which lie in and define planes oblique to the body portion of the tie, as best seen in Fig. 2, the said series preferably extending from the other end of the wire and thus providing at such terminal an end loop, as shown.

In the practical use of my improved tie, the wire is passed around the hay which it is desired to form into a bundle or shock and the hook *b* is engaged with one of the spring coils *f*, and since the members of said hook are spaced apart a distance substantially equal to the thickness of the wire, said hook and body portion of the wire contiguous thereto tend to assume a position oblique to the plane of the tie and coincident with the plane of such loop, as illustrated in Fig. 3. The body portion of the tie contiguous to the hook is then moved inwardly toward and into engagement with the end loop *f*, or a loop adjacent thereto, and such movement obviously positions the hook and the adjacent body portion in the plane of the tie to complete the interlocking of the ends of the tie and hold the hook in engagement with the desired loop against the tension of the same. By providing a series of these spring loops, it will be noted that the tie is susceptible of ready and accurate adjustment to various sizes of bundles or packages.

Having thus described the invention, what I claim is:

A package tie of the character described, constructed of an integral strip of wire, provided at one end with a twisted portion that is doubled upon itself to constitute a hook, the members of which are spaced from each other a distance substantially equal to the diameter of a single strand of the wire, the wire being looped to form a series of spring coils lying in and defining planes oblique to the plane of the tie, the hook engaging one of said coils, and the wire contiguous to the hook being designed for engagement with a coil interposed between the first named coil and the other end of the wire.

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

WILLIAM A. KNOBLE. [L. S.]

Witnesses:
WM. CURREN,
W. H. WINKLER.