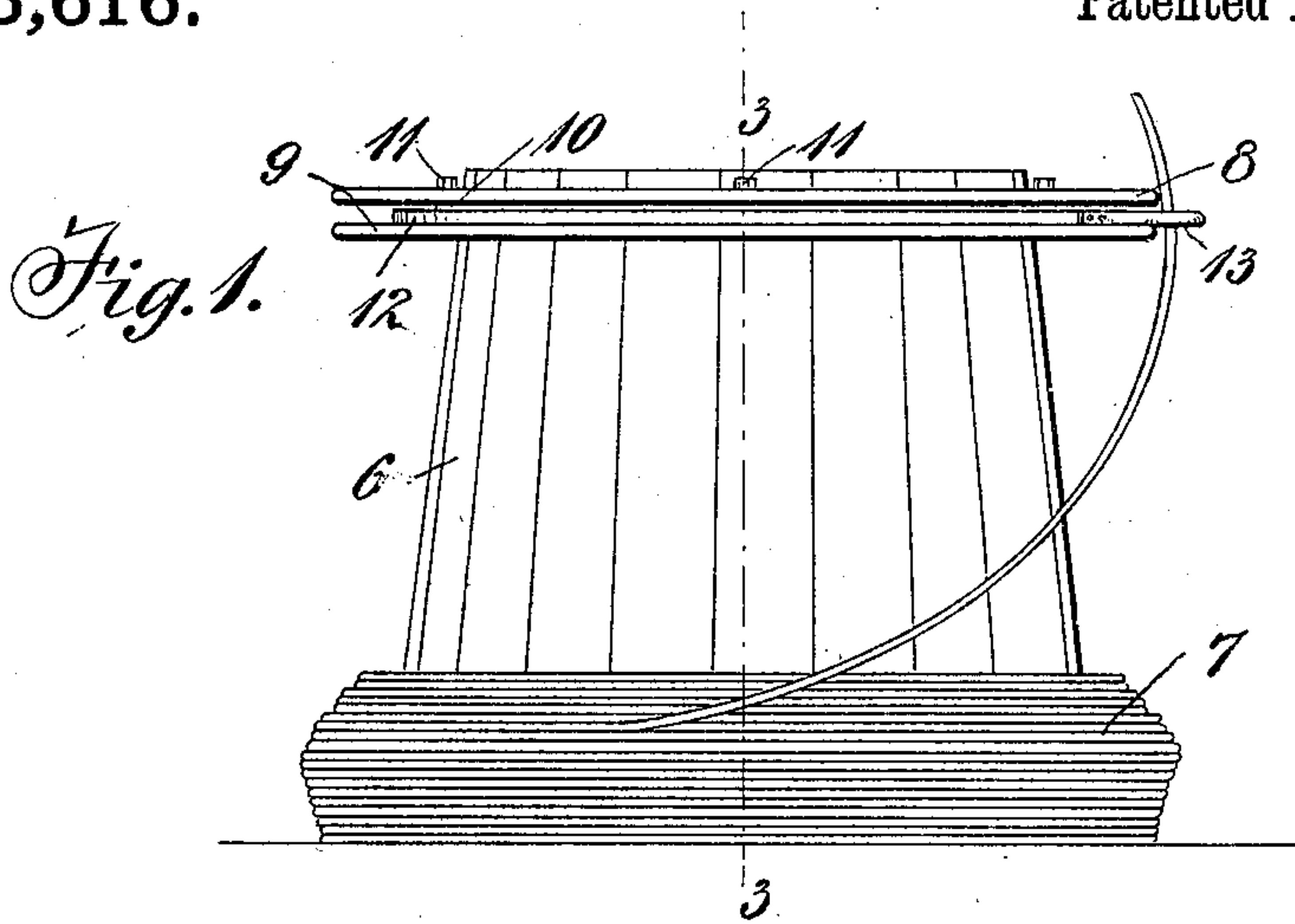


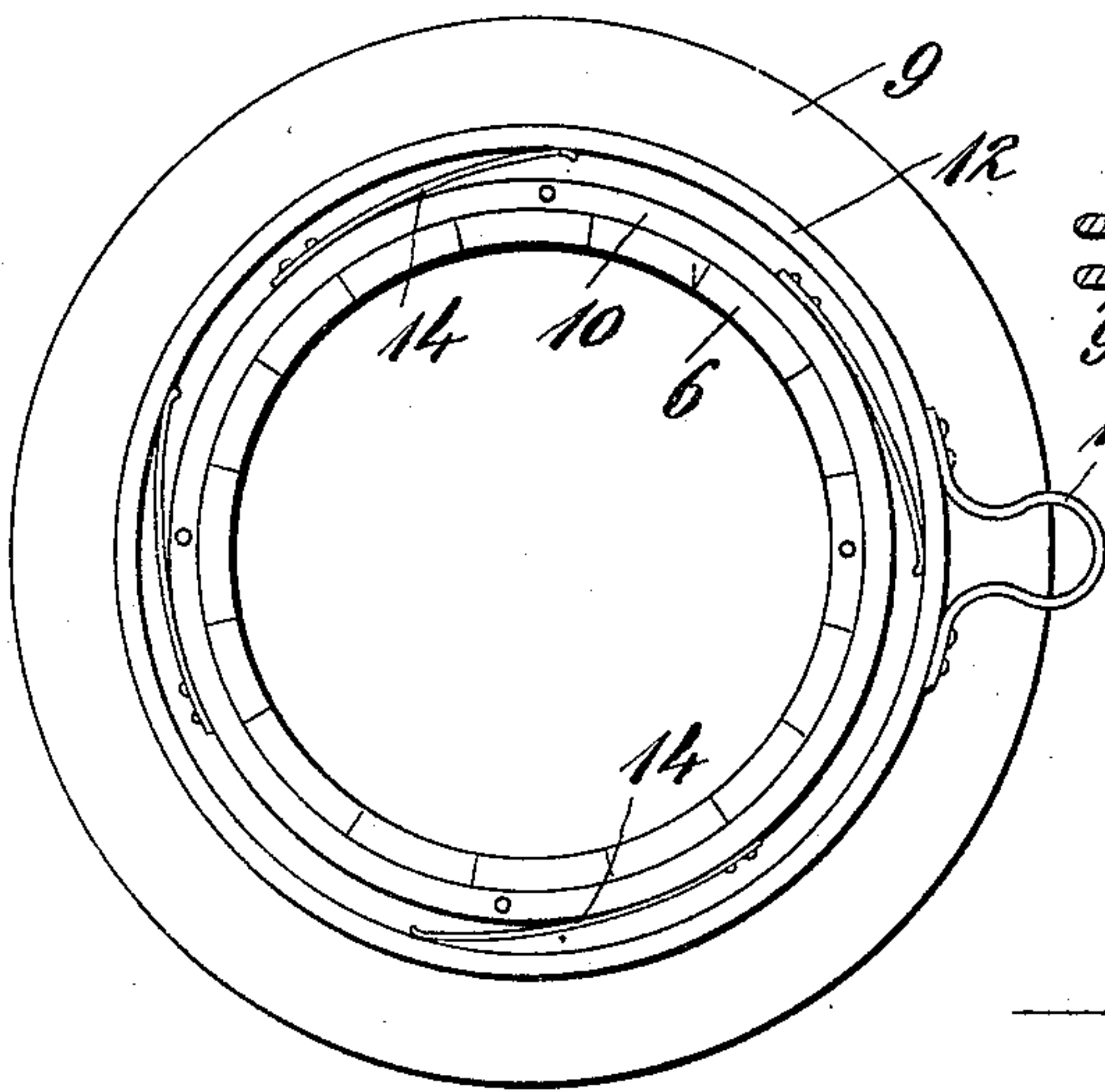
O. S. STURTEVANT.  
TENSION SPOOL.  
APPLICATION FILED JAN. 27, 1908.

903,616.

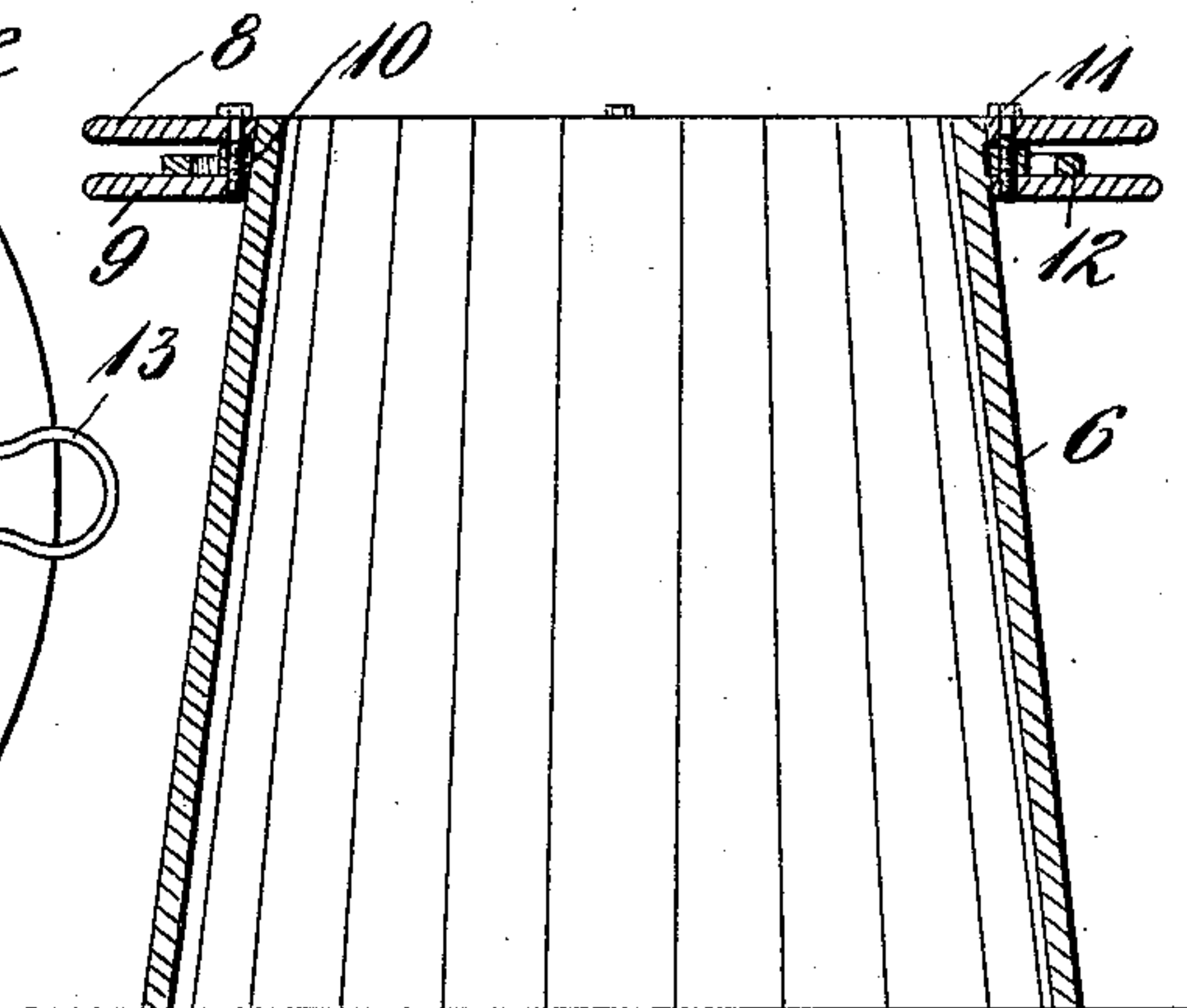
Patented Nov. 10, 1908.



*Fig. 2.*



*Fig. 3.*



*Orange S. Sturtevant*  
Inventor,

Witnesses

*A. H. Mastel*  
*Geo. E. Tew.*

By

*Wm. R. Sturtevant*  
Attorneys

# UNITED STATES PATENT OFFICE.

ORANGE S. STURTEVANT, OF ADRIAN, MICHIGAN, ASSIGNOR TO ADRIAN WIRE FENCE COMPANY, OF ADRIAN, MICHIGAN, A CORPORATION.

## TENSION-SPOOL.

No. 903,616.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed January 27, 1908. Serial No. 412,842.

*To all whom it may concern:*

Be it known that I, ORANGE S. STURTEVANT, citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Tension-Spools, of which the following is a specification.

This invention is a device used in wire working and is particularly useful for use in connection with wire fence machines and the like, although, of course, it may be applied to such other uses as it is fit for.

The object of the invention is to provide a device for holding and feeding a coil of wire, and it is characterized particularly by improved means for producing a tension on the wire, so that it will not unwind or pay off too fast, or in excess of the amount needed. This object is effected by a simple and cheap construction, as will more fully appear from the following description and the accompanying drawings.

In the drawings, Figure 1 is a side elevation of the device. Fig. 2 is a top plan view with one ring removed. Fig. 3 is a partial section on the line 3—3 of Fig. 1.

Referring specifically to the drawings, 6 indicates a spool or drum for the wire coil. This is tapered slightly to form an enlarged base and to allow the coil to be conveniently placed thereon, and it may be set upon the floor or ground, with the small end at the top. It is conveniently formed of wooden staves, although it may be constructed in any other suitable manner. The wire coil thereon is indicated at 7.

The tension device comprises or has two rings 8 and 9 spaced apart by a ring 10 which fits between said rings at the inner edges thereof; and all these parts are held together by bolts 11 passing through the same. The upper and lower rings 8 and 9 are conveniently flat wooden rings, and the construction described forms a comparatively deep channel or groove between them, which contains a loose tension ring 12, which is arranged to turn in the space between the fixed rings 8 and 9. This loose ring has an eye 13, through which the wire from the coil

is passed, and through which it is drawn as the wire is reeled off to feed the fence or other machine or to supply the wire wherever needed. Secured at one end to the spacing ring 10 are several flat springs 14, which bear at their outer ends against the inner edge or side of the turning ring 12. The pressure of these springs is sufficient to prevent unintentional or excessive rotation of the tension ring, but as the wire is drawn through the eye, they permit the tension ring to turn to follow the uncoiling of the wire from the coil below. The tension of the springs is designed and is sufficient to stop the turn of the ring, and consequently the uncoiling of the wire, wherever the feed or pull on the wire stops.

The rings forming the tension device above described may be collectively placed upon or removed from the top of the drum 6, to permit a coil to be put in place on the drum. Thus, the said device may be lifted off and a coil dropped on the drum, after which the tension rings are put in place on the upper end of the drum, and the wire threaded through the eye 13, preparatory to being reeled off.

The device will be found very useful for the particular purpose referred to above, and may also be used in other connections, for instance to hold a coil of rope in orderly condition and to allow the same to be fed off under tension when desired.

The structure is capable of modification within the idea and scope of the invention, and therefore it is to be understood that no limitation to the exact construction shown is implied.

I claim:

1. The combination of a fixed coil-holder, a ring rotatable around the same and having an opening through which the wire is drawn, and springs supported on the holder and bearing frictionally on said ring, for the purpose described.

2. A tension device for spools, comprising fast and loose rings supported on the end of the spool and readily removable therefrom, the loose ring being rotatable around the fast ring and having an opening through which



the wire or the like passes, and springs secured to the fast ring and bearing with friction on the loose ring.

3. The combination of a tapered spool  
5 adapted to receive a coil of wire or the like, an annulus fitting upon the small end of the spool and adapted for removal therefrom to permit a coil to be placed on the spool, a tension ring loosely mounted on the annulus

and having an eye through which the wire is 10 drawn, and friction springs secured to the annulus and bearing against the ring.

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

ORANGE S. STURTEVANT.

Witnesses:

ANNA NOONE,  
JACOB N. SAMPSON.