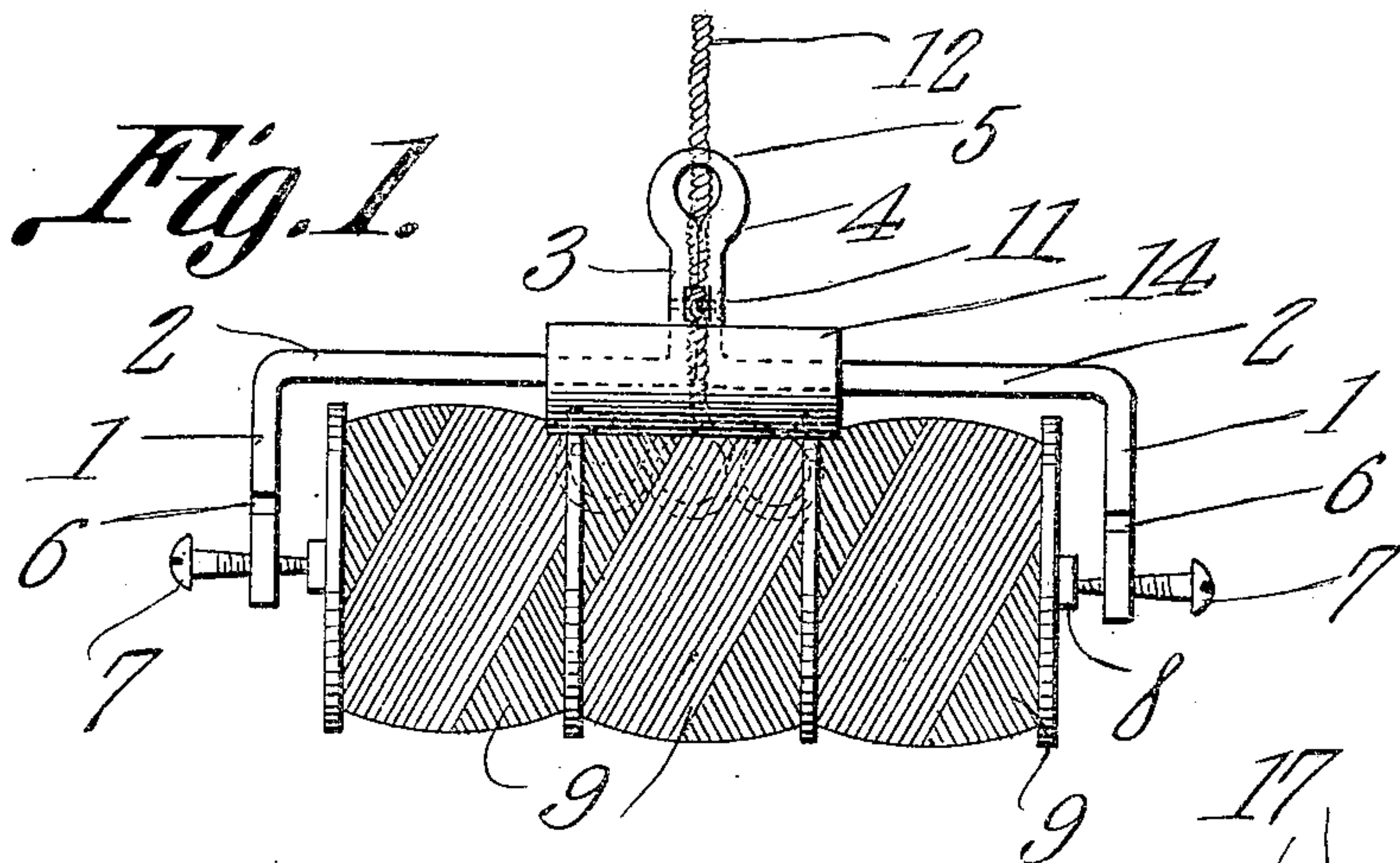


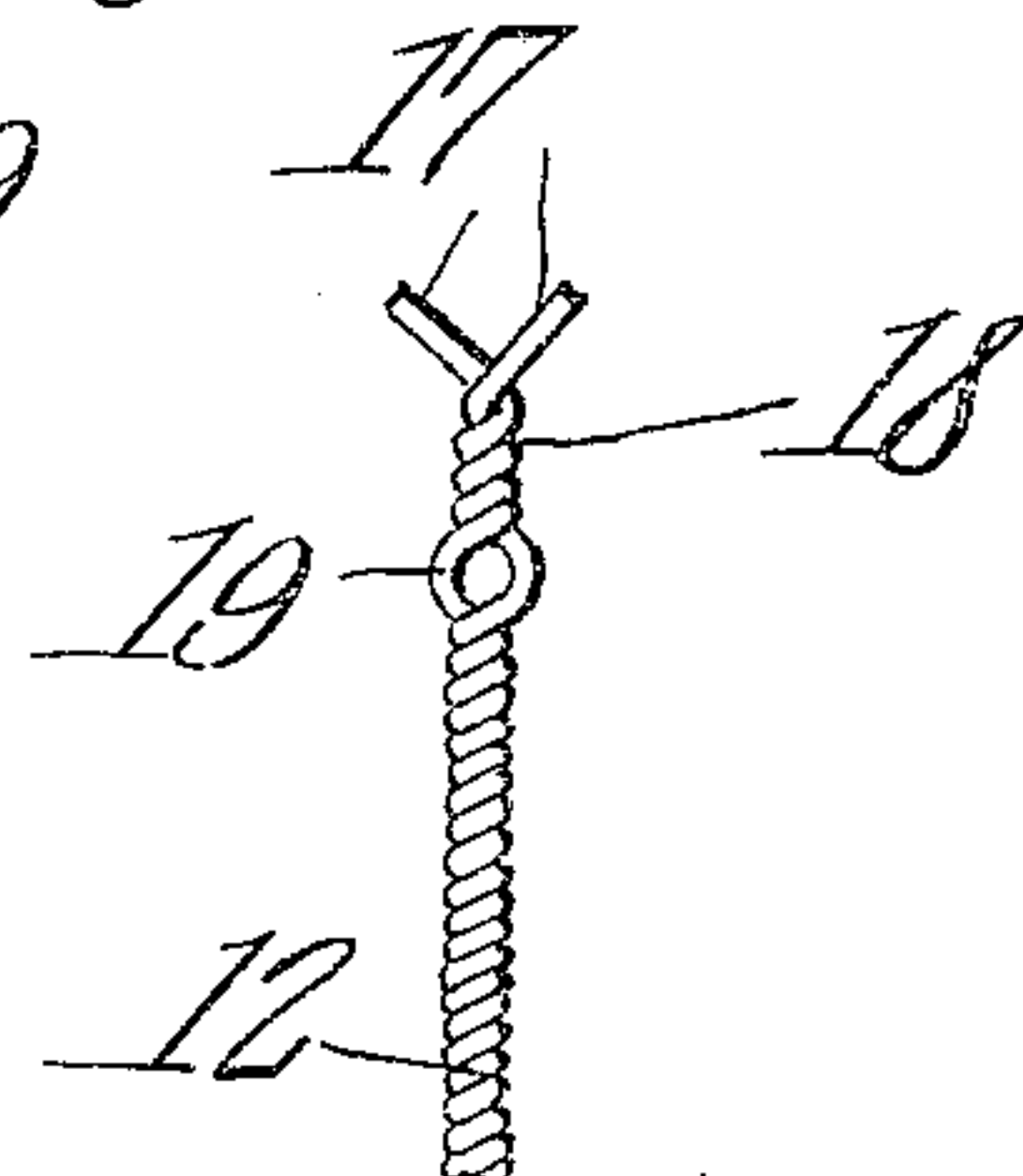
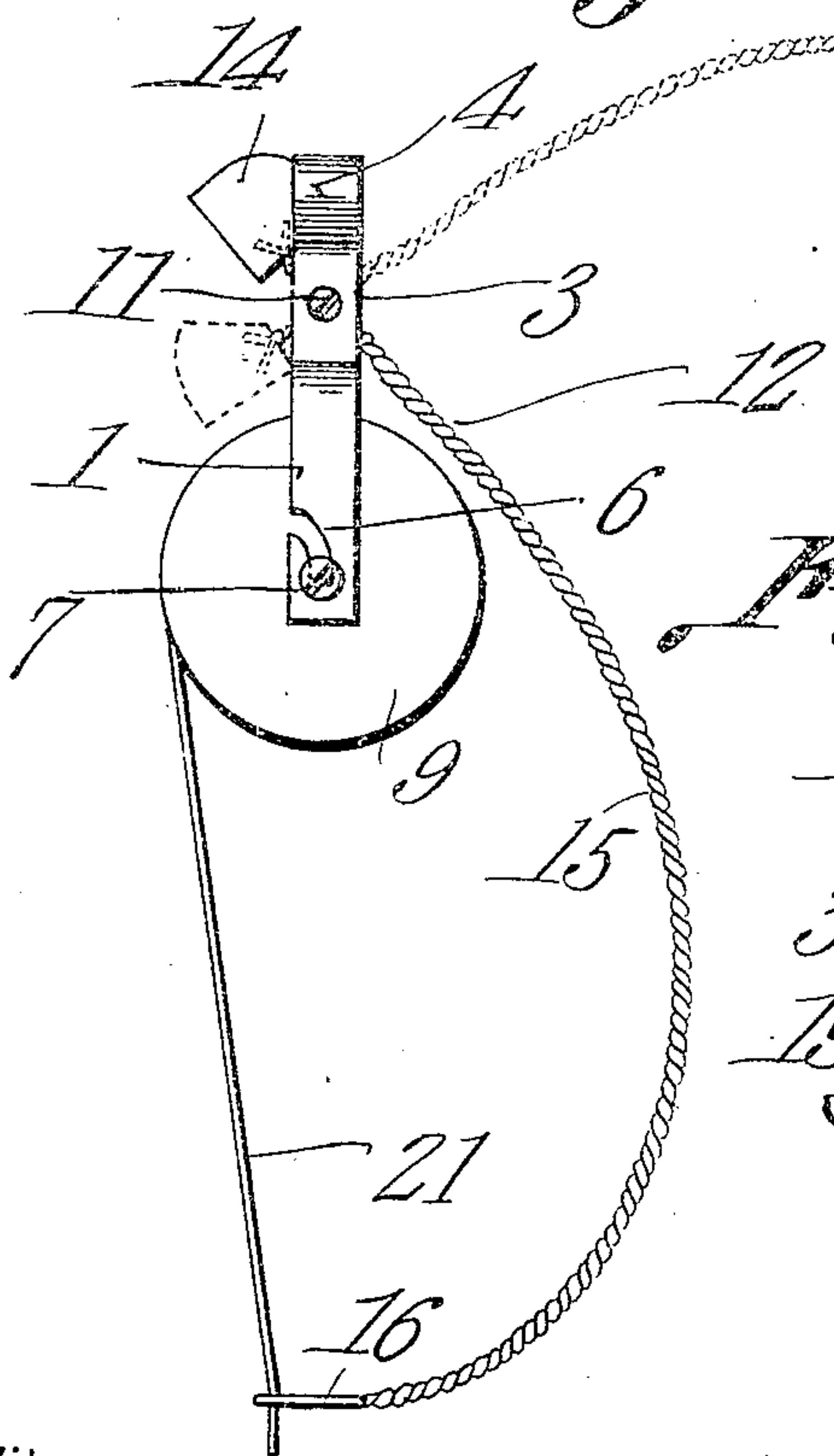
F. B. SHUMAN.  
 TWINE HOLDER.  
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962,791.

Patented June 28, 1910.

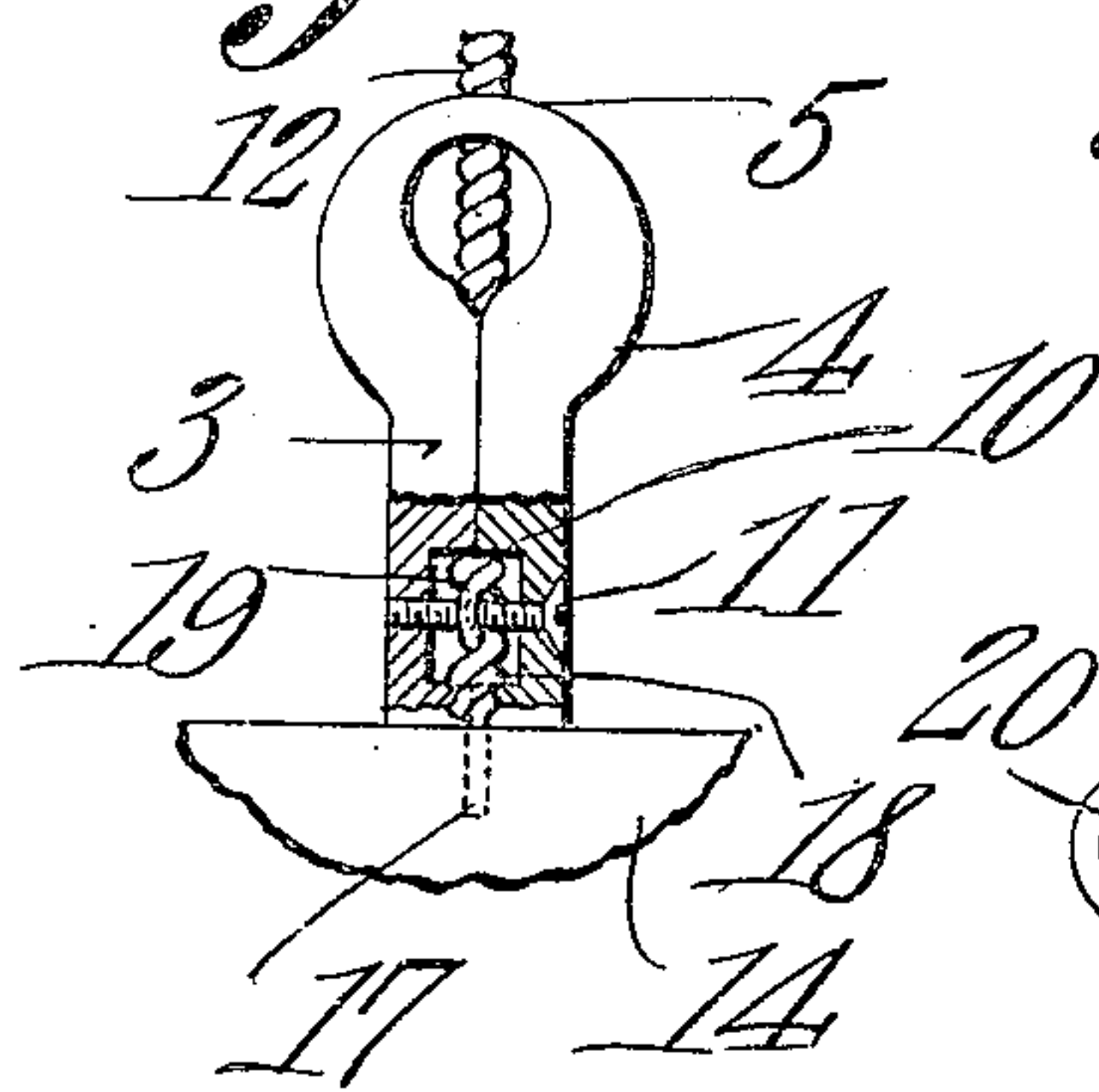


*Fig. 2.*

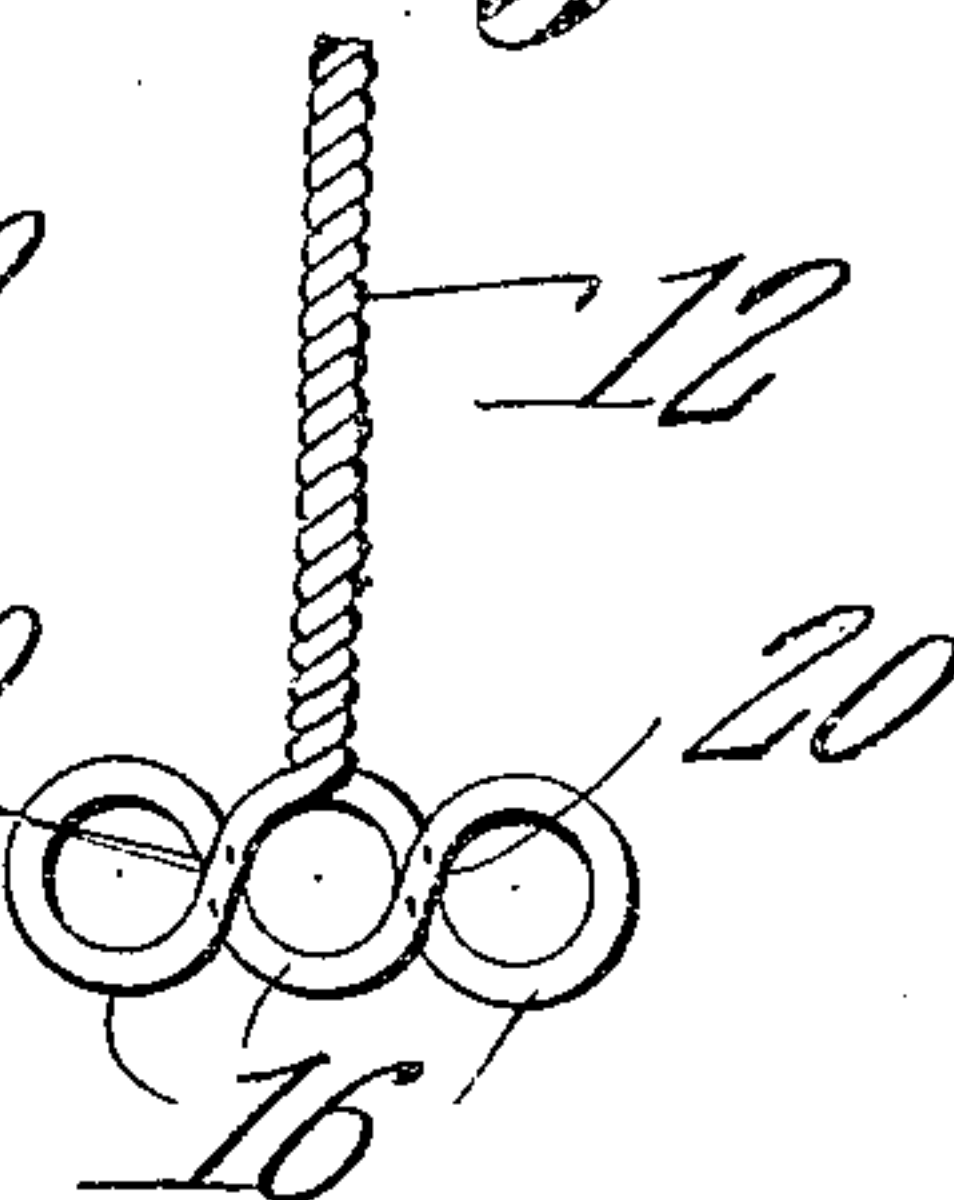


*Fig. 3.*

*Fig. 5.*



*Fig. 4.*



Witnesses

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# UNITED STATES PATENT OFFICE.

FRED B. SHUMAN, OF LOWELL, OHIO.

## TWINE-HOLDER.

962,791.

Specification of Letters Patent.

Patented June 28, 1910.

Application filed March 12, 1910. Serial No. 548,836.

*To all whom it may concern:*

Be it known that I, FRED B. SHUMAN, a citizen of the United States, residing at Lowell, in the county of Washington and State of Ohio, have invented a new and useful Twine-Holder, of which the following is a specification.

It is the object of this invention to provide a device upon which one or more spools may be mounted, so that the contents thereof may be reeled off at will.

Another object of the invention is to equip a device of this character with a tiltable arm, through one end of which the twine is adapted to run as it is reeled off, the construction being such that the twine receiving end of the arm will be positioned during the operation of reeling off the twine, in such a way that the reeling operation will be facilitated.

Another object of the invention is to provide an arm of novel and improved form; to provide a novel means for mounting said arm; and to provide a novel means for limiting the movement of the said arm.

With the above and other objects in view, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the drawings and claimed.

Changes, properly falling within the scope of what is claimed, may be made, without departing from the spirit of the invention.

In the drawings, Figure 1 shows the device in rear elevation; Fig. 2 is an end elevation; Fig. 3 is a plan of one end of the arm; Fig. 4 is a plan of the other end of the arm; the portions shown in Figs. 3 and 4 being viewed from points separated from each other by an angle of ninety degrees; and Fig. 5 is a fragmental elevation of a portion of the bracket upon which the spool is supported for rotation.

The device includes, as a primary and fundamental element, a frame, which in the present instance is fashioned from a single piece of metal. This frame consists of spaced fingers 1, which, as denoted by the numeral 2, are bent into alinement, and again bent rectangularly, to form parallel parts 3, connected at their upper ends by a supporting element, in the present instance shown in the form of an eye, the upper portion of which is thinned, as shown at 5, in order that the frame may have some resiliency.

As seen to best advantage in Fig. 2, the

edges of the fingers 1 are provided with downwardly extended slots 6, terminated within the contour of the fingers. Into these slots 6 may be introduced screws 7, the ends of which are engaged in a spindle 8, upon which are mounted for rotation one or more spools 9. In the present instance, three spools are shown.

As seen most clearly in Fig. 5, the adjacent faces of the parallel portions 3 of the frame are recessed, as shown at 10. Through these recessed portions of the parts 3, is extended a screw or bolt 11. By means of this screw 11, the parallel parts of the frame 3 may be advanced toward and retracted from each other, thus adjusting the distance between the fingers 1, whereby spools of different lengths may be accommodated between the fingers 1, the screw 11, moreover, serving as a means for binding securely, the ends of the screws 7 in the ends of the spindle 8.

Located within the recessed portions 10 and pivotally mounted intermediate its ends upon the screw 11 is an arm 12. Upon one end of this arm 12 there is a weight 14, the arm being curved, adjacent its other end as denoted by the numeral 15. This last named end of the arm 12 terminates in a twine receiving element, or in several of such elements, the same being delineated in the present instance, in the form of eyes 16.

By referring to Fig. 2 it will be seen that when the arm is depressed at its free end, the eyes 16 will be located directly beneath the axis of the spools 9, the weight 14 contacting with the eye 4 at the upper end of the frame, and thus serving to position the eyes 16 directly beneath the axis of the spools 9 as shown. This weight 14 serves as a counterpoise adapted to lift that end of the arm in which the twine receiving elements are located, and, as shown in dotted lines in Fig. 2, the weight 14 is adapted to contact with the frame, below the eye 4 to limit the upward movement of that end of the arm 12 in which the twine receiving elements are located.

It is to be understood that the arm 12 may be fashioned in any desired manner, the form shown in the drawings will be found to be economical in construction and satisfactory in operation, although another form might, under particular circumstances be employed to advantage. As shown, the arm 12 is fashioned from a single piece of ma-



terial, preferably wire or the like. This piece of wire is folded upon itself and twisted, as shown at 18. The ends of the strip of wire are made to diverge in opposite directions, as shown at 17, these portions 17 serving to secure one end of the arm 12 in the weight 14. In twisting the wire to form the arm, an eye 19 may be fashioned, the same being adapted to receive the screw 11. At its other end, the arm 12 terminates in an open head, extended transversely of the arm. This head is twisted upon itself as shown at 20 thus fashioning the several eyes 16.

It will be seen that the construction of the device is such that several spools 9 may be mounted upon the spindle 8; that a single device may be made to support spools of twine of different thicknesses and colors, the several eyes 16 serving to keep the free ends of these different twines separated, when the device is in use.

In devices of this character it is desirable that there should be some friction between the twine and the eyes 16. This friction tends to prevent the twine from being unwound too rapidly. However, when there is too much friction between the twine and the eyes, the reeling off of the twine is retarded to an undue extent, and the twine itself is, moreover, worn out in the process, thus reducing its strength. It is the aim of this invention to position these eyes 16 in such a manner that sufficient friction will be afforded to prevent the twine from being reeled off too rapidly, however, without fraying the twine, or making the operation of reeling the same off unduly difficult. The most efficient position for the eyes 16 is directly beneath the spools 9, and preferably alined vertically with the axis of rotation of the said spools. By referring to Fig. 2 it will be seen that when the eyes 16 are positioned as above described, the twine 21 will pass through one of the eyes 16 in a nearly vertical position. Thus, although there will

be sufficient friction to prevent a too rapid unrolling of the twine, friction between the twine 21 and the eye 16 will not be so great as to fray the twine, or to render the unreeling operation difficult. The dotted line position of the arm 12 in Fig. 2 illustrates the uplifted position of the arm, but, in the present discussion the dotted line position of Fig. 2 may be employed for another purpose.

It is to be noted that the upward and downward movements of the arms 12 are limited by contact, not between the arm 12 itself and some portion of the frame, but by the weight 14 which is upon the end of the arm, and the frame. The advantage incident to this feature is that the shock incident to the movement of the arm is received by the weight, the arm thereby being prevented from being bent, it being readily discernible that if the arm were to contact with the frame between the weight 14 and the screw 11, the arm itself would in a short time be bent and distorted, particularly in view of the fact that upon the end of the arm, there is the relatively heavy element 14.

Having thus described the invention, what is claimed is:—

In a device of the class described, a frame consisting of spaced, spool-receiving fingers bent to form parallel portions, the said parallel portions being terminally connected by an integrally formed suspension eye; a threaded member connecting the parallel portions and constituting a means for adjusting the space between the fingers, a part of the eye being thinned to permit the spacing of the fingers; and a twine-receiving arm fulcrumed upon the threaded member.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRED B. SHUMAN.

Witnesses:

GEORGE B. MIRACLE,  
FRANKLIN H. WOLFRAM.