

R. C. REDPATH.

REEL.

APPLICATION FILED NOV. 18, 1907. RENEWED JULY 29, 1909.

970,394.

Patented Sept. 13, 1910.

Fig. 1.

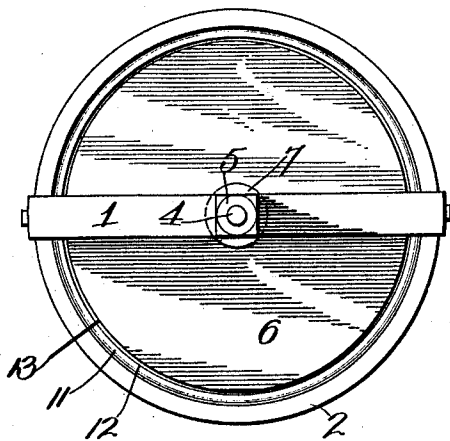


Fig. 2.

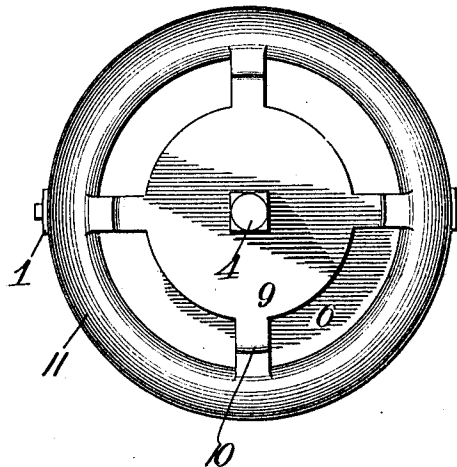
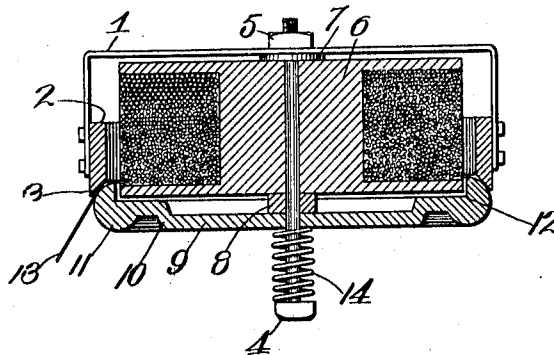


Fig. 3.



Witnesses
Frank R. Gloro
H. B. Rodgers

Inventor
R. C. Redpath
By George J. Thorpe Atty.

UNITED STATES PATENT OFFICE.

ROBERT C. REDPATH, OF OXFORD TOWNSHIP, JOHNSON COUNTY, KANSAS.

REEL.

970,394.

Specification of Letters Patent. Patented Sept. 13, 1910.

Application filed November 18, 1907, Serial No. 402,648. Renewed July 29, 1909. Serial No. 510,271.

To all whom it may concern:

Be it known that I, ROBERT C. REDPATH, a citizen of the United States, residing in Oxford township, in the county of Johnson and State of Kansas, have invented certain new and useful Improvements in Reels, of which the following is a specification.

This invention relates to reels and my object is to produce a reel from which wire may be readily and rapidly unwound and which will reliably guard against the unwinding of surplus wire, that is against the unwinding of wire after the pull thereon has been removed.

To this end the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a top plan view of a reel embodying my invention. Fig. 2 is an inverted plan view of the reel. Fig. 3 is a central vertical section of the reel.

In the said drawing, 1 indicates a suitable frame or support and 2 a stationary ring carried thereby and by preference beveled downwardly and outwardly at its lower edge as at 3.

4 is a vertical bolt extending through the frame or support 1 axially of the ring and 5 is a nut or collar engaging the bolt.

6 is a spool or drum fitting on bolt 4 within ring 2 and clamped securely to said bolt between the washer 7 thereon and the collar or enlargement 8 of the bolt.

9 indicates a circular plate fitting loosely on the bolt at the opposite side of the collar or enlargement from the spool or drum and capable of a limited rocking movement on said bolt. The plate is preferably of skeleton form, that is, consists of a central or body portion, radial arms or spokes 10 and a rim 11, the latter underlying ring 2 and having a circular recess 12 in its upper side within which fits with a fairly snug relation, the lower head or flange of the spool or drum so that the undermost convolutions of the wire 13 wound upon the spool or drum, shall lie in about the same horizontal plane as the highest point of the rim. By this arrangement the end of the wire can extend outward from the undermost convolutions or coils over the rim in practically a straight line and therefore be less liable to kink than

if the upper surface of said rim was above the corresponding surface of the lower flange of the spool or drum.

14 indicates a helical spring fitting around the bolt and bearing at its opposite ends against the underside of the circular plate 9 and the lower head of bolt 4 for the purpose of holding the rim with a yielding pressure against the beveled lower edge of ring 2, the wire where it extends outwardly from the spool or drum being clamped with a yielding pressure between the rim and ring.

As the end of the wire is pulled downward and inclined from the spool or drum it revolves around the axis of the latter without turning it, that is to say, as it is pulled from the spool or drum it travels around and between the rim and ring, the former tilting to accommodate such movement of the wire in an obvious manner and instantly reclamping the wire when the pull upon the latter ceases so as to prevent any surplus wire from unwinding.

While the drawing shows and the description refers to a construction in which the rim is the yieldingly actuated element, it will be apparent that said rim may be stationary and the ring be pressed yieldingly against it without departing from the principle of construction involved or from the terms of the claims hereunto appended, and I wish it to be understood that minor changes in the form, proportion, and detail construction of the parts may be resorted to.

Having thus described the invention what I claim as new and desire to secure by Letters-Patent, is:—

1. A wire holding reel, comprising a spool or drum upon which wire may be wound, a ring surrounding and bearing a fixed relation to the spool or drum, a plate adjacent to and substantially parallel with one end of the spool or drum and provided at its margin with a rim projecting toward and of substantially the same diameter as the ring, and means for pressing said plate yieldingly toward the adjacent end of the spool or drum and its rim against the opposing or adjacent edge of said ring.

2. A wire holding reel, comprising a spool or drum upon which wire may be wound, a ring surrounding said spool, a plate having a rim engaging one edge of said ring; said ring and rim bearing a slight tiltable or rocking relation, and yielding means for

resisting tiltable or rocking movement by the said member capable of such movement.

3. A wire holding reel, comprising a spool or drum upon which wire may be wound, a
5 ring surrounding and bearing a fixed relation to the spool or drum, a plate adjacent to and substantially parallel with one end of the spool or drum and provided at its margin with a rim projecting toward and of
10 substantially the same diameter as the ring, and a spring suitably supported and arranged at the opposite side of said plate from the spool or drum and tending to hold the plate and its rim pressed toward the
15 spool or drum and said ring respectively.

4. A reel for holding wire, comprising a spool or drum, a ring surrounding the same, a tiltable or rocking rim, and a spring pressing said rim yieldingly upward and
20 against the ring and the interposed end of the wire leading from the spool or drum.

5. A reel, comprising a bolt provided with a head, a drum secured on the bolt at one side of said head, a stationary ring surrounding the drum, and a rim capable of
25 rocking movement on the bolt and held yieldingly toward the ring and drum.

6. A reel, comprising a bolt provided with a head, a drum secured on the bolt at one side of said head, a stationary ring surrounding the drum, a rim capable of rocking move-
30 ment on the bolt, and a spring pressing said rim toward the drum and said ring to clamp the end of the wire leading from the drum between said ring and rim.
35

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

ROBERT C. REDPATH.

Witnesses:

H. C. RODGERS,
G. Y. THORPE.