J. C. F. WHITMORE.

CHALK LINE REEL.

APPLICATION FILED MAR. 14, 1910.

963,967. Patented July 12, 1910.

Fig. 1

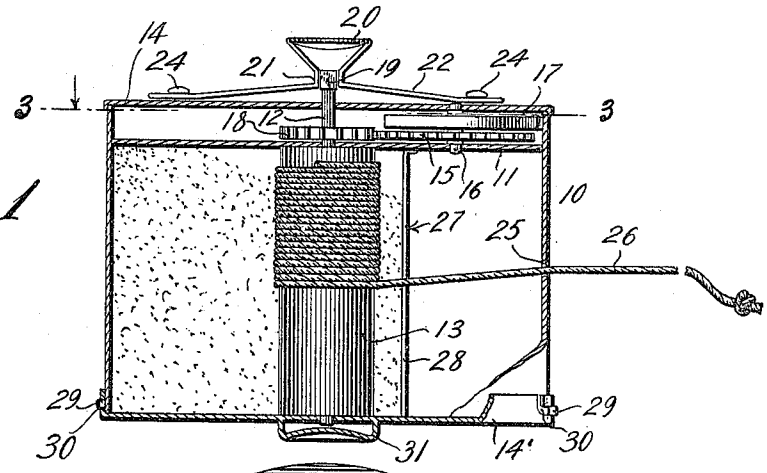


Fig. 2

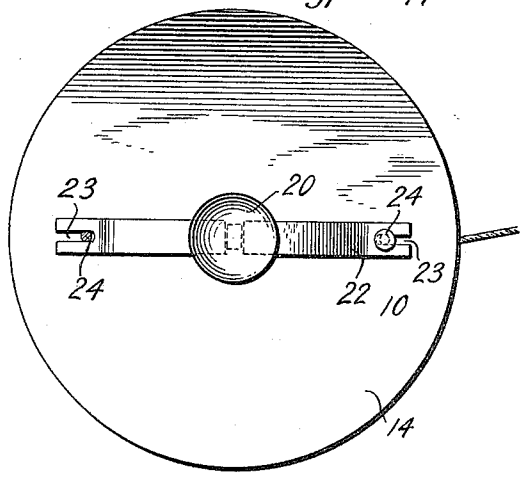
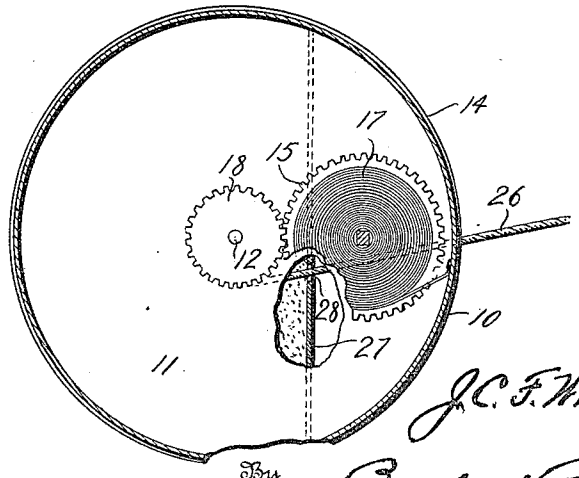


Fig. 3



Witnesses

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CHALK-LINE REEL.

963,967. Specification of Letters Patent. **Patented July 12, 1910.**

Application filed March 14, 1910. Serial No. 549,307.

To all whom it may concern:

Be it known that I, JOHN C. F. WHITMORE, a citizen of the United States, residing at Mayfield, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Chalk-Line Reels, of which the following is a specification.

This invention relates to chalk lines and particularly to the construction of the reel operating mechanism thereof.

It also contemplates the provision of a spring means whereby the reel may be released to wind the line.

With the above and other objects in view, this invention consists of the construction, combination and arrangement of parts all as hereinafter more fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a central longitudinal section of a chalk line reel constructed in accordance with the present invention; Fig. 2 is an end elevation of the reel; Fig. 3 is a section taken along line 3—3 of Fig. 1, parts thereof being broken away.

The reel forming the subject matter of the present invention comprises a cylindrical casing 10 provided adjacent to one extremity with the partition 11, said partition extending diametrically across the casing. A shaft 12 carrying the drum 13 is mounted in the casing and is journaled centrally in the partition 11 and the heads 14 and 14′.

Mounted between the head 14 and the partition 12 is a large spur gear 15, to the shaft 16 of which is secured the spring 17, said spring having the free terminal thereof attached to the casing. In order to provide a means whereby the gear 15 may drive the shaft 12 when it is desired to wind the line about the drum 13, a gear 18 is carried by the shaft 12 directly under the gear 15 and is adapted to mesh therewith. Thus it will be seen that upon permitting the spring to act on the gear 15, the drum will be rotated, winding the line secured thereto about the same.

To provide for the retaining of the drum in a stationary position, a rectangular head 19 is carried at the terminal of the shaft 12, projecting through the head or cover 14. This rectangular head operates in a clutch member indicated as A, said clutch member comprising a circular enlarged hand piece 20 which is reduced at 21 to engage the head 19.

Diametrically disposed on each side of the reduced portion 21 are the spring arms 22, said spring arms having their terminals bent inwardly toward the head 14 and provided with the slots 23. These slots are adapted to permit the ends of the spring arms to engage and reciprocate on the pins 24 carried by the head 14. From this construction it will readily be seen that, upon applying a pressure upon the finger piece 20 the spring arms will be operated and the head 19 will be projected into the enlarged portion of the thumb piece, thus permitting the shaft to be rotated by the spring 17.

An opening 25 is provided centrally in the casing through which projects the line 26, said line being secured at its inner terminal to the drum 13.

In order to provide a means whereby the line may be constantly chalked, a partition 27 is superposed above said drum and provided with a longitudinal slot 28 through which passes the line 26. A supply of pulverized chalk is constantly contained in the chamber B formed by the partition and is thereby always in engagement with the line.

The head 14′ is removable through the instrumentality of the pin 29 carried by the casing operating in the bayonet slot 30 in the head 14′.

The removable head 14′ carries the centrally disposed finger piece 31, which in combination with the oppositely disposed finger piece forms a means whereby a firm and secure hold may be retained on the casing.

Having thus described my invention, what is claimed as new is:

1. In a chalk line reel, the combination with a casing having a partition formed on one side thereof, a shaft mounted in said casing, a head formed at one extremity of said shaft projecting from said casing, means whereby said shaft may be rotated, and a clutch member adapted to engage said head comprising a finger piece having diverging spring arms reciprocating on said casing.

2. In a chalk line reel, the combination with a casing, a shaft mounted in said casing, a faced head formed at one extremity

of said shaft and projecting from said casing, means whereby said shaft may be rotated, pins formed on said casing, and a clutch member adapted to engage said head having divergent spring arms formed therein provided with slots at the extremity thereof adapted to reciprocate on said pins.

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

JOHN C. F. WHITMORE.

Witnesses:
H. A. WHITMAN,
MARTIN MOYLE.