No. 773,547. PATENTED NOV. 1, 1904.

G. A. COLEMAN.

ADJUSTABLE PLUMB BOB AND LINE REEL.

APPLICATION FILED MAY 20, 1903.

NO MODEL.

Fig. 2.

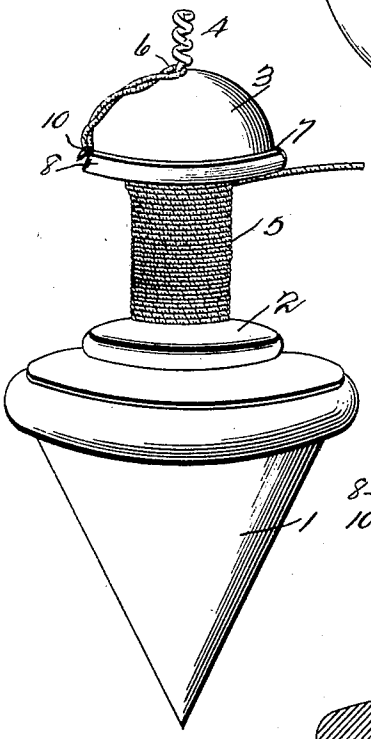


Fig. 4.

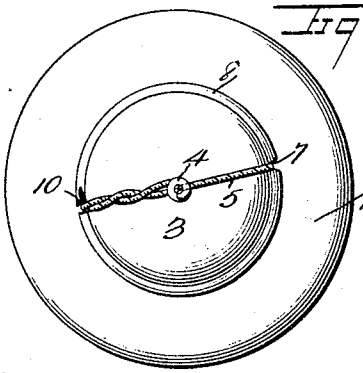


Fig. 1.

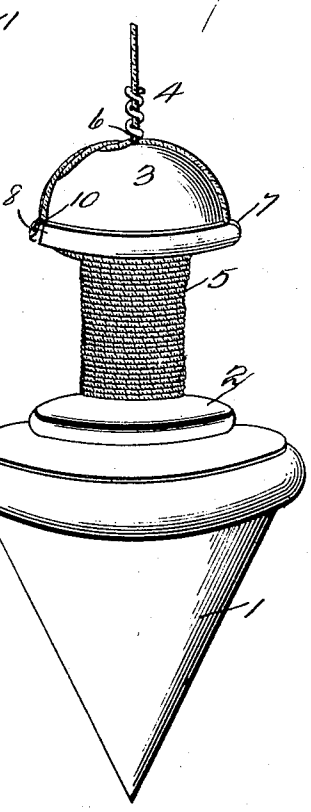
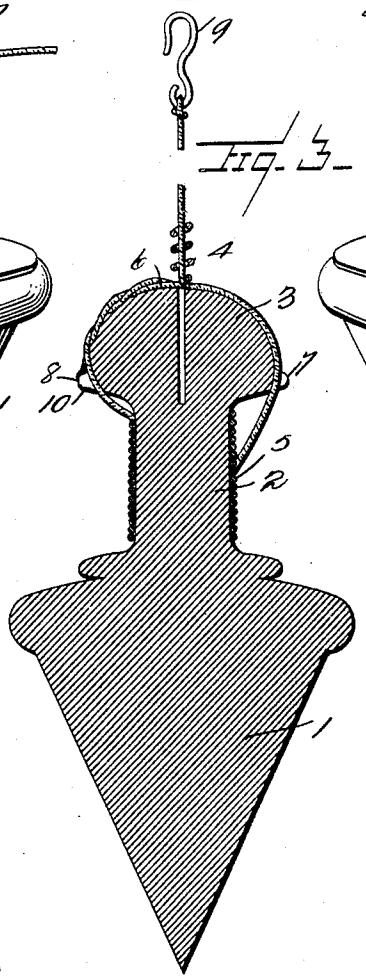


Fig. 3.



WITNESSES:

H. F. Dorsey.

L. E. Barkley.

INVENTOR

George A. Coleman

By

Francis Appleman

Attorney

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UNITED STATES PATENT OFFICE.

GEORGE ANSON COLEMAN, OF ATLANTA, GEORGIA.

ADJUSTABLE PLUMB-BOB AND LINE-REEL.

SPECIFICATION forming part of Letters Patent No. 773,547, dated November 1, 1904.

Application filed May 20, 1903. Serial No. 158,008. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ANSON COLEMAN, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Adjustable Plumb-Bob and Line-Reel, of which the following is a specification.

This invention relates to measuring instruments, and particularly to that class thereunder known as "plumb-bobs."

The object of the invention is to produce a plumb-bob which will carry a line of sufficient length for any ordinary work, the said line being adjusted to take up or let out the line in order to increase the length of said line as the work progresses.

Furthermore, an object of the invention is to produce a plumb-bob and line-attaching means whereby the said line may be wound and unwound without disturbing the connection of the supporting end of the cord and its attachment to the plumb-bob.

Furthermore, an object of the invention is to provide novel means for causing the plumb-bob to hang true notwithstanding the cord passes from the spool portion of the plumb-bob to the attaching means over the outer surface of the top of the plumb-bob.

Furthermore, an object of the invention is to provide novel means for permitting the adjustment of the cord on the spool portion of the plumb-bob.

Finally, an object of the invention is to provide a plumb-bob of the character described which will prove satisfactory in use and inexpensive to manufacture.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in perspective of a plumb-bob with the invention applied thereto. Fig. 2 is a similar view showing the parts in a slightly-different position. Fig. 3 is a vertical sectional view taken centrally of the device shown in Fig. 1. Fig. 4 is a plan view of the flexible connection in section.

In the drawings, 1 denotes the plumb-bob, having a spool portion 2 and a head 3. A guide 4, comprising a spirally-wound wire or other piece of metal, has its lower end anchored in the head of the plumb-bob and attached thereto, so as to prevent its being displaced through ordinary use.

The supporting-cord or flexible connection 5 has one end, 6, (to be hereinafter known as the "fixed" end,) secured to the lower end of the guide 4 and passes over the upper surface of the head through the slot 10, formed in the beading 8 at the base of the head. This connection or supporting-cord is wound around the spool portion 2 of the plumb-bob until a sufficient quantity for any ordinary use has been wrapped thereon. The outer end of the connection or supporting-cord is then applied to the guide 4 so that it extends through the center of said guide and will stand vertically when the upper end of the supporting or flexible connection is hung on a wall or other structure by means of the hook 9, attached to the end. In order to cause the plumb-bob to stand true, the flexible connection or support is passed through the recess or notch 7, formed in the beading 8 in a position diametrically opposite the slot 10. In practice when it is desired to wind or unwind the cord it is only necessary to acquire a sufficient slack in order to unwind or remove the same from the spiral guide 4 and the slot 7, as shown in Fig. 1, when the said connection may be wrapped or unwrapped at the will of the operator. When a proper adjustment is attained, the outer end (known as the "standing" portion of the flexible connection) is pulled through the guide 4, care being taken that the said connection is seated in the recess 7, as heretofore stated. This prevents the unwinding of the connection and also serves to retain the plumb-bob in a vertical position.

For the purpose of designating the parts of the line or flexible connection the part which is wrapped on the spool will be termed the "bite," the portion which is permanently attached to the guide will be termed the "fixed"

end thereof, and that portion which extends through the guide to the end where the hook is attached will be termed the "standing" portion.

The construction, operation, and advantages will, it is thought, be understood from the foregoing description, it being noted that various changes may be resorted to in the proportions and details of construction for successfully carrying the invention into practice without departing from the scope.

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

1. In a device of the character described, a plumb-bob comprising a body having a spool portion thereabove and a head above the spool portion, a guide having one end anchored in the head, a flexible connection having one end attached to the guide, the said flexible connection being wound on the spool and having its opposite end passed through the guide.

2. In a device of the character described, a plumb-bob comprising a body having a spool portion and a head, the said head having slots at its junction with the spool portion, a guide secured to the head, a flexible connection having one end secured to the guide and extending over the head into one of the slots and being wound on the spool, the opposite end of said flexible connection being passed through the guide, the said flexible connection being seated in the opposite slot.

3. In a device of the character described, a plumb-bob comprising a body having a spool portion and a head, the said head having slots at its junction with the spool portion, a guide comprising a piece of metal bent to form a spiral, said guide being secured to the head, a flexible connection having one end secured to the guide and extending over the head into one of the slots and being wound on the spool, the opposite end of said flexible connection being passed through the guide, the said flexible connection being seated in the opposite slot.

GEORGE ANSON COLEMAN.

Witnesses:

WM. A. FULLER, Jr.,

V. A. BATCHELOR.