

(No Model.)

J. L. DOWNIE & J. E. HARDIN.

LINE CHALKER AND PLUMB BOB.

No. 316,530.

Patented Apr. 28, 1885.

Fig. 1.

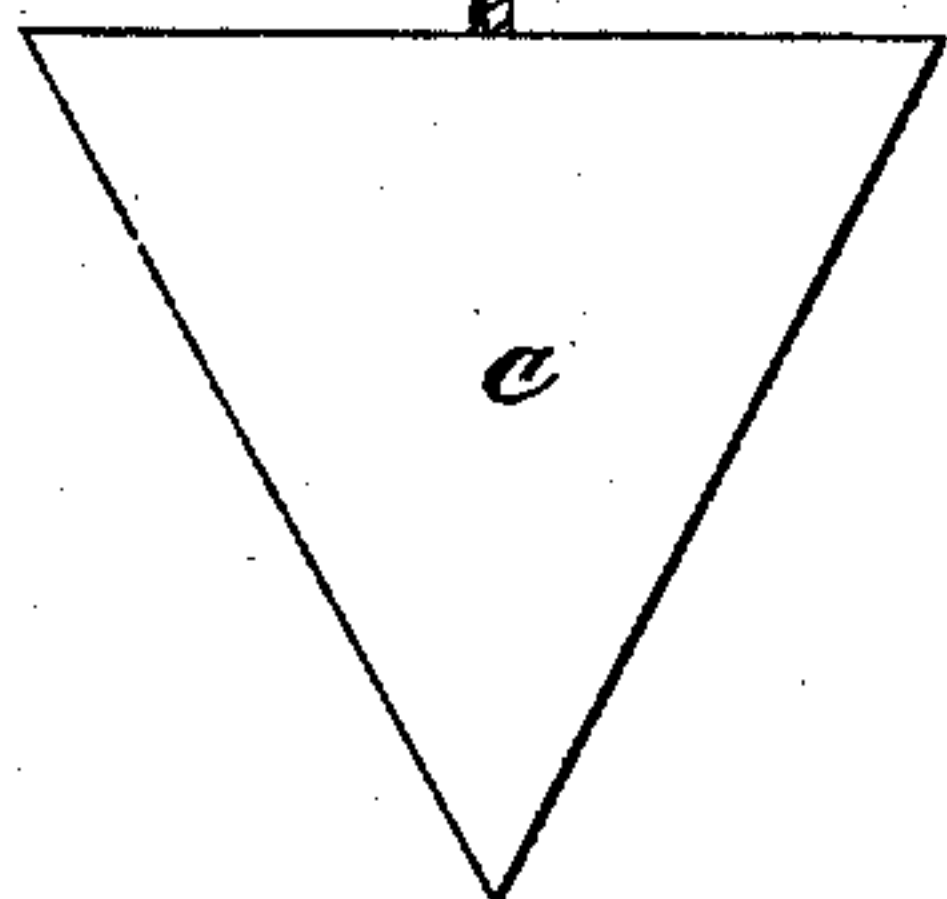
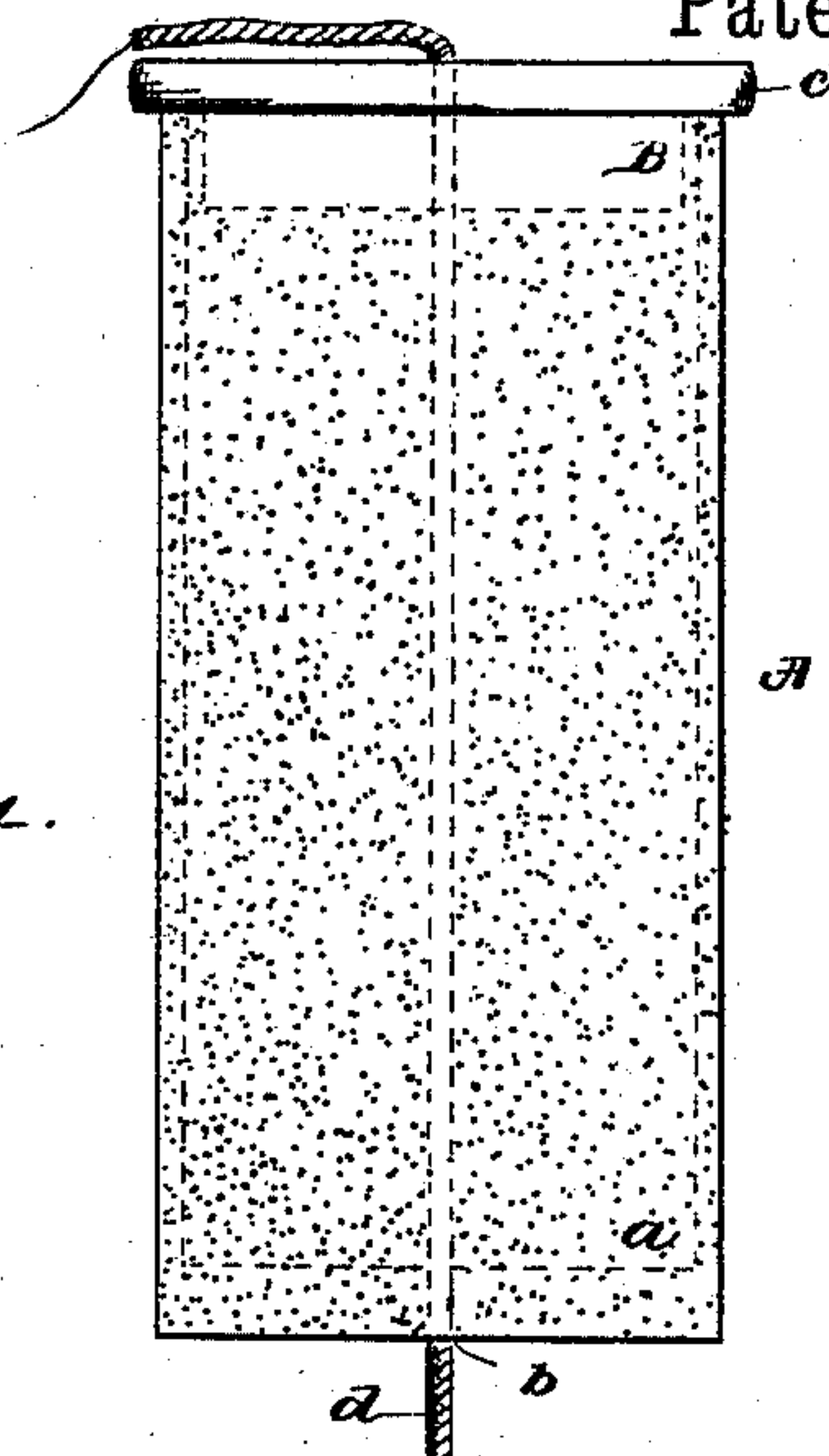
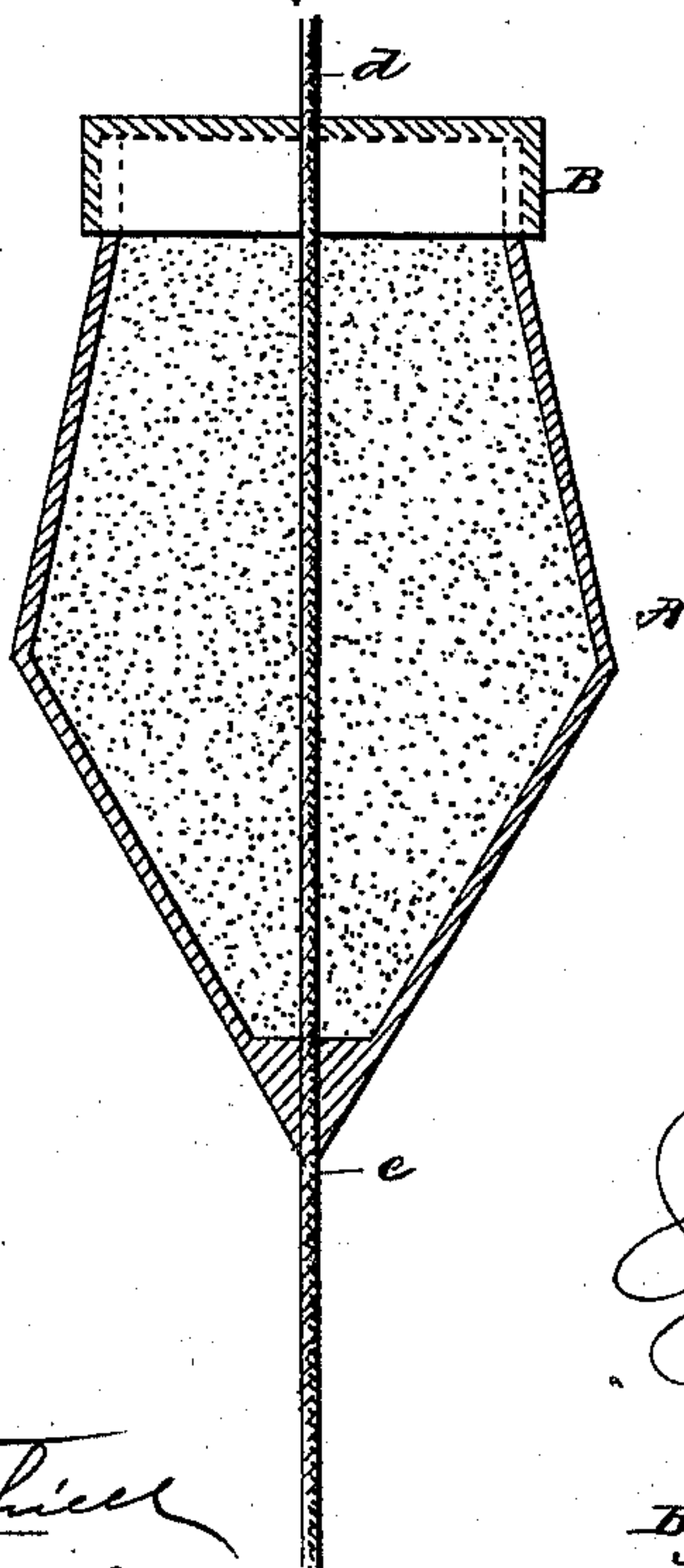


Fig. 2.



WITNESSES

C. W. Dasher
E. G. Diggers

James L. Downie
Joseph E. Hardin
INVENTORS.

By, C. A. Snow

Attorneys

UNITED STATES PATENT OFFICE.

JAMES LIVINGSTONE DOWNIE AND JOSEPH EUGENE HARDIN, OF ALLEGHENY, PENNSYLVANIA.

LINE-CHALKER AND PLUMB-BOB.

SPECIFICATION forming part of Letters Patent No. 316,530, dated April 28, 1885.

Application filed January 12, 1885. (No model.)

To all whom it may concern:

Be it known that we, JAMES LIVINGSTONE DOWNIE and JOSEPH EUGENE HARDIN, citizens of the United States, residing at Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Line-Chalkers and Plumb-Bobs, of which the following is a specification, reference being had to the accompanying drawings.

Our invention relates to a line-chalker and plumb-bob, and it has for its object to provide devices of this character which shall be cheap and simple in their construction, strong and durable, efficient, and easily operated.

With these ends in view the invention consists in the combination with a casing adapted to receive chalk or other marking material, said casing having an opening at each end and provided with means for the admission of the marking material therein.

The invention further consists in the combination, with a suitable casing having a removable cap or top piece, of an opening in the cap or top piece and in the closed end of the casing, and a cord having a bob attached thereto.

In the drawings, Figure 1 is a longitudinal vertical section of a line-chalker and plumb-bob constructed in accordance with our invention. Fig. 2 is a longitudinal vertical section of a modification.

In the accompanying drawings, in which like letters of reference indicate corresponding parts in all the figures, A represents a suitable casing of any desired form and dimensions, and preferably constructed of metal. One end of the casing A is closed by a head, *a*, formed integral therewith, said head having a central hole or opening, *b*, while the other end of the casing is open and may be interiorly threaded to receive a cap or cover, B, having threads upon its lower exterior end, said cap or cover having at its upper end an annular flange, *c*, which extends slightly beyond the upper edge of the casing and protects the same.

C represents the bob, which is of the form of an inverted cone, and which is of the same diameter at its upper end or apex as the casing A. A cord or string, *d*, is attached to the apex or upper end of the bob in any suitable manner, said cord passing up through the opening in the lower or closed end of the cas-

ing A and through the hole or opening in the cap or cover B.

In use the cap or cover is removed and the casing A filled with a suitable marking material—as, for instance, chalk. It will thus be seen that when the bob is lowered the cord will in its passage through the casing be covered with the marking material.

In the modification shown in Fig. 2 the casing A is of the form of an ordinary plumb-bob, having the pointed end *e* provided with a hole or opening. The cap or cover in this case is interiorly threaded to fit exterior threads upon the casing. This, however, is not essential, and other means may be employed whereby the cap will be held in place.

In using the device shown in the modification in Fig. 2, the bob shown in Fig. 1 is dispensed with, and the said device made to serve the double purpose of a line-marker and bob. We do not wish, however, to be limited to the exact construction in either of the figures as shown and described, but reserve to ourselves the right to make such slight changes and alterations in the details of construction as may properly fall within the scope of our invention, our invention comprehending, broadly, the employment of a casing for containing a marking material in combination with a plumb-line.

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

1. The combination, with a suitable casing adapted to contain a marking material and having openings for the passage of a cord, of a bob attached to one end of said cord, substantially as set forth.

2. The combination, with a suitable casing adapted to contain a marking material having an opening at one end and a removable cap having an opening, of a plumb-bob and a cord attached to said bob and passing through the openings of the casing, substantially as set forth.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in presence of two witnesses.

JAMES LIVINGSTONE DOWNIE.
JOSEPH EUGENE HARDIN.

Witnesses:

J. I. ANDERSON,
B. M. DOWNIE.