

B. F. CHAPPELL.

Level.

No. 30,612.

Patented Nov. 13, 1860.

Fig. 1.

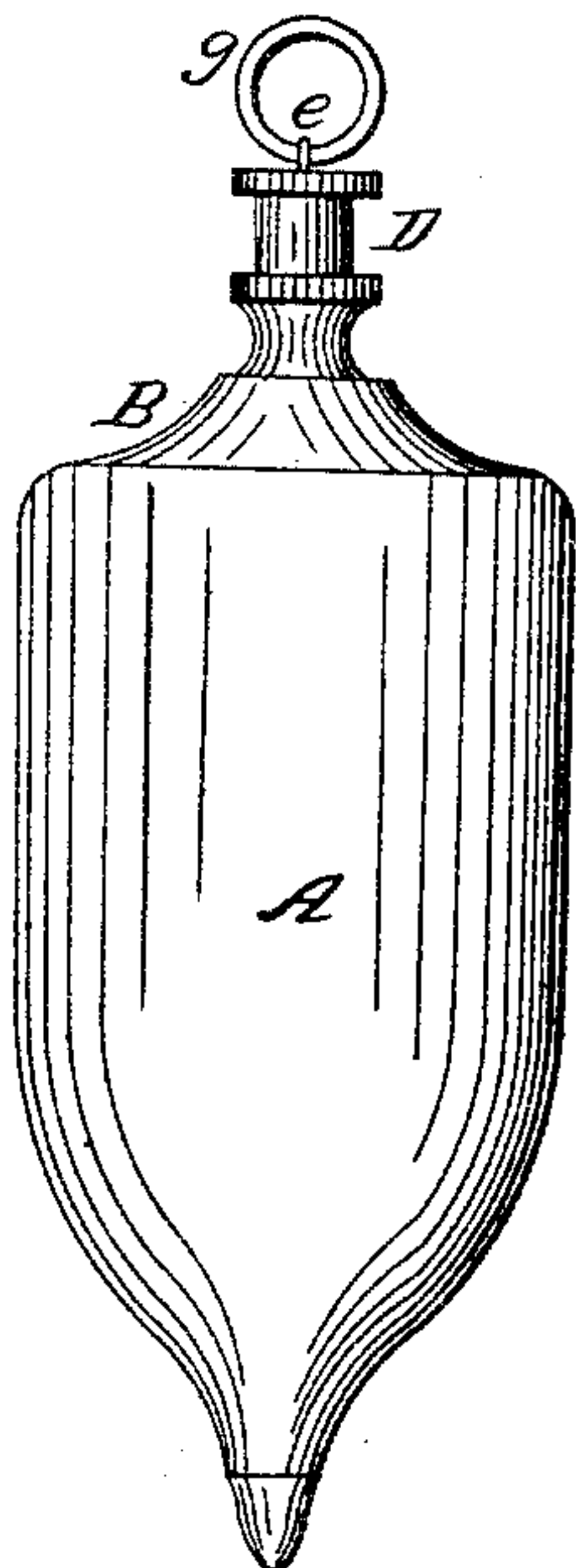
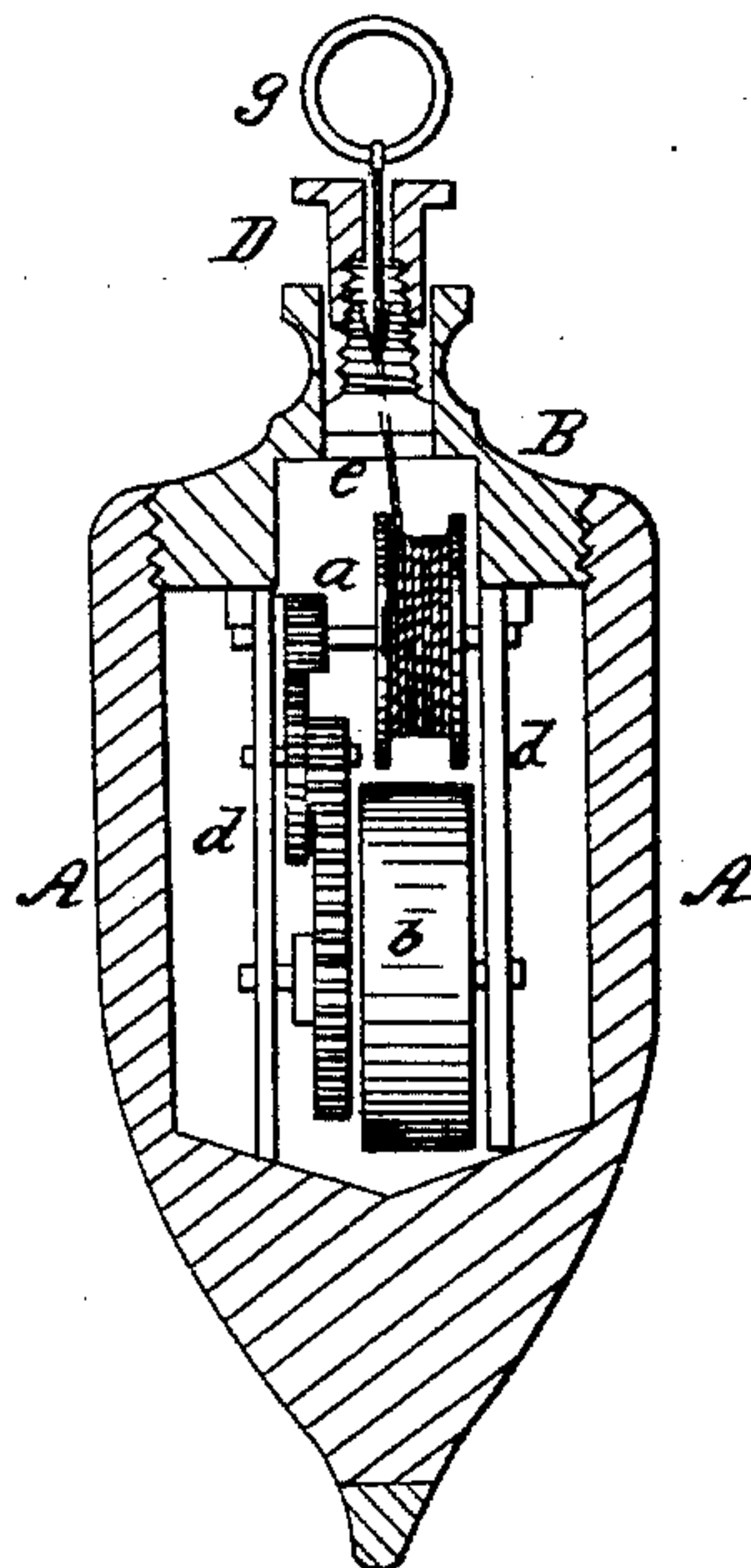


Fig. 2.



Witnesses:

J. W. Dooms
R. S. Spruill

Inventor:

B. F. Chappell
by
Munn & Co
attys

UNITED STATES PATENT OFFICE.

BENJ. F. CHAPPELL, OF NORWICH, CONNECTICUT.

PLUMB-BOB.

Specification of Letters Patent No. 30,612, dated November 13, 1860.

To all whom it may concern:

Be it known that I, BENJAMIN F. CHAPPELL, of Norwich, in the county of New London and State of Connecticut, have invented a new and Improved Plumb-Bob; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents an outside view of the plumb-bob. Fig. 2 is a diametrical section through Fig. 1, exhibiting the interior of the bob.

Similar letters of reference indicate corresponding parts in both figures.

This invention is an improvement in plumb-bobs for the use of carpenters, masons, shipwrights, surveyors, and in fact for any purpose where the plumb-bob is useful. The invention has for its object applying to the bob the string by which it is suspended, in such a manner that it can be lengthened or shortened at pleasure, and that when the bob is not in immediate use the string may be run into the body of the bob, out of the way, and not liable to be broken.

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In the drawings, A is a plumb-bob which is made of any suitable metal and of any

desirable shape. It is cast hollow or with a recess in it of sufficient capacity to receive a small frame, carrying a flanged drum *a*, and a fusee or watch spring *b*, which is made to operate upon the flanged drum *a*, through the medium of a train of wheel-work shown in Fig. 2, all of which have their pivot bearings in the frame *d*, that is secured to the metal screw-cap B, which is screwed into the top of the body of the bob.

The string *e*, which may be made as long as the drum *a*, will carry, has tied on one end a ring *g*, and its other end is tied to the drum *a*. This string passes through a pinch-nut D, that is screwed into the center and top of the cap B, by which nut the string may be held fast when it is entirely or partially unwound from the drum *a*, and drawn out of the bob. Thus when the plumb-bob is not in immediate use by slightly loosening the nut D, the string will be drawn into the body of the bob.

Having thus described my invention, I claim and desire to secure by Letters Patent as an improved article of manufacture—

A plumb bob, provided with a train of wheels, spring and stop, and otherwise made as herein shown and described.

BENJ. F. CHAPPELL.

Witnesses:

F. A. ROCKWELL,
SOLOMON FANNING.