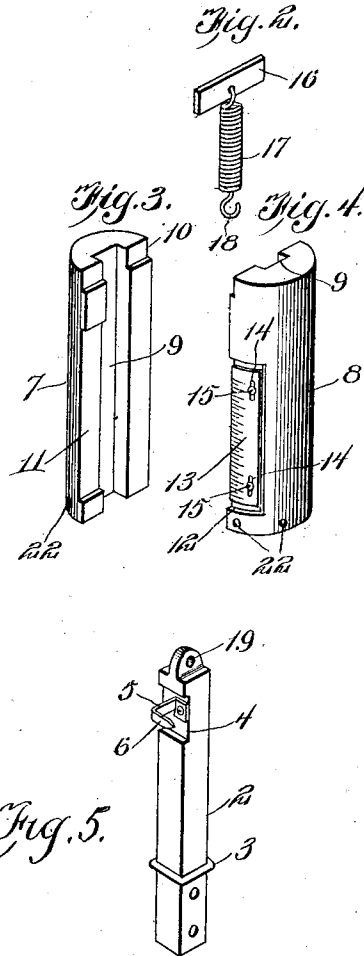
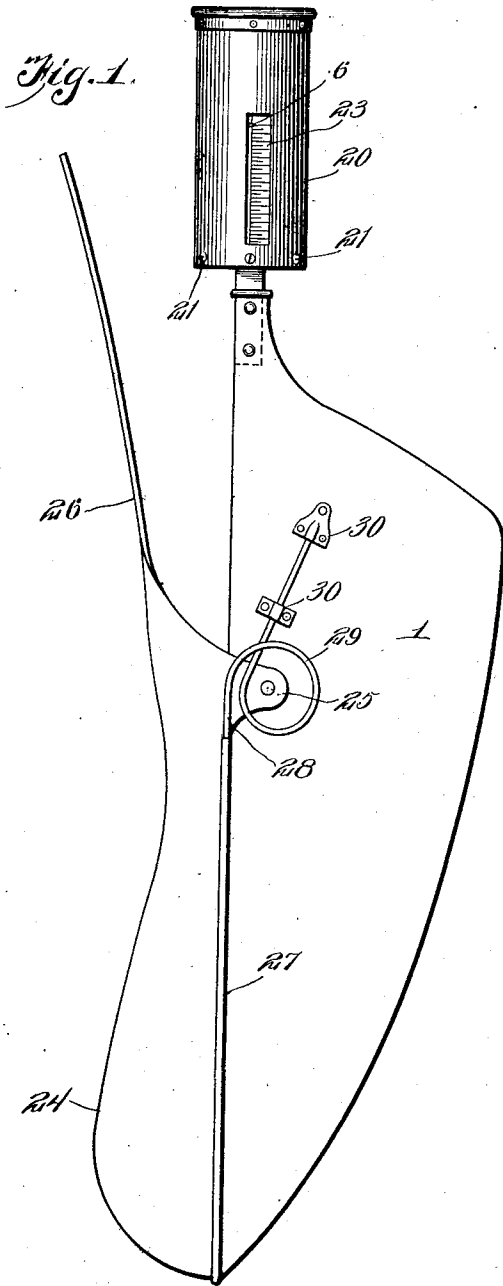


A. H. ARNOLD.
 SELF WEIGHING SCOOP.
 APPLICATION FILED DEC. 4, 1908.

916,251.

Patented Mar. 23, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR H. ARNOLD, OF CENTRAL, SOUTH CAROLINA.

SELF-WEIGHING SCOOP.

No. 916,251.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed December 4, 1908. Serial No. 465,984.

To all whom it may concern:

Be it known that I, ARTHUR H. ARNOLD, a citizen of the United States, residing at Central, in the county of Pickens and State of South Carolina, have invented new and useful Improvements in Self-Weighing Scoops, of which the following is a specification.

The invention relates to an improvement in self-weighing scoops, being designed more particularly to present a scoop of this type in which the material may be readily lifted and its weight accurately determined in a convenient and expeditious manner.

The main object of the present invention is the provision of a self-weighing scoop in which the parts are so arranged and constructed as to provide for their convenient assemblage or disconnection when desired.

The invention will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a view in elevation showing the improved weighing scoop. Fig. 2 is a perspective of the spring member. Fig. 3 is a perspective of one section of the holder. Fig. 4 is a perspective of the other section of the holder. Fig. 5 is a perspective of the standard.

Referring particularly to the accompanying drawings, my improved scoop comprises a bowl 1, which, so far as the purposes of the present invention are concerned, may be of any desired size or form. The handle or upper end of the bowl is formed to receive a scale standard 2, preferably squared in cross section and formed near one end with a bead projection 3 to accurately position the standard with relation to the bowl and at the same time form an ornamental connection at this point. Near the opposite or upper end one surface of the standard is cutaway, as at 4, to receive an approximately U-shaped metal strip 5, one arm of which projects in parallel relation to the proximate surface of the standard and is spaced therefrom to provide a pointer 6, for a purpose which will hereinafter appear.

The holder for the reception of the standard is made up of two semicylindrical sections 7 and 8 designed to be secured with their plane edges in contact to provide when the sections are assembled a cylindrical member. The contacting face of each section is longitudinally and centrally channeled to provide an approximately rectangular recess

9 extending throughout the length of the section. The recesses are so formed that when the sections are assembled the cylindrical holder provided is longitudinally and centrally formed with a rectangular opening of a size to slidably receive the standard 2. The upper end of each section is reduced on the contact face in a direction transverse the length of the sections, as at 10, so that when the sections are assembled a rectangular channel is formed in the upper end of the holder extending transverse the longitudinal channel. The section 7 on the contacting face is cut away at one side of the longitudinal channel 9 to provide a longitudinally extending recess 11, which opens from the channel 9 outwardly through the rounded surface of the section and extends from a point a slight distance above the lower end of the section to a point below the lower wall of the channel 10. The rounded surface of the section 8 is cutaway to form a scale receiving recess 12, which recess is approximately the length of the recess 11 and opens through that edge of the section 8 which is coincident with the recess 11 of the section 7. In the recess 12 is secured a scale 13 preferably formed near each end with an elongated slot 14 through which screws are arranged to take into the material of the section 8, the slots 14 and the relative lengths of the scale 13 and recess 12 being designed to permit longitudinal adjustment of the scale in order to accurately compensate for the weight of the scoop.

The holder and standard are assembled by inserting said standard in the squared opening formed longitudinally of the holder with the laterally extended portion of the strip 5 resting in the recess 11 of the section 7 and the pointer 6 overlying the scale 13. A cross bar 16 is adapted to be inserted in the recesses 10 of the assembled sections, from which cross bar depends a coil spring 17 adapted to rest in the cored out channel of the holder, the lower terminal of the spring being formed to provide a hook 18 to removably engage a perforated ear 19 formed at the upper end of the standard 2. The longitudinal movement of the standard relative to the holder under the influence of the weight of the material in the scoop is thus resisted by the spring 17, and the pointer 6 moves over the scale 13 to register the extent of the movement and thereby the weight of the material in the scoop. The holder

and connected parts are supported within a cylindrical casing 20 closed at top and open at bottom, the casing being secured to the holder by screws 21 taking into openings 22 formed in the respective sections. The casing is formed with an elongated opening 23 through which the pointer 6 and scale 13 are visible to enable the user to readily determine the weight of the material in the scoop.

10 The bowl 1 is provided with a cover 24 of appropriate shape, which, near its rear end, is formed with ears 25 designed to be pivotally connected to the bowl, a handle 26 projecting from the cover beyond the ears for convenient operation of the cover when desired. In advance of the ears 25 the cover is designed to fit snugly in contact with the proximate edge of the bowl, and such edge of the cover is formed to provide a bead 27 in

20 which is secured a length of spring material 28, which beyond the ends of the bead and adjacent the ears 25 is coiled, as at 29, and terminally secured at 30 to the bowl. The spring acts to normally hold the cover in

25 closed position relative to the bowl, thus forming a closed scoop which will readily hold the material during the weighing operation.

The use of the improved weighing scoop is readily apparent from the above description taken in connection with the drawings, it being particularly noted that by the removal of the casing 20 the operative parts of the scoop are readily separable for repair or

35 other adjustment.

Having thus described the invention what is claimed as new, is:—

1. A scoop including a bowl, a cover hingedly connected thereto and formed throughout its operative edge with a bead, and a spring held within the bead and terminally connected to the bowl.

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2. A scoop including a bowl, a cover hingedly connected thereto and formed throughout its operative edge with a bead, and a spring held within the bead and terminally connected to the bowl, said spring intermediate its connection to the bowl and the bead being formed to provide a coil.

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3. A weighing scoop including a scoop proper, a standard projecting therefrom, a pointer carried by the standard, a holder

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comprising semicylindrical sections each formed with a longitudinally extending channel to receive the standard when the sections are assembled, a scale connected to one of the sections to cooperate with the pointer, and a spring member removably connected to the sections and to the standard.

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4. A weighing scoop including a scoop proper, a standard projecting therefrom, a pointer carried by the standard, a holder comprising semicylindrical sections each formed with a longitudinally extending channel to receive the standard when the sections are assembled, a scale adjustably connected to one of the sections to cooperate with the pointer, and a spring member removably connected to the sections and to the standard.

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5. A weighing scoop including a scoop proper, a standard projecting therefrom, a pointer carried by the standard, a holder comprising semicylindrical sections each formed with a longitudinally extending channel to receive the standard when the sections are assembled, a scale connected to one of the sections to cooperate with the pointer, a spring member removably connected to the sections and to the standard, and a casing encircling the holder sections and secured thereto.

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6. A weighing scoop including a scoop proper, a standard connected thereto, a holder comprising sections adapted to be connected to form a cylindrical body, said sections being each formed with a longitudinally arranged channel designed to register when the sections are assembled to form a standard receiving opening, the contacting edges of the sections adjacent their upper ends being formed with transverse channels, a cross bar fitting within the registering channels of the assembled sections, and a spring depending from said cross bar and connected to the standard.

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

ARTHUR H. ARNOLD.

Witnesses:

F. B. MORGAN, Jr.,
C. L. MAULDIN.