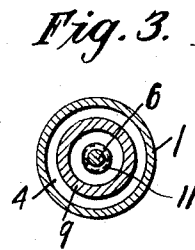
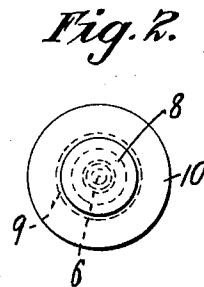
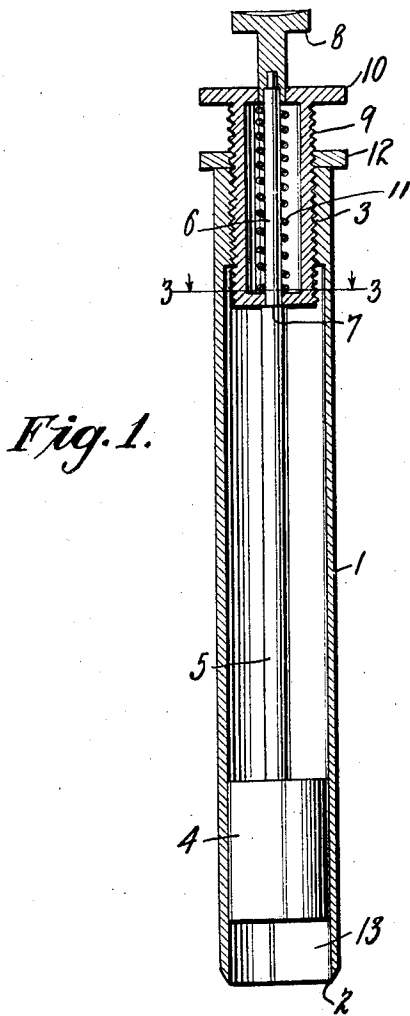


L. S. SIMMONS.
POWDER DIVIDER.
APPLICATION FILED FEB. 3, 1920.

1,406,504.

Patented Feb. 14, 1922.



Witnesses
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UNITED STATES PATENT OFFICE.

LLOYD SCOTT SIMMONS, OF SONOMA, CALIFORNIA.

POWDER DIVIDER.

1,406,504.

Specification of Letters Patent. Patented Feb. 14, 1922.

Application filed February 3, 1920. Serial No. 355,947.

To all whom it may concern:

Be it known that I, LLOYD S. SIMMONS, a citizen of the United States, residing at Sonoma, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Powder Dividers, of which the following is a specification.

It frequently becomes necessary to divide substances into given amounts. Particularly is this the case when preparing medicines in powdered form to be taken in uniform doses.

The invention provides means whereby a powder may be divided into like portions of uniform amount by bulk and which will admit of the work being quickly, accurately and conveniently performed.

The drawings illustrate a preferred embodiment of the invention. However, it is to be understood that in adapting the same to meet different conditions, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention as claimed hereinafter.

In the accompanying drawings an embodiment of the invention appears and on reference thereto,

Figure 1 is a vertical central section of a device constructed in accordance with and embodying the invention, the plunger and its stem being in full lines,

Figure 2 is an end view of the device as seen from the top,

Figure 3 is a horizontal section on the line 3—3 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by like reference characters.

The device comprising a barrel 1 which is beveled at its lower end to provide a cutting edge 2 whereby the barrel may readily penetrate the substance to be divided. The upper end of the barrel 1 is thickened and internally screw threaded as indicated at 3. A plunger 4 has a piston fit within the barrel. A stem or rod 5 connected with the plunger 4 passes upwardly through the barrel 1 and its upper portion is reduced as indicated at 6, a shoulder 7 being provided at the base of the reduced part 6. A button 8 is fitted to the upper end of the reduced portion 6 of the stem or rod 5.

An adjuster is fitted to the upper end of the barrel 1 preferably by means of screw

threads whereby its position may be fixed. The adjuster comprises a hollow body 9 and a head 10 the latter projecting beyond the sides of the body and having its edge roughened to enable the fingers of the hand to obtain a firm grip thereon when rotating the adjuster when setting the device for dividing a substance into determinate portions. The hollow body 9 is externally screw threaded to fit the internally screw threaded portion 3 of the barrel 1. The top and bottom of the adjuster are centrally apertured to receive the reduced portion 6 of the stem 5. The opening in the top or head 10 of the adjuster is somewhat larger than the opening in the bottom to agree with the diameter of the shank of the button 8 to which the upper end of the stem 5 is connected. A spring 11 is located within the body 9 of the adjuster and surrounds the reduced portion 6 and exerts an upward pressure on the lower end of the shank of the button 8 thereby holding the plunger 4 at the limit of its upward movement. A lock nut 12 mounted upon the threaded portion of the body 9 is adapted to engage the upper end of the barrel 1 and secure the adjuster in the located position.

The chamber 13 formed between the lower edge 2 of the barrel and the lower face of the plunger 4 is adapted to receive the substance to be divided and determines the portions of divisional amounts. After the chamber 13 has been filled the substance is ejected therefrom by exerting a pressure on the button 8 which causes downward movement of the plunger 4 with the result that the substance contained in the chamber 13 is dislodged therefrom. The substance to be divided may be placed upon a table or like supporting surface and the device is manipulated to cause the lower end of the barrel to pass through the substance thereby filling the chamber 13, said chamber being subsequently emptied by manipulation of the plunger 4. The substance may be of any nature and the portions thereof may be separately wrapped or placed in capsules or if the substance be damp the pellets or tablets form may be permitted to dry.

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

1. A divider of the character set forth comprising a barrel, an adjuster having screw thread connection with the barrel, a

plunger within the barrel and having sliding connection with the adjuster, and a spring disposed within the adjuster and normally acting to yieldably hold the plunger retracted in the barrel.

2. A divider of the character set forth comprising a barrel, having its upper end internally screw threaded, a hollow adjuster having screw thread connection with the threaded end of the barrel, a lock nut on the adjuster for securing the same in the required position in the barrel, a plunger within the barrel, a stem connected with the plunger and passing through the barrel and

having an end portion reduced and passing through the said adjuster, the shoulder at the lower end of the reduced portion forming a stop, a button at the upper end of the reduced part of the stem, and a spring within the adjuster and normally exerting an upward pressure on the stem of the plunger.

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

LLOYD SCOTT SIMMONS.

Witnesses:

H. F. BATES,
DAVID J. ERLDE.