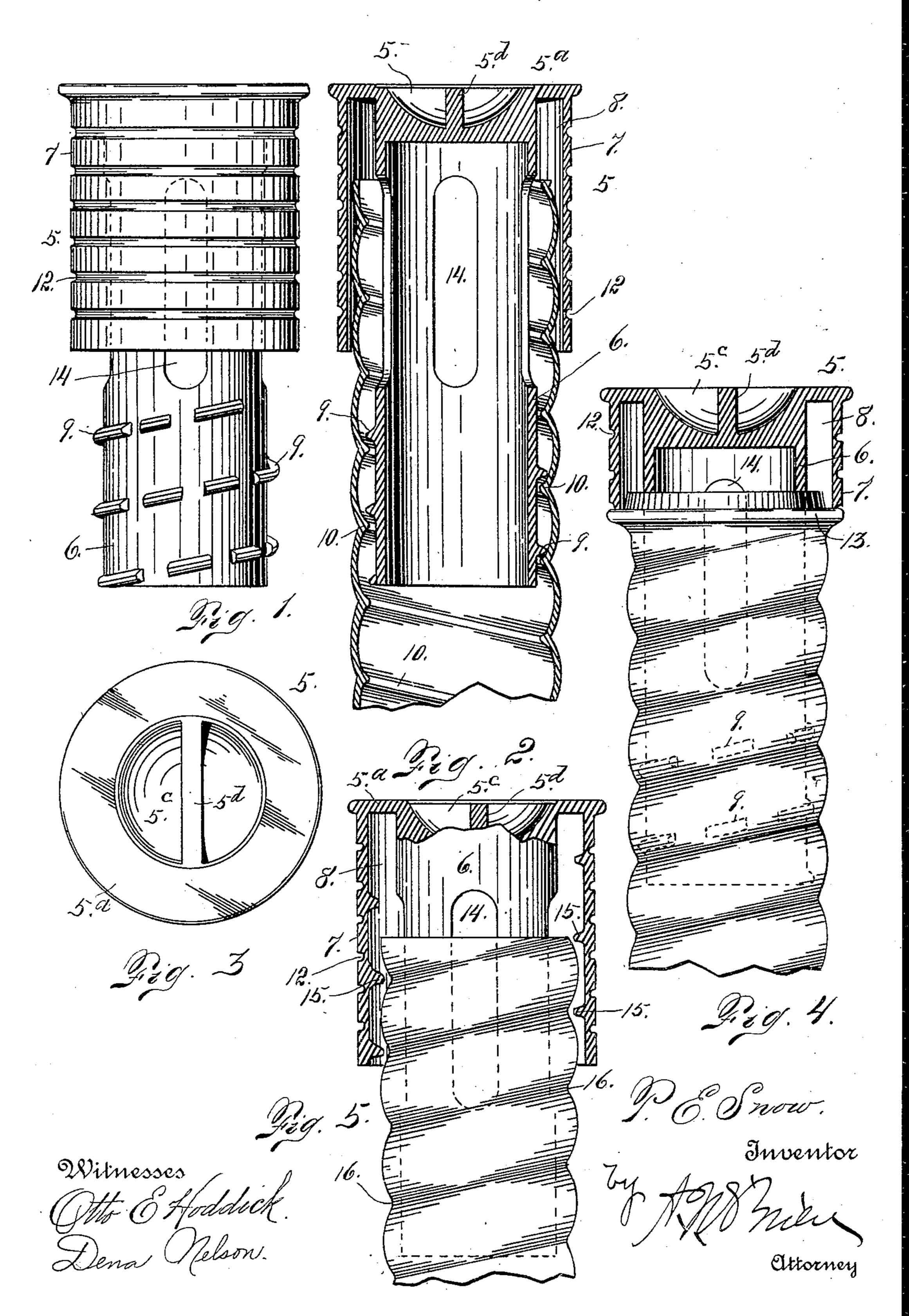
P. E. SNOW.

SERVICE BOX.

APPLICATION FILED JAN. 31, 1905.



UNITED STATES PATENT OFFICE.

PETER E. SNOW, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO HARRY S. SILVERSTEIN AND ONE-HALF TO ADA E. SNOW, OF DEN-VER, COLORADO.

SERVICE-BOX.

No. 800,687.

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed January 31, 1905. Serial No. 243,501.

To all whom it may concern:

Be it known that I, Peter E. Snow, a citizen of the United States, residing in the city | and county of Denver and State of Colorado, have invented certain new and useful Improvements in Service-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in service-boxes for use in connection with either water or gas systems or in any relation where a service-box is required. As is well known, these boxes are used to protect valves for turning the water, gas, or other fluid on or off, as may be desired, the valve being located a suitable distance below the surface to give it proper protection and being accessible through the box through the instrumentality of a key for manipulating the valve.

My improvement relates to a vertically-adjustable cap or cover for use in connection with these boxes. Heretofore, so far as I am aware, no provision has been made whereby the cap may be raised and lowered in order to keep it flush or vertically so with the pavement or other surface where the device is located. By virtue of my improvement the cap may be readily adjusted to accomplish the purpose above indicated; and to this end the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a detail view showing my improved cap. Fig. 2 is a section showing the same attached to a servicebox. Fig. 3 is a top or plan view of the cap. Fig. 4 is a view, partly in section, illustrating the cap applied to the old form of service-box. Fig. 5 shows a modified form of construction.

The same reference characters indicate the

same parts in all the views.

Let the numeral 5 designate my improved service-box cap, the same consisting of a top 5°, an inner depending sleeve 6, and an outer

space 8. The inner sleeve 6 is provided with a spirally-arranged rib or thread 9 to engage 55 the spiral rib 16 of the service-box on the inside, whereby the cap may be raised and lowered at will by simply turning it in the proper direction. The outer sleeve 7 fits quite closely to the outer surface of the box and 60 is provided with exterior circumferential grooves 12, whereby its length may be easily regulated. By taking a cold-chisel or other suitable instrument the outer sleeve may be shortened, as circumstances may require. 65 When my cap is used in connection with a service-box having a shoulder 13, as shown in Fig. 4, the length of the outer sleeve 7 must be made considerably shorter than where the cap is used in connection with a new service- 7° box or one devoid of the shoulder 13. The inner sleeve 6 of my improved cap is preferably provided with vertical slots 14, forming openings through which dirt or foreign particles of matter may pass, whereby they are 75 prevented from interfering with the action of the cap either while screwing it upwardly or downwardly.

In the form of construction shown in Fig. 5 the outer sleeve 7 is provided with threads 80 or spirally-arranged lugs 15, adapted to engage the spiral groove 16 on the outside of the service-box. In this case the inner sleeve 6 remains the same as before, except that it is not provided with threads. In forming the 85 threads 9 and 15 they preferably consist of separated spirally-arranged lugs or broken threads. This is much preferred, since it gives an opportunity for the dirt to escape, whereby it is prevented from interfering with the op- 9° eration of the cap.

From the foregoing description the use and operation of my improved device will be readily understood. All that is necessary in raising or lowering the cap to cause it to 95 harmonize with the surface where the box is located is to simply turn it either up or down, as circumstances may require.

The top 5° is provided with a recess 5°, divided into two equal parts by a rib or parti- 100 tion 5^d. This rib enables the user to apply a wrench to the cap for manipulating the latter. The grooves 12 of the outer sleeve 7 of the cap are sufficiently deep that by the means of a hammer and cold-chisel one or more of 105 sleeve 7, the two sleeves being separated by a | the sections may be easily broken off in order

to regulate the length of the sleeve as the circumstances of any particular case may require.

Having thus described my invention, what

5 I claim is—

1. The combination with a service-box of the class described, of a vertically-adjustable cap connected with the box, and provided with outer and inner concentric depending sleeves, one of which has a threaded connection with the box.

2. The combination with a service-box of the class described, of a cap having inner and outer depending sleeves, one being adapted to enter the service-box and the other passing outside thereof, the service-box being provided with a spiral rib, and the inner sleeve of the cap having a thread coöperating with the rib for the purpose set forth.

3. The combination with a service-box, of a cap consisting of inner and outer sleeves occupying positions on opposite sides of the box, the cap and the box being provided with cooperating threads for the purpose set forth.

4. The combination with a service-box, of a cap having inner and outer sleeves, one of the said sleeves being provided with a thread, and the box being provided with a coöperating rib for the purpose set forth.

5. The combination with a service-box, of a cap having inner and outer depending sleeves, the outer sleeve being provided with non-communicating circumferential grooves, to facilitate the shortening of the sleeve one sleeve having a threaded connection with the service-box for the purpose set forth.

6. The combination with a service-box of the class described, of a cap having inner and outer depending sleeves, the inner sleeve of the cap having a threaded connection with the box to permit the vertical adjustment of the cap.

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

PETER E. SNOW.

Witnesses:

A. J. O'BRIEN, HARRY S. SILVERSTEIN.