

(No Model.)

B. R. FOSTER.

MEASURING DEVICE FOR POWDERED MATERIALS.

No. 464,823.

Patented Dec. 8, 1891.

Fig. I.

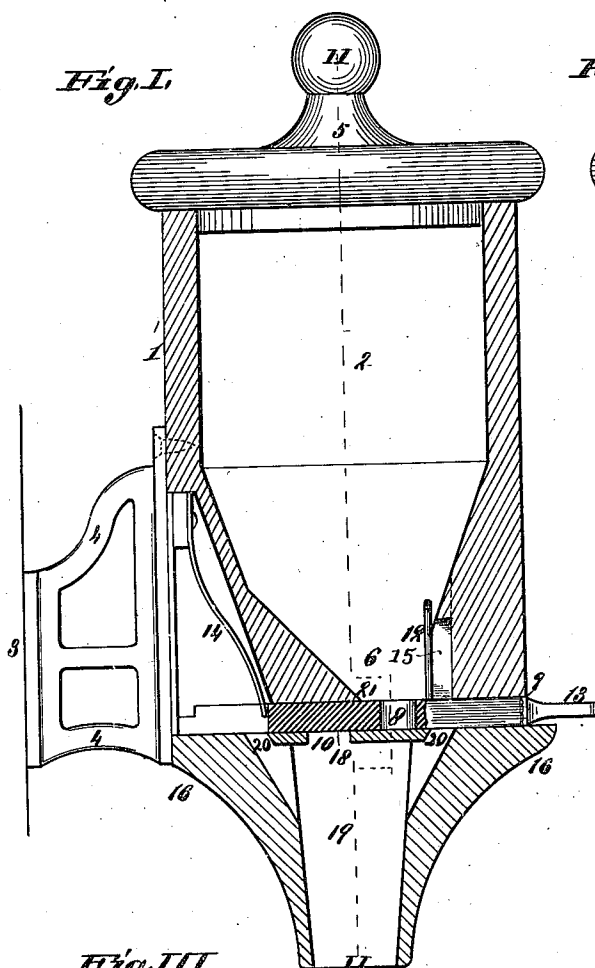


Fig. II.

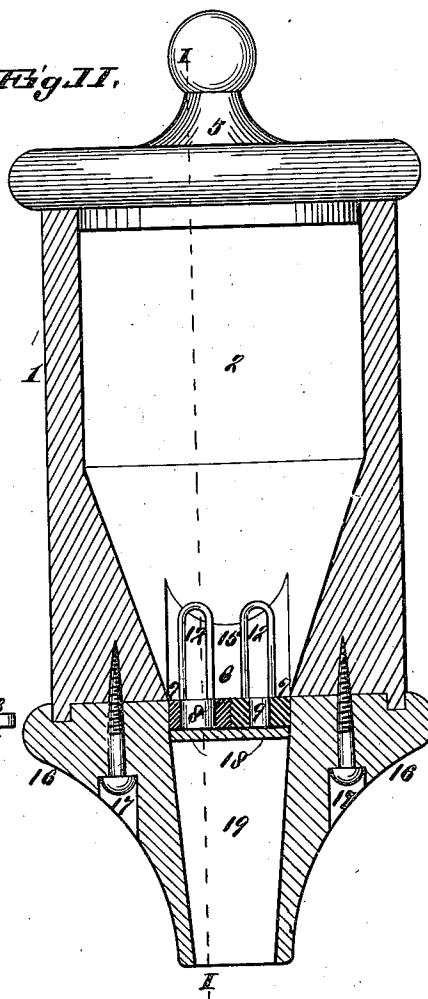


Fig. III.

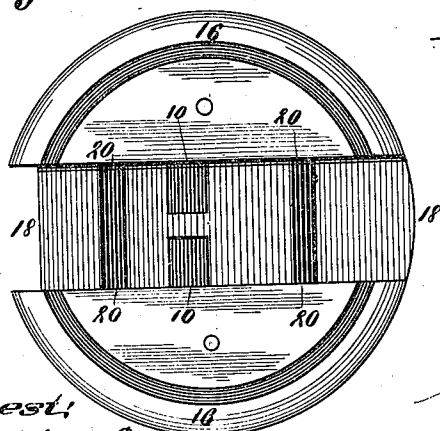
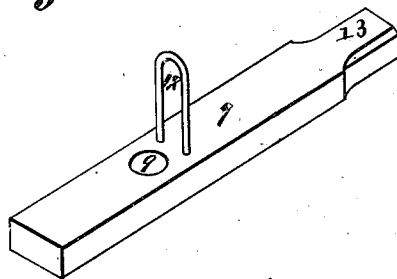


Fig. IV.



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MEASURING DEVICE FOR POWDERED MATERIALS.

SPECIFICATION forming part of Letters Patent No. 464,823, dated December 8, 1891.

Application filed July 20, 1891. Serial No. 400,141. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN R. FOSTER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Devices for Holding and Administering Pulverized Soap, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a coadjutory attachment to wash-stands, &c., for a depository for pulverized soap, with slide-valves of diverse capacity that govern the discharge of soap and a stirring device that stirs and forwards said pulverized soap to its discharge; and the invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical section taken on line I I, Fig. II, and shows the bracket attachment of the depository-box, its interior arrangement, a side view of one of the slide-valves, the spring that forces said valve back to its retired closed position, and the vertical stirring device that stirs and forwards the pulverized soap to the open port at which it is discharged. Fig. II is a like vertical section taken on the stagger line II II, Fig. I, and shows a front view, the duplex slide-valves of diverse capacity, and the combined stirrers and forwarders that are mounted on the stems that carry said valves. Fig. III is a horizontal section taken immediately beneath the slide-valves, and shows the open ports with which said valves register when pushed in, and the escape-ducts, by way of which any stray soap that works under the valve-stems finds free egress into the discharge-vent; and Fig. IV is a detail of one of the slide-valves, and shows the stirrer-bow that rises vertically therefrom.

Referring to the drawings, 1 represents the receptacle in the boxing 2, in which pulverized soap is stored, which receptacle may be attached to a wall 3, and preferably adjacent to a wash-stand by the bracket 4. 5 is the cap or cover of said receptacle. The boxing of the receptacle converges toward the center at bottom, thus forming an inclined chute 6, through which the pulverized soap is precipi-

tated onto the duplex sliding valve-stems 7, and passes into the major valve-port 8 and the minor valve-port 9 in their respective stems, and one of said valve-stems, according to the amount of soap required, is pushed into registering coincidence with its corresponding open port 10 in the bottom of the receptacle, there being two such open ports respectively on line with the sliding valve-port that works into registry therewith.

12 represents duplex vertical agitator-bows that are respectively secured in and ascend from the respective sliding stem of each valve, which valve-stem at its outer end is provided with an operating-handle 13, by which the respective slide-valve that is required at the time being to operate is pushed in until its open port registers with the open port 10 in the bottom of the receptacle, so as to secure the discharge of a certain amount of the pulverized soap onto the hands or into the wash-basin or other depository, as the case may be, the said amount being gaged by the capacities of said major and minor valve-ports, the measure being struck full by the rear incline 21 at the back of the inclined chute, so that the exact measure, respectively, of the major or minor valve-port (as the case may be) is appropriated each time. Thus the amount of the discharge is regulated by the respective operation of the major valve to effect a large discharge and of the minor valve to effect a small discharge. The open port thus secured to effect said discharge by pushing one or the other of said valve-stems into its operative position is immediately thereafter closed by the return action of the stem under the influence of the reactionary spring 14, one of which is provided for and works against each stem and throws its valve-port back to be again refilled for future use.

15 represents a cavity in the throat of the receptacle that provides sufficient liberty for the working of the agitators in the soap as the valve-stems move back and forth, and the movement of the valve-stem is limited to its respective positions of open and closed ports by the impact of said agitator-bows 12 with the buffer-stay provided by their contact with the sides of said inclined chute 6.

16 represents the perforate base-block,

which forms the bottom of the receptacle, to which it is secured by the screws 17, and within the countersunk channel 18 in said base-block the sliding valve-stems 7 are seated and work.

19 represents the perforate discharge-vent in the center of said base-block, through which the quota required of pulverized soap is discharged for use.

20 represents escape-ducts that incline downward and inward from the countersunk channel 18 on either hand beyond the open ports 10 and empty into the perforate discharge-vent 19, so as to provide an escape-vent for any stray particles of soap that may miss the open ports 10 and deliver them with the main discharge.

I claim as my invention—

1. In a device for holding and distributing pulverized washing-soap, the combination of the receptacle 1, having within it the inclined chute 6 and provided with the open ports 10 in its bottom and the escape-ducts 20, the straight parallel sliding valve-stems 7, which are respectively provided with the major port 8 and the minor port 9, arranged for measuring the modicum of soap to be used, and the duplex bow-agitators 12, the said agitators being secured to said slide-valves, substantially as and for the purpose set forth.

2. In a device for holding and distributing pulverized washing-soap, the combination of the receptacle 1, provided with the cavity 15, the strike 21 opposite said cavity, the open port 10 in its base, the sliding valve-stems 7,

which valve-stems are respectively provided with the major port 8 and the minor port 9, arranged for measuring and separating the modicum of soap to be used, the duplex bow-agitators 12, secured to and that travel in a straight line with said slide-valves, and the reactionary springs 14, the said springs arranged after the distribution of the soap to throw back the sliding valve-stems for the closure of the distributing-ports and the refilling of the measure valve-ports, substantially as and for the purpose set forth.

3. In a device for holding and distributing pulverized washing-soap, the combination of the receptacle provided with the cavity 15, the open ports 10 in its base, the perforate base-block 16, secured beneath said receptacle, the said block provided with the countersunk channel 18, the discharge-vent 19, the escape-ducts 20, and the duplex sliding valve-stems 7, that are seated in and work in said channel 18, the said valve-stems provided, respectively, with the major measure-ports 8 and the minor measure-ports 9, the reactionary springs 14, arranged to throw back the sliding valve-stems to close the ports 10 and refill the valve-ports 8 and 9 after the distribution of the soap, the strike 21, that levels the measure, and the bracket 4, by which said receptacle is secured to the wall, &c., substantially as and for the purpose set forth.

BENJAMIN R. FOSTER.

In presence of—

BENJN. A. KNIGHT,
SAML. KNIGHT.