No. 853,695. PATENTED MAY 14, 1907.

J. C. HILL.

SIGHT FEED.

APPLICATION FILED JULY 16, 1906.

Fig. 1.

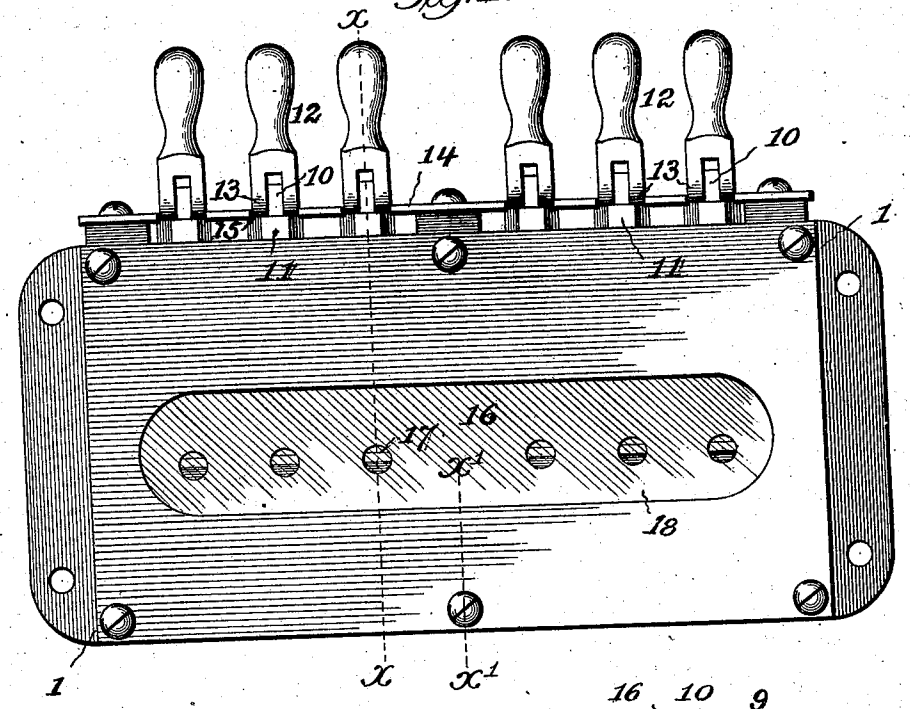



Fig. 2.

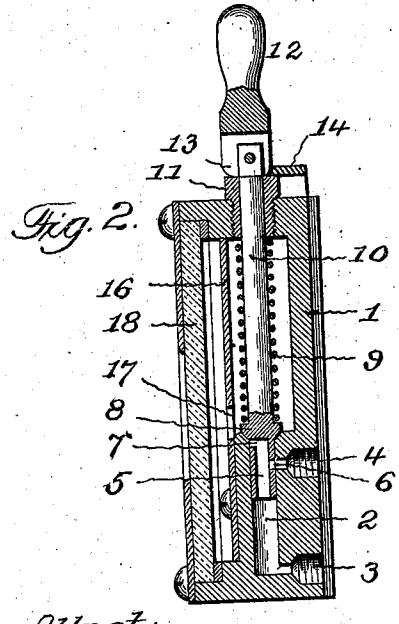



Fig. 3.

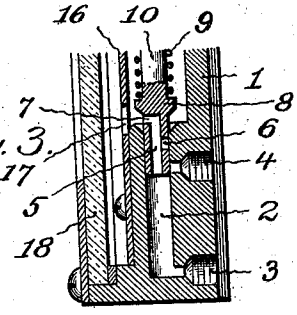



Fig. 4.

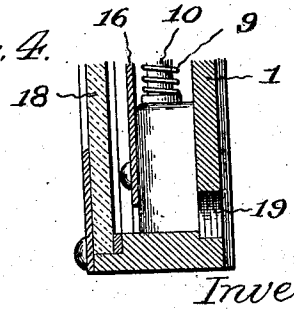
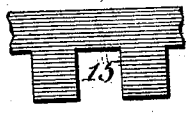



Fig. 5.

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# UNITED STATES PATENT OFFICE.

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## SIGHT-FEED.

No. 853,695. Specification of Letters Patent. Patented May 14, 1907.

Application filed July 16, 1906. Serial No. 326,327.

*To all whom it may concern:*

Be it known that I, JOHN C. HILL, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sight-Feeds, of which the following is a specification.

This invention relates to means for visibly indicating the flow of the fluid in its passage from a pump to the point or points of use, and has for its object to provide a simple and durable arrangement and combination of parts whereby a temporary visible flow of the fluid can be had at the will of the operator, and which is adapted to give such visible indication in a separate manner and individual to each of the deliveries of a multiple delivery pump, all as will hereinafter more fully appear.

In the accompanying drawings:—Figure 1 is a front elevation of a multiple delivery indicator constructed in accordance with the present invention. Fig. 2 is a transverse section on line *x*—*x* Fig. 1. Fig. 3 is a detail transverse section illustrating the parts in a reverse position to that shown in Fig. 2. Fig. 4 is a detail transverse section on line *x'*—*x'* Fig. 1. Fig. 5 is a detail plan view of the plate which locks the handles from rotation.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 is a main trunk or housing, which in the multiple and preferred form of the appliance is formed with a series of vertical passages 2, which at their upper ends are formed with seats for the controlling valves hereinafter described.

3 are a series of inlet passages connecting with the lower end of the series of passages 2, and adapted to conduct the multiple discharges of a pump into passages 2, aforesaid.

4 are a series of outlet passages connecting with the series of passages 2, near the upper ends thereof, and are adapted for connection with a series of pipes extending to the points to be lubricated.

5 are a series of tubular piston valves sliding in the upper portions of the vertical passages 2, and each provided with a pair of lateral ports 6 and 7, arranged in vertical separated relation as shown, and adapted in one position of the valve 5, illustrated in Fig. 2, to register the passage 2, through the lower port 6, with the outlet passage 4, so that the flow of the lubricant will be to the point of use. In the other portion of said valve 5, illustrated in Fig. 3, the communication of the port 6 with the outlet passage 4 is closed, and the upper port 7 is brought above the inclosing wall of the passage 2 so that the lubricant will discharge outwardly through said port 7 against a transparent wall of the appliance hereinafter described, to give a visible indication of the flow.

8 is a conical valve at the upper end of the piston valve 5, and adapted in the first described position of the valve above described, to seat upon and close the upper end of the passage 2, to prevent leakage therefrom of the lubricant.

9 is a spring the tendency of which is to hold the piston valve to its first described position, and to this end the said valve will be provided with a guiding and operating stem 10, around which said spring is arranged, with its lower end bearing against the top of the conical valve head 8, and its upper end against a guide bushing 11, screwing into the top of the housing 1 as shown.

12 is an operating handle, pivoted to the upper end of the guide stem 10, and provided with a lateral toe 13, having bearing against the top of the bushing 11, and adapted in a downward swing of the operating handle to lift the piston valve into the position in which it gives a visible indication of the flow of the lubricant.

14 is a plate secured to the top of the housing 1, and provided with a series of rectangular recesses 15 corresponding with the number of operating handles 12, and adapted to form receiving cavities for the lower ends of said handles to prevent any rotation of said handles from their proper position in relation to the main housing.

16 is a vertical plate arranged in front of the series of guide stems, springs, etc., above described, and adapted to conceal the same from view, and at the same time constitute a reflector to aid in a better observation of the flow of the lubricant heretofore described.

17 are a series of orifices in the plate 16 for the outward discharge of the lubricant against the transparent wall of the appliance.

18 is the transparent wall of the appliance secured to the front thereof in any usual and suitable manner. Such wall 18 is arranged a short distance in front of the vertical plate 16, before described, so as to leave a collecting chamber for the lubricant in making a visible test of the flow thereof.

19 is an outlet passage connecting with the lower end of said collecting chamber, and adapted for connection with a drain pipe extending to the supply tank of the pump.

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

1. A visible indicating appliance for lubricators and the like, comprising a housing formed with a main passage, inlet and outlet passages communicating with said main passage at different points in its length, a piston valve moving in said passage and provided with lateral ports adapted to control the direction of the flow of fluid from the main passage, means for imparting a sliding movement to said piston valve, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collecting chamber formed in said housing.

2. A visible indicating appliance for lubricators and the like, comprising a housing formed with a main passage, inlet and outlet passages communicating with said main passage at different points in its length, a piston valve moving in said passage and provided with lateral ports adapted to control the direction of the flow of fluid from the main passage, a spring tending to maintain said piston valve in one position, means for moving said valve into its other position, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collecting chamber formed in said housing.

3. A visible indicating appliance for lubricators and the like, comprising a housing formed with a main passage, inlet and outlet passages communicating with said main passage at different points in its length, a piston valve moving in said passage and provided with lateral ports adapted to control the direction of the flow of fluid from the main passage, a spring tending to maintain said piston valve in one position, means for moving said valve into its other position the same comprising a handle having pivotal connection to an operating stem on the valve and provided with a lateral lifting toe, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collection chamber formed in said housing.

4. A visible indicating appliance for lubricators and the like, comprising a housing formed with a main passage, inlet and outlet passages communicating with said main passage at different points in its length, a piston valve moving in said passage and provided with lateral ports adapted to control the direction of the flow of fluid from the main passage, a handle having pivotal connection to an operating stem on the valve and provided with a lateral lifting toe, a plate provided with a rectangular recess adapted for engagement with the lower end of the operating handle, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collection chamber formed in said housing.

5. A visible indicating appliance for lubricators and the like comprising, a housing formed with a series of main passages arranged in parallel relation, individual inlet and outlet passages communicating with said main passages at different points in their length, a series of individual piston valves moving in said main passages and provided with lateral ports adapted to control the direction of the flow of fluid from said main passages, means for imparting sliding movement to said valves, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collecting chamber common to the indicating discharge from the lateral ports of the series of valves.

6. A visible indicating appliance for lubricators and the like comprising, a housing formed with a series of main passages arranged in parallel relation, individual inlet and outlet passages communicating with said main passages at different points in their length, a series of individual piston valves moving in said main passages and provided with lateral ports adapted to control the direction of the flow of fluid from said main passages, a series of springs tending to maintain said piston valves in one position, means for moving said valves into their other position, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collecting chamber common to the indicating discharge from the lateral ports of the series of valves.

7. A visible indicating appliance for lubricators and the like comprising, a housing formed with a series of main passages arranged in parallel relation, individual inlet and outlet passages communicating with said main passages at different points in their length, a series of individual piston valves moving in said main passages and provided with lateral ports adapted to control the direction of the flow of fluid from said main passages, a series of springs tending to maintain said piston valves in one position, means for moving said valves into their other position the same comprising a series of handles having pivotal connection to a series of stems on said valves and provided with individual lifting toes, and a transparent wall connected to the housing and forming a part of the inclosing wall of a collecting chamber common to the indicating discharge from the lateral ports of the series of valves.

8. A visible indicating appliance for lubricators and the like comprising, a housing formed with a series of main passages arranged in parallel relation, individual inlet and outlet passages communicating with said main passages at different points in their

length, a series of individual piston valves moving in said main passages and provided with lateral ports adapted to control the direction of the flow of fluid from said main passages, a series of handles having pivotal connection to a series of stems on said valves and provided with individual lifting toes, a plate provided with a series of rectangular recesses corresponding in number with the handles and adapted for engagement with the lower ends thereof, and a transparent wall connected to the housing and forming a part of the inclosing wall of a connecting chamber common to the indicating discharge from the lateral ports of the series of valves.

Signed at Chicago, Illinois, this 14th day of July 1906.

JOHN C. HILL.

Witnesses:
ROBERT BURNS,
HENRY MOE.