(No Model.)

C. F. SMITH.

MOLASSES GATE.

No. 490,404. Patented Jan. 24, 1893.

Fig. 1.

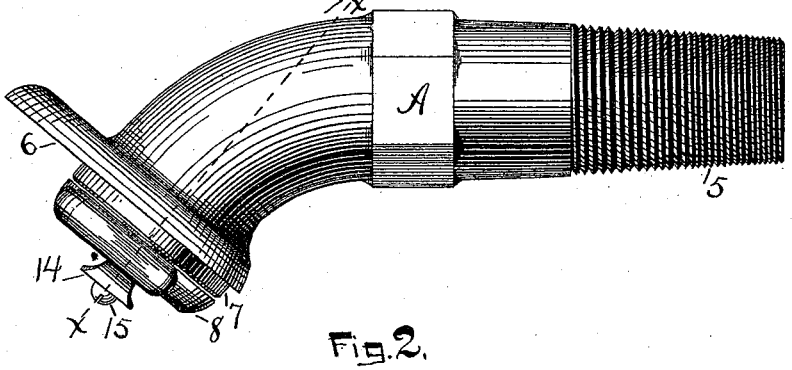


Fig. 2.

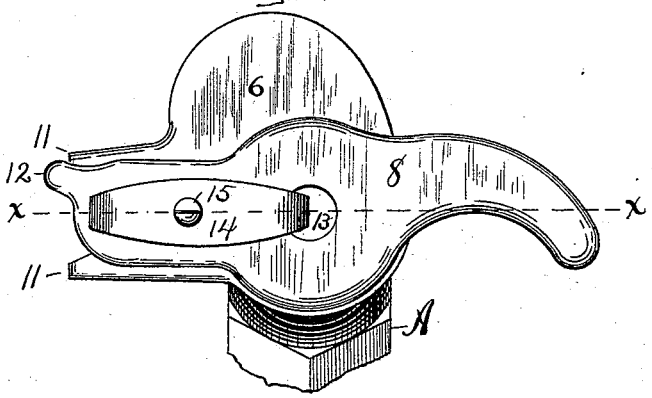


Fig. 3.

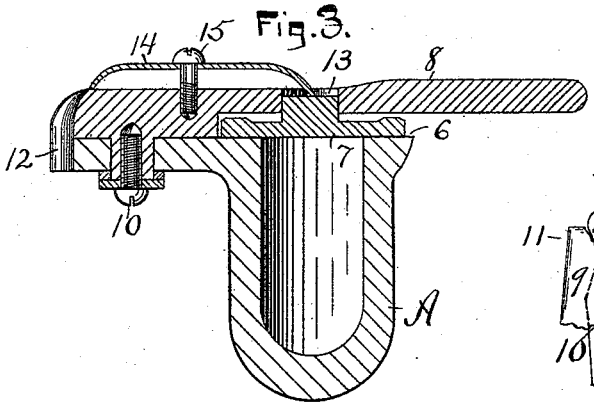
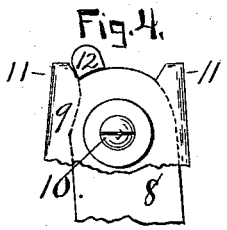


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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MOLASSES-GATE.

SPECIFICATION forming part of Letters Patent No. 490,404, dated January 24, 1893.

Application filed June 29, 1892. Serial No. 438,386. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. SMITH, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new Improvements in Molasses-Gates, of which the following is a specification.

My invention relates to improvements in molasses gates, and the chief objects of my improvement are simplicity and economy of construction and general efficiency of the article.

In the accompanying drawings, Figure 1 is a side elevation of my molasses gate. Fig. 2 is a face view of the gate end thereof together with a perspective view of a portion of the body. Fig. 3 is a sectional view of the same on the line *x x* of Figs. 1 and 2, and Fig. 4 is a detached view of a portion thereof showing the stop for the lever.

A designates the body which has a screw thread at 5 and in its general shape is of ordinary form. At the front end there is a flange or face 6 over which the gate 7 slides with the lever 8. In the same plane as the flange or face 6 there is a fulcrum wing 9 on which the lever is fulcrumed as at 10. This fulcrum wing is also provided with stop lugs 11 and the lever 8 is provided at its shortest end with the stop lug 12 for acting in connection with the stop lugs 11. The gate 6 is held in position so as to swing with the lever 8 by means of the tenon 13 which rests in a hole made to receive it in the body of the lever. Upon this lever I secure a spring 14 by means of the screw 15. The body of this screw is received in the lever 8 while its head rests upon the middle portion of the spring and one end of this spring rests on the face of the lever near its short end while the other end of said spring rests upon the tenon 13 of the gate thereby keeping the gate firmly compressed against the face or flange 6. The tenon 13 is made short enough so that the end of the spring 14 extends in a little beyond the outer face of the lever thereby preventing said spring from twisting around and working out of place.

The gate is represented as closed in the drawings in which position its motion, in the downward direction at the handle end, is limited by the stop lug 12 on the lever 8 and the upper lug 11 on the fulcrum wing. As the handle end of the lever (the right hand end in Figs. 2 and 3) is lifted to pull the gate away from in front of the opening in the body A, it is prevented from being lifted too far by the stop lug 12 engaging the lower one of the lugs 11 on the fulcrum wing. The rear side of this fulcrum wing and a portion of the lever are shown in Fig. 4. The construction is cheap and simple. The lateral extension of the fulcrum wing beyond the lever fulcrum serves to hold the lever firmly to its seat while the spring 14 bearing near the short end of the lever and on the gate serves to hold the gate 6 in contact with its working face with all the power of the spring.

I claim as my invention,

The herein described molasses gate consisting of the body having a flange or face 6, the lever 8 having a tenon orifice, the gate 7 held in connection with said lever by a tenon resting in said orifice, and the spring 15 secured on the face of the lever with one end of said spring resting on said tenon while its other end bears on the lever near the short end thereof, substantially as described and for the purpose specified.

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