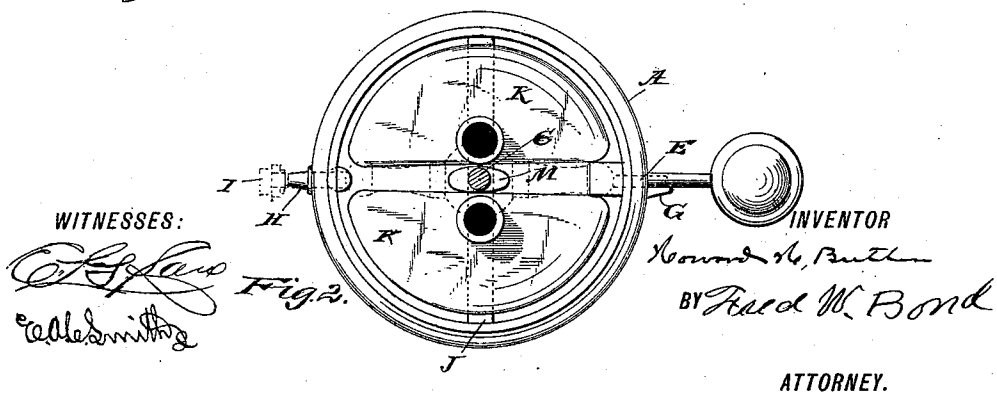
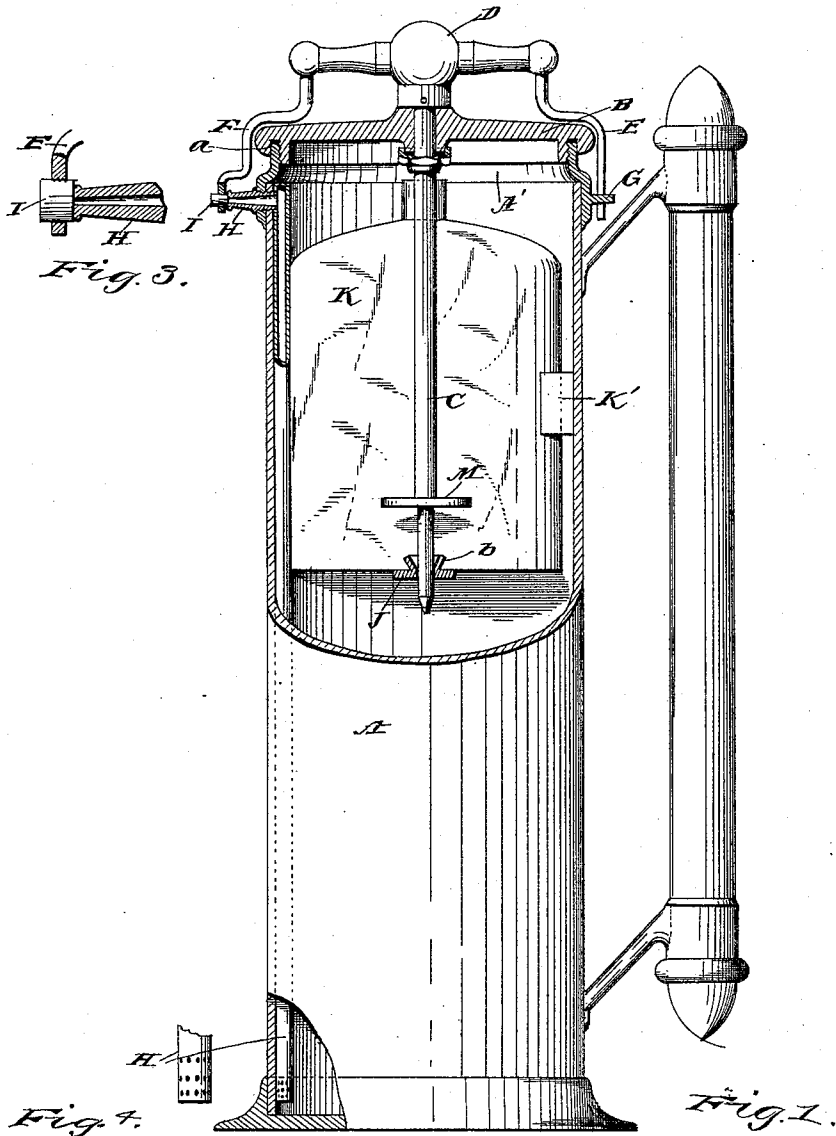


(No Model.)

H. H. BUTLER.
FIRE EXTINGUISHER.

No. 461,421.

Patented Oct. 20, 1891.



UNITED STATES PATENT OFFICE.

HOWARD H. BUTLER, OF CANTON, OHIO, ASSIGNOR TO HARRIE B. HUTCHINSON, AMASA BURCH, THOMAS E. COLLINS, AND W. J. MEANS, ALL OF SAME PLACE.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 461,421, dated October 20, 1891.

Application filed May 2, 1890. Serial No. 350,387. (No model.)

To all whom it may concern:

Be it known that I, HOWARD H. BUTLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters marked thereon, in which—

Figure 1 represents a vertical section which embodies my invention complete. Fig. 2 is a top view showing the cover removed. Fig. 3 is a detached view of the discharge-pipe and its stopper. Fig. 4 is a view of the bottom or lower end of the discharge-pipe.

The present invention has relation to fire-extinguishers; and it consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the metallic cylindrical liquid-containing vessel, which is made sufficiently strong to resist pressure within and which is provided with a stationary bottom and a screw-threaded removable top or cover B. This cover will be suitably packed to prevent leakage, and has a tubular opening through its center, through which passes the partially-revolving rod or shaft C. This rod or shaft is suitably packed on the under side of the cover B. To the top or upper end of the shaft C is securely attached the handle D, and projecting from the opposite ends of this handle are the two arms E and F. The arm E extends beyond the outer edge of the cover B and is so adjusted that it will strike against a projection or stop G, located on the outer side of the vessel A, so as to prevent the rod or shaft C from being revolved when the cover B is being screwed in place. The other arm F is so adjusted that it will come down to the end of the discharge-pipe H, and which has its lower end formed so as to hold a packing or stopper I, which packing or stopper may be

of any suitable material, and which packing or stopper closes the end of the discharge-pipe H, so as to prevent any evaporation and at the same time to form a cut-off.

Extending horizontally across the vessel A at any suitable point is a horizontal bar or support J, which serves not only as a support for the chemical-liquid-containing vessels K, but which also serves as a bearing for the lower end of the rod or shaft C, so as to prevent said shaft from springing when it is rotated. To the inner side of the cylindrical vessel is attached the stop K', which, in connection with the discharge-pipe H, serves to hold the chambers K rigidly in position, so as to be operated upon by the eccentric M upon the rod or shaft C. This eccentric is secured to the rod or shaft C at any suitable point above the horizontal bar or support J, but in such relation to the chambers K that when the rod or shaft C is revolved the eccentric will break the chambers K, and thus allow their contents to be emptied into the vessel A. These chambers are held in such a position that a slight turn of the rod or shaft C, by means of the handle D, will cause the eccentric to break both chambers. As the arm E strikes against the projection or stop G the rod or shaft C can only be revolved in one direction, so as to cause the eccentric to break the chambers K.

The discharge-pipe H extends from near the bottom of the vessel A upward to any desired distance, and is provided at its top or upper end with a horizontal portion, which projects outward from the side of the cylinder A. The bottom or lower end of this pipe H is perforated for the purpose of forming a strainer, which prevents any particles passing into the pipe H which will not readily pass out of the discharge.

For the purpose of preventing the top or upper part of the cylinder A from springing, the annular groove *a* is formed. The outer periphery of this groove abuts against the outer side of the top or upper portion of the band A', thereby compensating for the weakness produced in cutting the screw-thread to receive the screw-threads formed in the top or cover B.

For the purpose of easily entering the bottom or lower end of the shaft C the funnel *b* is provided, which acts as a guide for the bottom or lower end of the shaft C.

5 For the purpose of strengthening the cylinder A the band *A'* is provided, which is securely attached to the top or upper end of the cylinder A.

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

1. The combination of the handle D, provided with the arms E and F, the stop G, the cylinder A, the cover B, and the stopper I, 15 substantially as and for the purposes specified.

2. In a fire-extinguisher, the combination

of the cylinder A, the top or cover B, the rod or shaft C, provided with the handle D, the arms E and F, the stop G, the stopper I, the chambers K, located within said cylinder A 20 and held in a rigid position by means of the stop K', the discharge-pipe H, the horizontal support J, the perforated discharge-pipe H, and the arms M, substantially as and for the purpose specified. 25

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HOWARD H. BUTLER.

Witnesses:

E. A. C. SMITH,
FRED W. BOND.