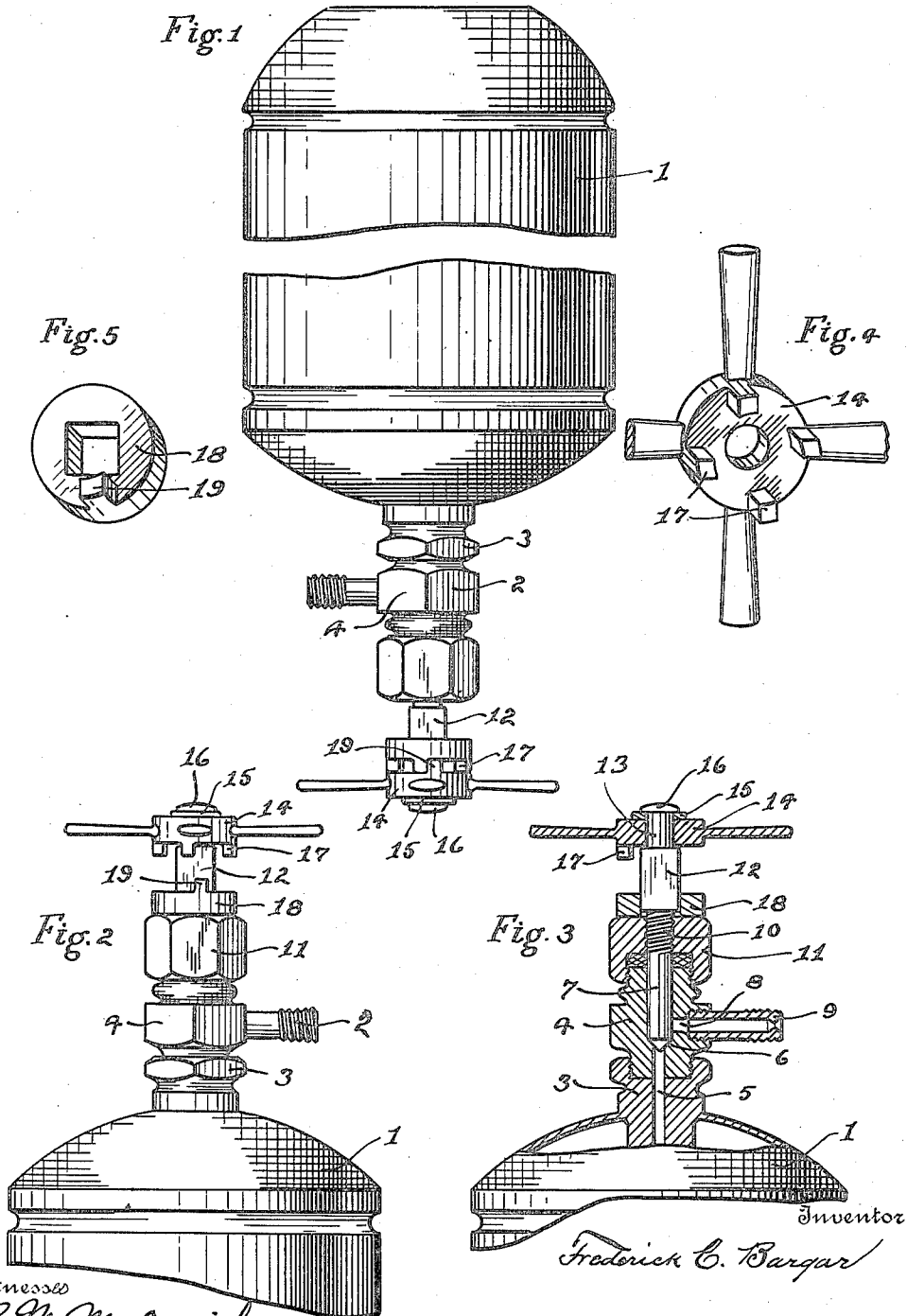


F. C. BARGAR.  
FIRE EXTINGUISHER.  
APPLICATION FILED NOV. 6, 1916.

1,228,388.

Patented June 5, 1917.



Witnesses

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# UNITED STATES PATENT OFFICE.

FREDERICK C. BARGAR, OF COLUMBUS, OHIO, ASSIGNOR TO NU-EX FIRE APPLIANCE COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

## FIRE-EXTINGUISHER.

1,228,388.

Specification of Letters Patent.

Patented June 5, 1917.

Application filed November 6, 1916. Serial No. 129,681.

*To all whom it may concern:*

Be it known that I, FREDERICK C. BARGAR, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Fire-Extinguishers, of which the following is a specification.

This invention relates to fire extinguishers and is particularly directed to a type of portable extinguisher in which an expelling fluid such as compressed air is desirably used in connection with the extinguishing chemical. In structures of this type it is essential that the extinguisher be handled so that when the chemical is released, this chemical will be in direct contact with the outflow controlling structure for, otherwise, the expelling fluid would be permitted to escape without discharging any of the chemical.

To this end, my invention has mainly for its object the provision of a structure wherein the operating handle is governed by suitable mechanism, whereby the controlling valve is opened by turning of the handle when the container is in one position and wherein this valve is automatically uncoupled from the handle when the container is in a reverse or inverted position. By this arrangement, the user will instinctively be aware that the container is in the incorrect position should the handle fail to operate the controlling valve.

The preferred embodiment of my invention is shown in the accompanying sheet of drawings, in which similar characters of reference designate corresponding parts, and in which:

Figure 1 is a view in side elevation of a container with my invention applied thereto,

Fig. 2 is a side elevation of the controlling mechanism of the extinguisher shown in inverted position,

Fig. 3 is a central vertical section of the same,

Fig. 4 is a view in perspective of the operating handle used by me, but shown detached, and,

Fig. 5 is a view in perspective of the clutch member used by me, but shown detached.

In these drawings, the container has been shown somewhat diagrammatically at 1. It is to be understood that, preferably, this container holds the extinguishing chemical and an expelling fluid such as compressed

air. To the bottom of the container there is attached the spray head 2, which comprises the fitting 3 into which the valve body 4 is secured. The members 3 and 4 are centrally bored, as is shown at 5 and this bore terminates in a valve seat 6, upon which the complementally formed valve stem 7 operates. This valve stem closes communication between the central bores 5 and the lateral bore 8 in the valve body, which bore 8 leads into the nozzle 9 to form the normal outlet for the extinguishing chemical. The valve stem is itself provided with a series of threads 10 in the usual manner and is packed against leakage by means of the packing nut shown at 11. The portion of the valve stem beyond the packing nut 11 is preferably of polygonal shape, as shown at 12 and its extreme outer end is turned down to cylindrical form, as shown at 13. It is on this cylindrical portion 13 that the valve handle 14 is rotatably mounted, the same being held in position by means of the washer 15 and the turned over head 16. One half of the hub of the handle 14 is provided with a plurality of laterally projecting clutch jaws or lugs 17, which jaws are designed to cooperate with a clutch member 18. This clutch member is also provided with a polygonal bore of such size that it is freely slidable on the portion 12 of the valve stem and the length of the portion 12 of the valve stem is such that when the extinguisher is in the position shown in Fig. 1, the clutch member 18 is in such position that its laterally projecting jaw or lug 19 will be in a position of engagement with one of the jaws of the handle 14, while when the extinguisher is in an inverted position, as shown in Figs. 2 and 3, these lugs will be entirely disengaged.

From the foregoing description, it will be apparent that when the extinguisher is in the position shown in Fig. 1, the clutch member 18 will freely slide on the portion 12 of the valve stem to be in such position that its clutch jaw 19 will be engaged by one of the jaws 17 of the handle 14. Therefore, by turning the handle, the valve stem 7 would also be turned to thus open communication between the passages 5 and 7 to permit the extinguishing chemical to be expelled. When in this position, the expelling fluid being always on top of the chemical will expel the same, but should the con-

tainer be moved to an inverted position, the expelling fluid would be in direct contact with the controlling valve. However, when the extinguisher is inverted, the clutch member 18 slides down on the squared portion 12 of the valve stem as shown, to thereby uncouple the handle from the valve stem. The handle is now freely rotatable on this stem and, therefore, prevents opening of the valve structure.

What I claim is:

1. A fire extinguisher comprising a container, a spray head attached to said container, a valve and handle controlling the outflow through said head, and means whereby said handle is operable to open said valve when the container is in one position and inoperative to open said valve when the container is in an inverted position.

2. A fire extinguisher comprising a container, a spray head attached to said container, a valve and handle controlling the outflow through said head, and a clutch mechanism between said valve and handle operable to couple the handle to the valve when the container is in one position and to uncouple the handle from the valve when the container is in an inverted position.

3. A fire extinguisher comprising a con-

tainer, a spray head attached to said container, a valve and handle controlling the outflow through said head, and a clutch member slidable up and down on the stem of said valve and arranged to clutch the handle to the valve when the container is in one position and to uncouple the handle from the valve when said container is in an inverted position.

4. A fire extinguisher comprising a container, a spray head attached to said container, a valve including a valve stem controlling the outflow through said head, a handle on said stem, said stem being polygonal in shape, a clutch jaw on said handle, a clutch member having a polygonal bore slidable on said stem, and a clutch jaw on said clutch member, said member having a slidable movement sufficient to couple the handle to the valve stem when the container is in one position and to uncouple them when the container is in an inverted position.

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

FREDERICK C. BARGAR.

Witnesses:

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A. L. PHELPS.