J. Q. ADAMS.

SIGNAL FOR FUNNELS.

APPLICATION FILED JUNE 30, 1910.

986,535. Patented Mar. 14, 1911.

FIG. 1

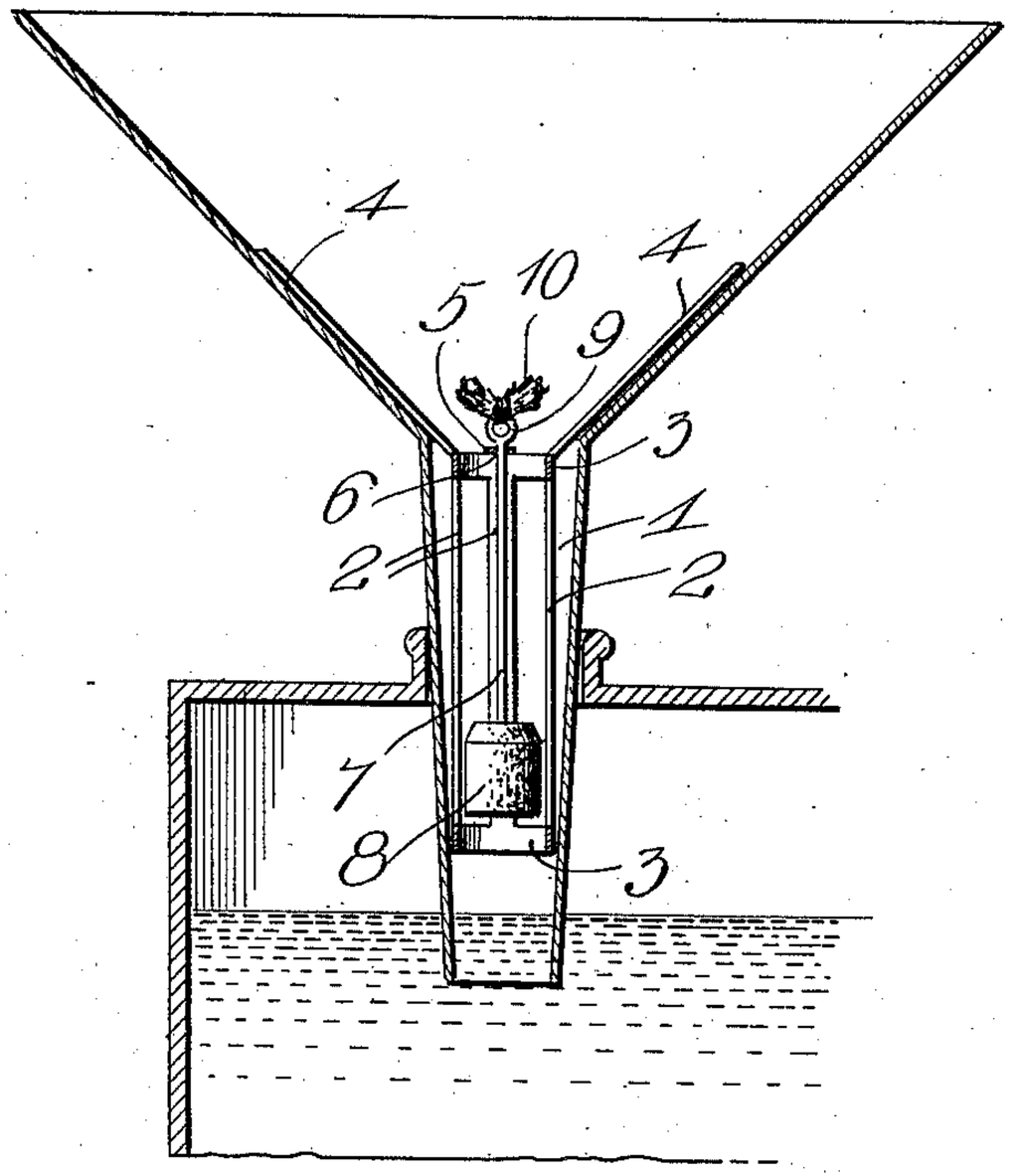


FIG. 2

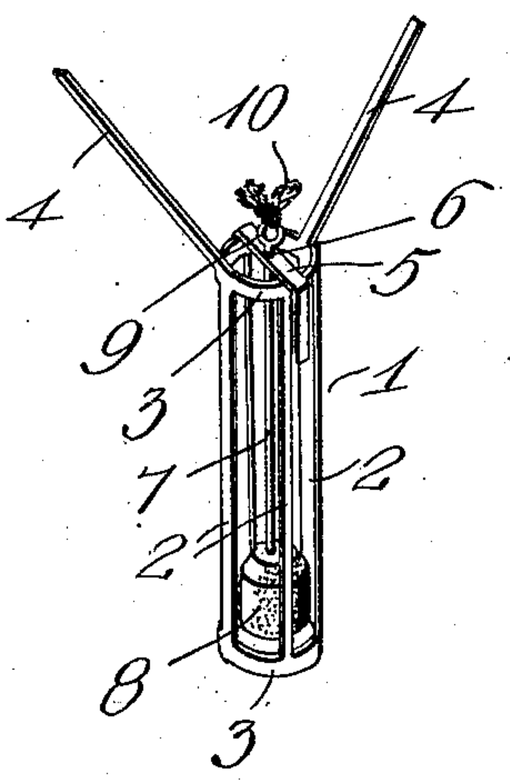
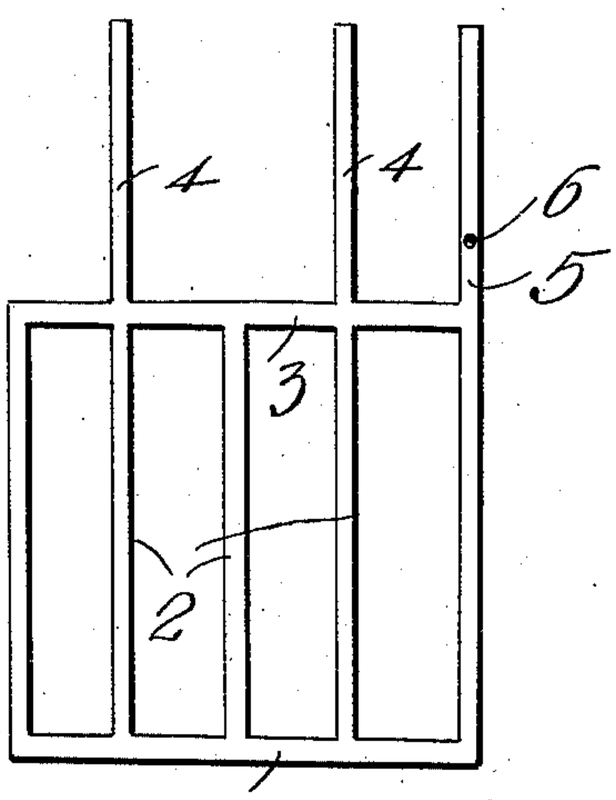


FIG. 3



Witnesses

E. Bennett

T. B. Hopkins

Inventor

J. Q. Adams

by H. Bliss & Co

Attorneys

UNITED STATES PATENT OFFICE.

JOHN QUINCY ADAMS, OF WESTMONT, NEW JERSEY.

SIGNAL FOR FUNNELS.

986,535. Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed June 30, 1910. Serial No. 569,809.

To all whom it may concern:

Be it known that I, JOHN QUINCY ADAMS, a citizen of the United States, residing at Westmont, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Signals for Funnels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in signals for funnels.

One object of the invention is to provide a signal for funnels by means of which the height of the liquid being poured into an opaque vessel or container will be indicated thereby preventing the overflow of the vessel or an excess of the liquid being poured therein.

Another object is to provide a device of this character which will be simple and inexpensive in construction and which may be readily applied to and removed from the funnel.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a vertical sectional view through a container and through a funnel engaged therewith showing the invention applied thereto and illustrating the manner in which the signal operates. Fig. 2 is a perspective view of the signal removed from the funnel; Fig. 3 is a plan view of the blank from which the float holding cage of the signal is formed.

My improved signal comprises a cage 1 which is preferably constructed from a sheet metal blank cut to form a series of vertically disposed bars or ribs 2 which are connected together at their opposite ends by integral strips 3. Two of the oppositely disposed ribs 2 are extended upwardly above the upper strip 3 and are bent or inclined outwardly toward their upper ends to provide funnel engaging arms 4 by means of which the cage is held in place in the funnel. One of the other ribs 2 is bent at right angles across the upper end of the cage and is soldered or otherwise secured to the opposite side thereof to form a guide plate 5. In the center of the guide plate 5 is formed a guide aperture 6 the purpose of which will be hereinafter described. The blank after being cut to form the ribs 2 and strips 3 is bent into cylindrical form and the meeting edges thereof are soldered or otherwise secured together to form the cage, after which the guide plate is bent across the upper end thereof and secured in the manner described.

Slidably mounted in the guide aperture 6 of the plate 5 is a float supporting signal rod 7 the lower end of which is secured to a cork or float 8 which is adapted to slide up and down in the cage thereby raising or lowering the signal rod to bring the upper end thereof above the cage when the float is raised therein. On the upper end of the signal rod 7 is formed an eye 9 to which may be secured any suitable form of signal 10 which may be readily observed when the same is raised by the rising of the float.

In the operation of the device the cage is inserted in the neck of the funnel while the supporting arms 4 are engaged with the inner sides of the body of the funnel which will hold said cage in position in the neck. With the cage in this position the funnel is engaged with the lamp, or other vessel or container to be filled and the liquid poured into the funnel, said liquid passing readily around the float which is spaced from the walls of the neck by the ribs 2. When the vessel is thus filled and the liquid reaches the float any more liquid poured into the vessel will cause the float to rise in the cage thus elevating the signal rod and signal which will indicate that the vessel has been filled, so that the pouring of the liquid therein may be stopped before the vessel overflows.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, as defined in the appended claim.

Having thus described my invention, what I claim is:

An attachment for funnels comprising a cage consisting of spaced vertical bars, cross

bars connecting the upper and lower ends of said spaced bars and having their ends secured together whereby a cylinder is formed adapted to enter the nozzle of the funnel, arms formed integrally with the upper cross bar, two of said arms being bent outwardly to rest upon the inner surface of the body of a funnel and thereby support the cage, and another arm being perforated and bent inwardly to extend across the cage and constitute a guide plate, and a float mounted within the cage and having a stem rising through the perforation in said guide plate and carrying a signal at its upper end.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN QUINCY ADAMS.

Witnesses:
H. C. BLASE,
E. McCOY.
