G. W. LORIMER.

COMBINED FIRE BUCKET AND WASTE CAN.

APPLICATION FILED AUG. 26, 1912.

1,100,837. Patented June 23, 1914.

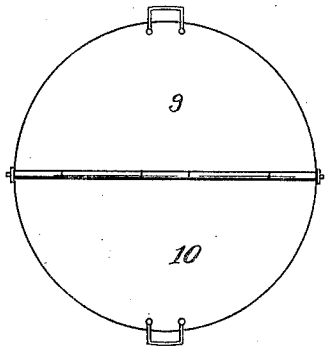


Fig. 3

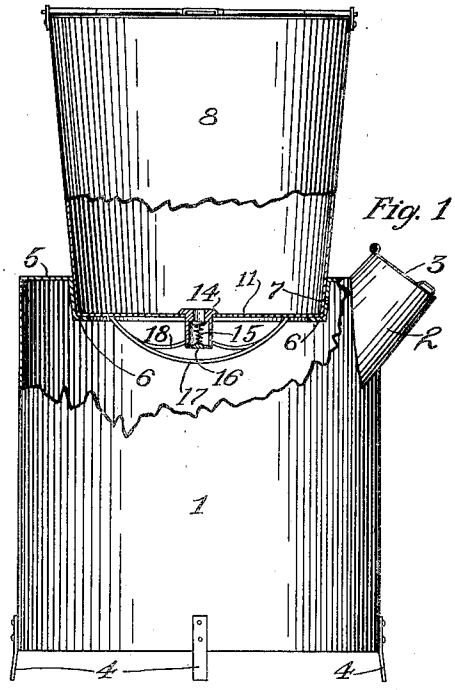


Fig. 1

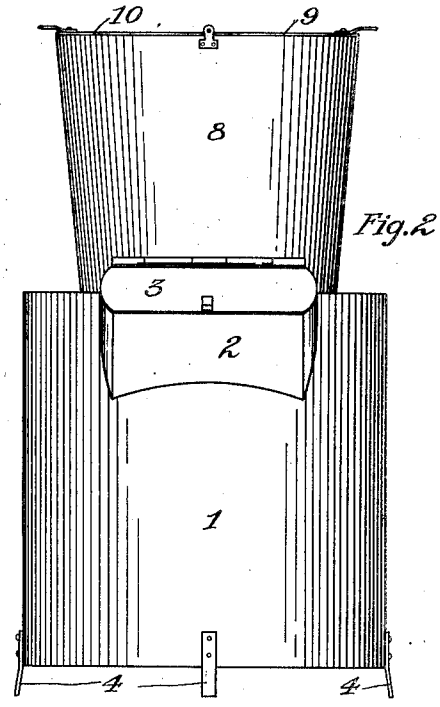


Fig. 2

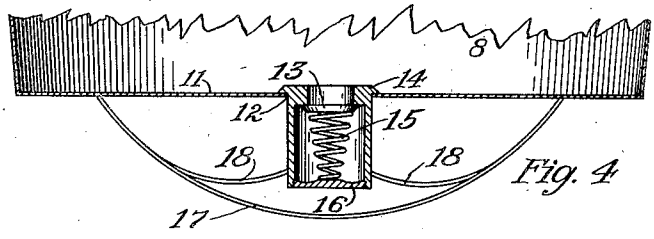


Fig. 4

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UNITED STATES PATENT OFFICE.

GEORGE W. LORIMER, OF PIQUA, OHIO.

COMBINED FIRE-BUCKET AND WASTE-CAN.

1,100,837. Specification of Letters Patent. Patented June 23, 1914.

Application filed August 26, 1912. Serial No. 717,163.

To all whom it may concern:

Be it known that I, GEORGE W. LORIMER, a citizen of the United States, and a resident of Piqua, county of Miami, and State of Ohio, have invented a new and useful Improvement in Combined Fire-Buckets and Waste-Cans, of which the following is a specification.

To guard against fire in factories, warehouses, and similar places, it is customary to distribute fire buckets throughout the premises, these commonly being ordinary pails of galvanized iron, supposedly kept full of water. With a slight laxity in discipline, these buckets are likely to be used for other purposes, or to lose their contents by evaporation or from other causes, and thus be found missing or empty in time of emergency. Similarly, in machine shops, it is customary to place waste cans for the disposal of used cotton waste, cleaning rags, and other greasy objects, to guard against fires, such as might be caused by spontaneous combustion of such oily material. In spite of this protection, fires have not uncommonly occurred by the spontaneous combustion of the oily waste and rags in such cans, resulting either in the opening of the seams of the can, or in the transference of the heat through the walls of the can to surrounding objects, and thus causing them to ignite.

It is the purpose of my invention to produce a combined fire pail and waste can, these two articles being so associated as to safeguard each other, the fire pail serving automatically to extinguish any fire arising in the waste can, and the frequent attention required to keep the waste cans empty serving automatically to attract attention to any faulty condition of the fire pail.

Referring to the attached sheet of drawings which forms a part of this specification, Figure 1 is a side view, partly in section, of my combined fire pail and waste can; Fig. 2 is a front view thereof; Fig. 3 is a top view of the fire bucket, and Fig. 4 is a sectional view of a detail of the fire pail.

The waste can 1, as will be seen in Figs. 1 and 2, forms in itself a support for the fire bucket 8. The waste can is of generally cylindrical form, having a side opening in the form of a spout 2, closed by a lid 3, loosely hinged at the top so as to be held closed by gravity. If desired, a spring hinge may be employed for the purpose of aiding gravity in keeping the waste opening closed. Suitable legs 4 are provided for keeping the bottom of the waste can above the floor level so as to minimize the danger of any heat within the can being communicated to the floor or other support. The top of the waste can is in the form of a circular ring 5 having a depressed circular opening surrounded by the flange 6. The sides 7 of this circular opening are formed to just admit the bottom of the fire pail 8, the inner flange 6 forming a supporting member for the fire pail. This construction is clearly shown in Fig. 1. The fire pail may be of the usual general form and is preferably provided with a fixed cover 9 over half its top area, this being supplemented by hinged cover 10, these two parts together serving to completely close the bucket to minimize the amount of evaporation. If preferred, the two parts of the cover 9 and 10 may each be hinged to the central rod which is journaled in the opposite sides of the bucket so as to provide for the complete opening of the cover. The bottom plate 11 of my bucket is provided with an opening 12, normally closed by a valve 13. A seat for this valve is provided by the shoulder on the inner side of the tubular bushing 14, which bushing is firmly secured within the hole 12 of the bucket bottom. This valve 13 is normally pressed upwardly against its seat by means of the coiled compression spring 15, the lower end of which rests against the abutment 16, screw-threaded into the lower portion of the bushing 14. This abutment 16 is of some low fusing metal well known in the arts, and variously formed of alloys of lead, antimony and tin.

In order to render the bucket incapable of standing on its own bottom on a flat floor and also to guard the valve mechanism, the rounded bottom guard 17 is provided, as indicated in Figs. 1 and 4. This is preferably in the form of an open framework so as to allow access to the fusible spring support 16 and at the same time permit the free flow of water from the bucket when the valve is opened. I prefer to brace this rounded bottom guard 17 by means of the webs 18, as most clearly shown in Fig. 4, these webs also serving to add additional mechanical strength to the valve containing bushing 14.

This bucket will serve, under normal conditions, the ordinary functions of a fire pail, but it serves the additional function of an automatic extinguisher for any fire which may arise in the waste can beneath it. The heat generated from spontaneous combustion of the waste will serve to melt the fusible part 16, which allows the valve 13 to open, thus emptying the contents of the pail into the waste can and extinguishing the fire. The rounded bottom of the fire pail serves to assure its being placed in the seat formed in the top of the waste can, while the frequent attention accorded to the waste cans in emptying them of their waste and other refuse serves to call equally frequent attention to the water pail, and thus assures its being kept full and in proper condition. It is seen, therefore, that each part of my device, the fire pail and the waste can, coöperates with the other for their mutual protection.

Having described my invention, what I claim as new and desire to secure by United States Letters Patent is:

In a device for fire proection, a waste can; a fire bucket in combination therewith; a seat surrounding an opening in the top of said waste can for said fire bucket; a heat operated valve in the bottom of said fire bucket; a rounded bottom-guard for said bucket protecting said valve and rendering said bucket incapable of standing on a flat surface, said rounded bottom-guard extending through the opening in the top of said waste can, when said bucket is resting in said seat, substantially as described.

Signed by me at Piqua, county of Miami and State of Ohio, in the presence of two witnesses.

GEORGE W. LORIMER.

Witnesses:
JOHN B. KING,
A. G. KERNS.