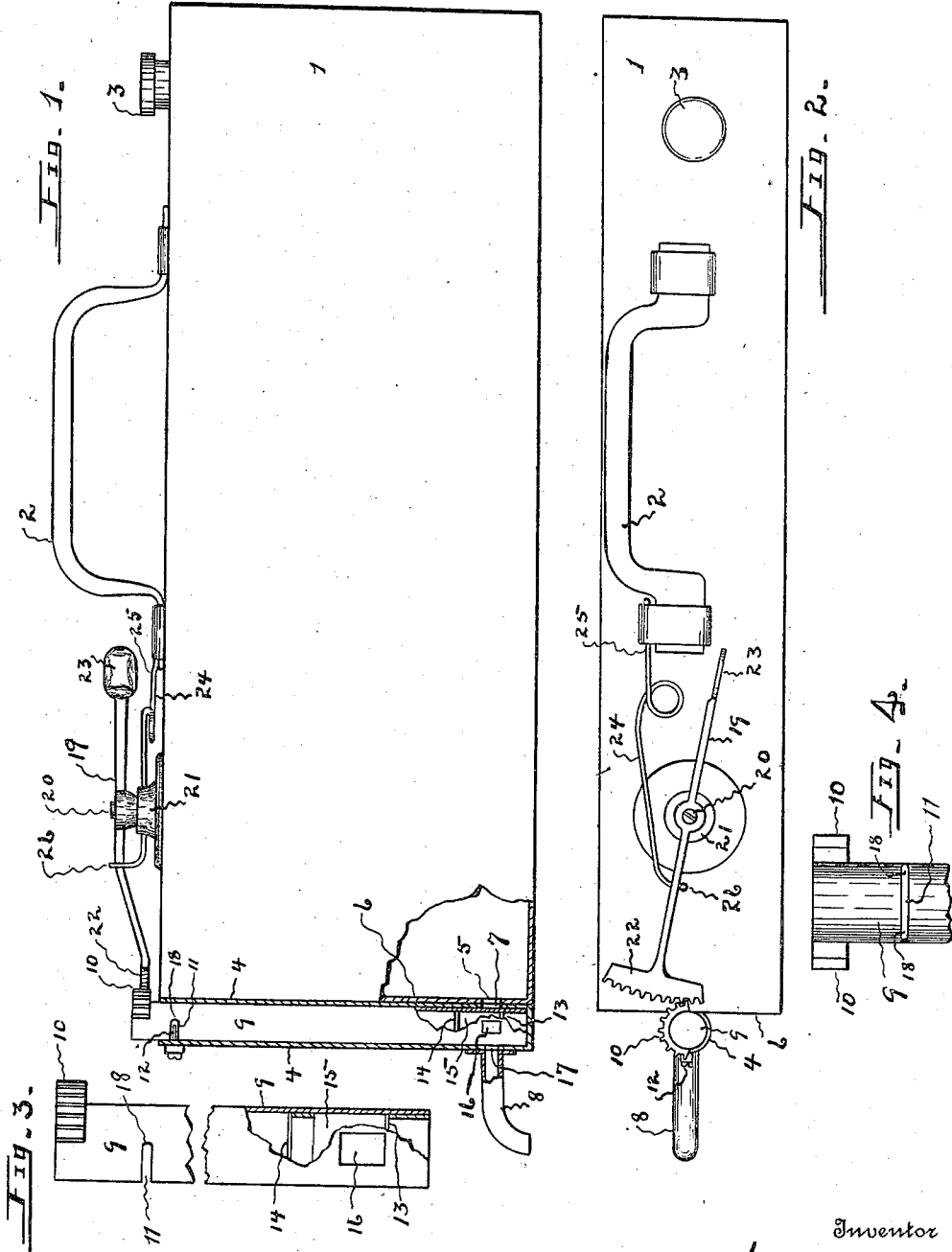


J. STEEL.
OIL DISTRIBUTING CAN.
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963,824.

Patented July 12, 1910.



Witnesses

Ang. F. Speck
H. C. Compton

By

John Steel,
Hermon A. Sturges,
Attorney

UNITED STATES PATENT OFFICE.

JOHN STEEL, OF OMAHA, NEBRASKA.

OIL-DISTRIBUTING CAN.

963,824.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN STEEL, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Oil-Distributing Cans, of which the following is a specification.

This invention relates to improvements in oil-distributing cans, and has for its object to provide a can or portable receptacle adapted to contain inflammable or volatile oil and having means, by use of which, the contents may be dispensed in measured charges or quantities, said means to consist of devices which may be conveniently and manually controlled.

While the device may be used for various purposes, it is especially useful in connection with the raising of fruit. In the business of fruit raising, in certain localities, it has been the custom, upon occasion, to maintain fires in orchards to prevent injury from frosts. Various kinds of fuel are used for this purpose, and crude oil has been generally employed, the same being confined in vessels disposed upon the ground and distributed throughout the orchard. At the time of the approach of a frost, since it is important that the fuel in the various parts of an orchard be ignited as soon as possible, it has been the custom to employ several operators to light the fires, and the expense for such labor has been considerable.

By use of the herein described device a single operator may pass from one fuel deposit to another, and by carrying the can in one hand and a torch in the other, will be able to cause ignition of the deposits throughout an orchard very quickly and economically, the parts upon the can being so constructed and arranged that the valve of the can may be controlled by the thumb, and a limited or measured quantity of volatile oil distributed thereby and without delay.

The invention has reference to a structure having parts so formed and arranged that, while the contents of the can may be discharged in predetermined quantities when desired, gas will be prevented, substantially, from escaping.

Another object of the invention is to provide a receptacle for the purpose described, which will be reliable and convenient in use, and will consist of few parts, so that it may be economically manufactured.

With these objects in view the invention

consists of the novel combination and arrangement of parts as described herein, pointed out by the appended claims and as illustrated in the drawing, it being understood that changes in form, size, proportion and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming a part of the application, Figure 1 is a vertical, side view, partly broken away, of an oil-distributing can embodying my invention; the revoluble, chambered, cylindrical valve being partly broken away, the cylindrical housing of the valve being in section. Fig. 2 is a plan view of the parts shown in Fig. 1. Fig. 3 is an enlarged detail relating to Fig. 1, being a broken away view of the chambered valve. Fig. 4 is a detail relating to Fig. 3 to clearly show the slot in the cylindrical casing.

Referring now to the drawing for a more particular description, numeral 1 indicates a can or supply receptacle, which may be of any desired form or size, but it is preferably formed rectangular in cross section as shown and having an elongated body, so that while it may contain an adequate quantity of oil, it may be conveniently carried by the handle 2, and an intake 3 is provided for purposes of filling the can.

In order that limited quantities of oil may be withdrawn or discharged from the can when desired, certain devices are employed, now to be described. At 4 is indicated a housing or cylindrical receptacle. It is secured upon the front end of the can and preferably is disposed midway between and parallel with its sides, and has a length substantially equal to the height of the can. An opening or exit way 5 is formed in the lower end of the front end-wall 6 of the can, adjacent to receptacle 4; and a similar way or opening 7 is formed in the wall of said receptacle 4 and communicating with exit way 5, and receptacle 4 is provided with a discharge pipe or nozzle 8; and as thus described, the contents of the can could obviously flow without obstruction through ports 5 and 7 within receptacle 4 and be discharged through pipe 8.

At 9 is indicated a cylindrical casing adapted to have a seating within and preferably having a length somewhat greater than receptacle 4, its upper terminal extending

above the top of the can, its periphery at this terminal being provided with a gear 10 extending thereon substantially 180 degrees. From the description it will be understood that oil within receptacle 4 would normally rise to the level of the oil in the can, and ordinarily would become volatilized, but as will be seen, the cylindrical casing is chambered at its lower end and said casing operates as a revoluble plug or filler for its housing 4, its wall preferably making contact with said housing nearly its entire length, and it is considered that gas will not escape after the parts are assembled.

Near the upper end of casing 9 and in that part of its wall opposite to gear 10 is formed the transverse slot 11, which extends substantially 180 degrees, and at 12 is indicated a set-screw or removable lug mounted in the front part of the wall of receptacle 4 and adapted to engage within slot 11 of said casing, and as thus described casing 9, while substantially filling the space within receptacle or housing 4, may have a revoluble movement therein, this movement, however, being limited to the length of slot 11.

In the lower end of casing 9 are provided the adjacent, lower and upper, transverse partitions 13 and 14, partition 13 being preferably disposed in alinement with the lower part of openings 5 and 7. By this construction a container or chamber 15 is provided near the lower end of said casing.

At 16 is indicated an opening or port formed in the wall of casing 9, and operating both as an intake and as an exit way for said container or chamber. Transversely considered, opening 16 is in alinement with openings 5 and 7 and with passageway 17 of pipe 8, and as is apparent, since casing 9 may have a revoluble movement of 180 degrees, opening 16 may be presented to port 7, at which time chamber 15 will be filled with a part of the contents of the can, passageway 17 at that time being closed; and when casing 9 is revolved 180 degrees in a reverse direction, port 7 will be closed by the wall of the casing, and the contents of chamber 15 will flow outward through port 17 and pipe 8. Since opening 16 extends to the bottom of chamber 15 and also registers with passageway 17, the entire contents of chamber 15 may be emptied when casing 9 is partly revolved, as described. It will be seen that opening 16 is formed in that part of the wall of the casing substantially in alinement with one of terminals 18 of slot 11 and one end of the peripheral gear 10, and therefore when stationary lug 12 engages a terminal of the slot, opening 16 will at that time be presented either to port 7 or passageway 17, and a further revoluble movement of casing 9 in the same direction will be prevented by lug 12. Casing 9, there-

fore, is adapted to have a half revolution, first in one direction and then in a reverse direction to present opening 16 of its chamber, in alternation, to passageways 7 and 17.

In order that casing 9 may be conveniently controlled or revolved, any suitable means may be provided, the means herein shown being a rock lever 19 pivotally mounted at 20, upon base 21, the latter being secured in any convenient manner upon the top of the can intermediate its front end and handle 2, the front arm of the lever being provided with a rack 22 for engagement with gear 10, and its rear end having a thumb-piece 23.

At 24 is indicated a spring having one of its ends 25 mounted upon the can, its opposite end 26 engaging the front arm of the lever. The spring provides automatic means for causing the lever to swing sidewise in one direction, and the parts are so adjusted that rack 22 will, under operation of the spring, normally hold casing 9 so that opening 16 registers with port 7, and chamber 15 will be filled.

In operation, to cause a discharge of the contents of chamber 15, the thumb-piece or rear end of lever 19 may be swung in a direction of handle 2, contrary to the force of the spring, whereby gear 10 and casing 9 will be revolved 180 degrees, and opening 16 will register with passageway 17. Upon releasing the thumb-piece, lever 19 will automatically swing in a reverse direction, and opening 16 of chamber 15 will again register with port 7.

The can thus described may be constructed at slight comparative expense, and its use results in a saving of a large amount of labor. Chamber 15 may be varied in size to correspond with the kind or quality of oil used. Since closures are made of the escape or exit ways, as described, no gas can escape to an appreciable extent, and the device has been found to be safe in practice.

Handle 2 is mounted somewhat to the rear of the middle of the can, so that, normally, its front end will be inclined downwardly, to be in a convenient position when in use, and as is apparent, the thumb-piece may be conveniently operated while the hand of the operator is grasping the handle.

Having fully described the several parts and their uses, a further explanation relating to operation is not necessary.

What I claim as my invention and desire to secure by Letters Patent is,—

1. In a distributing can, the combination with a supply receptacle having an exit way, of a cylindrical housing having an intake communicating with said exit way and provided with a discharge port; a cylindrical casing disposed within said cylindrical housing and provided with a gear, and formed with a containing chamber with a single port; a rock-lever having a rack in engage-

ment with the gear of said cylindrical casing; means to reciprocate said rock-lever, the containing chamber of said cylindrical casing being moved to present its port, in alternation, to the exit way of said supply receptacle and to the discharge port of said cylindrical housing.

2. In a distributing can for the purpose described, the combination with a supply receptacle, of a cylindrical housing-member provided with a discharge port and having an intake port in communication with the supply receptacle; a cylindrical filler-member seated in said cylindrical housing-member and having a chamber with a single aperture and provided with a peripheral gear; means mounted upon the supply receptacle and connected with said gear to cause a reciprocated rotary movement of said cylindrical filler-member, the aperture of said chamber registering, in alternation, with the intake port and discharge port of said cylindrical housing-member.

3. In a distributing can, the combination

with a supply receptacle having an exit way, 25
of a cylindrical housing having an intake communicating with said exit way and provided with a discharge port; a cylindrical casing disposed within said cylindrical housing and provided with a peripheral gear, 30
and formed with a containing chamber with a single port; a rock-lever having a rack in engagement with said peripheral gear; means to reciprocate said rock-lever, the port of said containing chamber communi- 35
cating, in alternation, with the exit way of the supply receptacle and with the discharge port of said cylindrical housing; and resilient means for causing the port of the containing chamber to remain, normally, in 40
communication with the exit way of said supply receptacle.

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

JOHN STEEL.

Witnesses:

HIRAM A. STURGES,
ALVIN F. JOHNSON.