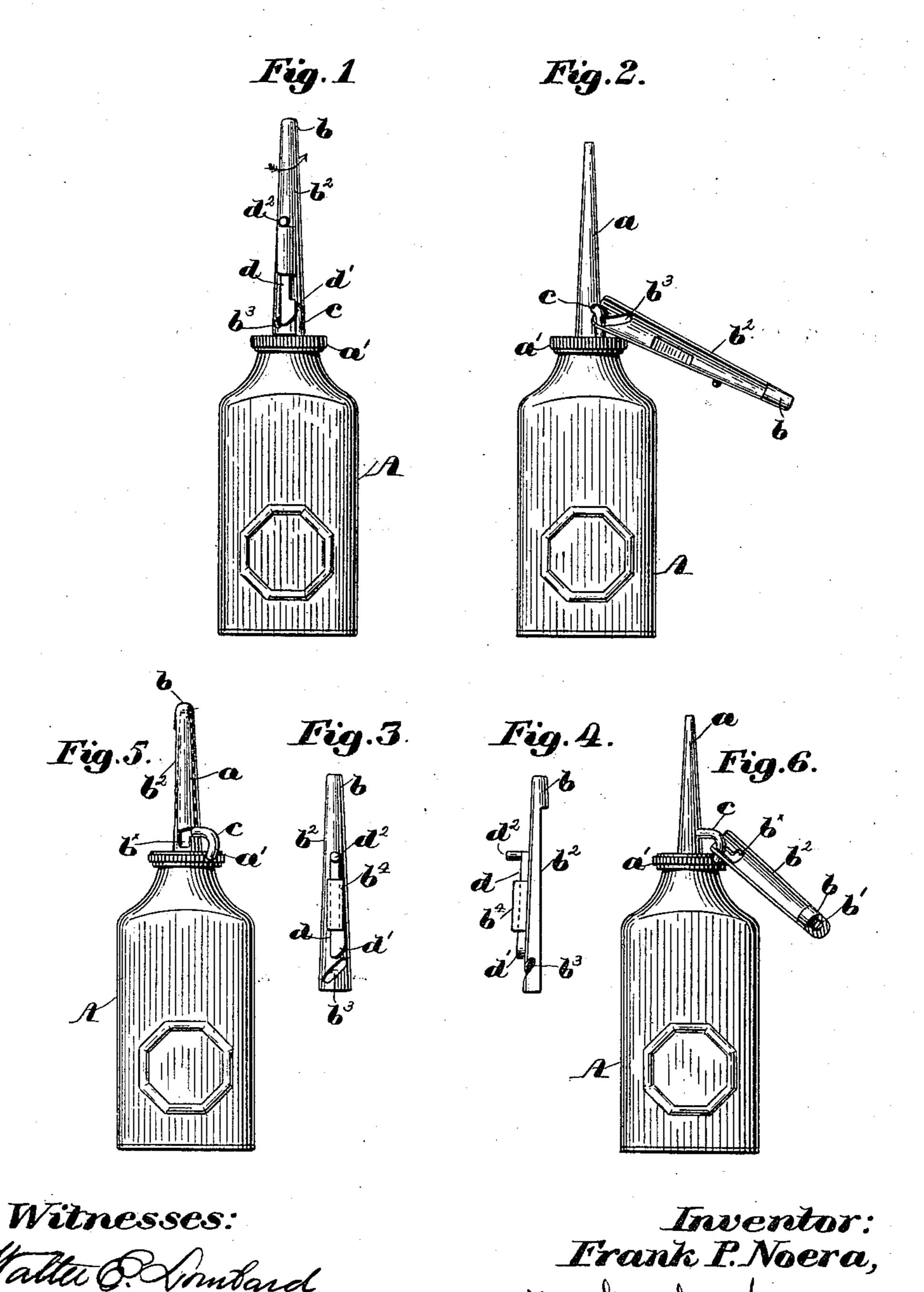
## F. P. NOERA. CLOSURE FOR OILING NOZZLES.

(Application filed Sept. 30, 1897.)

(No Model.)



## United States Patent Office.

FRANK P. NOERA, OF WATERBURY, CONNECTICUT.

## CLOSURE FOR OILING-NOZZLES.

SPECIFICATION forming part of Letters Patent No. 610,557, dated September 13, 1898.

Application filed September 30, 1897. Serial No. 653,565. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. NOERA, of Waterbury, county of New Haven, State of Connecticut, have invented an Improvement 5 in Closures for Oiling-Nozzles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to closures for the delivery-nozzles of oilers or oiling devices; and it has for its object the production of a connection between the closure and nozzle which shall serve not only to hold or press its 15 attached closure tightly upon and closing the nozzle, but shall also permit quick removal of the closure and retain the same from being lost.

A device of this character is particularly 20 desirable for oilers used by wheelmen, for I have found that a closure which is simply tight-fitting will not always remain in position closing the nozzle owing to the constant jar of the machine while running, the oiler 25 being carried in the tool-bag, and a threaded closure is not easily removable.

Figure 1 in elevation represents an oiling device of well-known character fitted with a closure embodying one form of my invention. 30 Fig. 2 is a similar view with the closure swung back to uncover the nozzle. Figs. 3 and 4 are front and side elevations of the closure detached. Fig. 5 is an elevation of the oiling device with another form of closure applied 35 thereto, and Fig. 6 is a like view with the closure swung to one side and uncovering the nozzle.

In the particular embodiment of my invention herein illustrated the receiver or can A, 40 Figs. 1, 2, 5, and 6, provided with a nozzle a, (shown as attached to a removable threaded cap a',) may be and are all of usual or desired construction so far as my present invention is concerned.

in a closure b, formed at its end to constitute a stopper, preferably a cap, adapted to fit over the end of the nozzle and preferably containing a suitable felt or other washer b' (shown 50 only in Fig. 6) and a holding connection  $b^2$ , leading from the closure and loosely attached to the nozzle or some other suitable part of

the oiling device. I have herein shown the connection  $b^2$  as in the form of an arm of the closure extending down beside the nozzle 55 and provided at the base with a slot  $b^3$ , Figs. 1 to 4, inclusive, which receives the pin or wire c on the nozzle or cap to which it is attached, said slot being shown as a cam-slot inclined relatively to the longitudinal axis of 60 the connection  $b^2$ .

In Fig. 1 the pin c is shown as in the upper portion of the slot and acting through the connection  $b^2$  to positively hold the closure b' tightly against the end of the nozzle. The 65 connection  $b^2$  is provided with a bearing  $b^4$ , in which a bolt d is longitudinally movable, the head of the bolt having a bolt or cam face d', which is adapted to bear against the pin cwhen the bolt is pressed inward, to thereby 70 partially rotate the connection  $b^2$ . Such rotation, by virtue of the pin and slot, acts to draw the closure the more tightly down upon the end of the nozzle, the bolt serving to lock the closure in place, so that the oiling device 75 may be handled freely or carried carelessly in a tool-bag without fear of displacement of the closure. The bolt is enlarged or overturned at its outer end, as at  $d^2$ , to prevent withdrawal from the bearing  $b^4$  and also to 80 serve as a finger-piece for operating the bolt.

When it is desired to remove the closure for oiling, the bolt is withdrawn, (see Figs. 2, 3, and 4,) and the attachment  $b^2$  is then rotated in the direction of arrow 5, Fig. 1, rais- 85 ing the connection to carry the closure above the end of the nozzle, the pin c then lying in the lower end of the slot  $b^3$ , whereupon the connection can be swung back, as in Fig. 2, to leave the nozzle entirely free and clear.

By sweeping or bending the pin or wire cin circular form, as shown, the connection and its attached closure may be turned farther back than would be possible were a short straight pin with a head used.

In the embodiment of my invention shown My invention is herein shown as embodied | in Figs. 5 and 6 the slot  $b^{\times}$  is shaped to present a longitudinal and a transverse portion, the latter portion preferably being made slightly inclined to produce a wedging or cam 100 action against the pin c, and thereby firmly hold the closure in position, closing the nozzle.

To remove the closure from the nozzle, the connection  $b^2$  is rotated to bring the longitudinal portion of the slot  $b^{\times}$  in line with the pin c, whereupon the closure and its connection may be raised to clear the end of the nozzle and thereafter swung back, as in Fig. 6.

5 The pin c and the slot in the connection constitute one form of loose attachment between the said connection and the nozzle or oiler, and such loose attachment is important, for otherwise the connection could not be swung back to leave the long nozzle free and clear for reaching parts not easily accessible.

In the one form of my invention shown the sliding bolt acts as a lock to prevent accidental displacement of the closure, and in the other form the inclined portion of the slot

serves as the locking device.

My invention is not limited to the particular connection between the closure and nozzle or oiler herein shown, nor is my invention limited to the particular loose attachment shown, for either or both may be varied without departing from the spirit and scope of my invention.

Having fully described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. The combination with an oiling device having a delivery-nozzle, of a closure for the latter, a connection leading from said closure and provided near its end with an elongated slot, a fixed pin on the device bent to form a retaining-loop and entering the slot, and a sliding bolt mounted on said connection and adapted to hold the pin in one end of the slot, to prevent accidental removal of the closure from the nozzle, substantially as described.

2. The combination with an oiling device GEORGE W. GEARING.

having a delivery-nozzle, of a closure for the latter, an extension leading from said closure 40 and loosely connected with the oiling device, and provided near its end with an elongated inclined slot, a fixed pin on the device and entering the slot, and a bolt movably mounted on said extension, to positively engage the 45 pin and hold it in one end of the slot, to lock the closure from removal from the nozzle, substantially as described.

3. The combination with an oiling device having a delivery-nozzle, of a closure for the 50 latter, an extension leading from said closure and having a cam-slot near its end, a pin on the oiling device and entering said slot, and a movable bolt on the extension, provided with a cam-head adapted to engage the pin 55 and partially rotate said extension and closure, to thereby draw the latter tightly onto

the nozzle, substantially as described.

4. The combination with an oiling device having a delivery-nozzle, of a closure for the 60 latter, an extension leading from said closure and having a spirally-arranged slot near its end, a pin on the oiling device, and a cam member movably mounted on said extension, to bear against said pin and partially rotate 65 said extension, to thereby draw the closure tightly onto the nozzle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of 7°

two subscribing witnesses.

FRANK P. NOERA.

Witnesses:
NATHL. R. BRONSON,
CHORGE W. GEARING