

(No Model.)

H. S. CHASE.
FILLING NIPPLE AND CAP.

No. 504,150.

Patented Aug. 29, 1893.

Fig. 1



Fig. 2

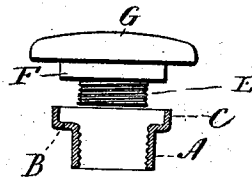


Fig. 3

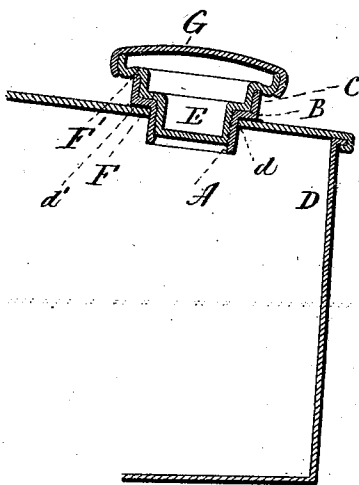
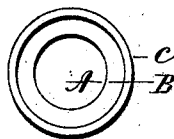


Fig. 4



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UNITED STATES PATENT OFFICE.

HENRY S. CHASE, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
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FILLING-NIPPLE AND CAP.

SPECIFICATION forming part of Letters Patent No. 504,150, dated August 29, 1893.

Application filed June 12, 1893. Serial No. 477,327. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. CHASE, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Filling-Nipples and Caps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a sectional view of a filling nipple as ordinarily constructed prior to my invention; Fig. 2, a view partly in elevation and partly in vertical section of a filling-nipple and cap constructed in accordance with my invention, the cap being shown as removed from and elevated a little above the nipple; Fig. 3, a view of the nipple and cap as applied to a lamp-fount, the cap being shown in position in the nipple; Fig. 4, a detached plan view of the nipple.

My invention relates to an improved filling-nipple and cap for lamp-founts, the object being to produce at a low cost of manufacture, a simple, convenient and effective article, particularly designed to prevent any oil from escaping from the nipple when the lamp is being filled, or after the cap is in place.

With these ends in view, my invention consists in a nipple having an internally threaded sleeve, a seat located at the upper end thereof, and a flange rising from the outer edge of said seat, and a cap having a threaded plug to fit into the said sleeve, a shoulder to bear upon the said seat, and an overhanging top to bear upon the flange.

It may be well to say that prior to my invention, filling nipples for lamp-founts have generally been made as shown in Fig. 1 of the drawings, with an internally threaded sleeve *a*, and a very narrow outwardly flaring flange *b*, at the upper end thereof. In filling a lamp-fount provided with such a nipple, a few drops of oil will almost invariably escape outside of the flange, making it necessary to carefully wipe the fount, and after the cap is in place, a little oil will often work out of the nipple, particularly if the lamp is carried about, so as to cause the oil to be thrown against the same. Furthermore, it is a difficult and ex-

pensive operation to properly apply such a nipple to a lamp-fount. In the first place the fount must be very carefully pierced to form an opening exactly corresponding to the external diameter of the nipple, which must then be maintained in right position within the said opening, with its flange extending above the upper surface of the fount, while the nipple is being secured in place by soldering it from the inside of the fount. To secure an oil-tight joint with such a nipple, it is almost necessary to employ a washer between it and the cap. If its flanged upper end is not cleared from the upper surface of the fount, its cap cannot be screwed tight into it without bringing the fingers into contact with the fount, which is almost unavoidably a little oily. Again, if the made opening in the fount to receive the nipple, is not accurately formed, some of the solder will run through from the inside of the lamp, and appearing upon the outside of the fount, disfigure the same unless it is removed at some expense. It will thus be seen that to apply one of the old nipples and secure a good job, is an operation requiring great care, and is necessarily expensive.

In carrying out my invention, I construct the nipple with an internally threaded sleeve *A*, a seat *B*, located at the upper end thereof, and a flange *C*, which rises from the outer edge of the seat. As herein shown the nipple is formed from a single piece of metal, with its seat at a right angle to the threaded sleeve *A*, and its flange at a right angle to the seat, and parallel to the sleeve. A nipple thus constructed is very easily applied to the lamp-fount *D* in right position, and a better joint secured than could possibly be made with one of the old nipples, and with much less expense.

In applying my improved nipple, its seat is brought to a bearing upon the lamp-fount, and covers the same for such a distance around the opening *d*, therein, that even if the said opening is not carefully and accurately pierced, there is very little chance of any of the solder *d'* escaping and appearing upon the upper surface of the fount. Furthermore, the seat by coming to a bearing upon the surface of the fount, locates the

flange in right position for the application of the cap, for the seat prevents the flange from coming near enough to the fount to preclude the proper application of the cap without bringing the fingers into contact with the surface of the fount. Again, as the solder attaches itself not merely to the surface of the sleeve of the nipple, but to the inner surface of the seat thereof, a tight joint is assured every time. If the nipple is secured in place by swaging or other means than soldering, the above statements hold true, in so far that by my improvement I am enabled to secure the nipple in place with less expense, and to better effect than as heretofore constructed.

My improved cap comprises an externally threaded plug E, an annular shoulder F, located at the upper end thereof, and adapted to take a bearing upon the seat B, of the nipple, and a circular overhanging top G, larger in diameter than the shoulder F, and adapted to bear upon the outer edge of the flange C, of the nipple.

In filling a lamp-fount provided with my improved nipple, the few drops of oil which, however carefully the lamp may be filled, most always fail to enter the fount, will, for the most part at least, fall upon the seat of the nipple, and thence work down through the sleeve thereof into the fount, being prevented from working outward by the flange at the outer edge of the seat. The operation of filling the fount is therefore made more cleanly with my improved nipple than with one of the old nipples, which had at their upper ends very narrow flanges, not wide enough to catch all of the escaping drops, and generally dividing the same between the nipple and the fount. The old nipples, moreover, had no vertical flanges corresponding to the flange of my improved nipple, and were not, therefore, as well adapted to confine the oil to the nipple.

As herein shown the cap is composed of two pieces of sheet-metal, one of which comprises the plug E, which is hollow, the shoulder F, and a flange F' extending outward beyond the said shoulder, and forming the inner portion of the top G, and the other comprising the outer portion of the said top, the edges whereof are closed over the outer portion of the said flange F', as clearly shown by Fig. 3 of

the drawings. When the cap is in place in the nipple, oil is not only prevented from escaping by the plug, but also by the bearing of the shoulder of the cap upon the seat of the nipple, and by the bearing of the overhanging top of the cap upon the flange of the nipple. With all these safeguards, there is practically no opportunity for any oil to work out of the fount through the nipple when the cap is firmly screwed into the same. Furthermore, my improved cap is, by reason of its shoulder and overhanging top, of convenient form to manipulate; and it is so far stiffened by its shoulder that it may be made of comparatively light stock, and still answer all requirements.

If preferred, the nipple may be formed of more than one piece of metal, and instead of forming the cap in two pieces, it might, for instance, be composed of one, or three, or more. I would therefore have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

Throughout this description I have spoken of my improved nipple and cap as applied to lamp-founts, but it is apparent that they may be applied to oil-cans, or other vessels of whatever character and use. My invention therefore is not limited to the use of the nipple and cap with lamp-founts.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein described filling-nipple and cap, the former having a threaded sleeve, a seat located at the upper end thereof, and a flange rising from the outer edge of the seat, and the latter having a threaded plug adapted to fit into the said sleeve, a shoulder adapted to take a bearing upon the said seat, and an overhanging top constructed to bear upon the said flange, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRY S. CHASE.

Witnesses:

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F. B. NOBLE.