(No Model.)

J. A. NESMITH.

COMBINED TORCH AND HAND WARMING CANE.

No. 440,849. Patented Nov. 18, 1890.

Fig. 1.

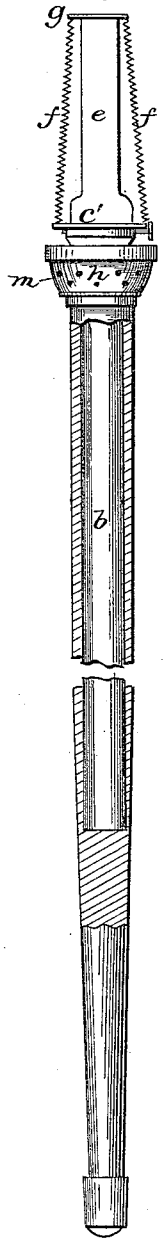


Fig. 2.

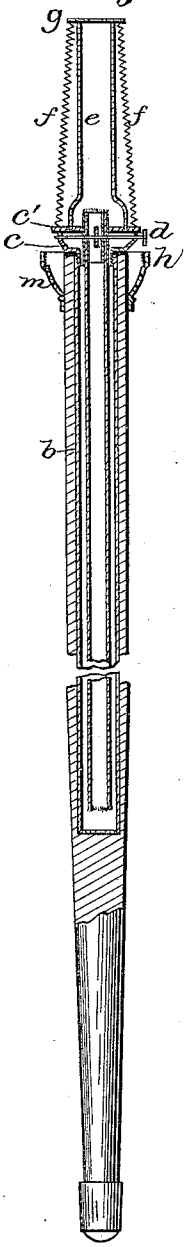


Fig. 3.

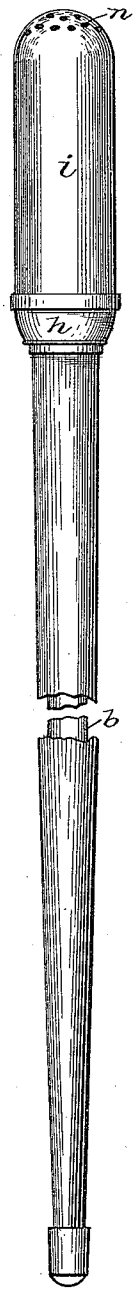


Fig. 4

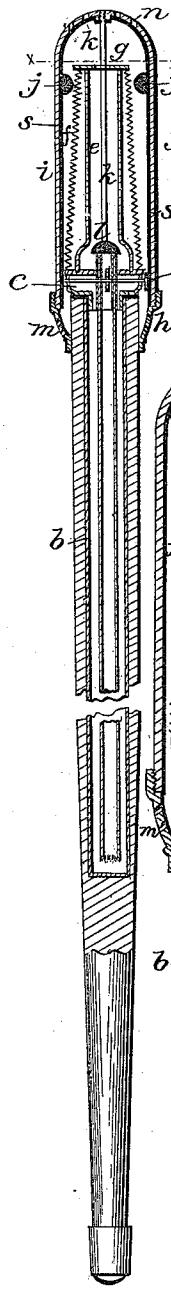
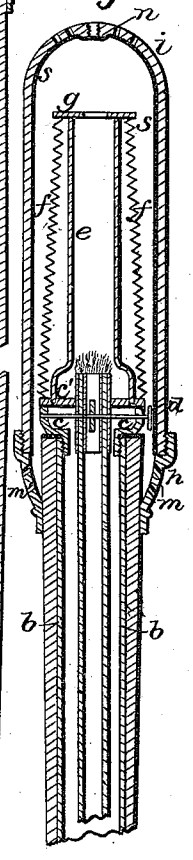


Fig. 5



Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH ADDISON NESMITH, OF SNICKERSVILLE, VIRGINIA.

COMBINED TORCH AND HAND-WARMING CANE.

SPECIFICATION forming part of Letters Patent No. 440,849, dated November 18, 1890.

Application filed July 7, 1890. Serial No. 357,991. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ADDISON NESMITH, a citizen of the United States, residing at Snickersville, Loudoun county, in the State of Virginia, have invented new and useful Improvements in a Combined Torch and Hand-Warming Cane, of which the following is a specification.

The object of my invention is to provide a walking-cane with means whereby it may be utilized as a torch for giving light at night and as a means for warming the hands in cold weather. It is particularly intended for night processions and for persons in the country and in towns without light. As a means for warming the hands in cold climates, provision is made for covering or inclosing the torch with a removable hollow metal cap, which forms the handle of the cane, protects the flame of the torch, permits ventilation, and provides air for maintaining combustion. Provision is also made for sealing the torch-burner tube when the cane is used without requiring the burning of the flame to warm the handle-cap.

The accompanying drawings illustrate a walking-cane provided with my improvements, whereby it may be used as a hand-warming cane for walking or carried as a torch for giving light, and in which—

Figure 1 shows the cane in section and the torch devices in elevation. [Fig. 2 is a vertical section of the cane and torch. Fig. 3 is an elevation of the cane when used as a walking-stick. Fig. 4 is a vertical section of the same, showing the torch-burner tube as sealed. Fig. 5 is a cross-section of the torch-cane handle or cap, and Fig. 6 shows in section the cane when used as a hand-warmer in walking.

The cane is bored out a suitable depth to receive a tube *b* for containing any suitable oil and a wick. The upper end of this tube terminates at the upper open end of the cane and has an interior screw-thread to receive the threaded neck of a burner-cap *c*, which has a wick-raising device *d*, which, with the cap, may be of any suitable form. A glass chimney *e*, preferably of the Argand form, is fitted upon the cap, and is held thereon by small coil-springs *f*, connected to the burner-cap plate *c'* and to a perforated plate *g*, placed upon the top of the chimney. At its upper end the cane is provided with a cup-ring *h*, which is screw-threaded interiorly at its upper edge and forms the means of attaching a hollow handle *i* to the cane, so as to cover and inclose the torch. The handle is of metal and may be of any suitable form, and is screw-threaded exteriorly at its lower edge to screw into the cup-ring over the burner-tube when the cane is used as a walking-stick, as shown in Fig. 4. To prevent the possible breaking of the chimney, I provide the interior of the handle with rubber or other cushions *j* in position around the upper portion of the chimney, so that any swaying or side movement of the latter would be against the cushions.

For sealing the burner-tube when the torch is not used, I provide the handle with a central stem *k*, fitted at its lower end with rubber cushion *l*, adjusted so as to fit upon and seal burner-tube when the handle is screwed down tight in the ring-cup. The stem of this sealing-cushion may be screwed into the upper end of the handle by a left-hand thread, so that the sealing-cushion may be set to suit the top of the wick-tube.

When it is desired to use the torch for heating the metal handle as a means for warming the hands, I remove the sealing cushioned stem *k* from the handle and burn the torch at a taper within the handle; and for this purpose I provide the ring-cup with perforations *m* for the admission of air for combustion, and I provide the end of the handle with perforations *n* for ventilation, as seen in Fig. 6.

The cane-tube can be filled with oil by removing the burner-cap.

The joint of the burner-cap with the cane-tube may be sealed in any suitable way.

To light the torch, the chimney may be tilted to one side by the yielding of the springs.

As a means for retaining the heat in the metallic handle, I may provide the latter with an interior lining of asbestus *s*, secured in any suitable way to the inner wall of the handle, and for producing such heat I may use any suitable substance.

I claim as my improvement—

1. In a cane-torch, the combination of the oil-containing tube having a screw-thread at

its upper end, the wick-containing burner-cap adapted to be screwed into said tube, the chimney, and the coil-springs for holding the chimney upon the burner-cap, substantially as described.

2. The cane-torch herein described, consisting of an oil-containing tube *b*, a burner-cap *c*, a removable glass chimney *e*, a perforated cover-plate for said chimney, and suitable yielding connections for holding said chimney and its cover-plate in place, substantially as described.

3. In a cane-torch, the combination of the oil-containing tube, a wick-containing burner-cap, and a chimney with a removable hollow metallic ventilating-handle inclosing said chimney and having interior wall rubber cushions, substantially as described, for the purpose stated.

4. A torch walking-cane consisting of the cane-stock having an oil-containing tube, a wick-containing burner-cap, a chimney therefor, coil-springs for holding the latter upon the burner-cap, the screw-ring cup secured to the cane, and the removable hollow metallic ventilating-handle secured to said ring-cup and having a sealing-stem for the wick-tube, substantially as described.

5. In a torch walking-cane, the combination of an oil-containing tube, a wick-containing tube, a removable glass chimney upon said wick-tube, a hollow metallic handle-cap, a burner-cap, and a sealing-stem for the wick-tube carried by and within said handle-cap, substantially as described.

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

JOSEPH ADDISON NESMITH.

Witnesses:

A. E. H. JOHNSON,

E. M. DAWSON.