

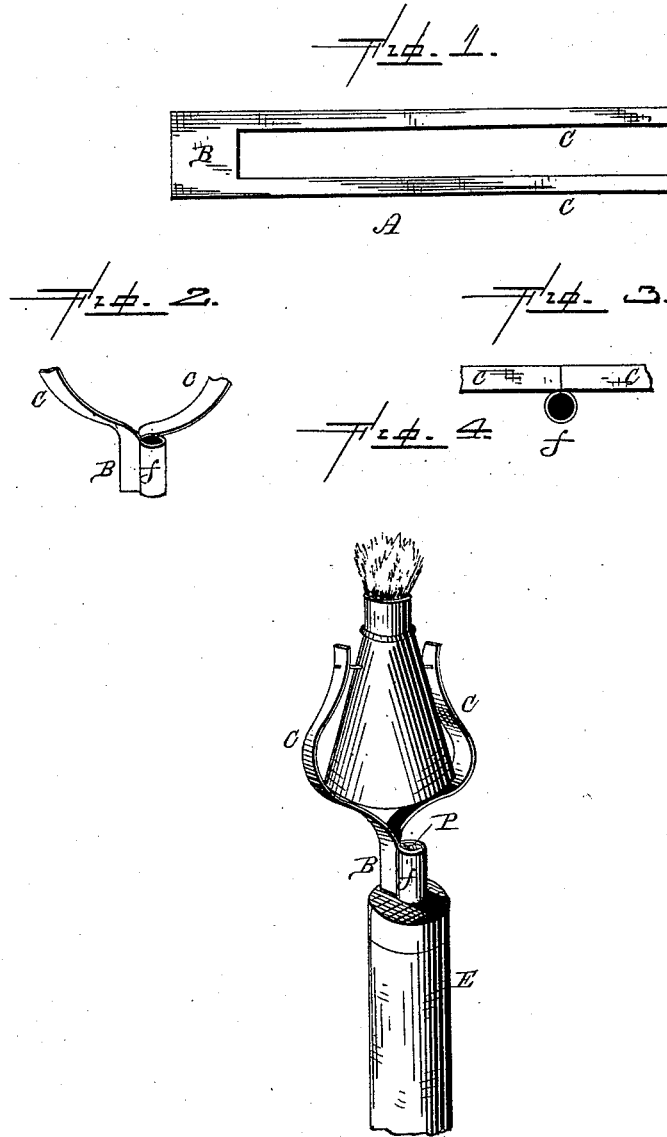
(No Model.)

A. J. DUNCAN.

TORCH.

No. 304,919.

Patented Sept. 9, 1884.



-WITNESSES-

L. F. Gardner

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# UNITED STATES PATENT OFFICE.

ANDREW J. DUNCAN, OF PITTSBURG, PENNSYLVANIA.

## TORCH.

SPECIFICATION forming part of Letters Patent No. 304,919, dated September 9, 1884.

Application filed July 21, 1884. (No model.)

### *To all whom it may concern:*

Be it known that I, ANDREW J. DUNCAN, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Torches, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in the manufacture of torches of which the cups containing the burning-fluid are supported by revoluble arms, fastened to a socket that turns on a pin in the end of a staff; and it consists in making the arms and the socket of only one piece of sheet metal without riveting or any other kind of attaching, as will be fully described hereinafter.

The object of my invention is to simplify and cheapen the manufacture of this class of torches without reducing their strength, by abandoning all unnecessary parts and substituting therefor a single piece that performs the services of the various parts now in use. Instead of two separate arms attached to a leaf on a socket, I use but one piece, that furnishes arms for the support of the oil-cup, and also a socket for a pivot-pin, thereby dispensing with all other parts and reducing the cost of manufacture.

The accompanying drawings represent my invention.

Figure 1 represents the blank. Fig. 2 shows the blank after it has been bent; Fig. 3, a plan of the same. Fig. 4 represents a torch completed.

A represents a blank consisting of a narrow oblong plate cut out of No. 15 or other heavy sheet iron, divided lengthwise into four equal parts, of which the two central parts are removed, leaving the end B, about one inch in length, undisturbed, by which the remaining

two outside strips or widths, C, are held together. The strips C of the blank are first bent by suitable machinery to the required form of arms to support the cup, and afterward the part B of the blank between the arms, which has remained straight, is bent around a mandrel into the form of a cylindrical socket, *f*, whereby the lower parts of the arms are brought together when the socket is closed. From the socket the arms bent outward and upward, and then inward and upward, and the ends are made to support the cup on the ends of a stout wire that projects from opposite sides thereof. A headed pin, P, passing vertically through the socket *f*, enters into the end of a staff, E, and prevents the socket with the arms from sliding off when the staff is turned from a vertical position, but allows the socket to turn freely around the pin. By this arrangement the handle may be turned in any direction without displacing the cup from its proper vertical position, where it is held by gravity.

I am aware that torches are in existence that turn in the manner described; but they differ, essentially, in their manufacture and material of which they are made from mine, inasmuch as they are either composed of several pieces fastened together or of bent wire, all of which I disclaim; but

What I claim as my own invention is—

A torch of which the arms supporting the cup and a socket for a suitable attachment to a staff are made of sheet metal in one piece, and formed in the manner substantially as described.

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

ANDREW J. DUNCAN.

Witnesses:

M. E. HARRISON,  
T. F. LEHMANN.