

J. P. WELSHANS.
Fire-Kindling Torch.

No. 216,479.

Patented June 10, 1879.

Fig. 1

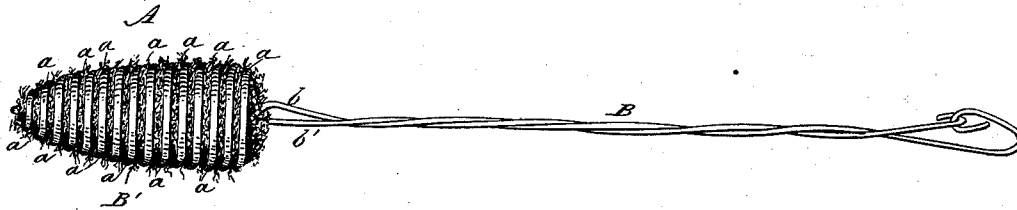


Fig. 2

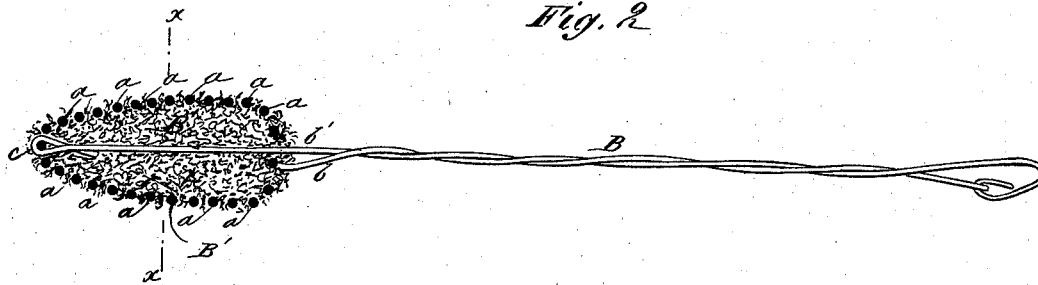
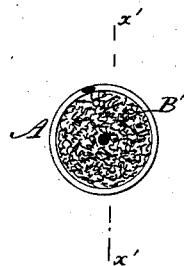


Fig. 3



WITNESSES:

C. Neveu
C. Spurgeon

INVENTOR:

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

JACOB P. WELSHANS, OF BROWNSBURG, INDIANA.

IMPROVEMENT IN FIRE-KINDLING TORCHES.

Specification forming part of Letters Patent No. **216,479**, dated June 10, 1879; application filed October 23, 1878.

To all whom it may concern:

Be it known that I, JACOB P. WELSHANS, of Brownsburg, in the county of Hendricks and State of Indiana, have invented a new and useful Improvement in Fire-Kindling Torches, of which the following is a specification.

The object of this invention is to provide a cheap, simply-constructed, and durable torch for lighting purposes, kindling fires, burning insects off of trees, &c.

It consists of an open cone of wire wound spirally, provided with a handle and central strengthening-wire, said cone being packed with asbestos, amianthus, hornblende, or other similar refractory material for absorbing the combustible fluid.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of my improvement. Fig. 2 is a section through the cone on line $x'x'$, Fig. 3; and Fig. 3 is a transverse section on line xx , Fig. 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a cone made of wire wound spirally, with intervals a , &c., between each coil. This spiral coil is made on one piece of wire, b , while another piece, b' , is wound with the part of b below the cone, and is carried up through the cone and looped over the end coil, forming the apex of the cone, as shown at c . Below the cone, where the two strands are wound together, a handle, B, is formed, and the two are joined together by a hook-and-loop attachment.

The cone A is packed tightly with asbestos, hornblende, amianthus, or any other suitable and similar refractory material of fine fiber and high absorbing property, as clearly shown at B'.

When the torch is about to be used the cone is immersed in petroleum, turpentine, alcohol, or any other highly-combustible fluid, and then lighted.

It can be used as a torch, fire-kindler, for burning insects out of trees, or as a heater for liquids, &c.

It is cheap, easily constructed, and can be handled without danger, and will last an indefinite length of time, as the packing material is practically indestructible by heat.

The wire runs up through the cone, strengthens it, and the interstices a expose the packing and give space for the air to reach the oil, and thus support and promote combustion.

I am aware that the heads of torches or fire-kindlers have been made partially of wire bent spirally, also that an absorbent material has been used, and therefore lay no claim, broadly, to these features.

It will be observed that the advantages I derive from constructing the head of my fire-kindler entirely from wire wound spirally from base to apex are, that I obtain a much larger flame than when a cast-iron base is used, as in Lewis' patent; also that a fire-kindler can be made much cheaper, besides being more durable, than one employing a cast-iron base.

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

As a new article of manufacture, the within-described torch fire-kindler, consisting of the spiral cone A, with interstices a , central strengthening-rod b' , and handle B, in the manner set forth.

JACOB POOL WELSHANS.

Witnesses:

BENJAMIN P. JONES,
FRANCIS M. SPARKS.