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FIRE LIGHTER

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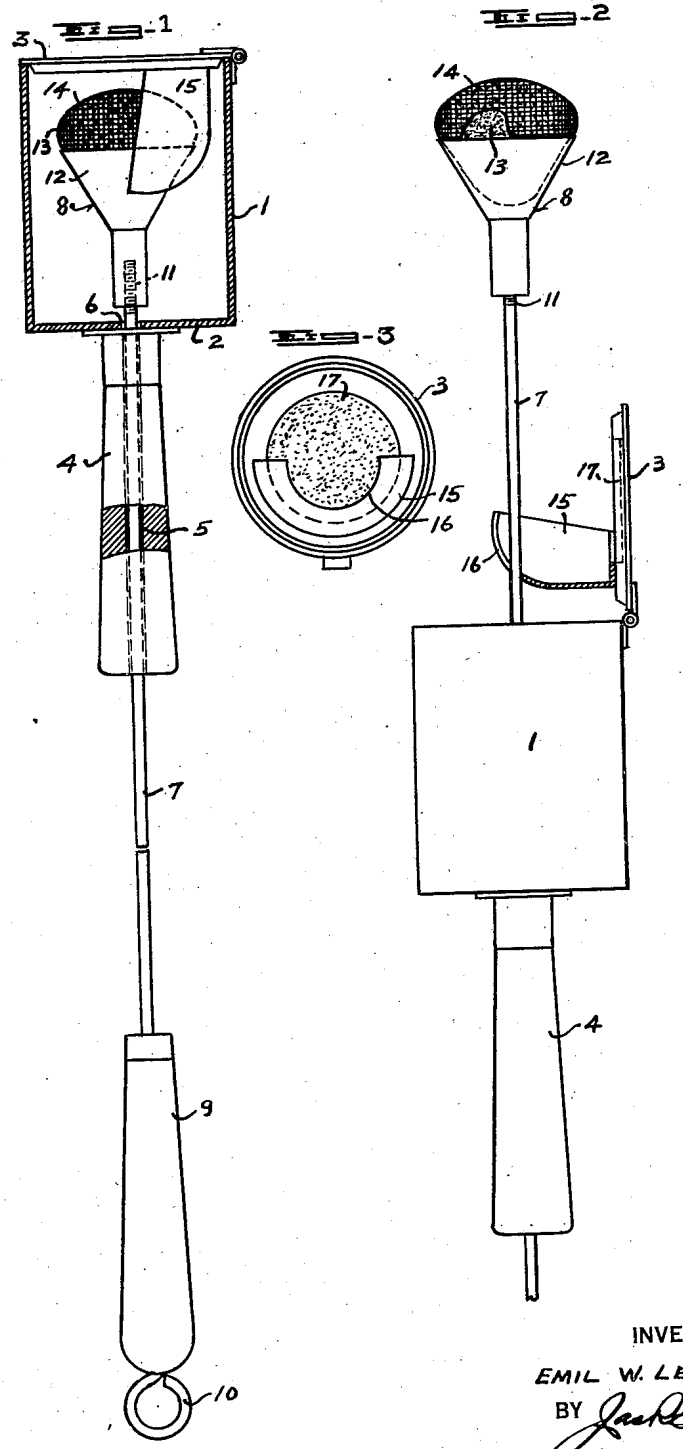

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2,429,829

FIRE LIGHTER

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2 Claims. (Cl. 158—10)

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This invention relates to a fire lighter, and while primarily designed and intended for igniting the fire in oil and gas furnaces, it will be obvious that the lighter may be employed for any other purposes wherein it is found to be applicable.

Important objects and advantages of the invention are to provide a lighter of the character described, which is particularly adapted for igniting fires in oil and gas furnaces that have the burners thereof located in somewhat remote and not readily accessible locations, which will minimize explosions due to delayed ignition and in consequence eliminate fire hazards and damage to property and perils to life, which embodies novel means for automatically extinguishing itself after the ignition operation, which is simple in its construction and arrangement, durable and efficient in its use, compact, and comparatively economical in its manufacture and operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the novel construction, combination, and arrangement of parts herein specifically described and illustrated in the accompanying drawing, but it is to be understood that changes in the form, proportions and details of construction may be resorted to that come within the scope of the claims hereunto appended.

In the drawing wherein like numerals of reference designate corresponding parts throughout the several views:

Figure 1 is a side elevational view of the improved lighter, with the receptacle in cross section, and with the ignition head housed within the latter.

Figure 2 is a similar view with the ignition head disposed in the partially projected position.

Figure 3 is a bottom plan view of the receptacle lid and of associated parts.

Referring in detail to the drawing 1 denotes a metallic, oblong cylindrical receptacle, including a bottom 2 at its inner end, and having an open outer end that is provided with a hinged lid 3.

A supporting handle 4 is fixed to the center of the receptacle bottom 2 to dispose same in longitudinal alignment with the receptacle 1. The supporting handle is provided with passage 5, which extends axially through the said supporting handle and registers with an opening 6 in the receptacle bottom 2.

A projection rod 7, of any suitable length to best meet conditions found in practice, extends

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through the passage 5 in the supporting handle 4 and through the opening 6 in the receptacle bottom 2. An ignition head 8 is secured at the outer end of the projection rod, and an operating handle 9 is fixed to the inner end of the latter. The operating handle is provided with an eyelet 10 at its free end for suspending the improved lighter when not in use.

The ignition head 8 preferably has a screw thread connection 11 with the projection rod 7 to permit its replacement when required, and, when not in use, is enclosed or housed within the receptacle 1, as clearly shown in Figure 1.

The ignition head 8 includes a hollow cone-shaped holder 12, which is packed with asbestos wool 13 or analogous material that is non-inflammable. The asbestos wool is preferably covered with wire mesh material 14 secured to the holder to maintain the former within the latter.

A rest member 15, for the head 8 is fixed against the inner side of the lid 3 and extends into the receptacle 1 when the lid is in the closed position, as illustrated in Figure 1. The rest member is substantially dished, and is provided with a recess 16 in its lower or free end.

To project the ignition head 8 for use from the recepticle 1, the projection rod 7 is shifted forwardly by the operator. The forward movement of the ignition head will cause the latter to abut against the closed lid 3 and thereby open said lid. The recess 16 in the head rest member 15 provides clearance for the travel of the projection rod through the receptacle. To return the ignition head to the receptacle, the projection rod is simply retracted. When the ignition head strikes the rest member on its return movement, said rest member together with the open lid will be automatically drawn to the closed position, as shown in Figure 1.

When the receptacle 1 encloses the ignition head 8, the latter is engaged in the dished rest member 15, and such engagement will hold the lid 3 in the closed position, particularly when the device is suspended from the eyelet 10 in the operating handle 9.

In practice, the asbestos wool 13 is saturated with gasoline, kerosene, or analogous inflammable elements, and is ignited to provide ignition means to the ignition head. Under ordinary conditions, one saturation of the ignition head will suffice for repeated lighting operations. As soon as the ignition head 8 is retracted into the receptacle 1, its flame will be automatically extinguished when air is cut off therefrom by the closure of the lid 3. An absorption pad 17 is carried at the

inner side of the lid 3 to absorb drippings from the extinguished ignition head.

The present invention provides a most efficient device of its kind, which may be economically manufactured, and successfully employed for the purposes and in the manner herein set forth.

What I claim is:

1. A fire lighter of the character described, comprising a receptacle having a hinged lid, a supporting handle carried by the bottom of said receptacle, a rest member depending from said lid, an ignition head normally disposed in said receptacle and engaged in said rest member, and a projection rod extending through said supporting handle and being connected with said ignition head, said rod being operable to cause the abutment of said ignition head against said lid to open the latter and project said ignition head from said receptacle, said rod being further operable to cause the engagement of said ignition head with said rest member to close said lid and to retract said ignition head into said receptacle.

2. A fire lighter of the character described, comprising the combination of a cylindrical receptacle having a hinged lid and a bottom, a supporting handle attached to the bottom of said receptacle, a rest member depending from the

inner side of said lid, an ignition head normally disposed in said rest member within said receptacle, a shiftable projection rod extending through said supporting handle and being connected with said ignition head, said rod being operable to cause the abutment of said ignition head against said lid to open the latter and to project said ignition head from said receptacle, said rod being further operable to cause the engagement of said ignition head with said rest member to close said lid and to retract said ignition head into said receptacle, an operating handle secured to one end of said projection rod, a suspension element carried by said operating handle, and an absorbent member carried at the inner side of said lid.

EMIL W. LERSCH.

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