

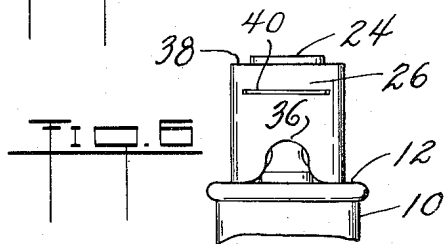
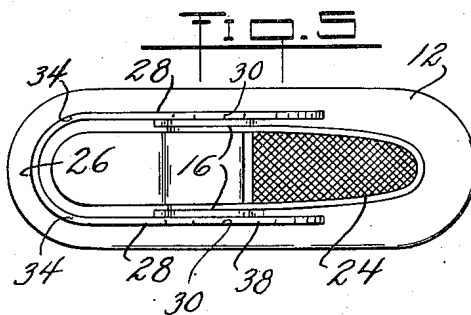
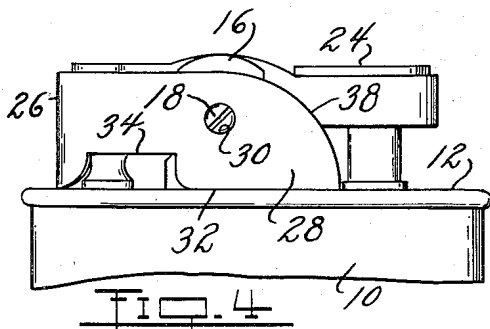
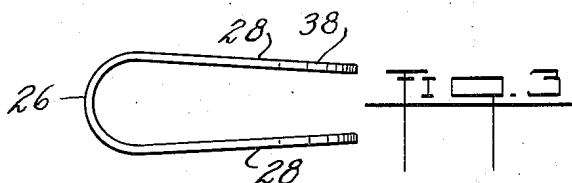
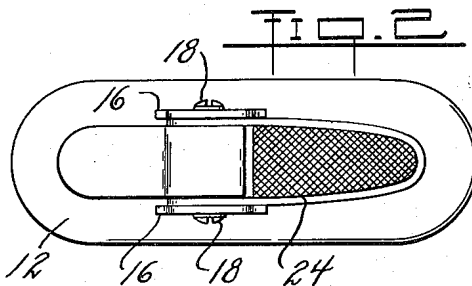
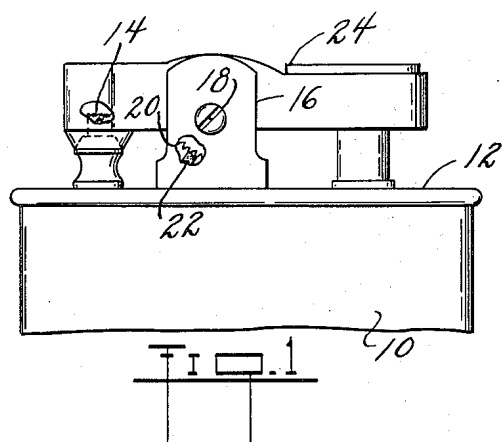
Jan. 16, 1951

P. E. PEARL

2,538,627

LIGHTER ACCESSORY

Filed March 9, 1948



Philip E. Pearl
INVENTOR.

BY
Wm. O. Ballard
his attorney

UNITED STATES PATENT OFFICE

2,538,627

LIGHTER ACCESSORY

Philip E. Pearl, Toledo, Ohio, assignor of one-half
to Clifford J. Kraemer, Toledo, Ohio

Application March 9, 1948, Serial No. 13,862

1 Claim. (Cl. 67—7.1)

1

This invention relates to wind screens for pyrophoric lighters.

An object of this invention is to provide a wind screen in the form of an accessory for lighters which may be snapped onto the lighter and firmly held in place, yet readily removed if desired.

Another object of this invention is to provide a wind screen in the form of an accessory which may be easily mounted on a lighter without the use of any tool and will not detract from the appearance of the lighter nor mar the finish in any manner.

Still another object of this invention is to provide a simple one-piece device complete in itself to be securely attached to a lighter, provide an effective wind screen without interfering with any lighter function, and can be easily removed for lighter repairs or for transfer to another lighter.

Other objects and advantages of this invention relating to the arrangement, operation and function of the related elements of the structure, to various details of construction, to combinations of parts and to economies of manufacture, will be apparent to those skilled in the art upon consideration of the following description and appended claim, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

Referring to the drawings:

Fig. 1 is a side elevation of the upper portion of a typical lighter embodying operating parts to which the wind screen of the invention herein may be attached;

Fig. 2 is a plan view of the lighter of Fig. 1;

Fig. 3 is a plan view of the wind screen;

Fig. 4 is a view similar to Fig. 1 with the wind screen of Fig. 3 mounted thereon;

Fig. 5 is a plan view of Fig. 4; and

Fig. 6 is a view of the lighter from the left of Fig. 4 showing a modified form for the wind screen bow portion.

In view of the extremely numerous types and designs of pyrophoric lighters now on the market, it would be impossible to illustrate even a representative fraction thereof, but a typical popular type is herein shown which includes a fuel reservoir or receptacle 10 having top 12 through which extends wick 14.

Adjacent thereto is a pair of arms 16 upwardly extending from the top 12, which arms 16 mount axle 18 upon which is journaled abrader wheel 20 in engagement with "flint" or pyrophoric element 22. Operating mechanism 24 including the

2

snuffer and manually controlled plunger causes rotation of the wheel 20 against "flint" 22 which ignites the wick 14. In these type of lighters, the axle 18 extends outwardly slightly beyond the outer faces of the arms or projections 16. This insures a substantial axle mounting. Advantage is taken of this fact by the invention herein.

The wind screen herein comprises a U-shaped element in the form of a spring material strip having bow portion 26 and a pair of legs 28 outwardly extending from the bow portion and inwardly extending toward each other when the unit is unmounted or in its normal form as manufactured. Stainless steel has been found to be a desirable material. An aperture or eye 30 extends through each leg adjacent the free terminus thereof. These eyes 30 are so positioned that when the screen legs are spread for mounting the device on the lighter and the lower side 32 of the screen is brought into engagement with the lighter top 12 in proper position, the eyes will engage the termini of the axle 18 and firmly hold the screen in position with the legs 28 firmly against the outer faces of the arms 16.

Cut-out regions 34 along the screen side 32 provides a limited draft to the wick 14, sufficient for good combustion yet insufficient to extinguish the flame.

By this arrangement a tripod effect is given the mounting by the bow and the outer portions of the legs. This insures stability.

A modification of the screen may include a cut-away region 36 in the bow portion 26.

These cut-away regions and the upper edge 38 of the screen may be contoured to a desired motif for appearance.

In position the bow surrounds the wick, the legs extend far enough beyond the wick to be effective and grip the arms 16, all in no manner interfering with full lighter operation nor requiring any change in the lighter. The screen may be quickly snapped into firmly mounted position and as easily removed without the use of any tool. It in no way detracts from the lighter appearance nor from its utility nor does it mar the finish when it may even be of precious metal as frequently used.

It is to be understood that the above detailed description of the present invention is intended to disclose an embodiment thereof to those skilled in the art, but that the invention is not to be construed as limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of being practiced and

3

carried out in various ways without departing from the spirit of the invention. The language used in the specification relating to the operation and function of the elements of the invention is employed for purposes of description and not of limitation, and it is not intended to limit the scope of the following claim beyond the requirements of the prior art.

The draft apertures may also be varied in style, as for example, one or more openings 40 through the screen may be used, being of such shape and size as desired.

What is claimed and it is desired to secure by United States Letters Patent:

As a new article of manufacture, a detachable wind guard for a pyrophoric lighter of the type having a fuel reservoir provided with a substantially flat top with a wick protruding there-through and a pair of arms upwardly extending from said top spaced from each other and from the wick, wick firing mechanism between said arms, and an axle mount for said firing mechanism carried by said arms and having an extension protruding outwardly from the outer side of each arm; said guard comprising a U-shaped strip of spring material having a bow portion and a pair of legs extending toward each other, said legs each having a lighter engaging side including

4

a substantially straight line terminal extent, a lighter top bow engaging extent with narrowed reaches between said bow and terminal extents whereby said guard has a three-point engagement with the lighter top when in attached position, said legs each provided with an eye there-through in the region intermediate the straight line extent, said legs being spread in lighter attached position to a substantially parallel extent to thereby spring embrace the outer faces of said arms and in such position having the axle extensions within said eyes for fixedly holding the three-point engagement with said top with said wick within the bow.

PHILIP E. PEARL.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,755,951	Dubsky -----	Apr. 22, 1930
2,463,424	Reilly -----	Mar. 1, 1949

FOREIGN PATENTS

Number	Country	Date
126,260	Switzerland -----	June 1, 1928