

June 24, 1952

B. W. PORTER
MATCH-HOLDING LIGHTER

2,601,455

Filed Feb. 18, 1949

FIG. 1.

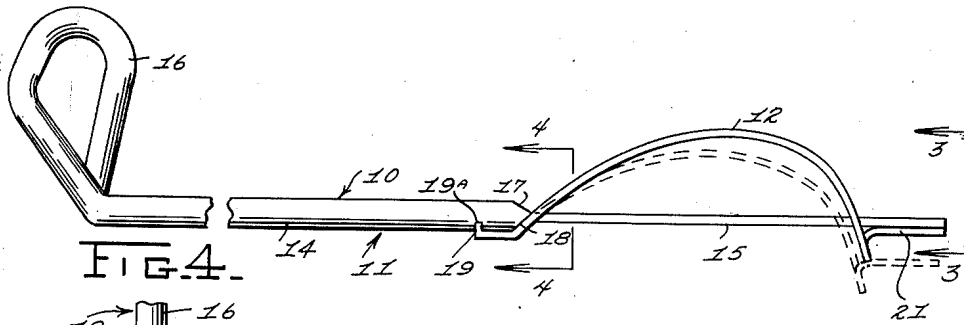


FIG. 4.

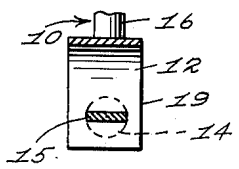


FIG. 2.

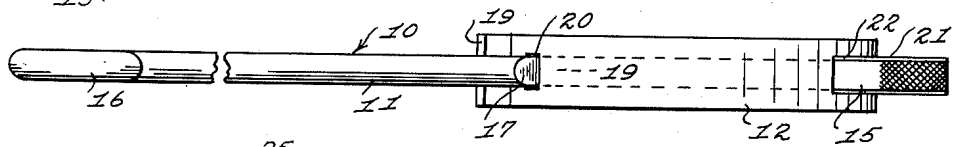


FIG. 3.

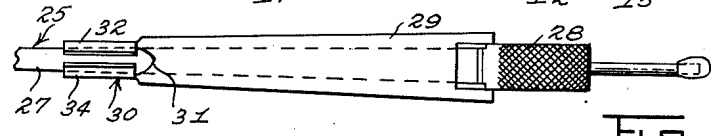


FIG. 5.

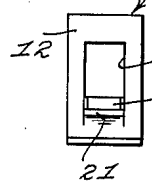


FIG. 6.

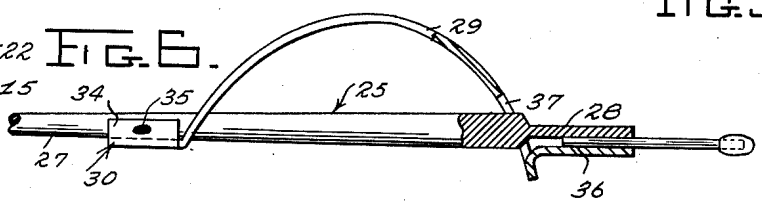


FIG. 7.

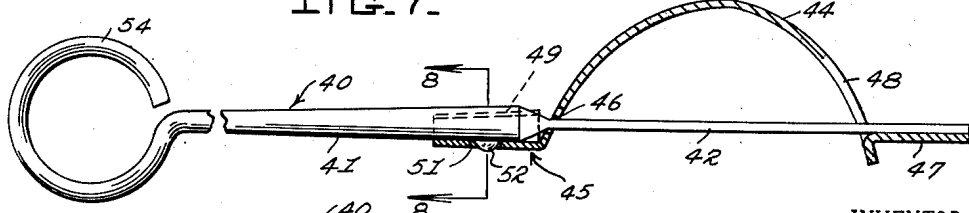
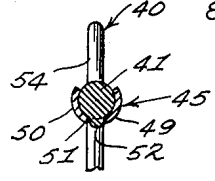


FIG. 8.



INVENTOR.
BURL W. PORTER
BY

McMorrow, Bertram & Davidson
ATTORNEYS

UNITED STATES PATENT OFFICE

2,601,455

MATCH-HOLDING LIGHTER

Burl W. Porter, Wilmington, Calif.

Application February 18, 1949, Serial No. 77,140

2 Claims. (Cl. 294-99)

1

This invention relates to an improved spring-type match-holding lighter.

It is an object of this invention to provide a spring-type match-holding lighter of the kind to be more particularly described hereinafter in which a match may be clamped for lighting burners and the like, the holder being so constructed and arranged whereby the supporting rod of the holder will constitute a clamping jaw of the clamp securing the match on the rod.

Another object of this invention is to provide a match-holding lighter which is formed of a minimum number of cooperating parts required for obtaining the desired purpose, thereby providing a lighter which may be readily manufactured and assembled at a low cost.

Yet another object of this invention is to provide a device of this kind which is readily formed of an elongated rod and a short length of flat spring material, the rod and spring being formed for interengagement and cooperation to form a resilient clamp on one end of the rod for securing a lighted match thereon for lighting oil burners and the like.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a side elevation, partly broken away, of a match-holding device constructed according to an embodiment of my invention;

Figure 2 is a top plan view;

Figure 3 is a front elevation of the match-holding device, taken substantially on the line 3-3 of Figure 1;

Figure 4 is a fragmentary transverse section, taken on the line 4-4 of Figure 1;

Figure 5 is a top plan view of the forward end of a modified match-holding device;

Figure 6 is a side elevation, partly broken away and partly in section, of the forward end of the modified form of the match-holding device shown in Figure 5;

Figure 7 is a side elevation, partly broken away and partly in section, of a second modified form of match-holding device, constructed according to an embodiment of this invention;

Figure 8 is a transverse section, taken on the line 8-8 of Figure 7.

Referring to the drawings, the numeral 10 designates generally a match-holding device or lighter for holding a match to ignite oil burners and the like. The match-holding lighter 10 is formed with an elongated rod 11 and a short length of flat, resilient material, as a flat spring 12, secured on one end thereof.

The rod 11 is formed with an elongated, cylindrical shank 14, the forward end of which is flattened to form a forwardly-extending, flat jaw member 15. The rear end of the rod 11 is

2

looped upwardly at the rear end thereof to form a looped handle 16 for holding the lighter. At the forward end of the shank 14, where the rod 11 is pressed to form the forwardly-extending jaw member 15, the rod is tapered to provide forwardly-converging walls 17 and 18. The walls 17 and 18 provide an abutment for limiting the sliding movement of the resilient member, to be hereinafter described, when it is applied to the jaw member 15. An upwardly-extending lug or upturned end 19 is fixed to or formed on the inner end of the resilient member 12 and is engageable in a transverse slot 19a on the lower side of the shank 14 rearwardly of the forwardly-inclined wall 17 between the shank and the jaw member, for retaining the resilient member 12 in position on the jaw member 15.

The resilient member 12, as noted above, is formed of an elongated flattened spring or other suitable resilient material, and is formed with a rectangular opening 20 transversely thereof at the rear ends thereof. A jaw 21 is formed on the forward end of the resilient member 12 by striking a portion of the spring out from adjacent the front end thereof. As the jaw 21 is struck outwardly from the body of the resilient member 12, a rectangular opening 22 is provided at the forward end of the resilient member 12 immediately above the jaw 21.

The resilient member 12 is assembled onto the rod 11 by sliding the rear opening 20 over the jaw member 15 and rearwardly over the lug 19. Normally, the combined area of the lug 19 and the jaw member 15 is greater than the opening in the opening 20, but the rear end of the resilient member 12 may be forced over the lug 19 so that the lug will restrain the resilient member 12 against sliding movement off of the jaw member 15 unless sufficient force is applied. The resilient member 12 is then bowed along the length thereof so that the forward end of the jaw member 15 will engage through the opening 22. The jaw 21 is adapted to engage the lower surface of the forward end of the jaw member 15 in the manner of a spring clamp for clamping a lighted match on the forward end of the rod 11. As the resilient member 12 is bowed along the length thereof and is retained in its bowed condition, normally biased to clamping engagement of the jaw 21 with the jaw member 15, the rear end of the resilient member will flatly abut the lower downwardly and rearwardly-inclined surface 18 on the forward end of the shank 14.

In Figures 5 and 6, there is shown a modified form of this invention, wherein the match-holding lighter is formed in substantially the same manner as the lighter 10 described above, but a slight modification in the form of the rod and the means for securing the resilient member to the rod is provided. The match-holding device 25 shown in Figures 5 and 6 is formed with a cylindrical shank member 27, which is slightly

3

tapered to a reduced diameter at the rear or handle end thereof. A flat, forwardly-extending, clamping jaw member 28 is formed on the forward end of the shank 27 in substantially the same manner as the jaw member 15 described above. However, the jaw member 28 is formed on the extreme forward end of the shank 27, and the forward end of the shank 27 is substantially disposed within the limits of the resilient member 29 engaged thereon.

The resilient member 29 is formed in substantially the same manner as the resilient member 12 described above, but a ferrule 30 is formed integrally with the rear end thereof. An opening 31 is formed on the rear end of the flat, bowed portion of the resilient member 29, so that the shank 27 may freely engage therethrough.

The ferrule 30 is formed as a longitudinally-split sleeve formed from the rear or inner end of the flat, resilient member 29. The ferrule 30 includes cooperating side arms 32 and 34 which are rolled upwardly for engagement about the sides of the shank 27 intermediate the length thereof, the inherent resiliency of the spring metal from which the member 29 is formed providing the clamping engagement of the arms 32 and 34 with the shank 27. The ferrule may be securely attached to the shank 27 by spot welding one or both of the arms 32 and 34, the spot weld being indicated by the numeral 35 in Figure 6.

The main body portion or length of the resilient member 29 is bowed in substantially the same manner as the resilient member 12, described above, and a jaw 36 is struck from the forward end thereof. By striking the jaw 36 from the forward end of the resilient member 29, a rectangular opening 37 is formed at the forward end, and the forward end of the rod which includes the shank 27 and the jaw member 28 is freely extended through the opening 37. As noted in Figure 6 of the drawings, the forward end of the shank 27 reaches into the opening 37, but the clamping member 28 is disposed forwardly thereof and the jaw 36 clampingly engages the flat jaw member 28 for securing a match therebetween.

In Figures 7 and 8 there is shown a second modified form of this invention, wherein the match-holding lighter is indicated by the numeral 40. The lighter 40 includes a cylindrical tapered shank 41 and an elongated, flat jaw member 42 formed on the forward end thereof. A resilient clamping member 44, formed substantially in the same manner as the resilient member 29 described above, is engaged over the forwardly-extending jaw member 42. A ferrule 45 is formed integrally with the inner or rear end of the resilient member 44 and is adapted to engage about the shank 41 at the forward end thereof. The jaw member 44 extends forwardly from the forward end of the shank 41 and only the jaw member 42 is engaged within the resilient member 44. An opening 46 is formed in the rear end of the resilient member 44 and the rear end of the clamping member 42 is engaged therethrough. A jaw 47 is formed on the forward end of the resilient member 44 in substantially the same manner as the jaw 36 described above, and the forward end of the jaw member 42 is engaged through an opening 48 for clamping engagement with the upper side of the jaw 47.

The ferrule 45 is formed of a pair of side arms 49 and 50, and an opening 51 is formed on the lower side of the ferrule between the arms 49 and 50. A lug 52 is fixed to or formed integrally with

4

the forward end of the shank 41 and is adapted to be engaged within the opening 51 for securing the ferrule 45 against sliding movement along the length of the rod 40.

A looped handle 54 is formed on the rear end of the shank 41 to provide a firm grip in holding the match-holding lighter.

In applying the resilient member 44 onto the match holder 40, shown in Figures 7 and 8, the forwardly-extending jaw member 42 is initially engaged between the arms 49 and 50 of the ferrule 45 and engaged through the openings 46 and 48. The ferrule is then moved rearwardly for frictional, resilient engagement about the forward end of the shank 41 until the lug 52 is engaged within the opening 51.

The resilient members 12, 29 and 44, described above, are bowed along the length thereof and as they are formed of resilient material, they are biased to an extended position. However, the biased extension of the resilient members is such that the tendency of the resilient members is not to be extended into a straight line, but into an arc of a greater diameter than the arc required for resiliently pressing the jaws 21, 36 and 47 into clamping engagement with the forward ends of the jaw members 15, 28 and 42.

I do not mean to confine myself to the exact details of construction herein disclosed, but claim all variations falling within the purview of the appended claims.

I claim:

1. A match-holding lighter comprising an elongated rod, a bowed resilient member arranged longitudinally of said rod inwardly of and spaced from one end of the latter and having one end remote from said one end of said rod fixedly connected to said rod and being connected adjacent the other end to said rod for sliding longitudinal movement only during assembly of said bowed member with said rod, and a longitudinal extending jaw on the other end of said resilient member and engageable with the portion of said rod intermediate said one end of said rod and the slidable connection of said resilient member with said rod for clamping engagement therewith.

2. A match-holding lighter comprising an elongated rod, a jaw member extending longitudinally from one end of said rod, a bowed resilient member arranged longitudinally of said rod and having one end remote from said one end of said rod fixedly connected to said rod and being connected adjacent the other end to said jaw member for sliding longitudinal movement only during assembly of said bowed member with said jaw member, and a longitudinally extending jaw on the other end of said resilient member and engageable with the portion of said jaw member forwardly of the slidable connection of said resilient member with said jaw member for clamping engagement therewith.

BURL W. PORTER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
145,564	Greenleaf	Dec. 16, 1873
187,214	Campbell	Feb. 13, 1877
2,563,422	Sabo	Aug. 7, 1951

FOREIGN PATENTS

Number	Country	Date
48,442	Norway	Sept. 30, 1930