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S. KANAZAWA

POCKET STOVE

Filed June 28, 1923

Fig. 1.

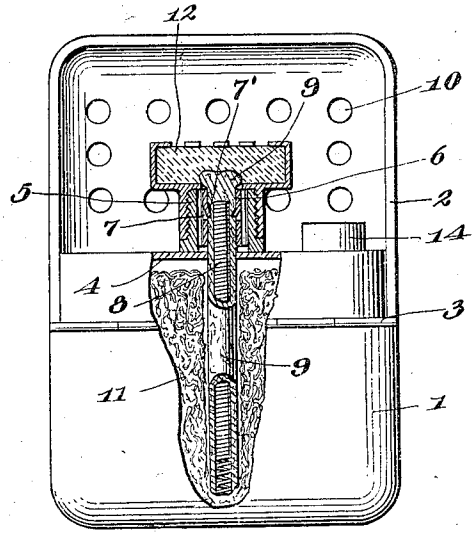


Fig. 2.

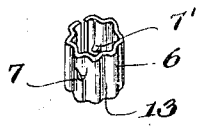


Fig. 3.



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SADANOSUKE KANAZAWA, OF TOKYO, JAPAN.

POCKET STOVE.

Application filed June 28, 1923. Serial No. 648,372.

To all whom it may concern:

Be it known that I, SADANOSUKE KANAZAWA, a subject of the Emperor of Japan, residing at No. 2 Tashiro-cho, Kanda-ku, in the city of Tokyo and Empire of Japan, have invented certain new and useful Improvements in Pocket Stoves, of which the following is a specification.

This invention relates to a portable heat producing device, and more specifically a pocket-stove or warmer.

The device of this invention consists generally of a receptacle containing fuel absorbing material such as cotton and having a top plate provided with a central opening, to which is secured a sleeve, and into which sleeve is placed an inner sleeve having on its periphery a plurality of longitudinal channels and an inwardly projecting lug or lugs for retaining a wick therein, which wick has a core composed of a spiral metal wire, and a heat producing element mounted on the said sleeve, which element contains asbestos carrying platina black or like material thereon.

An object of the present invention is to provide a pocket-stove or warmer which functions in most efficient manner.

Another object is to construct a device of this character, in which any accidental interruption of the warming effect is prevented.

Other objects and advantages will be seen in the description which follows.

In order that this invention may be clearly understood and readily carried into practice reference may be had to the appended explanatory sheet of drawings, in which:—

Figure 1 is a front view of a pocket-stove constructed according to the present invention, with one of the hinged cover plates removed, and partly in section.

Figure 2 is a perspective view of an inner sleeve.

Figure 3 is a plan view of said inner sleeve and an outer sleeve.

Referring to the drawings, numeral 1 indicates a receptacle adapted to contain benzine or the like. This receptacle 1 is of comparatively flat shape and is provided with two cover plates 2 hinged thereto at 3, only one such cover plate being shown in the drawing. The cover plates 2 are perforated as at 10. The receptacle 1 has secured thereto a top plate 4, which is formed with a central opening. This top plate 4 has secured thereto an upwardly extending sleeve 5 concentric with said central opening. Inserted into the sleeve 5 is an inner sleeve 7 having on its periphery a plurality of ridges 6 and slots 13 by which a plurality of channels are formed between the sleeve 7 and the inner wall of the outer sleeve 5. Preferably, the inner sleeve 7 is made of a corrugated sheet metal and is formed with a lug or lugs 7′ projecting inwardly, as shown in Fig. 2. Into the inner sleeve 7 is passed a wick 9 having a core 8 composed of a spiral metal wire, said wick 9 being held in its position by the lugs 7′ on the inner sleeve 7.

A heat producing element 12 is removably mounted onto the sleeve 5, as shown in the drawing. In this heat producing element 12 is filled a suitable quantity of asbestos, in which asbestos is placed platina black or like material. The receptacle 1 is filled with a benzine absorbing material 11, for instance cotton thread, and is provided with an inlet opening for supplying benzine, said inlet being provided with a cap 14.

From the foregoing it will be seen that benzine vapor produced in the wick 9 will pass through the space formed by the spiral wire 8 and the benzine vapor produced in the receptacle 1 will rise through the channels formed between the inner sleeve 7 and the inner wall of the outer sleeve 5, and that the same will come into contact with the fibres of asbestos carried by the heat producing element 12 which will be thus caused to glow. The heat producing element 12 will thus produce and give out a desired amount of heat. By referring to Figure 1, it will be noted that the wick 9 is securely held in its proper position in the inner sleeve 7 by the lugs 7′ formed thereon, the latter preventing the wick 9 from dropping down. Consequently, there is no tendency of causing any accidental interruption of the heat producing effect.

What I claim is:—

1. A pocket-stove consisting of a receptacle for volatile liquid fuel provided with a top plate having a central opening, an outer sleeve secured to the said top plate and concentric with said central opening, an inner sleeve formed with a plurality of longitudinal channels on its periphery and also formed with an inwardly projecting lug or lugs, and a wick passed into said in-

ner sleeve and held in its position by said lug or lugs, the arrangement being such that the vapor produced in the receptacle rises through the channels formed on the periphery of the inner sleeve.

2. A pocket-stove consisting of a receptacle for volatile liquid fuel provided with a top plate having a central opening, an outer sleeve secured to the said top plate and concentric with said central opening, an inner sleeve formed with a plurality of longitudinal channels on its periphery and also formed with a lug or lugs projecting inwardly, and a wick passed into said inner sleeve and held in its position by said lug or lugs, said wick having a core composed of a spiral metal wire which is arranged in such a manner that the vapor produced in the wick passes through the clearance formed by the spiral wire and thence upwardly through the central space.

In testimony whereof I affix my signature.

SADANOSUKE KANAZAWA.