

(No Model.)

A. PRICE.
POWDER AND FUSE WARMER.

No. 511,160.

Patented Dec. 19, 1893.

Fig. 1.

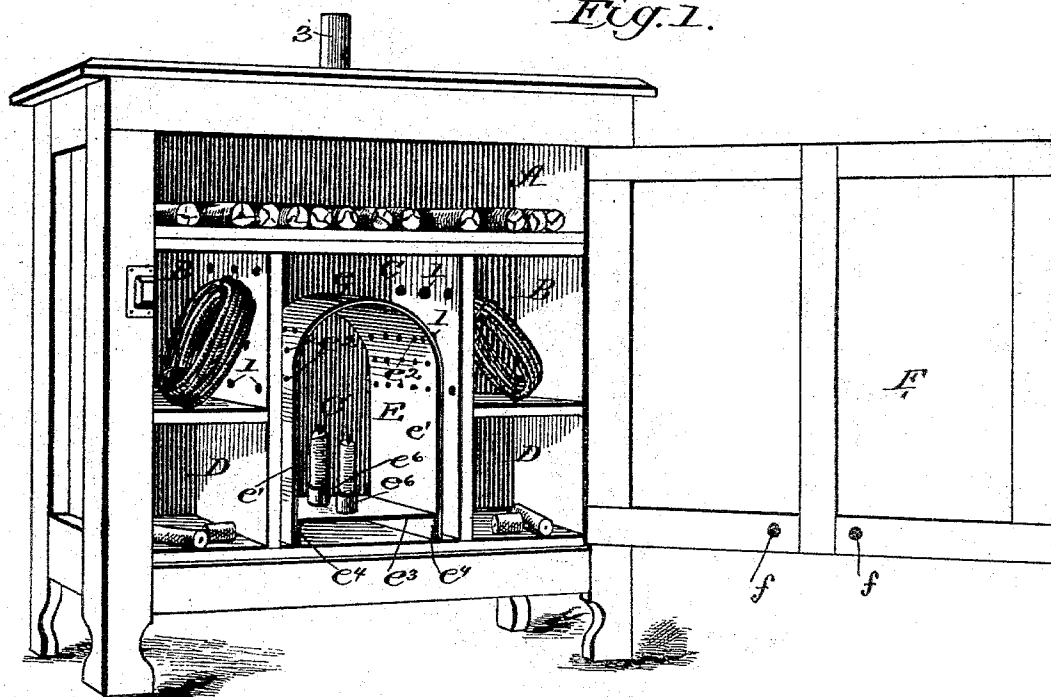
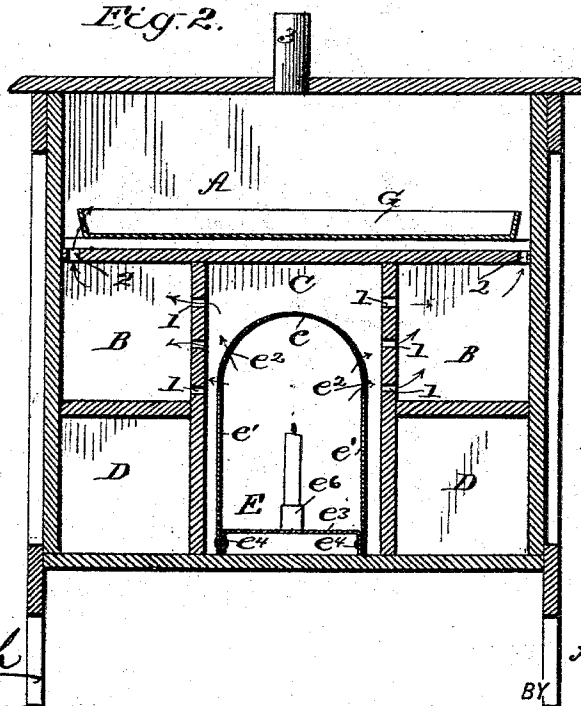


Fig. 2.



WITNESSES:

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Fred G. Dietrich
Jas. A. Ryan -

INVENTOR

Albert Price

BY

Mum & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBERT PRICE, OF MARYSVILLE, MONTANA.

POWDER AND FUSE WARMER.

SPECIFICATION forming part of Letters Patent No. 511,160, dated December 19, 1893.

Application filed February 27, 1893. Serial No. 483,906. (No model.)

To all whom it may concern:

Be it known that I, ALBERT PRICE, of Marysville, in the county of Lewis and Clarke and State of Montana, have invented a new and useful Improvement in Powder and Fuse Warmers, of which the following is a specification.

My invention is an improved powder and fuse warmer for thawing or softening powder, fuses or anything containing nitro-glycerine and has for an object to secure a gentle, steady heat to produce the desired result and insure safety and the invention consists in the novel constructions and combinations of parts hereinafter described and pointed out in the claims.

In the drawings—Figure 1 is a front perspective view of my improved apparatus the door being open, and Fig. 2 is a vertical section of the apparatus.

The casing is divided by partitions and formed with the powder tray A, fuse compartment B B heating compartment C and candle boxes D D, the latter being on opposite sides of the heating compartment and below the fuse compartments C C.

Within the heating compartment C I arrange the candle holder E which is formed of sheet metal having the round top e , sides e' perforated at e^2 , a bottom e^3 and legs e^4 preferably formed by bending flanges on the bottom and securing the same to the side plates. The bottom e^3 preferably has one or more sockets e^5 for the candle and the holder E is made of such size as to leave a considerable space between its sides and top and the inner walls of the fuse compartments and the under side of the powder tray as clearly shown. The legs also serve to hold the bottom sufficiently above the bottom of the case to avoid burning the same if the candle should burn down to and heat the bottom.

In practice the candle boxes may be used to hold the pieces of candle which will not become much heated because of the arrangement of said box. Holes 1 are formed to lead from the heating into the fuse compartments and similar holes 2 lead from the fuse compartments into the powder compartment near the opposite ends of the powder compartment

such openings 1 and 2 being best shown in Fig. 2.

In operation the candle placed in the candle holder will heat the latter and the heat will pass out through the openings in the side of and be radiated by said holder to thoroughly and gently heat the air in the heating compartment, the top and side walls of said compartment being protected from any danger of fire as will readily appear. From the heating chamber the hot air will pass through openings 1 into the fuse compartments and heat the same and thence through the openings 2 into the powder compartment, warming the powder and thence passing out of the stack or outlet 3 at the top of the casing. The air to supply the combustion of the candles passes in through openings f bored in and near the bottom of the door F.

It will be seen that by my invention I utilize dry heat, the only heat that should be used to warm or thaw nitro-glycerine powder and conduct it by a circuitous route through the cabinet and allow it to escape quickly thus preventing the overheating of the powder chamber.

The device is simple, conveniently handled and may be readily carried from point to point as may be desired.

A tray G as shown in Fig. 2 may be arranged to receive the nitro glycerine powder and in practice the tray may be half filled with saw dust to absorb the glycerine should any ooze from the powder.

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

1. A powder and fuse warmer substantially as described comprising the case having the powder compartment, the fuse compartment and the heating compartment and provided with openings forming communications between said compartments and the metallic candle holder substantially as set forth.

2. A powder and fuse warmer substantially as described having its heating chamber or compartment provided with a metallic candle holder having an imperforate top and also provided with side and bottom plates substantially as set forth.

3. In a warmer substantially as described the combination with the heater and the warming compartments of the metallic candle holder arranged in the heating compartment and having a top and bottom and perforated sides and having supporting legs whereby to support its bottom plate above the bottom of the casing substantially as set forth.
- 10 4. The improved powder and fuse warmer consisting of the casing having the powder compartment the heating compartment and the fuse compartments and provided with openings forming communication as described the candle holder arranged in said heating chamber and provided with the bottom, top and perforated sides and having legs supporting its bottom above that of the casing all substantially as and for the purposes set forth.

ALBERT PRICE.

Witnesses:

MATTHEW DORRITY,
JOHN LARSON.