

F. SZAKÁLL & D. KARDOS.  
SAFETY METHYLATED SPIRIT STOVE.  
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946,690.

Patented Jan. 18, 1910.

Fig. 1.

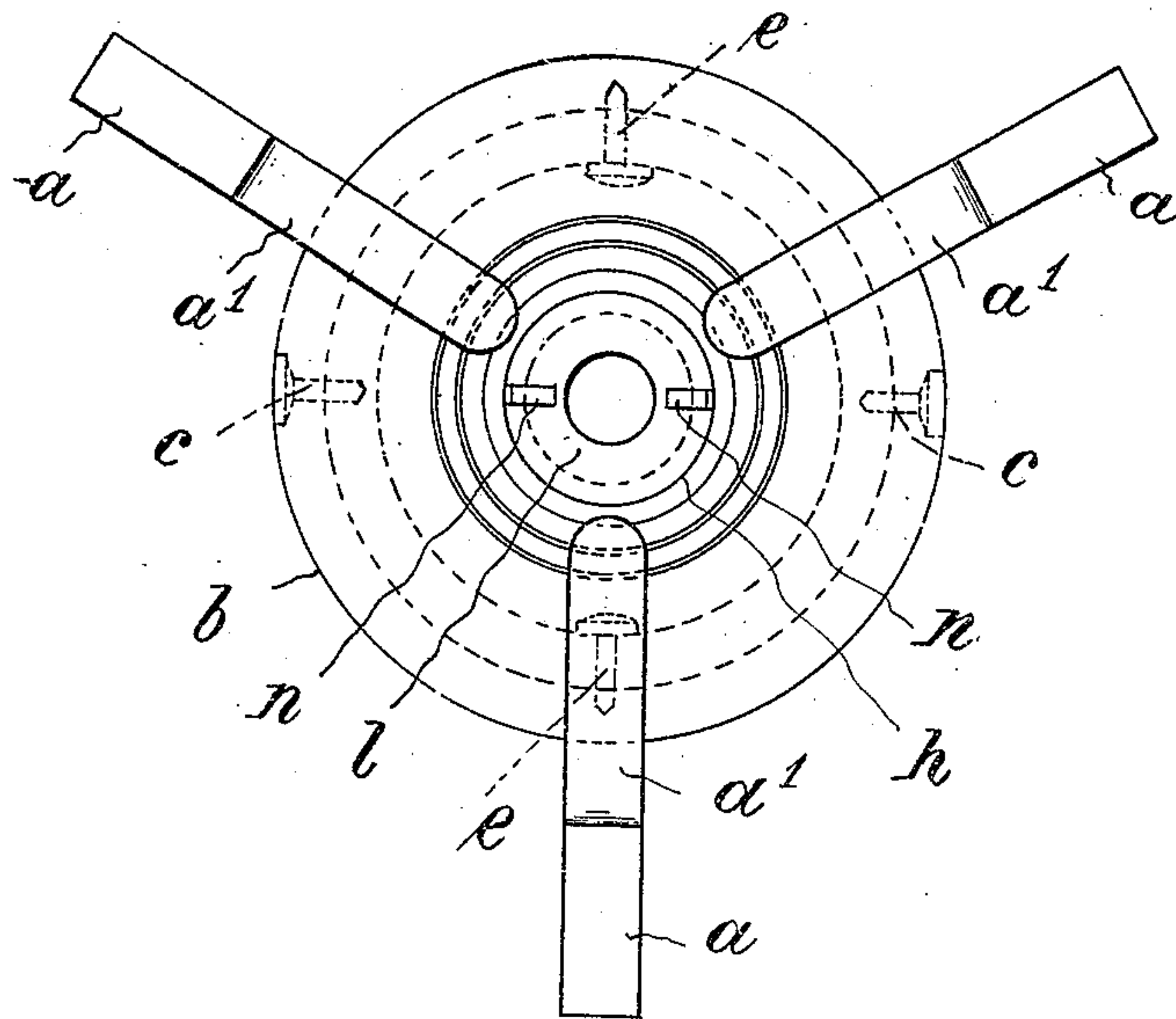
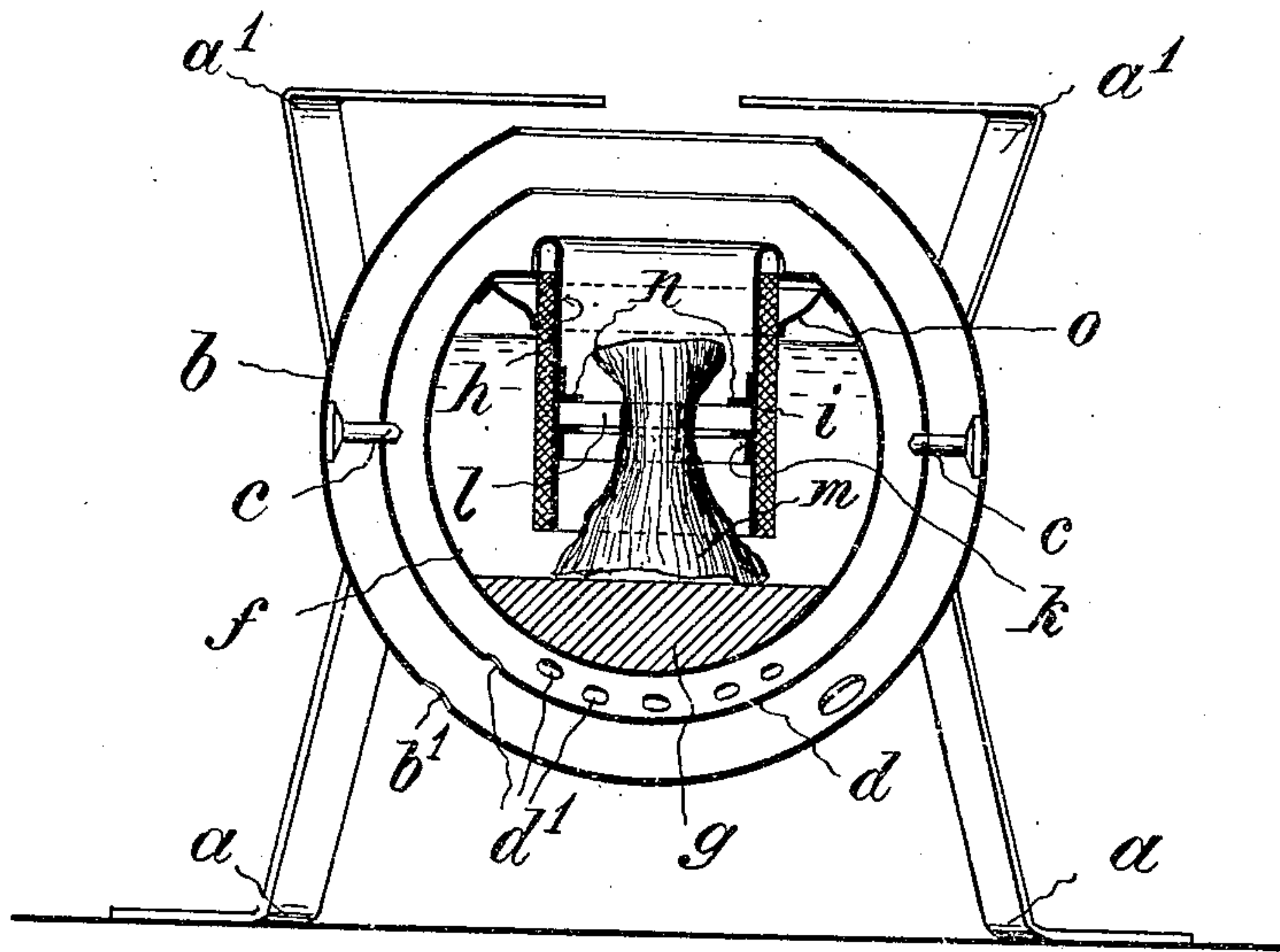


Fig. 2.

Witnesses:

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# UNITED STATES PATENT OFFICE.

FRANZ SZAKÁLL, OF PALOTA-MJFALU, AND DESIDER KARDOS, OF BUDAPEST, AUSTRIA-HUNGARY, ASSIGNORS, BY MESNE ASSIGNMENTS, TO THE FIRM OF "ROPS" METALLWAAREN-AKTIENGESSELLSCHAFT, OF BUDAPEST, AUSTRIA-HUNGARY.

## SAFETY METHYLATED-SPIRIT STOVE.

946,690.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed March 2, 1908. Serial No. 418,865.

*To all whom it may concern:*

Be it known that we, FRANZ SZAKÁLL, of Palota-Mjfalú, and DESIDER KARDOS, of Budapest, in the Empire of Austria-Hungary, merchants, both subjects of Hungary, have invented new and useful Improvements in Safety Methylated-Spirit Stoves, of which the following is a specification.

10 This invention relates to a safety methylated spirit stove which is so constructed that when upset, an outflow of the methylated spirit is prevented. This is attained in that the spirit lamp is hung after the  
15 manner of gimbals in the interior of two concentrically mounted spherical casings.

Referring to the accompanying drawing: Figure 1 is a vertical section of the stove and Fig. 2 a plan thereof.

20 The complete stove is inclosed by a spherical casing *b* supported by three or more legs *a* and provided below with several air inlets *b*<sup>1</sup>. In this casing *b* there is rotatably mounted about a horizontal axis on the  
25 pivot *c* a second spherical casing *d* which is also provided with air inlets *d*<sup>1</sup> and adapted for mounting the lamp *f* that is rotatable on the pivot *c*. The lamp *f* consists of a spherical vessel which is weighted at the bottom  
30 with the lead mass *g*, flattened above and provided with a cylindrical flange forming the burner. This cylindrical flange extends in a curve to the wick tube *h* on which the wick *i* is wound, so that the top edge of the  
35 wick extends into the upper part of the flange forming the burner to the apertures provided on the flange and adapted for the exit of the spirit vapors. There is secured on the inner side of the wick tube *h* a ring *k*  
40 on which the asbestos disk *l* bears, which closes the wick tube *h* and is provided with a wick *m* fixed in a hole of the disk. The asbestos disk *l* is secured by means of two tongues *n*. On the outer side of the wick *i*,  
45 there is provided a metal ring *o*, which bears with one edge beneath the flange serving as burner and is soldered with the other edge to the vessel *f*. This ring prevents in any position of the lamp *f* a direct flow of the  
50 spirit into the burner and the outflow through the apertures thereof. The legs *a* are extended upward above the connecting point of the casing *b* and serve as supports or brackets *a*<sup>1</sup> for the cooking vessels.

The improved stove operates as follows: 55  
The methylated spirit is poured into the wick tube *h*, from whence it flows through the asbestos disk *l* to the lamp *f*. If the lamp is to be ignited, the spirit will first of all be ignited by the wick *m*, the flame pro- 60  
duced heats the wick tube *h* and vaporizes the spirit contained in the wick *i*. The arising vapors escape through the apertures of the burner and are ignited by the flame of the wick *m*. The existing hot flame will be 65  
maintained by the air entering through apertures *b*<sup>1</sup> *d*<sup>1</sup>. The flame burning on the wick *m* extinguishes in a short time for want of air. Now if the stove were to tilt in any direction, the lamp will always assume such 70  
a position, in consequence of the employed suspension, wherein the flange serving as burner is directed upward. During the short period in which the lamp assumes another position, the ring *o* prevents the outflow of 75  
the methylated spirit.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is:— 80

1. In a safety spirit stove, the combination of an exterior spherical casing open at the top and mounted on legs, an intermediate spherical casing open at the top, axially suspended on pivots within said exterior casing 85  
and a burner having a substantially spherical liquid fuel holder and suspended on pivots axially at right angles to the said intermediate casing within the latter and suitably weighted substantially as described. 90

2. In a safety spirit stove, the combination of a spherical outer casing open at the top and mounted on legs, an intermediate spherical casing, open at the top and axially suspended on pivots within said outer casing, 95  
and a burner having a spherical liquid fuel holder and axially suspended within the said intermediate casing at right angles to the latter, the said outer and intermediate casings having air inlet holes in their lower 100  
parts substantially as described.

3. In a safety spirit stove the combination of a spherical outer casing open at the top and mounted on legs, an intermediate spherical casing, open at the top and axially suspended on pivots within said outer casing, 105  
and a burner having a spherical liquid fuel holder and axially suspended on pivots with-

in said intermediate casing at right angles  
to the same, said burner having a cylindrical  
wick tube extending down into the fuel  
holder, an annular flange connecting said  
5 wick tube with the spherical fuel holder and  
an asbestos horizontal partition wall mount-  
ed at about its central portion and support-  
ing a second wick practically concentrically  
within the said wick tube, the said outer  
10 and intermediate casings being provided

with air inlet holes at their lower parts  
substantially as described.

In testimony whereof we have signed our  
names to this specification in the presence of  
two subscribing witnesses.

FRANZ SZAKÁLL.  
DESIDER KARDOS.

Witnesses:

HELLER FORSIF,  
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