

A. KARNAT.
SAFETY ATTACHMENT FOR LAMPS.
APPLICATION FILED AUG. 11, 1908.

927,974.

Patented July 13, 1909.

Fig. 1,

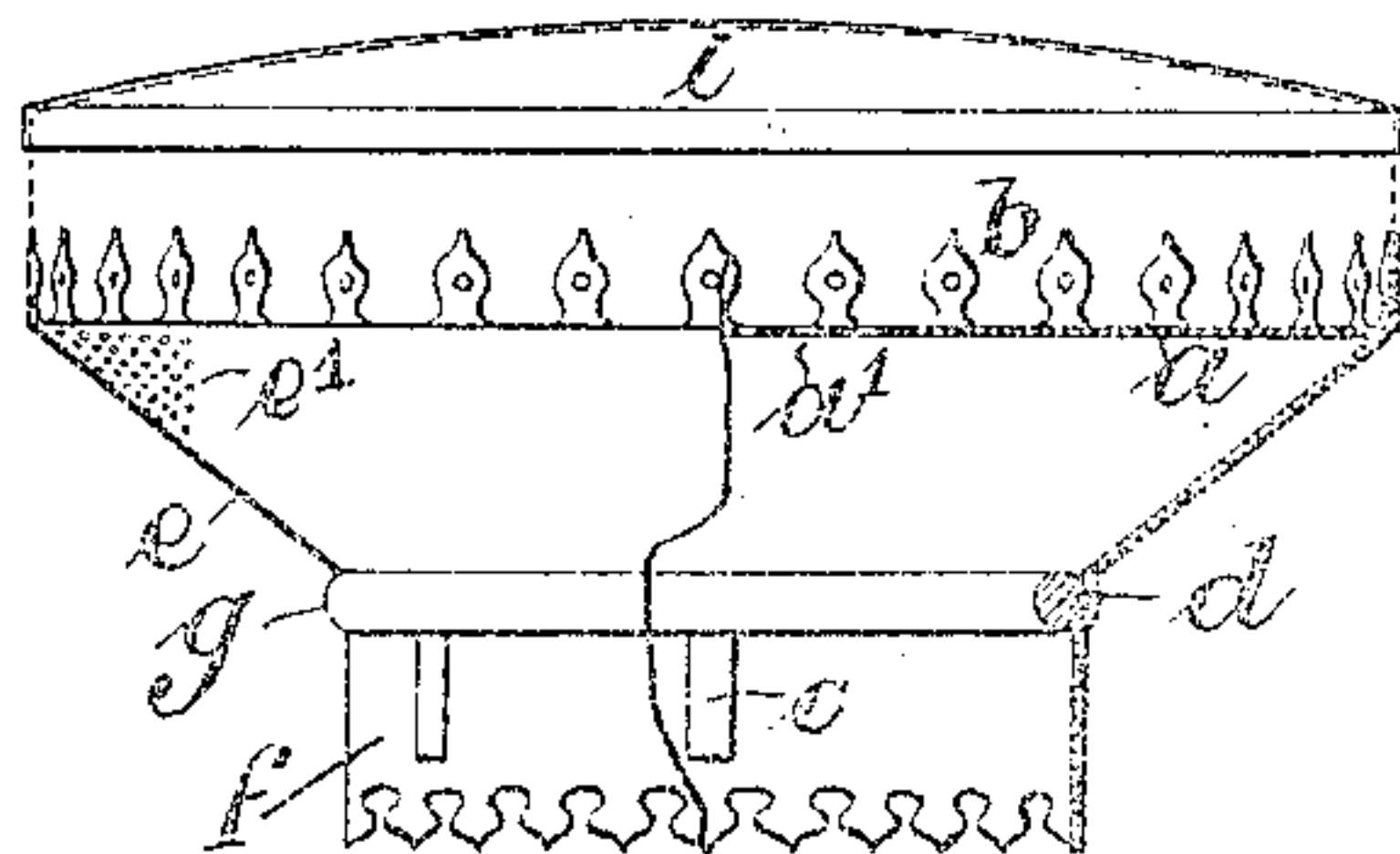


Fig. 2,

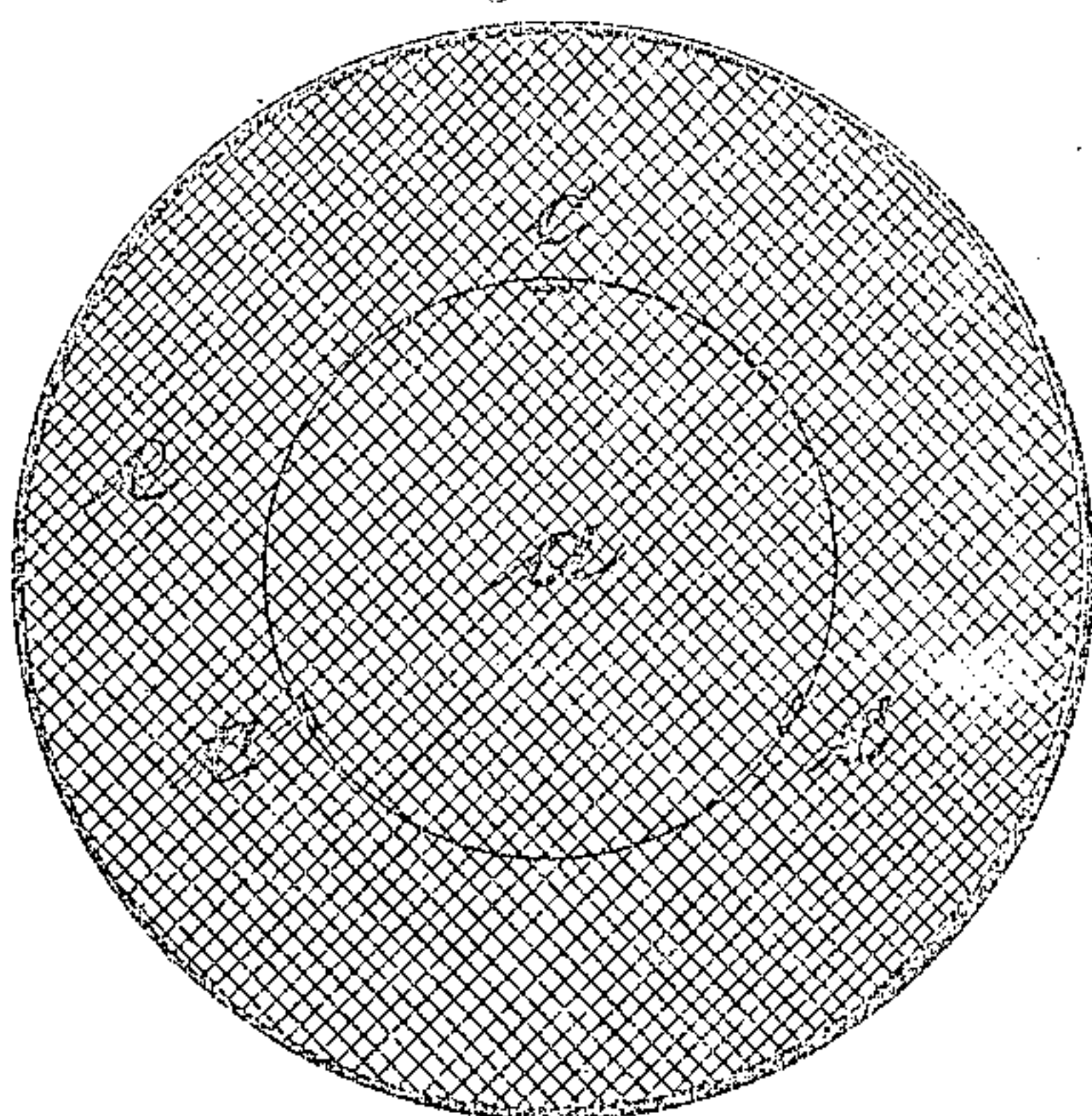


Fig. 3,

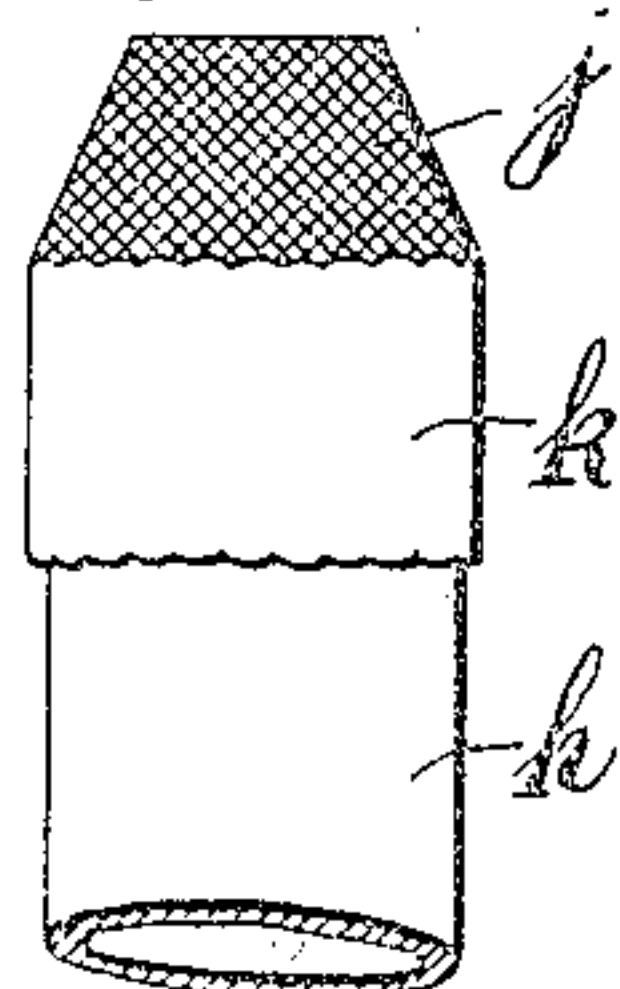


Fig. 5,

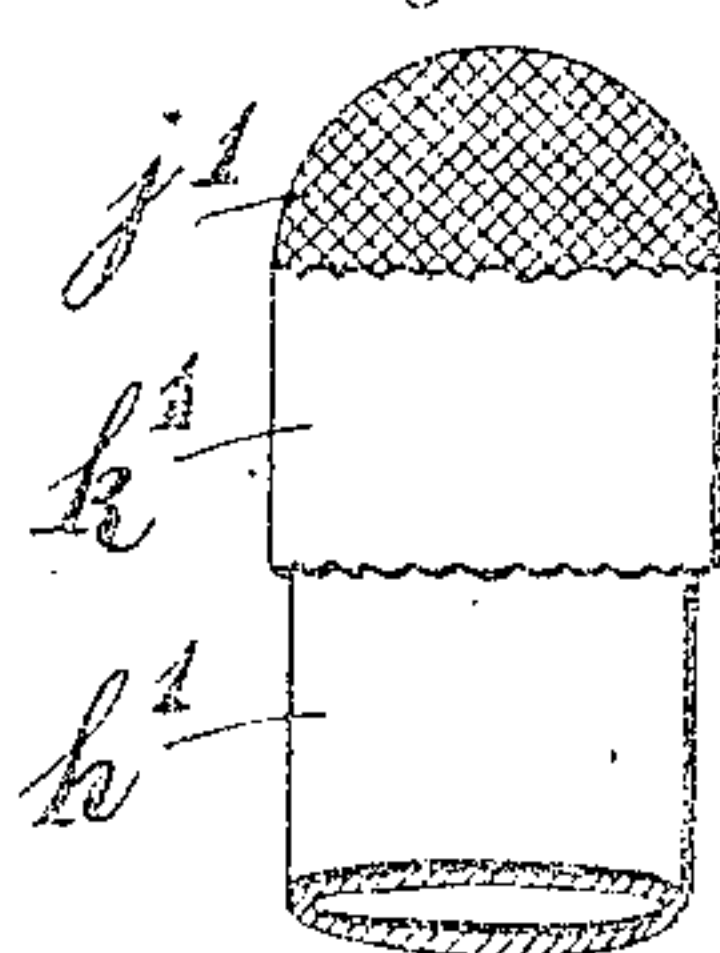


Fig. 4,

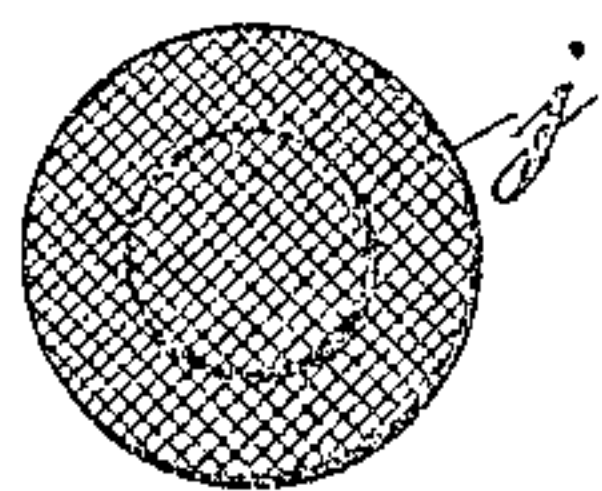
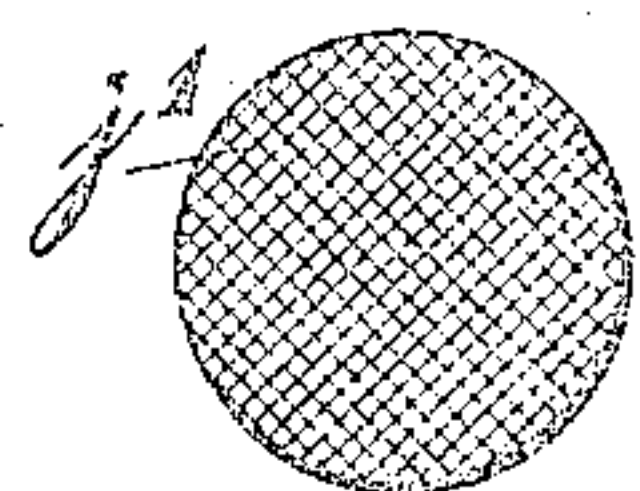


Fig. 6,



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SAFETY ATTACHMENT FOR LAMPS.

No. 927,974.

Specification of Letters Patent.

Patented July 13, 1909.

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To all whom it may concern:

Be it known that I, ALEXANDER KARNAT, a subject of the Czar of Russia, and a resident of Gut-Forsteli-Bathen, Russia, have invented certain new and useful Improvements in Safety Attachments for Lamps, of which the following is a specification.

This invention has reference to a novel method and device for preventing the generation of lampblack in lamps.

It is the special object of my invention to produce a novel device to be attached to the lamp which causes the spontaneous extinction of the flame when lampblack is forming, the device being then clogged up by the lampblack whereby the draft in the lamp is interrupted and the flame spontaneously extinguished because the ingress of the air, necessary for the combustion, is prevented. Thus the novel lamp attachment acts as a safety device, and after the flame has been automatically extinguished further formation of smoke is rendered impossible. The spontaneous extinction of a smoking flame is of special importance in places where lamps are burning without attendance, because this prevents that such rooms, or objects located therein are blackened, soiled or injured by the escaping smoke and the danger of setting aflame the surroundings is avoided. In addition to these main objects it has been attempted to secure novelty and attractiveness in appearance so as to make the lamp safety device a desirable article. This has been attained by making certain exterior parts of ornamental design, all as will be fully described hereinafter in connection with the accompanying drawing in which:

Figure 1 represents in side elevation, partly in section, a novel safety device, for lamps which embodies in desirable form the present improvements. Fig. 2 illustrates same in top plan view with the top cover removed. Fig. 3 shows in side elevation a modified form of the device. Fig. 4 is a top plan view of same. Fig. 5 illustrates in side elevation another modification of the device, and Fig. 6 is a top plan view of the modified form shown in Fig. 5.

Similar characters of reference denote like parts in all the figures.

The device illustrated in Figs. 1 and 2, consists of a cylindrical part *f* provided with three springs, *e, e, e*. The upper portion of the part *f* forms an interior groove, as

at *g*, and extends upwardly into a funnel shaped body portion *e*. On the top of the funnel shaped portion *e* of the cylindrical part *f* there is provided a body *a*, of wire netting. The funnel shaped portion *e* is formed at the top into a crown *b* which is merely ornamental in order to enhance the beautiful appearance of the device. In the groove shown at *g* rests a ring of asbestos. This asbestos ring *d* serves for tightening the device when it is applied.

The funnel shaped body portion *e* of the cylindrical part *f* is provided for the following purpose: Supposing that the cylindrical part *f* would not be enlarged into the funnel shaped portion *e* then the body of wire netting *a* would be accordingly smaller in area. The wires of which the wire sieve is composed reduce the open space formed in this instance of the interstices between the wires whereby the draft would be reduced, however, by means of the enlarged funnel shaped portion *e*, the wire sieve is of larger area containing a larger number of interstices, thus the necessary draft is maintained and if desired the wire sieve may be made so large, by virtue of the funnel shaped portion *e*, that the total area of the interstices is equal to the area of the open lamp chimney.

The cylindrical part *f* is attached to the glass chimney of the lamp, the springs *e, e, e* retain same in position and the asbestos ring *d* tightens the device.

The operation of the device is substantially as follows:—Assuming that the wick of the burner has been properly cut, then the flame burns clear and does not flicker even if a sudden draft occurs. When this device is used the consumption of petroleum is considerably reduced and the glass chimney saved from sudden cracking. This is one of the advantages of the novel device. Assuming now that the lamp wick has not been cut properly or screwed up too high when the lamp is lighted then the flame begins to smoke. When the smoke reaches the top or cover *a* of wire netting, the rising lampblack clogs up the small openings or interstices of same and the flame is spontaneously extinguished within a few seconds without damaging or soiling, in the least, the room or any objects located therein. Furthermore any danger of setting aflame any object near the lamp, or the room, or

entire building, is fully avoided by the use of this device.

The above described device may, of course be made so that the funnel shaped portion *e* of the part *f* is perforated or made of wire netting, as shown at *e'* and the top or cover *a*, solid and partially perforated, as shown at *a'*. The body may also be provided with a cap *i*, as shown in Fig. 1, which serves partly as an ornament and partly for checking the rising vapors for the few moments same pass through the perforations or interstices. The vertical position of this cap permits of the egress of the combustion gases under normal conditions, as shown in Fig. 1.

The modification shown in Figs. 3 and 4 embodies a part *j* of wire netting having the form of a frustum of a cone. This part *j* is secured to a metal tube *k* which is attached to the lamp chimney *h*.

Another modified form is represented in Figs. 5 and 6. It is provided with a part *j'* of wire netting whose surface has the form of a hemisphere. The part *j'* likewise is secured to a metal tube *k'* which is attached to a lamp chimney *h'*. It is self evident that the top surface of the various bodies of wire netting may be straight waved or of other shape without departing from the spirit of this invention.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. A safety attachment for lamps, comprising a cylindrical part with retaining spring adapted to be attached to the lamp chimney, having an annular groove in its upper portion and extending upwardly above the groove into a funnel shaped portion, and a top or cover on the funnel shaped

portion of the cylindrical part with interstices.

2. A safety attachment for lamps, comprising a cylindrical part with retaining springs adapted to be attached to the lamp chimney, having an annular groove in its upper portion and extending upwardly above the groove into a funnel shaped portion, an asbestos ring in the groove for tightening the device, and a top or cover on the funnel shaped portion of the cylindrical part with interstices.

3. A safety attachment for lamps, comprising a cylindrical part with retaining springs adapted to be attached to the lamp chimney, having an annular groove in its upper portion and extending upwardly above the groove into a funnel shaped portion, an asbestos ring in the groove for tightening the device, and a wire sieve on the top end of the funnel shaped portion of the cylindrical part of relatively large area as compared to the area of the open chimney.

4. A safety attachment for lamps, comprising a cylindrical part with retaining springs adapted to be attached to a lamp chimney and having an annular groove in its upper portion and extending upwardly above the groove into a funnel shaped portion, an asbestos ring in the funnel shaped portion of the cylindrical part, and a cap attached to said funnel shaped portion permitting of the egress of the combustion gases under normal conditions.

Signed at Libau, Russia this 6 day of July 1908.

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Witnesses:

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