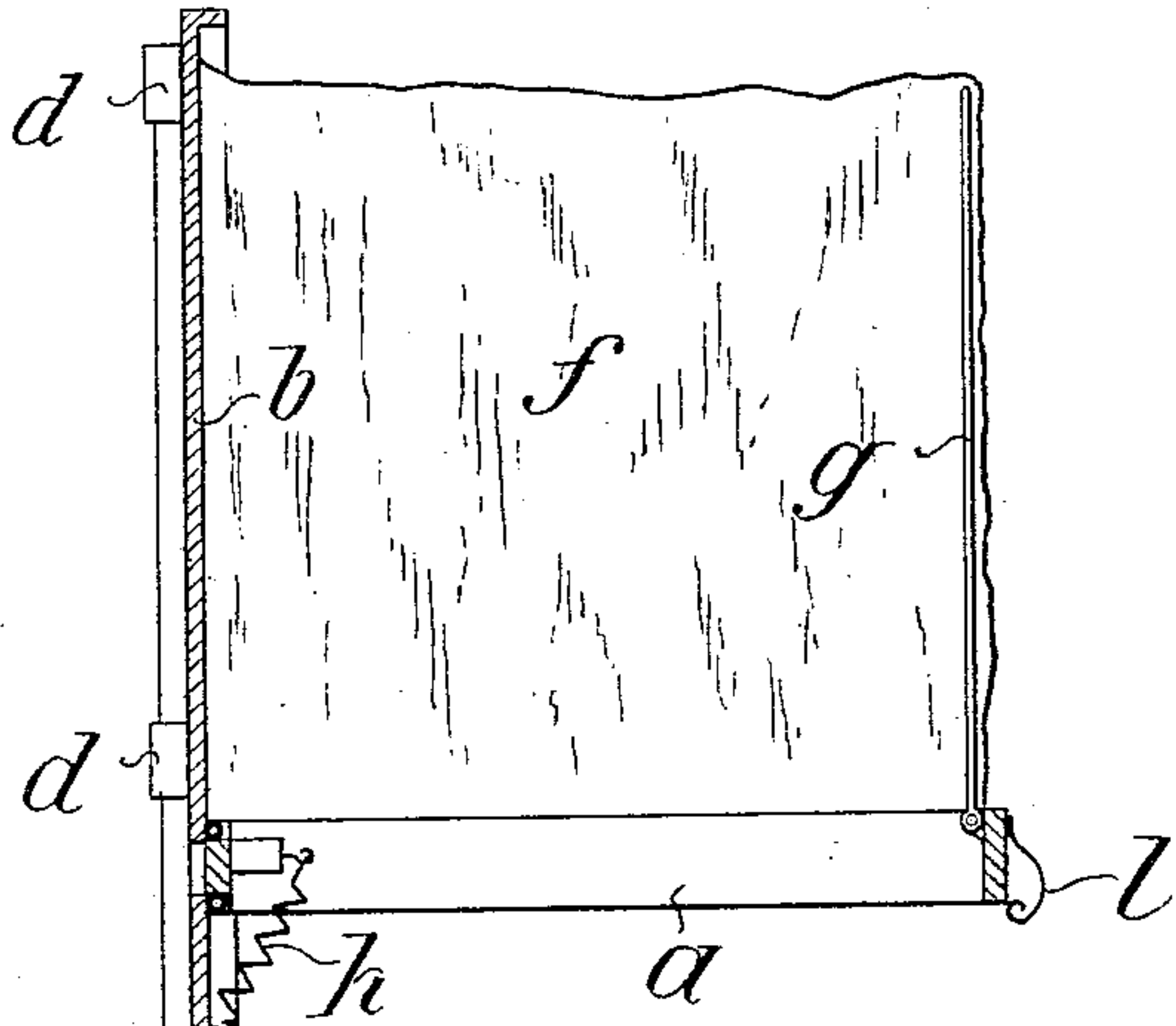


No. 733,300.

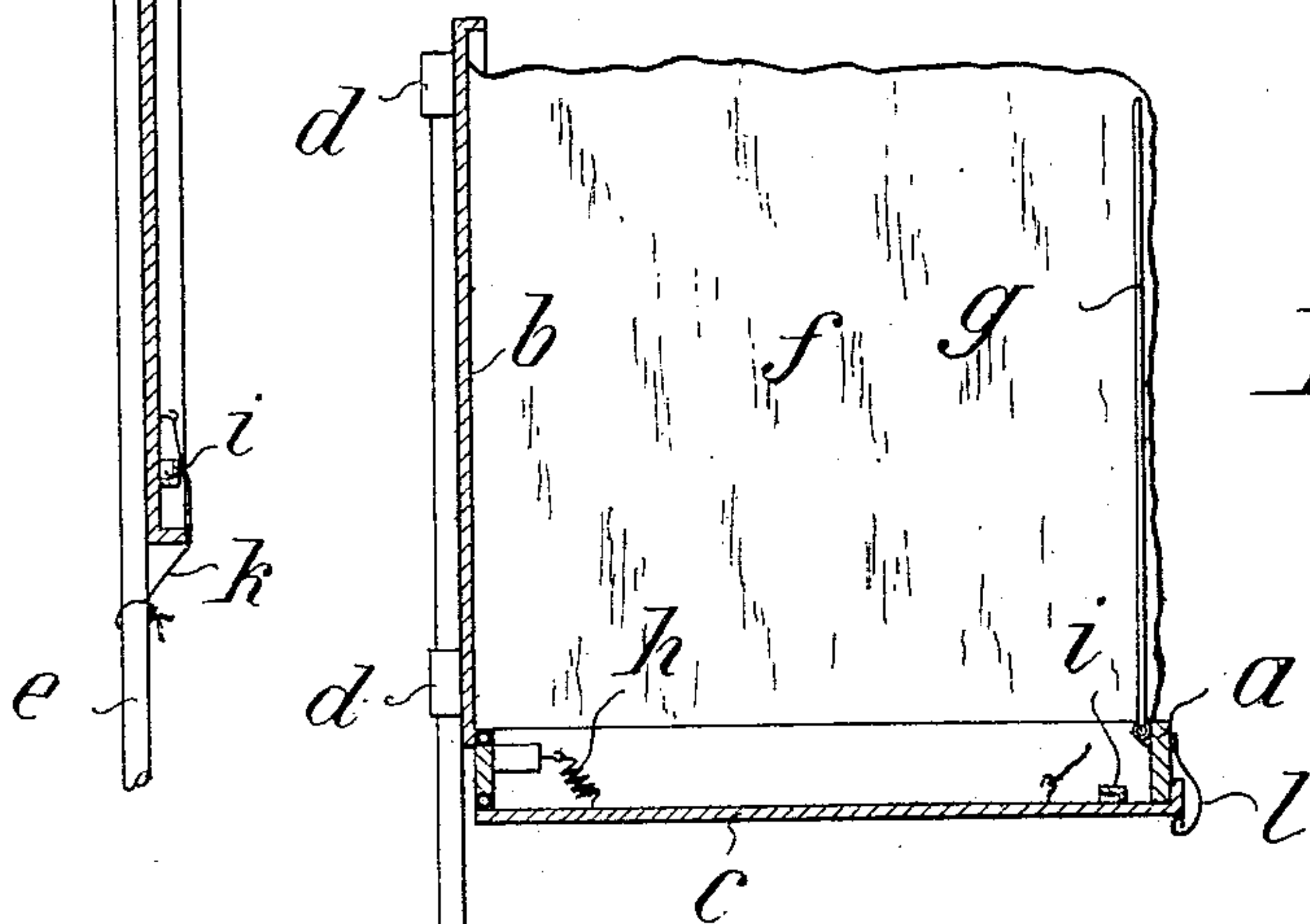
PATENTED JULY 7, 1903.

L. SUSANKA.  
FLASH LIGHT APPARATUS.  
APPLICATION FILED MAR. 16, 1903.

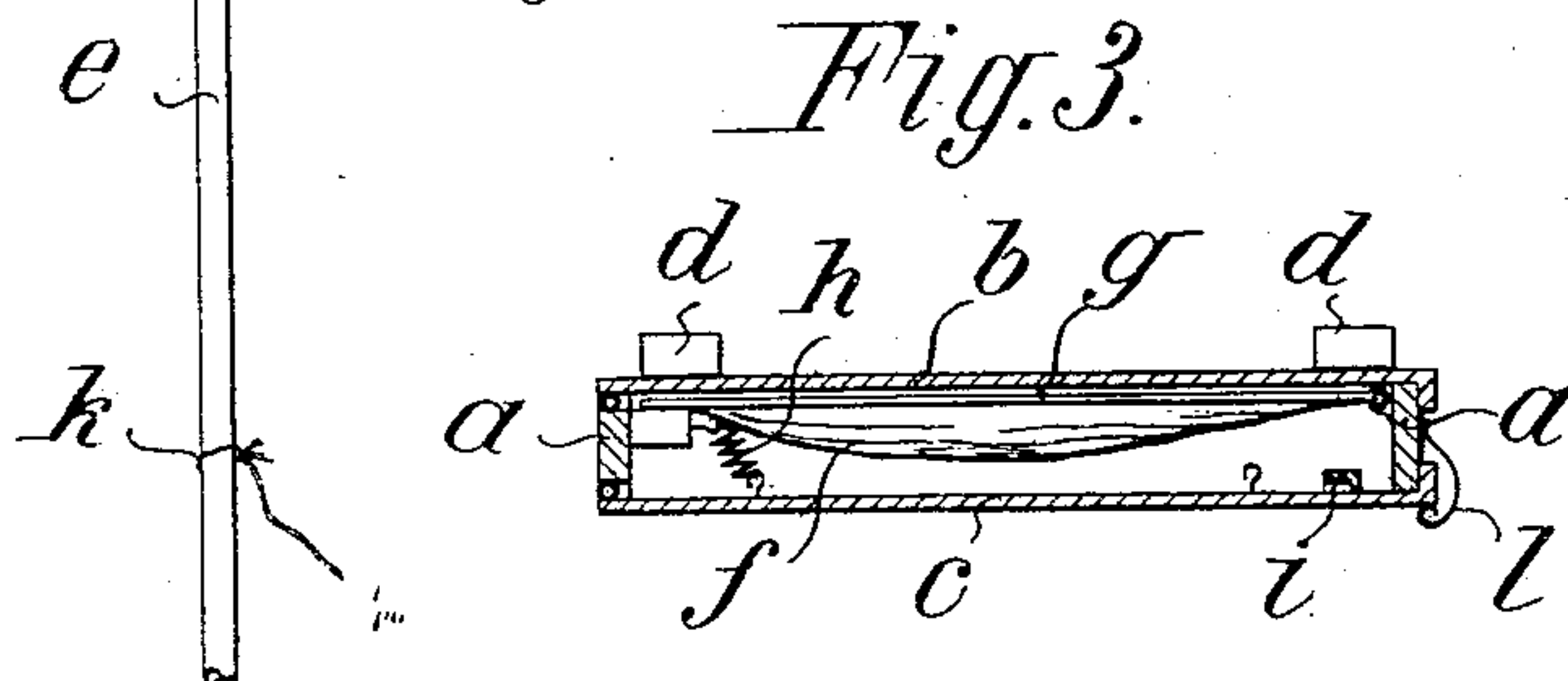
NO MODEL.



*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

Witnesses:  
*W. O. H.*  
*W. L. Sommers*

Inventor,  
*Leopold Susanka.*  
by *Wm. M. H. H.*  
*Attorney*

# UNITED STATES PATENT OFFICE.

LEOPOLD SUSANKA, OF VIENNA, AUSTRIA-HUNGARY.

## FLASH-LIGHT APPARATUS.

SPECIFICATION forming part of Letters Patent No. 733,300, dated July 7, 1903.

Application filed March 16, 1903. Serial No. 148,123. (No model.)

*To all whom it may concern:*

Be it known that I, LEOPOLD SUSANKA, a subject of the Emperor of Austria-Hungary, residing in Vienna, in the Province of Lower Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Flash-Light Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a readily-transportable device for catching or collecting the vapors generated during flash-light photographic exposures in order that such vapors may not be able to exert any prejudicial effect during the exposure, thereby rendering it possible to take instantaneous pictures of the desired softness and gradation of tone by means of the flash-light. This device consists of a box or frame provided with a hinged bottom and cover, the frame being connected with the cover by means of a bellows-like bag, while the bottom, which is connected with the frame by means of springs, carries a receptacle for a substance adapted to produce the flash-light and is held open by a device adapted to automatically release it when the light has been produced, so that the bottom will close, the vaporous products of combustion being inclosed in the extended bag above the burning place.

A constructional form of the device, which forms the subject of this invention, is illustrated in the accompanying drawings, in which—

Figure 1 shows the device in vertical section in the position for producing the flash-light. Fig. 2 represents it after the bottom has closed, and Fig. 3 shows the device folded for transport.

Upon one of the longitudinal sides of the frame *a* the cover *b* and bottom *c* are hinged. The cover is provided upon its outer side with sockets *d*, by means of which the device may be fixed upon a stand or support *e*. The bellows-like bag *f*, serving for collecting the va-

porous products of combustion, is attached to the inner edges of the frame and of the cover in such a manner that when stay-rods *g* or a rod bent into U shape in lieu thereof, rotatably mounted upon pins fixed in the sides of the frame, (or rods rotatable upon pins,) has been erected a collecting hood or chamber is formed. Springs *h*, attached, on the one hand, to the frame *a* and, on the other hand, to the bottom *c*, exert a tractive effort upon this latter when open and tend to close it. In order to increase the action of the light, both the cover and the bottom of the case are provided with a reflecting inner side, and a recess *i* is formed in the bottom for the reception of the magnesium powder or the like, which produces the flash-light. The bottom is held in the open vertical position by means of a thread *k*, attached to its inner side, passing over the receptacle for the powder or the like and attached to the stand *e*, Fig. 1. As soon as the mixture is ignited the thread *k* is consumed, and under the influence of the springs *h* the bottom flies up and is retained in the closed position by the spring-catch *l*, Fig. 2. The chamber above the recess *i*, into which the combustion-vapors ascend, is thus closed below, and these vapors are therefore retained in the bag. For purposes of transport the bow-shaped part *g* or its equivalent is turned down and the device folded together, as shown in Fig. 3, the different parts of the box being held together by means of any suitable closing device.

I claim—

1. A flash-light apparatus comprising an open-ended receptacle, a collapsible smoke-collector secured thereto, a support to hold the collector distended above the receptacle and a support to hold the flash-powder below the receptacle, said supports hinged to and constituting the heads of the receptacle, for the purposes set forth.

2. A flash-light apparatus, comprising a receptacle, a collapsible smoke-collector secured thereto, a support therefor, a stay coacting with the support to hold the collector distended above the receptacle, a support to hold the flash-powder below the receptacle, said supports hinged to and constituting the heads of the receptacle and said collector and stay



adapted to fold into said receptacle, for the purpose set forth.

3. A flash-light apparatus, comprising a receptacle, heads therefor hinged thereto, a collapsible smoke-collector secured to the upper head and to the receptacle, the lower head provided with means for holding the flash-powder, and means automatically closing said lower head; in combination with holding devices to hold both heads open, the holding device for the lower head adapted to be released when the flash-powder is ignited, for the purpose set forth.

4. A flash-light apparatus comprising a receptacle, heads therefor hinged thereto, a collapsible smoke-collector secured to the upper head and receptacle to fold into the latter, the lower head provided with means for holding the flash-powder, means automatically closing said lower head and pivoted stays to hold the smoke-collector distended and arranged to be turned down into the receptacle; in combination with means to hold both heads open, the means to hold the lower head open

adapted to be released by the ignition of the flash-powder, for the purpose set forth.

5. A flash-light apparatus, comprising a receptacle, heads therefor hinged to one side thereof, a collapsible smoke-collector secured to the receptacle and to the under face of the upper head, the latter provided with means on its outer face for connecting it to an upright support, the lower head provided with means for holding the flash-powder, a stay coacting with the upper head to hold the collector distended, and a spring acting on the lower head to close the same; in combination with a cord attachable to the lower head and upright over the flash-powder to hold the said head open, for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

LEOPOLD SUSANKA.

Witnesses:

JOSEF RUBRESCH,  
ALVESTO S. HOGUE.