

No. 870,504.

PATENTED NOV. 5, 1907.

P. FROST.
MUTOSCOPE.

APPLICATION FILED JAN. 25, 1907.

Fig.1.

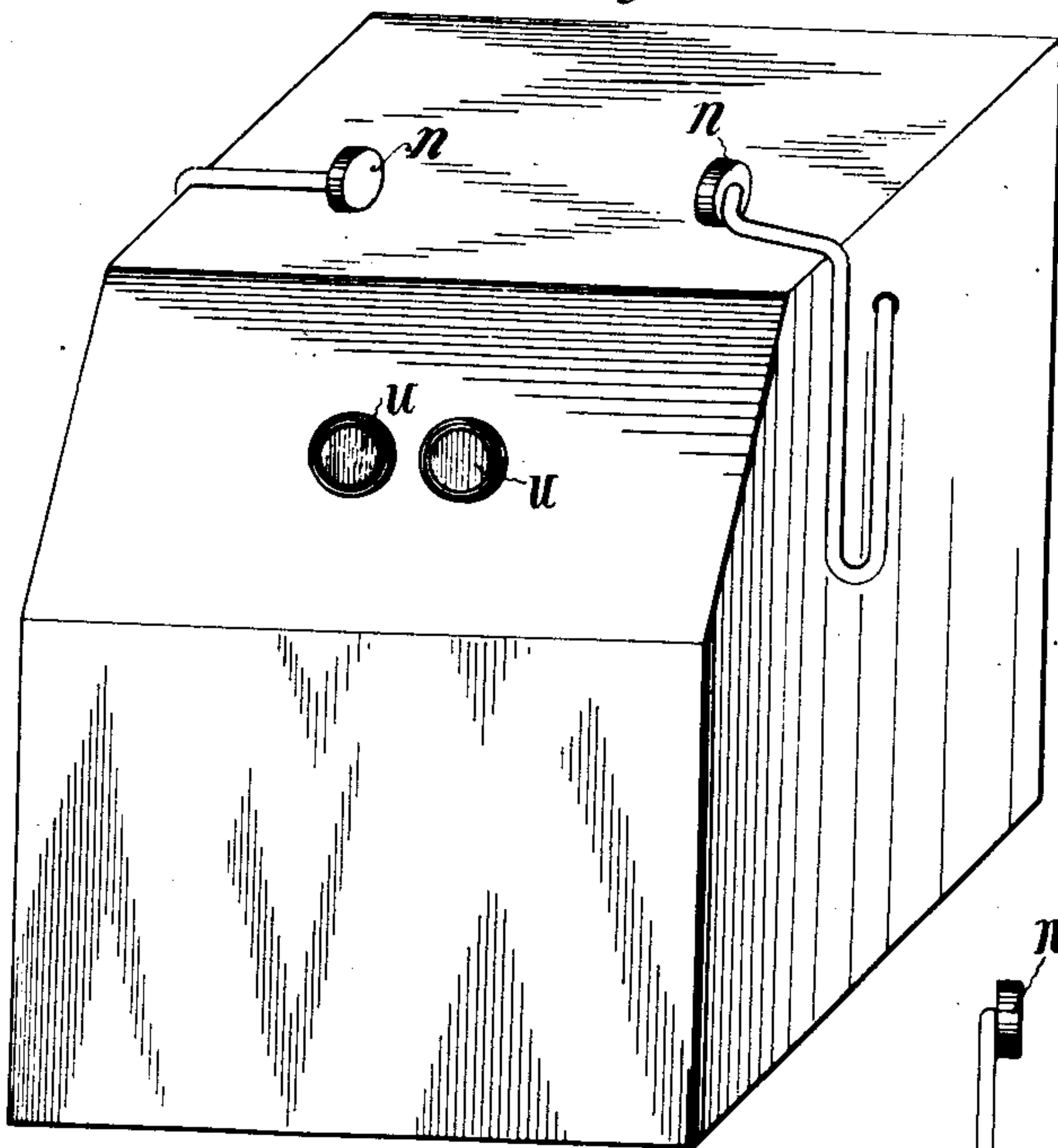


Fig.2.

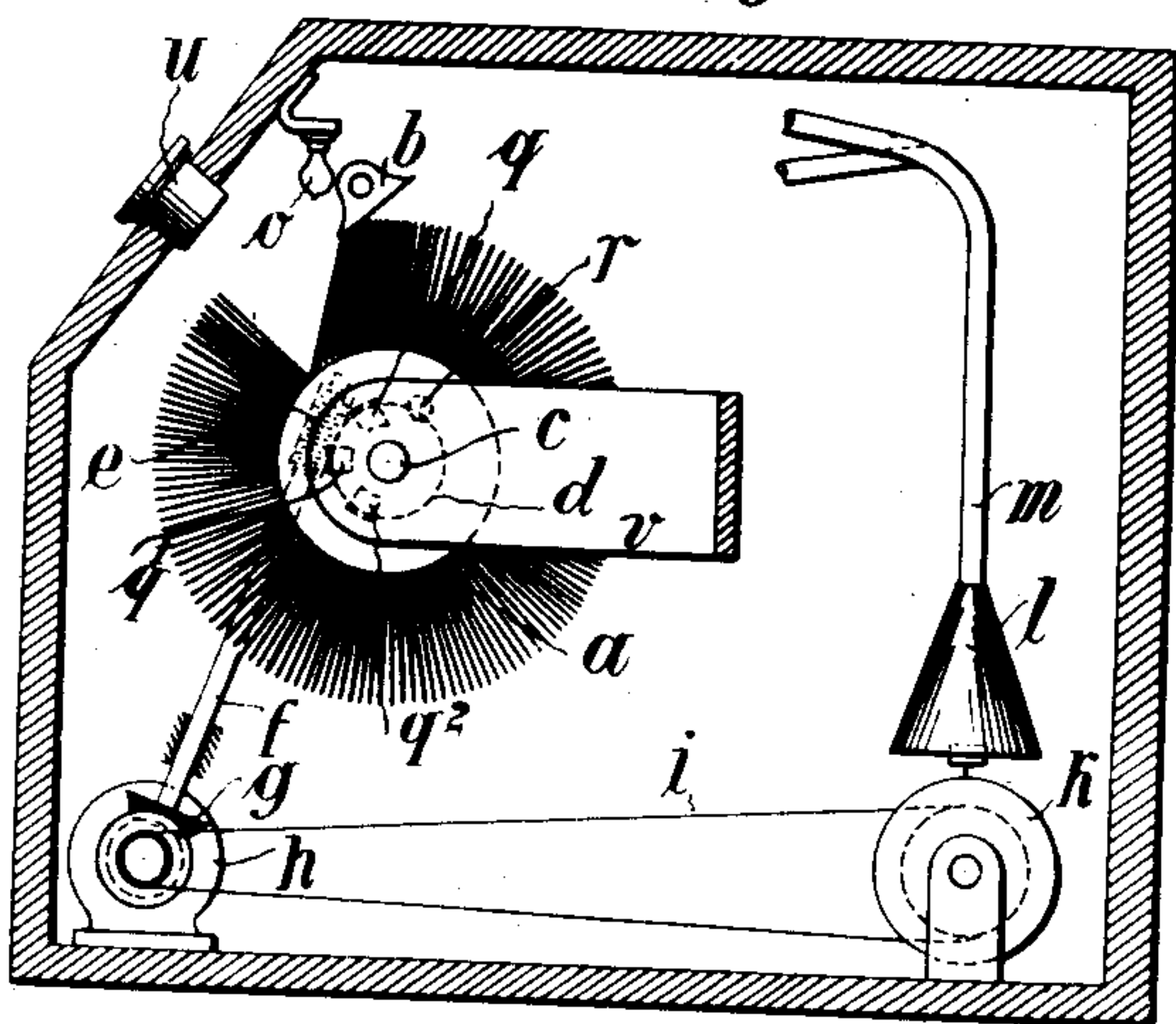
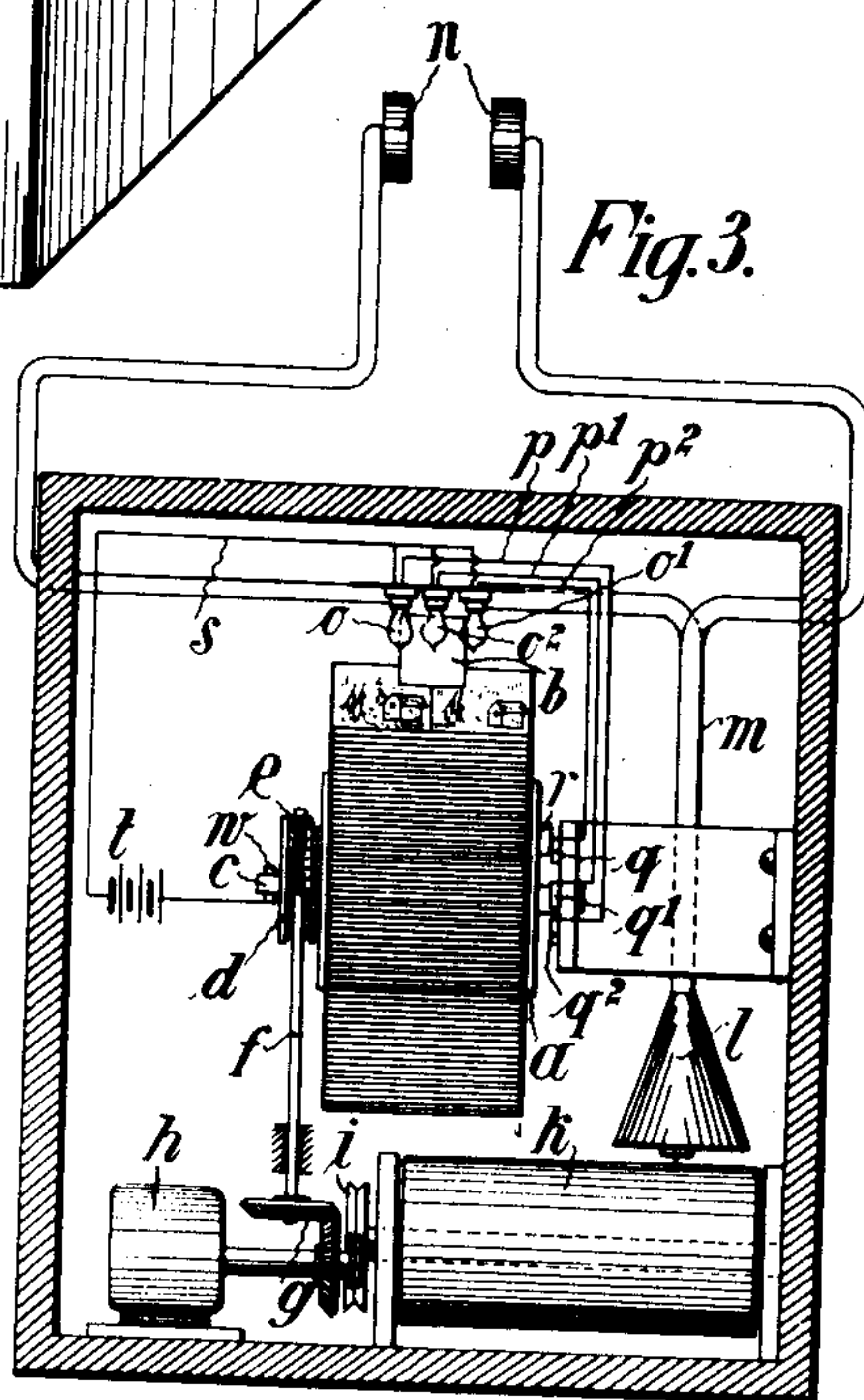


Fig.3.



Witnesses.

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MUTOSCOPE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PAUL FROST, a subject of the German Emperor, residing at Berlin, Germany, have invented certain new and useful Improvements in Mutoscopes; 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 or figures of reference marked thereon, which form a part of this specification.

My invention relates to mutoscopes and has for its object to drive the mutoscope and simultaneously operate a phonograph and automatically close circuit through various colored lights, the phonograph and lights preferably but not necessarily operating in harmony and in accordance with the moving picture displayed, as will hereinafter be more fully described and claimed.

Referring to the drawings in which like parts are similarly designated, Figure 1, is a view of case showing stereoscopic lenses and the ear pieces of the phonograph. Fig. 2, is a longitudinal section and Fig. 3 is a transverse section through the case.

The apparatus comprises the usual picture roll *a* on which are preferably but not necessarily, stereoscopic pictures of successive positions of the objects presented, said pictures projecting radially from the roll. The usual deflector *b* is mounted in the case to riffle the pictures past the view point. The stereoscopic lenses *u* are mounted as shown.

On the roll *a* is a worm wheel *d* that is operated by a worm *e* on the end of a shaft *f* suitably mounted in the case. The shaft *f* is driven by bevel gear wheels *g* from an electric motor *h* whose shaft drives also, by a belt or cord *i*, the phonograph cylinder *k*.

The reproducing horn *l* of the phonograph is connected to the tubes *m* that lead to the ear pieces *n*.

For illuminating the pictures the lamps *o*, *o'* *o''* of different colors are suitably supported from the case between the riffle bar *b* and the lenses *u* and are automatically included in the circuit of a battery *t*. To accomplish this the lamps are connected by wires *p*, *p'*, *p''* to contacts *q*, *q'*, and *q''* supported in a bracket *v*

which as shown also forms a bearing for one end of the picture roll shaft *c*. This shaft carries a contact *r* electrically connected to the shaft *c* which in turn is connected through the trailing contact *w* to battery *t* and a single wire *s* from the battery to all of the lamps complete the electric connections. By rotating the shaft *c* the contact *r* successively closes circuit through the contacts *q*, *q'* and *q''* to automatically include the lamps in succession in the battery circuit. The order and arrangement of the contacts *q*, *q'* and *q''* can be altered to suit the circumstances and several contacts or groups of contacts can be placed in the path of the contact *r* connected to the same lamp, the order of the illumination is of course optional with the maker.

Instead of single pictures, I prefer to use stereoscopically made pictures to be viewed through stereoscopic lenses. The colored lights and the phonograph are preferably operated to be in harmony so that the lighting effects scenery and actions are accompanied by proper phonographic reproductions and may simulate and reproduce all the parts of a theatrical performance or an opera.

1. The combination with a mutoscope, of a phonograph driven in unison with the views presented, an electric illuminating circuit containing differently colored lights, and means on the rotating mutoscope picture drum to directly control said lights.

2. The combination with a mutoscope of a phonograph driven in unison therewith, an electric lamp circuit containing a plurality of differently colored lamps, fixed contacts adjacent the picture drum of the mutoscope, and contacts on the drum to close an electric circuit through the fixed contacts and lamps by the rotation of the drum.

3. In combination, a mutoscope the individual pictures of which are stereoscopic pictures, a phonograph driven in unison with the pictures, an electric light circuit containing a plurality of differently colored lamps, contacts fixed in proximity to the mutoscope drum and contacts on the mutoscope drum to close the circuit through said contacts to any one of the lamps.

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

PAUL FROST.

Witnesses:

JOHANNES HEIN,
WOLDEMAR HAUPT.