

No. 667,490.

Patented Feb. 5, 1901.

J. H. & C. W. BRAKER & F. C. WOLF.
ILLUMINATED SIGN FOR STREET CARS, &c.

(Application filed May 16, 1900.)

(No Model.)

Fig. 1.

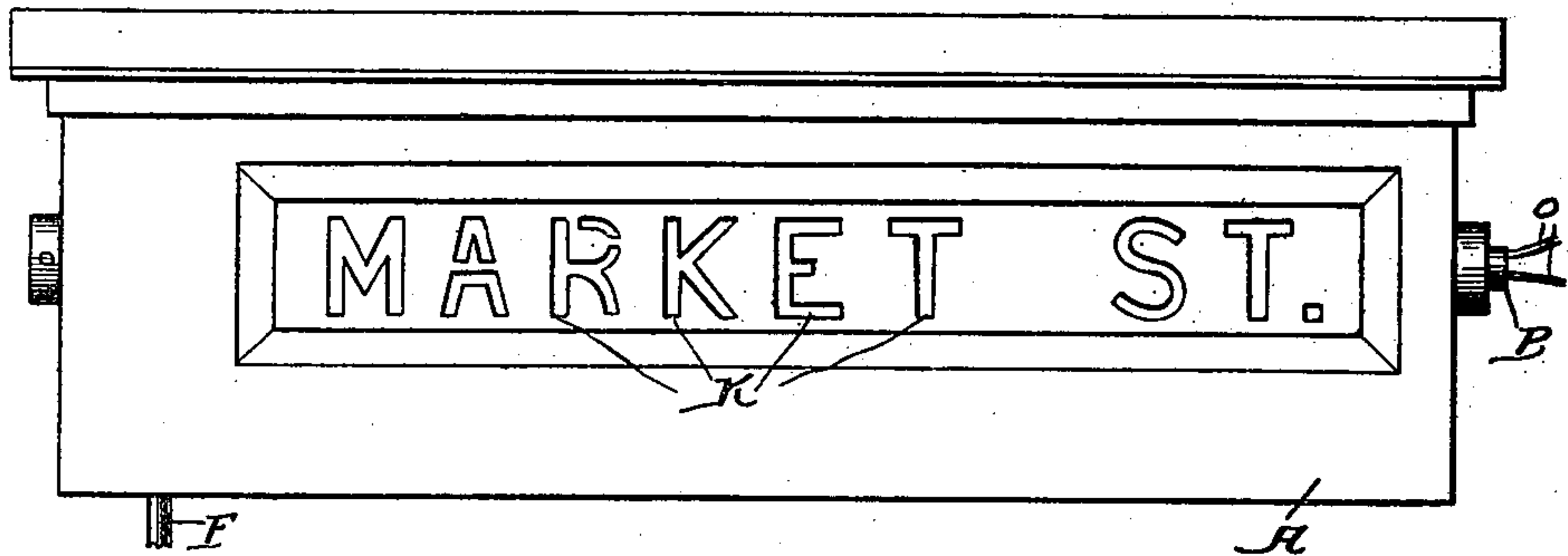


Fig. 2.

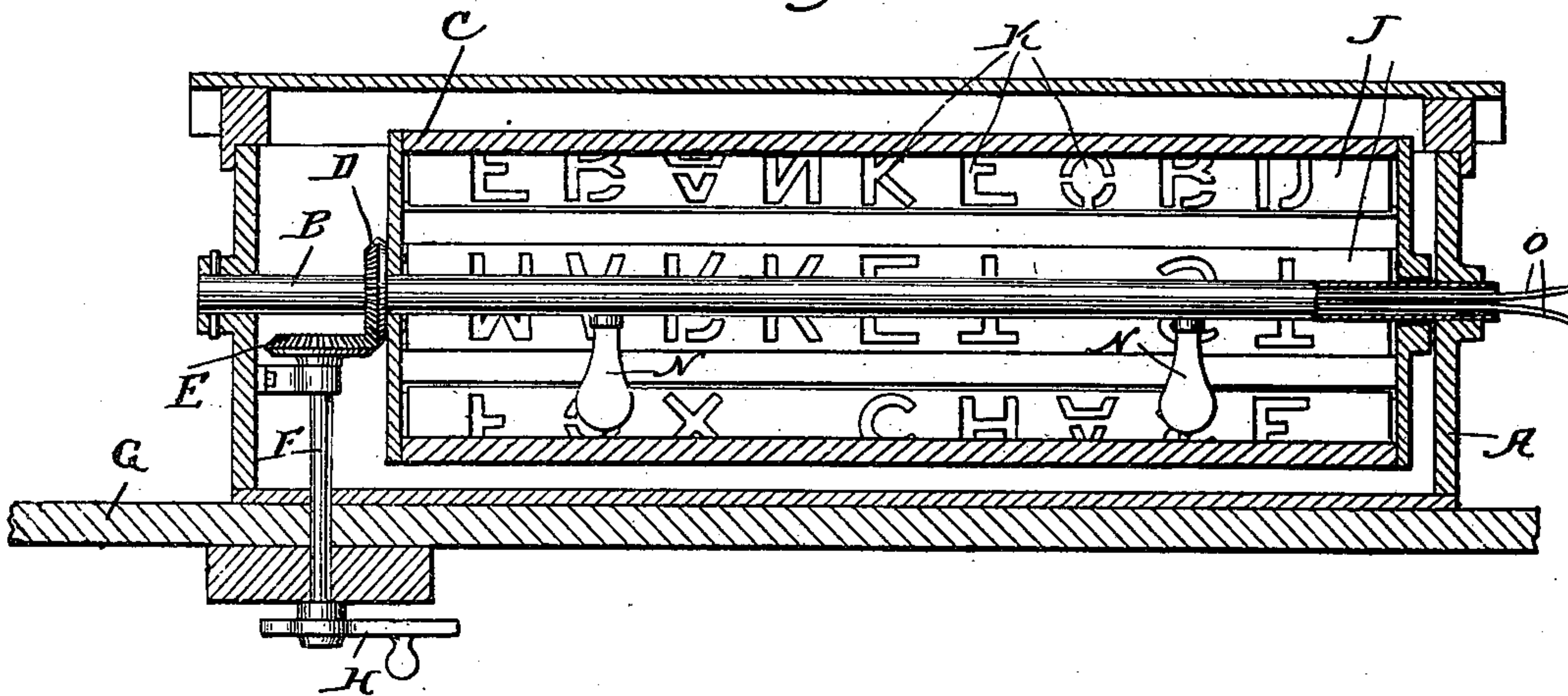
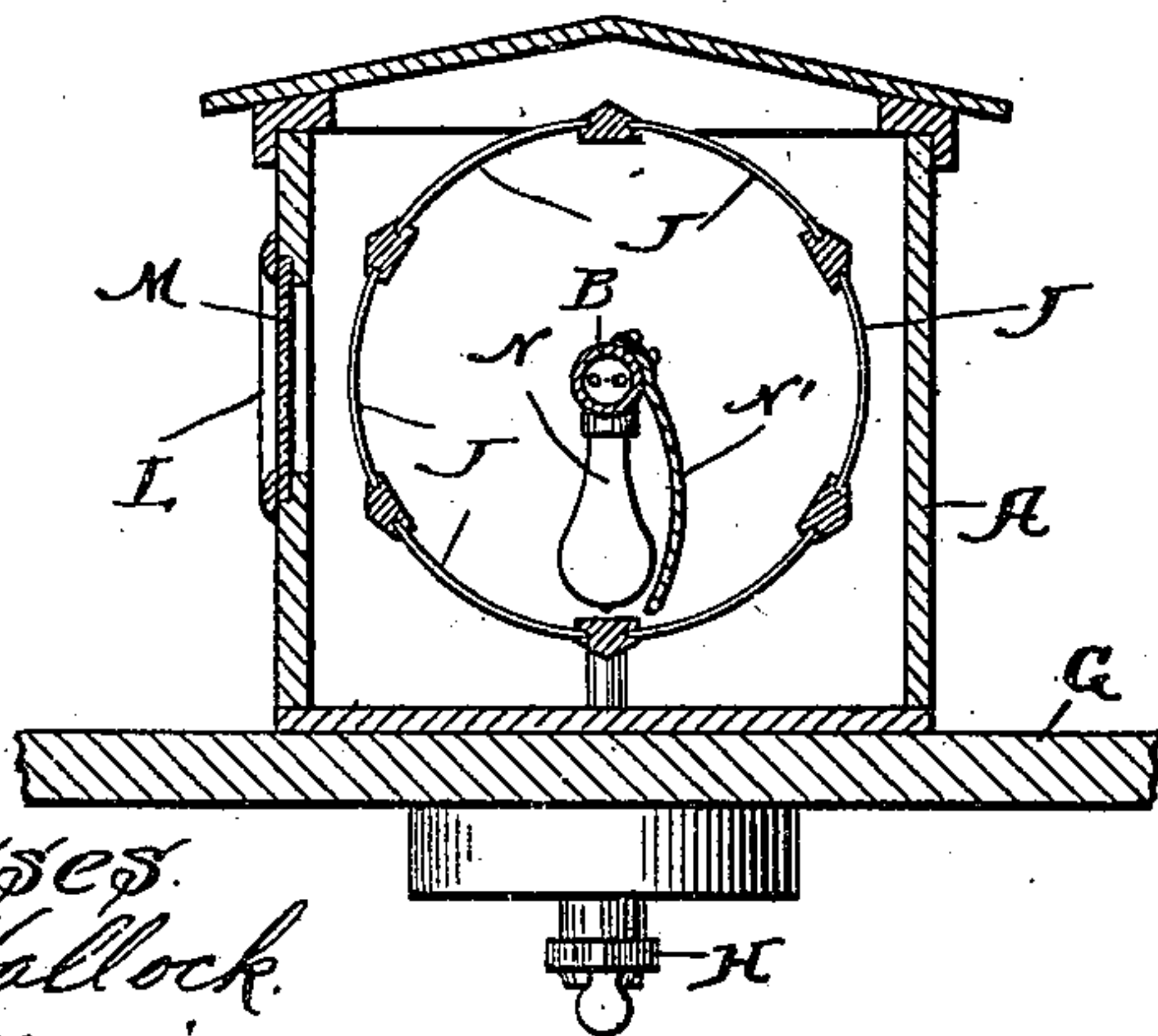
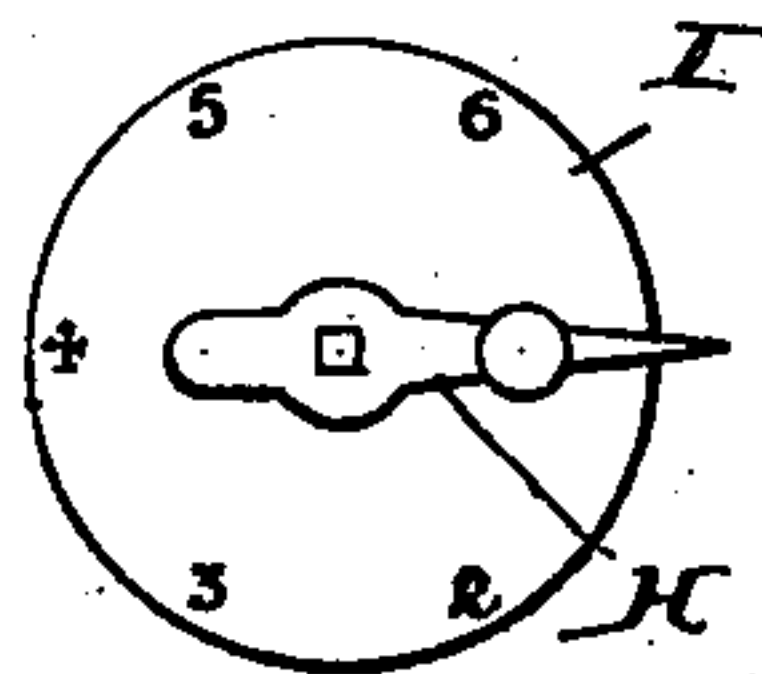


Fig. 3.



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Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH H. BRAKER, CHARLES W. BRAKER, AND FRANK C. WOLF, OF
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ILLUMINATED SIGN FOR STREET-CARS, &c.

SPECIFICATION forming part of Letters Patent No. 667,490, dated February 5, 1901.

Application filed May 16, 1900. Serial No. 16,833. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH H. BRAKER, CHARLES W. BRAKER, and FRANK C. WOLF, citizens of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Illuminated Signs for Street-Cars, Stations, and the Like, of which the following is a specification.

Our invention relates to a new and useful improvement in illuminated signs for street-cars, stations, and the like, and has for one object to provide an exceedingly simple and effective arrangement in which a series of signs are so arranged that any one thereof may be brought into view, an electric light being arranged so as to bring the sign into prominence; and a further object of our invention is to so arrange the lettering of the signs as to make them prominent in daylight without the use of electric light.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of a sign made in accordance with our improvement; Fig. 2, a longitudinal section thereof; Fig. 3, a cross-section of the sign, and Fig. 4 a detail view of the pointer for indicating the registration of the various sections of the sign with the opening in the housing.

In carrying out our invention as here embodied, A represents the housing, which is of convenient shape to inclose the mechanism and the electric lights, and B is a hollow stationary rod secured lengthwise of the housing, so as to have no movement therein. Upon this rod is journaled the drum C, having a beveled gear D secured thereto, which meshes with the corresponding gear E, the latter being secured upon the upper end of the shaft F. The shaft F is journaled in suitable bearings within the housing and ex-

tends downward therethrough and through the roof G of the car or other support and has secured upon its lower end the pointer H. This pointer serves as a handle for the revolving of this shaft and also for determining the section of the sign which is being displayed by registering with the graduations upon the dial I. The drum has set therein the sign-sections J, and these are preferably composed of sheet material, such as sheet metal, having its outer surface painted white, the letters K being cut therethrough, so as to permit the passage of the light from the interior of the drum to illuminate the sign or to give the appearance of a white light upon a black background in daylight. An opening L is forming in the front of the housing of a length sufficient to display the various sections of the sign, and this opening is covered by a strip of glass M, thus completely inclosing the entire mechanism, as well as the sign.

For illuminating the signs a series of electric lights N are arranged within the drum and supported by the rod B, said lights being connected with a source of electricity by the wires O, passing through the hollow rod. We prefer that the electric lights shall depend from the hollow rod and that a reflector N' be arranged behind the same, so as to direct the light through the open letters that are exposed to view, thus leaving the electric lamps out of view while effecting the desired result.

In practice when a sign made in accordance with our improvement is secured upon the roof of a car the rod F is passed through said roof, while the dial I is secured upon the under side thereof, so as to be in easy reach of the motorman, and of course such a sign should be secured upon each end of the car when the latter travels in either direction. When thus arranged, it follows that the section of the sign which registers with the opening in the housing will be visible and be prominent on account of the open letters in the white background and that the motorman may readily bring any section of the sign into view by simply turning the pointer H to the graduations upon the dial which correspond to the principal section needed when the electric

lights are lighted. The letters will be made especially prominent by being illuminated, the background then appearing black, while the letters appear in the form of the light passing therethrough.

Of course it is obvious that various colors may be given to the letters by the use of colored glass or paper, and we do not wish to limit ourselves to this particular. It is also obvious that a number of drums may be used upon the same stationary rod, thus providing for a series of signs.

If it is found desirable, openings may be formed in the ends of the housing and slides fitted therein with suitable lettering, so as to be read from the side of the car.

It will be obvious that our improved sign is equally adapted for use as a station-indicator or for use in railway-stations to indicate the time when trains are to depart, in which case the shaft F may be connected by gearing with any suitable central office, so as to be operated at a distance.

Having thus fully described our invention, what we claim as new and useful is—

In combination, a suitable housing having an opening in its front surface secured to the top of a car, a hollow stationary rod secured centrally lengthwise of the housing, an approximately cylindrical drum rotatably mounted on the rod, a beveled gear-wheel se-

cured to one end of the drum and embracing the rod, a shaft journaled in suitable bearings within the housing and extending downward therethrough and through the roof of the car and central of a dial suitably marked; said dial being secured to the under surface of the roof of the car, a gear-wheel on its upper end meshing with the gear-wheel of the drum, on its opposite end a combined pointer and handle, a series of sign-sections within the drum, said sections having suitable letters cut therethrough, electric lights depending from the rod and secured thereto out of plane of the sign or letters to be exposed, wires passing through the hollow rod communicating between the lights and electrical source, and a curved reflector behind each light; said reflector being secured at its upper end to the rod by screws and so positioned as to reflect the rays through the openings of the sign.

In testimony whereof we have hereunto affixed our signatures in the presence of two subscribing witnesses.

JOSEPH H. BRAKER.
CHARLES W. BRAKER.
FRANK C. WOLF.

Witnesses:

MARY E. HAMER,
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