

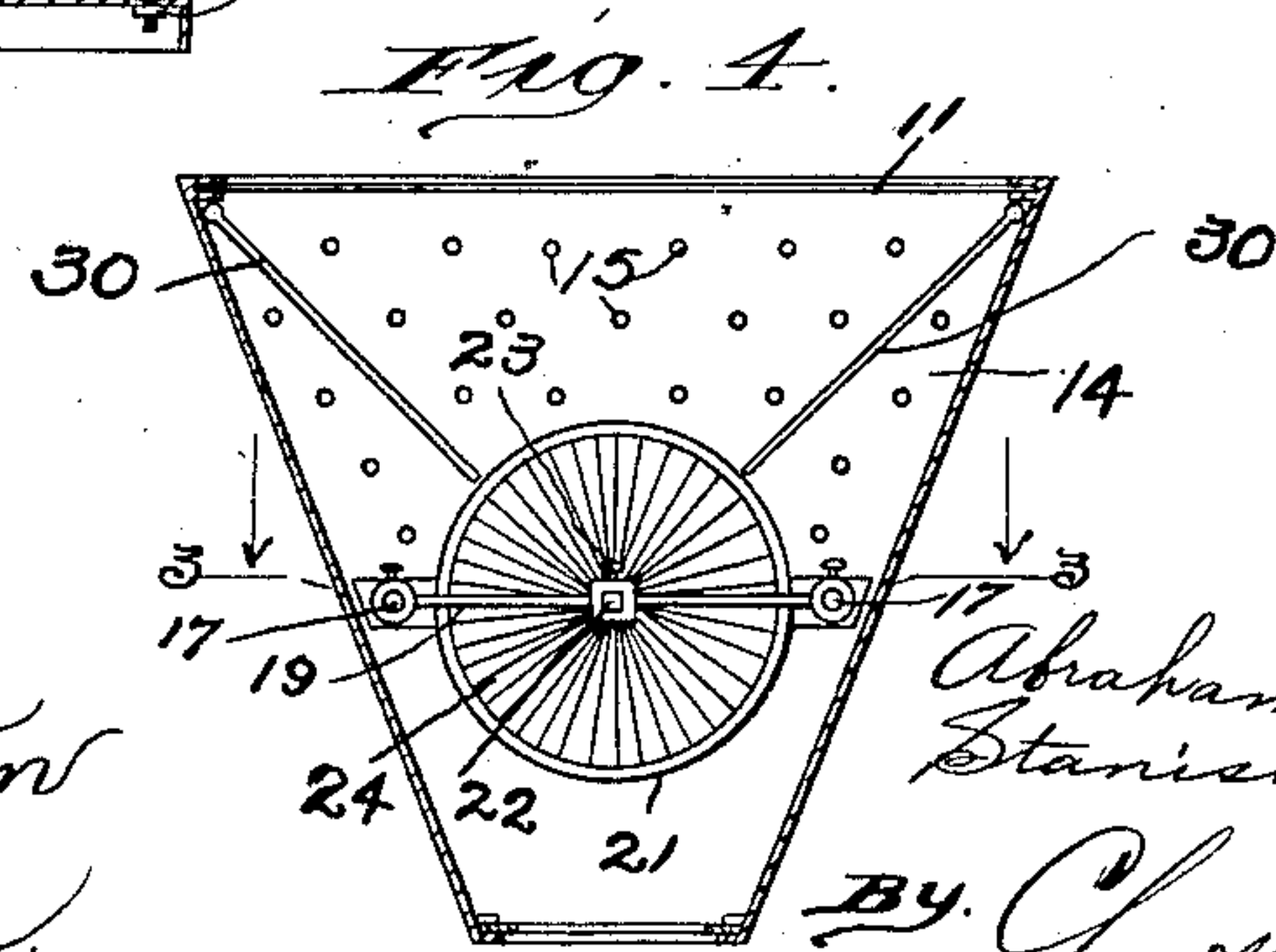
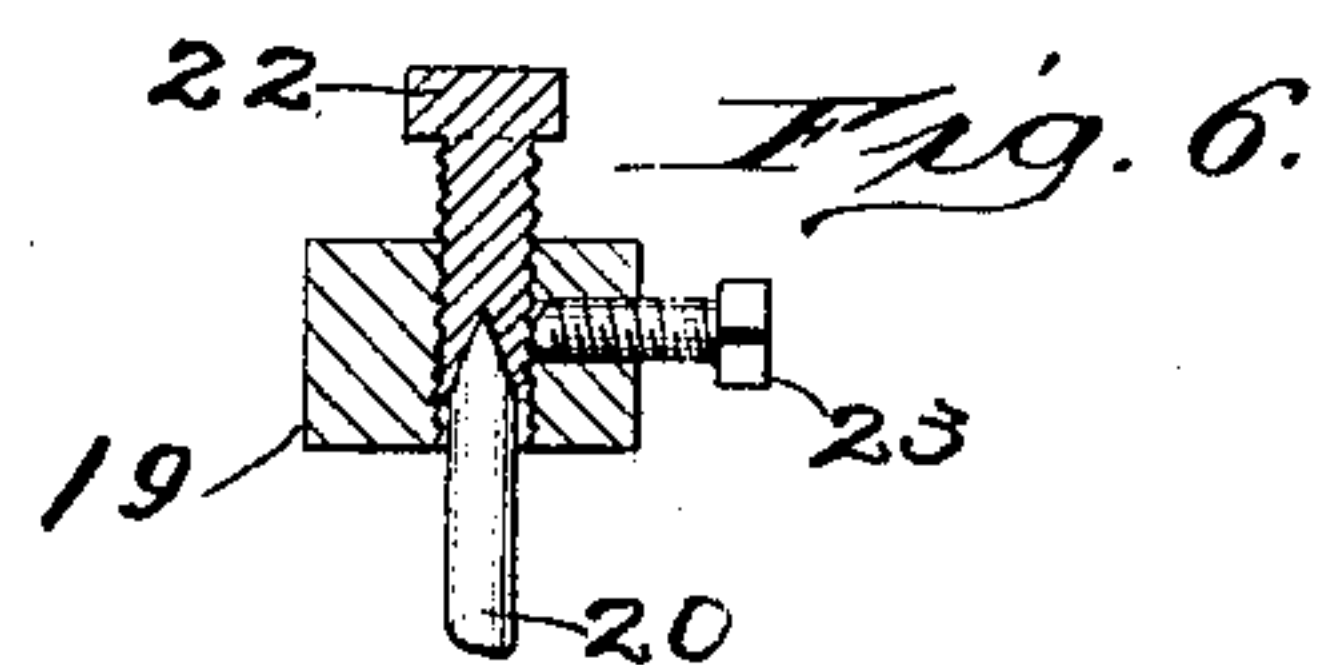
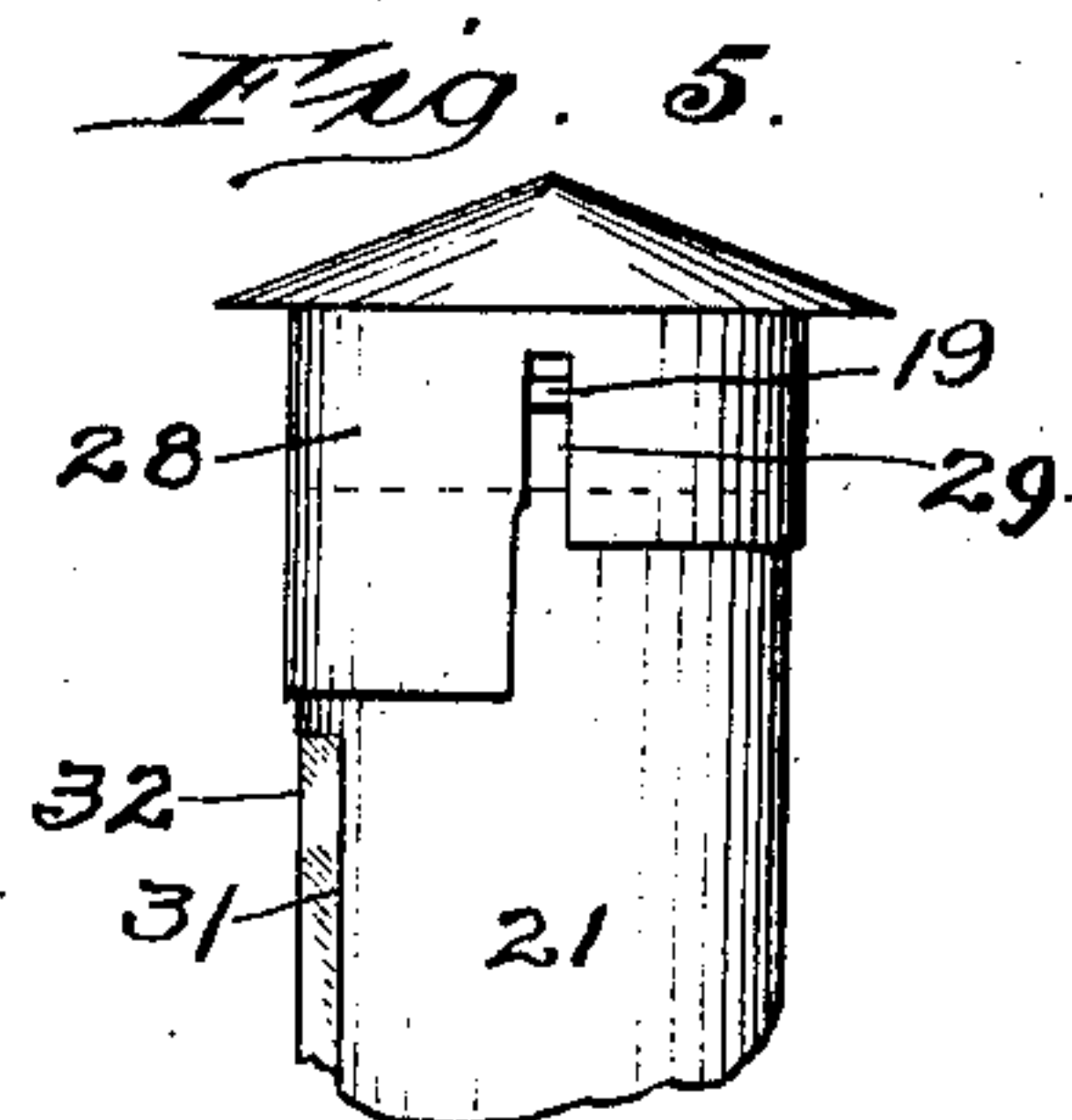
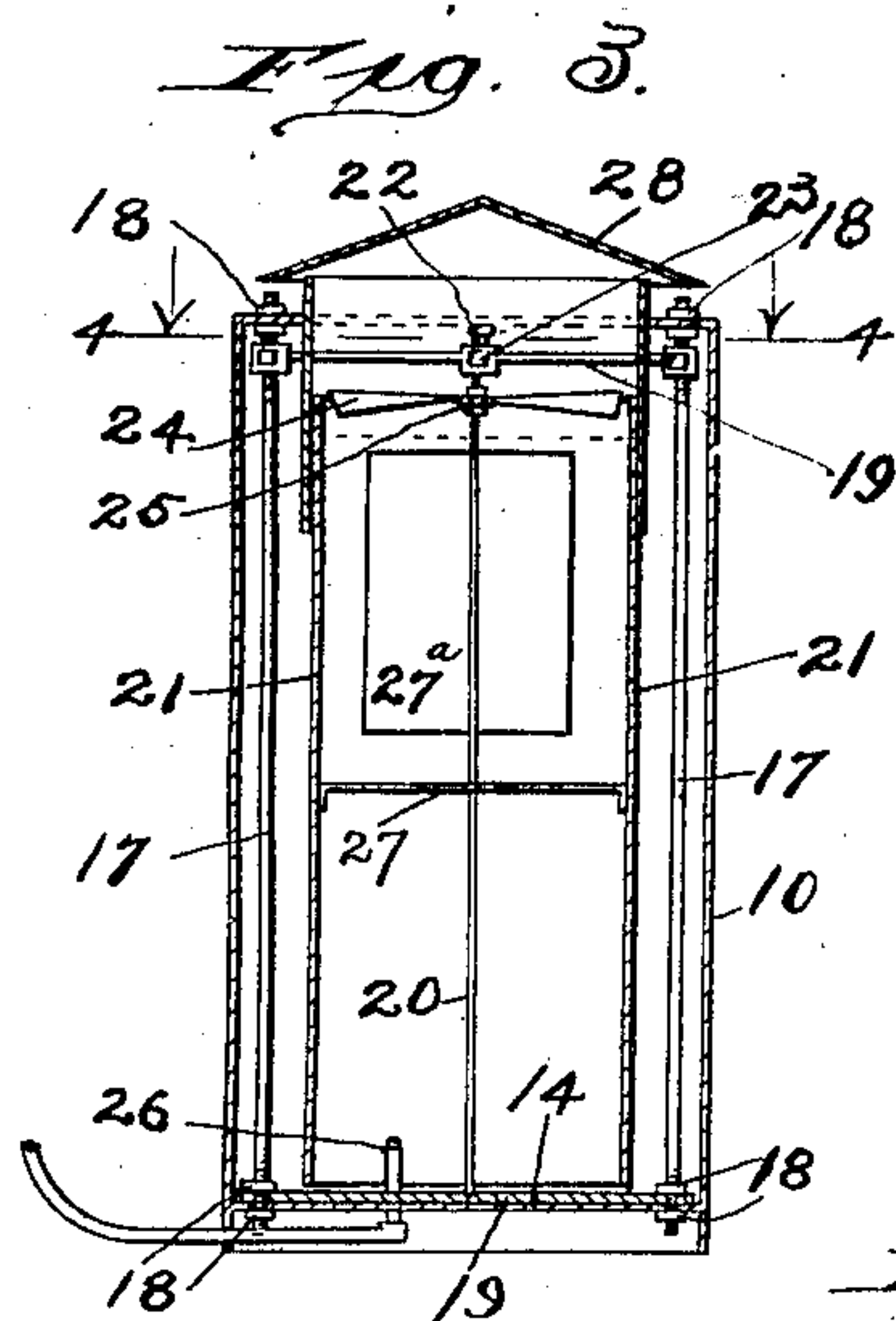
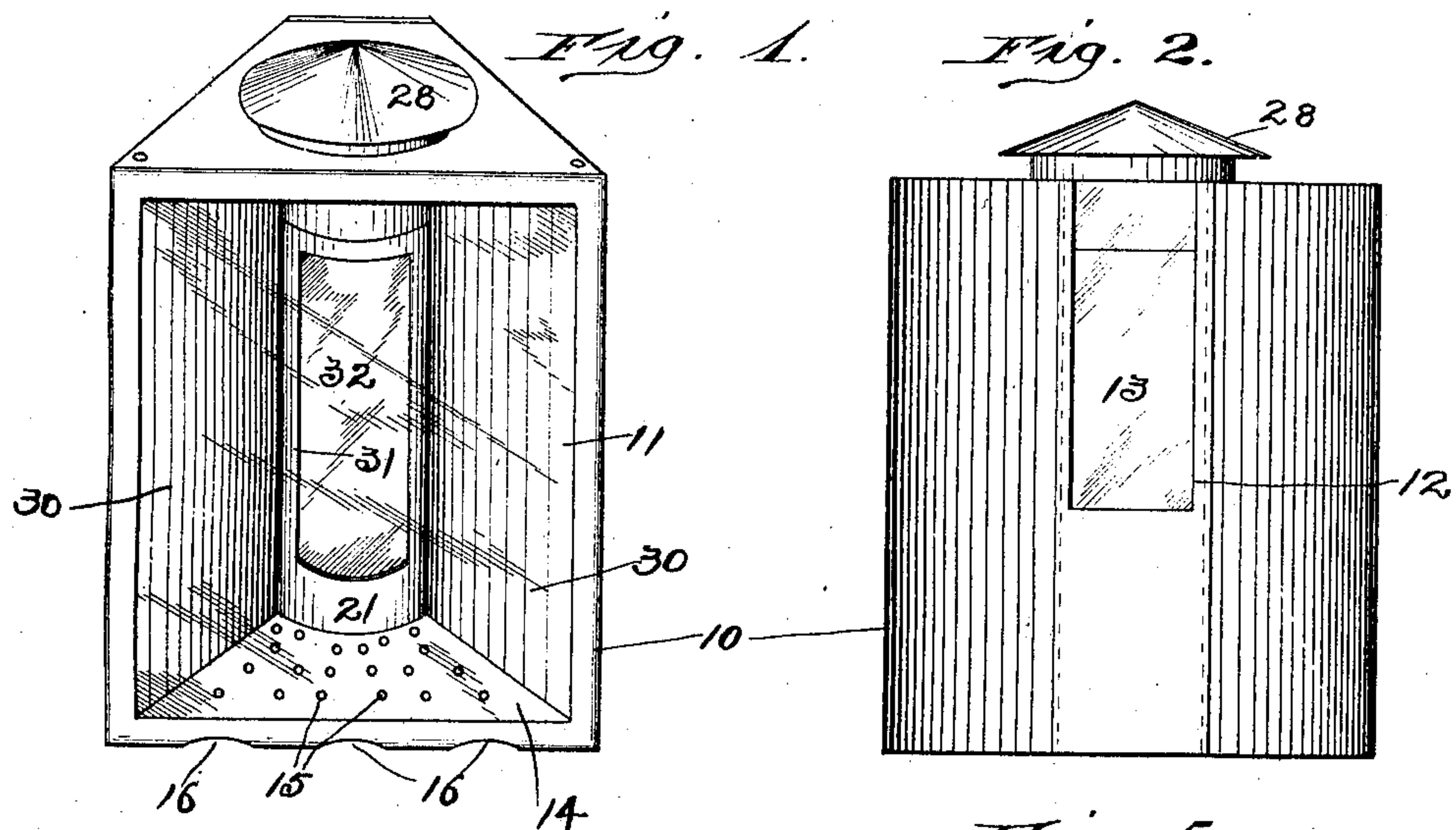
No. 813,087.

PATENTED FEB. 20, 1906.

A. N. GATZERT & S. BERENS.

ILLUMINATING SIGN.

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UNITED STATES PATENT OFFICE.

ABRAHAM N. GATZERT, OF CHICAGO, AND STANISLAUS BERENS, OF
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ILLUMINATING-SIGN.

No. 813,087.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ABRAHAM N. GATZERT, residing at Chicago, and STANISLAUS BERENS, residing at La Grange, Illinois, citizens of the United States, have invented certain new and useful Improvements in Illuminating-Signs, of which the following is a specification.

This invention relates to improvements in illuminating-signs of the flash-light variety or that class of signs in which light is caused to intermittently show through a plate or piece having a suitable sign thereon; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a sign of the above-named kind which shall be simple and inexpensive in construction, strong, durable, portable, and efficient in operation, and so made that the light thereof may be displayed intermittently through the front of the casing so as to illuminate the sign or through the back thereof to light up the store or room.

Another object of the invention is to so construct the device that the intermittent display of light shall be effected thermally or by means of the heat emanating from the light-producing flame of a gas-jet or lamp, either of which may be employed.

A further object is to afford means to prevent the emission of the rays of light from either the front or rear of the casing, as well as to regulate the space or light-opening in the front thereof.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which our invention pertains to make and use the same, we will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a front perspective view of an illuminating-sign embodying our invention. Fig. 2 is a rear view in elevation thereof. Fig. 3 is a vertical sectional view taken on line 3 3 of Fig. 4 looking in the direction indicated by the arrows. Fig. 4 is a plan sectional view taken on line 4 4 of Fig. 3 looking in the direction indicated by the arrows.

Fig. 5 is a view in side elevation of a portion of the rotatable drum or cylinder and the cowl or hood therefor, and Fig. 6 is a sectional view of the adjustable bearing for the upper portion of the rod or shaft which supports the rotatable drum.

Like numerals of reference refer to corresponding parts throughout the different views of the drawings.

The reference-numeral 10 designates the casing, which may be of any suitable size, form, and material, but is preferably substantially triangular in form, as shown in Figs. 1 and 4 of the drawings, and is made of sheet metal. The front portion of the casing is provided with a rectangular opening to receive a plate of glass 11, on which may be displayed a sign of any suitable kind. The rear or contracted portion of the casing is also provided with an opening 12, in which is located a sliding door 13, which may be made of glass or other transparent material, or when it is desired to prevent the emission of light through said opening said door may be made of opaque or non-transparent material.

As shown in Figs. 1 and 3 of the drawings, the sides and front portion of the casing 10 extend a slight distance below the floor 14, which is provided with a series of openings 15 for the passage of air. The lower front portion of the casing is also provided with a number of recesses 16 for a like purpose. Located vertically within the casing and near the middle portion of each of its sides is a rod or bar 17, which extends from the bottom to the top of the casing and may be secured thereon by means of nuts 18 or otherwise. These rods or bars are preferably united at their upper and lower ends by means of bars 19, which extend across the casing, as is clearly shown. Rotatably mounted at its lower end on the lower bar 19 is a supporting rod or shaft 20 for the rotary drum or cylinder 21, the other end of which rod or shaft is pointed to engage a socketed adjusting-screw 22, which is screw-threaded in the upper bar 19 at about its middle and which may be held therein by means of a set-screw 23, located in the sides of said bar. The drum 21 is provided at its top with a wheel or propeller which comprises a series of blades 24, shaped and inclined like the blades of a wind-mill wheel or the blades of a propeller. These blades extend radially from a hub 25, mount-

ed on the upper portion of the shaft 20, to the upper end of the drum or cylinder 21, to which they are attached. The lower end of the drum or cylinder 21 is open, so that a gas-jet 26 for furnishing light and heat may project therein from the floor of the casing. The middle portion of the drum or cylinder 21 is provided with a brace 27, which is also mounted on the shaft 20 and serves to assist in holding the drum in a vertical position. Fitted loosely over the upper end of the drum is a cowl 28, which has on each of its sides a slot 29 to receive the upper tie-bar 19, which serves to assist in supporting the cowl. Hinged at its outer edge to the inner surface of the front portion of the casing at each of its front corners is a vertical wing 30, the free ends or edges of which project to near the periphery of the drum, as is clearly shown in Fig. 4 of the drawings. The front surfaces of the wings 30 are reflective, while their rear surfaces are non-reflective. These wings are employed to regulate the emission of the rays of light from the drum 21, which, it must be understood, is mainly made of opaque or non-transparent material, but is provided with an opening 31, in which is located a sheet or plate of mica 32 or other suitable transparent material. As the drum rotates on its axis or supporting-shaft 20, which operation is caused by the heat emanating from the gas-jet 26 or a lamp which may be used instead of the gas-jet passing between the blades 24, comprising the propeller, it is apparent that the transparently-closed opening 31 in the drum will be caused to pass the free ends or edges of the wings 30, which wings may be adjusted inwardly or outwardly, so as to increase or diminish the space between their free edges, thus affording a larger or smaller opening for the emission of light. It will also be understood that the wings 30 will serve to prevent the light being displayed from the front of the casing until the opening 31 in the drum begins to pass the inner edges of said wings. When it is desired that light may be displayed through the opening 12 in the rear part of the casing, it is apparent that the sliding door 13 therefor may be removed or a transparent door employed. By placing the apparatus in the window of a store, so that its front may be seen from the outside,

it is obvious that in the rotation of the drum 21 light will be displayed intermittently through the front of the casing and sign thereon and through the rear of the casing into the store or room.

In order to prevent the drum or cylinder turning too rapidly, a vertical wing 27^a may be attached to the shaft 20, which supports the cylinder. To adjust the position of the wings 30, the sliding door 13 may be moved so that access to the interior of the casing can be had through the opening 12 therein.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a casing having an opening in one of its walls, of a sign-plate located in said opening, a rotary drum mounted in the casing and having a transparent portion, a wing hinged to the front portion of the casing at each side of the opening therein, and projecting inwardly to near the drum, and means to rotate said drum by the heat from the light-producing flame, substantially as described.

2. The combination with a casing having an opening in one of its walls, of a sign-plate located in said opening, a rotary drum mounted in the casing and having a transparent portion, a wing pivotally secured on each side of the opening in the casing and extending inwardly toward the drum, a propeller mounted on the upper end of the drum and comprising a series of radially arranged and deflected blades, a vertical shaft supporting said propeller and a vertical wing secured to said shaft, substantially as described.

3. The combination with a casing having an opening in its front wall and an opening in its rear wall, of a sign-plate located in the front opening, a shaft vertically journaled in the casing, a rotary drum mounted in the casing and having a transparent portion, a vertical wing on said shaft, and means to rotate said drum by the heat from the light-producing flame, substantially as described.

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