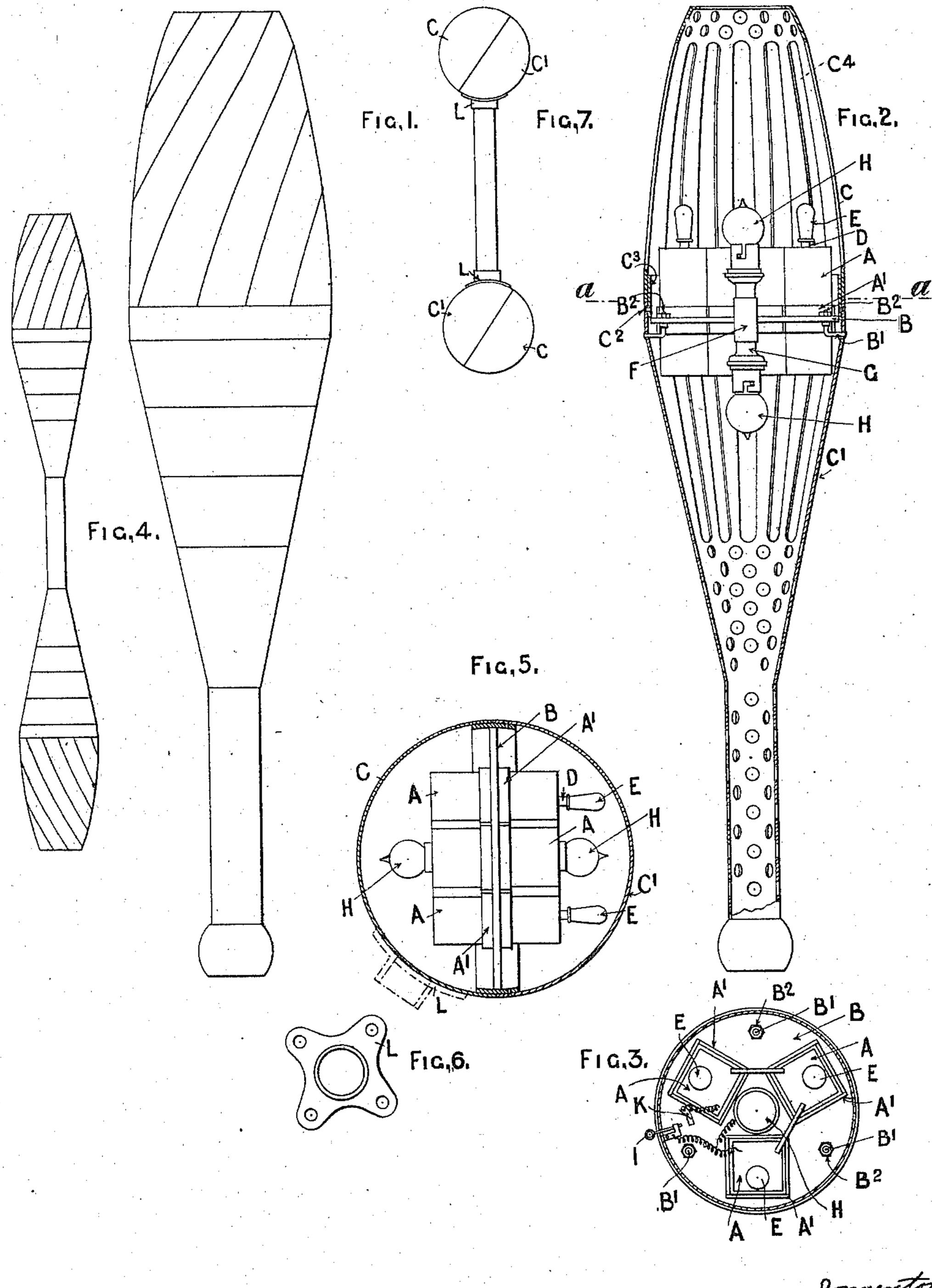
## M. CRONIN.

## ELECTRICALLY ILLUMINATED JUGGLERY APPARATUS.

No. 575,332.

Patented Jan. 19, 1897.



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THE MODRIE BETERS CO. PHOTO-LITHO., WASHINGTON, D. C.

## United States Patent Office.

MORRIS CRONIN, OF LONDON, ENGLAND.

## ELECTRICALLY-ILLUMINATED JUGGLERY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 575,332, dated January 19, 1897.

Application filed October 30, 1896. Serial No. 610,539. (No model.)

To all whom it may concern:

Be it known that I, Morris Cronin, a citizen of the United States of America, residing at 57 Charing Cross, London, England, have invented new and useful Improvements in Electrically-Illuminated Jugglery Apparatus, of which the following is a specification.

This invention consists in jugglery apparatus containing electric glow-lamps and bat-10 tery in the interior of a partly-transparent outer envelop or frame, all so constructed that the apparatus can be readily taken to pieces and put together and so that the gas evolved during the performance, together 15 with any acid that might escape from the cells, shall be collected and retained within the apparatus itself.

The apparatus may assume various forms, such as a ball, a club, or a wand with a ball

20 or club at each end.

Figure 1 of the drawings is a side elevation, and Fig. 2 a longitudinal section, of an Indian club for jugglery performance; and Fig. 3, a section on line a a, Fig. 2. Fig. 4 is a 25 side view of a double-ended club. Fig. 5 is a section through a ball-shaped jugglery apparatus; Fig. 6, a detail of same, and Fig. 7 a side view of a double-ended club with ball-

shaped ends.

The electric battery, by preference a secondary battery of any known suitable construction, is made with, say, three cells A, of ebonite or the like. These cells, in this case shown square, are passed partly through and 35 cemented into corresponding square holes in a flange B and rest thereon with flanges A', which are also cemented to the flange B. This latter is, by means of studs B' and nuts B2, fixed to the outer envelop or hollow frame, 40 which is of club shape and made in two parts C and C'. These parts are united by screws c<sup>2</sup>, screwed into a reinforce-ring C<sup>3</sup>, united to the part C.

The hollow frame C C' is made of sheet 45 metal with perforations in the form of slits C4 or round holes, or zigzag, or any other regular, irregular, or fancy shape. These perforations are covered on the inside or on the outside with some suitable transparent ma-50 terial, such, for instance, as celluloid, by preference, in various colors. If the transparent material is outside, it may form an }

entire outer covering. In Fig. 1 the outer covering is shown in the form of strips of celluloid, intended to be of various colors, 55 said strips being put on helically near the outer end of the club and in rings of various colors, as to the rest the handle part may be white.

Each cell has a cover cemented in liquid 60 tight, and each cover has an inlet-tube D for charging or discharging the acid. Over a flange on each tube is sprung a hollow rubber cap E, capable of receiving the surplus gaspressure and expanding therewith during the 65 five or ten minutes that the performance with the apparatus lasts. It is also intended to receive any drops of acid that might be projected through the compressed gas on the top of the liquid in the cell.

The foundation-plate or flange B has a central socket F, formed on or fixed thereto and serving to receive the sockets G of two electric glow-lamps H. The switch-rod and button I, when pushed in against the contact K, 75 closes the circuit and causes the lamps to burn; but any other well-known form of

switch may be used.

Fig. 4 shows a double-ended club, each end

being of the construction described.

Fig. 5 shows a section of a ball-shaped frame in two halves for holding between them in the manner described the flange or foundation-plate B with cells A and lamps H. This ball is used for playing with, the same 85 as the club. If the ball is to be attached to a wand, such as, for instance, shown in Fig. 7, which has a ball on each end, I provide the ball with a screw-socket L. (Shown in dotted lines in Fig. 5 and in plan projection in 90 Fig. 6.)

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. Electric-light-transparency jugglery apparatus, consisting of electric-battery cells 95 provided with expansible gas-receptacles over their filling-inlets said cells fixed to a foundation-plate of ebonite or the like having one or more electric glow-lamps fixed thereto, and an outer inclosing sheet-metal hollow 100 frame made in detachable parts and within which the said foundation-plate is fixed, said frame having holes provided with colored transparent material and with a switch for

turning the light on or off, substantially as set forth.

2. The combination of the electric-battery cells A provided with hollow rubber caps E on their filling-tubes D, the plate B to which the cells are fixed and which is provided with sockets F, the glow-lamp sockets G fixed therein and carrying the lamps H, the outer hollow perforated sheet-metal frame C' with screws B' and nuts B<sup>2</sup> for fixing the plate B

thereto, the outer hollow perforated sheetmetal frame C detachably united to the hollow frame C', colored celluloid or the like covering the holes in the frame C C', and a switch I K, substantially as set forth.

MORRIS CRONIN.

Witnesses:

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