

A Curious Electrical Display.

BY HAROLD J. SHEPSTONE.



CURIOUS and ingenious method of entertaining the public by the aid of electricity has certainly been introduced by Mr. George W. Patterson, of Chicago. This gentleman has devised a means of swinging electrically-lighted Indian clubs in such a way as to produce startling, yet beautiful, spectacular effects. Although this kind of electrical display with Indian clubs is entirely new so far as the public is concerned, Mr. Patterson has given much time and thought to the subject, and his entertainments have not reached their present high degree of excellence and novelty without a great deal of patient study of that vast and marvellous subject which we call electricity.

Until very recently Mr. Patterson used to give displays with Indian clubs to which flaming torches were attached. It was the success which attended these entertainments that led him to devise a means for obtaining a more elaborate and effective display. The only thing which could possibly help him to obtain this end was electricity, and that he has succeeded in his endeavours is well evidenced from our set of unique photographs, which illustrate some of his pretty spectacular effects.

In our first photograph we are introduced to Mr. Patterson and all the paraphernalia necessary to an entertainment. One of the greatest difficulties which this electrical entertainer has had to face was the securing of a portable battery of high voltage and light weight. For some time past Mr. Patterson has been unable to give his performances except in halls and houses wired for electrical illumination; now, however, this drawback has been overcome, and Mr. Patterson can amuse the public with his electrical illuminations in any hall or theatre, and also give exhibitions of his skill in private

houses and other places. This has been rendered easy of accomplishment by a storage battery which he has himself designed and built. This battery, which has evoked much comment from eminent electricians, who have been struck with its wonderful powers, is seen in our photograph. It weighs 35lb., has thirty-two volts normal, and a capacity of ten ampères at about twenty-five volts. It is of such convenient size that it can be easily carried by one person.

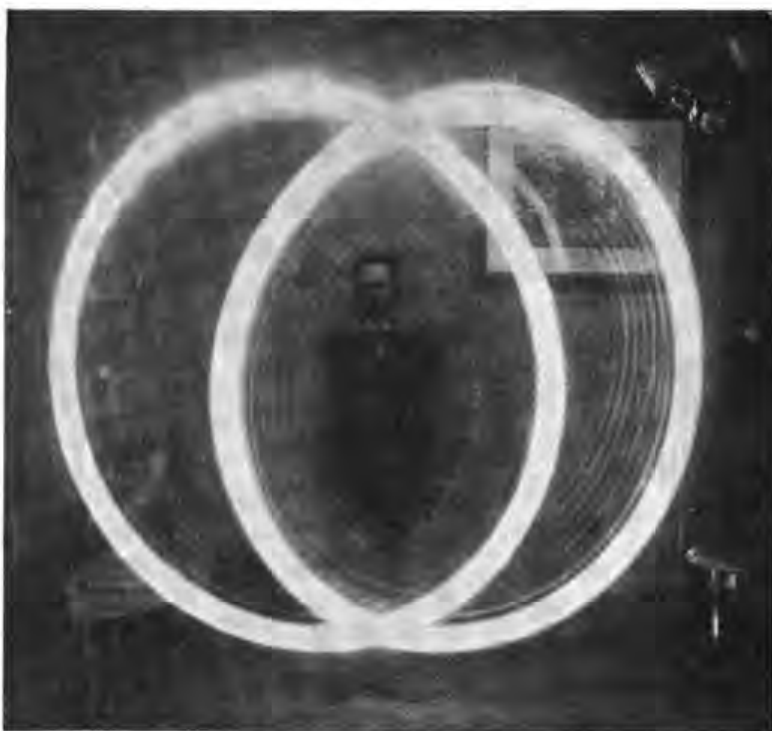
If one looks carefully into our view, they will detect the small electric lamps which decorate the Indian clubs. These clubs are made in two parts, the split being lengthwise. A flexible cable of five wires leads into the club handles through a rubber tube, the wiring being cleverly concealed. Three series of eight three-candle-power miniature lamps are set in small, specially turned brass sockets, the length of the club, so the lamps stand out at right angles to its surface. As the little globes are coloured, no fewer than six series of different colours are obtained when the current is turned on.



From *U*

MR. PATTERSON AND HIS APPARATUS.

(Photograph.)



From a]

A SIMPLE EFFECT.

[Photograph.

To give a display the room is darkened, of course, and Mr. Patterson, taking his stand in front of the audience, turns on the current and swings the clubs with the most wonderful results. In the next photograph, which is one of a series of Mr. Patterson's numerous "figures," we notice two distinct "O's," with a very thick outer circle or ring. This larger circle is produced by a thirty-two candle-power, fifty volt lamp which is usually run on 110 volts, fixed to the tip of each club. Some idea of the power of these two lights, which are necessary to make the figures, may be gauged from the fact that they are too dazzling for the naked eye when lighted and stationary, and are so powerful that they are capable of illuminating an entire church or public hall of average size. The smaller circles of light shown in our illustration are the reflections of the miniature lamps on the body of the clubs.

In addition to this pair of electrically-lighted clubs, Mr. Patterson also uses fancy ones in his displays, made of black wood and

ornamented with strips of silver. Another pair, which may be detected in our first photograph, are those designed to represent the American flag. Each of these latter contains a music-box. The torch clubs Mr. Patterson made himself. They are of regular shape, with long handles, painted with pegamoid or aluminium paint, giving them the appearance of silver. At the ends are fixed wire screens of spherical shape, filled with asbestos fibre, which is saturated with gasoline before using. These make brilliant effects in the dark, and will burn nicely for about five minutes. Mr. Patterson claims that they are the only pair of the kind in the world, and are entirely safe, whereas the ordinary torch

club is not, as cotton is used instead of asbestos. In some of the halls and concert-rooms of Chicago where he has given performances, Mr. Patterson has swung his clubs before a conical mirror reflector, which acted as a powerful footlight, and also threw upon the wall behind him the shadow of a giant club-swinger.

A pretty design produced by lighted clubs



From a]

A PRETTY DESIGN.

[Photograph.



From a]

AN ARTISTIC EFFECT.

[Photograph.

in a darkened hall is seen in our third photograph. The clubs are always swung to music, so that the effect to the audience is still more pleasing. The patterns or figures which may be obtained by the swinging of the clubs are almost infinite in variety. The lights on the clubs are under the control of an operator behind the scenes, who turns on and off the lights of both clubs by means of a switchboard.

Mr. Patterson is a recognised expert in the swinging of Indian clubs, which we can well believe after glancing at the illustrations which accompany this article. He is thoroughly at home with a pair of these wooden implements hovering around his head, and makes a novel picture as the large yet graceful circles of light flash all round him. In order to produce such a charming picture as seen in our next photograph, the clubs, of course, have to be swung fairly rapidly. Indeed, it would be impossible to obtain so many circles with one pair of clubs unless

they are swung quickly, while the grace and style of the whole effect speak volumes for Mr. Patterson's ability as a club-slinger. His club-swinging has rightly been termed "poetry in motion."

Our photographs, it may be added, were taken while Mr. Patterson was swinging his clubs at ordinary speed, by the light of the incandescent lamps studded on the clubs. The time of the exposure was from five to ten seconds. Great credit is undoubtedly due to the photographer who has furnished us with practically exact miniature facsimiles of the various displays. The only thing we can complain of is that we are not treated to the numerous other electrical features which go to make

up an ordinary performance. There is the telephone, for instance, with megaphone attachment, through which Mr. Patterson sings from a distant room.

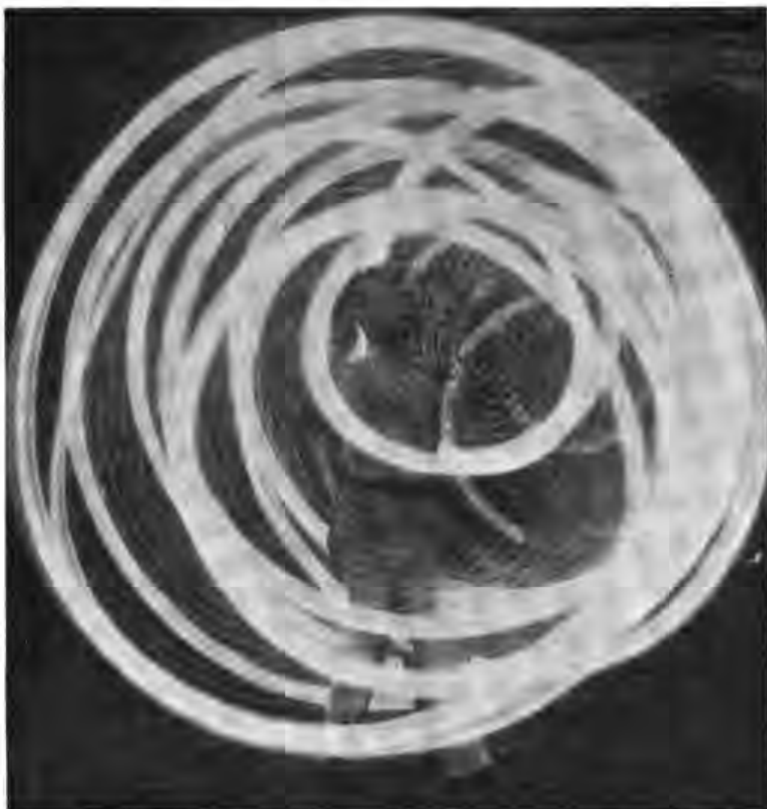
Then there is also the electrical storm, which lacks nothing but buckets of water to



From a]

A COMPLICATION from

[Photograph.



From a)

A "RUNNING FIGURE."

[Photograph.

make it complete. The storm begins with distant heat lightning, simulated by well-distributed Geissler tubes, gradually increasing to the fiercest of chain or "zig-zag" lightning, with corresponding gradation of thunder, the latter being produced in the usual manner by a "thunder-sheet" of iron. The nearer lightning is produced by the direct arching of carbons in Mr. Patterson's hands. The arc is struck in a small box from which the light is thrown by a lens through a cardboard disc having lightning forms cut into it. The disc can be revolved to any form and the light flashed out in any direction. The effect, as may be imagined, is very startling, especially as it is accompanied by the fiercest thunder, and a sound of dashing rain, the latter being produced by skilfully manipulating a circular vessel into which peas are constantly poured.

To add to the terrors of the scene Mr. Patterson laughingly sings "The Lightning King" through the megaphone, the horn of

which is so prominently seen on the table in our first illustration. As the storm abates the more cheerful tune of "Anchored" is heard through the disturbed elements. No sooner is quietude restored than a perfect double rainbow gradually appears across the hall, and is dissolved by a water rheostat by sending the rays of a single-loop filament incandescent lamp through a prism. The colours come out beautifully; when at their brightest the lamp is run greatly over voltage. By turning the lamp slightly, so that the filament is not in direct line with the prism, lights from two points strike the prism, producing two rainbows, as sometimes seen in the sky. This part of the performance is greatly appreciated by the audience, so realistic are all the details of a thunderstorm carried out.

However novel thunderstorms made to order may sound, Mr. Patterson is not yet fully satisfied that he has reached the limit of his powers as an electrical entertainer, and has great hopes of producing more startling novelties before very long. In addition to the thunderstorm there are other curious and ingenious electrical displays, which it would be impossible to describe here.

One of his great plans is to produce ozone electrically, and blow it gently among his audience by means of electric fans. With the aid of an atomizer and apple blossom perfume he believes he can reproduce the genuine air of a country orchard. Should this new wizard of electricity ever come to London and give exhibitions of his wonderful skill as a conjuring electrician, those who long for a breath of country air need only go to one of Mr. Patterson's performances, close his eyes, and imagine beautiful blossoms and graceful trees, as he drinks in the sweet perfume of a distant country orchard.