

A Electric Lawn Party.

Mr. Edward H. Johnson, the president of the Interior Conduit and Insulation Co., has a fine country residence, "Alta Crest," at Greenwich, Conn. His house is situated about four miles from the Sound, in the center of a plot of ground of 33 acres, which, according to the United States geographical survey, occupies the highest point of land between Maine and Florida, a like distance from the coast. On account of the electric light and the electrical proclivities of its owner, the place has been very appropriately named "Electric Hill." The house itself is of the colonial style, and from its spacious porticoes a magnificent view on all sides is spread before the observer. The lighthouse off Bridgeport shoals is plainly visible 33 miles distant—such is the vista. The house stands on the apex of the hill, and the broad winding driveway which leads up to it by a circuitous route is lighted by numerous incandescent lamps on ornamental poles. An Edison plant supplies the light and power for the house as well as for the spacious stables and lawns.

Within the house itself Mr. Johnson has carried out many novel ideas in regard to lighting as applied to decorative effects, as well as in regard to the useful application of electric power for household work.

In the groined, oaken hall a large handsomely finished organ pours forth melodious music by the hour, by the simple manipulation of an ordinary electric switch. An apartment over the *porte cochere*, known as Mr. Johnson's "Den," contains trophies from all parts of the civilized and uncivilized world. An electric cigar lighter lies handy to an open box of cigars on a table. Two electric cooking stoves keep the late supper warm, while an electric teapot simmers on the sideboard and has been found convenient in supplying other warm decoctions besides the five o'clock cup. A huge horned owl blinks electrically, with large yellow eyes, from his perch in one corner across the room at a hideous bearded Chinese mask, which emits the red fire of passion from its open eyes, mouth, and nostrils. Between the two is suspended in midair a large specimen of porcupine fish, within whose transparent and bristling skin is concealed an incandescent lamp sufficient by itself to light the room. Electric fan motors cool the air when necessary. On one side of the room stands what may now be termed a relic—one of the first phonographs ever made, a monument to tinfoil, lung power, and muscle; while on the other stands the very last instrument, especially constructed for Mr. Johnson, at the phonograph works. The drawers of the cabinet contain a choice selection of musical cylinders, which prove an endless source of entertainment to every one.

Lately Mr. and Mrs. Johnson received some 300 guests at their annual lawn party, given in honor of the birthday of their daughter. For this occasion a large dancing platform, 40 by 25 feet, was erected on the lawn in front of the house, covered with crash, and illuminated by strings of Chinese lanterns, each with an incandescent lamp within, suspended in festoons from decorated poles at the corners. Outside the house, the decorations consisted principally of artistic effects produced by an elaborate arrangement of incandescent lamps of all colors. Between each post of both the upper and lower porticoes encircling three sides of the house were suspended flexible pendants bearing alternate colored lamps of red, white, and blue, while from each of the third story windows hung lamps of like colors, and, surmounting it all, making one huge pyramid of light, was a varicolored cluster of lamps in the cupola.

From beneath the ivy which climbs thickly round about the stone tower containing the gun room and telephone room, peeped forth also many red and blue lamps. The flag poles, 75 feet in height, floated the stars and stripes, surmounted; not by the conventional eagle, but by a pin-wheel five feet in diameter, containing over a dozen red, white, and blue lamps, and rapidly revolved by an eight horse power motor.

The engine room, with its two Edison dynamos, storage batteries, engines, and various regulating apparatus, proved to be a place of endless entertainment and instruction. The pumps operated automatically by Sprague motors, and forcing water from wells 1,200 feet distant, as well as the electrical dampers and other heat-regulating apparatus, automatically and electrically operated, were thoroughly inspected. The electric organ in the hall entertained great numbers, while the phonograph in the "Den," with its popular vocal and instrumental music, was the center of a delighted audience. The idea of lighting carriages by electricity, recently mentioned as new and just accomplished in England, has been in operation on Mr. Johnson's several carriages for a number of years, and was also illustrated. The feature of the evening, however, was a grand display of Pain's Manhattan Beach fireworks, which were ignited by electricity direct from the lighting circuit, a suggestion from Mr. Johnson, and something, we believe, never attempted before.

The fireworks, some one hundred and fifty yards from the house, were ignited from the piazza by the turning of a small electric switch in the hands of a lady. A tiny electric bell at her side gave the signal

that all was ready; the switch was then pressed and the rockets and bombs exploded.

The *modus operandi*, as conceived and carried out by Mr. Johnson, was as follows: For skyrockets a battery (not electric) was constructed of six pieces of one inch tubing of the Interior Conduit Insulation Co.'s underground tube—another new application for this useful article. Upon the upper ends of each tube, which were cut squarely, were driven two French nails about one inch apart, one side of each set of nails connecting with copper wire to one pole of the circuit (taken from an adjacent lamp post) and the other side of each set to the other pole. Each pair of nails were connected by the simple winding about with a piece of fuse wire of small capacity immediately under the touchpiece of each tubed rocket. Accordingly each fuse was thrown directly across the line and all in multiple on the moment the switch on the piazza was made to close the circuit through a flexible cord across the lawn, thus effecting the simultaneous explosion of the rockets. The bombs and other pieces were touched off in a like manner, to the delight of an admiring audience. As the evening drew to a close all seemed reluctant to depart from this veritable fairy land.—*Electrical Engineer.*

CRYSTALLIZED ORNAMENTS.

A beautiful ornament, which is very easily made, consists of a wooden cross covered with Canton flannel,

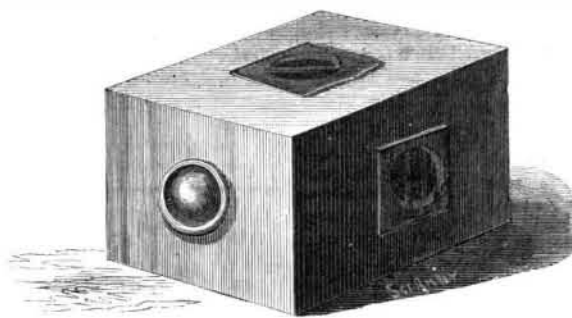


Fig. 1.—GROTTO.

with the nap side out, and crystallized by immersion in a solution of alum. The nap retains the crystals so that they are not readily loosened or detached. The flannel should be attached to the wood by means of brass wire nails, and the cross should be suspended in a solution formed by dissolving a pound of alum in a gallon of warm water. The cross should be suspended in the solution while it is still warm and allowed to remain in until the solution cools, when it will be found covered with bright crystals.

Fig. 1 is a perspective view, and Fig. 2 a longitudinal section of a grotto formed by crystallizing alum in a box containing jagged points covered with Canton flannel or wrapped about in various directions with

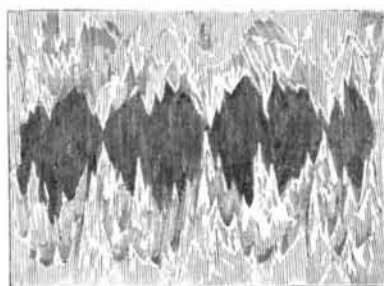


Fig. 2.—INTERIOR OF GROTTO.

coarse thread or twine. The box may be of wood or metal. It should have apertures in the top, ends, and sides. These apertures are stopped with corks, while the box is filled with the solution. After the crystallization the corks are removed, and the holes in the top, sides, and one end are covered with colored glass, and over the front aperture is secured a convex spectacle lens, having a focus about equal to the length of the box. When the interior of the box is illuminated by a strong light passing through the colored windows, the effect is fine.

The solution used in this case is the same as that given for the cross. After the crystals are formed and the liquid is poured from the box, the interior should be allowed to dry thoroughly before closing the apertures.

Celluloid Litigation.

Judge Lacombe of the United States Circuit Court for this district has lately rendered a decision adverse to the validity of the Hyatt patents, which cover the manufacture of celluloid. The substance known as celluloid consists usually of dissolved paper, although cotton or other vegetable fibers may be used. In the manufacture tissue paper is treated with nitric and sulphuric acids, the product is then washed and camphor added. The mass is then ground. Coloring matter is now added and the mass is made into a paste with alcohol, it is then pressed and broken between rolls. The finished mass is very plastic and may be moulded and pressed into any desired shapes, drawn into tubes, etc.

Patent—Corn Cob Pipe.

Judge Wallace, of the United States Circuit Court, sitting at Syracuse, N. Y., rendered an interesting decision in the case of H. Tibbe & Sons Manufacturing Company vs. Heineken. The suit was for the infringement of a patent on a corn cob pipe, and the court held that the defendant had infringed the plaintiff's patent by filling the cells which hold the corn on the exterior of the cob with cement from the outside. Judge Wallace said in giving judgment: "The claim of the plaintiff, Tibbe, is a new article of manufacture, a smoking pipe made of corn cob, in which the interstices are filled with a plastic, self-hardening cement. Upon first impression it would seem that the old 'Jackson pipe' is substantially the same thing as the pipe of the present patent. But that was a corn cob pipe in which the inside of the bowl was lined with a plastic cement to fireproof it, whereas the pipe of the patent is one in which the interstices of the cob are filled with cement. These interstices, or cells, which hold the corn are on the exterior of the cob, and although in some instances they could be filled from the inside of the bowl, that would not be a practical way of filling them, and when cobs of large or medium size are used for the bowl, as they generally are, the interstices can only be filled from the outside. The specification is addressed to those skilled in the art, and the claim is to be interpreted, as its language naturally imports, as one for a pipe in which the exterior interstices of the cob are filled with a plastic cement. Such a pipe supplies a sweet and porous receptacle for tobacco, having characteristics which are well understood by smokers to be desirable, and is a very different thing from one with a cement-lined bowl. It did not involve invention of any high order to make such a pipe, but there was enough to convert a poor article into a good one, and supply something to the trade which was new and the merits of which were immediately and generally recognized. If the defendant chooses to sell the old 'Jackson pipe,' he is at liberty to do so, but he has appropriated the rights of the complainant by selling the pipe of the patent and must take the consequences."—*Bradstreet's.*

New Route across the Atlantic.

An Ottawa, Can., dispatch states that a company of Boston, Mass., capitalists has been quietly developing the foundations of a seaport at the east end of the Straits of Canso, N. S., and if expectations are realized it will have an important bearing upon future communication between Europe and America. The place, which is to be called Terminal City, is five miles east of Port Mulgrave, on the Intercolonial Railway, and the government has consented to an extension of the railway to the place, and agreed to operate the extension as part of the Intercolonial system. Terminal City is situated on one of the finest harbors on the Atlantic coast, having sufficient depth of water for the largest vessel afloat, being completely land-locked, absolutely free from ice, comparatively free from fog, and open to navigation at all times. A straight line on the map of the world from Chicago to Liverpool passes through this point, and the distance between them is 400 miles shorter than by Portland, Boston, or New York. It will take four days from Terminal City to Liverpool by the new steamers proposed to be put on the route. When the railroad is completed and wharves are built, all passengers and mails from Europe will be delivered in New York or Montreal one day sooner than by any other route. It is the most easterly port, open all the year round, and appears to be a natural shipping port for the products of the Dominion to Europe.

High Rates of Speed.

One of our correspondents not long ago asserted that a speed of 100 miles an hour by steam locomotives was entirely practicable, and thought it would be attained. In a recent lecture before a scientific club, Professor Elihu Thomson declared that much higher speeds than can now be obtained with steam locomotives are to be expected by means of electricity, and he considered from 100 to even 150 miles an hour possible. While in the steam locomotive there are reciprocating parts that must be put in motion, stopped, and reversed continually, in the electric locomotive we have simply a rotary motion, which makes it possible to run with economy at much higher rates of speed. He believed that if we could come back after another hundred years, we would find 150 miles an hour to be the speed of traveling, adding, "It simply depends upon finding the necessary method of applying sufficient power, and building the locomotives to suit, arrangements being adopted to keep the cars on the track." One hundred and fifty miles an hour may be among the possibilities, but probably most people nowadays would rather leave to coming generations the enjoyment of whirling through space at that frightful velocity. To leave Chicago at night and be in New York next morning would be a wonderful achievement, involving great increase of business facilities, but the safety of such a speed under present conditions may well be questioned.—*Railway Age.*