# SCIENTIFIC MISCELLANY.

**Norway's Artificial Coal—Refrigeration of Airtight Cars—Power Either in Electricity or A Smokeless Fuel—Experiments of Dimitri—A Lunar Volcano—An Exhibit Of Deceptions—Extirpation of Rats—Whooping Cough Contagious.**

The peat coal now being turned out on a considerable scale in Norway is made by the process of Rasenthal, a Norwegian engineer, which consists in heating the peat in closed retorts to 250° C. for seven hours. The finished product resides 85 per cent of the original tar and gas. Analysis shows this coal to consist of 66 per cent of carbon, 16 per cent of oxygen, 6 per cent of hydrogen, 3.7 per cent of water, and only 4 per cent of ash, and its heating as much that of average lignite, or coal. The cost of manufacture is about 60 cents per ton, the selling price being a little over $4.00 per ton, or about a quarter of the coal in Norway at which it is used. The product has proven suitable for foundry work, and means have been tested which exactly hold the cost of the same other from artificial coal.

The scheme of covering the Sahara with forests is pronounced by M. P. Privat Deschanel to be impracticable, for solid water cannot be produced in Africa. On a limited scale, however, the valleys—not of which are favored with a small amount of water—may be made to be planted with tamarisk, acacia, eucalyptus and poplar, the last named tree having unexpectedly proven the most suitable, in the open shelter, vegetables and fruit trees may be grown.

In some late experiments on the bursting of small fly-wheels, the first wheel tested, 15½ inches in diameter, burst at a speed of 6525 revolutions per minute, or a rim speed of over five miles a minute. A timber casing around the wheel was completely demolished, and a piece of the rim was shot like a bullet through four inches of pine and 2½ inches into the hardwood floor.

A new style tube, with an adjustable cathode, shows that the exact position of the cathode enormously affects the penetration of the rays, a change of a third of an inch giving a range of practicative power from the highest almost to none at all.

The use of ether for forcing plants has given Mr. Johannsen, of the Agricultural High School at Copenhagen, results so decided as to suggest great possibilities for florists and market gardeners. The plants are etherized by being placed for twenty-four to ninety-six hours in a closed vessel filled with ether vapor, cylindrical glasses being used for small plants and oil-painted boxes lined with tin-foil for larger ones. The cost of etherizing lilacs is said to have been from a cent to a cent and one-half for each plant. In the experiments of the last three years, tulips, lilacs, etc, ether-ized late in the fall and then placed in a hothouse developed much more rapidly than usual, and had a pretty color and great durability. Little benefit was had from ether applied before the middle of September. Trials on a greater variety of plants are planned for this year, and a study of the effects of varying and repeated doses of ether will be made. The ether being very inflammable, great care must be taken to keep it away from lighted matches or any flame.

An incandescent lamp of three or four candle power is used by M. Paul Noel, a French entomologist, for capturing insects that swarm in ponds at night. The lamp is connected by wires to a small storage battery on the tank of the pond, weighted by a semicircle of iron, and placed over a net having an opening two feet and a half square. The net is of coarse pack-thread, closed by a string. The weighted lamp and the net are slowly sunk in the water, the lamp is lighted, and insects, fish, lizards, frogs, tadpoles and larvae of every kind rush up to it. The string is pulled, quickly capturing several pounds of victims.

Fluorine, remarkable both as the most active of the chemical elements and as the only one forming no compound with oxygen, was with difficulty isolated by Moissan in 1891. Its liquefaction, just announced by Professor Dewar, adds a new and extraordinary detail to the chemistry of cold. The gas liquefies at a temperature of 187° below zero, and the product is a yellowish liquid which has lost the intense chemical energy and become entirely inert.

New discoveries of rocks dangerous to navigation show no signs of diminishing, no less than 300 rocks and shoals not before known having been reported to the British Hydrographer in 1896.

A singular eruption was witnessed early this year by a Russian party after crossing the sands of Skeidara, in the south of Iceland. A sudden long, groaning sound drew his attention to a glacier about two miles in front of him, when he saw huge masses of ice thrown into the air from the glacier, followed by a flood that swept down upon the level sands, carrying everything before it. Turning his horse, he fled to the station of Nupstad. On returning to the sands a day later, he found them covered by a belt of ice-floes of varying size four miles wide and twenty to twenty feet high, reaching from the glacier to the sea, a distance of about 30 miles. Six newly formed torrents rushed from the glacier on the opposite side of the ice-field. The eruption is supposed to have come connected with the severe earthquakes of last summer.

A scorpion carrying a flower is a curious sight seen not long ago by an Aden correspondent of Nature. The flower was a large blossom of what is locally known as the white-and-mottled tree, and the creature held it over its back by its claws, curling up its tail to assist. The nearest tree from which the flower could have been obtained was thirty feet away, with very smooth trunk and a low limb parallel intervening. This fact seems to prove that the scorpion carried the flower through intention, though a direct one, as it would have shielded itself from the bright lamp light, or for some other purpose is unknown.

Scorpions are well known to feed on vegetable substances and to construct nests.

It might puzzle many to say why the fashion of black feet should go out one day, each in the strongest vogue. A German naturalist has made a sentiment strong enough in the far flight through the air the feathers have taken, to positively a d the white down is generally caught an attraction that induces them to take it.

The popular theory that whooping cough is contagious only before the patient begins to whoop is adverse by Dr. Weill, of Paris, physician. From many cases of whooping cough he has caught himself that risk of infection ceases at the beginning of the whooping stage or very soon after.

**Her Quiver Full.**

**The wife of a Sioux Blanket-weaver of Nanticoke, Pa., in Venous, has presented her husband with thirty-five children, and she is still only in her twenty year. She has been the mother of twenty-six boys and six girls. The births of the twenty-five children occurred in the wars. At the first birth twelve in one at the second, twelve at third, four at the fourth, two at the fifth, three at the sixth, two at the seventh, three at the eighth, three at the ninth, three at the tenth, three at the eleventh, three at the twelfth, three. The mother nursed all her children herself. As her strenuous labors of the case is to be the mother suffered from her fifteenth year weekly, and sometimes daily, from epileptic fits, which she if I have not been mistaken by the children. She be sell, he, was born four at her birth, and her maternal parent in her time succeeded in presenting her husband with no less than thirty-eight children.**

## OBITUARY.

GEORGE P. ADAMS.

MALAD CITY, Idaho, June 18, 1897.—On Sunday, June 6th, 1897, Brother George P. Adams departed this life, having been sick about twenty-four hours. His her Adams was born August 12, 1817, at Haverhill, West Jackson-ville, Boston, Massachusetts. He was a member of the Church of Jesus Christ of Latter-day Saints Oct. 8, 1840, and sealed to his wife Lucy Ann Ellis in 1846, stayed in Ohio four years, from which place he removed to Utah and settled at Little Cottonwood, Salt Lake City, Idaho, where he lived until his death.

He died as he had lived, a faithful Latter-day Saints. He died in the hope of a glorious resurrection. Brother Adams has gone to join his beloved wife, who died May 28, 1896. He leaves five children, forty grandchildren, seven great grandchildren and a host of friends to mourn the loss of his fatherly counsels.

W. H. R.

**How to Cure Colds With Soda.**

There is a sure specific for a cold in the head. This new remedy is baking soda, which is the family name for bicarbonate of soda.

The learned physician who has "discovered" it recommends its use in doses of 30 to 50 grains in twice three ounces of water every half hour for three doses, and the fourth dose to be taken after another hour.

Then the patient must wait for two or three hours and repeat the dose if the cold is still present. But this is not often necessary. To be promptly effective it should be begun with the earliest indication of coryza and sneezing. After the second or third day it acts less promptly and more frequent repetitions are needed.

It is less efficacious for influenza when it is contagious than for common colds. In such cases five to ten grains of phenacetine may be added to the 10 or 20 of bicarbonate of soda in the first dose.

The explanation of the new treatment is based upon the idea that there is an acid condition of the system which is sufficient to irritate the terminal endings of the nerves in the skin and mucous membranes, and to render them susceptible to impressions of cold by derangement of the capillary circulation. This remedy seems to act by relieving the internal cause of the surface irritation.

**How to Transfer Leaf Colors.**

The natural colors of a leaf may be easily transferred to paper. Take a leaf of a tree or shrub, place over it a small piece of white linen soaked in spirits of ether and insert between the leaves of a blotting book, with a sheet of paper to receive the impression. Lay the book aside for a few days. The leaf will be found devoid of color, which will have been transferred to the paper in all the original beauty of tint and outline of leaf.

**How to Repair a Cycle Puncture.**

First of all, it is necessary that you thoroughly clean that portion of the tube round the puncture. This you can do with sandpaper. Then you must give both tire and tube a coating of the solution. Do not apply the patch at once, but wait till the solution is just beginning to solidify, then press it firmly to the tube, and the pressure will be sufficient to keep it in place. The gas superfices at a temperature of 187° below zero cool, and the product is a yellowish liquid which has lost its intense chemical energy and become entirely inert.

**Losing Strength**

HAVE YOU GIVEN another reader your opinion of Scott's Emulsion? If you have, you know how it has helped many of your friends who have come to you for advice. Think how many more would be helped if you would tell them of Scott's Emulsion.

**Scott's Emulsion** cures Wasting Diseases, Pulmonary Troubles, Bronchial Coughs, Colds, Wasting Diseases and General Debility. Druggists everywhere.

50c. and $1.00.

**NOTICE.**

Zion's Benefit Building Society.

THE ANNUAL MEETING OF THE stockholders of Zion's Benefit Building Society will be held on Tuesday, July 13, 1897, at 7:30 o'clock p. m., at the office of the Society, for the election of officers for the ensuing year, and the transaction of such other business as may lawfully come before the meeting.

EDGAR HOWE, Secretary.

SALT LAKE CITY, June 25, 1897.

## NOTICE TO CREDITORS.

Estate of Edward Stevenson, Deceased.

NOTICE IS HEREBY GIVEN BY THE undersigned, administrators, of the estate of Edward Stevenson, deceased, to the creditors of, and all persons having claims against the said deceased, to exhibit them, with the necessary vouchers, within ten months after the first publication of this notice, to the said Sara T. Stevenson, at the office of the undersigned, in Salt Lake City, in the County of Salt Lake, Utah.

SARA T. STEVENSON,
HENRY E. STEVENSON,
ZERA T. STEVENSON,
Administrators of the estate of Edward Stevenson, deceased.

Thomas G. Webber, Attorney for Administrators.

Dated June 4, 1897.

## STOCKHOLDERS' MEETING

North Golden Gate Mining and Milling Company.

PUBLIC NOTICE IS HEREBY GIVEN that the annual meeting of the stockholders of the North Golden Gate Mining and Milling Company will be held at the office of E. R. Richards & Co., 167 Progress Building, in the city and county of Salt Lake, Utah, on Wednesday, the 8th day of June, 1897, at the hour of 2 o'clock p. m., for the transaction of any and all business that may legally come before the annual meeting of said stockholders, and for the purpose of electing a board of directors to serve for the ensuing year.

ALBERT HOY,
Secretary.

May 25, 1897.

An Ordinance Authorizing the Finance Committee to Issue Warrants in Payment of Certain Work Done, Fuel, Supplies and Other Appropriations in the Various Laws and Ordinances Of Salt Lake City, Amounting to the Sum of Twenty-Five Thousand Dollars, Payable Out of the Various Funds Of said City with Legal Interest and Penalty.

Be it ordained by the City Council of Salt Lake City, Utah:

SECTION 1. That permission and authority be and are hereby granted to the Finance Committee of said City to issue the following warrants, viz:

THIRD.

That the permission and authority hereby granted to the Finance Committee of said City to issue warrants shall extend to Salt Lake City, or any other municipal corporation, or any other legislative or executive department of the Government of the United States, or any other person or persons, or any other corporation, for any work done or any supplies furnished, or any other obligation or liability incurred, or any other claim or demand for any work or labor or