

LUMINOSITY IN NATURE

MANY INSECTS AND PLANTS
HAVE LIGHT-GIVING POWER.

Lightning Most Popular Among Pyrotechnic Insects—Australian Poppy is the Most Remarkable of Luminous Plants.

The lightning bug's mystery of light without heat is now alleged to be solved. A member of that earnest-headed colony of scientists at Woods Hole, Mass., has recently declared that the bug does its interior and exterior illumination by eating certain substances which supply it with phosphorus.

It is to be hoped that this is true so we may quit worrying about why the lightning bug is lit up.

Although the lightning bug is our most popular and common pyrotechnic insect, there are many other insects and many forms of vegetable life which share in light-giving power of high and low degree. Under certain conditions nasturtiums, dahlias, tuberoses and yellow lilies may be seen to glow with a bright radiance, varying in color and intensity. Only those flowers that have an abundance of yellow or orange shades exhibit this phosphorescence. The best time to see the light is after dark, when the atmosphere is clear and dry. The light is sometimes steady, but often intermittent and flashing.

Often, in the early fall, the ground will be illuminated by the glow from the dead leaves. The Australian poppy is the most remarkable of all the luminous plants, for it has been found to send out a light of its own of quite notable brilliancy.

Mushrooms growing on decayed wood often have a degree of brilliancy that, when they are placed on a newspaper, will enable one to read the words in their vicinity with no other light. One species of mushroom in Australia, 16 inches in diameter, was of such brilliancy that, when seen from a distance, its light frightened the natives.

Crabs are notable light givers, and the salpa of California is the most wonderful of all. Bodies of water 20 miles square have been seen glowing with them, and in Santa Catalina channel one naturalist reported that as far as the eye could see the creatures lay gleaming like gems in the sunlight. Many luminous frogs have been discovered from time to time, and any frog may be made luminous by inoculating it with certain bacteria which produce this phenomenon.

Many theories have been brought forward to explain the phenomenon of luminosity, but as yet little is known about it.

Ashamed of Own Toes.

Man is a five-toed animal who seems ashamed of the fact. He covers his sensitive feet with leather, which turns him into an imitation ungulate, or hoofed creature, and then wonders why he has corns and bunions. He takes the spring out of the earth with his pavements and the elasticity out of his stride with hard-soled shoes, and marvels why walking has become a pain instead of a pleasure. There may be some climatic excuse for this folly in winter, and as for grown-ups at any season "the world has set its heavy yoke upon the grave and bearded folk." But give the kids, even the poor little rich kids, a chance to get their feet on the good breast of the earth.

Agreed.

"Don't you think Mrs. Gadders a charming woman?"
"Indeed, I do."
"She has a great deal of tact."
"Undoubtedly. What did she compliment you for?"
"My wit. And you?"
"For the same thing."
"Shake. She flattered us both."

FIGHTING THE WHITE PLAGUE

Discovery of Tuberculosis Germ by Doctor Koch 32 Years Ago inaugurated a Campaign.

The germ of tuberculosis was discovered 32 years ago by Dr. Robert Koch of Germany, who spent two years in laboratory work in search of it. The discovery changed the whole world's attitude toward tuberculosis. Since the days of the ancient Assyrians the destroying germ has ravaged humanity, and in all the successive generations at least every sixth human being was at some time affected by its presence in the blood. Less than half a century ago the disease was regarded as "fatal and hopeless." Some people looked on it as a divine affliction of the human race, and an indication of mankind's degeneration. Thirty years ago Europe was reporting 1,000,000 deaths every year from tuberculosis and the United States was reporting at the rate of 450 every day.

Today the civilized nations of the world are conducting a general war against the tubercle bacillus. In the United States more than \$20,000,000 is being expended annually for this purpose. The death rate in 20 years has fallen from a ratio of 245.4 to 158 to the 100,000.

Physicians have long known that the bacilli lurk in everyone's system waiting for the vitality to sink to a low ebb when they can begin their fearful scourge. Consequently, the universal campaign is to make everyone strong enough to resist the destroyers. The world has thrown open its windows to let in sunlight and fresh air, knowing that these are fatal to the bacilli. The old fear of "night air" has given way to the practice of living, sleeping and working out of doors where the bacilli cannot follow and live.

The Revival of Shipbuilding.

Prosperity for the American shipbuilding industry is assured during a period of several years to come, whatever may be the future of the merchant marine under the American flag and regardless even of the new seamen's act. For ships may be built in this country for owners who prefer to place them under foreign registry on account of American laws; in any event, the demand for new vessels from the neutral countries of Europe, which have hitherto placed their orders in British yards, is sure to be heavy, while the belligerent countries themselves, overtaxed in the construction and reconstruction of warships, must fill the gaps in their merchant shipping to a degree by placing orders in America.

Women's Wooden Dresses.

Dress goods made from wood is an invention in England. In appearance the cloth is said to closely resemble silk and to be inexpensive.

The fabric is made by cutting wood into thin sheets and treating it chemically so that it is converted into a thick fluid. When this is passed through a series of heated pipes the moisture is evaporated rapidly and the product changed into a solid which passes through a fine-mesh screen in the form of thread.

A chemical bath is then given the hair-like strings, they are thoroughly dried and woven into fabrics.

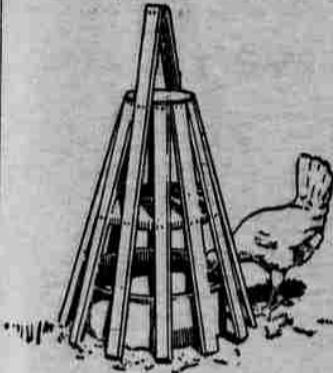
Secret of Laughter.

"The secret of laughter is in the return to nature. Civilization and culture are late additions and we are living to a great extent in artificial conditions. Psychology makes plain the fact that our present mental equipment has been slowly and painfully acquired and a certain strain in maintaining that high altitude is inevitable. This tension is relieved by nonsense and by the portrayal in humorous anecdotes and on the stage of evasions of convention and infractions of the prevailing code of morals and manners.

CLEAN WATER FOR CHICKENS

Easily Made Covered Fountain is Shown in the Illustration—Keeps Fowls Out of the Pan.

Clean water should be provided for the poultry at all times. In order to keep the fowls from getting into the drinking pan, it is necessary to make some sort of a covering. A frame built of slats attached to a small round board at the top and a larger round board placed about a foot above the water pan makes a splendid device. When placed over the pan the chickens have free access to



Covered Drinking Pan.

the water through the slats, and the water keeps much cooler by being shaded. The frame cover may easily be lifted off and the water pan cleaned and re-filled. By this arrangement the chickens can not tip the water over.

CRUDE OIL GOOD FOR SWINE

Scurvy, Contracted by Animals Running in Pastures Wet With Dew or Rain, Can Be Cured.

Quite often when pigs are running in tall pasture which is frequently wet with dew or rain, an irritating effect is produced on the skin and a sore condition commonly known as scurvy is the result. This is particularly true when hogs are pastured in rape which is more likely to have this effect than other forage crops in which the pigs may be pastured.

The remedy is to apply crude oil or some similar substance which will heal up the sores and protect the skin from further irritation. Where this is not done a stoppage of growth and sometimes the loss of the pig is the result. Often this will be neglected unless some special provision is made which will permit the hog to treat itself. Sometimes burlap sacks are wrapped around a post in the pasture and kept saturated with oil. Better and more economical are some of the modern automatic devices which will apply oil in suitable quantities whenever the hog rubs as he will do against any object when his skin is irritated from any cause.

This will be just as effective in subduing lice which often prey upon hogs where attention is not given to their eradication. It is attention to little details of this kind which makes for efficiency in farm management and satisfactory profit from every department of the farm production.

Control of Cabbage Worm.

Poison bran mash, such as is in common use for cut worms, is said to be effective in the control of the cabbage worms. Hellebore is also effective, particularly when the cabbage is just about ready for market. There is a possibility that the tobacco compound, commercially known as "Black Leaf 40," would control cabbage worms.

Time to Market Sheep.

The most advantageous time to sell a sheep is when it is a lamb. If the lamb weighs 80 pounds, is fat and has the quality, it will sell as a prime lamb the year around; if it weighs 84 to 85 pounds on the farm it will weigh about 80 pounds on the market.

STICK TO YOUR JOB

MAN WHO "GOT THERE" GIVES
ADVICE TO YOUNGSTERS.

If a Man Has Any Ability at All, He Should Make Up His Mind to Stick to His Appointed Task Right to the Finish.

More than thirty years ago a man I know was working in a tobacco factory, says a writer in Collier's. He was a stripper—that is, he was engaged in stripping the stems from tobacco leaves. Such work is extremely arduous and the prospects of securing advancement are remote.

This man, however, was ambitious. He wanted to work himself from wages to salary. It was his desire to labor with his brains instead of with his hands. Pictured in his mind's eye was that plateau against which the top of the ladder of success rests. Did he seek another job? He did not!

He kept right on stripping. Today he is the president of a \$65,000,000 corporation! And he is still in the tobacco business!

The man, I might as well tell you, is Caleb G. Dula.

"In my day," said Mr. Dula. "I have seen much written and heard much said about men becoming their own masters. What foolishness! The young man is told to start in business for himself. He is told to give up his job and get one that brings in a larger income. That advice has ruined the prospects of more men than any other I can think of.

"If a man has any ability at all, and is interested in his work, he should make up his mind to stick right to the finish. If he has no ability he will not stick. Do not misunderstand me. If a man is in the wrong job—that is to say, if he is not the right man or is not in the right job—he is doing both himself and the job a great injustice to continue his relations. Under these circumstances a business divorce is necessary. The man should have a new job and the job should have a new man!

"Generally, however, every man, be he a clerk or a clergyman, a well digger or a steeplejack, a longshoreman or a lawyer, should realize that his environment is his savings bank. He is paying out it days of his life. The investment will return larger interest than any other he could make. The man who leaves a job for a slight raise in salary loses his investment. In a new field he opens another account. And it is likely to be a meager one for some time, as he generally is a stranger in a strange land, and until he has proved his worth his associates and his employers have their eyes constantly on him, watching for him to make some break."

Radiator Water Saves a Life.

Because of the not infrequent occasions on which motoring parties find themselves chilled, as in snow or rainstorms on tours, while insufficiently protected by coats and cloaks, it is of interest to remember that the radiator of an automobile at all times when the car is running has a supply of hot water. Prompt application of hot water recently saved a half-drowned woman at Manhattan Beach, New York, from a severe chill and pneumonia. Doctors declared that the radiator water undoubtedly saved her life.

A Mere Trifle.

"I was asked to stop in town and get a little something for my wife, but I can't remember what it was," said Scadsworth.
"Ribbons?" asked Dubwaite.
"No."
"Hairpins, toilet water, face powder, candy?"
"None of those things. Ah! I remember now. She wants a new electric runabout."