

## Some Odd Things in Nature

### The Capacity of a Frog

FROM "The Frogs of Aristophanes" to "A Frog He Would a-Wooing Go," from the days of Aesop to the modern romance in—

There was a frog lived in a well,  
And a merry mouse in a mill—

Frogs have been renowned in song and legend. Their hind legs are tidbits for epicures, even to giving an adjectival sobriquet to a gourmetish nation. Their evening chirps and chugs herald the coming of spring; their roar of "More Rum" is as far echoing as the trumpet of an elephant.

From tadpole to yellow or speckled vested amphibian, they are the clowns, acrobats, comedians, of the puddles, brooks, ponds, with humor in their perpetual look of surprise, and with mouths co-extensive with their cerebral embodiment. They are equally at home in mud, water, air. Their bill of fare is unlimited, their tastes omnivorous, their appetites adjustable to their rubber capacity.

The tempting red flannel on the hook of the frog angler would be leaped for with the same celerity and perhaps swallowed with the same avidity, if it chanced to be a live coal. As between the coal and two fully grown live crawfish, five inches long, with their four formidable, lobsterlike claws, which the writer found in the stomach of a large bullfrog a short time ago, he would much prefer swallowing the coal, because of its lesser after activity.

How the frog captured and swallowed alive such active, powerful, fighting prey as crawfish, remains a marvel. So remarkable was the find, even to one accustomed to examining the diet of birds, insects, reptiles, that he wrote to Professor C. Hart Merriam, chief of the Biological Survey at Washington, about it. In response came the statement that during the last twenty-five years, members of the Biological Survey have found, among other things, in the stomachs of frogs, a full fledged oriole, a water thrush, meadow mice, a garter snake twelve inches long, painted turtles two inches in diameter, water beetles (Belastoma), themselves capturers of small fish, frogs of various species and sizes, minnows. A recent writer in "Forest and Stream" records finding a swallowed chipmunk.

After such examples of voracity and capacity, it may well be conjectured that the frog of Aesop's fable, which tried to swell himself to the size of a present ox, and failed, had succeeded in swallowing a smaller ox on a former occasion, and was again hungry.

### Fires Started by Moths

Moths and flames are universally connected, yet few people suspect that danger could arise therefrom. The insects are of such frail structure that generally they get destroyed before it is possible for them to inflict injury, and it is hardly credible that the wings would ignite and retain the flame long enough to enable the moth to fly to its surroundings.

That, however, has occurred. The moth was a very large one and its wings must have been very dry, so that when it floundered through the flame it set fire to one wing and darted on to a curtain nearby, which at once flared up. It is possible that many summer evening fires in the country could be attributed to a source of this kind. It is notorious

that mysterious fires often arise at sunset in the hot months.

### Capturing and Taming Elephants in India

The Government of India has 15,000 men who catch and train wild elephants in the northern jungles. Dacca, in Bengal, is the headquarters of his majesty's pachyderm department. Here is an elephant depot nearly a mile square, deeply entrenched and with an immense shed in the centre, where the animals are kept during the heat of the day. Tuskers are picketed in long rows awaiting transport by sea and land to all parts of India for military and civil use. There is a hospital for sick beasts. The depot abuts on a branch of the River Ganges, so the animals can have their bath and be watered.

Hunting parties leave Dacca at the beginning of December, and after working three or four months in the forests of Chittagong the white sabbies in charge return about May with hundreds of captured monsters. The method of capture is ancient and simple. When the feeding ground of a herd is reached an army of laborers fells trees and builds a great enclosure with a funnel shaped opening. Above the entrance is a drop door secured by a cable. The native beaters and shikaris, armed with tom-toms, brass gongs, fireworks and flintlocks, surround the frightened herd and drive it into the corral. The cable is cut, the door drops. Afterward men mounted on tame, intelligent beasts enter the enclosure and rope one wild specimen at a time and lead him outside. If necessary, the tame ones give him a good "flicking." The process of taming is often speedy, but it takes some time to educate an animal for the military or civil service. Every military elephant, which will carry artillery and baggage for the British army in mountain expeditions, must learn how to salute with its trunk. Twenty-five of the least valuable of a herd of animals recently captured were sold at a public auction for \$1,000 apiece.

### Waltz of the Ostrich

The so-called waltzing performance of the ostrich is familiar to all in South Africa, but few outsiders have ever heard of it. It consists of a rapid whirling movement, sometimes one way, sometimes another, the wings spread out and alternately elevated and depressed. It is a fascinating sight when indulged in by a large flock.

First one bird will dart forward and begin the circular movement, another will follow, and then others, until the entire flock is whirling around in the mad whirl. Some will continue until they drop exhausted or, apparently becoming giddy, stumble and fall.

The dance is seen in all its glory only when a considerable number of birds are together. It often takes place among only a few, but is never so intense or prolonged as when the flock is large.

Chicks only a month or two old engage in the amusement, though they are rather clumsy and sometimes stumble, particularly when they are reversing. As they grow older they perform several complete turns with great facility, though even adult birds sometimes stumble and break their legs in falling.

This gay behaviour is no doubt instinctive, and, as with other instincts, it is perfected by experience. Ostrich chicks begin the whirl even when reared away from other ostriches, and without having seen the performance. The South Africans have the following theory of the significance of this playful activity:

The wild ostrich can protect himself against

lions and leopards in no other way than by flight. When chased by a host of prey the ostrich, starting to run, twists and turns in curious fashion, and jerks so quickly from side to side that no beast would be likely to have time to set himself for a spring in one direction before the bird had changed his course.

Ostriches thus pursued have been seen to stop at full speed, turn as if pivoted and flee again in almost the opposite direction. Probably no other animal can do this.

The South Africans believe that the instinctive waltzing movement of the ostrich is useful in perfecting the bird in the art of suddenly twisting and turning, which is most likely to assist it to elude its natural enemies, the larger carnivora.

### Artificial Forcing of Plant Growth

To the Danish botanist Johansen we owe a discovery in relation to plant cultivation. After years of study and experiment with plant life, especially as to their habits of resting, Johansen came to the conclusion that their rest time might be divided into three periods: First, the time that follows the fall of the leaf, in which the plant is going to sleep; second, a period of absolute rest or sound sleep; third, a period when the plant has slept long enough, and remains dormant only because the cold weather is unfavorable for activity or growth. The not unnatural conclusion was finally reached; that if they could hurry the plants to sleep, hurry them, in fact, through the first two stages, they would be ready for the forcing or hothouse treatment some months earlier.

After this conclusion was reached, Professor Pohansen began his experiments with ether and chloroform in plant culture. He found that exposure to the fumes of either of these anesthetic drugs produced profound sleep in plants, as it does in individuals. For nearly four years this method of forcing plants has been adopted, with gratifying success from a commercial viewpoint. By this means, lilac bushes and various other plants are made to produce two crops in the year. The natural crop is ready for market in May and early June. By the latter part of August, the plants to be etherized are lifted and conveyed to a room that can be made practically air tight. The openings to the room are then sealed, and the ether is poured through a hole in the roof into a vessel in the room. With some plants two doses are necessary. The time required for etherization varies according to the species. The anesthetic process has the effect of drying up the tissues, and in a few hours producing changes in the plants that would have taken months if left to nature. Plants etherized in August are ready for market usually by November.

At the Cornell University experiment station, a most interesting discovery in relation to plant growth has been made in recent years. After a series of experiments extending over more than a quarter of a century, regarding the effects of light on plant growth the acetylene gas method has been adopted with profit in certain lines of plant culture. It has been found that periods of darkness are not necessary to plant maturity, and that artificial light might be profitably used to supplement the sunlight in the forcing process. The experiments have produced gratifying results in hastening to maturity numerous plants and vegetables. Strawberries, which were exposed to the acetylene gaslight in addition to sunlight, were ready for market over two weeks earlier than under other methods, and still more marked results were achieved with some flowers and vegetables.

duty in that time will be filled full of lead as a mutineer. Go."

There was a moment's hesitation, and the crew slowly dispersed. A short while later the captain of the Ivanhoe, who still lingered curiously in that vicinity, saw the smoke belching from the funnel of the Jane, while she swung lazily into her southern course. About three weeks later shipping circles were relieved to learn that she had arrived safely at her destination, with no untoward occurrence to report.

### HOW TITLES ARE TAXED

The elevation of John Morley and Sir H. R. Fowler to the peerage is probably as pleasing to themselves as it is to their thousands of admirers, says Tit-bits, of London, but each of the gentlemen so honored will have to pay a fee of at least £200 for the privilege of adding the title of "Viscount" to his name, which is the cost of letters patent for a viscountcy of the United Kingdom.

For higher rank the fees amount to more. The new Duke of Devonshire, for instance, when he comes to take the necessary letters patent which will fully entitle him to his own will have to pay £350 for the same, in addition to paying away an immense fortune in the shape of death duties. If the change had been that of a marquessate the fee would have been £300. A newly made Earl pays £250, a Baron £150 and a Baronet £100.

These fees, however, are only part of the expense entailed by a man who is honored with a title. The cost of investiture, heraldry, etc., considerably augments the amount. It may be remembered that when Lord Roberts accepted his Earldom in 1901, and was subsequently given the Garter, he was presented with a bill for £1,750, which at first he strongly objected to pay.

To the average reader it will probably seem absurd that when such rewards for serving the country are granted the recipient should so suffer in pocket. It is not so bad nowadays, however, as in the time of James I., for instance, who mulcted his baronets pretty heavily for their privileges. They were obliged each to maintain thirty soldiers for defence purposes or pay into the Exchequer an equivalent sum, which amounted to £1,005 per year. Furthermore, to be qualified for the honor in those days one had to be a "gentleman born" and have a clear estate of £1,000 per annum.

### FOREIGN COMMENT ON THE BRITISH ARMY

The *Matin* and the *Echo de Paris* call attention to a statement attributed to one of the foreign military attaches in Rome—not the English one—as recorded by the military correspondent of the *Memento*, of Turin. It is an answer to the contention of a French newspaper that before transforming the Anglo-French entente into an alliance England must first increase her land forces. This military attaché contends, on the contrary, that England is now capable of rendering military assistance to France in the event of war. Although she has not an army as formidable as those of France and Germany, she could mobilize a force of some hundreds of thousands of men. Furthermore, her artillery and cavalry are excellent, her commissariat service is quite perfect, while her generals are at the present moment the only ones in Europe whose high military capacity has been tested on the field of battle. As to the contention that Great Britain has no army, the writer asks, "How was it that she sent 300,000 soldiers and 500 guns to the Transvaal? Is France or Germany capable of landing 50,000 men at a time on a foreign shore? Where could they find the necessary ships? He adds that in a Franco-German war the landing of 50,000 British troops on the Baltic coast would be of great advantage to France. The suggestion by the French newspaper that the German Army would be under the walls of Paris before the British naval squadron could reach the Baltic was equivalent to saying that France had no army. If the French army were not capable of arresting the advance of the German forces for ten days, then it would be England's turn to request the Republic to organize a good army.

### BOATS OF CONCRETE

A striking illustration of the applicability of concrete is to be found in the concrete boats and barges that have been built by a ship-building firm on the banks of the Tiber, at Rome, says Cement Age, New York. The method of construction is simple and the boats are quickly made, at less cost than the ordinary kind. They will stand very rough usage, are practically indestructible so far as the element of time is concerned and, of course, are fireproof. It is also said that the smooth surface of the cement finish offers less resistance than wood and that the bottoms do not foul easily or collect seaweed. Consequently they are easy to clean. In case of damage to any portion of the boat repairs are quickly and cheaply made with cement or concrete. A comparison of cost with steel barges has shown that the concrete boat can be constructed at half the cost of steel and that in the matter of maintenance the cost is about a fourth or third less. The "Liguria," a 150-ton concrete barge, was constructed by Messrs. Gabellini, the firm referred to, in 1905. Since January, 1906, she has been working in the harbor of Civita Vecchia, near Rome. In October, 1905, she was towed from Rome down the Tiber to the sea. She was also towed back again to Genoa and Civita Vecchia.

"Kiss me, my dear," said her husband in a thick tone of voice.

"It isn't necessary," replied the wife. "I can tell you've been drinking without that."—*Detroit Free Press.*

it. The gas leaked out below, and left a regular train of hydrogen in its path. She carried with her a sort of pyrotechnic aureole, suspended below her car by a wire, which she was to set off in the air. This she had done many times before. On this day she also carried up a small parachute ballasted by a firework contrivance, that would go off in a shower of silver.

She was to start this contrivance after having lighted it with a port fire made on purpose. She set out; the night was gloomy. At the moment of lighting her fireworks she was so imprudent as to pass the taper under the column of hydrogen which was leaking from the balloon. My eyes were fixed upon her. Suddenly, an unexpected gleam lit up the darkness. I thought she was preparing a surprise. The light flashed out, suddenly disappeared and reappeared, and gave the summit of the balloon the shape of an immense jet of lighted gas. This sinister glow shed itself over the boulevard, and the whole Montmartre quarter. Then I saw the unhappy woman rise, try twice to close the appendage of the balloon, so as to put out the fire, then sit down in her car, and try to guide her descent; for she did not fall. The combustion of the gas lasted for several minutes. The balloon, becoming gradually less, continued to descend, but it was not a fall. The wind blew from the northwest and drove it towards Paris. There were then some large gardens just by the house 16 Rue de Provence. Mme. Blanchard essayed to fall there without danger, but the balloon and the car struck the roof of the house with a slight shock. "Save me!" cried the wretched woman. I got into the street at this moment. The car slid long the roof and encountered an iron cramp. At this concussion Mme. Blanchard was thrown out of her car, and precipitated upon the pavement. She was killed!"

These stories froze me with horror. The unknown was standing with bare head, disheveled hair, haggard eyes!

There was no longer any illusion possible. I at last recognized the horrible truth. I was in the presence of a madman!

He threw out the rest of the ballast, and we must have now reached a height of at least 9,000 yards. Blood spurted from my nose and mouth.

"Who are nobler than the martyrs of science?" cried the lunatic. "They are canonized by posterity."

But I no longer heard him. He looked about him, and, bending down to my ear, muttered:

"And have you forgotten Zambecari's experience of the 7th of October, 1864? A frightful journey, was it not? But Zambecari was a brave and energetic man. Scarcely recovered from his sufferings, he resumed his ascensions."

"At last, on the 21st of September, 1872, he made another ascension at Boulogne. The balloon clung to a tree, and his lamp again set it on fire. Zambecari fell and was killed! And in presence of these facts we would still hesitate! No. The higher we go the more glorious will be our death!"

The balloon being now entirely relieved of ballast, and of all it contained, we were carried to an enormous height. It vibrated in the atmosphere. The least noise resounded in the vaults of heaven.

I saw my companion rise up before me. "The hour is come!" he said. "We must die. We are rejected of men. They despise us. Let us crush them!"

"Mercy!" I cried.

"Let us cut these cords! Let this car be abandoned in space. The attractive force will change its directions and we shall approach the sun!"

Despair galvanized me. I threw myself upon the madman, we struggled together and a terrible conflict took place. But I was thrown down, and while he held me under his knee the madman was cutting the cords of the car.

"One!" he cried.  
"My God!"  
"Two! Three!"

I made a superhuman effort, rose up, and violently repulsed the madman.

"Four!"  
The car fell, but I instinctively clung to the cords, and hoisted myself into the meshes of the netting.

The madman disappeared in space! The balloon was raised to an immeasurable height. A horrible cracking was heard. The gas, too much diluted, had burst the balloon. I shut my eyes—

Some instants after, a damp warmth revived me. I was in the midst of clouds on fire. The balloon turned over with dizzy velocity. Taken by the wind, it made a hundred leagues an hour in a horizontal course, the lightning flashing around it.

Meanwhile, my fall was not a very rapid one. When I opened my eyes I saw the country. I was two miles from the sea, and the tempest was driving me violently toward it, when an abrupt shock forced me to loosen my hold. My hands opened, a cord slipped swiftly between my fingers, and I found myself on the solid earth!

It was the cord of the anchor, which, sweeping along the surface of the ground, was caught in a crevice, and my balloon, unballasted for the last time, careered off to lose itself beyond the sea.

When I came to myself I was in bed in a peasant's cottage at Harderwick, a village of La Gueudre, fifteen leagues from Amsterdam, on the shores of the Zuyder-Zee.

A miracle had saved my life, but my voyage had been a series of imprudences, committed by a lunatic, and I had not been able to prevent them.

May this terrible narrative, though instructing those who read it, not discourage the explorers of the air.

## Experience of Captain of Tramp Steamer

NO greater heroism and devotion to duty was ever displayed than that of Captain Cremonini of the Italian tramp steamer *Jupiter*, which ran out of coal. The *Jupiter* sailed from Genoa, Italy, on February 3, 1901, for New York, loaded with brimstone and sulphur. She was one of the largest freight carriers, and her cargo was worth at least five hundred thousand dollars. For the sole reason that the salvage claim, due to whoever might be so fortunate as to pick her up disabled, would reach tremendous figures, Captain Cremonini would not abandon his ship after she had run out of coal and lay helpless in bad weather. With his chief engineer and steward he remained for forty fearful days and nights, deserted by his crew without fuel, and practically without food, facing death in every wave, heart-sick and despairing, yet twice refusing succor when succor meant the abandonment of the staunch but stricken vessel in his trust. The coincidence is singular from a mythological viewpoint, that the tramp steamer *Junio*, bound from West Hartlepool for Pensacola, should have been the one finally to pick up the *Jupiter* and tow her safely into Barbadoes.

"Why did you not leave your ship when your crew were taken off by the *Citra* di Messina on February 11?" asked the astonished skipper of the *Junio*, when he discovered the three famished wretches.

"Because," replied Cremonini, "you should know that the mere presence of the captain on board the *Jupiter* when taken in tow cuts the salvage claim one-half."

The question of the crew often becomes a serious problem before the tramp can finally weigh anchor. As a tramp seldom sees her

home port inside of three years, it is hardly to be expected that the sailors will remain content with her wandering lot during that entire period. On reaching the first port some of them drop out, and more at the next, so that after a year only the officers of the original complement remain. In consequence it is not at all unusual to see a tramp manned entirely by Chinese, and in some cases by Malays and Lascars, which the captain has been obliged to ship in the far east. It is a source of wonder to the layman that the officers, so comparatively few in number, will trust themselves at sea with these often desperate Asiatics; but they do not so regard it. The captain is absolute and supreme on his ship while on the high seas, and the English marine law is such that it practically gives him the right to take a human life to quell a mutiny. That the captains feel security in the knowledge of the power that they have a right to exercise was never better illustrated than in the case of the *Jane Burrell*, whose story has been permanently identified with the annals of Philadelphia's shipping. In this case Captain Robertson was practically alone at the head of a mutinous crew; but his supreme self-confidence allowed him to start on a six thousand mile voyage to the Argentine Republic, when through the refusal of the men to work he actually was obliged to have his ship towed into deep water.

The *Jane Burrell* had been a long time from her home port, and the crew imagined that they would return there from Philadelphia. There were general murmurings of discontent when it was learned that she had cleared for South America with a cargo of coal, with the prospects of going thence to

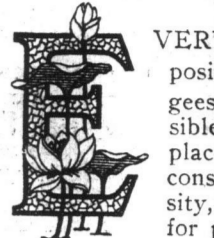
Java for sugar. At the Delaware Capes they refused duty, on the ground that the ship was leaking and unseaworthy. This being recognized complaint, the captain was obliged to arrange for a survey, with the result that no such condition was found to exist.

In the morning he ordered the ship to sea; but no response was given. The engine room force were loyal and at their posts; but the coal passers and firemen were numbered among the malcontents, and there was no steam. Captain Robertson then thoroughly illustrated his inborn ability to cope with a situation that, to say the least, was unpleasant. He signaled the tug *Ivanhoe*, which was at the capes after having towed a vessel down the river, to put a hawser aboard the *Jane Burrell*. As the sailors would not lend a hand to make this fast, it became necessary for the captain and his officers to attend to the duty. He then whistled for the *Ivanhoe* to tow the *Jane* to sea beyond the three-mile limit over which the United States claims jurisdiction.

"Make it seven miles," he shouted to the skipper of the tug, "and then cut me adrift. I know how to deal with these fellows."

When this was done and the *Jane* lay rolling aimlessly, with Cape Henlopen light far astern, Captain Robertson, a revolver in hand, addressed the men gathered forward in characteristic fashion: "My lads, you have been on the sea long enough to know that country, indicating with a wave of his hand the sand dunes on the Jersey coast, 'hasn't anything to do with this matter now. I've got you where I want you—on the high seas—where there is only one boss, and that is myself. I will give you three minutes by this watch, and every man that has not returned to his appointed

### WITH THE BREEDING A



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The larger the is about six inches and fed at the bo other semi-aquatic fertility of the egg member where th Have the utensils sufficient depth the entire heads. Ne result in sore eyes gander to four her ber of females m flock confined un be able to find a They drop them a dirty; simply wash coating. A good ers: "Steamed cut or barley chop, 23 grit, 5 parts; sra

This is fed in soft. A hundred require about 125 steamed clover (c and some whole c gels, tamps) etc) of green food to available pasturag hatching use a g depended upon—the ing to directions turers, air the egg be good, strong g all right. If you good, steady and depended upon to and above all kee in their natural st not take kindly them.

Do not feed t hours. If you b model that provi carry the heat at the first three day The first feed is a parts; sifted brn parts, clover mea Mix with hot wa four times a day tin plates. Wash Use above ration week replace mid one pound of bee to not less than 8 second week and ration: Cornmeal bran 10 parts, clo or scraps 5 parts, At six weeks b built a good fram pens and feed co equal parts. If to free range, decre more green food, market geese is j fledged; therefore flesh at that time. nicher than at any very healthy bird, goose is a dead, they are subject matism and appop dirty or wet quar almost exclusively by absence of sh guarded against.

At the beginn cheap food, and the subject will cooked or cut fin potatoes, cow be meat scraps car scraps. Geese ca chickens can.

The market po limited amount o the requirements and-must have to pasturage. It is some as much g recognizes seven Toulouse, Embled African, Canadian latter named two cannot be consid