

A SNAKE-EATING FROG.

Mr. C. F. Seiss, of Philadelphia, Pa., writes as follows: "It is a well known fact that many serpents subsist almost entirely upon frogs, but I never knew of frogs attempting to devour their common enemy, the snake, until I myself witnessed it. Last autumn I had in my vivarium a female shad frog (*rana halecina*, Kalm), a young bullfrog (*rana Catesbiana*, Shaw), and also two male marsh frogs (*rana palustris*, Le Conte). One morning I introduced to them a De Kay's brown snake (*Storeria Dekayi*, Holbrook). The bull and marsh frogs were much terrified at the appearance of the snake, and leaped wildly about, hiding at last under stones in corners as far removed from the snake as possible. Not so, however, with *halecina*. She did not, if I may use slang, 'scare worth a cent,' but looked upon the sudden appearance of the snake as a matter of course. The snake, happy at being released from the small dark box in which it had been confined, began moving about quite briskly. It at length crawled too near *halecina*, who with her tongue instantaneously seized it by the head, and began swallowing it with rapid gulps, until six inches of the snake had disappeared in her now distended abdomen. At this moment the snake had the appearance of an immense tongue, which the frog slashing about most energetically. Not wishing to lose the snake, it being the most valuable of the two reptiles, I endeavored to force the frog to part with the snake, by tapping her smartly with my lead pencil. This had not, however, the desired effect, but I was forced to grasp the frog in one hand, and the snake in the other, and thus draw the snake from its unpleasant situation. The snake acted as if partially blind or bewildered after its removal, but otherwise seemed none the worse for its five minute trip around the frog's stomach. *Halecina* made two more attempts to swallow her fellow prisoner the snake; both times she was caught in the act and frustrated, and it is without doubt, she would at length have succeeded, had I not adopted precautionary measures. The above-mentioned snake was twelve inches in length, and the frog, from nose to vent, two and a half inches. Previously, this same frog had swallowed a live brown Triton (*desmognathus fusca*, Rafinesque), over three inches long. I will presume the frog mused thus: 'I will be compassionate toward you, poor Triton, and end your sorrowful longing for liberty'—and swallowed him!"

A BEAUTIFUL FERN.

The *Gleichenia dicarpa*, which we illustrate herewith, is an exquisite fern of the natural order *polypodaceae*. It is, we believe, a native of New Zealand; and it is a highly ornamental addition to the shrubbery and the fern house. It is of a rich, dark green color, the spores being brownish yellow. It grows well and flourishes in a peaty or loamy soil. It can be easily propagated by divisions of the roots. Botanists recognize as many as eight sub-orders of ferns, the *polypodaceae* being known as the true ferns. This class includes the great majority of those with which we are familiar in the wild state or under cultivation. As many as 3,000 different species of ferns have been enumerated. In the earlier geological ages, ferns formed an important part of the vegetation, as may be seen by studying the coal formations; and they are found in our days in all parts of the world. One peculiarity of the genus is that many species flourish best when secluded from the air; and for this reason the Wardian case was designed especially for their cultivation, and has become one of the most popular and beautiful of household ornaments.

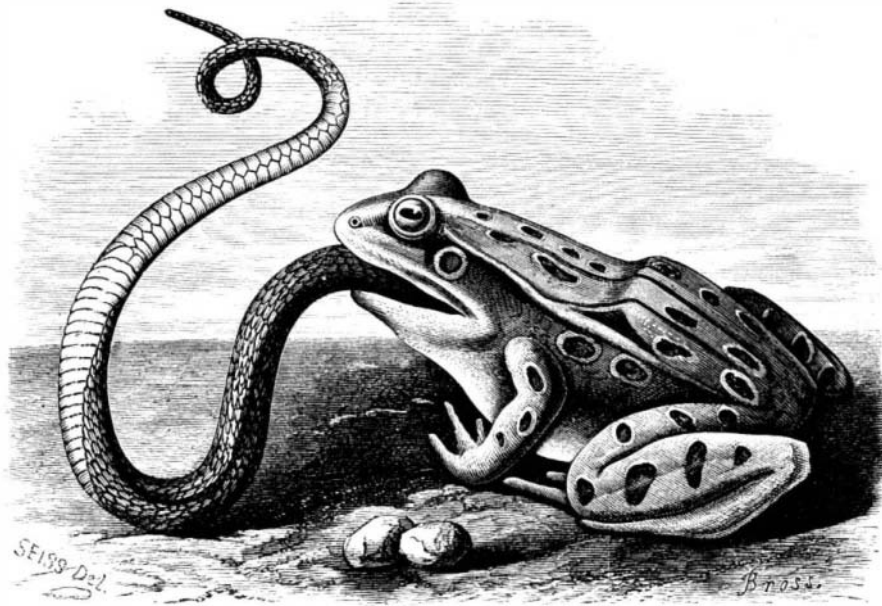
Purification and Uses of Petroleum.

M. Masson, druggist, of Lyons, France, has succeeded in removing the disagreeable odor of petroleum by the following process: Into a vessel containing 225 lbs. of petroleum are separately introduced, by means of a long funnel, 2 ozs. each of sulphuric and nitric acid, and 1.1 lbs. of stronger alcohol are carefully poured upon the surface of the petroleum. The alcohol gradually sinks to the bottom, and when coming into contact with the acids heat is developed and some effervescence takes place, but not in proportion to the quantity of the liquids. Ethereal products of a very agreeable odor are formed, and the substances thus treated acquire an analogous odor, at the same time becoming yellowish in color. The operation lasts about an hour, after which the liquids are thoroughly agitated for some minutes with water, and after resting for eight or ten hours the purified petroleum is drawn off. The lower stratum, which is a mixture of the acids, water, and alcohol, may be used for deodorizing the heavy oils of petroleum, by agitating them well for twenty minutes, and, after twelve hours' washing the oil twice with milk of lime, to remove the free acids. It will then have the same, but a weaker odor, as the light petroleum first treated, and answers well for lubricating purposes. Petroleum thus purified may be used in pharmacy for

many purposes. All the tinctures for external use may be prepared with it, like the tincture of arnica, alkanet and camphor; it may be used for dissolving ether and chloroform, like alcohol, and, combined with fats or glycerin, promises to be of great utility in the treatment of skin diseases, etc. The alcohol used in pharmacy might be replaced by this purified petroleum.—*Répertoire de Pharmacie.*

Woodpeckers.

N. O. says, regarding a statement that woodpeckers never make incisions in the bark of trees for the purpose of sucking the sap, that woodpeckers proper, as well as a species

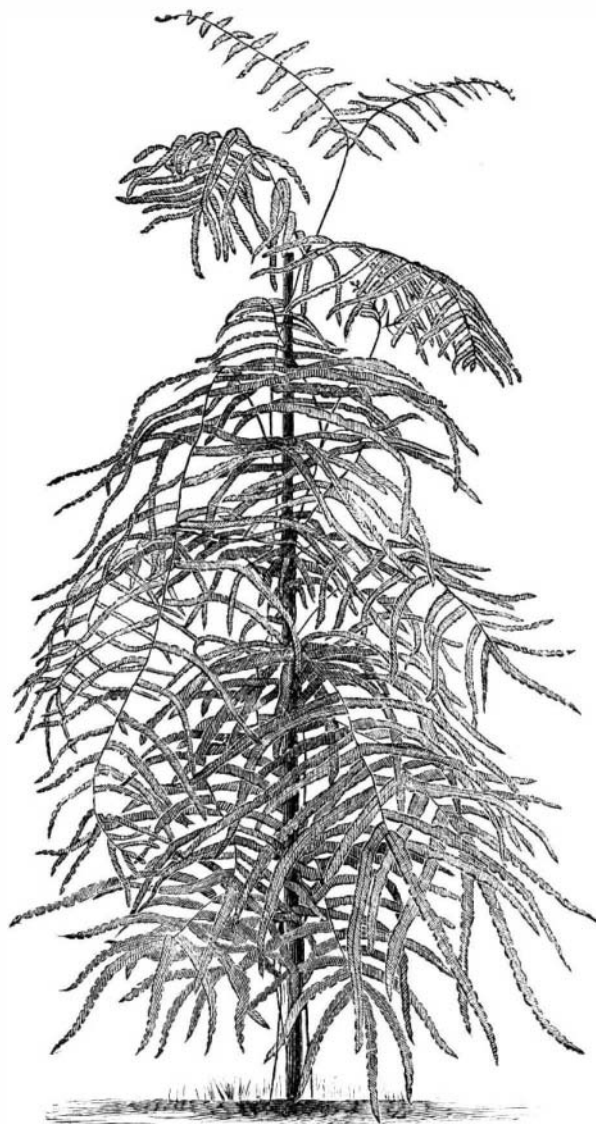


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called sapsuckers, tap beech, cherry, wild cherry, sugar maple, and almost all smooth-barked trees. They bore holes $\frac{1}{8}$ or $\frac{1}{4}$ inch apart, horizontally, round the tree or its limbs; these holes are an inch deep sometimes, as many as 50 having been seen in a row.

A Disastrous Launching.

A disaster which resulted in the killing of six men and the wounding of several others occurred during the launch of the iron steamship *Saratoga*, at Mr. John Roach's shipyard, in Chester, Pa. The men were engaged in knocking the blocks from under the keel of the vessel, and failed to hear the warning to come out, when the ship began to move. Before they could escape, they were caught among the timbers and terribly mangled as the vessel passed over them. Mr. Roach has launched some forty ships, and hitherto without accident.



GLEICHENIA DICARPA.

A Museum for Working Men.

Mr. Ruskin has opened near Sheffield, England, a museum for working men. It is the first school established under the St. George's Company for the working men and laborers of England, to whom the *Fors Clavigera* is inscribed; and as soon as he had selected the site Mr. Ruskin called some of the Sheffield men together and explained to them the reasons of his choice. He was well pleased with the workmen, spoke to them in the most familiar and friendly strain, and remarked that he had come to learn and not to teach. Having found they appreciated the boon he was about to confer upon them, he has sent to the museum many rare and interesting objects. On his paying a second visit to Sheffield, several working men who had embraced the doctrine of Robert Owen were anxious to obtain an interview with him, especially as he was reputed to be of an exceedingly amiable and affable disposition, and to hear his opinion as to the feasibility of establishing a co-operative village, consisting of houses, works, dining and lecture hall, library, etc., and surrounded with plenty of fresh air and pure water. Out of the funds of St. George's Company he has now purchased at Abbeydale, Sheffield, a beautiful estate of thirteen acres, at a cost of altogether \$11,000, and has expressed his willingness to accept his co-operative friends as tenants until the annual interest they may contribute shall have cleared off the capital; that the estate is to be known as Equality Country, that twelve families have united in the undertaking, and that all their earnings will be thrown into a common stock, are matters of surprise to those who have taken a leading part in the movement. At most two families will live on the estate until it is known that the scheme is a success, the object of its promoters being simply

to carry on the boot and shoe making trade on co-operating principles, in antagonism to the modern system of producing, by means of machinery, cheap and nasty goods; and if in this they succeed, they may gradually increase the number of their dwellings and form the whole into a co-operative village. The garden produce will be simply to meet their own requirements; but in whatever direction they may extend their present programme, Mr. Ruskin has not been asked to furnish them with the requisite means to carry out the movement.

Professor Bell's Talking Telephone.

A correspondent asks: "Do you think that the telephone will take the place of the telegraph now in use?" As this question is one which a great many are now asking, we would say that we do not. It may perhaps supersede the Morse system to some extent for private lines and the like, and, possibly, may be utilized somewhat in forwarding press reports; but for regular commercial telegraphing, it does not appear to us to possess, as it now stands, any advantages. In the first place, messages would require to be taken down in short hand by the receiving operator, and afterward copied in long hand; and we all know the liability to error, not to speak of the great delay of such a system. Then, again, while "Auld Lang Syne," "Home Sweet Home," or anything with which we are perfectly familiar, could be very easily recognized, it is questionable if regular messages could be "telegraphed" without serious errors occurring. It is very much like talking through the little toy "lovers' telegraph," or an ordinary speaking tube. If great care is taken to speak slowly and distinctly, and you have an idea of what is coming, you can generally make out enough to understand what a person is talking about. But it seems to us that nobody would care to trust important messages, sometimes involving life and death, or thousands of dollars, to being sent in this manner. We chronicled, issue before last, a ludicrous mistake made in just this way. A reporter telegraphed over the police wires to the editor of a Brooklyn paper that he was at the lunatic asylum, where he had gone on business, and could not get back in time for the afternoon edition. The sergeant told a policeman to step around to the newspaper office and inform the editor that Koselowski (the reporter) was at the lunatic asylum. The policeman misunderstood the message, and reported to the editor that Cardinal McCloskey was insane, and had been removed to the lunatic asylum. It is not too much to expect that just such mistakes would constantly occur were the telephone in use for commercial telegraphy. For the above reasons we do not think that telegraphers need have any fears about the telephone usurping, to any great extent, the place of the system handed down to them by Professor Morse.—*The Operator.*

On Dyeing with Aloes.

To prepare the coloring matter of aloes we introduce gradually 10 parts of this resin in 60 parts of nitric acid heated in a water bath. When the disengagement of gas is slackened, we evaporate the yellow solution at first in the sand bath, then in a water bath, and we redissolve the residue in water, which precipitates the