

informed by those interested in keeping him in ignorance, and when a paper like "The Farmer's Advocate" disregarding financial loss and risk, is able and willing to enter the lists in his cause it has every reason to expect his support.

Lambton Co., Ont. "RUSSELL PHILLIPS.

[Our correspondent's explanations are true, but do not conflict, really, with our own, which were technically correct. Some further light is thrown on bank profits by an editorial in last issue, (May 8th.)—Editor.]

A Conscientious Bank Commission Needed.

Editor "The Farmer's Advocate."

In the April 17th. issue of "The Farmer's Advocate" an expression of opinion was invited as to the desirability of having a Banking Board of Commissioners. I may say I am favorable to a Government-appointed Board of competent men with a keen conscientious sense of duty, possessing all the powers of inspection and audit, to whom the various banks shall report yearly, and at any other time upon any specified matter desired by the Board. The Board should report from time to time to the Government and at any other time when requisitioned to do so, on all matters pertaining to the peoples interest and the requirements of the Government. A Board thus constituted should be an absolute protection to the depositor, and a safeguard to the shareholder as well. Mr. McLeod's suggestion of a salary is a staggering one, namely, two and one-half times the Premier's. We are of the opinion a great deal less would secure a better man sufficiently competent and possessing a conscience, which, you will admit, Mr. Editor, is a very important factor in the make-up of a good auditor. When all is said and done the powers which charter and govern should also protect and secure the absolute safety of deposits. I have little sympathy with any movement to secure easier methods of obtaining money for farmers loans, but would favor lower rates if possible. But the banks should not slacken one iota the strict compliance with furnishing satisfactory security. For legitimate enterprise every facility should be afforded where the bank has the proper security for the loan. The speculating borrower should not be encouraged. He is the plague of the period.

Huron Co., Ont.

M. LOCKHART.

Nature's Diary.

By A. B. Klugh, M. A.

The voice of the "spring peeper" is now heard in the land. It comes from low, marshy ground, in the open, from pools in the woods and from the "willow swales." These piping notes are commonly believed to be the voices of frogs, which is right, but because of the strength of the notes they are thought to come from the mouths of large frogs, which is wrong. The "spring peeper" is a tiny tree-frog, from three-quarters to one and a quarter inches in length. Its color varies from light fawn to dark brown or ashy-gray. It has a V-shaped dark mark between the eyes and an oblique cross on the back. The under-parts are light in color, and in the male the throat is brown. The fingers and toes have broad disks at their tips. These disks secrete a sticky substance which enables the tree-frog to cling to such smooth vertical surfaces as window panes.

Pickering's Hyla (or Hyla Pickeringii) which is the name of the "spring peeper" is found in and around water in the spring, for it is then the eggs are laid. The eggs are fastened, either single or in little groups, to plants in the water. They are one-twelfth of an inch in diameter, the upper portion being dark brown and the lower creamy-white. The tadpoles hatch in from six to twelve days, depending upon the temperature, and are full-grown in from six to seven weeks after hatching. Even while the tail is still long the tadpoles may leave the water. By the end of June their tails are usually completely absorbed and the young Hylas leave the water permanently. During July, August, September and October, Pickering's Hyla is to be found in the woods and occasionally utters its piping note.

As is the case with many frogs, and other amphibians, this species can assume numerous colors. At one time an individual may be light yellowish fawn and an hour later it may be dark brown or reddish-brown.

When Pickering's Hyla is calling it distends its throat into a large transparent sac, about one-half the size of its head and body together.

About the end of October this tree-frog hibernates under leaves or moss, to awaken the next March and become again the "Spring Peepers."

Some of our earliest spring flowers are now in bloom. Among these are the "Pussy-willows." These attractive objects are the catkins of the Glaucous Willow (Salix discolor). The "Pus-

sies" are of two kinds "Green Pussies" and "Yellow Pussies." The green ones are the catkins of pistillate flowers or flowers containing pistils only, the yellow ones are the staminate catkins or flowers containing stamens only.

The pistil is that part of the flower which has to do with the bearing of seed. Its main part is the ovary, which contains the ovules, which in turn contain the egg-cell. The pistil of the "Pussy Willow" is shown in Fig. 4; and in Fig. 5, as cut in half showing the ovules within. At the top of the ovary (in most flowers at the end of a stalk called the style) is the stigma. The surface of the stigma is sticky, so that pollen grains falling on it adhere to it.

The stamen is that part of the flower which produces the pollen. It consists of two parts, the anther, which contains the pollen-grains, and the stalk or filament. The stamens of the "Pussy Willow" are shown in Fig. 6.

The pollen-grain on reaching the stigma germinates and sends down a tube to the egg-cell

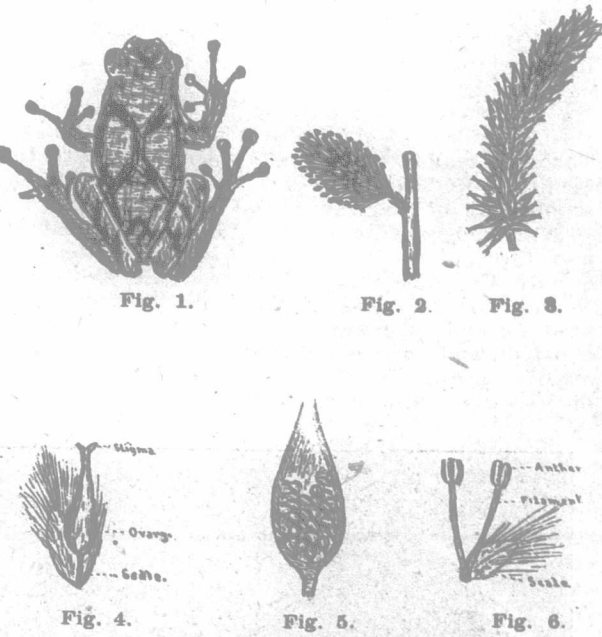


Fig. 1.—The Spring Peeper Hyla pickeringii.
Fig. 2.—Staminate Catkin of Willow.
Fig. 3.—Pistillate Catkin of Willow.
Fig. 4.—Pistil of Willow.
Fig. 5.—Ovary of Willow, containing ovules.
Fig. 6.—Stamens of Willow.

within the ovule, and down this tube two nuclei pass. One of these fertilizes the egg-cell and the ovule then becomes a seed.

In many plants the pistils and stamens are borne in the same flower; in the willows they are in different flowers.

The pistils and stamens are the essential parts of the flower, as we can see from the above description of their functions. They may be accompanied only by a sepal, as in the willow, or surrounded by brightly colored petals and green sepals as in many flowers.

New Pests.

By Peter McArthur.

This is a wonderful year for seedlings in the wood-lot. It seems as if every seed that fell last fall had sprouted. The ground is matted with young maples, and judging from the way the cattle attack them where they are growing in the pasture field by the woods, they must be good eating. They look so appetizing I imagine they would make better greens than nettles or dandelions, but I am afraid I would get into trouble if I suggested trying a mess of them. Still some brave man must have been the first to try each of the other herbs and vegetables we eat. But perhaps he was forced to it through hunger and was willing to take a chance. I guess I'll restrain myself for I do not feel like taking any chances with a digestive system, that is not what it used to be. But if I wanted to try a mess of tender young seedlings I wouldn't need to go to the woods for them. The culls that were left to rot in the orchard offer a bountiful crop, and under the crab-apple tree they are growing "as thick as they can stick." I am glad that the seedlings are coming up so plentifully in the woods, for now that the cattle are kept out they should have a chance to grow.

The orchard is proving to be unusually interesting this year. It has an entirely new crop of pests that are making trouble for me. The kerosene emulsion with which I soused the buds last week, did not have much effect on the aphids, though it was made and applied according to directions. The bulletins on orcharding do not say much about the aphids, but my own observa-

tion shows me that they are harmful. They get in between the stems in the blossom clusters where it is almost impossible to get at them with the spray. When they are plentiful the stems appear to soften and slough off, and even when they do not destroy the stems, they seem to weaken them so that the blossoms do not spring apart as they do under normal conditions. They remain glued together, as when the blossom buds first appear. After the blossoms began to open the aphids marched out on the petals, so that many of the blossoms are speckled with the little green pests. They have attacked the Spies more than the other trees, and the tree on which I noticed them last year, is affected the worst. I also see on the leaves and blossoms little drops of what I suppose is the "honey-dew" said to be secreted by the aphids, but I have not tasted it. If I did, in my present exasperated state of mind, I might share the fate of Kubla Khan of whom Coleridge wrote.

"Beware! Beware!
His flashing eyes, his floating hair!
Weave a circle round him thrice,
And close your eyes with holy dread
For he on honey-dew hath fed,
And drank the milk of Paradise."

But the aphids are not my only trouble. Something is pasturing on the blossoms at night and eating them clean as far as they go. I am told it is the June bugs, but I have not been able to find any of them at work, though the air is alive with them, every night after sunset. Anyway, whatever is eating the blossoms makes a thorough job of it. Everything is eaten right down to the stem, destroying any chances of apples from the blossoms that are attacked. As yet only a few of the earlier trees are in bloom, and it is impossible to say how much damage is likely to be done. As the blossoms must have considerable poison clinging to them since the spraying with lime, sulphur and arsenate of lead I have no doubt that the eaters have been killed, but that is no satisfaction to me if they manage to destroy the blossoms. One consolation is that the trees are so covered with blossoms, that there may be enough for all of us.

This letter must stop right here. Word has just come that the apple and cherry trees we ordered arrived this morning, and not a minute is to be lost in going after them. The message is that they "are as dry as a bone." Between apples and cherries, there are two hundred and fifty trees, and I am worried about them. It is twelve days since they were shipped from Welland and the weather has been very hot. They must have come at the rate of about half a mile an hour. I don't know, but that does not strike me as very wonderful service on the part of the railroads in handling perishable freight. I wonder if I should accept the delivery, if the trees are so dried out that there will be no chance of them growing. Other people in the neighborhood have been refusing to accept trees for this reason. But there is no use crossing bridges before I come to them. I shall wait till I have a look at the trees at the station and then I shall consult an experienced orchardist whom I can reach by telephone.

HORSES.

Keep salt in the horse pasture.

Commence handling the colt from the time of his birth.

If possible do not use the stallion which is over worked.

The working horse should be kept stabled nights for some time yet.

Good jumpers over the hurdles are about as good "thrillers" as one could wish.

Have you returned the mare which is nursing a foal to the stallion? Do not be satisfied with one colt; keep her breeding.

Do not let the young colt remain out in a drenching rain until he is, at least, a few weeks of age, and he is better inside even at a few months of age if a long, cold downpour ensues.

Fancy high steppers were not as much in evidence at this year's Toronto Horse Show as at those of former years. Not a Hackney stallion came out. The high stepper has been hardest hit by the automobile, yet some of the best individuals ever seen in harness were forward.

A prominent business man, who has a large number of orders to deliver daily over all kinds