

Keeping them in a warm room, we expect to see a saw-fly, one of the hymenoptera, emerge from each, before next spring. The insect is very probably *Nematus Erichsonii* (Hartig), "The Larch Saw-Fly." This insect was first seen in America, near Boston, in 1880. In South Quebec in 1882. Later in Maine and New Brunswick, where very extensive damage has been done to the larch forests. James Fletcher, Dominion entomologist, has given very full notes of its depredations since its appearance, in his annual reports. Your observation is, we think, the first published notice of the occurrence of *Nematus Erichsonii* in Nova Scotia.

J. R.—At a meeting of our literary society, the enclosed paper was found in the "question drawer." Kindly give required explanation in next issue of REVIEW: "Explain why spring water will not freeze as readily as rain water; and also why will it not mix with rain water—as we sometimes see in the rivers what is termed storge ice; and further, is the so-called storge ice caused by the different kinds of water not mixing?"

1. Rainwater being naturally distilled is nearly free from salts of any kind, except such as may be floating in the atmosphere. Spring water contains salts in solution, and therefore tends to freeze at a lower temperature. Sea water freezes from 4° to 5° Fah. lower than pure water; and when a small portion is frozen, the ice is found to be nearly pure water, while the unfrozen portion is a saturated solution of the marine salts. When mixed, alcohol and water is reduced to a low temperature—the water freezes first while the alcohol is separated.

2. It takes some time for liquids to mix with each other, unless by mechanical or other means currents between each are set up. In rivers two different bands of water may move to a great distance before molecular diffusion at the stratum of union causes the two bands to be fully mixed. Molecular diffusion is comparatively a slow process.

3. We have never before seen the word "storge" used with your meaning or in reference to ice; and we would be glad to know where and to what extent the word is so used. What is "storge" ice? "Shell" ice is generally caused by the surface of water freezing, and the remaining water draining away and being replaced by air, or possibly in some cases, by gas. If tide water overflowed a sheet of ice, we would expect an upper sheet of ice to be formed, separated from the lower by a thin layer of saturated unfrozen water which might partially drain away at low tide and be replaced by air.

J. M. S., CHARLOTTETOWN. No. 1. *Aspidium spinulosum*, var. *Boottii*, Tucker. 2. *Pteris aquil-*

ina, L. 3. *Osmunda cinnamomea*, L. (sterile frond). 4. *Aspidium thelypteris*, Swartz (sterile frond). 5. *Phegopteris dryopteris*, Feé. Additional: *Aspidium spinulosum*, var. B. (two or three fronds), and *Dicksonia punctilobula*, Kunze (sterile frond).

B. E. D., HAMPTON. Your specimen is *Dicentra cucullaria*, D. C., generally called *Dutchman's Breeches*, and belongs to the Fumitory family.

R. M. S., MAITLAND. Your specimens are as follows: 1. *Osmorrhiza brevistylis*, D. C. (Hairy Sweet Cicely). 2. *Botrychium Virginicum*, Swartz (Virginian grape fern). 3. Fern frond *infertile*. 4. *Panicum crus-galli*, L. (Barn-yard Grass). 5. *Phegopteris dryopteris*, Feé, (Oak Fern). 6. *Carex pallescens*, L. 7. *Carex* —? 8. *Carex* —? (Sp. of seven and eight too fragmentary for specific determination, as is also 12). 9. *Scirpus eriophorum*, Michx. 10. *Hypnum splendens* (Splendid Feather Moss). 11. *Poa serotina*, Ehr. (False Red-top). 12. *Carex* —? 13. *Xyleborus dispar*, Fabr. (Pin-borer, Shot-borer). This is a small beetle about an eighth of an inch in length which bores small round holes into the trunks and branches of apple trees in the western part of the province. The history of this specimen is given as follows: "No. 13 is from an apple tree about eight years old, and six inches diameter at trunk. It leaved out well; blossoms appeared; but soon all the leaves and blossoms began to wilt, and eventually the tree died. It was cut down this morning (August 9th); and from ten to fifteen insects or their holes were found in it near the ground. Being small, the holes could not be easily found on the bark, which left the roots. The soil was low, but dry and gravelly." Two live beetles were found in the small block of wood transmitted.

WM. M. G., MUSQUODOBOIT. No. 1., *Cornus stolonifera*, Michx. (Red-osier Dogwood). 2. *Monotropa uniflora*, L. (Indian pipe or Ghost-plant). 3. *Arctia saundersii*, Grote. This is a very pretty moth. The larva is a hairy caterpillar, nearly related to those called the "woolly bears."

BOOK REVIEWS.

BRIEF VIEWS OF UNITED STATES HISTORY, for the use of high schools and academies, by Anna M. Juliard, principal of high school, Whitehall, N. Y. (Syracuse, N. Y., C. W. Bardeen, publisher, 1888).

This little book of some seventy pages is in capital form for proper history teaching. Chronological and topical skeletons are given which the teacher should be able to clothe in the vestments of living history. The Yankee genius comes out however, so strongly even in this skeleton, that for instance, the history of the war of 1812 is simply a