out how this typical segment and its appendages is modified for different purposes.

Describe the respiratory system of the grasshopper and compare it with

that of the spider.

4. Explain the difference between the vertebrates and invertebrates.

- 5. Describe the typical anterior limb of a vertebrate and show how it is modified in different animals.
- 6. Describe the structure of the heart in a fish and point out how its structure increases in complexity in the different divisions of the vertebrates.
- 7. Describe the brain of a frog and compare its structure with that of the brain of man.
- 8. Describe the vertebrate eye and show by a diagram how an image of an object is thrown on the retina.
- 9. Point out the structural peculiarities of birds which adapt them to their method of locomotion.
- ro. Outline a classification of the fishes and assign to their proper places in it the perch, pike, pickerel, brook trout, lake salmon, sturgeon; garpike, black bass, sunfish, eel, sucker and whitefish

## II.

## ODD BOTANICAL SPECIMENS.

The writer recently had a peculiar specimen of a trillium grandiflorum brought to his attention. The specimen was devoid of the whorl of cauline leaves so characteristic of the genus, and the outer set of leaves of the perianth was much larger than is usual in such plants. The inner set of leaves of the perianth was green except for a few white spots around the margin. The andrœcium was combosed of nine stamens of which the inner circle was made up of larger stamens than those of the two outer As far as could be ascercircles. tained the plant was without a pistil,

but it is quite possible that this last observation is incorrect as the specimen was not in good condition for an accurate examination. Another monstrocity to which the attention of the writer was recently directed was a specimen of the Indian turnip. peculiarity in this case consisted of a double spathe. The inner spathe was the same as that ordinarily found on this plant, the other was similar as far as color is concerned, but differed considerably in form, being more of the form of a foliage leaf and thinner than the spathe usually is. situated at the same height on the stem as the spathe and on the opposite side. It was not bent in the manner peculiar to the spathe of this plant.

## EXAMINATION PAPERS IN WENTWORTH PUBLIC SOHOOLS, APRIL 1896.

ENTRANCE TO JUNIOR FOURTH CLASS.

## COMPOSITION.

1. Write a letter to a friend in Hamilton describing a ramble through the woods in spring time, telling what you saw, what you heard, and any incidents of the trip. (20)

2. Combine the following into (1) a simple sentence, (2) a complex

sentence:

(a) The boy fell. The boy was little. It was a ditch he fell into. The ditch was dry. It was this

morning that he fell in.

(b) King Midas had grown quite an old man. King Midas used to take Marygold's children on his knee. King Midas was fond of telling them this marvellous story. He told this story pretty much as I have told it to you. (20)