

fear, to give vent to emotions for which we cannot account. We have no reason why we do these things—things perhaps we often regret after the occasion has passed—we can only classify them as instinct. It is undoubted that a child is entirely governed by stimuli up to a certain stage in its life—until the dawn of reason gradually breaks and we get development from the animal to the human plane.

In closing I would just like to draw attention to similar conditions in the plant world. Compare an animal, a child just born, for instance, in a darkened room with but one window, with a plant growing in a darkened place with but one loophole of light. Both turn instinctively to the light. In the former the reason implies a nervous system, but in the latter we are taught it is a purely mechanical process. And yet there is a similarity. Again, Huxley informs us that a frog, from which the brain has been removed, will retain its centre of gravity even when revolved. Compare this frog with a plant placed in an inverted position, with the root upwards and the stem downwards. If growth continues this plant will right itself and will grow normally. This cannot be explained, yet the fact remains that there is a similarity between the frog and the plant. And so on, we could find similar instances of comparison which only serve to show the great complexity of nature, and the uniformity of all things.

In such a short article, such instances as I have recorded open up a great field of conjecture; and, I for one, would be greatly interested to read accounts in this magazine of recorded observations which tend to illustrate the difference between animal instinct and reason.

#### PRELIMINARY LIST OF THE CRATÆGI OF THE OTTAWA DISTRICT.

By HERBERT GROH.

Encouraged by the results which have attended the closer study of the Hawthorns in other parts of Eastern North America, and knowing that no such study had been made, as yet, at Ottawa, I was led, in the spring of 1909, to undertake systematically the collecting of material for this purpose.

For my first attention I chose the section of country reaching southward from the city to the Rideau River, and lying, roughly, between Bank Street on the east, and the Experimental Farm and the Hog's Back locks on the west. While not confining my work to these limits, I endeavoured to cover this area with some degree of thoroughness.