## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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JOHN WELD, MANAGER.

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is published every Thursday.

It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.

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due to storms or lack of rain or drought or intense heat, but with the man whose land is in a good state of fertility, is well fertilized and judiciously tilled, and grows the proper rotation of crops, these losses are of minor importance Is the blame not generally upon methods over which we have control rather than upon the ele-

G. K. Chesterton, a brilliant English writer, deplores the decay of patriotism in England which he attributes to absorption in trade, physical force and frivolous things and to the neglect of any serious teaching in the schools of the surpassing achievements of Great Britain in literature, science, philosophy and political eloquence. Boys are kept from the vast heritage of intellectual glory and are "left to live and die in the duel and infantile type of patriotism which they learned from a box of tin soldiers."

It is now suggested that dreadnoughts are out of date and that no more should be built, the next fighting machine in order being a formidable form of air craft. The people would like to know which is the cheaper form of making millionaires of manufacturers of munitions of war. If the dreadnought goes let the whole race for increased armament go. As long as it exists the country will have to pay with men and money, and expenses with an aerial fleet are not likely to be much lower than with the dreadnoughts of the present time.

Whether it was the suddenness with which the heat of an election campaign came or due to the warm sessions held by the A. B. C. meditators at Niagara, or whether it was just a natural occurrence, summer came in all its withering, wilting glory early last week. With a few showers occasionally this heat should cause a tapul growth of crops.

#### Plant a Woodlot.

In last week's issue we gave a short account of the work of the Forest Station at St. Williams, Ont., from which were sent out this spring over 400,000 trees to be planted as forest for the future. This is a great work, and farmers generally as well as men and companies, owning large areas of rough land, should co-operate to replace the fine forest areas which formerly grew in this country, and many of which were ruthlessly destroyed to make way for wheat and hay. Reforestation is something in which we are all interested. Every farmer should have a woodlot. He has the land and he can get the trees for the asking. All that is left for him to do is to plant and protect them from his live stock. Just think what trees mean to the farm and to the country. We must have shade, moisture well and evenly distributed, and lumber for economic purposes. Trees furnish all. It is estimated that the lumber crop of the United States will be exhausted by 1930, and the lumber harvest is going on over there at three times the natural rate of growth. Canada's supply is going. More merchantable lumber is burned in Canada each year than is cut. Not only should exploitation of our remaining areas of standing timber be guarded against but more should be planted. The individual can help greatly by a small plantation on his own place. Forest trees may soon be more valuable on your land than apple trees. Try them.

#### Nature's Diary.

A. B. Klugh, M.A.

There is a group of animals which are looked upon by the public with an animosity and a horror which the characteristics of their Canadian representatives are far from warranting. I refer to the snakes. We find that any snakes and all snakes are classed together in the popular mind as dangerous reptiles to be killed by whoever is brave enough to risk so desperate an encounter. The sight of a full-grown man armed with a formidable club, struggling heroically against a little green snake about a foot in length is one calculated to inspire one with an immense pride in the human race. Especially when one realizes that this little snake finds difficulty in attacking a form the size of a large grasshopper. How are we to account for this almost universal hatred of snakes? It seems to me that the Biblical account of "the old Serpent" has something to do with it, and also the fact that most of the literature on snakes deals with foreign species and more with particularly venomous far as our Canadian snakes are concerned,-there is no part of the Dominion in which more than one venomous species is found, and there are only four venomous species in the whole of Canada, all of them being Rattlesnakes. As far as the East is concerned the two species which oca cur there are extremely rare, and their "bite" has in no case proved fatal. While the Rattlers of the southern portions of Western Canada are more numerous and are larger, they are far from being the menace to human life which they are commonly represented to be. Not only are all our common snakes perfectly harmless as far as man is concerned but many of them are largely insectivorous and therefore of great service to the

The reports of the deadly Copperhead being killed in Canada which appear from time to time in the press, are like all newspaper natural history, entirely erroneous. The snake which is taken for a Copperhead is either the Little Brown. Snake or DeKay's Brown Snake, two species which are insectivorous and entirely harmless. Both of these snakes are less than a foot in length, and any brown above. The Little Brown Snake has a brilliant red abdomen and DeKay's Snake a pink abdomen. Both are viviparous, that is, they produce their young alive, the former having from twelve to twenty young in a brood and the latter from eight to twelve. So small are these youngsters that one could coil up on a dime and leave a good margin all around.

The beautiful little Green Snake is another species which is insectivorous and consequently beneficial. It is from a foot to fifteen inches in length, of a uniform pale green above and greenish white beneath. It feeds upon grasshoppers. crickets, spiders, and is particularly partial to the larvae of leetles and moths. It usually frequents rather open situations, travelling about in the grass and into bushes. It is sometimes found coiled about vines where its green body so blends with the color of the stems that it is seen only with difficulty. It is one of the gentlest of the

snakes and will submit to the most vigorous handling, even when freshly captured, without showing the least sign of anger. It is an oviparous species, and its eggs are deposited under flat stones. The eggs are elongate in form and have a very thin integument. About a dozen eggs is the maximum number deposited. The young on hatching are dark olive above and greenish-white beneath.

One of our very common snakes is the Garter Snake. This species is, when full-grown, from twenty-eight to thirty-six inches in length. It has three yellow or pale greenish stripes on a ground color of olive, brownish or black.

The Garter Snake is one of the first snakes to appear in the spring, and one of the last to hibernate in the fall. It frequently emerges from its winter quarters, which are usually in burrows in soft soil on a slope that faces south, or in rocky ledges where there are numerous fissures, before all the snow has melted. In the fall the snakes congregate in large numbers in suitable situations. Here they sun themselves during the middle of the day, and retire into their burrows at night. As the nights become colder their basking periods during the day are shortened and finally, after the first severe frost, they remain below ground for the winter. The Garter Snake is a viviparous species and produces large broods of living young, which may number as high as fifty. The young are usually born in August, and shift for themselves at once, feeding almost exclusively upon earthworms. They become mature in about a year, and they breed during the following spring.

As the Garter Snake feeds mainly upon frogs, toads, and earthworms, it cannot be classed as an economically beneficial species, but except for the toad item on its menu it is harmless, and it is certainly not at all dangerous to man. My late friend Norman Beattie was fond of demonstrating this by teasing Garter Snakes until they bit his finger, the result being some tiny needle like punctures which soon healed.

# THE HORSE.

### Indigestion in Horses.---V.

IMPACTION OF THE COLON.

Horses over-abundantly fed, or fed upon food containing large quantities of indigestible or woody fibre, as over-ripe hay, are liable to suffer from an accumulation of such matter in any part of the large intestine, especially in the large colon. This condition is not uncommon in horses whose ration has been changed from hay to straw. It may also be due to a weakness of the digestive organs, or partial inactivity of their glands want of exercise, or any sudden change of food. It is not uncommon in horses that do not thoroughly masticate their food, due to greedy ing, irregularities or disease of teeth or other causes. It may be due to a diseased liver, or in fact, to an inaction or partially inactive condition of the glands in any part of the digestive tract. As previously stated in discussing these diseases, the same causes operate in exciting the various diseases of the digestive organs, and it may not be considered out of order to again state that when horses are intelligently fed and exercised, care being taken that the quality of the food is good, and that the quantity be in accordance with the size of the animal and the amount of work performed, and any change of diet be gradually made, it is seldom that digestive diseases occur except in animals with abnormally weak digestive powers, or one whose teeth require attention. It may also be wise to remark that all horses over five years old, and often those even younger, would be better if they had their teeth dressed by a competent man once every year. This statement will probably be considered by some as extravagant, but it is a fact nevertheless, and the horse owner who attends to this matter regularly is amply repaid for the outlay, in the fact that his horses can masticate their food more thoroughly and without irritation to either tongue or cheeks, and as a consequence thrive better, look better, and are less liable to the class of diseases under discussion. Many will say "My horses' teeth are all right, they eat well and keep in good condition.' This may be quite true, but it does not follow that because a horse consumes his food without apparent diffculty and without quidding, that his teeth are in first-class condition. If examined, there will in most cases be seen or felt sharp points on the inner margin of the lower molars and the outer margin of the upper ones. projections, while probably not materially interfering with mastication, cause more or less irritation to the tongue and cheeks, hence, to say the least, make mastication more or less unpleasant and warrant the expense of the cost of having the cause of irritation removed.