

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"  
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE 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.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post-office Address Must be Given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD COMPANY (Limited),  
London, Canada.

steer. The importance of by-products on a farm is, comparatively speaking, just as great as that of the packing plant. Read the article and take a lesson.

### Apples or Pictures?

This is the season when the perennial fruit-tree agent with his pretty colored pictures of new fruits makes his annual call and incidentally causes the mouths of the entire family to water to such an extent that "Dad" buys a few trees of the new varieties from which the most showy colored plates have been made, and plans to have something really new in the orchard in a short time. Buyers should remember that there is only about one promising new variety of apples, for instance, in about eight hundred new seedlings. New varieties which will compare with our good old Northern Spy, Rhode Island, Greening, Baldwin, King, Fameuse McIntosh Red, Golden Russet, Duchess, Astrachan and Yellow Transparent do not crop up in every nursery row, but most agents have a few entirely new, and, to them, better than any of the old reliables, because a gullible public will always buy something new. Read an article in the Horticultural Department. The writer pins his faith to the tried and true. Do not listen to agents. Buy what you want and you want the good old standbys.

We recently read an article written by a woman ashamed to sign her name, and unfortunately purporting to be "from a country woman's standpoint", in which the farmer was blamed for everything that was bad. The writer said "the war was not responsible for the rise in staple foodstuffs now," and that "the farmer alone is responsible for non-production." This same woman could feed a heavy producing cow for \$10 per year, a 200-egg hen for \$1 per year, and could clear \$500 per year from 100 hens in the back yard. She would make something of a "crackerjack" as a farmer's wife. She should never waste valuable time writing articles for the official organ of the National Council of Women of Canada. She should be feeding chickens, milking cows, pitching hay, forking manure, and doing several other of the farm jobs which she

thinks are so profitable—and one with so much patriotism should do all these things gratis. But we venture to say she would rather flit in her limousine from one afternoon tea to another, intent upon lowering the high cost of living.

### Nature's Diary.

A. B. KLUGH, M. A.

In the whole realm of natural science there is no subject in which more popular interest is evinced than that of the animal mind. Neither is there any subject upon which erroneous views are more generally current. Animal intelligence, the animal mind, animal psychology, comparative psychology,—these being the various names applied to this study,—have aroused the interest of man from early times, but it is only in very recent years that any really critical and scientific work has been done in this subject.

The study of the animal mind is an extremely difficult matter, and if we think for a moment we can see that this must be so. If we consider the study of the human mind we find that we can judge the mind of our neighbors only on the basis of our own thoughts and feelings under similar circumstances. It is a matter of every-day experience that we often form entirely wrong inferences from the actions of others. In the study of the human mind we at least have language to aid us, and while words are often employed to hide thought rather than reveal it, we are usually able to rely on the words of those engaged in a scientific study of the human mind as being genuine expressions of their thoughts. But in the case of animals we have no language to aid us. Further than that the less similar the bodily form, the nervous system and the environment of an organism is to our own the harder it becomes for us to interpret what is taking place in its mind. We infer consciousness in other beings because we are conscious ourselves, and we judge the mental states of others, such as joy, anger, or fear, from certain external manifestations which are like the accompanying manifestations of these mental states in ourselves. With beings much like ourselves our inferences may be fairly accurate, but when thrown among people of other nations, or races, our judgments are likely to be erroneous. How much more is this the case with the lower animals whose senses are so entirely different from our own. In the human race the main sense is the sense of sight, it is decidedly and superlatively dominant over all the other senses, and we are very apt to infer that it is also thus dominant in all other animals. Yet there are very few animals in which sight is the dominant sense, perhaps in only one other group besides the human race is this the case—the birds. Among most mammals the senses of smell and hearing are far more important than that of sight, and in many the sense of sight takes cognizance only of moving objects. The dog's world is largely a world of smells, and his wonderfully developed olfactory sense is able to detect odors, the existence of which we cannot perceive, and to analyze compound odors in a manner which is quite impossible to us. In the bat the sense of touch is developed to an extent in comparison with which our sense of touch is dull in the extreme. In insects there is the antennal sense, the organ of which is the antenna or feeler, a sort of "smell on contact sense" which we do not possess at all. Among the Crustacea (Crayfishes, crabs, lobsters, etc.), the sense of touch is predominant, that of sight is little more than the ability to tell light from darkness and the sense of hearing is absent. These few examples give us some idea of how hard it is to comprehend the psychology of animals so very differently equipped in the matter of senses from ourselves.

In considering the mental attributes of animals there are two views, both of which are current, and which require some discussion. One view is that animals are mere machines, that they are acted upon by external stimuli, and that they respond to these stimuli in a fixed manner, and that all talk of "mind" in their case is futile. This view which is particularly rife among German thinkers, is one which cannot be held by anyone who has an open mind—there are too many easily observed facts against it, and we can lay it aside along with many other things which are "made in Germany". The other view is that animals are, as far as their mental attributes are concerned, little men; that they are activated by the same motives. This view, which is known as the anthropomorphic (from two Greek words "man-form" or "man-like") view is one which has been largely held in the past and is still held pretty generally by the public at large. While this view is decidedly more hopeful than the previous one, since it allows an animal mind for us to investigate and tends towards a humane treatment of animals, is one which is not in accordance with the many facts which are being brought to light by our studies of comparative psychology. We can readily see that this view will hold good in some measure for the higher animals, but as we descend the scale of animal life we find it becoming wider and wider from the truth, until, when we reach the simplest animals it becomes an absurdity. This trend, anthropomorphism, is in fact one of the things which has to be most carefully guarded against in all work on the animal mind; it is the attitude of mind which renders practically valueless all the older treatises on animal intelligence. The correct view is undoubtedly that the very lowest

animals are little more than machines, they receive stimuli and respond in a definite and unvarying manner, but as we rise higher and higher in the scale of animal life we find the mental attributes of the forms under consideration approaching those of man more and more closely.

To be continued.

## THE HORSE.

### Common Diseases of Horses.

In arranging the following table on the "Common Diseases of Horses," we have endeavored to be as brief and concise as possible and have not gone into minute details, hence we consider it wise to make some general explanations, as there may be those who have practically no experience in the treatment of diseases in stock, hence would have no definite idea of the manner in which medicines are administered or applied. Of course, in order that a man may be able to treat even the most common diseases it is necessary that he have on hand a number of drugs. By carefully reading the article under discussion, he will be able to decide which of the drugs mentioned he will want, and can get a supply. A word of caution in this respect is probably wise. Some of the drugs mentioned are poisonous, many of them will deteriorate if exposed to the air, and all drugs keep better in an even temperature. Hence all drugs should be labelled in plain English, and should be kept in a special receptacle placed where the variation in temperature will be as little as possible, and the receptacle should be kept locked in order that children or careless persons may not be able to reach them. Careful labelling is necessary in order that no mistakes may be made, as the quantity that would make an ordinary dose of one drug may be poisonous of another. All liquids should be kept well corked, and all powders kept either in separate compartments, drawers or boxes or well wrapped in paper. It would be wise if those who contemplate treating these diseases would purchase a graduate for measuring fluids, called "measure of capacity," and a scales to weigh solids or powders, called "measure of weight." In cases where these standard measures are not kept, ordinary domestic utensils are used, with the capacity of which the practitioner should be familiar. In speaking of drams, ounces, etc., of fluids, the "fluid" should be used, as for instance, we prescribe 2 oz. of oil of turpentine it should read: "Oil of turpentine, fluid oz., etc." In our table we omit the word "fluid" in order to save space, but no mistake can be made. Common tumblers contain 8 to 10 fluid ounces, (oz. is used as an abbreviation for ounces); tea cups about 5 oz.; wine glasses about 2 oz.; tablespoons ½ oz.; dessertspoon 2 drams, (dr. is the short for dram); teaspoons 1 dr. or 60 drops. Such measures, however, are merely approximate. The measure of weight is harder to estimate without a scale or considerable experience, as the weight of the different drugs varies so much; a teaspoonful of one drug may weigh a dram while of another not half that much. Hence the practitioner must acquire an intelligent idea of weights or procure scales. Knowing that 1 oz. contains 8 drams, and that 1 dram contains 60 grains, if he gets the drugs made up in 1 oz. packages he should be able to divide it into approximately whatever sized doses he would wish. A pound contains 16 ounces. A pint contains 20 fluid oz.

In drenching horses, or in fact any animal, great care must be taken not to allow the fluid to run into the mouth too quickly, else a portion of it may pass down the windpipe into the bronchial tubes and cause suffocation or mechanical bronchitis, which is often fatal. All medicines, either in fluid, powder or solid form should be freshly prepared, that is, it is not wise to keep the different drenches ready mixed, nor balls made for future use. Drugs deteriorate more quickly when mixed, and especially when mixed with water, and balls soon become hard unless mixed with treacle or glycerine, hence we repeat, "do not mix a dose until needed." After the administration of a purgative a horse should have two or three days' rest, and should be given nothing but bran to eat until purgation commences. In applying a blister the hair should be clipped off the parts to be blistered, the blister well rubbed in (the results depend greatly upon the mode of application, merely placing upon the skin gives little results, smart friction is necessary). The patient's head must be tied so that he cannot bite the parts. In 24 hours it should be well rubbed again, and in 24 hours longer sweet oil or lard should be applied and the patient's head released, or he turned loose in a box stall. The parts should be oiled daily until the scale comes off, when, if necessary, another blister may be applied. When we advise a liniment we mean any of the ordinary stimulant liniments in ordinary use, as one made of 2 oz. each of alcohol, oil of turpentine, and liquor ammonia fortier, with water to make a pint. This liniment is strong or weak in proportion to the proportion of water used. In treating all diseases the removal of the cause, if possible, is essential; the patient should be made as comfortable as possible, preferably in most cases in a box stall. In all respiratory troubles it is essential that he be kept where the air is fresh and pure, even at the expense of heat. Heat can be supplied by clothing, but there is no substitute for fresh air.

a WHIP.