

for questioning the class, encouraging discussion and clearing up any difficult or misunderstood parts. True, this is not the orthodox college method, but it is the only method which will ever be found to prevent "plugging," and get the student to master his subject so that he can retain it. Let us by all means adopt this method, even though it may mean a further division of classes and the employment of a few more assistant professors. Unfortunately, the idea seems to prevail that if the student only gets the information down in good form in his notes, that is the main point—as if he will think in after years of referring to a lot of blurred and musty old manuscript! Were the information in good, readable, printed text-books, these might be of some value for reference; but, except in a few cases, the text-books prescribed are not used at all, the lecture period being devoted to dictating notes. In nine cases out of ten, what the pupil does not assimilate will be of little use to him afterwards.

Again, I contend that too much attention is given to unimportant details and not nearly enough to general principles. A certain amount of detail is unavoidable, but the proportion should be as small as possible, for much of this detail is inevitably forgotten, and then of what use is it? Now, true education consists in drawing out or developing the pupil's faculties, and mere memory is not the most important of these. The student should be trained to read, study and think, not merely to commit to memory a lot of bald facts. Yet, under the present system, this is exactly the result, so that instead of utilizing the extensive library, we are forced to "plug" a great many details, which in less than a year will be mostly forgotten.

Finally, I wish to take exception to some of the subjects in the curriculum, and of these, apiculture first. Now, there can be no objection to teaching this subject to those who care for it, but probably eighty per cent. of us care no more for the keeping of bees than we do for the raising of cotton, yet we are forced to prepare and write upon it for the sake of the remaining twenty! Teach it to these, but by all means make it optional.

Another subject which deserves special mention is veterinary science. The text-books used are crammed full of technical detail and the lectures reproduce that information. We are taught much of the detailed anatomy of the horse and are forced to memorize the actions, uses and doses of a hundred or so drugs, many of which are rarely used, while some are used for hypodermic injection only. Taught from a suitable illustrated elementary text-book, like that used in half the agricultural colleges of America, there is no reason why this subject should be more difficult than physiology as taught in the public schools, but at present it is the cause of more discouragement than probably any four other subjects in the first year. Taught as suggested, we would have more time for the study of other subjects, and for general reading.

As for biology, this has frequently been defended by defending systematic botany and entomology. So far so good, but what about the large proportion of time devoted to structural botany, and what about zoology? Excepting a lecture or two on birds, our whole study was with the comparative anatomy and physiology of minute forms of animal life, mostly marine—animals which are for the most part entirely foreign to our thoughts and associations. The consequence is that, although taught by one of the clearest and best lecturers on the staff, the subject has to be plugged for the exams., and gladly forgotten. Then we got agriculture only three times a week during the winter term, yet we are told that the course is practical! What I would suggest is say a half-dozen general lectures on zoology, with no examination. We are told that the aim of the course is to teach us those sciences and principles underlying agriculture; and this is right, but what connection has zoology with agriculture? Let us have agriculture and live stock at least one hour each day; let us have more chemistry and soil physics, and, to provide the necessary time, lop off zoology and perhaps some geology and structural botany. Make apiculture optional; teach veterinary science in a more non-technical manner. Give us more drill in the facts and principles brought out in the magnificently-conducted experimental department. Pay less attention to poetic interpretation, more to grammar and rhetoric, abolish French and German in the upper forms and substitute a small amount of elementary Latin. Attach greater importance to the two-year course and make it more practical throughout. Then will the O. A. C. have advanced a long step toward becoming what it should be: an institution which no intending farmer can afford not to attend.

Lincoln, Co., Ont.

W. D. ALBRIGHT.

#### Big Reward for Little Effort.

I received the Bible as a premium all right, and I am very much pleased with it and obliged for your promptness. The Bible is better than I expected. It is a big prize for so little work. Thanks.

M. McPHEE, Jr.

## HORSES

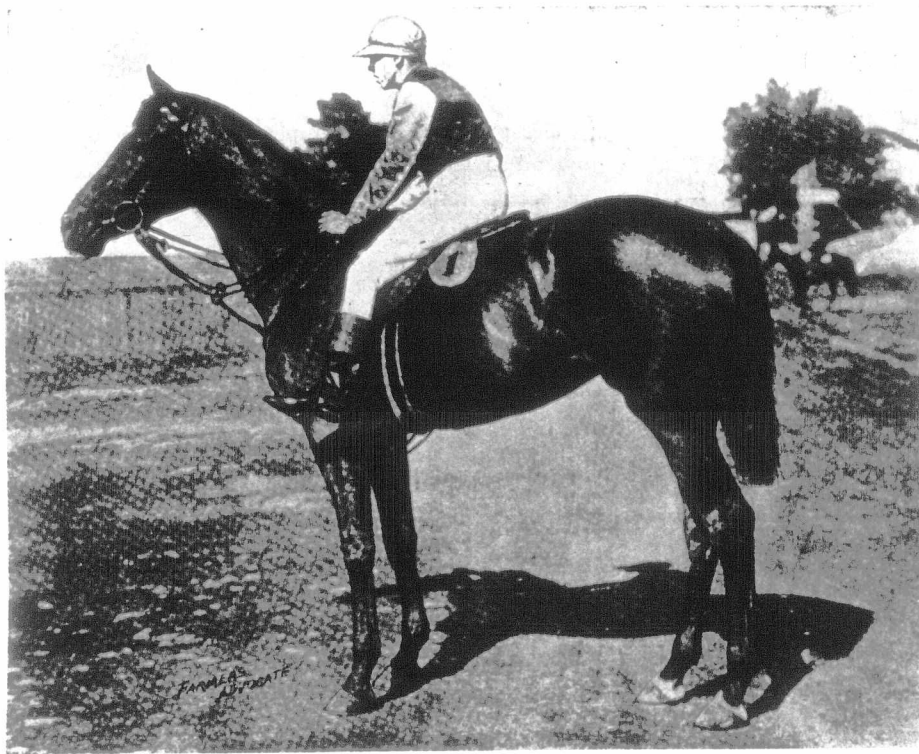
### The Care of Horses' Feet.

We all recognize the importance of good feet in a horse. There is a great deal of truth in the old adage, "No feet, no horse." While some horses have congenitally weak feet and require very careful usage to prevent disease, many go wrong in their feet from careless or ignorant treatment. The foot of the horse is a complex organ and subject to many diseases, the causes and symptoms of which we will not discuss in this article, but rather discuss the means of preventing disease. The main point to be observed is to keep the feet in as natural a shape and condition as possible. There is, under normal conditions, a constant growth of all the horny or insensitive parts of the foot, and we can readily understand that if there be not an equally constant waste, the organ will assume abnormal size, and, as a consequence, become ill-shaped. Of course, during youth, while the animal is growing, the growth of the feet, like that of other organs, exceeds the waste, hence they increase in size. In the state of nature, the natural wear and tear on the unshod foot equals the ordinary growth and keeps it in proper shape, but owing to the artificial manner in which horses are of necessity reared in cold climates, their feet require more attention than they frequently receive. Interference is seldom necessary until the first winter, as during the

often there is a foul-smelling discharge from its cleft. This is due to neglect of regular attention, and, as the frog should be large and strong and so deep that it presses on the ground when the foot is planted, in order to sustain its proper share of the animal's weight and tend to prevent contraction of the heels, it can readily be seen that anything that tends to a decrease in size or prevention of development of this important part of the foot is a serious matter. Regular attention should be paid to the feet until the time arrives when shoes are required, after which the shoeing smith will cut and rasp away at each shoeing a sufficient amount of horn to keep the foot in proper shape. The intelligent horseshoer will be careful to not cut the bars down nor pare any off the frog or sole except what becomes partially detached. Horse owners should see that there is not too much cutting and rasping done in the shoeing forge. Horses should have their shoes removed every month or at the most every five weeks. During cold or damp weather no particular attention is required other than having the shoes removed regularly and cleaning the feet out daily; but in dry, hot weather, horses that are kept in the stable should have artificial moisture supplied to their feet. During this season the roads and fields are hot and dry and the stable floors in a like condition, and unless some means be taken to supply moisture, the feet also become hot, dry and hard, which condition predisposes to disease. Moisture can be supplied by the soaking tub or soaking boots, or by standing in wet clay. Thick felt swabs, to fit around the wall

and buckled around the pastern, are very convenient and satisfactory. These, allowed to remain in a tub of water until they become saturated and then buckled on, will keep the feet moist for hours. There are a great many "hoof ointments" advertised and highly recommended, and while some of them may be of some value (at least for improving the appearance of the feet), there is nothing quite as valuable as water for supplying the necessary moisture. Horses at pasture do not require the same attention, as the dew and rain on the grass will have the same action. If more attention were paid to some of these matters we would see fewer lame and groggy horses on the streets and roads.

"WHIP."



WAKEFUL, THE BEST RACE-HORSE IN AUSTRALIA.

summer months, when the colts are at large, the natural wear will suffice, but when the weather becomes cold and they are kept in the stable the greater part of the time, often in stalls that are not regularly cleaned (which state favors the growth of horn), the wear will be infinitesimal, and unless attention be given, the feet will become abnormally large, deep in the heels, long in the toes, and abnormal in shape to such an extent as to render it impossible for the animal to stand and move naturally. This condition abnormally increases the tension on some of the tendons and ligaments and correspondingly decreases that of others. If this be allowed to continue, the future usefulness of the animal will be affected. In order to prevent this, the feet should be paired or rasped down to the natural shape every few weeks during the season of stabling. The heels should be kept well pared down, the wall rasped off on the bearing surface all the way around and the toes not allowed to become too long. It is not often necessary to pare either the frog or the bars. In order to prevent thrush or other disease of the frog from an accumulation of filth, it is wise to clean out the sole every day with a foot hook. In the spring we often notice colts with long toes, deep heels, and with the lower margin of the wall turning inwards. In such cases the owner probably thinks it wise to have the feet trimmed before turning them out to grass. When a foot is lifted and the sole cleaned out preparatory to trimming, it will be noticed that the frog is very narrow and shallow, and

#### Breeding from Young Fillies.

The question whether it is wise to breed fillies at two years old has been more than once asked by correspondents in the last few months, and, in replying, caution has been advised in resorting to this unless in cases where the filly is vigorous and well developed. We notice that the same question is being discussed in Britain, and from the Farmer's Gazette of recent date we quote: "With reference to the advisability or otherwise of breeding from young fillies, a well-known breeder of heavy horses writes to inform us that he himself has, for years, bred very successfully from animals of this age, and has never known any injurious results to have followed from the practice. Much depends, in cases of this kind, upon the filly herself. If the animal belongs to a vigorous family of horses, possesses a good constitution, and has been well 'done' in her first and second seasons, no great harm may be caused by putting her to the stallion at the age mentioned, but in the generality of cases we find that not only is the foal produced less robust and less vigorous in its constitution than the produce of a fully-matured mare, but that the development of the filly herself is so much arrested that she very seldom grows into as fine a mare as another of the same age, and kept under the same conditions, but not bred from until her third or fourth year. If indulged in at all, our experience is that breeding from two-year-old fillies should only be attempted where the animals are, as above indicated, of sound, vigorous constitution, and where they have been kept in the best condition right through from the time of foaling. Much may also be done to counteract the injurious effects of early breeding if precautions are taken to work the animals lightly and feed them liberally during the time they are carrying their first foals."