

Any filling lessens their power of holding.

24. If the crust is sound, and if the fitting of the shoe is accurate, and the nailing is good, toe clips on the fore feet are not absolutely necessary. If clips are used, the crust should not be pared out more than the depth of one-eighth of an inch to receive the clip.

On the hind feet, two clips, one on each side, are generally needed to strengthen the hold of the nails. Toe clips are commonly used on the feet of heavy horses; but in the case of riding or harness horses doing fast work, they would be apt to cause overreaches. For horses that kick against the stall posts, quarter clips are necessary.

KEEP THEM GROWING—Foals should be taught to eat oats and a few other nourishing foods at an early age. This will enable them to maintain their condition, and go on improving, when they lose their first natural nutriment—their dam's milk—at weaning time, later on in the year. Otherwise, a great falling off will be found at an important crisis in their life. A severe check of strength and growth at weaning time is seldom perfectly compensated by any amount of good treatment afterwards. It is essential that steady progress should be maintained from the day of birth until maturity to perfect a horse to the extent of his powers of development. The making of a horse greatly depends upon careful nursing in the earlier periods of his existence. Nutritious food and comfortable shelter from extremes of heat and of wet weather are essential to young foals.—London Live-Stock Journal.

CANADIAN HORSES FOR THE BRITISH MARKET.

By the Secretary of the American Clydesdale Association.
Heavy draught-carriage horses—Runners—Colours—Hunters.

To the Editor "Farmer's Advocate":

SIR,—The continued and rapid growth of the export trade in horses during the last few years leads us to enquire what kinds are likely to pay the Canadian or American farmer best if he means to cater for a share of that foreign trade in future. A recent visit to the other side enabled the writer to make some personal enquiries on the subject, the general replies being: "Send us all the good horses you choose, either for draft or carriage or road purposes, with plenty bone, size, and quality, and the more action they have the better price you can always get for them. Your poorly-shaped horses, whether trotting-bred or otherwise, with fiddle heads, ewe necks, spindle shanks, or curby hocks, we don't want at all." I asked the various uses to which imported horses were being put, and was told that a few, but only a few, of the very heaviest are fitted for dray or lorry work in the large cities; the bulk of the Canadian draft horses are either used in light lorries or vans, and many are sent into the country, being well suited for light farm work. A good many so-called carriage horses, but really misfits, also become "vanners" when they land. Others find their way into busses, tramway carts, cabs, and hansom, while an occasional pair is picked up for gentlemen's carriage horses, and command really good prices. It will thus be seen that Canadian and American horses, being of infinite variety, are put to all manner of uses, and the horses which bring the best

prices abroad are also the highest priced ones at home—the most difficult to produce, and therefore the scarcest. I refer to carriage horses and heavy drafters. Those two kinds—perfectly distinct from each other—are the only kinds that the average Canadian farmer can hope to realize a substantial profit from, and the misfits of both kinds will still sell at a fairly remunerative figure for ordinary purposes. As to carriage horses, there really seems no royal road to their production. They are occasionally bred in all manner of ways, and the most careful, intelligent and skillful breeders are often entirely at sea in their efforts to attain success in this line.

Many requisites are essential, but perhaps the chief ones in a 16-hand horse are style, quality, and action, while in the 15 to 15.2 horse it is like Demosthenes' three rules of oratory: "Action, action, action." Yes, strange as it may seem, lofty, straight, all-round action will count about 90 per cent. of the whole. Color used to cut a good deal of a figure, but not so much now, although chestnuts, bays, and browns are preferred generally, and if accompanied by attractive white stockings all the better. (1) The main criticisms lodged at our horses are lack of strength and stamina. Of course the British wagons and vehicles of all kinds are much heavier than with us, and consequently more strength is required in the horse so that the load may be drawn easily, without the straining and tugging incidental to a light horse struggling with a heavy load.

I was also surprised to learn, on the authority of Prof. McCall, of the Glasgow Veterinary College—than whom none is in a better position to judge—that the Canadian horses used in Glasgow do not, as a rule, hold out or wear as well as the Scotchbred horse of the same grade. Notwithstanding that the legs and feet of those Canadian horses when brought across are generally excellent, for some reason or other, unknown, they don't stand the tear and wear as they ought, but seem to "play out" altogether too soon. The only explanation I can offer for this, in addition to change of climate, is the fact that frequently young, green horses are taken across and put into heavy, constant work in the city right away. These horses cannot be acclimatized and are in no sense fitted for such work until they are at least a year in the country. The same rule applies to European horses brought to this country, and it is unfair to condemn American and Canadian horses as "soft," when they are not really getting a fair chance to show their mettle. It is needless to state that any green, unseasoned horse will give way when placed in heavy work alongside one whose bones and muscles are already hard and tough as whalebone. The increasing tendency of our farmers to market their stock "early," especially in hard times, has thrown a great many four-year-old horses on the market, many of them being passed off as a year older than they are, and all users of horses know by experience that at this age they are in no condition for hard work, either on farm or in the city.

In a country where sport has such a hold upon the people as it has always had in England, with the facilities for

(1) The old rhyme used to run:
One white leg, keep to his end;
Two white legs, sell him to a friend;
Three white legs, sell him when you may,
Four white legs, keep him not a day." Ed.

fox-hunting unequalled, it is not surprising that the demand and the price obtainable for good hunting horses should encourage farmers to use Thoroughbred sires freely. In recent years, however, Canadian-bred hunters have entered the field, and in many cases are able to hold their own alongside the best English or Irish productions, and there seems no reason why the export trade in hunters should not greatly increase in the near future. The great essential to the successful breeding of weight-carrying hunters is the use of only the most superior Thoroughbred sires, whose strength, stamina, and absolute soundness are beyond dispute. Given a supply of half and three-quarters bred mares of substance, such as I think there are in many parts of Canada, and if mated with large, sound Thoroughbred sires, I cannot see why the produce should not equal the British-bred hunter in every respect, and he can certainly be raised cheaper. The breeder of hunters must, above all things, avoid "weediness" and unsoundness in every form, however, and no greater mistake can be made than to sacrifice soundness, strength or stamina for excessive speed, or any or all of the other excellences combined. A hunting horse without wind or without the necessary strength to carry his rider day after day, if necessary, is scarcely worthy of the name; and if he belongs to the "weedy" order, is really of little use for any purpose whatever. On the other hand, if he happens to be somewhat short of quality or scarcely equal to his jumps, he will still fit in as a cavalry remount, at £40 or thereabout; while if he turns out a successful hunter, four or five times this price may eventually be got for him. True, there are many misfits, but by keeping up the weight those misfits are quite serviceable at remunerative if not extravagant figures. Although Ireland has always been in the forefront in hunter breeding, it is generally admitted that the Irish horses are by no means equal to what they were 30 years ago, and one noticeable feature at all the principal English and Irish shows is the enormous proportion of light or middle weight hunters to heavy weight-carriers—12 to 13 stone hunters being in far greater numbers and of less value than 15-stone horses. For this reason, if for no other, it is highly essential that size and strength be kept prominently in view by the Canadian hunter breeder. That both the demand from England and the price for the first-class finished article will keep up for many years to come there is no reasonable doubt whatever.

To the Canadian or American farmer who wishes to raise horses suitable for the foreign market, the same advice is applicable as for the home market. Try to raise them just as good as you possibly can; use the best sires you can find, almost regardless of service fee; feed your colts generously, but give plenty of exercise; handle and break them carefully but thoroughly; if for draft purposes, do not overlook the necessity of having them heavy; and for any purpose, try to raise only such as are absolutely sound in wind and limb.

ALEX. GALBRAITH.

PROVINCIAL EXPOSITION MONTREAL.

Will open on date arranged. The buildings destroyed by the fire of July 20th will be replaced, and the management are confident of an Exhibition equal if not surpassing those of previous years.

COMPOSITION OF ANIMALS.

Investigations at Rothamsted bring out the fact that the entire bodies, even of lean animals, may contain more fat than nitrogenous compounds, while those of fattened animals may contain several times as much. That of the fat ox contained more than twice as much, that of the moderately fat sheep nearly three times, of the very fat sheep more than four times, and of the moderately fattened pig about four times as much fat as nitrogenous substance.

Further calculations go to show that the increase in fattening oxen contains seldom more than 7 to 8 per cent. of nitrogenous substance, and seldom less than 60, and generally nearly 65 per cent. of fat. In the case of oxen fattened very young, the increase may contain about 10 per cent. nitrogenous substance and 50 per cent. fat. With sheep the increase usually contains less nitrogenous substance than with oxen, and about 70 per cent. of fat. The increase of pigs contains 6.5 to 7.5 per cent. of nitrogenous substance and 65 to 70 per cent. of fat. In the latter part of the period of fattening sheep and pigs the increase contains less nitrogen and more fat.—"Farming."

SOURCES IN THE FOOD OF THE FAT PRODUCED IN THE ANIMAL BODY.

Experiments conducted at Rothamsted upon between four hundred and five hundred animals showed that much more fat was formed than could be accounted for by the fat in the food; and it was believed to be established beyond doubt that much, if not the whole, of the fat formed in the bodies of the herbivora fed for the production of meat was derived from the carbohydrates of the food.

In fact, the experimentally determined relation of the non-nitrogenous and of the nitrogenous constituents of the food, respectively, to the amount of increase produced; the composition of fattening increase generally; the relatively greater tendency to grow in frame and to form flesh with highly nitrogenous food; the greater tendency to form fat with food comparatively rich in non-nitrogenous substances, and especially in carbohydrates; and common experience in feeding—all pointed in the same direction."

"Farming."

Special Notices.

The Toronto Industrial Exhibition, now known as CANADA'S GREAT FAIR, is an occurrence to which almost every Canadian looks forward with pleasurable anticipation, as it is made the occasion for their annual holiday outing. It is to be held this year from the 31st August to the 12th of September, and as the live stock exhibitors and various associations have agreed to have their stock on the grounds from Thursday, the 3rd September, till the close of the Fair, the first week will now be as good as the second. We have received a copy of the Prize List, which is unusually well gotten up. Any one desiring a copy can obtain one by dropping a post card to Mr. H. J. Hill, the Manager, Toronto. A great programme of interesting attractions is promised. Applications for space should be made early. The Prize Lists for our own Montreal Fair are also ready and prompt application should be made for copies, or to secure space. See advertisement, first page.

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