

cents a pound, and reject those sources which supply them at 3 cents a pound, I, for one, see no reason for special complaints as to the high cost of living. If the same intelligent study were devoted to the selection and preparation of human foods as is now being applied to the selection and preparation of stock foods, we should not hear so much about the cost of living; and if some of the glaring waste of food in our large cities were remedied, it would be better for the whole nation. Man's life consisteth not in the things which he possesseth; nor is an individual any healthier, happier or wiser because he eats food that costs 3C cents a pound, when he might have eaten similar food at three cents a pound. All over the American continent, in particular, there is vast waste of food products, and not a little ill-health—both physical and moral—by reason of allowing whimsical, cultivated appetites to dominate, instead of common sense.

Of course, there has been a gradual rise in the average price of all food products, due to a variety of causes, largely to the increasing supply of gold, which is our artificial standard of value. But this is another question.

It is, of course, obvious, that animal products must be more expensive, on the whole, than vegetable products, and the question arises as to what effect upon civilized life it would have if the demand for human food should gradually discriminate in favor of vegetable products. How far could humanity profitably dispense with animal foods? The question is interesting from a speculative standpoint, but is not of pressing practical importance.

There is, however, another question of more moment at the present time, and that is a consideration of the consequences of man's analysis of various food products; analysis or separation for use, not for mere information, is what I mean. For example, the fat is separated from the milk, the sugar from the beet, the starch from the maize or potato, and so forth. Modern milling processes separate the wheat grain into various products, and we find, too, all kinds of prepared foods. What is the effect of all this? The consequences are by no means all happy. Children feed extensively upon candy, and cannot develop bone or muscle; white flour replaces whole-wheat flour at great expense, and what is gained? Often improper nourishment and alimentary disturbances. The natural foods have been analyzed, and recombined, and it is a question as to whether most of the labor expended in this way is not wasted. Let sugar be eaten more in vegetables and fruits, where it occurs naturally, and let fats be eaten in combination with proteids, and carbohydrates in milk and meats, not so largely in separated forms. There are, of course, exceptions, sufficient, doubtless, to justify a modicum of current practice; but, on the whole, a return to the simplicity of nature will provide a simple remedy for many of the ills of civilization. The analysis of food products provides the opportunity to choose, and, unfortunately, choice may be made of the wrong, as well as of the right. At the present time, the best remedy lies in the dissemination of knowledge. W. C. GOOD.  
Brant Co., Ont.

That Mrs. W. E. Hopkins, writer of the lengthy letter which appeared in "The Farmer's Advocate" of February 24th, has "struck fire," is evident from the aftermath of comment pouring into the editorial department. Most of her critics, while evincing a desire to be fair, show lack of wide acquaintance with conditions. Also, we echo one correspondent's advice to re-read her letter before criticising too harshly. Though it is difficult for persons residing in the more progressive farming districts to believe, as a matter of fact, there are not a few sections where Mrs. Hopkins' characterizations all too truly apply. Fortunately, they are not wholly true of Canadian agriculture in any large or general way, but certain of her criticisms will strike home a twinge of self-consciousness to no small number of us, if read with an introspective attitude of mind. Daughters do not get a square deal in many cases, either in country or city, nor is the masculine arrogance and rudity, of which Mrs. Hopkins speaks, so exceptional as we could desire. Let us each see what can be done to add to the refinement and attractiveness of rural society, and hasten the day when to no part of Canada may any such strictures be applied.

We might wipe out every city in the world, and the countryman would breed a new humanity. Obliterate the farmers, and the cities in three months would be silent, and their inhabitants fleshless bones.—[Irish Homestead.]

If, by obliteration of the farmers is meant permanent obliteration of soil husbandry, the foregoing sentence is not far from the mark.

## HORSES.

### Treatment of Mares at Foaling.

#### II.

Unless the weather is favorable to have the mare in a field alone, which is preferable in daytime, quietness should be observed, and if she lies down with the buttock so close to the wall as to prevent the foal from passing back easily, then the position should be changed to a more desirable one, to give room for easy delivery. If the presentation is normal, the act is generally performed quickly, and sometimes the foetal membrane does not rupture, and the foal smothered. Therefore, so soon as the colt's nose appears outside the vulva, if the covering is not torn, the attendant should tear it, to allow the colt to breathe; and, after delivery, if the umbilical cord (navel cord) does not break, it should be cut. First, tie a strong, rather soft string that has been soaked in a three-per-cent. solution of creolin or carbolic acid (prepared previously) around the cord about one and a half inches from the belly, to prevent bleeding, and cut the cord an inch below the string. A sharp knife or large shears should be convenient for the purpose. The cord is composed of three tubes or cords, twisted. Dress the belly around and over the navel with a three-per-cent. solution of creolin or carbolic acid two or three times a day for a few days, until the cord dries up and drops off, when most danger of infection has passed. If the mare lies quiet for half an hour, or thereabouts, allow her to do so, by which time she may expel the foetal membranes, if they did not come with the foal shortly after delivery, or, as soon as she rises, offer a gallon or two of tepid water, into which has been stirred a handful or two of bran, repeating the drink hourly until thirst has been satisfied. Feed light, easily-digested food for a few days, gradually increasing quantity until full feed and exercise is given. Watch the foal for action of the bowels, and, if it is constipated, give an injection of half a pint of warm water and an ounce of glycerine, mixed, and repeat in an hour, if necessary. This, in my experience, has proved more satisfactory than any physics or medicine given by the mouth.

So far, I have been considering almost normal conditions, which, unfortunately, is not always the case.

Returning to delivery, if the act be delayed beyond a few minutes (five to ten), the labor pains being strong, the attendant should summon assistance, halter the mare, get her on her feet, bathe the hand in warm water, in which a small quantity of creolin has been mixed, then pass the hand through the vulva, and discover whether the position is normal (that is, the fore feet presenting, with the nose lying about on the knees), or a breach presentation (that is, the hind feet presented, with the tail of the colt up towards the mother's back). In either case, assistance should be given by drawing on both feet together; but if the presentation be other than one of these (and in these, if convenient), procure, as soon as possible, the most skillful assistance obtainable. While doing so, keep the mare on her feet, walking her to prevent strong labor pains forcing the colt into cramped position and contracting the walls of the uterus, making it difficult to adjust the position. There being many abnormal positions known to skilled men, descriptions will not be beneficial, other than to say that some of them can best be relieved by in part dismembering the foetus, and removing it in pieces, thereby, in many cases, saving the life of the mare. In many cases, where the presentation is not so difficult, by early, skillful assistance, the foal's life, as well as the mother's, may be saved.

Occasionally, a mare will decline to allow the foal to suck, when it may be necessary to coerce her by holding up a fore foot, or even applying a twitch for a few times; but, in many cases, if the foal be smart, and they are left alone, the mare will submit, and almost always after being controlled a few times. But if she be vicious with the colt, it is advisable to remove the colt only while she is under control, or she may kill it. Such mares, sometimes, after the foal has sucked a few times, become very fond of and careful with their young. Sometimes pregnant mares have considerable swelling along the belly and in the legs, even bog spavin and thoroughpins appear. In such cases it is well to regulate the feed by reducing the quantity and increasing the exercise, to relieve the condition, as, a few days after delivery, such conditions generally disappear, and, when physics or other medicines are administered, abortion may be induced. In some cases, the milk may drop from the teats for days or weeks before delivery. In my experience, this is symptomatic of a weak or dead foal. All that can be done is to give the mare the already advised care, and wait for delivery; then, if the foal be alive, and weak, treat carefully; give the advised injection, as it will be deprived of the first milk, which has a mild, purgative action; and, if the foal be unable to rise, it should be rubbed dry, assisted to rise, stand and suck. But if the mother has

not sufficient milk, cow's milk should be substituted, given from a clean sucking bottle, the milk to be sweet, warm, and have a small quantity of sugar added, and given every four or five hours for a few days, when the periods between feeds may be gradually lengthened.

If the mare has an inflamed udder, bathe with warm water, or, better still, warm, sour butter-milk, two or three times a day; have the milk frequently drawn, either by the colt or by hand. After each bathing, rub well in camphorated oil and belladonna, made by taking four drams tincture of camphor, four drams fluid extract of belladonna, and eight ounces of raw linseed oil. After applying the oil, prevent the colt sucking for an hour or two, then wash the teats with warm water, and permit the colt to suck.

The placental membranes should be expelled along with or shortly after the foal; if not, they should be removed, and, as it is a delicate operation, a skilled person should be secured as soon as possible. Occasionally, there may be considerable straining and hemorrhage after delivery, when a dose of one dram of powdered opium, or one ounce of laudanum, is beneficial, and the mare should be kept as quiet as possible. As to breeding again, frequently that may be accomplished about the ninth day, or at the end of any twenty-one days following this, being general, although there is considerable variation. It is well to wean the foal at about five months of age. Have it feeding well, and gradually prevent its sucking for a few days; allow it to suck twice a day, and for a day or two more only once a day, and then prevent altogether. Attend to the udder, drawing the milk once a day, or once in two or three days, as condition demands, until danger from inflammation is passed, then keep her in condition for the next foal. J. STANDISH, V. S.  
Colchester Co., N. S.

### Improvement of Horses.

A memo by T. B. Macaulay, of Montreal, a breeder of draft and carriage horses, and close observer of the horse stock of the country, form part of the evidence received by the Parliamentary Committee on the Miller Bill, at Ottawa, in regard to race-track gambling. Mr. Macaulay takes the broad ground that improvement in our horses can only be made by specializing them. The great trouble with the horses of every country is that the vast majority have no special characteristics; they are merely ordinary general-purpose horses, and this is the class that always sells at the lowest prices. It is only to the extent that horses have some special quality that they are worth more than the ordinary and comparatively low value. There are three main lines along which specializing may be developed:

1. Heavy draft horses.
2. Stylish carriage horses.
3. Speedy horses.

For the draft group, the qualities desired are size, weight, strength, and the proper conformation for heavy draft. For carriage horses, what is needed is beauty, style, action. And, for speedy horses, courage, ambition, grit, and the conformation suitable for speed.

Size, weight and strength certainly cannot be implanted in horses by an infusion of racing blood, either Thoroughbred or Standard-bred. The addition of hot blood to a draft type would simply reduce the size, reduce the strength, and make the horse less quiet, steady and reliable at work, thus reducing his efficiency in every way. In other words, so far as the draft type is concerned, the addition of hot blood would be very undesirable. The importance of weight in this connection may be seen by the fact that if a horse of 1,500 pounds would sell for \$250, a horse of exactly the same quality otherwise, but weighing 1,600 pounds, would certainly sell for \$300, the extra hundred pounds being thus worth \$50, or, say, 50 cents a pound. This emphasizes the loss which it would be to farmers to have the weight of their animals reduced, for any reason whatever.

"Stylish carriage horses," observes Mr. Macaulay, "are represented in this country almost entirely by the Hackney breed. This breed traces back to union of the old Norfolk trotters of long ago and the English Thoroughbreds of that time. It combines a large measure of ambition and endurance, with greater beauty of conformation and high, stylish action. The special characteristic in this line which brings great prices is action. The addition of any hot blood to this breed is unnecessary, and would simply lessen the action, detract from the beauty, and lower the value of the horse. Mares with warm blood, of course, give better results when crossed with the Hackney than do cold-blooded mares, but certainly will not equal, on the average, those from pure Hackney mares, or even from half-bred Hackneys. The results of Sir Gilbert Greenall's annual auctions are convincing proof of this. Sir Gilbert is the most prominent breeder of Hackneys in England, and his sales are almost historic events in the Hackney world. Some years ago he tried the experiment of introducing some of the best Thoroughbred

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