Twenty-four months.—The mouth at this age will show two middle permanent (broad) incisors fully up in wear, and next pair (first intermediate) well up but not in wear.

Thirty months.—The mouth at this age may show six broad permanent incisors, the middle and first intermediate pairs fully up and in wear and the next pair (second intermediate) well up but not in wear.

Thirty-six months.—Three pairs of broad teeth should be fully up and in wear and the corner milk teeth may be shed or shedding, with the corner permanent teeth just appearing through gums.

Thirty-nine months.—Three pairs of broad teeth will be fully up and in wear and corner teeth (incisors) through gums but not in wear.

Do Not Forget to Dip

The time for dipping the sheep is at hand and no more important duty is there in connection with the handling of the flock than a thorough dipping of the entire band, both young and old. Just after the older sheep are shorn the ticks leave them and go to the lambs, where they find a better covering, and if they have been very bad on the ewes, the lambs will have a terrible time of it. If no lice are present they will, of course, quite largely remain on the older sheep, making their quarters in the hair on the legs and face. Hence the necessity of saturating every part of the sheep. Both the ticks and the lice breed very quickly and a few missed on a very few of the sheep will soon infest the whole flock. Hence the necessity for doing the work thoroughly. Usually one dipping will suffice if thoroughly done, and the dip be used with good strength.

Almost any of the commercial dips will answer the purpose. Some prefer those having a fair proportion of sulphur, believing it to have great effect in stimulating the growth of the wool. The fact is firmly established, at any rate, that a good commercial dip will make the wool grow faster and stronger, and with more lustre.

It will always be found profitable to dip every spring, even if no ticks or lice are on the sheep. It cleanses the skin and conduces to the healthfulness of the sheep in addition to the stimulus given to the growth of the wool. A second dipping just before winter to destroy any that may have escaped when dipping in the spring and clean and stimulate the skin and wool, will be found very profitable also. This can be done by pouring the dip into a parting of the wool, the full length of the body, two or three places on each side, and a thorough saturating of the hair on the legs and head, using the dip somewhat stronger, say 30 per cent. stronger, and have quite as good effect.

What has surprised me very much for some time is the carelessness of so many shepherds or sheep owners with regard to ridding their flocks of vermin. So very few dip at all, some do not feel inclined to take the trouble, others think they should dip but cannot get time, while some have told me they never have any ticks because they feed sulphur always, and do not take the trouble to look at the sheep to see if they are clean. Sulphur is a grand tonic, and may prevent lice from seeking shelter on the sheep, using it in good quantities, but it will not kill those already on the sheep nor protect them from increasing, unless fed in such quantities as to cause more loss than profit.

The sheep business, having become so much more profitable than it was a few years ago—although there has not yet been a time when a few sheep could not be kept with good profit on every farm—wool selling at nearly double the price and constantly going up, and prospects good for further advance, as evidenced by the recent sales of wool in the English wool market, and the anxious enquiry from American and other manufacturers, and the high prices maintained for mutton and lamb. The advanced price for prime export beef did not reach the top price for export or for the best mutton and lamb, and when one considers the difference in cost of production, and the weeds on the farm that will disappear when the flock has possession, one cannot see anything but a bright future for the sheep raiser and the profit in caring for them.

A. W. SMITH.

Bone Manure

It is doubtful whether we pay as much attention to the use of bones as manure, as the subject demands. German gardeners long ago used bone manures in their hot houses, but cultivators of other nationalities began to use them hesitatingly and cautiously, but as soon as their utility as a fertilizing agent was assured, England for one, imported large quantities of bones from Germany, and there was at one time a saying that the export of German bone dust saved the importation of ten tons of German grain. As Malta covered her bare rocks with soil from foreign lands, so England fertilized her barren clays and sandy heaths with bones from Germany.

The principal element in the action of bones is phosphate of lime, which is indispensable to the growth of nearly all plants, but it is scarce in many soils and is speedily exhausted.

Analyses shows that it is a constant ingredient in most plants; it is found in the pea pod, the bean, the Scotch pine, in rice, in the roots of the peony, and the water lily, and, strange to say, in the pollen of the date palm; 39.3 per cent. in the ashes of the grains of oats, 44.5 per cent. in those of the grains of wheat, 46.5 in the ashes of bran, 33.5 in the seeds of barley.

These proportions show forcibly how indispensable the phosphate of lime is to the most useful of our farm crops, turnips, potatoes and other culinary plants; clover and grasses are alike dependent upon it. Bones are most useful on porous soils, because their phosphate is slow of liberation, and can only be set free by the action of the air, hence it is more freely evolved in soil in which aeration is free, full and rapid; it remains perfectly fixed and stubborn in soils where it is locked up from atmospheric influences; this shows the necessity of having the land in a perfectly friable condition before planting a root crop.

Another powerful consideration as to the fertilizing quality of bones, is their extraordinary capacity of absorbing and retaining moisture; on arid soils this is of great consequence, especially upon crops which make their growth during the heat and drought of some summers. Bone manure is not only found to benefit the particular crop to which it is applied, but its influence extends through the whole course of crops and is noticeable for years. The writer knows of a field, one part of which was manured with farm yard manure and the other with bones, and the boned part was visibly superior 15 years later; the fact that the bones' slow manner of freeing the phosphate, and the time it takes for them to entirely decompose, will account for the length of time bones may benefit the land.

The quantity of bone dust required to the acre is about 20 bushels. The best way of applying it to root crops is to drill it in with the seed.

The effect of bone dust on the growth of roses, carnations, and other flowers grown either in the open ground or under glass, is very rapid and remarkable, and a small quantity mixed with the soil in which house plants are potted will be found very beneficial.

W. R. GILBERT.

Choosing the Stallion

(Continued from page 458.)

horse in many particulars, at all events, or he could not hope to go out and meet competition, which is becoming pretty strong in most parts of Canada, and he usually costs a high price, and is maintained at considerable expense. There are very few of them travelling or standing for service that, bred to a superior mare will not produce good stock. As the case stands, the best of them do not produce on an average, high class foals.

BREEDING THE GENERAL PURPOSE MARE

To the most experienced, the breeding of a general purpose mare to good advantage would be a perplexing problem. The best solution of the question would be to get a better mare of some pronounced type, to do your breeding with. However, if a great deal of good can not be done by any number of remarks on the subject, a great deal of harm may be prevented by remembering a few.

In the mare you are thinking of breeding, search carefully for any indication of the blood that runs in her veins. If she is a mare of 1,300 or 1,400 pounds, showing some Clydesdale or Shire character, then by all means breed her to a good draft horse. Such a mare may produce a colt that may scale 1,600 pounds when grown, and if a mare, would be a good one to keep for breeding. If there are strong indications of warmer blood, the mare showing clean legs, with not too much of the fawn colored hair below the knee, which means infusion of draft blood, if there is blood-like style and character in conformation and quality, then she would be a safe mare to breed to a good Hackney, one not too large, and showing lots of breeding, style, action and spirit. If, on the other hand, she is simply a medium-sized nondescript, a thoroughbred horse of good substance, with as much style and action as possible, is the one to give quality, conformation and spirit, to possibly sire a passable saddle horse, or a mare that would be suitable to breed good carriage horses from.

There are, it is needless to remark, better ways of breeding any of these kind of horses, but along these lines will be found the best way to breed hopeful progeny from the general purpose mare.

J. W. S.

One morning Bishop Capers said something about the age at which a man generally begins to fail. Before any one else could reply an old darky butted in.

"It's dis way, bishop," he said; "until you gits to be 50 you is on de up grade. After dat you is on de level, and after dat you start down hill."

Bishop Capers, who is many years past 50, was anxious to find out whether he was still on the level, and asked the negro at what age a man generally started down grade.

"Dat depends entirely," replied the old negro, "on the rate of speed dat you goes on de way up."