

DED 1866

orses
he Horse

protect-
it, very
defects in
These
is known
icate and
removed
re is ex-
g the in-
y plates
to each
rs of the

OG.
ie bars: C,
the sole.

DOT.
: D, peri-
lamine, or
: L, horny

c band: C,

TOWING ITS
ue: C, wall

ie sensitive
el project-
sue. These
the living
lamine of
ure attach-
a frog and
rresponding
connecting
e, so close-
ance and

feel to the exposed surface. This sensitive layer, known to farriers as "the quick," is bountifully supplied with nerves and blood vessels. Just where the hair meets the horn—the part called by horsemen the coronet—is a very important structure, seen when the hoof is detached. This is a prominent ring or band, extending round the foot, and covered with very large papillae. From it the wall grows, and injuries to it are followed by serious defects in the horn. Not only do such easily-recognized conditions as "sand crack" and "false quarter" follow injuries to the coronet, but all the defective qualities of horn, such as are found in dry, brittle hoofs, proceed from the coronet. So, also, do the rings and irregularities often noticed on the front of the hoof.

Growth of Hoof.—The wall grows downward from the coronet at the rate of about an inch in three months. It is constantly growing, and, when protected from wear by a shoe, soon causes a disproportionate hoof. If allowed to grow, it may even produce deformity. Remembering this, horse-owners will understand how necessary it is that no shoes should be worn more than about a month without the superfluous growth of horn being removed from the hoof. Farm horses, in idle seasons, are often grossly neglected by being forced to stand in shoes attached to hoofs so overgrown as to place the foot quite out of its proper relative position to the limb.

Young horses that have never been shod are often injured by being allowed to run in yards or small soft pastures where the hoof is not naturally worn down. Their feet become so overgrown and disproportionate that the limbs are injured and joints twisted permanently. Even foals should be attended to by the farrier when their hoofs become overgrown. No paring is necessary. All that is wanted is the removal of the excess of wall with a rasp. This necessary attention would frequently make all the difference between good feet and limbs, and bad ones.

Cartilage.—It is unnecessary to enter more into detail as to the anatomy of the foot. Within the sensitive layer just noticed are the bones, and attached to them the tendons which move the limb in progression. There are two structures, however, which must be mentioned. The chief bone of the foot—the coffin bone—which gives the general form to the hoof, does not extend throughout its whole interior. It forms the basis of the front and sides of the hoof, but towards the heels is replaced on each side by plates of gristle or cartilage. This elastic material can be felt at the inner and outer sides of the coronet through the skin of the living horse. When diseased and converted into bone it forms the so-called side-bones, which sometimes cause lameness, and always destroy the natural elasticity of the foot. These cartilages, replacing bone at the back parts of the foot, give resiliency to the hoof, and so prevent concussion.

The Frog.—If we examine the under surface of the foot, we find another provision against jar, for, whilst the sole rests upon a bony basis, the frog does not. The body of the coffin bone only extends backwards to about an inch past the point of the frog. It there divides into two processes which extend nearly to the heels, but leaving between them a large space which is filled by a pad of elastic material, over which the frog rests. This arrangement permits the frog great freedom of movement, and gives to the back portion of the hoof the special feature of elasticity so necessary to its function of breaking concussion when the foot comes to the ground during progression. The front part of the foot, by the thickness and hardness of the wall, and by the rigid basis of bone within, is specially fitted to sustain the strain which is placed upon it when the toe takes the weight of the horse, as it does in all forward movement. The back part of the foot, by its thinner and more elastic horn, by its prominent and soft frog, and by the partial substitution of cartilage for bone as its inner basis, is specially endowed for receiving its first impact with the ground during progression. That the foot may preserve its functions intact, the hoof must be maintained in its best form. No parts must be proportionate. A foot denuded of horn may have its sensitive portions injured, and a foot covered by an excessive or disproportionate hoof may so destroy the balance of the limb as to cause grave lesions, resulting in lameness.

• • •

The great English classic race, the St. Leger was run at Doncaster Moor on the 9th, and was won by J. B. Joel's horse, Your Majesty, by Per-simmon, dam—Yours.

• • •

We don't sell advertising space to any but reputable firms.

• • •

The man who advertises is not ashamed of what he has to sell. Patronize him.

Our advertisers are reputable.

STOCK

Discussions on Live-Stock subjects welcomed.

Winter Feeding Steers

Last winter and spring considerable space in these columns was devoted to the discussion of winter feeding steers outside. The experiences of several feeders were given, and illustrations of winter fed steers published. The conclusion of the whole matter was that with the shelter of an ordinary thick bluff, and a reasonably available supply of water, steers can not only be wintered in comfortable condition, but flesh can be added, and the cattle turned off in the spring at a profit. This system of outdoor feeding first received publicity through these columns during the fall of 1905, and since then several proselytes have been won over to it. The system is one that has come to stay. In our dry climate, cattle that are gradually accustomed to low temperatures, experience no discomfort when the thermometer goes down far below zero. Sheltered from the cutting winds with plenty of straw to keep them off the cold earth, with water and salt, with grain depending upon the object to be gained, cattle come through winter in much better condition than they do in ill-ventilated dark stables.

Already Mr. Jas. Murray of the Experimental Farm at Brandon has secured his supply of steers for the second test of outdoor wintering, and the time is right here for others who think of feeding steers this winter to get in their bunches.

The New Union Stock Yards.

Confidence in the cattle business has increased the last two years. Not that the average farmer in the grain belt has made money out of cattle feeding, although many have, but the continuous firm, though low prices for range cattle, have given a feeling of assurance to the trade. This better feeling is due primarily, to the steady demand in old world markets for fresh meat, and to the comparatively short supplies throughout the world. It can in no way be traced to the better handling of our cattle from the range to the shambles. The same conditions as now obtain were in vogue during the years of depressed cattle trading. But it is gratifying to notice that the trade in western cattle has assumed so steady a nature that the railway companies are preparing to facilitate it by providing more convenient stock yards at Winnipeg. This will not mean that the producer will receive more for his cattle as a result of the new yards being built, although it is quite probable that prices will be higher by the time the yards are completed, but it will mean less waste of time in weighing, sorting, reloading or killing, and this in the end is a benefit to the producer, even if the drover and wholesaler appropriate the whole difference to themselves, for in that event they would not be so close in buying.

One thing about the proposed new stock yards that is objected to in many quarters, is that they are to be under the control of the railroads. The railroads, it is claimed, should feel under pressing obligations to handle stock cars with all possible despatch, but with the yards under their direct control, it is insinuated the service will not be as satisfactory. It is also contended that the yards can be kept more sanitary, charges more reasonable, and other desirable conditions secured if the control be vested in a separate unrelated company, or in the city council. But it seems to us a lot of trouble is being met more than half way by these criticisms. However, it may appear on the surface, it only requires a second thought to see that the railway companies will serve their own interests by giving their best attention to the stock trains, and as for internal management, we know of no other institutions so well able to hire capable men. Civic control may ring very musically to some ears, but the best development of any industry cannot be reached where the control is constantly undergoing change through elections. Further, we have to consider that the establishment of stock yards is a matter of the investment of money, and as far as Western Canada is concerned the investment is not by any means as easy as many another proposition, and the amount required would tax a strong organization to raise. All things taken into consideration, therefore, we believe the live-stock interests will be advanced, in the surest and quickest manner, by the plan now in

Frost or no Frost—Raise Pigs

EDITOR FARMER'S ADVOCATE:

I see in the FARMER'S ADVOCATE of August 26th a man in Saskatchewan wants to know what he should do in a district where the crops are frozen every year. Well that is the easiest thing in the world—grow pigs, just pigs, hogs, these four legged animals that make two hundred pounds at six or seven months, and kill out for good human food. If his wheat is frozen, chop it, and feed it to these pigs and he will make a dollar a bushel out of it, and if it is not frozen, chop it, anyway it will still be worth a dollar a bushel. This is a good country to grow peas. Sow peas and oats mixed, cut them with a binder, chop the grain and feed it to the pigs. It is a great help if a few cows are kept, milk starts young pigs off well.

This farmer need not build expensive pens, but he can build very comfortable pens for them with very little lumber. Build a feeding pen eight feet high, leaving cracks between the boards just so wide that a pig cannot get out, cover this over with straw, build another pen behind this three feet high, fill it with straw for the pigs to sleep in then have a passage between the two pens, and pigs can be kept in comfort. If there is a bush near, the pen can be made much cheaper.

Many a mortgage has been paid off with pigs. If this farmer lives near Regina he can sell more hogs than he can raise. Of course in summer he will need to provide green feed such as oats, clover and rape, which will all take work, but a man can't be happy without work, and Western Canada is no place for the "waster."

Laing, Sask.

D. O. C.

Pointers for Hog Feeders

A three-hundred-pound hog at eight months of age, is the ambition of Prof. Dietrich, who is conducting an extensive series of experiments in economical hog-feeding at the Illinois Experiment Station. He has accomplished it in nine months, but is anxious to do it in eight. Of course, he is producing the fat hog, not the Wiltshire singer, but, all the same, the results are interesting. He finds that an all-corn ration is not good for growing pigs. Up to the age of six months, which is to say during the growing period, a ration containing considerable protein, is advantageous; after that, corn may be used to produce fat. One of their most important findings, and one to which hog-raisers the world over cannot give too careful heed, is the danger of over-feeding. A hog can eat more than he can digest, and digest more than he can use.

English Sheep Sales

English ram sales in the last month have been fairly successful. The first draft of sixty ram lambs from the Hampshire Down flock of H. C. Stephens, Cholderton, brought an average of £33 3s. 6d., the highest price being £68 5s.. At the sale of 41 ram lambs, by Messrs. J. Harris & Son, Sir George Cooper paid £78 15s. for the hire of one for the season, the balance selling for an average of £14 14s. each, Mr. Flower paying £47 5s. for one. At the sale of the flock of Col. Le Roy-Lewis, ewes sold from 60 to 81 shillings each. At the sale of the Tarrant flock of Mr. Chas. Bugg, ewes sold up to 112 shillings, and in all 757 head averaged £3 10s. Oxford Downs sold well at the annual sale from the flock of Mr. J. T. Hobbs, 43 making an average of £20 1s. 8d., the highest price being £141 15s.. Mr. Treadwell paid £58 16s. for one, and another brought £48 6s. Messrs. Treadwell's average at their annual sale was £16 3s. 6d., as compared with £22 17s. last year, highest price this year £48 6s. Suffolk ewes at the annual sale from the flock by Messrs. R. Bond & Sons, at Ipswich, sold up to 160 shillings, as compared with 200 shillings last year. The total consignment of 96 averaged £4 18s. 11d.

• • •

If breeders who have improved stock to sell will advertise as the manufacturer and business man does in the paper devoted to their interests and that reaches the class they want to sell to—stock farmers, dairymen, and breeders—they will win success if they have sufficient confidence in the merits of their stock to invite the patronage of those who need it. A successful manufacturer says: "When I buy advertising I want to feel assured that the paper in which I have placed my advertisement goes to the men whom I desire to reach, and that the people to whom it goes have a good opinion of it. I place my advertising on that basis. I used to think that I did not receive