

ant it and
isable, the
where very
ment lands
scale that
ncy. But
n to be to
ce of the
mplished
of failure.

II.
nd in the
primaeval
uce-Birch
of White
e are, of
of forest
uce-Birch
tic coast
er inland
because
its floor.
y due to
s a good
nd. One
the trees
with the
i. Here
bitat for
in great

s forest,
-scented
undant.
esented.
is not
rowth of
d Sorel,
s with
monest
e Star-
end of
cherry
earings
s are in
lowered
som, is
-flower
e areas.
ds. Of
he most
Hermit
ngsters
sinking
ide on
Thrush
woods
Thrush
on the
d root-
are of

oods is
species
arrives
y, the
ind or
-stems
has a
which
arrow.
woods,
since
clear
forests
ferns
o Seas-
ds, so
these

forest
is in-
se we
clams,
g the
these
plants,
n ally
Water
d the

areas
Moss
asses,
y and
erries
ats of
ur in
one,
bogs
aped
cross
a ap-

THE HORSE.

Diseases of the Feet—VIII.

Quittor.

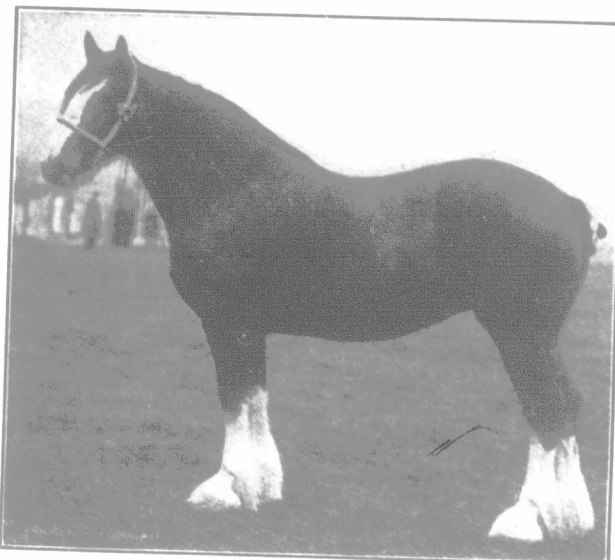
A condition known as "Quittor" consists of a fistulous wound on the coronet, usually upon the quarters or heels. A tube or pipe extends from this opening downwards to a greater or less distance, often extending to the sole, in other cases a variable distance down the wall to the seat of irritation. It is generally caused by treads, punctures, pricks in shoeing, suppurating corns, or other injuries that cause a suppurating within the foot, or in the structures of the coronet. Pus forms at the seat of irritation. If an opening be not made through the horny boundary to allow its escape, it will increase in quantity and burrow upwards between the sensitive and insensitive structures until it reaches the coronet, through which it will break. If existing for any considerable time, a false tissue of a fibrous nature surrounding the passage forms, practically forming a tube or pipe extending from the seat of irritation to the external opening. One or more of these sinuses may form. In most cases the sinus is practically straight, but in others it is more or less curved.

Symptoms.—The symptoms are readily recognized. There will be more or less lameness. In some cases the lameness is very marked, the horse being unwilling to put the foot to the ground, while in others it is slight. There is a swelling and hardening of a portion of the coronet, in which one or more small orifices are seen discharging a thin, limpid secretion, or a thick and sometimes somewhat curdled pus. From the external orifices sinuses are found leading generally downwards beneath the coronary substance, lateral cartilages and into the foot. A quittor differs from a wound or recent abscess in the coronet by the condition of the parts, which have taken on a peculiarly well-marked unhealthy action, by the character of the swelling, which is hard to the touch, and by the presence of one or more sinuses.

Treatment will depend upon the cause. If it be a suppurating corn puncture, prick, bruise or other cause that sets up an irritation, followed by the formation of pus between the sensitive and insensitive soles, a free opening must be made through the horny sole to allow escape of pus. The seat of tenderness in the sole can usually be readily located by tapping gently with a hammer or pressing with a pair of pincers. When the seat of trouble is tapped or pinched the animal will evince pain. After the pus has been liberated, treatment should be the same as recommended on a former article for punctures. In addition to this, local treatment of the coronet should be given. If the condition is of recent occurrence, all that is required is to keep the opening clean and dress two or three times daily with an antiseptic, as a five per cent. solution of one of the coal tar antiseptics or carbolic acid, but if the condition has been in existence for some considerable time, it is wise to inject the sinus once or twice daily for a few days, as 8 grains of corrosive sublimate in one-half pint of boiled or distilled water. The fluid will escape at the sole, having first passed the whole length of the sinus and tending to destroy any fibrous growth that may have formed.

In cases where no communication exists between the exit and the sole of the foot, it is necessary to locate the seat of irritation, and either make an opening through the wall to allow escape of pus, or extend the passage down to the sole and make an inferior exit there. This is an operation that in most cases presents difficulties. In the first place it is necessary to determine the direction and depth of the sinus. This is done by carefully introducing a probe. When the operator has satisfied himself on this point, he must decide whether he will make the lower exit through the wall or through the sole. When the seat of irritation is near the lower margin of the wall, the sole is usually selected for the exit. In many cases the long continuance of quittor is due to the imprisonment of a piece of decayed bone, dead cartilage, or other foreign body, and it is necessary to remove this before a cure can be effected. In cases of this kind the condition will usually be disclosed during the probing operation, the point of the probe coming in contact with the offending body reveals the condition to the operator. This also locates the seat of the trouble. In such cases it is necessary to pare through wall or sole and remove the foreign body. When it is decided to extend the sinus down to the sole, either a bistoury or a red hot iron is introduced at the top and forced down, cutting or burning a passage to the sole which is then pared through to make a free exit. Most practitioners object to the use of the hot iron, except in cases where other means will not suffice. After the sinus has been continued to an inferior opening, it is good practice to inject into it a strong solution of corrosive sublimate, say 15 grains to an ounce of water. One or at most two injections will be sufficient to cause the whole surface of the sinus to cast off a thin slough, and leave a normal granulating surface, requiring no further treatment beyond being kept clean by flushing out once or twice daily with an ordinary antiseptic solution. To sum up, the principles of treatment are: To make a dependent orifice by incision or cautery, remove all foreign bodies, destroy proud flesh or fibrous growths, keep clean and stimulate reparative processes. When fistulous openings are situated on or near the anterior surface of the coronet, great care must be observed in treatment, as the articulation of the bone of the foot with the pastern bone is superficially sealed, and thinly covered by soft structures, hence care must be taken to not cut or cause a sloughing into the joint. During treatment it is necessary to give complete rest, exercise or work causes great suffering and renders recovery very difficult.

WHIP.



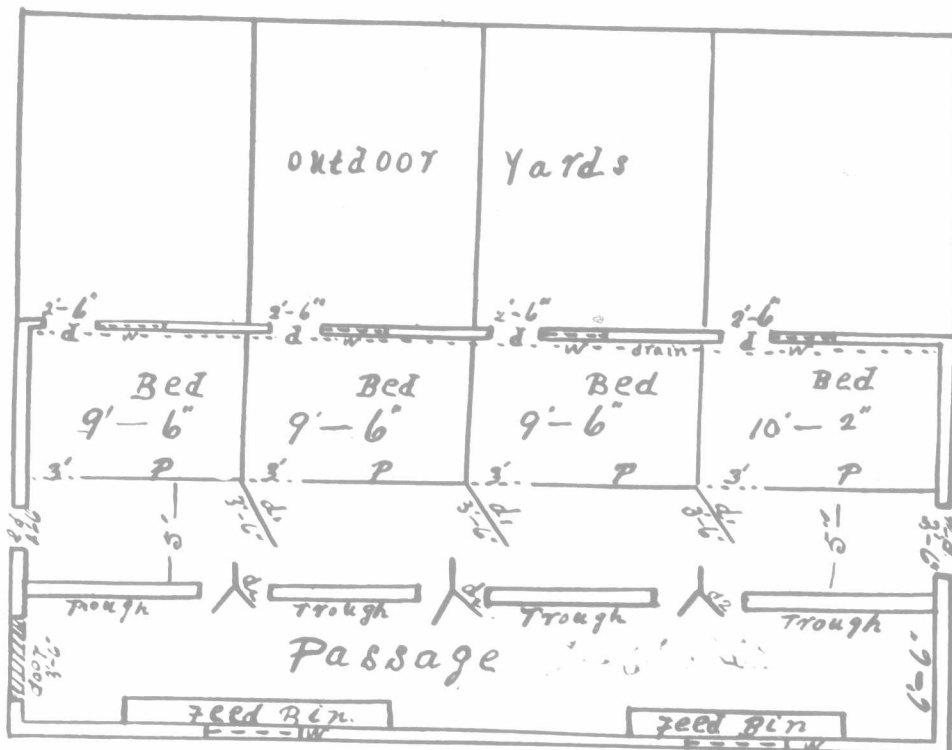
A Good Type of Clydesdale Brood Mare.

LIVE STOCK.

Changing a Sheep House to a Piggery.

I have a building, 50 feet by 20 feet, that I wish to equip for a piggery. It stands on a stone wall about one foot high and has 9 by 10-inch sills. It has been used for a sheep pen and the walls are single boarded and battened. This building stands about 16 feet from the east end of the barn, to which I should like to have it joined so I could enter the piggery from the stable and barn floor. Kindly advise me how to make this building warm enough for pigs and how to ventilate it. Would cement sides and floor be suitable? What is the best size for pens? Please recommend anything that would make this building up-to-date. G. R. A. M.

Ans.—Sentiment in favor of elaborate and extensive piggeries is ebbing and now approaching the low-water mark. The colony house or hog-cabin is growing in popularity and giving good results under widely varying conditions. The piggery and cabin can be used in



Plan of a Small Piggery.

conjunction with each other very advantageously, but no one yet has been able to design and construct a large building so successfully adapted for swine that it is an absolute success in every regard. More grass, larger runs and less confinement are the conditions towards which successful hog raisers are striving. Small piggeries are practicable and in some cases quite necessary. We have made the foregoing statement in order only to express the growing sentiment in favor of less elaborate hog houses.

It is more difficult to make recommendations regarding the fixing over of old buildings than it is to advise in regard to a new one. There are usually some obstacles presented by the old structure that one has to make the best of. There is no reason, however, why this sheep house could not be made into a very comfortable piggery. We are not told whether this building stands north and south, or east and west. The latter of course is preferable for that exposes a long wall to the south and facilitates lighting and yarding.

In regard to walls for a piggery, we here describe the type recommended by the Central Experimental Farms system, and which is in use at Ottawa as well as on many of the branch farms. The lower 10-inches of the walls are of concrete and above this a closely built wooden construction. The posts and studs are of 2-inch by 6-inch planking. On the outside of posts and studs

are two ply of building paper, covered with plain boards put on vertically, with beveled battens over cracks. The inside of the posts and studs is covered with modern building paper, which is covered with seven-eighth-inch sheathing. The ceiling also is sheathed with seven-eighth-inch stuff. The roof is boarded on the rafters and covered with roofing paper and metal shingles.

This description offers some suggestions for this particular case. On the inside of the studs of the building, already standing, one could put a ply of building paper and board it over tightly, making a satisfactory wall. The dead air space between the two layers of boarding would keep out cold and moisture. The stone wall on which it already stands should be quite satisfactory.

While cement floors, in the opinion of some breeders, are not altogether satisfactory, they are the most popular type now in use and it is difficult at moderate expense to construct anything superior to them. Their cold and moist nature, for which they are criticized, can be reduced to some extent by placing several inches of gravel or cinders for a foundation. The rough part of the concrete floor may be painted with two coats of tar and then the top layer of cement, one inch thick or more, placed on top of this. The tar is a perfect insulator from soil moisture. An overlay in the corner of the pen will keep the pigs off the cement while they are lying down.

Plenty of windows should be installed in the south wall, giving at least one for each pen. The windows should be large enough and so situated in the wall as to flood the pens with light.

A straw loft in a piggery reduces the moisture very considerably, especially when the floor of the loft is loose enough to permit the air to circulate upwards. The straw should be changed every year.

As to ventilation, there are several methods to follow. One in common use has a shaft opening through the ceiling below and the ridgeboard above, and is covered with a cupola effect to prevent a current of cold air downward. There should be at least two of these in a building of this size and it might be well to have a check at the bottom so one could regulate the air current according to temperature. In some piggeries the windows are so constructed as to act as an inlet for fresh air. The top section is hinged so as to open inward at the top; thus diffusing the fresh air well over the tops of the pens. The fresh air may also be brought in through a shaft placed between the wall and its stone foundation and coming up the wall for a short distance on the inside. These should not be more than 4 by 6 inches in size and should be equipped with coverings on the inside openings by which the amount of incoming cold air can be regulated.

The accompanying plan may offer some suggestions in regard to pens. Nine feet by 12 feet, 10 feet by 12 feet, and in some cases pens as small as 8 feet by 10 feet, are suitable. Under any circumstances one should provide trough space sufficient for the number of pigs the pen is supposed to accommodate. A building 20 feet wide will not have sufficient width to permit of two rows of pens and a convenient passage, so one could lay out the building in a manner similar to that represented by the accompanying illustration which has pens and yards on the south side. With the hinged gates between the troughs and the sleeping corner of the pens, one has a passageway throughout the length of the building which facilitates cleaning. The drain should be located along the line where these gates are hinged, instead of at the back wall as shown in the illustration, and the slope in the floor should be towards it, both from the beds and from the troughs.

This lay-out for a piggery would not suit everybody, but it at least offers some suggestions or acts as a basis upon which to draw more convenient plans.

The building could be joined to the barn, thus making one more pen and a feed room.

Produce and save and in doing so remember that dollar bills cannot be eaten or worn for clothing, neither do they make satisfactory fuel for heating. The real necessities of life are not found in money in its various forms, but in things which can be bought with money. Canada might have plenty of money but the people might starve or freeze. Available food, clothing and heating material are far more important in a pinch than is money, although it is necessary now to conserve the latter that the nation may be able to finance the war.