anked heaven for this, my

partake of the bountiful

English preacher, said that nell. One was, as he puts

ve for the woman who be-

was my early and lifelong

oor farms had a love for

occupied in their otherwise

na danger o' too mony o'

city for amusement and a

best friend in whatever placed, but if it has fallen

ist can't be what he might

help tae bring him almost th having, I'll gie ye my

bundant in many of our

ave a good many species

-shelled forms of the Lake

he small, thinner-shelled

pally distributed. A very

ted species is Unio com-

fresh-water clam we find a

first sight appears to have

eful dissection shows that

is really quite complex.

ode of life of any animal it

ing of its anatomy, and it Fig. 2 and notice some of

adductor muscles which

together when the clam is

three other muscles, not ontrol the foot. The shell ly open, being thus kept

ligament at the hinge, and

n of the adductor muscles

t is the foot, the muscular eps along. In locomoting and forced into the sand

the tip is expanded to give

shell are pulled up to the

this series of movements bout 20 seconds, and this bout an inch in 15 minutes.

their shells are in a more

hey are at rest (when they

y leave behind them the

ow, by which the extent can be traced. M is the

ell and encloses all the

the gills of which there are

which lie on either side of overed with vibritile hairs

ent to carry the minute

am feeds, into the mouth.

consists of two short tubes,

tion of cilia, takes in water

he upper passes the water

of the heart, and au is one

th is situated just between which is surrounded by a is the intestine which is

oot and empties just above

ney and functions as an

the fresh-water clams are

ss, that is in the portion coils. The eggs are exe gills of the female, where

sperms which are ejected male into the water.

ome the outer gill, and in

tion of the outer gill, are

The eggs develop into a hidium, which consists of

actor muscle, a mantle, a) and hears tufts of sensory

a are carried in the gills extruded in September,

ey are carried through the

usion, float in the water

such as the fin or tail, or omes in contact with the

e shell close upon it with a he proper host fish which

im remains attached, the

forming a cyst, and in this

for some weeks, getting ues of the host. During

a digestive system and

nd the young clam drops

ater clam has a particular

coming encysted only on a

on fish of certain families.

the wrong kind of fish it

n carry from 1,000 to 2,000 feeted injuriously. This young of the fresh-water

among marine species, is

to their environment, for

ing streams simply floated

t down stream, with the would be formed further they were all at the month

the fresh-water clam.

Diary.

KLUGH, M. A.

I found there.

THE HORSE.

Wounds and Their Results-IX.

ERYSIPELAS.

Erysipelas occasionally occurs as a complication, or result of wounds. It may be defined as an inflammation of the skin and underlying tissues, characterized by a diffused swelling of the parts involved, which have a

remarkable tendency to swell, and is dependent upon some unascertained alteration in the blood.

Symptoms.—In an indefinite period, but usually about the third or fourth day after the infliction of any injury, the skin in the immediate vicinity of the wound in smaller smooth shining but tender and pointure. injury, the skin in the inimediate vicinity of the wound is swollen, smooth, shining, hot, tender and painful. The swelling is liable to extend quickly in all directions, If a limb be effected its whole circumference becomes involved in the swelling in a few hours. The swollen surface pits on pressure; that is, when pressed it presents a doughy feel, the finger sinks into the tissues, and the indentation does not disappear quickly when pressure is relieved where muscular tissue is involved. Where the tissue under the skin is hard and firm, the pitting is not so well marked.

In rare cases little vesicles are formed, which are followed by some amount of sloughing. This is more liable to occur on the flexure surface of a joint when a limb is the seat of trouble. Besides local symptoms, we notice more or less well-marked constitutional dis-turbance. The pulse becomes frequent and strong, shivering fits are generally noticed; the temperature becomes increased; loss of appetite more or less marked,

and lamneness, if a limb be effected. The degree of constitutional disturbance is in proportion to the severity of the attack. The tendons and ligaments, the fibrous coverings of adjacent muscles, as well as the skin and subcutaneous tissues, become involved. The pain is usually excessive, the swelling hard and tense, and occupies a large extent of surface. In a variable time purulent collections form in the muscles, or more deeply between the tendons and ligaments, which on being lanced, discharge a watery pus; which, in some cases, contains shreds or masses of

gangrenous tissue. The general systemic disturbance becomes severe, rigors are frequent and pain acute. The pulse, at first full and strong, becomes frequent, small and feeble; the respirations are short and hurried; the bowels generally constipated, and the faeces covered with mucous; the urine generally scanty and highly colored. The appetite is lost, but thirst is usually excessive. Occasionally the inflammation extends to the articular lations nearest the injury, and the case becomes complicated with open joint.

Treatment.-A brisk purgative of 6 to 9 drams of aloes and 3 drams of ginger, or 1½ to 2 pints of raw linseed oil should be given in the early stages, the size of the dose being governed by the size of the patient. The swollen parts should be well bathed frequently with hot water, or better poultices of hot linseed meal kept to the parts. If poulticing be adopted the material must be kept hot, as if allowed to become cool the reaction will retard recovery.

After the purgative has operated, dieuretics, as nitrate of potassium, (saltpetre) in three to four dram doses should be given twice or three times daily for about 3 days, and also tincture of iron should be given in six to eight-dram doses in a pint of cold water as a drench twice daily. The feed should be of first-class quality, of the best kind, and given in liberal quantities. If the appetite continues need to be increased by If the appetite continues poor it can be increased by giving a tablespoonful three times daily of equal parts powdered sulphate of iron, gentian, ginger, nux vomica and bicarbonate of soda.

In very severe cases treatment must be more energetic A purgative must be given, and the excitement and fever combatted with fifteen to eighteen drops of Fleming's tincture of aconite in one-half pint of cold water, given as a drench every three or four hours until the pulse loose its forevers after which aconite must the pulse loses its frequency, after which aconite must not be given. After the purgative has acted, the tincture of iron should be given in four to five-dram doses every three or four hours. Heat should be kept to the swollen parts. If abscesses form they must be opened, but it is advisable to abstain from the use of the knife unless any has recent as the admission of air into the tissues is apt to cause sloughing

Blankets and Blanketing.

BY GEO. W. MUIR.

In summer and while at work horses do not require blanketing because they are usually warm enough However, we are now approaching the time of the year when blanketing will, under certain conditions, become necessary. Young or idle horses that are gradually account to the second se ally accused to the change from field to stable conditions do not require any blanketing, as their coats become heavier as the temperature goes lower. It is the horse that is at work in all kinds of weather, in one day and out the next, that requires close attention. When a horse comes in wet from perspiration or rain he should be dried off as much and as quickly as possible. If soaking wet a scraper may be used, this to be followed by a brisk rub with a wisp of hay. The horse should then be blanketed until such time as his coat becomes dry again.

The advisability of blanketing the working horse continually throughout the winter, when not out at work, depends on conditions in the stable. Generally speaking, it is more healthful to keep the stable cool enough to make a blanket necessary all the time, hot

stables being very unhealthful. If the stable is warm at all times it will only be necessary to blanket the horse when it comes in wamm. In the former case, too heavy blankets should not be used for the horse will then feel the cold much worse and will require extra heavy blanketing if obliged to stand for any length of time

When the horse is obliged to stand idle outdoors in cold weather for any length of time, it should be well blanketed. This is particularly true of clipped horses. Some horses are blanketed continually to keep them clean and to make their coats glossy. This is wrong practice for, in the first place, the dirt in a horse's coat originates, for the most part, in his skin, hence the blanket cannot keep it out; in the second place the blanket does not make a true gloss on the coat but only a temporary one which is soon lost when the horse goes out in the cold. Liberal use of the curry comb and brush are the best means of obtaining a clean and

In practically all cases of sickness, blanketing is to be recommended, the idea being not to keep the animals unduly warm but to keep them warm and at the same time be able to provide plenty of pure, fresh air. This is particularly true in cases of pneumonia or other lung trouble. When an animal is seen standing trembling and with its back up it is safe to throw a blanket or two over it as the first remedial measure. Often a good warming up at this stage will check worse

The best blankets are made of cotton or canvas with wool or flannel linings. The wool and flannel serve to absorb the moisture, and thus help to dry out the animal's coat besides being warmer in winter than the all-cotton blanket. A light, water-profed canvas blanket with little or no lining is serviceable for outdoor use in wet weather. All blankets should have good strong fasteners for very often an otherwise good blanket is ruined through becoming unfastened, trampled upon and torn. A good strap and buckle at the breast is a necessity, the same being fastened to the blanket in such

The stockman who is not straight-forward and square in his dealings is likely to find a diminishing market for his products.

It is much easier to put an animal off its feed than to get it back to a thriving condition. It takes an experienced feeder to grain an animal to the maximum.

The success or failure of the herd depends upon the man doing the feeding. Both ends of the cattle must be watched, and the feed of the right quality given in the proper quantity.

Every stable medicine chest should contain a few ounds of Epsom salts, two or three quarts of raw oil, a little sweet nitre, ginger, turpentine, etc. One never knows how soon these, especially oil and salts, will be needed, and a dose in time saves complications.

The cold spell the middle of November found much of the stock still on pasture. Once the weather becomes disagreeable the cattle do not do much in the With our weather conditions, stock needs to be stable fed more than half the year, which is a disadvantage compared with countries where there is grazing the year round.

Live Stock is the Key-Stone of Permanent Agriculture.

The readjustment period has apparently arrived, and the effect has been reflected in the price of farm products and live stock. If one thinks back two or three years he is apt to cry blue ruin as he reads market reports in his weekly or daily paper, but when the mind travels back ten or twelve years the present prices are still high, although not commensurate with the present cost of production. The wonder is that the slump didn't come long before this; it did after other wars. We have been living in abnormal times. The dollar has been decreasing in value but let us hope that it has reached

> to unload their stock and dispose of the grain and hay. Others, more optimistic, prefer to winter their regular number of cattle on the abundant crop of straw and corn and then finish on grass. No one is in a position to foretell the future conditions. Market stock may be high or it may be low next spring and summer. The present easiness of the market has come at the season when prices nearly always have reached low ebb, but with the coming of the new year have materially strengthened in the past. Let us hope it may be so this coming year. 'In normal times it would be a safe supposition that hogs and cattle would strengthen by late January and February; to-day it is but a guess. If

people become panicky and start unloading, the prices are sure to drop, owing to a glutted market. It is advisable to steer a steady course and keep the head level. Hay is a big price, but cattle can be wintered without it if there is a supply of silage or corn stover and straw. These latter feeds have not the same cash value, but they keep the cattle growing and in condition to put on flesh when turned on grass. It is possible that instead of putting half-fat steers on a bearish market, it will pay to carry them on home-grown feeds and make them prime for next spring. This entails labor and one may have only the manure pile for his toil, but even at that it requires fertilizer to keep up the productivity of the soil. There are a great many factors which will determine the price of live stock and grain the next six months.

The pure-bred trade likewise feels the depression. Prices are not what they were, but at that well-bred, carefully-fitted animals bring a fair price. It is the breeder of plain individuals who is feeling the pinch, and is apt to dampen the enthusiasm of anyone thinking of improving their herds. The bidding at sales of pedigreed cattle during the past month has been slow, but this must not be taken as the barometer of the livestock business. True, some of the animals sold away below their value, if others brought what they were worth. The fact of the matter is that the poorly-fitted cull pure-breds in these sales brought the average away down, with the result that a bad taste was left in the mouths of some breeders. The man raising well-bred stuff and who feeds them well gets wages and good stuff and who feeds them well gets wages and good interest on his investment, but it is not a good day for the speculator in live stock. Instead of being depressed by the low average reported for some sales, the breeder would be better guided by remembering that 43 head made an average of £730 in Scotland; or the £791 average on 25 bull calves at Wm. Duthie's; or Hartnell's \$1,663.29 average on 79 imported cattle that had just have the same at 2000 mile journey, and were in this landed from a 4,000-mile journey, and were in thin condition. It must be remembered that these animals had the blood and breed character that ear-marked them



A Winning Team of Clydesdales at the Western Fair, 1920.

blanket a surcingle is generally used. This should be fairly wide and padded on either side of the spine to relieve the pressure on the latter. In some cases also it will be found necessary to use thigh straps, these being fastened to the rear of the blanket about the height of the breeching and passed around the inside of the thigh and fastened to the blanket again at the flank. It is advisable to have these straps fairly loose to allow a little play or they will be easily broken.

As most blankets are rather expensive they should be given a little care. After using on a sweating horse

or when damp from other cause see that they are aired and dried at the first opportunity. At the end of the season they should be soaked and then washed, thoroughly dried, and packed away in a box with cedar or moth balls.—Experimental Farms Note.

LIVE STOCK.

Stock will not thrive with dirty mangers.

Remember that salt is an essential, not a luxury.

What have you done to boost your particular breed of stock?

A little sweet oil and iodine applied to that ringworm will remove it.

Fill the cattle on roughages. They are the cheapest part of the ration.

It is easier to prevent lice than to rid the cattle of

them once they become infested.

Give the flock dry quarters. The cold doesn't matter so much, provided the pen is dry.

That barren cow is a liability rather than an asset to the farm. Send her to the shambles.