## FOUNDED 186

Diary.
UGH, M. A.
little fleas
to bite 'em,
lesser fleas
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of mammals, birds and aving external parasites, them, that we naturally provided with its own it. But when it comes enerally known.

external parasites, but ustaceans. That large Crustacea, to which the mps, etc., belong, players, both fresh and salt, re are, of course, a very pass the larval, or the in the water, and some in the water and their a group the insects are lite otherwise with the few species, such as the but in the waters they e species which prey on species which prey on on vegetation, there are ng, species which are minute that there are op of water, and there n other aquatic animals. es of fishes belong to a Many of the Copepods ecies are very important parasitic Copepods are which is in accordance

n as an organism begins

(Enlarged).

begin to lose some of its in which these powers ally disappear. One of a parasitic animals are and we consequently a copepods incapable of tate. They are firmly fishes body, and there is. When first hatched and during this period themselves to it. Then se their ability to swim opear. Other parasitic crawl about throughout body.

body. orms, the fixed as well the fishes body where obtained. Such places ne mouth and the fins. opepods have two eggthe body, (see Fig. 1), oundant than the males. with great tenacity to necessary by the fact ium than air. In many are modified into suck l joints of the antennae ost of the fixed forms ut claws for burying in hooks and claws which considerable irritation, lling where these claws w of blood, and their together into the form lood is drawn up. by scales the parasites tc., where there are no edge of the scale until

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ther confined quarters, r of parasites often in In such cases it is carefully all the fish, wily parasitized.

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## THE HORSE.

**DECEMBER 2, 1920** 

## Stable Clothing and Bedding for the Work Horse.

BY DR. G. H. CONN.

During the winter months blankets are usually employed, when animals have been clipped. It is also the custom to blanket most farm animals that are used for the farm work. There is not much doubt but that blankets are of much value, inasmuch as feed may be saved, or at least energy that goes to produce heat, will be saved by the use of a blanket. No one would hardly dispute this latter fact. It also adds to the appearance of the animal by producing a better coat of hair, and it materially adds to the comfort of the animal. While we have determined that the animal really does not need a blanket to keep in good health, yet the saving in feed, the improvement in the appearance, and the comfort it gives the animal, are reasons enough to influence the common use of the blanket upon work horses during the winter months.

The blanket first of all must be of material that will be warm, that is strong and will not be easily torn, and material that can be kept reasonably clean. Two common materials for stable blankets are ordinary woollen blanketing and jute sacking lined with stout woollen collar check. Probably a better blanket than this is one made of an extra heavy white canvass or docking; a blanket of this kind will not permit of any cold winds striking the animal, and are very easily kept clean owing to their hard, smooth surface. A blanket or cover of this kind lined with the ordinary woollen blanketing would be much warmer than the average blanket, and no doubt quite a little more expensive as well.

The blanket used on work or draft horses consists of the body blanket only. In fancy show horses a pad and roller are used to fasten the blanket in place and a hood is used for the head and neck. The common type of blanket fastens directly in front on the breast, by a strap and buckle, or a snap and ring; two surcingles are sewed on to keep the blanket in place, and they are either buckled or fastened with a special fastener on the order of a snap or hook. To facilitate the keeping of the blanket on the animal, a "fillet string" may be placed around the quarters; this is nothing more or less than a string extending from one side of the blanket to the other, around the quarters, much the same as the breeching, only being placed a little higher upon the quarters.

The blanket should fit the neck very much the same as a collar; if it is too large in the neck, the blanket does not retain its shape and is very difficult to keep in place. It should extend well down to the elbows and backward to the dock, fitting the animal rather loosely. Both the fillet string and the surcingle should be adjustable, and in fastening the surcingle, the fastener should be placed high enough that the animal will not lie on it when lying down.

when lying down.

The blankets should be shaken quite often, and brushed occasionally to remove the loose hair and the dirt, that collects on them. If it becomes necessary to wash them use cold water and just as little as possible. It sometimes becomes necessary, due to contagious diseases and skin ailments, to disinfect the blankets; cold disinfectant solutions should be used, and the blanket stretched at intervals during the time that it is

Blankets should not be used in the fall until the temperature requires them for the comfort of the animal, and then only for warmth. It is a very common mistake made by some horsemen to keep the barn very tight and close, and then blanket their horses very heavily to induce the accumulation of excessive fat and to make them exceedingly sleek. This lowers the vitality of the animals and renders them quite liable to diseases induced by exposure to inclement weather. The ventilation in the barn should always be ample to keep the air pure and eliminate the moisture. Horses never suffer from cold in a well-ventilated barn, as the moisture is always removed before it has become cold enough to make its influence felt upon the animals. The use of a blanket under the harness, or on the outside, during very cold weather should never be permitted while the animal is working. This is a common practice, but one to be condemned under all conditions.

When the animal is brought to the stable excessively sweaty or wet, it should be dried with rubbers or handsful of straw, until the excess of moisture has been eliminated; the animal must not be blanketed while in an extremely wet condition, but should be allowed to dry somewhat, first. It should be blanketed, however, before it gets cold enough to show a reaction to the temperature by shivering. If the blanket is placed on the animal while the coat is excessively wet, it will absorb a quantity of the moisture and the dampness of the blanket will only make the animal more uncomfortable and add to the possibilities of producing a reaction that will be detrimental to the animal.

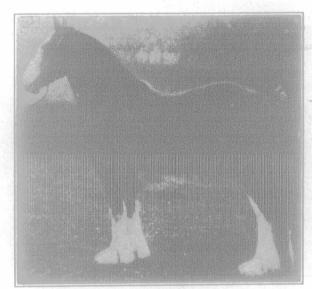
THE PURPOSES OF BEDDING.

By providing a good bed for the work horse, we are but practicing economy in his management. While it is true that most horses take much of their rest while standing, and that there are others that rarely lie down, yet providing a good, comfortable bed, may do much toward inducing them to take some rest at least, lying down. We are very positive that with most horses, a good bed influences them to rest much of the time lying down, even in the day time. This serves to save their legs, and if the bed is properly made it protects them from injuries on the hard floor.

A good bed for the horse should be level, dry and warm, should absorb or allow the urine to drain away in its entirety, and have no injurious actions upon the hoofs or the body. Most materials have some objections but we do have several that can be used very successfully when properly managed. While straw is the most common material used for bedding, as well as the most satisfactory, yet we have other materials that can be used when circumstances make it necessary; the most common of these are, sawdust, shavings, sand and leaves.

Straw to make the best bed should be long, dry, clean, free from mold and of a good bright color. A great deal of the straw used for bedding in towns and cities has been baled, and this crushes it to such an extent that it does not produce as good a bed as the whole, unbaled straw. Straw makes a very attractive bed when properly prepared; being clean and bright looking, and very elastic. However, for best results enough straw should always be available to keep the soiled straw replaced at all times. A thick, wet, urine soaked mass of straw in the bedding is very unsanitary, and should not be permitted under any conditions.

It requires some little experience to make up a bed properly. In the first place, the straw must be laid criss-crossed, for if it is laid straight it does not make a good bed, and does not remain in place long. Where the horses stand in a single stall the bedding should not be placed too far forward, as the horse usually lies as far back in his stall as his tie strap will permit. In making up the bed the straw should be patted down with the fork to get it neatly arranged; if it is left too fluffy and loose it will be moved into large masses by the movement of the animal's feet. We know of no better way for the average horseman to secure the few little practical details that are necessary in making a suitable bed for the horse, than to watch the caretaker or "swipe" prepare the bed for one of our modern race horses. Of course, the farmer cannot devote the time to making up each animal's bed that is spent on the race horse's bed, but he can at least learn the principles of properly preparing the bed, and it will greatly assist him in improving his own method.



Jim Scott.

Reputed to be the best Clydesdale gelding showing in Scotland this year. He was sired by Carbrook Buchlyvie.

The bedding should be removed from the stall, or at least from in under the animal's feet during the day; the wet and urine-soaked straw should be removed as well as all of the manure. If the bedding is but slightly soiled it can be used again after it has been dried. It should be piled in such a way that the air will circulate through it and dry it out thoroughly. There is one objection to throwing the bedding to the front of the stall; a greedy horse may eat it and he will be compelled to breathe the strong ammonia fumes from any of it that may be soaked with urine. The best way to handle it is to throw it in a pile at the rear of the stall out of reach of the animal's feet. New straw can be added from time to time, as it may be needed. On the average farm, straw is plentiful, and no attempt is made to save any of the bedding, but the straw is removed with the manure, and allowed to decompose and soak up the moisture from the other manure, for the purpose of producing manure for fertilizing the season's crops. Where the straw is plentiful this is the most profitable method to pursue, but at times it is necessary to buy straw for bedding, and in such cases becomes necessary to conserve the bedding as much as possible.

Wheat straw is, no doubt, the best straw that is used for bedding; it is long, tough, hard and will wear well; it is not as sweet as oat straw, and not so readily eaten. It should be of a bright yellow color.

Oat straw is more easily crushed and will not wear

oat straw is more easily crushed and will not wear so long as wheat straw; it is sweeter to the taste and is easily digested, so horses are apt to eat it quite greedily.

Rye straw is the best of all the straws as it is longest and toughest; however, it is too high priced and in too great demand for stuffing for collars and other purposes. The straw is smaller than wheat straw, and not so

bright in color.

Barley straw is not suitable for bedding the horse as the awns on the head may irritate the skin, and if eaten in any great quantities may cause colic.

Leaves would make a very good bed and one that is very economical. It is doubtful if farmers would very often be compelled to resort to the use of such

material, as they can usually produce bedding material of some kind. They could be used in case nothing better could be secured. They do not drain the urine away as well as we would like.

Sawdust may be used for bedding horses but it should not be employed, unless ample supplies are available as it ferments very rapidly. The sawdust should be from well-seasoned logs; if it is from green timber it will become heated as soon as it is packed into a bed and soaked with urine, and will cause an irritation of the skin. It is not an unusual sight to see animals that are bedded with sawdust, have a large, scabby surface, where they have lain with that part of the skin next the heated sawdust. If there are drains in the stable they should be stopped up, before sawdust is used, or it will wash into them and clog them. The sawdust must be removed as soon as it is soiled or wet with urine. In very hot weather if allowed to remain damp, it may become flyblown and full of maggots.

Shavings make a very good bed, where they can be secured; they do not heat as badly as sawdust, and are not so good as an absorbent. They occasionally contain some large blocks of wood, which should be removed by hand. The same precautions in handling it as in the use of sawdust, should be taken.

Sand may be used in a dry, hot climate, and where the floor is not damp; it should never be used in damp, cold climates. Care must be taken that the sand is free from all traces of salt, or the horses may eat large quantities of it, which will produce a serious, if not a fatal colic.

The practice of allowing the bedding to remain under the animal all the time, is not to be recommended. It gradually works to the rear of the animal and in a short time, we find that it is simply a damp heap; it is very unsanitary and should be condemned for this purpose.

Before using any absorbent bedding stop all the drains to prevent them being clogged. As a general practice, do not bed the animal down until he has been cleaned, and as the horse will usually stool as soon as the bed is placed under him it is well to place a small fork full of soiled bedding under it, and then remove it when the bedding down is performed for the night; this conserves bedding material.

## LIVE STOCK.

Dry, harsh hair is not a sign of thriftiness in the stock.

Receipts of stock at leading markets is considerably below the same period last year.

Do not misrepresent an animal when answering an inquiry from a prospective purchaser.

It is the production of live stock and farm crops that will give the dollar its full value.

Combing, brushing and a little trimming up greatly improves the appearance of the herd,

Some stockmen are wishing that they had sold their cattle when they were offered a good price.

Some men should be prosecuted for cruelty to animals, for the way they lend assistance in cases of difficult parturition.

Did you ever feed silage to the sheep and hogs? Give a little to the growing pigs and watch them work for the kernels of grain.

Rats are a poor class of animals to keep around the granary or stables. They cause annoyance and loss, but produce nothing of value.

If ensiling the corn the silo would not hold at regular filling time, run a good stream of water into the cutting box. If ensiled too dry corn moulds.

In order to feed economically the herdsman must know the relation of gain to the amount of concentrates fed. This entails the use of scales.

The Ontario Provincial Fair and the Toronto Fat Stock Show will be held next week. These fairs are a source of inspiration to all lovers of good stock. Plan on attending.

Everyone who looks after stock should understand something about the anatomy of an animal, and learn how to correct mal-presentation and render aid in an intelligent manner.

Straw helps fill the cattle and also supplies a certain amount of nutriment. A good deal of it can be utilized to advantage by mixing it with pulped roots or silage a few hours before feeding.

Every flockmaster and herdsman should train their eye to detect signs of distress in their animals, and also study how to render first aid. Too many fail to see anything wrong until someone points it out or the animal goes down.

Have you ever noticed how young pigs like to root in earth? It is a good plan to have sods on hand to throw into the pigs during the winter, or there is no better way of disposing of the soil brought into the root-house on turnips and mangels.