Correspondence.

To the Editor of the Colonial Herald.

Sir; I have received a letter from Mr. David Haystead, who was formerly a Tenant on one of the Earl of Selkirk's Estates (New Wiltshire), in this Colony, which letter I forward to you for insertion in your paper. The writer is a practical farmer—he is honest, industrious, and worthy of credit. His information, he states, is from personal observation. The letter, therefore, needs no recommendation, and without it it will doubtless be read with much interest by many of your readers.

I am, Sir,
Yours respectfully,
W. DOUSE.

Charlottetown, Oct. 10th, 1840.

Charlottetown, P. E. Island, 9th Oct., 1840.

Sir,—I was formerly a tenant under you, in the New Wiltshire Settlement, on the property of the Earl of Selkirk in this Island; and twelve months ago, from dissatisfaction with my condition, I disposed of my Leasehold Interest, with a view to bettering my fortune in the United States of America. To that land of promise, I accordingly went; but I am now returned from it, with ideas greatly changed, both respecting that country and this Island.

Although in purse much poorer, I am returned something wiser than I was when I left you. I have, indeed, paid rather dearly for my increase of wisdom; but, dear as it has cost me, I will not be so ungenerous as to withhold the benefit of it from others amongst whom I mean to settle again, and who, as I was, are discontented in prosperity; and, as I mean to beg of you to be so good as to place me upon another farm on the property under your management, I think it is due to you, in the first place, that I should lay before you my altered views and the fruits of my late experience, to be made whatever use of you may think proper. Indeed, from the notice taken of my departure from this Island, by a correspondent of the Colonial Herald, in a letter inserted in that paper, September 21st, 1839, (the whole of which letter, except the assertion that I was sent out to America at the expense of my Parish in England, is in the main substantially correct,) I think it would be well to give this admission and the following statement to the public, through the medium of the press.

Whilst in the United States, I travelled a good deal over the country in search of an advantageous situation in which to settle. In New Jersey farming is not so profitable as in this Island. The lands, in general, I found very rocky and very hot; and no where, in that State, do I think the soil capable of producing more per acre than that of this Island. Here, (I mean in P. E. Island) the farmer, even among stumps, can raise as much per acre, as can be done on most of the farms in New Jersey; and, what is more, he can do it with less labour. This I would fully explain, could I write with as much ease as I can speak; and, in conversation, I shall be happy to do so to any of the unreasonably discontented here with whom I may meet.

Around Philadelphia, for a distance of about sixty miles, the country is in a state of high cultivation, and much like the finest agricultural counties of England; but neither is it any more than those English Counties, a country in which a poor man may think to settle comfortably down as an independent farmer. The price of land there is from one hundred and fifty to two hundred dollars per acre. At a greater distance from Philadelphia, a poor man may do pretty well; but, even at that distance from the city, I found no farmers better off than most of the agricultural settlers in this Island, of twelve or fifteen years standing. In what are called the back settlements, the country, which is mountainous, has much iron and coal; but the soil is not suitable for the farmer; and the roads there are so bad in the fall and the spring of the year, that, on them, three horses are not more than sufficient to draw one horse load.

In Ohio, I found every thing abundant, and the cultivation good; but neither is it the country for a poor man. A capital of from £600 to £1000 would be necessary to enable a man to settle comfortably upon a farm there. The poor man must seek his settlement far back in the woods, where he may, very probably, be from 100 to 200 miles distant from a mill, and obliged to make use of two stones, about the size of chair bottoms, to make a *mush* of his grain for food. In such back settlements, the Government price of land is 10s. per acre, with credit for four years to a man who is very poor; and, when a man has made a purchase of such land, and become located, it is very likely he may find himself four or five hundred miles from a market, and be obliged to send his produce to one, on what is called "*the halves*;" that is, to give one half of the proceeds to the person conveying it thither. Last winter, in Ohio, the price of wheat was 2s. 6d. and of Indian corn, 1s. 3d. per bushel.

Were it not that it would require a very long letter to detail all the observations I made while in the United States, you should have them without reserve; but it may now serve the purpose to say, that, although I by no means wish to underrate the character of those States, all I saw and heard whilst there tended to convince me, that it is certainly not a country yielding the advantages to a poor man, which I had been led to believe it; and I honestly declare that, in returning to this Island, I have done so under the conviction that it is the best country I have seen for the industrious agriculturist.

I forbear to speak of what I and my family suffered from fever and ague, in Newark, New Jersey; but I may say I consider the healthful climate of this Island as one of its very chief recommendations.

I am, Sir,
Your obedient humble servant,
David Haystead.

William Douse, Esquire, &c. &c. &c.

Agriculture, &c.

(*From Stewart's Stable Economy.*)

PRINCIPLES OF FEEDING.

The principles of feeding are facts which influence and ought to regulate the practice of feeding. The word feeding refers to the manger food, given at intervals, not to the hay and fodder, which is almost constantly within the horse's reach.

People who are unacquainted with stable affairs make many blunders in the management of their horses, and particularly in feeding them. They reason too much from analogy. The rules which regulate their own diet are applied to that of the horse. Medical men are remarkable for this. A skilful surgeon expressed his conviction that stablemen are full of error and prejudice regarding the diet of horses. He said, 'I order my patients to live on plain food, on that which does not tempt excess; and I tell them to eat when they are hungry, and to desist when they are satisfied. It is thus I treat my horse,' continued he; 'I give him plain wholesome food, as much as he likes, and when he likes.'

This is scientifically absurd; it is a common way of speaking only with the ignorant. It might be a very good rule, if there were no food for the horse but grass, and none for man but bread. Horses may eat more grain, and men more beef than their work requires; or the plain wholesome nourishment, as it is called, may not suffice for certain kinds of work. It is this, it is the work which renders care and system so necessary in the feeding of horses. Men have to work too, but very few have labour bearing any resemblance to that of the horse, and those few are compelled to regulate their diet by rules which are not known to the bulk of mankind. The diver, the boxer, the runner, the wrestler, must not live like other men. The fermentable nature of the horse's food, and the peculiar structure of his stomach which forbids vomition, and the abstinence from food and drink occasionally required by the work, are other circumstances which demand particular attention to the mode of feeding.

Slow Work *aids digestion*, empties the bowels, and sharpens the appetite. Hence it happens that on Sunday night and Monday morning there are more cases of colic and founder, than during any other part of the week. Horses that never want an appetite ought not to have an unlimited allowance of hay on Sunday; they have time to eat a great deal more than they want, and the torpid state of the stomach and bowels produced by a day of idleness, renders an additional quantity very dangerous.

By slow work, I mean that which is performed in a walk, not that which hurries the breathing, or produces copious perspiration. The moderate exertion of which I speak, does not, as some might suppose, interfere with the digestive process. It is attended with some waste; there is some expenditure of nutriment, and that seems to excite activity in the digestive apparatus for the purpose of replacing the loss. Farm and cart horses are fed immediately before commencing their labour; and the appetite with which they return shows that the stomach is not full; but,

During Fast Work, *digestion is suspended.* Of this we have not indeed, any positive proof, but there is good reason for believing it. In the general commotion excited by violent exertion, the stomach can hardly be in a favourable state for performing its duty. The blood circulates too rapidly to permit the formation of gastric juice, or its combination with the food; and, it may be, the blood and the nervous influence are so exclusively concentrated and expended upon the muscular system, that none can be spared for carrying on the digestive process. But this is mere theory. It is better to appeal to facts.

The effects of fast work on a full stomach are well enough known among experienced horsemen. The horse becomes sick, dull, and breathless. He is unwilling, or unfit to proceed at his usual pace; and if urged onward, he quickly shows all the symptoms of over marking, to which I allude among the accidents of work. The effects are not always the same. Sometimes the horse is simply overmarked, distressed by work that should not produce any distress. Some take colic, some are foundered, some broken winded. The most frequent result is overmarking in combination with colic. Perhaps the colic, that is, the fermentation of food, begins before the horse is distressed. But, whether or not, distress is much aggravated by the colic.

These effects are not entirely produced by indigestion. The difficulty of breathing may be ascribed to mere fullness of the stomach pressing upon the diaphragm, and encroaching upon the lungs, it prevents a full inspiration; and its weight, though not, perhaps, exceeding eight or nine pounds, must have considerable influence upon a horse that has to run at full speed, and even upon one that has to go far, though not so fast.

Some horses commence purging on the road, if fed directly before starting. They seem to get rid of the food, entirely, or partly; for these, which are generally light bilged horses, do not suffer so much, nor so often, from any of the evils connected with a full stomach. The purgation, however, often continues too long, and is often followed by great exhaustion. They should be kept short of water on working days, and they should have a large allowance of beans.

All work, then, which materially hurries the breathing, ought to be performed with an empty stomach. Coaching horses are usually fed from one to two hours before starting, and hay is withheld after the corn is eaten. Hunters are fed early in the morning; and I believe racers sometimes receive no food on running days till their work be over. Abstinence, however, must not be carried so far as to induce exhaustion before the work commences.

After Fast Work is concluded, it is a little while ere the stomach is in a condition to digest the food. Until thirst has been allayed, and the system calmed, there is seldom any appetite. If the horse have fasted long, or be tempted by an article of which he is very fond, he may be induced to eat. But it is not right to let him; a little does him no good, but a full feed does him harm. The stomach partaking of the general excitement, is not prepared to receive the food. Fermentation takes place, and the horse's life is endangered; or the food lies in the stomach unchanged, and produces founder.

Food, then, is not to be given after work till the horse be cool, his breathing tranquil, and his pulse reduced to its natural standard. By the time he is dressed and watered, he is generally ready for feeding.

Salt and Spices aid Digestion.—On a journey, or after a severe day, horses often refuse their food. When fatigued, tired off his feet, a handful of salt may be thrown among the horse's corn. That will often induce him to eat it, and it will assist digestion, or at least render fermentation less likely to occur. Some, however, will not eat even with this inducement. Such may have a cordial ball, which in general produces an appetite in ten minutes. I am speaking of cases in which the horse has become cool, and those in which the work has not fevered him. The horse should always be cool before food is offered; and if his eye be red, and pulse quick, cordials, salt, and the ordinary food, are all forbidden. The horse is fevered.

Abstinence unusually prolonged is connected with indigestion, and it produces debility.

The *Indigestion or Abstinence*, may in some cases, arise from an enfeebled condition of the digestive apparatus. The stomach and bowels may partake of the general langour and exhaustion, and be in some measure unable to perform their functions; but of this there is proof. When a horse has fasted all day, he is very apt to have colic soon after he is fed at night. It happens very often. The voracious manner in which the horse feeds has something to do with it. He devours his food in great haste, without sufficient mastication, and he often eats too much. The sudden and forcible distension of the stomach probably renders it unable to perform its duty. The quantity, the quality, and the hurried digestion of the food, account for the frequency of colic, after a long fast, without supposing that the stomach is weak. The appetite seems to indicate that it is not.

The result may be prevented. Give the horse food oftener. When prolonged abstinence is unavoidable, give him less than he would eat. Divide the allowance into two feeds, with an interval of at least one hour between each. In this way the appetite dies before the stomach is overloaded. To prevent hurried ingestion, give food that is not easily eaten. Boiled meat, after a long fast, is unsafe, and grain should be mixed with chaff.

The *Debility or Inanition of Abstinence* is denoted by dulness. The horse is languid, feeble, and inoffensive. Want of food tames the very wildest; and sometimes vicious horses are purposely starved to quietness. The time a horse may fast before he loses any portion of his vigour, varies very much in different individuals. In some few it may depend upon peculiarity of form. Light-bellied, narrow-chested horses cannot afford to fast as long as those of round and large carcass. But in general, the power of fasting depends upon habit, the kind of food, and the condition of the horse. When accustomed to receive his food only twice or thrice a-day, he can fast longer by an hour or two, without exhaustion, than when he is in the habit of eating four or five times. As a general rule, liable, however, to many exceptions, it may be held that a horse begins to get worse soon after his usual hour of eating is past. The degree and rapidity with which his vigour fails, depends upon his work and condition. If idle, or nearly so, for a day or two previous, he may miss two or three meals before exhaustion is apparent. Langour is probably felt sooner. If in low condition, he cannot fast long without weakness. He has nothing to spare. If his usual food be all or partly soft, he cannot bear abstinence so well as when it is all or partly hard.

Horses in daily and ordinary work should seldom fast more than three or four hours. They generally get corn four or five times a-day, and between the feeding hours they are permitted to eat hay; so that except during work, very few horses fast more than four hours. But some, such as hunters and racers, are often required to fast much longer. Hunters are sometimes out for more than nine hours, and they go out with an empty stomach, or very little in it. The only evil arising from such prolonged abstinence is exhaustion, and among fast working horses that cannot be avoided. The work and the abstinence together may produce great exhaustion and depression, and the horse may require several days of rest to restore him. But if he had been fed in the middle of his trying work, he would have been unable to complete it. The evils arising from prolonged abstinence are less dangerous than those arising from fast work on a full stomach.

The work which must be performed with an empty stomach should be finished as soon as circumstances will permit. In order that the racer or hunter may have all the vigour he ought to have, his work should be over before abstinence begins to produce debility. How long he must fast before he is fit to commence his task must depend upon the pace, the distance, and the horse's condition. The stomach, after an ordinary meal of grain, is probably empty in about four hours. For a space of eight or ten miles an hour it does not need to be empty; if the food be so far digested that it will not readily ferment, a little may remain in the stomach without rendering the horse unfit for exertion of this kind. Coaching horses, therefore, go to the road in from one to two hours after feeding. For a hunting pace, perhaps a digestion of two hours will secure the food from fermentation; and in that time, after a moderate meal, the weight and bulk of the food which remains in the stomach will not encumber the horse, nor impede his breathing. For a racing-pace the stomach must be empty, and the bowels must not be full. I do not know exactly how long racers are fed before commencing their work. The time appears to vary, spare feeders not being required to fast so long as those of better appetite. I rather think that they are often, or sometimes, kept too long without food, but I have little right to venture an opinion on the subject. It appears that racers sometimes receive no food on running days until their work is over. If hay were withheld for twelve hours, and corn for three or four, before starting, I should think such restriction would be sufficient. These horses, however, are always in high condition; they can afford to fast a long time before fasting produces exhaustion, and the distance they run is so short, that the expenditure of nutriment is not so great. With horses in lower condition, having less spare nutriment in them, a fast of twelve hours produces a sensible diminution of energy, and in this state he is not fit to perform all that he could perform after abstinence of only four or six hours. In the course of training, either for the course or field, the groom should learn how long the horse can bear fasting without losing vigour, and that will tell him how to regulate the diet on the day of work.

When the distance is considerable, or the work requiring several hours of continuous exertion, the waste of nutriment is greater than when the distance is short, or the work soon over, and the abstinence might be regulated accordingly. For a long road, the sooner a horse is fit to begin his task after feeding, the less will he be exhausted at the end of it.

Application of Atmospheric Pressure to Agricultural Purposes.—A number of ladies and distinguished personages, amongst whom were the American minister, Dr. Wilkinson, Professor Graham, Mr. Jourdon, and other literary and scientific men, on the 23d August last paid a visit to the Colosseum, to inspect the model apparatus and experimental demonstration constructed by Mr. Pinkus for applying atmospheric pressure to the purposes of agriculture, as well as a substitute for steam in propelling carriages on railways. Should the principle prove available in practice for either of these purposes, it will render the present age the most remarkable in the annals of mankind, and more especially so if it should prove available for all the varied purposes of field husbandry contemplated by the inventor. It is proposed to employ a stationary engine, worked by steam, or even a water-wheel, where available, to work an air-pump or pumps to rarify the air in mains or pipes, to be laid underground, as is done for the transmission of gas. In like manner as mains and pipes diverge in all directions, from a centre, for the transmission of gas, so may they be laid from a stationary engine, working air-pumps along the headlands of every field, with valves at given distances, to which valves a flexible air-tight pipe, composed of leather and caoutchouc, will coil round a drum of the machine, to which plough-shares, spades, hoes, or any other implements may be attached, as the case requires. This is a brief sketch of the principle; and, so far as we have had an opportunity of reflecting upon it, we see no insuperable obstacle to its practical application to all the purposes contemplated by its author; but we believe it has not, as yet, been put to the test in any practical operation of agriculture. If successful, it will prove of inestimable value to our colonial proprietors, especially to those who have already steam engines erected on their estates. We believe a company is already formed for applying it to railways; and, if successful, it will add greatly to the agreeableness of railway travelling, inasmuch as it will obviate the annoyance resulting from the escape of steam, smoke, and cinders.

The Praise of Pigs.—At the meeting of the Yorkshire Agricultural Society at Northallerton, the following eulogium was pronounced on the junior members of the swinish multitude, by H. S. Thompson, Esq. On rising to propose the toast of "The successful candidates for pigs," he said:—The committee could not have given me greater pleasure than by reserving for me this toast, which I most gladly propose; for, from the prince to the peasant, the grunt of the pig is rich in savoury recollections—[laughter]—and you should all drink my toast with feelings of thankfulness and gratitude. Mr. Childers has alluded to the presence of the ladies in the field to-day; and (turning to the gallery) I mean to appeal to them, if they were not moved to admiration at the delicate complexions and well-rounded forms of our swinish beauties. [Great laughter.] The pig is an animal universally respected. It has been held in the highest esteem in every age, from the first dawn of creation to the present day. The patriarch Noah held it in such high honour, that, to show his respect, he called one of his sons *Ham*. [Roars of laughter.] I will not trouble you with compliments similar in spirit, which have been paid to the pig through successive ages; but turning to our own country and our own day, is it not a well-known fact, that the highest prize which society has been able to pitch upon, as a reward for uninterrupted connubial happiness, is a flitch of bacon! [Great laughter.] What contributes more to a man's enjoyment, than a slice from a fine ham, or a rasher of sweet bacon? and what would be the condition of the peasant, if there was not a lump of bacon in his pot? But, gentlemen, I will not detain you longer, lest, instead of "The successful candidates for pigs," you should think that I am going to propose the health of the pigs themselves—[laughter]—and lest, also, if I dwell too long on the merits of my swinish favourites, you begin to think that I am myself a *bore*." [Roars of laughter.]

Steam Travelling Extraordinary.—Leicester, Monday.—About half-past twelve o'clock this day a train, the longest, perhaps, ever known, came along the Midland Counties Railway from Nottingham. It had four engines to drag it forward, and to the beholders appeared like a moving street, the houses of which were filled with human beings. The occasion of this extraordinary sight was a return visit made by the committee and friends of the Nottingham Mechanics' Exhibition to the Mechanics' Exhibition of Leicester. The number of carriages was 67, and the quantity of passengers nearly 3,000—most of whom were well and respectably attired. On the banks for a considerable distance, and also near to the station, tens of thousands of spectators had assembled to greet their arrival, and the scene altogether was one of the most imposing that can be conceived.

The silk manufacturers of Lyons consume 2,000,000,000lb. of silk annually. It requires 4,292,400,000 silkworms to produce this quantity of silk. Each silkworm produces about 500 yards of silk thread, and the total length of all the silk produced is equal to 14 times the distance of the earth to the sun, and 5,494 times that of the earth to the moon. It is likewise equal to 52,505 times the circumference of the earth at the equator, and 200,000 times the circumference of the moon.

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