Seven-eared Wheat—Bald Barley—Russian Rye—and American Bee Plant.

To the Editor of THE CANADA FARMER:

SIR,—Your number of 15th Dec., 1866, contained a statement of mine relating to the "Seven-eared Wheat" I brought from Utah, and of which I sent Prof. Buckland at the time—through Stewart Campbell, Esq, Sec. of the County of Perth Agricultural Society—some plants of the first season's growth here. I now send you some heads of this, the second season's growth. You will observe the grain is as white as fall wheat, but I am sorry to say it has not met my expectations. The plant is liable to rust, the heads are smaller than last year, and are not well filled, and it appears to be running to a single ear. In fact, it is not adapted to our climate. I will, however, for experiment, try it again next season.

I also send you some heads of "Bald Barley," brought by me from Utah. This is its second season here, and it does well. It yields largely, and the grain is bald, plump, with clear thin skin, and very large.

I send you, in addition, a few heads of "Russian Rye," brought from California—originally from the Amoor River, Siberia. The grain is of good quality, plump and white. I think it will suit our climate.

The above specimens are not selected, but are average heads.

I observed a notice in THE CANADA FARMER of July 15th this year, copied from the *Illinois Prairie Farmer*, of the "American Bee Plant," (*Cleome Integrifolia.*) I also brought home seed of the same from the Rocky Mountains, and have grown it here two seasons. The description contained in the notice is very correct. It blooms freely, is ornamental, and the bees prefer it to other flowers. I send you a few seeds, and as I have a considerable quantity, I will willingly send some to all who apply, post-paid. It should be sown in the autumn, any time before the ground freezes. It will, after that, seed itself. It should be sown thin, as the plant branches considerably.

GEO. FORMAN.

Stratford, Co. Perth, Ont.,
Sept. 25, 1867.

NOTE BY ED. C. F.—We are very much obliged to our correspondent for the samples, with some of which we hope to experiment. The seven-eared wheat has a strong resemblance to Egyptian wheat, and if it had been adapted to this climate, would have been a great acquisition, as it must be very prolific where it thrives. The rye is a fine sample. The grains of "Bald Barley" are remarkably large and plump. The variety seems well worthy of trial. We feel particularly interested in the seeds of the American Bee Plant, and shall sow them as our correspondent directs.

☞ The crop of flax seed raised in the West this year, is supposed to be at least twice as large as that of any previous season.

FOREST AND FIELD.—The forests in France are under the care of the Government, and under the new laws for their protection they have increased nearly one million of acres. Less than one-sixth of the area of the kingdom is covered with wood land. This is much less than is desirable for the best interests of husbandmen. It is estimated that from 20 to 25 per cent. of a country should be covered with forest in order to secure uniformly good crops. Our forests, now disappearing, demand the attention of Government.

DRAINAGE.—The Metropolitan Sanitary Commission of London compute that for every inch of water drained off, and which would otherwise pass into the air as vapor, as much heat is saved per acre as would raise 11,000 cubic feet of air one degree in temperature. A farmer was asked the effect of some new draining, when he replied; "All that I know is, that before it was done I could never get out at night without an overcoat, but now I never put one on" A physician took one of the Sanitary Commissioners to a hill overlooking his district. "There," said he, "wherever you see those patches of white mist I have frequent illness, and if there is a cess-pool, or other nuisance as well, I can reckon on typhus every now and then. Outside these mists I am rarely wanted."

Veterinary Department.

Hernia, or Rupture, in Horses.

By hernia is understood the protrusion of some part or parts of the intestines out of their natural cavity, through some natural or artificial opening; and according to the part or parts where the lesion occurs it takes a distinctive name. In the horse, the different kinds of hernia usually met with are four in number. When a portion of the intestine is protruding through the umbilical or navel opening, it is called umbilical hernia; and in the present number we shall give a short notice of this affection, which is very common in sucking colts.

Umbilical hernia can be easily detected. A tumour is observed in the lower walls of the abdomen in the umbilical region; the tumour is soft, and by pressure of the hand can be returned into the cavity of the belly; the walls of the opening can be easily felt. Prior to birth, the navel opening is for the passage of the umbilical cord or navel string; and in a short time after birth, closure of its walls usually takes place, and the cord becomes obliterated; but it occasionally happens that complete closure does not take place, and a portion of the gut, or the substance by which parts of the intestines are attached (*omentum*), is apt to get impressed into it and become imprisoned, thus constituting umbilical hernia. Hernia is again divided into three kinds. When the protruding portion of the bowel can be readily returned into its natural cavity, the hernia is said to be *reducible;* when it cannot be returned, it is called an *irreducible* hernia; and when the hernia becomes constricted at the mouth, so as to impede or altogether arrest the circulation of the blood, this is designated a *strangulated* hernia. The hernia in question is generally of a reducible character, and when small, it appears to inconvenience the animal very little. In young animals, it is often not necessary to have recourse to an operation; for as the colt gains strength the bowel frequently recedes into its natural situation, and the retraction is followed by complete closure of the opening. When, however, the hernia appears to increase in size, something should be done at once for its reduction, as the smallest hernia proves unsightly; and although not interfering much with a horse's usefulness for ordinary work, it materially depreciates him in marketable value.

There are many ways in which it can be reduced—viz., by ligature of the skin, by clams, skewers, &c.; but such applications should only be used by a person conversant with the anatomy of the horse. It may also frequently be reduced by means of a truss or bandage, which is a safer method in unprofessional hands. After the tumour has been reduced, a small pad, which may be secured in its place by means of some adhesive plaster, should be applied over the opening, and bandage should then be applied around the body, and gradually tightened, according to the size of the abdomen. The bandage may be further secured by means of a circingle, to which is attached a crupper. The pad and bandage must be worn for a considerable time, and the colt should be well fed on a nutritious diet—good keep tends to strengthen the muscular fibre. Umbilical hernia, however small, is an unsoundness.

The Dairy.

Rennets—A Caution.

To the Editor of THE CANADA FARMER:

SIR,—The cheese-making business of Canada, although just now in its infancy, is making very rapid strides over the whole of the Dominion. Great care is needed in the manufacture, and one very important element is the selection of, and curing of the vells from which the rennet is to be extracted. These should be from the sucking calf (no matter how tender the age), and dry, salted down in cask or crock; and if kept for several months, so much the better, and the rennet will be much finer flavoured. The pride of the skilful dairymaids of England is in a clean, well-ventilated dairy and a supply of fine old well-seasoned vells to begin the season with.

There is one thing I wish to caution the trade against. Through ignorance on one part, and dishonesty on the other, a number of sheep's maws have been bought up in this country and sold to unsuspecting parties for the maw of the calf. Now, to use rennet made from such articles entails a serious loss; for, although the curd may be separated from the serum, the separation is not complete, and the flavour of the cheese is consequently very much impaired, and its keeping qualities are deteriorated; in fact, they are not the proper article to use, and cheese-makers cannot be too careful to be certain that there are none such among their vells when they put them in the rennet jar. Those who are not aware of the difference should go to the nearest slaughter-house, examine some sheep's maws, and compare the two; they will soon learn to discriminate one from the other by the food, and also by the internal appearance, and they need not be deceived.

I was in St. Anne's Market, Montreal, a few days since, and a butcher informed me he had known quite a number of sheep's maws sold for calf's during this past summer. So let me advise cheese-makers to look out, for no doubt there will be many put aside during the winter, and there is no saying in what market they may be offered. I trust these few words of caution may prove of service to the inexperienced.

MARTIN COLLETT,
Oct. 9, 1867. 468 Yonge St., Toronto

RANCID BUTTER FOR COOKING.—Many persons sneer at the common notion that butter too rancid to be eaten raw upon bread, may be used without objection in cooking; but this notion, like many other popular ideas, is more in accordance with the truth of the matter than the imperfect knowledge that ridicules it. All fats are compounds of acids with glycerine. Butter is a mixture of several fats, and one of them, constituting, however, only a small portion of its mass, is butyrine: this is a compound of butyric acid with glycerine. Butyrine, like other fats, is a neutral substance, but when it is decomposed—in other words, when the butyric acid is separated from the glycerine with which it is combined—we then have two substances, the acid and the glycerine, exhibiting each its peculiar properties. Butyric is a very powerful acid, caustic and sour, and having that peculjar strong odour which is characteristic of rancid butter. One of the early steps in the decay of butter is the decomposition of the butyrine, which is made manifest by the odour of the butyric acid set free, and by the sour and biting taste of this acid. Now, at a temperature of 315 degrees, butyric aid is evaporated, hence it is only necessary to raise the temperature of the butter to this point in order to drive off the acid which makes it rancid, and to leave the remainder perfectly sweet. If rancid butter is mixed in a cake, a portion of the butyric acid will be absorbed by the water in the cake and it may not be all expelled by the heat in baking; but if the butter is used for frying in an open pan, it is pretty certain that the butyric acid will all be evaporated. With a knowledge of the properties of butyric acid, a skilful cook ought to be able to use rancid butter in such ways as to retain none of the rancidity in the cooked articles.—*Scientific American.*

☞ Isaac Hatch, of Little Rock, Ill., produced 405 pounds of cheese from each of his fifty-five cows in one year. From the sale of the cheese was realized $4,031.—So says the *Sycamore Republican.*

☞ A Mr. Blood, living in the vicinity of Herkimer, N. Y., kept, this summer, eleven cows, a bull and a horse, upon two and a half acres of land. The stock was kept in a yard and soiled. The land had been cut over several times to furnish the necessary food during the season, but the stock had been kept. This fact might suggest the question whether our farmers, ordinarily, were getting the best results that could be had from their lands.—*Western Rural.*