ver for which Flanders is remarkable. To accomplish the number of ploughings considered necessary in Flanders, *Flemish* industry and attention appear to be essential, and we fear it will be many years before a similar system will be introduced into Canadian husbandry, however profitable it might prove to be.

ROYAL ENGLISH AGRICULTURAL SOCIETY.

In addition to the premiums offered by this Society for Cattle and Implements, they have offered premiums for Essays on the following subjects:—1st. On the Drill Husbandry of Turnips: 2nd. On the Natural History, Anatomy, Habits, and Economy of the Wire-worm: 3rd. On the Mechanical Properties of the Plough: 4th. On Prognostics, or Natural Signs of Changes in the Weather: 5th. On Cheese-making: 6th. On the Rotation of Crops best suited to Light Lands: 7th. On the Rotation of Crops best suited to Heavy Lands: 8th. On the varieties of Wheat, suited to different soils, in order to ascertain what is the best wheat which each soil is capable of producing: 9th. On the Food of Plants: 10th. On the best mode of curing Butter for future consumption, and preservation in Foreign Countries—the Butter to be obtained from grass-fed cows, milked between the 20th of May and the 20th of June of the present year.—They also propose a Prize for the best managed and cultivated Farm in the District in which the Society may annually meet. The competitors for this Prize will be required to give a statement of the course of management and cropping during the two years previous to the commencement of the Rotation, embracing the period of competition; to render a detailed account of the whole system of management, as regards cattle and sheep, tillage, manure, produce, expenses, and proceeds during the Rotation, with the value of the land and stock, at the commencement and conclusion of the Rotation. Prizes are offered for the best ploughing, and for the best performance of many other branches of agricultural labour.

We give these details in order to show farmers in British America, the exertions that are being made in England, the best cultivated country on earth, to advance still further the improvement of agriculture in all its branches. And if they consider it expedient and profitable to encourage the improvement of Husbandry in Britain, would it not be much more necessary to give instruction and encouragement for the improvement of agriculture in Canada? No man, acquainted with this country, will pretend to say that improvement is not required here; and this being a fact that cannot be disputed, we would enquire what instruction or encouragement has been given, either by the Government, or by individuals that would be calculated to produce the required improvement? We may be answered, that every man should be left to manage his own affairs as he may think proper; that if he was satisfied with matters as they are, it was his affair, and no man should meddle with him. The English community, however, appear to think and act very differently. Every member of that community seem to be impressed with the conviction of the utility of introducing every improvement that is possible in the art of agriculture, and in every other art. In that country, they appear to think that it is the duty and interest of all, that improvement *should* advance, and they adopt every possible means to instruct and encourage the general progress of improvement.

METHOD OF FEEDING HORSES AND MILCH COWS, IN SOME PARTS OF FLANDERS.

It is said that working horses are kept in excellent condition fed on eight pounds of beans, and twenty pounds of bean-straw, and twenty pounds of barley-straw cut into chaff, daily.—Milch cows, get twenty pounds of hay, and twenty pounds of straw each, in the twenty-four hours, when not fed with roots. We would recommend that sixteen pounds of hay should be substituted for either the bean or barley-straw for the food of horses. In the District of Burgeos, six and one-third quarts of oats, and thirty-five pounds of hay, is given per diem to each horse. In lieu of fifteen pounds of the hay, seventy-three pounds of carrots are given. A little over half the quantity of beans is substituted sometimes for the oats. A small quantity of oil-cake is dissolved in the water given them, and it is whitened with rye-meal, oat-meal, or the flour of buck-wheat. Milch cows get eighteen pounds of straw, and sixty pounds of turnips in the twenty-four hours, with a white drink as to horses.—In lieu of the turnips, grain, potatoes, or carrots are given. Six pounds of hay is sometimes substituted for a part of the straw. In feeding horses, cut straw is invariably mixed with their oats, and the horses in consequence are kept in better condition on seven pounds of oats per diem, than they would be on double the quantity of oats given to them unmixed. When oats is mixed with cut straw, the mastication necessary, converts every grain of corn into nutriment. Chopped hay or straw is not much used in feeding horses in any part of British America.

MINERAL BONE-EARTH.

Mr. Pusey, M. P., reported to the Council of the Royal English Agricultural Society, as Chairman of the Geological Committee, the result of Professor Phillips's examination of the Specimens of Native Phosphate of Lime from Estramadura, in Spain, presented to the Society by Mr. Kemberley at a former meeting of the Council, and referred to the Geological Committee for their opinion of its value in an agricultural point of view, as a substitute, to a certain extent, and as far as the phosphate of lime was concerned, for bone-dust as a manure.

Mr. Phillips found that this specimen contained no less than 90 per cent. of the phosphate, and he was therefore of opinion that it would be a most important manuring application, provided its mechanical texture could be modified in such manner as to assimilate it to that of the phosphate existing in bone-dust. Mr. Pusey reported that Professor Phillips investigation on this point had led to a successful result, and that he had discovered a mode by which this valuable mineral substance could be brought into a fit state for application as a manure; but he considered that it would be important that a full examination of this substance should be instituted, previous to any steps being taken to import it as an article of commerce.

Dr. Danbeny is about to undertake a journey into Spain, at his own expense, for the purpose of inspecting the geological occurrence of this mineral in that country.

ON REARING CALVES.

(*From The London Mark Lane Express*).

SIR,

Having noticed that the query of your correspondent with respect to the best substitute for milk in rearing calves has not been answered, I have taken the liberty of sending you an account of the mode pursued by myself. It is not answering your correspondent's question, but he may find that linseed and wheat ground together are very useful in rearing calves.

I never have reared any calves entirely without milk. If possible for the first month, twelve pints of new milk is daily given them, six at morning, and six at night. Hay is placed before them in a small rack, which they soon learn to eat. The following fortnight six pints of new, and eight of blue (skim) milk is given them daily; the latter is much better boiled, and when new, milk-warm, mixed with the new milk. At the expiration of that time, I commence mixing porridge with the skim-milk, and entirely leaving off the new. The porridge is made of boiling water, and ground linseed and wheat. Stir the latter into the water as it boils until it becomes as thick as good gruel; when cool it is fit for use. Five stone of linseed to a bushel of good sound wheat, ground together, makes very good lining for gruel. When the milk fails, the gruel is given as a substitute in the same quantity. A few cut turnips are likewise given. This has been the general manner in which I have reared calves, and they turn out well in the spring to grass.—At times, being much pressed for milk, I have been obliged to commence with porridge; when the calves have been very young, sometimes only a fortnight old, a little new milk was always put into it: the calves were also kept at the pail a much longer time. I have been in the habit of rearing from ten to eighteen calves yearly for the last eight years, during which period I have lost but five. Linseed whole, Oil-cake, and Sago have been tried, but the ground wheat and Linseed have been always found to answer the best. Your correspondent might try the linseed and wheat; the first month without milk, will be the most trying to the young calves. Oil-cake, beans, or oats ground, should be placed daily in a trough, which they will soon begin to lick, and it will keep their bodies from becoming large. The wheat should be sound, and above all the serving of the calves should be intrusted to a trusty person. If this food is given either too hot or too cold, they are injured. New milk warm, and regular feeding does much for them. I have turned out finer calves than some persons who have given much more milk, but have neglected warmth, regularity of feeding, and cleanliness. I remain yours respectfully,

March 14th, 1842.

THE SLEEP OF PLANTS.—The common chickweed with white blossoms, affords a remarkable instance of what is called the sleep of plants, for every night the leaves approach in pairs, so as to include within their upper surface the tender rudiments of the new shoots, while the next under pair at the end of the stalk are furnished with longer leaf-stalks than the others, so that they close the terminating pair, and protect the end of the branch.—*Ib.*

RISING OF THE SURFACE OF THE LAND IN EUROPE.—In Sweden as well as in Italy, the land rises constantly from out of the basin of the surrounding sea. This operation takes place very slowly and gradually, yet it seems without interruption. According to the late observations of M. Niccolini, the Neopolitan Geologist, the land of the west coast of Italy has risen from the year 1823 to 1838, one hundred and twelve millemetres. The same facts has been long observed in Sweden, but never yet ascertained by any accurate measurement.—