

enable a skilful farmer to adopt the most suitable modes of cultivation and management. From want of due attention to the nature and quality of soils, much labour and capital may be wasted in vain attempts to introduce plants not at all suited to them, and manure may be as improperly applied. This ignorance has and will prevent many from improving their farms and making them profitable, when they had the means in their power to do both. We shall in our next, describe the different sorts of soil, and what sort of crops are best suited for them. We shall also endeavour to submit the best modes of cultivation, and management of the several sorts of soil we have in Canada.

The first requisite upon a farm where a dairy is proposed to be kept for the manufacture of cheese and butter, is, to have a well constructed dairy, where a regular temperature may be maintained at all seasons of the year; and this temperature should be from 50° to 55° both in summer and winter. The temperature might be maintained here in summer by having the dairy below the surface where the land would be favourable, or where not favourable to have a mound of soil raised outside the walls, and to have the building shaded with trees. In winter the temperature should be kept up by a stove or fire. The windows should be to the north and east; should have glass to close in winter, but in summer the sash and glass might be removed and the window frames be covered on the outside with gauze-cloth, which would exclude flies, but admit the air; and the windows might be further protected from rats, mice, and other accidents, by a grating of wire. The dairy should always be well ventilated, kept dry and clean, and be as much as possible removed from the effluvia of putrid substances. It is possible that the dairy may form a part of the lower story of a dwelling house where the land is favourable, but in that case, the effluvia from the kitchen and other parts of the house should be excluded as much as possible from the milk-room. The floor should be of stone flags or brick, with a drain of tiles, uncovered, to run off water, &c. When a large dairy is kept, it would be necessary there should be a work-room attached, in which different manual operations might be performed. It should be fitted up with a boiler to boil water and heat milk, and it should be of sufficient size to allow of performing the operation of churning, cheese-making, washing the dairy utensils, and the like. When the dairy is of the largest size, there should be more

than one apartment: namely, one for churning and for making the cheese, and one for cleaning the utensils. The store-room is merely for keeping the cheese when made, and may be placed wherever convenient; and should have a certain degree of warmth without having too much heat or light.

The utensils required for a dairy, must be in the number of each, proportioned to the size of the dairy, and quantity of milk to be manufactured.

- 1st. Milking-pails, which may be formed of wood or tin.
- 2nd. Sieves of hair or wire-gauze for the purpose of passing the milk through and retaining the impurities.
- 3rd. Vessels for holding the milk until the cream rises upon the surface, and a vessel for containing the cream.
- 4th. Flat skimmers of willow, ivory, or horn, for the purpose of skimming the cream from the surface of the milk.
- 5th. A churn.
- 6th. A wooden vat or-tub, in which the milk is placed when the curd coagulated.
- 7th. A cheese-knife, for the purpose of cutting or breaking the coagulated curd, that the whey may be separated.
- 8th. A vessel perforated with holes, in which the curd may be placed that it may be broken and the serous matter farther extracted.
- 9th. Wooden vessels with perforated sides and bottom, in which the curd is placed for being compressed.
- 10th. A cheese-press. The utensils more especially employed for making butter alone, are the dishes for holding the milk until the cream separates; the skimming dishes for removing the cream; a vessel for holding the cream; and the churn. The dishes for containing the milk are, in England, made of various substances, as marble, slate, tinned-iron, zinc-tin, glass, earthenware, and wood; lead is also employed, but, we think, improperly, as it may be acted upon by the acid of the milk; and so likewise may iron, if not defended by a coating of some substance. The milk is sometimes contained in one large vessel or trough, with a stop-cock at the bottom, so that the milk may be withdrawn, leaving the cream in the trough; or it may be put in separate shallow vessels. These shallow vessels are latterly made of zinc. Tin, zinc, and glass vessels are easily kept clean, and sooner cooled than wood, which contributes to the more ready separation of the cream. The churns are of different constructions; the most common in the British Isles, is the plung-churn, moved by the hand; the form of this domestic instrument is everywhere known. It consists of a cylindrical vessel of wood placed upright, and the agitation to the milk within by a perforated board which nearly fits the cylinder, and to which is attached a long handle; this being moved up and