



PALMER'S WHEAT DRILL.

The old, expensive, and complicated English Drill, has been greatly simplified and improved by our enterprising neighbours. It would be a great advantage to Canadian husbandry if this implement were more generally used. The above, which is a recent improvement, is said to combine in a simple and substantial form the merits of the numerous English and American Drills. The inventor challenges the world to produce its equal! This is taking a pretty wide sweep, at all events. The following is his description of its construction and operation:—

“The frame-work consists of a simple axle, four by six inches, and a pole, on the former of which is placed a box or hopper. One simple distributor driven by a cam wheel and friction rollers, conveys the grain from the hopper into the several drills, through hollow braces or levers; and the quantity in each drill cannot vary a spoonful in sowing five bushels. Each drill is independent of the others, and either can pass over a stone or other obstruction eighteen inches high, without interfering with the operation of the other. It will drill perfectly, a strip of land of any width, from four inches to the entire width of the machine, and will work on land of any shape, without waisting the grain. All the teeth or drills can be raised or remain in a position eighteen or twenty inches from the ground, rendering it perfectly safe to drive over the roughest places. By the most simple movement, the distribution of seed can be stopped in an instant, or continued with the same ease. All the injury the drill can sustain by coming in contact with roots or fast stones, is the breaking of a small wooden peg, which is easily

replaced. The machine is so contrived, that by a very simple movement, the interior work is exposed to view, and at all times, the grain, while passing into the drills, is in full view of the operator, so that he can detect at a glance, any stoppage of the grain, and at once remedy it.”

DAIRY BUSINESS.—Our northern friends must look sharply to their cows, their pastures, meadows, root, corn and other forage crops; for Virginia, North Carolina, Georgia, and Tennessee are already in the field as competitors in the dairy business. There is not a State in which both cheese and butter cannot be made. Like all other arts, that of rearing good milkers, keeping them well and cheaply, and at the same time manufacturing choice butter and cheese for market, demands experience, care and study. The operation is mainly performed in those seasons of the year, when all animal substances, like milk, whey, buttermilk, and curd, are extremely liable to chemical changes which injure the products of the dairyman. Only a small portion of the butter and cheese made in the United States is really first rate. And why not? The milk is good when drawn from the udder, but it is badly handled ever after. Less attention is paid to keeping milk pails, pans, churns, cheese tubs or vats, perfectly sweet and clean than is required to secure the best results. Butter when taken from the churn is not properly worked over; nor salted with pure salt; nor protected from the influence of atmospheric air, as it should be. The germ of that peculiar chance, known by the common name of “lowy,” is early planted in a mess of butter, although undeveloped for weeks or months.

Butter and cheese which are put up wrong, if kept any time, will never come out right. The changes which they undergo present a subject for close and curious study. As in curing meat, good salt, pure air, and the entire exclusion of oxygen from butter in kegs, and cheese in a well oiled, impervious rind, are the leading matters to be attended to. In cheese-making, the heating of the milk, the condition of the rennet, the