

the separator. So much support is given by farmers to dairy factories at present as a means of increasing their incomes, that this machine should command great attention from all interested in the future of farming; and a great benefit would be conferred if some well-known society, such as the Canterbury Agricultural and Pastoral Association, would undertake a series of experiments to test the actual gain and advantages generally by the use of this machine. The experience of a practical dairyman, who showed one of these separators, which he had worked for the previous eighteen months, at a show held at Talbot, Victoria, recently, proved that, even in a comparatively small dairy of fifteen or twenty cows, the separator would pay for itself in six months in economizing labour, the gain in quantity of cream, and the superior quality of butter made. If this is found to be the case in a small dairy, what an immense difference it means to a large one!

Churns.—The improvements in the articles for making the butter have not advanced as fast as those for obtaining the cream to make the butter from. Only four patterns were exhibited: the common American cylinder churn, with four beaters; a modification of the cylinder, with straight sides instead of barrel-shaped, were shown by the Dunedin Woodware Company: they are made all sizes, are cheap, handy, and useful pattern; but the beaters are rather weak, and the spindle of the largest size looks too small. For use in a dairy where a large quantity of butter is made the barrel-churn shown by T. Dow, of Christchurch, would be very suitable: it is made of oak, and has three flights, placed at equal distances inside, a patent vent-hole, and very tight-fitting lid; the crank to turn the churn runs on wheel-bearings, the churn itself is placed on a convenient stand, and would outlast several of most other patterns. The third exhibitor, T. Ellis, Wanganui, shows a patent of his own, and claims that his churn will produce six per cent. more butter than any other, and that it is self-cleaning by cross-action. The churn is rectangular in shape, with thirty-two spoon-shaped beaters fixed on to a large wooden spindle, and is made of native woods. It is very certain that, unless the cross-action is as effectual as the inventor claims in cleaning the churn, it would be a very long operation to do so by other means.

Taken as a whole the implements exhibited are of a high class, both as regards workmanship and their distinctly practical nature; so much so, indeed, that the demand for imported implements is steadily decreasing, and as they become worn out they are being replaced by colonially-made machines. As an instance, in the manufacture of that essentially American machine, the reaper-and-binder, a colonial firm is turning out of their yards a machine equally as good as the American make in all parts, and can also sell it at a price which will compare favourably with that asked for the imported article; and the same remarks apply with more force to the less elaborate machines. When it is remembered that there was only one colonial-made implement in the Exhibition held at Dunedin twenty years ago, and that a single-furrow plough—an implement that may be said to be obsolete, at any rate as far as grain-growing is concerned—and now to examine the machines at this present Exhibition, some slight idea of the wonderful progress made during that time may be obtained; but no surprise will be felt that now we want more than one kind of implement made in the colony, because last year there was an area of more than ten times as large under crop than in 1864; and in that year the colony sent away more than half a million of money to buy cereals, whereas last year, besides providing for all our own wants in flour, malt, horse-feed, and seed for the ensuing season, we received in cash nearly three-quarters of a million for our produce.

Fencing Material.—A great variety of iron fencing standards, straining-posts, and tools for straining wire fencing are shown by the New Zealand Implement Company and J. Mackay, of Nelson, all of more or less practical utility. The standard which appears to be the simplest and cheapest in the end was one made by the Implement Company out of Y iron, which form gives it extra strength and rigidity. The holes are punched in the ordinary way in the tail of the Y part of the standard, and then the space between the hole and the edge is cut through diagonally, and the corner so left is bent outwards. The wire is then easily slipped into the slot while it is slack; but when strained even moderately tight it is absolutely impossible to get it out without something breaks. This is the kind of standard that would be most suitable for fencing off breaks of turnips or for any temporary purpose, as no staples or fastenings of any kind are required, and the fence could be put up as quick or even quicker than with any other standards; besides, being of more durable materials, there is no risk of the standards getting bent. J. Mackay shows a large assortment, but nothing that can equal the Y standard for simplicity or lightness. All his standards require bent wire, or staples, or a cast-iron catch to hold the wire on. His standards, too, are made of heavy iron, which would make them expensive as well as cumbrous. He also shows several appliances for straining wire, either from the straining-posts or for repairing a broken wire between the strainers, which are of useful types. The Acme Barb-wire Company, Timaru, show specimens of their manufacture, both black, annealed and galvanized, with two or four barbs, placed at different distances apart to suit all classes of stock, from the pig-wire, with barbs three inches apart, to the ordinary wire, with five or six inches between the barbs. The wire is two-ply, and the barbs are put on with an extra twist, making them firm; and the fact of this company surviving while others have given up business is evidence of the excellence of their wares. The ingenious little tools for putting barbs on existing wire fences are also exhibited. These have been found very useful, and gaps in fences can easily be made impenetrable by their use at a very much less cost than the usual way, as it only requires to be done once.

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