

home, in order to extract from them the greatest possible amount of information.

VISIT TO THE STATE OF VERMONT.—I stopped first at Newport, for the special purpose of meeting a veteran agricultural journalist, highly appreciated in this province, Dr. T. H. Hoskins, of the *Vermont Watchman*, the chief authority on those

FRUITS OF NORTHERN CLIMES.

that are suited to the coldest and to the most exposed parts of America. The much regretted Charles Gibb, of Abbotsford, who sacrificed both fortune and life in perilous journeyings in Russia, both European and Asiatic, and as far as New Zealand, advised me, twenty-three years ago, to apply to Dr. Hoskins, he having been his first instructor as regards the fruits best suited to the climate of our province. Dr. Hoskins has for many years taken a very active part in the most useful work of our provincial Horticultural association, the seat of which is at Montreal.

DOES FARMING PAY? At least a partial solution of a hardly contested question here presents itself: does farming pay? Dr. Hoskins has answered this question very clearly, at least as far as he himself is concerned. I think it would be well to give here, in a few words, his positive demonstration of the problem. Brought up in the country, endowed with the most emphatic aptitudes for the study of the exact sciences, he devoted himself to horticulture from his childhood, attending to school at the same time. Later, his success in market-gardening and fruit-growing enabled him to treat himself to a university education, without at the same time neglecting his gardening operations, the sole source of his income. Indefatigable in his studies, his misadventures led him on to the attainment of the highest steps of the scholar's ladder. He obtained exceptional university honours, and was induced by his teachers to devote himself exclusively to the practice of medicine at Boston, the metropolis of the New-England States. There, he was already winning distinction as a skilful physician, when, in consequence of a fall, he nearly lost his life, and was in danger of becoming a permanent cripple. His only chance of even partially recovering his health was to leave the town, and to seek in the country the partial re-establishment of his health. At last he took up his abode, in a modest seclusion, on a small piece of land, and without any funds to start with. He had to carry out, himself, the fruit of his daily labour to his new customers. To-day, his gardens and orchards are extensive, and his reputation as a trustworthy authority is universally recognised. Besides growing fruit, he follows general agriculture, especially the dairy-business, with distinguished success. A man of scientific attainments, a physician in great practice, he left the town for the country, his health weak, his limbs feeble, and all his little property expended during his long and painful sickness, and, yet, by his own sole work, work, though, of an intelligent and persevering kind, in spite of the failure of his bodily strength, he lives at ease, exclusively from the produce of his fruit and his agricultural labours. Therefore, farming pays, at least it pays those who conduct it with knowledge and prudence.

BURLINGTON DAIRY SCHOOL, VERMONT.—I recently visited the greatest butter-factory in the whole world, at St-Albans, Vt. As much as 10,000 lbs. of butter has been made there in one day during the first year of its existence, and the factory is so arranged that 20,000 lbs. of butter can be turned out easily in a day. It is, so to speak, fed by 50 centrifugal separators, placed at a radius of some leagues from the central factory, and the milk and cream are brought thither either in special vehicles, or by the numerous railroads that meet in St-Albans. This enormous enterprise, managed, practically, by Mr. Palmer, formerly of Danville, Q., and therefore a

Canadian, with satisfactory success from its inception, has created so much interest, that the State authorities thought fit to establish, last December, a

SPECIAL BUTTER SCHOOL.

in connection with the University, the farm-school, the experimental station &c., all official organisations of the State, united at Burlington. Having been informed of this by Mr. Palmer himself, at an exhaustive visit paid to his magnificent establishment, I put myself into communication with Prof. Cooke, director of the farm-school. The faculty of agriculture, with a readiness for which we cannot be too grateful, agreed to give, gratuitously, theoretical and practical instruction to seven or eight of our best butter-makers, during the whole of the course, which lasts four weeks. Eight pupils attended the course which ended November 30th. During my journeys, backwards and forwards to Brattleboro, I was lucky enough to travel with Prof. Cooke, director of this school, and Mr. Chas. professor of applied chemistry, &c. Both these gentlemen, in the name of the professors of the school, praised our pupils most highly, assuring me that the English-speaking ones are now thoroughly capable of conducting any similar school that may in the future be established in this province. These pupils, then, are fitted to deliver useful lectures in all that concerns the making of butter; they can, moreover, show how to detect frauds in the milk delivered at the factories; and, lastly, they can speak with thorough knowledge of the treatment of milk-cows, as they have seen it practised at the extensive cow-sheds attached to the Burlington agricultural school. The members of the dairymen's association had lately, at Montmagny, an opportunity of applauding one of these pupils, M. Aimé Lord, teacher of butter-making at the L'Assomption school. M. Lord showed us, in a striking and intelligent manner, the utility of

THE BABCOCK TEST,

a small, cheap instrument, which enables one to pay for the milk according to its exact contents of butter, and also when the milk is used for making cheese, prevents all fraud by a few moments of investigation, and, lastly, may be made very useful even in the cow-stables of the ordinary farmer by showing him the comparative value of each of his cows as regards its yield of butter-fat.

FARM-BUILDINGS.—One of the chief reasons of my journey to Brattleboro, and generally to the state of Vermont, was to study, on the spot, the best farm-buildings, barns, cow-sheds, dung-pits &c. &c., in connection with the dairy-industry. Dr. Hoskins, who, in his paper, has, during the last year or two, published a series of special articles on this question, had frequently pressed me to assist him in this matter of such great economical importance, especially now, when the dairy-industry is everywhere becoming so developed. We, therefore, Dr. Hoskins and I, studied at length the series of articles I had the honour to publish recently in the *Journal of Agriculture*.

In order to add to the fruitfulness of this investigation, I had made, with the kind permission of M. Joly de Lotbinière, president of the Council of Agriculture, an exact model, scale $\frac{1}{2}$ inch to the foot, of a building the plans of which I have given in part, and which was erected a short time ago on the farm of the R.R. D.D. of the Sacred Heart at Lorette. This model, though, contains an important improvement, which, combined with a considerable saving in the cost of the building, admits of much greater facility in storing the fodder, and of its distribution to the cattle. The principles aimed at and applied, are, to the best of my knowledge, the following:

1. Strict economy in the whole and in the details;
2. The proper conditions to ensure, first, the health of the animals; ample light, enough warmth; complete ventilation, without