

£86,000 is spent annually by the Board of Agriculture and the County Councils on agricultural instruction, and when we compare the results obtained from this expenditure with the results obtained in Denmark and Sweden there is room for doubt as to whether we get enough value for our money. Certainly there is not the eagerness on the part of our agriculturists to avail themselves of the instruction offered. This may be because the social conditions of the countries are very different. In this country there is a large trade in milk, and it is not probable that the English farmer who can realise 6d. or 7d. per gallon by sending his milk to market is likely to attempt to compete with the foreigner in butter-making, who is satisfied with little more than half that amount. Add to this the fact that in 1894 there were only sufficient cows in this country to produce about 32 gallons of milk per head of the population, and it will be seen that any serious competition with Denmark for the bulk of the butter trade is out of the question. These facts also make it very doubtful whether the co-operative butter-factories are adaptable to this country. Professor Long states that the best butter is not made in factories, and this is borne out by experience, as good fresh farm-house butter still fetches a price considerably in advance of that obtained by Danish butter. And it is in this direction that the English farmer can successfully compete with the Dane, but only by the manufacture of butter of the highest quality and of uniform excellence. In districts remote from railway-stations, butter- and cheese-making form the only way of disposing of the milk, and the aim of the County Councils should be to provide thorough instruction in the best methods of butter- and cheese-making, so that products of the very highest quality only should be put on the market. I am of opinion that such instruction cannot well be provided by travelling dairy-schools. These have, no doubt, been of great service in the past in arousing interest in dairy-work, but to obtain the end we have in view the instruction must be much more complete and thorough, and a course of from three to six months at a dairy-school is desirable. County Councils are, no doubt, beginning to realise this, as is evidenced by the establishment during the last few years of schools or institutions, with farms attached, for instruction in dairy-work. The reports from such schools show that in districts which have felt the influence of the dairy-school there has been a marked rise in the price obtained for the butter made. The cost of carrying on such schools is, no doubt, great; but by the amalgamation of three or four counties the cost becomes less than that of a travelling school, while the work done will be more thorough, and greater care may be exercised in selecting for such instruction only those directly connected with the work of dairying."

Farriery.

Farriery being of considerable importance, and the subject having already been considered by the Wellington Education Board with a view to instruction being given, I give an illustration (Plate XXXVI.), reproduced from the *Record*, of the Berkshire School of Farriery.

The Council of the Berkshire School instituted lectures during two winters at suitable centres on the principles of horse-shoeing. The difficulty arose, however, of providing the necessary practical instruction combined with the theoretical work. A sub-committee appointed to deal with the matter suggested a travelling forge, accompanied by a competent instructor, with the result that the van as shown in this illustration was constructed. It was designed by Mr. Fathers, the instructor. It contains two forges, with vices, fittings, and tools to enable four men to work at one time, who take alternately the duty of acting as striker.

The *Record* gives the following method of conducting the school: "A convenient centre is selected, and suitable handbills are circulated in the district by way of advertisement. In addition to this the instructor, as far as time permits, calls upon the smiths at their homes and forges, and he has seldom much difficulty in persuading them to join the school. As the men have to do their ordinary work in the daytime, it is necessary to carry on the classes in the evening; consequently they usually commence at 6 p.m. or 6.30 p.m., and continue as late as desired. A course of instruction comprises ten evenings—no work, however, being done on Saturday nights. Since a class can only conveniently be composed of four men, and as these cannot always attend night after night, it is sometimes found desirable to conduct two classes, upon alternate evenings. The men are shown the correct method of shoeing all kinds of horses likely to be met with in their business. Not only are different classes dealt with—from cart-horses to hunters—but proper modes are taught of adapting shoes to abnormal conditions of the foot, and subjects are provided for practice where obtainable. An interesting typical collection of shoes is always on exhibition where the van is stationed, and is much appreciated.

This practical work has hitherto been followed up by an instructive course of lectures, delivered at convenient centres by Mr. Wheatley, on the structure of the horse's foot, illustrated by models. At the conclusion of a certain number of courses in a district a prize competition is held, open exclusively to pupils from these classes; and to encourage regularity of attendance only smiths who have attended upon eight evenings are allowed to compete. Prizes are given, and commendation certificates; also, if a man reaches a certain standard of excellence he is entitled to registration upon the books of the Worshipful Company of Farriers. The course of instruction has been confined strictly to men already in the trade, a policy which has probably been the main reason of the movement having been unimpeded by jealousy or ill-feeling.

The following statement of expenses will show the cost of conducting the school of farriery for twelve months: First cost of van, £50, subsequent alterations, £10, £60; tools, lamps, &c., £20; salary of instructor and assistant, £140; iron for making shoes, nails, rasps, &c., £45; removals by horse from place to place, £15; rent of premises occupied at each centre, £15; inspection journeys, £10; printing, £5; incidental (as coals, &c.), £25; total, £335.

2. MINING.

As in the case of agriculture, this section is controlled by a special department (under the Minister of Mines). The syllabus of the Science and Art Department in this matter is already well