

is made very light in weight, and, from the best materials being used, and good workmanship, it is strong. It may be more readily loaded than the waggons in ordinary use. It is manufactured by Messrs. Ransome & May, of Ipswich, who gained the gold medal of the Royal Agricultural Society of England at the general meeting at Oxford, and a second time at Derby. The price of the cart is not necessarily much higher than those of the older and less efficient vehicles. Flat carts were used in many parts of the country for the harvest home, but they obviously incurred more or less damage to the crop. Frames projecting at an angle from the body of the cart were subsequently employed to accomplish one of the objects obtained by Messrs. Ransome & May's cart; which secures not only great width in loading, but a perfect guard to the wheels. In the present state of agricultural affairs, small savings are of great importance to farmers, who may soon economise the cost of a cart in the saving of labour and time, and the safety to crops obtained in conveying them by proper vehicles from the field to the farm-yard.—*Ibid.*

**AGRICULTURAL ENGINEERING.**—The farm of Harold Littledale, Esq., of the County of Chester, England, furnishes an illustration of the very artificial practice now becoming by no means uncommon among the scientific Agriculturists of the day. The experiment so thoroughly and successfully carried out by Mr. Littledale, derives additional interest and importance when contemplated with regard to the proposed distribution of the sewage water of London and some of the large provincial towns, over the farms in the vicinity of those great centres of population. Canadian Farmers are not in a position to avail themselves of the expensive artifices described below. Such examples, however, serve well to encourage the enterprising in this country, to seize upon every rational means of raising the standard of Husbandry, and to arrive at that practice which secures the greatest amount of permanent remuneration with comparatively, the least expenditure of capital. The details subjoined we extracted from the report to the Board of Health on Liscard Farm near Birkenhead, by W. Lee, Esq., Superintending Inspector.

Mr. Littledale has drained all the land on this farm capable of being drained. Both pipes and tiles have been used. Some of the drains are laid only 2½ feet deep, others 4 feet, and latterly, increased as the result of experience. The average width between the drains is about 21 feet. The cost was £4 to £5 sterling per acre.

Liquid manure is preserved for distribution in a tank capable of containing 58,300. It is forced by means of steam power through iron pipes, through a distance of two miles, serving for 150 acres. There is a hydrant for every 300 yards of main. The hydrants are so fixed that with 150 yards of hose the distributor and boy can irrigate 10 acres per day. The quantity distributed to each acre being about 4,118 gallons.

As to the general result of draining, liquid manures, and other improvements effected by Mr. Littledale, I (Mr. Lee) was informed that the yield of the whole farm is double what it was 10 years ago.

**GRAFTING EVERGREENS.**—The French nursery men are very successful in grafting evergreens, and practice it as follows:—"The proper time for grafting pines, is when the young shoots have made about three-quarters of their length, and are still so herbaceous as to break like a shoot of asparagus. The shoot of the stock is then broken off about two inches below its terminal bud; the leaves are stripped off from 20 to 24 lines down from the extremity, leaving, however, two pairs of leaves opposite and close to the upper end of the shoot so headed back—which leaves are of great importance for drawing up the sap. The shoot or stock is then split to the depth of two inches, with a very thin knife, between the two pairs of leaves left; the scion is then prepared—the lower part being stripped of its leaves to the length of two inches, and is then cut to a wedge and inserted, in the ordinary mode of cleft grafting. The graft is tied with a slip of woollen, and a cap of paper is fastened to a stake, and firmly fixed over the whole graft, to protect it from the sun and rain. At the end of 15 days this cap is removed, and the ligature at the end of a month." Some evergreens, grafted in this way, make a second growth of five or six inches the first year—but most sorts do not start till the next year.

**INSECT ON THE PLUM.**—An esteemed correspondent at Springfield, Otsego Co., has sent us a specimen of an insect and of a portion of the bark of a plum tree, containing a deposit of its eggs. The eggs are in compactly filled rows, beneath a single slit through the epidermis. The insect was lost, and we cannot speak of its character. This cannot be the cause of the black knot, as suggested by our correspondent, as in numerous cases, the most rigid microscopic examination of the black knot, has failed to reveal any indications of external or local injury—besides which we have often observed deposits of eggs, not dissimilar, but larger, both in the plum and cherry, that produced no effect whatever, except small mechanical injury. Indeed it is rare that insects produce any other result. We hope our correspondent will favour us with the results of future observations.

**CHERRY TREES AT MIDSUMMER.**—Many young cherry trees have been set out the past spring, and have already commenced growth. But if left with hard exposed soil about them, a large portion will die before the close of summer, or during the hot, dry weather. If watered, as the work is usually done, the surface will become hardened and crusted, the roots not reached, and some trees killed by the very process intended to save them. An acquaintance, who set out 50 cherry trees a few years since, informed us that he watered a row a third, every one of which died—most of the others lived. If it becomes necessary to apply water, the earth should be removed down to the roots, and replaced when the water is poured in. But it is far better to keep the ground constantly and moderately moist, than to flood it after it becomes dry. This is completely effected by mulching. Spread round the young cherry trees early in summer, old straw, spoiled hay, mown weeds, or any similar material, to a depth of six compact inches, and a few feet in diameter, and they will flourish and grow through the whole season.