

nate drains of 30 inches deep and 40 inches deep in a heavy clog soil, and the practical result was highly satisfactory. It may be worth while mentioning that when the government loans for drainage were granted, in or about 1850, under the supervision of Mr. Parkes, the well-known civil-engineer, of Birmingham, the rule was laid down, and strictly adhered to, that no grant was to be paid over until the superintendent had certified that every rod of drains completed had been laid at a depth of not less than four feet all over.

By the bye it may be well to repeat what we have often written in this paper: water gets into the chains from the bottom; it does not wriggle its way into the pipes through cracks and worm-holes. Until a man gets it into his head that the force of gravity presses upon the water already in the soil, and splits the lower sheet of water, so to speak, each way into the drains, he can never be a successful drainer. Frequent drainage, when the pipes are laid at regular distances from each other through a whole field, is one thing; drainage for springs is quite another.

Fall-wheat.—If fall wheat can be grown; and has been grown at St. Hilaire; why should it not be grown in other parts of the province of Quebec? We remember very well, somewhere about 1882, measuring-up a lot of fall-wheat for Major Campbell's sons, the yield of which was highly satisfactory. The straw measured 6 ft. 1 inch in length, almost as much as it ever measures in our best English soils, and the grain from an acre weighed 2,040, equal to 34 imperial bushels! This would be a good average crop in any part of the old country; quite as much as the average of Scotland, where wheat is only sown on land thoroughly prepared for it; and at least 4 bushels more than the average of England, where wheat is more generally sown than north of Tweed.

If any one tries fall-wheat next season, we would advise him to bury the seed *at least three inches deep*, either with a drill, or by ploughing it in, in which case it would take a 4 inch furrow to cover the seed, and the width of the furrow should not be more than 8 inches at most.

The land should be untouched after ploughing in the seed, except so far as necessary to water-furrow it, which should be very carefully done; and, in the spring, the first operation should be the passing of the harrows over it, to be followed by a heavy roller, unless the soil be very light and

loose, in which case the roller may precede the harrows. It will be easily perceived that either roller or harrows will crush down the crests of the furrows, and, so to speak, earth up the young blade of the wheat; after which, the plants will begin to *tiller* at a rate that will surprise any one who has never seen fall-wheat at work.

After what crop should fall-wheat be sown? After early potatoes, or after a bastard fallow, as we suppose no one makes summer-fallows nowadays. Naturally, a clover-ley would be the best place for wheat, but then the second-cut would have to be sacrificed, and that does not pay. Theoretically, wheat should follow pease, vetches, or other leguminous plants; but the land is, even on the heavier soils, so shattered by the roots of pease and vetches, that the wheat, if at all a heavy crop, is almost sure to go down. The best of all seed-beds for wheat is a good crop of rape fed off by sheep. Would there were more of them.

VARIETY OF FARM PRODUCE.

In one of the earlier of his books,—I am nearly ashamed not to be able to name it—Mr. Ruskin, insists how very much more the ordinary stone-mason — of the period when the great cathedrals were built, viz. : about six or seven hundred years ago — must have known about his craft, above what the average man of the same class knows on the same subject, in 1850, and which is true of to-day. So much of the stone-mason's work is now forwarded, and partly executed by machinery, that the skill of the ordinary workman has become cramped by the comparative narrow range within which he is called upon to exercise it. What was noticed of the artisan class is equally true of the agricultural labourer; and to a certain extent it is so of the modern occupiers of farms. Their field of activity of late years has been greatly narrowed. They may, and possibly do, know very much about many things of which their predecessors were entirely ignorant, yet about the capabilities of the farm itself, the men of to-day are not called upon to know so much as were their forefathers. The farms produce a smaller variety of crops, and many processes which were once part of the work in every farm household, have been removed altogether from the ken of the agricultural classes. There can be no doubt but that just about the time, when talk of "go-head