

which is the better plan, it is removed, during the winter at convenient intervals, from the yards, to heaps round the liquid manure tanks, where it can be conveniently worked; or to heaps in the field on which it is ultimately to be applied, where the beds of mould have been prepared for its reception. In these latter cases it is turned at least once towards the end of spring, when the earth on which it lies is mingled with it, and the whole heap is thrown up and well broken to pieces; and again, in April, about three weeks before it is carted on the land. Some of these processes are effected at day's wages, but the others are properly piece work; and it is even well to let it all to one party of men.

The first filling in the yard will cost 3d. per yard, measured in the heap as soon as made.—The carts are made to go over the heap, if it be early in the season, and thus compress it.—Three men can work at one cart; if strong men, they can fill 120 cubic yards a day. A man and pair of horses, for at least two carts are employed, work with them, and this adds another 3d. to the cost. The second operation or first turning in the heap, costs 1d. per cubic yard, measured before being turned. Two men work together at one heap; a right and left handed man should work together; a hay knife, or similar implement, must be used to cut the heaps down in slices two feet wide; and these are successively thrown up and mixed with six inches of the earth on which they lay. The third operation, or second turning, may cost 3d. per cubic yard, also measured before turning. The fourth operation—loading and carting—will cost 3d. per yard to fill; four horses and carts are needed in travelling the distance of 500 yards. One man and horse are in a field emptying, another horse is at the heap with the cart that is being filled, a third is going full, and a fourth returning empty. Three men will fill enough (120 yards a day), to keep the whole going. Two boys will be needed to lead the carts. The expense of horse labor, besides the 3d. per yard for filling, putting two boys as equal in expense to one man will be 16s. per day, or rather more than 13d. per cubic yard. The fifth operation—spreading, will be done by two men, if the dressing be not very heavy, as fast as the dung is ready for them, and three ploughs will suffice to plough it in. The expense of spreading will thus amount to about 3d. per cubic yard. We assume about thirty yards per acre to be the amount of dung applied, and that it is applied broadcast. If it be laid in drills, then there will be needed, not two men, but one man, and three lads or women. Each row of heaps is on the middle of the drills; the man goes first and divides every heap in three; and the women follow, distributing each in its own drill.

The expense of manure making, up to its being spread on the land, need not exceed 7½d. per yard, measured just before being spread; but 2½d. of this, or if we exclude the spreading

also, 3½d. of this, is done at day's wages; and all the rest, which is properly piece work, may be bargained for at 4d. per cubic yard. We may just add one word here on the policy of arranging men in a chain of operations; the force at each link, so to speak, being proportioned to the work or strain which is brought to bear upon it. Thus the filling, carting, dividing in the field, spreading and ploughing in of manure, are such a chain; and if the force at each link be sufficient, with industry, to do the work which will come to its share, then, though the first party only be on measure work, yet their industry, thus excited, is a surety for that of all the others.—Self interest pulls the first link along at the requisite pace, and all the other links in the chain are constrained to follow at an equal rate.

*Seed Operations.—Broadcast Sowing.*—A man will sow twelve to eighteen acres a day; and his wages, with that of the person employed in supplying him with grain or seed, may cost from 2½d. to 3½d. per acre.

*Drilling.*—A drill machine of ordinary breadth drawn by two horses, and attended by two men and a boy will sow ten acres a day. The day's work will cost 13s., which amounts to about 1s. 3d. per acre. Dibbling machines are not yet made to get over the land so fast as this. Newbury's horse dibble will sow four or five acres in a day, and the cost of the operation will therefore be from 2s. to 2s. 6d. or more per acre. Mangold wurzel seed is generally dibbled. We have done it hitherto by hand—the drills being first marked either longitudinally by a drill, or transversely, at intervals of the necessary length, by a ribbed roller. Two women, whose wages amount to 1s. 8d. per acre, will dibble one acre a day. Turnip seed is sown by a two-furrowed drill, drawn by one horse. The daily cost is 5s.; and they will get over five acres a day.

*Hoeing in Wheat* will cost from 7s. to 8s. an acre. The men carry a bag of seed tied round their waist, and, using a very broad light hoe, they make a shallow drill across the ridge, sowing the seed in it as they return to the side from which they started, and covering it over with the earth moved in forming the next drill. The whole is thus sown, covered and trodden in.

*Potatoe planting*, if done wholly by spade, on land already worked, may cost 10s. to 12s. an acre, the distance between the rows being thirty inches. Potatoes may be cut into "sets" for 2d. to 3d. per sack, according to the size of the potatoe, and the consequent number of pieces into which it has to be divided.

*Setting Potatoes* is done at day's wages by women or children, who walk backwards in the drills, each with a basket full of sets, and place them, as they proceed, at intervals of a foot. They are kept from idling by two ploughs, which, continually circling the party, open fresh drills on one side and close them on the other, so that, the number of setters being proportioned to the work, the whole operation proceeds to-