

Mr. BISHOP had raised last year 32 tons of mangrel wurzel on a field of rather more than three quarters of an acre, a strong clayey loam. He was in the habit of ploughing three times for green crops, opened his drills, placed the dung in them, covered it up with the plough, and placed his seed on the top. He disagreed with Mr. Barnes as to their taking anything out of the land, for the tops left on, and the weeds killed out, amply repaid any loss. He made this year, off 4 acres of very fox-taily land 2800 bushels of turnips, all by good hoeing; for one field of about 4 rods he had left unhoed, bore at the rate of only 20 bushels to the acre. It was a low field with a hollow centre, where the last tenant had failed to raise about 5 bushels of wheat to the acre the year before; he had made a drain, which took off the water,—ploughed as soon as it was dry three times, dragged and rolled well for seed, sowed on the 21st of June 2 lbs. of seed on 4 acres, and hoed them three times. He had made his drilling machine out of a couple of 1 lb. powder canisters, tied each in the cleft of a forked stick, with a hole in the bottom, and sowed two drills at a time as fast as he could walk, he then rolled the seed in. He thought men ought to raise more clover and hay instead of wheat. He had raised a good deal of clover-seed, turnips, &c., and mangrel wurzel, he thought, was a surer crop than turnips, for the fly never touched them; he had rolled turnips after the fly was upon them with decided benefit. He put spring wheat on his turnip land, and sowed to clover, fed his clover till June, and then let it go to seed, and it came better from pasture than from mown clover. Slaughter-house manure gives better crops than anything else.

Mr. DONALDSON had a crop of turnips and mangrel wurzel this year, each worked and treated alike, but the mangrel wurzel turns out an excellent crop, and the turnips a bad one.

Mr. BISHOP, in answer to a question, said he piled his turnips all together. He had one heap now of 1600 bushels, about 10 feet high, but kept a square flue of boards, pierced with holes in the centre, for a ventilator, so as to keep them sweet. He had a screen about 10 feet long, which he rolled his turnips down into the pit, so as to clean them.

Mr. MILMAN made long heaps of roots, about a yard wide, and covered an inch-and-a-half with dirt, which was quite sufficient. He had a root-house with a chimney to it, which kept 1200 bushels well.

Mr. GRAFTON SMITH said he had lived chiefly on new ground, and thought that after the first crop of wheat men ought to lay down new land to grass. Breaking up sod amongst stumps was difficult, but the best way was to break it up in the fall, sow peas, and after that summer fallow. He thought he had to fallow stubble land, because green crops required so many hands. He broke up some very bad land one fall,—in the spring the cattle ran on it, he cross ploughed it in June, and it broke up very well. He disapproved of breaking up in spring for fallow, for we could not get at it soon enough, for the peas had to be got in first, and then comes haying; then harvest, the grass keeps on growing all the time, and after a

bad harrowing we have to plough for wheat with all the grass alive. He thought manuring on fallow was of no use on his own new land, he had tried it, but saw no difference in the crops. He had seen clover seeded down on wheat, which would grow from 1½ to 2 tons of hay, after two crops it was manured and sown with peas, then cross ploughed and ridged up, and it would do as well as a fallow.

Mr. ROBINSON had experienced great pleasure in hearing so many excellent remarks on the subject. He had determined to consider the matter, but had been unable to gain time to do so. It was a very important subject. In Mr. Dale's paper was a recommendation of summer fallowing; but he objected to it, as leading to the old system, and thought other things paid better now than fallows. Twenty years ago pork and wheat were the only cash articles; now a man who has other animals can sell them for cash; so one ought to look after everything. He who fallows his farm risks all upon one stroke. He knew of a man last year, in the Queen's Bush, who fallowed almost all his farm, and now had 1000 bushels of wheat in his shanty; but it should be considered the risk he ran. He recollected his father fallowing for wheat, which was partially winter killed, and after that grew exceedingly rank, and rusted, so that the straw was at harvest tied up, not in sheaves, but in large bundles, 48 of which went to one bushel of bad wheat. Considering the money that was laid out in fallowing, in horses, wages, &c., he thought those who wished to raise good crops would act differently. Farms should be seeded down, and well done, not with one or two pounds to the acre, but with four or five, so as to choke the Indian grass, and raise good clover for cattle and hogs, in order to have young animals for the butcher, besides a cow or so for home use, and one's hogs grown cheaply. He had a quantity of young hogs last year half fat on clover and water. A man should have a small part of his farm in wheat, part in oats, a large part in clover, so as to get good grass, hay and pork; with good peas, enough to grow \$100 of pork, and then have a yoke of oxen for sale, young cattle, too, and perhaps a pair of young horses. Ought we to do nothing but plough, and get a crop of wheat to sell—pigs, to sell the most of—oats and peas, to sell altogether,—in such case manure was nothing but digested straw. He had heard of cut straw and bran, but he thought we ought to bruise our oats with straw to make good manure. Ploughing was not the only thing necessary, crops require ammonia, potash, and soda,—and thus require ashes. When soil was poor like that field of Mr. Bishop's,—where did the crops get their nourishment from? On board ship lettuces had been raised on wet rags, and he had heard that from 90 to 95 parts of all crops came from the air. How can manure be made if all the crops are sold off, and it be nothing but digested straw? He had lived in the woods all his life,—he came from Yorkshire when 5 years old,—his nearest neighbor was 3 miles off, next one 5, next 7, and he had been at school but two months after he came out here. The condensing and absorbing power in the earth had been placed