

Few persons in a new country are sufficiently careful of manure. Sometimes it is spread on the green sward, sometimes permitted to remain lying round the barn yard for two or three seasons. The liquid which exudes from it is not economized. The exhalations which arise from the ardent influence of the summer's sun, and from the natural activity of fermentation are permitted to escape and carry away with them the most valuable part of the manure. Proper means are not used to fix the gases which are generated by putrefaction, and which constitute the elements of vegetable food. Every manure heap should have a foundation of muck to receive the liquid which exudes from it—layers of muck intermixed with it to keep the manure from being overheated and a protection of some kind to keep it from the influence of the weather. Plaster should always be used for fixing the ammonia. Very few farmers pay any attention to the degree of heat attained by the fermenting manure; it should never exceed one hundred degrees of Fahrenheit's thermometer. At a much lower heat, carbonic acid, and other gases ascend as elastic fluids and are diffused and lost in the atmosphere; the manure heap becomes *fire-fanged*, and its fertilizing ingredients are expelled.

So long ago as 1812, Charles Alexander, an intelligent farmer in Scotland, published an account of his experiments to ascertain the value of the urine of cattle as a manure. He commenced operations by digging a pit near his feeding stalls but distinct from that which was occupied by the solid manure. The dimensions of this were thirty-six feet square and four feet deep. Surrounded on all sides by a wall. Having selected the nearest spot where he could find loamy earth, he proceeded to fill it and found that the whole expense of transporting the earth to it did not exceed \$29. When the work was complete he levelled the surface of the heap on a line with the sewer which conducted the liquid from the byre, that he might be enabled to saturate the soil evenly. The liquid was supplied by fourteen cattle which were kept for five months on turnips and hay. The contents of the pit produced 288 loads which manured seven acres of land. He tried this experiment annually for ten years, and used in separate fields the rotted cow dung and the saturated clay, and found in all cases the latter was fully equal to the former. The beneficial effect of the compost on the soil were fully as permanent as those of the barn-yard dung. The pit which contained the solid manure of the fourteen cattle, as well as the litter employed in bedding them, only furnished two hundred and forty loads, which manured six acres. The value of the urine therefore, when compared with the solid manure, was in the ratio of seven to six, so that it is evident that the liquid is more valuable than the solid matter. We have been calling on our rural friends to construct tanks and to saturate muck and solid manure with the valuable liquid which at present is so much neglected, and we hope to see our views carried out. By having a tank, even of the rudest kind, the quantity of manure on a farm may be doubled and the crops increased in proportion. We suggest that it would be considerable saving of labour to form the heap of muck in the field, wherein it is to be used, and to draw the liquid manure from the tank for the purpose of saturating it. The spring is so short in this latitude that everything that can be done to forward farm operations should be effected. Late sown crops seldom produce well.

IMPROVEMENT OF VEGETABLES.

There is no vegetable now cultivated, which is not susceptible of almost indefinite improvement. Yet we see very little difference between the crops produced now, and the crops raised by our forefathers. Indian corn, beans, pumpkins,