

neat instincts and habits are a great eyesore. Moreover, they involve waste of rich land, valuable manure, and costly labour. When these blank places amount to a considerable proportion of the field, the loss of crop thereby occasioned becomes a serious item. It is therefore every way desirable that these blank places should be filled up and turned to some useful account. This may be done in a variety of ways. The best, were it practicable, would be to transplant from rows that have an excess of plants, and so occupy the vacancies and make the field complete. But this can hardly be said to be practicable, though we believe it is done to some extent by British farmers. [It is a successful practice in Western Canada.—Ed. J. A.] The turnip does not transplant kindly, and only submits to the process in a mild climate, or during a remarkably wet time. Even under such conditions, the plant is checked and the bulbs stunted. Mangolds are much more docile under transplantation. Indeed, during a spell of moist weather, they can be transplanted almost without their knowing it. Hence there need be no blank spaces in a mangold patch—ought to be none.

Blanks in the turnip field may be filled up by sowing Yellow Aberdeens, White Globes, Stubble or White Stone turnips. These mature in a much briefer time than the Swede, and though not so valuable, are by means to be despised. They may be fed in the late fall or early winter, and made to help materially in eking out the supply of roots. The Yellow Aberdeen is the best of these late varieties, and will come to a very respectable size if the season be good, though sown three or four weeks after the general crop of Swedes. A good supply of White Stones is by no means bad filling for a bin in the cellar, or for the pot on days when there is "boiled dinner" preparing in the kitchen. It is very little trouble, when the turnip crop is gathered, to separate the different kinds, and convey them to their proper destination.

There is another mode of filling these vacancies, which may be mentioned, though the suggestion is rather late to be of practical value the present season. It can, however, be made a note of, and acted on another year. We refer to filling up with another kind of forage crop, namely, the cabbage. There is no better expedient than this, and none that can be more easily carried out. More or, cabbages are greatly relished by cattle in the winter time, and are especially valuable for milch cows. Being of easy culture, the wonder is that they are not more extensively grown as a field crop. The plants require to be grown until fit for transplantation in a seed bed, which should be located in some sheltered and sunny spot, and the seed sown in early

spring. The soil of the seed-bed should be very rich, well-worked and mellow. In sowing a quantity for field culture, of course a good sized bed will be required, and it is the better plan to sow in drills, as the plants can then be more readily hoed and weeded. They will also require thinning, and if the plants can be used at different intervals, it will be well to take the larger and stronger ones first, leaving the feebler ones to grow into more vigorous condition. A moist time should be chosen for transplanting, and the work done with a tool known among gardeners as a "dibble." This tool is usually made of an old broken spade handle. The top part of the handle, about eighteen inches in length, is what is used for the purpose. A gradually tapering point is made to it, which is pushed into the soil, and withdrawn with a turn of the hand. Into this dibble-hole the young plant is set, and the dirt firmly pressed around it. The most expeditious way of doing the work is for one person to make the hole and drop the plant beside it, while another sets the plant. This is an operation in which the "young folks at home" can be employed to advantage, as their backs are short and their fingers nimble.

#### COST OF KEEPING HENS.

BY J. C. THOMPSON, TOMPKINSVILLE,  
STATEN ISLAND, N. Y.

As there is a constant clamor against "bidly" about her "eating her head off," "poultry don't pay," etc., permit me to say a few words in behalf of the ever faithful "bidly." In the first place "bidly" is charged with everything that is bad,—she is noisy, mischievous and gluttonous; in the next place, she is seldom indeed credited with an ounce of the nice food she daily produces for our tables; she is often half fed and less cared for, and yet under such unfavourable circumstances will give her careless owner at least 100 eggs a year, and often 125 to 150 lbs. But say only 100 at 8 to the pound is 12½ lbs. of food, returned to her careless owner, for less than a bushel of grain consumed in a year, (if she is lucky enough to have it set before her). Allowing her to weigh 5 lbs., she returns her weight in food two and a half times, and is yet on hand at the close of the year ready to reproduce her kind, and repeat her weight in eggs more than twice in the coming year.

Quite unlike the "grunter" she is not "done for" "salted down" and converted in a "non-producer" for the future. She still lives, to give a good account of herself in daily supplying our tables with food of the best quality, while poor Porkey is "done gone" for ever. Now I repeat that "bidly" gives more weight

of food (and of the best kind too) for the grain consumed than any other animal kept on a farm. What I ask is that a strict account be kept of all the eggs laid as well as the food consumed, and if, at the close of the year, the result is not satisfactory then all would be justified in discarding "Bidly's" society and turning their grain over to the "swinish multitude."

For the information of them that don't know, let me say that no hen that has a decent run, eats a bushel of grain a year,—all my tests have been made when they could get only the grain fed daily. Large fowls like Brahma, eat 2½ oz. per day; small birds like Leghorns, eat less than 2 oz. per day.—that is about seven half-pecks of grain for the smaller birds, and a bushel for the large kinds; and then too we must not forget that "bidly" gives us a fresh mess every day, besides furnishing us with a companion for the pot or oven once or twice a week, while poor "porkey" gives us fresh only once a year.

I must close by stating what my stock gave in eggs for Jan. 1868. 120 hens gave 620 eggs at 50 cents per dozen, wholesale price, 51½ cents dozen, \$25.75; cost, third of a bushel of corn per day, at \$1.50 per bushel, \$15.50. To biddies credit for January, \$10.25.—*Gardeners' Monthly.*

#### FEEDING OF STOCK AS A BRANCH OF FARM MANAGEMENT.

The feeding of stock is one of those subjects which can be most successfully advanced by studying the principles on which it depends; and, though these involve many most complex chemical and physiological questions, we have obtained some foundation on which to go. The food which an animal consumes is partly assimilated and partly excreted, but, if it be properly proportioned to its requirements, its weight remains constant, and hence we learn that the food does not remain permanently in the body. If, now, an animal be deprived of food, it loses weight, owing to the substances stored up in the body being used to maintain the process of respiration and the waste of the tissues. The course of events within the body is, so far as known, somewhat of this kind. The food is digested, absorbed into the blood, a certain quantity being consumed to support respiration. If the food be properly adjusted to the requirements of the animal, its weight remains unchanged—the quantity absorbed and that excreted exactly correspond to one another; but, if we increase the food, a part of the excess will be deposited in the tissues to add to its weight. Now, the quantity absorbed depends upon the state of the animal—a lean beast thoroughly exhausting its food, while, when it is nearly fat, it takes only