

member that similar revolutions from unproductiveness to fertility are practicable all over the continent, we begin to realize what hidden stores of wealth there are in the bowels of the earth, and feel that it would be well if nine-tenths of our farmers could go to school for a while to these thorough-going cultivators of the soil. Of their work, *Heath and Home* says:

The skill and success of these market gardeners are such that on land the yearly rental of which is from fifty to one hundred dollars per acre, vegetables are grown with profit which are consumed thirty miles inland, where the rental of an acre is less than twenty dollars. These little patches of deep-tilled and highly-manured earth do double duty, and in a climate where there is ice in the middle of April and hard frost by the middle of October, the short season is so crowded by the energy of these unwearied husbandmen that they gather two profitable harvests—one about the 4th of July, the other by Thanksgiving time. As a specimen of what these gardeners can do on an acre, one of the most noted and skillful of these vegetable growers, Mr. Peter Henderson, of South Bergen, makes the following show, pronouncing it an average for the past ten years, from grounds that have been brought up to the standard of fertility necessary to the market garden:

OUTLAY ON THE ACRE.

Labor.....	\$300
Horse labor.....	35
Manure, seventy-five tons.....	100
Rent.....	50
Seeds.....	10
Wear and tear of tools, etc.....	10
Cost of selling.....	100
Total.....	\$605

RECEIPTS FROM THE ACRE.

12,000 early cabbages, five cents per head, marketed about the 4th of July.....	\$600
14,000 lettuce, one cent per head, set between the cabbage, and sold in May and June.....	140
80,000 celery, at two cents per head; set in July and August, and marketed during the winter.....	600
Total.....	\$1340
Deduct the outlay.....	605
Profit in clear money.....	\$735

An hour's conversation with this successful cultivator and his foreman, as well as a study of his book and a visit to his grounds in South Bergen, near the classic shores of Communipaw, would convince most of our farmers that nothing can be more vicious and profitless than our old hereditary way of scattering manures and labor right and left, over a wide, half-tilled, half-utilized surface. A detail of his system and his methods would make, what he has made, a book on profit in market gardening. We can only give the conclusions to which a scrutiny of the reasons of his success has carried us.

1. For the green and bulky crops, such as cabbages and celery, a wide surface is a seduction and a snare to the cultivator. It is well for him when a speculative value in lands near a great city confines him to a limited area.

2. An abundance of manure and skill in gardening are a full offset to high value of lands near cities. With manure and the requisite knowledge; a gardener, on acres worth \$2,000 each, may grow

rich by selling vegetables to the man whose acre is worth \$200.

The great crops of the market garden are grown by filling the soil every season with bulky, and, for the most part, vegetable manures. While the market gardener may spread a ton of guano on an acre, it is applied not as a substitute, but as a co-worker with manufacturing and stable composts.

4. The vicinity of towns large enough to support big horse-stables, breweries, and slaughter-houses, affords the area for very profitable gardening, no matter how unpromising the soil.

5. Next to manure, the market gardener must have abundant and timely supplies of labor. When the earth is not in the dead-lock of winter, he wants as many men as he has acres.

6. This business requires nerve. To venture timidly and hug the shore is to fail. Rank manuring, frequent stirring of a deep, well-drained soil, and weedless perfection of culture, are not advisable simply—they are vital to success.

SOME OF THE NEW ANNUALS OF LAST YEAR.

BY JAMES VICK, ROCHESTER, N.Y.

RHODANTHE MANGLESII MAJOR.—I have seen charming plants of *R. Manglesii* in Europe almost a shower of graceful rosy bells, but never anything more beautiful than a bed of this new Rodanthe, in my grounds the present season. It is like *R. Manglesii*, except that the flowers are about twice the size, and the plant far more robust. In Western New York the summer has been wet and cold, something like an English summer, and this may have been the cause of success.

THE PETUNIA is one of the most useful of our hardy annuals, and its improvement in the past twenty-five years has been quite marked. Only a few years since the Petunia was a poor, white, papery flower. Then small purple flowers were produced. Now we have them of every desirable color, except yellow, and perhaps blue, though some of the purples are very near blue, and both double and single. For making a good showy bed, the single sorts are the best.

There are two classes of Petunias one of the same habit as the old Petunia, with tough, slender, wiry branches, bearing a mass of flowers, and also giving abundance of seeds. The best variety of this class is the *Countess of Ellesmere*, a bright rose, with a white throat. This variety flowers so freely, and is of such a bright rose color, that it makes a bed on the lawn or a border of great beauty. It always comes true from seed. The *Blotched and Striped* of this class is also very desirable—of almost every conceivable style of marking. There are also mixed varieties of almost every color. Plants of this section make a very long though slender growth. I have measured plants this season which covered with their prostrate branches spaces ranging from 12 to 18 feet in diameter.

The *Grandiflora* section have thick, short, succulent branches, covered with a sticky substance, very large leaves, and enormous flowers, often from four to five inches across. They flower very freely, but not as abundantly as the small flowered ones. They produce but very little seed, and none in the open ground, as a general rule, though perhaps a little could be obtained in a very dry season. To obtain