

surface—it has a head of 125 feet above the level of Lake Michigan—there seems to be no doubt but that by an enlargement of one of the wells to the diameter of 20 inches, a sufficient supply, estimated at 17,000,000 gallons per day, could be obtained to meet the demands of the city for years to come, and this would flow into the reservoirs without the aid of expensive engines, steam pumps and fuel. Another curious feature in regard to those wells, and one which geologists have not yet explained, is found in the fact that they are located in no great valley or depression, like the basins of Paris and London, but are out on the level prairie, surrounded for hundreds of miles by country of a like character. This fact, taken in connection with the low temperature of the water and the great head of the fountains, seems to indicate that it has a source far in the north or northwest, beyond Lake Superior and beyond the Mississippi, perhaps away off in the Rocky Mountains.—*Mechanics' Magazine.*

Gardening in a Back-yard—The Country in the City.

In the February number of the *American Agriculturist*, a correspondent publishes his experience as a New York back-yard gardener on a small scale:—"On the first of May last the changes of this changing world found me—a practical farmer of twenty-five years' sojourn in 'sylvan scenes'—taking possession of a city house in New York. It had been engaged for me without my first inspecting it, and upon reaching my new dwelling-place I neglected to look at parlour and dining-room, but ran eagerly to the rear to survey the 'grounds.' Imagine how small the smallest kind of a city yard looked to a man who had been accustomed to till ten acres of a garden! When I was gardening on the large scale, I used to read in the *American Agriculturist* of wonderful things done in small plots of ground, and I recollected with sorrow the contempt I felt for those 'potterers in small patches.' Here was so little land to be made most of. It had already been laid out, by a former occupant, into a grass plot which two bed-sheets would cover, and a border around three sides of the yard. I had 36 feet of border, averaging 3 feet wide, and I borrowed a bit from one end of the grass-plot to make a bed 8 feet by three. A stable at hand supplied manure, and the ground was put in tolerable condition. The fence with the warmest exposure was furnished with a trellis of wire and strings, and Lima beans, planted as much for ornament as for the beans. Eighteen good tomato plants were set out along the borders and supplied with trellises. Two egg-plants filled spare corners while the bed I annexed from the grass-plot was devoted to two hills of cucumbers. Then all along the edges of the borders and beds parsley-seed was sown. The results were first shown in one cucumber! Do you believe there was such another cucumber in New York, and did I not on that day feel pity for those misguided persons who bought the wilted things at the corner grocery? Tomatoes came early, and plenty of them, all that five persons could eat and quantities to 'can' and pickle green; also about a dozen egg-fruit, aldermanic in proportions and delicious in flavor. Several pickings were made of Lima beans, and the parsley

was always pretty to look at and handy to have. "And is this all?" some reader of large possessions will ask. No. All those nice things on the table were as nothing to the weeding, the pinching-in of rampant cucumber vines, the tying-up and cutting-up of tomato vines (how much cutting they do stand!) the fight with insects, the getting of the hands dirty, the back tired, and being happy generally. I don't think I can ever have a smaller garden, but if it comes down to a single cubic foot in a candle-box, I shall accept it thankfully and read the *Agriculturist*, which will tell me how to make it yield to the full extent of its capabilities."

A Steeple Jack at Westminster.

A daring individual named Burns, from Manchester, has succeeded at the House of Parliament in the dangerous operation of fixing the copper bands round two of the finials on the centre tower. The last November gale blew off one of the finials, and loosened another; and if it had not been for the lightning conductor, one would have dropped down, and might have done considerable damage, being one of the highest, and 9 inches square by 6 feet 5 inches from its basement to top, surmounted by a vane that would not revolve. From that cause the wind had such power over it that the third joint gave way, and the finial fell against the steeple; the west wind, however, moved it again, and placed in its position where it rocked. Burns made his way, 210 feet high, outside the tower, without scaffold, by a series of seven ladders, in an ingenious manner, and safely repaired it. Burns very recently got up to the top of the steeple of St. Mary's Church, Rotherhithe; succeeded in taking down the weather-vane, which is 7 feet 4 inches long, and 84 pounds weight, and after it had been repaired and regilded restored it to its place.—*Builder.*

Learning a Trade.

It was a wise law of the ancient Jews; that the sons of even their wealthiest men should be obliged to serve an apprenticeship to some useful occupation, so that in case of reverse of fortune they might have something to "fall back upon." The same still exists in Turkey, where every man, rich or poor, even the Sultan himself, must learn a trade. How fortunate would it be now had it been a law in this country. "Would to God I had a trade!" is the cry of thousands of our returned soldiers, North and South, who find themselves ruined in pocket, with no immediate prospect of gaining a livelihood. It should teach parents that whatever else they may give their sons they should give them a good trade. One of our contemporaries most truthfully remarks that a popular idea among our people is that all their sons should adopt a clerkship, and the adoption of the business of book-keeping as a means of obtaining their livelihood, and every effort is made to give them an education to that end. So far as the education of their children in the science of keeping proper accounts is concerned, the idea is a good one, as every young man should have a sufficient knowledge to properly manage his own books, should he ever embark in business; but to make book-keepers and clerks of all our boys is a grand mis-