

## Scientific and Useful.

## THE VALUE OF FAMILIAR THINGS.

How often do we undervalue familiar things! Professor Tyndall illustrates the value of a single potato by supposing that every potato in the world but one were destroyed, that would contain in itself the possibility of again stocking the world with an invaluable article of food. If one potato would produce, when planted, only a crop of ten potatoes, in ten years the total product of the produce of this one potato would be equal to ten millions, which would be sufficient to stock the whole world with seed. The real value of that single potato, then, would be such that it would be better that the city of London or New York should be destroyed than that tuber should be lost to the world. We suppose that the same would hold good as to a kernel of wheat; but we are in no danger of such extremities; and the calculation is not of especial moment, save to dignify the homely esculent so familiar to us all.

## LEAVES FOR FLAVORING.

The "Garden," an English periodical, after remarking that leaves are not so much used for flavoring as they might be, adds the following practical suggestions:—"One of the most useful and common of all leaves for flavoring is that of the common syringa. When cucumbers are scarce, these are a perfect substitute, in salads or anything in which that flavor is desired. The taste is not only like that of cucumbers, but identical—a curious instance of the correlation-of-flavor in widely different families. Again, the young leaves of cucumbers have a striking likeness, in the way of flavor, to that of fruit. The same may be affirmed of carrot tops, which are as like carrots in taste as may be. In most gardens there is a prodigious waste of celery flavor in the sacrifice of the external leaves and their partially blanched stalks. Scords of sticks of celery are cut up into soup, when the outside would flavor it equally well or better. The young leaves of gooseberries added to bottled fruit give a fresher flavor and a greener color to pies and tarts. The leaves of the flowering currant give a sort of intermediate flavor between that of black currants and red. Oranges, citron, and lemon leaves impart a flavor equal to that of the fruit and rind combined, and some what different from both. A few leaves added to pies, or boiled in the milk used to make with rice, or formed into cruster or paste, impart an admirable and almost imitable bouquet.

## RECENT DISCOVERIES IN THE PYRAMIDS.

The Pyramids of Egypt were constructed 4,000 years ago. Mr. Dixon, of England, has for some time been exploring the two remarkable chambers known as the King's and Queen's chambers, in the interior of the Great Pyramid. By means of a wire introduced between the joints of the masonry he found a space, and was therewith induced to bore into the walls of the queen's chamber, when he discovered a passage way, eight by nine-inches-in-dimensions, evidently a ventilating flue. Its terminus has not yet been found. Within the passage way he found a bronze hook, which is supposed to be the most ancient specimen of bronze now existing. He also found a piece of worked cedar wood, and a granite ball, which latter is believed to have been an Egyptian weight. Its diameter is 24 inches. As the walls, says the "Scientific American," behind which these articles were found were solid on the inner side of the chamber, it is believed that they were placed in the positions where they were found at the time the pyramid was erected.

## ACTIVE PRINCIPLE OF VACCINE VIRUS.

The vaccine matter, or virus, consists, in an albuminous fluid, differentiated, among which very small microscopic grains are conspicuous. Messrs. Chauveau and Leber consider those as the very carriers of the vaccine matter. Mr. Ferdinand Cohn was offered an opportunity to examine the subject more closely, and makes the following report:—At first he raises the question, are these grains, perceived by all observers, constituent parts of the virus, or accidental admixtures? Experiments instituted with all possible precautions led to the conclusion that they exist in the freshest virus, and have to be considered as constituents. These globular corpuscles fill the vaccine matter quite equally. They are without spontaneous motion, but show molecular motion. Their size could not be ascertained accurately, being beyond our present means of microscopic measurement, but it is certainly less than 0.001 of a millimeter—perhaps one-half or three-quarters of it. At first they are mostly single, rarely in pairs, but increase rapidly in number when the observation is continued for some time with proper precautions. They form entire rows, and, after some hours, irregularly-connected groups. This extremely rapid and uninterrupted augmentation proceeds from cross-division of the cells. From these observations Mr. Cohn considers the corpuscles of the virus as living, independent organisms, belonging to the class of schizomycete, which, as the smallest and simplest of all organisms, multiply only by the division of cells. In conclusion, Mr. Cohn discusses the question whether these corpuscles are in fact the carriers of the contagion, and comes to the conclusion that this is highly probable, yet not definitely decided. He inclines, however, to a modification of this statement, viz., he would consider them rather as originators than carriers, in so far as he believes them to act as ferment upon the liquid constituents of the virus, which, becoming decomposed, show their poisonous effect when received into the circulation of the blood. Mr. Cohn promises to test his hypothesis experimentally, and to communicate the results.—Editor's Scientific Record, in Harper's Magazine.

Most people drift. To do this is easy, costs neither thought nor effort. On the other hand, to resist the tide one must have principle and resolution. He must watch and pray and struggle continually. And no thoughtful person who cares for his soul will dare to drift.

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