The artificial milk resembles milk in color, consistence, oder and even taste. But in composition it is different; for it is only an emulsion produced by the fat mixed with the water by means of gelatine. Although the name artificial milk is not proper, it has some nutritious qualities, and for this reason it is now under trial at the hospitals of Paris.

OBJECT AND EFFECTS OF IRRIGATION.

The purpose of irregation is not only *moistening*, as many farmers may think but chiefly *manuring* by means of irrigation; dam up a little stream, and make a small ditch along the higher part of a piece of land, so as to cause the water to overflow; in the immediate vicinity of the ditch the grass will grow a great deal longer and faster than at some distance from the ditch, where the moistening part had been executed to the same degre as above. showing that the water had left its manure at the first contact, with the surface of the ground. In laying out the ditches for irrigation make many ditches, instead of a single one. There is no loss even by the greatest number of ditches provided they are put in the right place. The distribution of water, and the different modes of arranging the land for irrigation and drainage, depend on the shape or the surface of the ground, &c., and require a very fine judgment, and at least some knowledge of leveling and surveying. The rain water has no manuring effect on the soil; but its great efficacy is its dissolving quality, by which it makes the manure fit for feeding the vegetables. The water of running streams, led on the land for irrigation, fulfills two important conditions, namely that of yielding manure, and is therefore superior to rain water for irrigation. Some have contended that rain water contains a little ammonia, and that it therefore possesses fertilizing properties, but the most refined analysis has failed to prove this.

THE CEDARS OF LEBANON.

The following is an extract from a letter of R. S. Calhoun, missionary, in the last number of the *Bibliotheca Sacra* —

"The region of the Cedars—ten hours ride south east from Pripoli—is not far from 7000 feet above the level of the sea, and is surrounded on the north, east, and south by a still higher range of mountains. It is open towards the west, and looks down upon a vast mass of rugged mountains, and beyond them to the 'great and wide sea.' The scenery is most majestic and impressive.

The soil in wh. h the cedars grow, is of a limestone quality, and so exceedingly rough and stony as to be entirely unfit for the plow. The whole region around is covered deep with snow, usually from early in December to the middle of April.—But though the snow is so abundant the cold is not so intense, as, for instance, in New England.

This region around the Cedars is too cold for rain, and hence almost the entire discharge from the clouds is in the form of snow, while at the same time, as far as I can judge, from the reports of the people inhabiting the nearest village, the ice is far less than with you, thusindicating a less degree of cold.

The Cedars are few in number. I have been counting them to be about four hundred. Our actual count was three hundred and ninety-three,—Many of them are two feet, a less number three feet and even four and five feet in diameter. Several of them are from six to ten feet. One that I measured this morning is forty feet in circumference, say two feet above the ground. A little higher it sends forth five immense branches, each from three to five feet in diameter, which shoot up almost perpendicularly, thus, in reality, constituting five trees of great size. Many of the cedars are double, and a few even triple and quadruple; that is, from one root apparently there grow up two or more trees, united as one for a few feet, and then separated by a slight divergency, thus forming independent trunks, straight and beautiful.

As to the age of these trees, I do not know that history says much. In a chip two inches thick I have counted, to day, sixty circles; which I believe you, who know better about such matters, would make equal to sixty years. A tree of six feet in diameter, according to this calculation, would be nearly 1100 years old. But as the chip alluded to indicates a very flourishing growth, and as the yearly increment becomes less as the tree increases in age and size, it is quite probable that a tree of six feet in diameter may be 2000 years old. At this rate, the giant tree mentioned above has probably breasted tempests of more than 4000 winters; thus making its origin nearly cotemporary with the flood. Travelers have been in the habit of cutting their names on these larger trees. One date I find as far back as 1673, at which time as appears, the circumference of the tree must have been nearly as great as at present. From such dates as these we must inevitably refer their origin to a remote antiquity."