

Miscellaneous.

Value of Bones.

The following, from the pen of S. Edwards Todd, agricultural editor of the *New York Times*, carries a "big hint" to the mind of every agriculturist in the country. If it will pay to collect bones for transportation and consider them a commercial article of much value from a country where all labour and material is as high as it is in the United States at present, or export them some thousands of miles to countries where all labour and products are far cheaper than where these same refuse fragments are gathered, then it certainly *will pay* to employ them at home; and if once used, we feel assured that their value will soon be known. It is certainly time that some attention should be called to this subject in all parts of the country. Exceptions there are in many places where the value of bones is well known, but this value ought to be more generally and universally appreciated:—

"If there is any one practice among American farmers for which they deserve sharp rebuke, it is for permitting such immense quantities of bones to be exported for the improvement of the agriculture of foreign nations. Thousands of tons of bones are collected annually in Chicago, Buffalo, New York, and other populous cities, and shipped to European countries to fertilize the land for raising turnips, wheat, fat cattle, and sheep. And yet American farmers in stupid quietude look on and say, 'It don't pay to collect bones and apply them to the soil.'

"It *will pay*. They have not tested the application of ground bone. There is not a meadow nor a pasture in the land—with very few exceptions—that will not be greatly benefited by a dressing of ground raw bone. Thousands of acres of the best farming land in New England is in a low state of impoverishment for the want of a liberal dressing of ground raw bone. Such fertilizing matter is the very life of the soil. European farmers understand and appreciate this fact. They know it pays to ship bones from America to enrich their farms. Every shipload of bones that is picked from our land injures the agriculture of our country. England delights in the excellence of choice cheese of American dairies, while we mutter and grumble over a pot of the whey. Europeans rejoice over the rich, sweet American butter while we are so unaccountably stupid as to be satisfied with the buttermilk. Our farmers dig, and delve, and rake, and scrape their grain-fields, meadows and pastures, to get phosphatic fertilizers to send to Europe to produce big crops of turnips; and then grumble and denounce their own land as good for nothing, because their turnips refuse to grow as they do in eastern countries.

"The truth on this point is. American farmers must save and apply more manure to their impoverished land; especially must they save bones for growing a crop of turnips. As soon as we can produce a bountiful crop of turnips on a wheat soil, we can grow wheat. Wheat and turnips in England go hand in hand.

"There is a volume of truth in the old maxim:—

"No bonedust, no turnips; no turnips, no wheat; No wheat and no turnips, no cattle, no meat; No turnips, no cattle, nor manure in the yard, Make bills for the doctors, and farming go hard.'"

—*American Artizan.*

Acetylene.

A colorless gas, consisting of two equivalents each of carbon and hydrogen, is contained in small quantities in coal gas, and is supposed to have been the cause of certain mysterious and hitherto unaccountable gas explosions. It may be separated from the coal gas by passing the latter through a solution of ammonia-sulphate of copper, precipitating a reddish brown deposit of acetylide of copper. This being very explosive, igniting with slight friction, is supposed to have been the cause of several explosions which have occurred in moving copper gas pipes and in altering meters where the brass work had been much in contact with the gas, and a deposit of acetylide of copper might naturally have been formed. It is a curious fact that if chlorine gas is turned into a jar of acetylene gas even in darkness, an explosion will ensue, but not so if the acetylene be turned into the chloride, unless a moderate degree of light be present. In the latter case, the chlorine unites with the hydrogen, setting the carbon free, so that the vessel, which previously held a mixture of colorless gases is instantly filled with a mass of inky black smoke, giving the jar the appearance of patent leather. These observations, says the *Scientific American*, are derived from a late lecture by Prof. Frankland.

Drainage.

The Metropolitan Sanitary Commission of London compute that for every inch depth of water drained off, and which would otherwise pass into the air as vapor, as much heat is saved per acre as would raise eleven thousand cubic feet of air one degree in temperature. A farmer was asked the effect of some new draining, when he replied, "All that I know is that before it was done I could never get out at night without an overcoat, but now I never put one on." A physician took one of the Sanitary Commissioners to a hill overlooking his district. "There," said he, "wherever you see those patches of white mist I have frequent illness, and if there is a cess-pool, or other nuisance as well, I can reckon on typhus every now and then. Outside these mists I am rarely wanted."

Snow Animalcules.

A distinction is observable between the taste of snow water and that of rain water, and the use of the former in parts of Switzerland is thought to be the cause of peculiar affections of the throat, including *goitre*. The discovery of numerous shrimp-like animalcules in snow water, by a distinguished chemist, has suggested a possible connexion between them and the unwholesomeness of snow water. They prove at least that life is not restricted to the conditions of temperature with which we usually associate it. The fluids which give mobility within these organisms must be such as, unlike those of animals, and alcohol, resist extremes of cold.