Hydrophobia.

Crystals of nitrate of silver rubbed into the wound, are perscribed by Youatt, who has been bitten eight or ten times by rabid animals. It is a disease to which the susceptibility of individuals seems to vary so remarkably that no remedy has yet been found generally applicable.

Improvement in Matches.

To avoid the use of phosphorus in matches, the third edition of Knapp's Technology proposes the introduction of nitromannite (8 parts) with 3 of sulphide of antimony, 16 chlorate of potash, 1 bichromate or potash, 10 red lead, 4 powdered glass, and 5 gum. Nitro-mannite is prepared by treating mannite with nitric acid or a mixture of nitric and sulphuric acid, in the same way as cotton for the manufacture of gun cotton.

Water-proof Composition for Leather.

Melt together 1 lb. tallow, ½ oz. neatsfoot oil, 1 oz. of rosin, ½ oz. lamp-black and a tablespoon full of boiled linseed oil. Should be rubbed in repeatedly, the boots or other articles to be warmed. It is said to be perfectly water-proof and not injurious to the leather.

How to make Super-phosphate.

To one hundred pounds of water in a half hogshead tub, add slowly forty-three pounds sulphuric acid (oil of vitrol.) To this add one hundred pounds of broken bones. To be stirred occasionally and the bones will be dissolved in three weeks. Then add four times its bulk in muck, (dry if you have it.) The tub should be kept covered. If the material is kept hot, three days will do it as well as three weeks, if cold.

To dissolve bones without acid. To a flour barrel full, put one half bushel hard wood ashes, then alternately a layer of bones and ashes, ending with ashes; add water sufficient to wet, but not to drip, (brine is much better.) In time these bones will dissolve. This mixture is a cheap and powerful fertilizer.

Bleaching Process of Mothay and Rousseau.

The article to be bleached is immersed in a solution of permanganate of soda, which has been rendered slightly acid, and is stirred about for a few minutes, with a glass rod. It is then plunged into a solution of sulphurous acid, which removes the violet brown oxide of manganese deposited upon it in the first bath. After the successive immersions in the two fluids have been repeated two or three times it is found to be beautifully white, without its fibres being the least impaired in strength. In this, as in all the processes which have been used for bleaching, oxygen is the agent which destroys the coloring matters; but is here applied in the form of ozone, which is disengaged from the permanganate by the organic matters.

Straw and Clothes Bleaching.

Bolley states that the hypo-chlorite of magnesia bleaches much more quickly than that of lime, with the further advantage in the case of straw goods, that it bleaches directly as well as quickly, without first coloring the straw brown as does the hypochlorite of lime. Magnesia being a much weaker base than lime, parts with the chlorine much more quickly.—The great bleacher is oxygen, and in the form of ozone, nothing oxidable can withstand it. Ozone is said to be rapidly formed when turpentine is exposed to the air, and the writer who mentions this (in a German periodical) recommends laundresses to add to their rinsing water a little pure rectified oil of turpentine mixed (which can be done only by distillation) with twice as much strong alcohol. No smell will remain in the fabric after drying.

Practical Memoranda.

Fruit Essences.

Dingler's Polytechnic Journal gives the following table of the composition of artificial fruit essences, showing the number of parts of each ingredient to be added to 100 parts of alcohol—all chemically pure. Glycerine is found in all—it appears to blend the different odors, and to harmonize them:—

Response of Orange	
	Glycerine Chloroform Nitric Ether Aldebyde Acetate of Ethyl Butyrate of Ethyl Butyrate of Ethyl Grannthylate of Ethyl Benzoate of Ethyl Benzoate of Ethyl Benzoate of Ethyl Grannthylate of Ethyl Benzoate of Amyl Sebacic Ether Salicytate of Amyl Dutyrate of Amyl Butyrate of Amyl Butyrate of Amyl Chesace of Orange Alcoholic Alcoholic Solutions Seturated in Succinic Acid Succinic Acid Succinic Acid Succinic Acid Here
	Plum.
	⊢ : : : : : : : : ⊢on : : : on : : : ∞ Cherry.
	i i i i i i i bi i i i i i i o i i b Pear.
	: : : - 15: : 5-: : -: 50: : 55 Orange.
	:: р:: 5:::::::::::::::::::::::::::::::
iiiiiii boopiiii opoipi b Strawberry.	பட் கட்ட்ட்ட் பட்ட் கட்ட் Gooseberry.
iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	: µ: ол: : µµµµµи : µµори: Д Raspberry.
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Capacity of Cisterns.

The Iowa Homestead has an illustrated article on cisterns showing the several forms in which they are made. The capacity of those of cylindrical form is thus given:—A cistern five feet in diameter will hold a fraction over five barrels to each foot in depth.

6	feet a	fraction	over 6	barrels	to	each	foc
7	"	"	9	"			"
8	"	66	11	"			"
9	"	44	15	"	•		"
10	66	66	18	**			"