manufactured at Belfast, and quite free of carbonic acid, will remove about a twenty-fifth of its weight of arsenic from solution in water, when agitated with the solution for a few minutes; so that even ammoniacal nitrate of silver does not any longer indicate the presence of arsenic; that the same magnesia will remove about a twelfth of its weight of arsenic if agitated occasionally for a period of 8 or 12 hours; that this proportion is removed entirely in less than 3 minutes if the mixture of magnesia and water be previously near the temperature of 212°; and that the same proportion is removed with as much speed at ordinary temperatures, if the magnesia be used in the form of gelatinous pulp, as thrown down in a cold solution of sulphate of magnesia by solution of canstic potash, and washed with cold water.

It is well known that magnesia was proposed many years ago by Mr. Hume of London as an antidote for arsenic, and that several cases have been published in which it appeared to have been of service; but that its general utility has been doubted or denied on account of the apparent want of chemical action between oxide of arsenic and magnesia. M. Bussy's inquiries will probably clear up these difficulties. Meanwhile it appears probable, from the experiments described above, that the general belief in the want of action between magnesia and oxide of arsenic has arisen from the circumstance that for a long time no other magnesia has been in current use in medical practice in Britain except the dense variety, which appears to exert very little action on arsenic in solution on account of its great density.

Dr. Christison promises more accurate experiments and a statement of the successful case hereafter. Meanwhile it appears advisable that, when magnesia is used as an antidote, and cannot be promptly obtained in the gelatinous state, the light calcined magnesia should alone be employed, and in the proportion of between 30 and 50 parts to 1 of arsenic.—*Chem. Gaz.* August 15th, 1846, p. 316.

AMMONIA AS A VESICANT.

(Chemist, Oct., 1846, p. 467.)—Formula of Pommade de Gondret:—In summer take lard, 6 drachms; oil of sweet almonds, 2 drachms; tallow, 4 drachms. Melt by a gentle heat, and pour into a wide mouthed phial with a glass stopper. Then add 12 drachms of liquid ammonia at 27° or 28°; put in the stopper and shake it up. It should be kept in a cool place; but as the temperature gets lower, put two drachms less tallow, and 2 more of lard. This pommade produces vesication in three, four, or five minutes.

CITRATE OF IRON AND AMMONIA.

By M. Beral. (Jour de Chimie Medicale, Aug., 1846, p. 498.)—The citrate of iron and ammonia, and its compounds are tonic; they are recommended to physicians for the treatment of all diseases which require the martial preparations. The following is the formula for preparing the citrate of iron and ammonia:

Distilled water,	5 lbs.
Crystal. citric acid,	2 "
Liquor ammoniæ,	1 "

Dissolve in a platina vessel and place the mixture on the fire; when boiling add by degrees fifteen lbs. of the moist hydrated peroxide of iron. When the oxide is dissolved, cool it for filtering: make it of the consistency of syrup; spread the product on plates of glass, and dry by the heat of a stove so as to obtain the citrate in transparent scales, of a fine garnet colour. The quantity of hydrated peroxide should be equal to 1½ lbs. of dry peroxide. Thus prepared, the citrate of iron is soluable, uninjured by air, always identical and free from the styptic taste common to other preparations of iron.

Formula for the Syrup of Citrate of Iron:

Simple syrup,	7 drs.
Citrate of iron and anhydrous ammonia,	
Sugar of cloves and vanilla, of each,	15 grs.

Mix and dissolve.

Formula for Pills of Citrate of Iron:

Sugar in powder,	3 drs.
Citrate of iron and anhydrous ammonia,	1 "
Mucilage gum arabac,	a sufficient quantity.

Divide into pills of 3 grs. each.

ON THE NOURISHING QUALITY OF DIFFERENT VEGETABLE SUBSTANCES.

Reckoned from the amount of Nitrogen contained in them.

By E. N. Horsford, of Albany, U. S.

(*Anal. der Chem. and Pharm.*, vol. lviii, p. 166.)—This is a very able research conducted in the laboratory of Prof. Liebig by the author, who appears to have devoted much time and care to the analysis. Besides simply estimating the amount of carbon, hydrogen, nitrogen, oxygen, sulphur, and ashes in the various vegetable substances that passed through his hands, the proportion of vegetable azotized substances contained in each one is also laid down; this is calculated from the amount of nitrogen and the known composition of these principles as made out by Mülder, Scheerer and others.

The following is the statement of the nutritive value of some of the substances alluded to in the extensive table accompanying the memoir. Wheat is taken as the standard, and the numbers in the table represent how many parts of the corresponding vegetable are equal to 100 of wheat.

	Theory.		Experiments on animals by Boussingault.
	Dried at 212° F.	Fresh	Fresh.
Wheat	100·	100·	94·
Rye,	98 8	97·6	97·6
Corn,	115·	113·	108·
Rice,	220·	225·	
Buckwheat,	170·	166·	122·7
Pease,	57·	60·	90·7
Lentil,	55·	58·	
Potato,	220·	596·3	429·
Yellow Beet,	182·7	919·4	589 7

L. L. S.

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THE MONTREAL SCHOOL OF MEDICINE AND SURGERY AND ITS DIPLOMAS.

If there is one thing which more than another tends to render unpleasant the duties which devolve upon the editors of public journals, it is the animadversions which they are occasionally called upon to make on the public acts of public bodies. In the discharge of functions appertaining to such bodies, it is the mode which most usually furnishes the material for remark, for it seldom occurs that the powers with which they are invested are transcended, or that prerogatives are arrogated which are not actually possessed. It may, and does not unfrequently happen, that these powers are pushed to