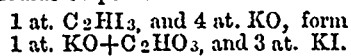


aromatic smell, like saffron, or rather, perhaps, like a mixture of iodine and chloroform; its taste is similar, but becoming disagreeably strong of iodine; it volatilizes slightly at the ordinary temperature, at 212° Fah. quickly and without decomposition (consequently it is readily drawn over with water), fuses at 240° Fah.—248° Fah. to a brown liquid, but with partial decomposition into iodine vapour, ioduretted hydrogen and residual carbon, which, strongly heated in the air, leaves no residue. Water shaken with iodoform acquires, in a very slight degree, its odour and taste, it dissolves only 1-13000th part; on the other hand, 1 part of iodoform is soluble in 80 parts of cold, and in 12 parts of boiling alcohol, of 80 per cent., and still more readily in boiling ether. The alcoholic solution varies from a straw colour to sulphur-yellow, the ethereal is golden-yellow; both solutions have a neutral reaction, with a sweetish ethereal taste, but afterwards a continuous burning one of iodine. Aqueous solution of potash, when warm, has no action on iodoform, whilst an alcoholic solution quickly decomposes it into formate of potash and iodide of potassium:—



ONTARIO COLLEGE OF PHARMACY.

The regular monthly meeting was held at the usual place, on Friday evening, 9th inst. The Vice-President occupied the chair.

After routine business, the following new members were elected:

A. C. Slavin, M.D. Orillia.
W. J. Dyas. Lucan.

ASSOCIATES.

Preston Lambert. Toronto.
J. J. Hall. Woodstock.
E. B. Borland. Fenelon Falls.
C. P. Geary. St. Thomas.
David Miller. Paris.

A Communication received by the Secretary, regarding the subjects of the proposed examinations, was referred to the report of the Committee on Text Books, to be found in the May number of the JOURNAL; and an application for membership was laid aside for endorsement.

The Chairman said there was evidently some misapprehension as to the hour for the meeting to commence, as he understood one or two members had gone away, having come at eight o'clock, half-past being the time, and there was a little allowance to be made for those who found that hour rather early.

The Secretary said that by some error in the report of last meeting, the discussion on the subject proposed by Mr. Brydon was announced for this evening, while those present would remember it was appointed for the October meeting, when it was hoped all would be prepared to discuss the subject.

The meeting adjourned.

H. J. Ross, Secretary.

The English Commercial Soda Test.

Mr. John Pattinson writes as follows to the *Chemical News*, in regard to a common source of error in alkalimetric determinations of sodas:—

My attention has lately been drawn to a strange error made by some analysts in attempting to apply the English commercial test for soda to samples of alkali, soda-ash, &c., the result of which error is to make the test indicate from 1 to 1½ per cent. more soda than the sample contains by the proper English test. It is well known that this (the English soda test) had its origin in the early days of the soda trade—when chemists believed the equivalent of soda to be 32, and that of carbonate of soda 54; and that, consequently, test acid was made so that 40 parts of sulphuric acid neutralized 54 parts of carbonate of soda equal to 32 of soda. This method of testing has always been, and still is, used by the soda trade throughout England; and it is a custom well understood by both buyers and sellers. It indicates 0.66 per cent. more soda in a 50 per cent. alkali, than the rigidly correct test based on the new equivalent 31 would indicate. It is certainly desirable, for the sake of scientific accuracy, that the correct equivalent, 31, should be used in testing; but seeing that manufacturers have expended their capital in plant, and made their contracts for their various materials on the understanding that a product containing a certain percentage of soda would be obtained, and, seeing that there are other commercial customs of the trade still in force, which tell as much against the manufacturer as the test does in his favor—such, for instance, as that of not charging for fractions of percentages, it is more the province of an association like the Alkali Manufacturers' Association, than that of an analytical chemist, to make alterations in trade usages affecting such vast interests. Certainly, if any alteration be made at all by chemists, it should be made in the direction of scientific accuracy, and not in the contrary direction, as in the case to which I have referred. The error, I find, arises in this way: The test-acid is made so as to indicate the exact amount of soda according to the new and correct equivalent 31—that is, that 40 parts of sulphuric acid should neutralize 53 parts of carbonate of soda, equal to 31 parts of soda.

To convert the results obtained by this test-acid into the English commercial soda-test, it is incorrectly assumed that the 31 parts of soda are equal to 32,—in other words, that the 53 parts of carbonate of soda contain 32 parts of soda. This is where the error lies; for, according to the correct English test, 54 parts of carbonate of soda, and not 53, contain 32 of soda; and, therefore, by the English test, 53 parts of carbonate of soda contain only 31.41 of soda. By thus mixing up the old and the new systems of equivalents, a sample of soda-ash which, by the correct English test, contains 59.66 per cent. would be returned as containing 51.61 per cent. of soda. A sample of caustic soda which, by the correct English test, would contain 75.0 per cent. of soda would, by this erroneous method, indicate 76.4 per cent. It is only necessary to point out this error in order that it may be avoided and guarded against by any of your readers interested in the buying and selling of alkali.

The New Patent Laws of the United States.

It may be useful to some of our readers to learn something in regard to the new Patent laws. We subjoin the following from the *Scientific American*:

The advocates of the free trade system, if they did not succeed at the late session of Congress in realizing all their aims, certainly made a clean sweep so far as patents are concerned.

This country is now thrown freely open to all foreigners in respect to patents, and the peoples of all countries may come or send here and compete with American genius and industry on the most favorable terms.

The law which required foreigners to put and continue their inventions on sale in this country, within eighteen months after obtaining their patents, has been repealed, and foreigners, like our citizens, may choose their own time for working their patents.

Another provision of the new law permits a foreigner to patent his invention here at any time, ever after it has been introduced and patented abroad for years, provided it has not been used here for more than two years prior to application for an American patent.

The old law prohibited the grant of a patent for any foreign invention that had been brought into use here, even for a day, prior to application for a patent.

In the same way the new law also throws open to foreigners the right to take out patents for designs, and as this virtually includes all the new figures and pattern for every description of fibrous and textile goods, such as carpets, silks, laces, calicoes, trimmings, etc., the law becomes important to our home manufacturers.

The following is the provision of the new statute in relation to design pattern:

"Any person who, by his own industry, genius, efforts, and expense, has invented or produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief any new and original for the printing of woolen, silk, cotton, or other fabrics; any new and original impression, ornament, pattern, print, or picture, to be painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, and patented or described in any printed publication, may, upon payment of the duty required by law, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor."

The Government fee for a design patent is \$10 for 3½ years, \$15 for 7 years, and \$30 for 14 years, with privileges for extension.

Another novel provision of the new law consists in the registration of trade-marks. When a patent has been granted for the article or the pattern, a further security may be obtained in the shape of a patent upon the trade-mark that is placed upon the article or goods. The following is the law for trade-marks:

"Any person or firm domiciled in the United States, and any corporation created by the authority of the United States, or of any state or territory thereof, and any person, firm or corporation resident of or located in any foreign country which by treaty or con-