

Canadian Inventors in the United States.

We notice that under the recently amended Patent Law of the U. S., Canadian inventors, in common with other foreigners, are allowed to apply for patents on the same terms as citizens of the United States. The *Scientific American* thinks the example worthy to be followed by the government of the Dominion. We heartily agree with our contemporary, and hope that our law-givers will fall in with reciprocity—at least as far as genius is concerned.

Detection of Fusel Oil in Alcohol.

The *Revue Hebdomadaire* gives a simple test for the detection of amyl alcohol in spirits, which, if effective, is calculated to be of considerable value. The spirit to be examined is mixed with an equal bulk of rectified ether, and a like quantity of water; the mixture is shaken in a burette, or glass tube, when, after a short rest, the ether rises to the surface, and is removed by a pipette. This must be left to spontaneous evaporation; if the alcohol contained fusel oil, it will be left behind, and may be easily recognized by its pungent smell.

Hydrocyanic Acid in Tobacco Smoke.

After a series of carefully conducted experiments, Drs. Poggiale and Marty (*Journal de Pharmacie*) deny the statement made by Dr. Vogel, that hydrocyanic acid can be readily detected in tobacco smoke. According to these investigators, tobacco smoke does not contain hydrocyanic acid, nor does it exist in any of the condensed products of such combustion.

Dichloroacetic acid is said to be the best caustic for the removal of warts; one application is commonly effectual. The acid should be carefully put on with the sharp point of a glass rod.

Notes and Queries.

R. D. E. Toronto.—**TEST FOR THE PRESENCE OF WATER IN ETHER.**—We recently noticed a test which is said to detect the presence of 2.5 parts of water in 1,000 of ether. It is based on the fact that perfectly dry phenylate of potash is quite insoluble in anhydrous ether. Should even the above quantity of water be present, the phenylate partly dissolves, communicating more or less of a reddish brown color. This test will suit your purpose better than any with which we are acquainted.

PASSIVE STATE OF METALS.—*Assistant* says that in making *liq. ferri pernitrat* he employed the ordinary double acid, sp. gr. 1.370, without dilution; on adding the iron, which

was in the form of clean turnings, no action ensued. The iron and acid were suffered to remain in contact during the course of a night, and next morning, on being examined, the metal showed no traces of solution, appearing as bright, when viewed through the acid, as when first immersed. The glass vessel containing the mixture was shaken, when a vigorous action at once set in, during which the greater part of the solution was lost through boiling over. *Assistant* wants us to explain the apparently strange circumstance, and asks us if we ever heard of a parallel instance. We will answer the last part of the enquiry by saying, that we have frequently noticed the same phenomena, both in regard to iron, and other metals. Not very long ago we had a lot of silver—some twelve pounds of American coin—which obstinately refused to dissolve, although in contact with the requisite quantity of acid—diluted as usual—for twenty-four hours; on moving the coin with the end of a glass rod, solution commenced, and continued without interruption until the specified quantity of metal was all consumed. This *passive state* of metals, as it has been termed, may be induced in a variety of ways, one of which is that to which you refer—the dipping of iron wire into strong nitric acid. By holding it for a few seconds, in the flame of a spirit lamp, the same end is attained. It has been suggested that this passive iron might be turned to good account as a substitute for platinum, in galvanic experiments; but the passive state is liable to be disturbed by such very slight causes, that the method is of no practical use. The phenomena may be explained by supposing the metal to be instantly covered with a thin film of oxide, which serves as a protection against further action. Hence, when shaking the vessel which contained your iron, the coating of oxide was broken, and the acid at once attacked the surface of metal—the stirring of the silver with the glass rod was attended with the same result.

C. Anderson.—**CHLORIDE OF GOLD.**—This salt is a terchloride, having the formula AuCl_3 . The crystals which fall from a concentrated acid solution are not those of the above chloride, but another salt, the chloride of gold and hydrogen. The salts, used in photography, under the names of chloride of gold and calcium, or sodium, are mixtures of chloride of gold, with a variable amount of the chlorides of calcium, or sodium. The true double salt, chloroaurate of sodium contains equivalent quantities of each of the chlorides, and has the composition indicated by the formula $\text{NaCl}, \text{AuCl}_3, + 2\text{H}_2\text{O}$.

T. H. S.—**TO PRESERVE LEMON JUICE.**—Select good, sound lemons, free from decay; after pressing out the juice, strain through a muslin, or hair sieve, and put into clean, dry bottles, leaving only sufficient room to insert the corks. Put the bottles in a water bath, and heat to 212° . If the bottling is done in winter, a temperature of 180° will be sufficient. While the juice is still hot, cork the bottles, and seal with bees wax. If the operation is carefully performed, the juice may be preserved, at least, a year.

CORIANDER SEED, may be protected from the ravages of the little insect that is so liable to infest it, by sprinkling a few cardamons on the top of the seed.

Subscriber wants to know if JAPAN WAX is a production of the animal or vegetable kingdom. It is derived from a native tree of Japan, the *Rhus succedaneum*; natural order, *Anacardiaceae*, and is, consequently, of vegetable origin. It is generally of a dirty white, or yellowish color, and though resembling beeswax, in some of its properties, it has a different composition, containing it is said, twice as much oxygen, and consisting of palmitic acid united with oxy. of glyceryle. Its fusing point is also lower, being about 120° to 130° Fahrenheit, while that of beeswax is 145° .

Changes.

The partnership existing between Messrs. Lane & Perry, Fergus, has been dissolved by mutual consent. The business will be continued by Mr. P. H. Perry.

MONTHLY MEETING.

The regular monthly meeting in connection with the Ontario College of Pharmacy, was held in the usual place, on Friday evening, August 5th. The chair was taken by Hugh Miller, Esq., Vice-President.

Minutes of former meeting were read and approved; and after the transaction of ordinary routine business, the following gentlemen were elected members of the College:—

Duncan Ferguson.....	Douglas.
W. A. Preston.....	Dingle.
William G. Stark.....	Hamilton.
Robert C. Holbrook.....	"
George H. Harkness.....	Mono Mills.
R. Wood.....	Erin.

ASSOCIATE.

Price Jackson.....Toronto.

In pursuance of a suggestion made by the late Council, in their annual report, it was proposed by Mr. Rose "that a committee be appointed to secure papers to be read before the College, or to otherwise increase the interest of the monthly meetings." The committee named consisted of Messrs. Dunsbaugh, Shuttieworth, and Margach. The Secretary expressed his regret that more members did not take an active part in the meetings of the Society, and, more especially, in the reading of papers. He noticed that in the reports of the proceedings of kindred associations there was, generally, no lack of communications of this character; but if the intelligence and activity of our Society was to be judged by the number of papers brought before it, the estimate formed would not be of the most flattering character.

A number of gentlemen expressed themselves in favor of the motion, which was carried, and the appointment of the Committee confirmed.

Mr. Brydon said that he would suggest, as a subject for discussion, at the September meeting, "the best formula for the preparation of the so-called Syrup of the Hypophosphites." He had, so far, failed in purchasing a syrup of a reliable character; and in those syrups said to contain iron, he had only found the merest trace. He thought it was the duty of pharmacists to prepare this class of medicines themselves. The discussion was agreed to, and, there being no further business of importance, the meeting adjourned.

H. J. Rose, Secretary.