

9. A chemist or other person who keeps patent or proprietary medicines for sale shall upon request made in writing, signed by an officer of the license branch, to be named for that purpose by the Lieutenant-Governor in Council, permit the Inspector of Licenses, or such other person as shall be named therein, to take a sample sufficient for the purpose of analysis of any patent or proprietary medicine kept by him for sale. A refusal to comply with such request shall render the offender liable to a penalty of not less than \$10 nor more than \$40 for such offence.

10. This Act shall be read with and as part of the Liquor License Act.

Section 3 corrects perhaps the most glaring defect of former legislation in prohibiting as it did the sale of tinctures, etc., without a prescription, it also allows the sale of alcohol "for use in the arts or manufactures or for illuminating purposes."

Section 4, it will be observed, allows the sale of a mixture containing not more than six ounces of alcohol, where such is "one of the necessary or *bona fide* ingredients." This applies, of course, to the preparation of what are usually termed family recipes, liniments, etc., and is a very necessary provision in the Act.

Section 7 is what we might term "the penal clause," and is intended to prevent the sale of compounds which, although sold under the name of medicines, are really intended as a guise for the consumption of spirits of some description. This is a very necessary clause and we are sure will be commended by the trade.

Reference is made in section 8 to portions of the Pharmacy Act, viz.:

Sec. 26 is in reference to certain poisons to be sold only in a certain manner as specified in Schedules A and C.

Sec. 27 prescribes penalties for wrongful sales, and Sec. 28 defines the penalties to be inflicted for infringements of the Act.

It should be borne in mind that this Bill does away with all previous bills or amendments to the License Act as referring to druggists. There need now be no registration of sales, as no liquor of any kind can be sold without prescription except as designated in Section 5, and in the case of alcohol mentioned in Section 3.

The Bill as a whole should be satisfactory to the drug trade, as well as being a safeguard against abuses which might creep in.

## Review of the Year 1897.

**A Canadian Year—Diamond Jubilee—Chemistry—Therapeutics—Pharmacy—Pharmacognosy—New Remedies—Botany.**

The year 1897 has been essentially a Canadian year, and the absence of any remarkable discoveries, like that of the "X" rays and of argon, which gave special significance to the two preceding years, accentuated the fact. The Diamond Jubilee of Queen Victoria will, of course, be inseparably connected with 1897 for all time, but it was this event that gave Canada its hour and opportunity.

The first step towards something practical in the shape of Imperial Federation was taken by the Canadian government, and New Zealand is following. Besides this the visits of the British Association and of the British Medical Association have been the occasion of extending knowledge of the institutions and leading men of the Dominion. This prominence, combined with revival in trade, cannot fail to be productive of good, and the prediction of the ex-President of Toronto Board of Trade, that the next three years will bring unexampled prosperity, is in a fair way of being fulfilled.

Although no startling or epoch-making discoveries have been made in the past year, activity has reigned in all branches of science, and many important results have been recorded. Among these the experiment of Brown with seeds at the extraordinary temperature of 190° C calls for special notice, as the result is likely to compel biologists to revise their definition of life. At this low temperature no known animal or vegetable can exist and all chemical action ceases, yet seeds exposed for 110 hours were none the worse and grew as well as seeds not treated. Fluorine has been liquefied and the discoverer of argon and helium has described his ineffectual search for an element with an atomic weight between these two gases.

Organic remedies, similar to thyroid gland, do not appear to have made much progress during the year, but serum therapy or treatment by means of antitoxins is certainly gaining ground. The usual procession of new remedies has appeared and probably 95 per cent will disappear. A few new drugs have been brought forward, but experimental evidence is still wanting of their value, and

chemical examination remains to be made. The inevitable Roentgen Society has been formed and we may therefore expect to learn still more of the nature of the mysterious rays. "Sixty years a Queen" has naturally led to many reviews of the progress made in science and the arts during the period.

### CHEMISTRY.

The important experiments of Dewar upon the condensation of gases by means of pressure and great cold have been extended and a system of analysis almost founded upon them. The production of liquid fluorine has already been referred to, and was accomplished at about 185° C, by Moissan (who first isolated the element) and Dewar. It is a clear yellow liquid, and at that low temperature does not attack glass. It will not solidify, even at 210° C. Dewar has also described an apparatus for separating helium from liquid air. Hampson has devised an improved apparatus for producing liquid air under a pressure of 87 atmospheres, without any auxiliary refrigeration, in a few minutes. No well appointed laboratory will in future, it is natural to suppose, be considered complete without having liquid air "on tap." Rayleigh has given further observations on the separation of argon from the nitrogen of air by means of an electric flame when oxidation of nitrogen occurs. Shenstone has carried out further experiments on the production of ozone from dried oxygen, and has shown that moisture is not necessary in all cases of chemical reaction. Munby has invented a Bunsen burner for the use of acetylene, capable of yielding a flame comparable to the ordinary air gas jet, and consuming only a cubic foot of acetylene per hour. Its heating effect is much greater than an ordinary Bunsen. Besides yielding acetylene, calcium carbide has been found by Warren to act as an excellent metallurgical reducing agent. Litharge, for instance, when heated with calcium carbide, yields metallic lead and calcium oxide, accompanied by vivid incandescence. Keating Stock makes an improved copper-zinc couple by adding acidulated solution of copper sulphate to granulated zinc. After thorough washing it is ready for use, and can be renewed in