

Bacteriology.

Bacteriology is a new science (*bacillus tuberculosis* was not discovered until 1881), and considering the short time devoted to its study it is surprising to see how much has been accomplished. Complicated apparatus has been devised, books have been published in many languages, new methods in photography have been invented, and results have been recorded with an accuracy and system that are very gratifying. If the germ theory of disease is the true one, then any research which broadens our knowledge of bacteria must be ranked as in the highest degree humanitarian; and if through these researches we shall come to a better knowledge of disease and how to combat it, not only will the truth of the theory be demonstrated, but the world will confess that the microscope has a practical value greater than that of a scientific toy.

The bacteriologist must be able to determine in regard to a family's or city's water supply, its richness in bacteria, and whether the germs contained are harmful to health. All water, even distilled water, and that which has passed through an ordinary charcoal filter, contains germs. Only by the severe tests of the bacteriological laboratory can we say positively whether a given water supply is contaminated by sewage, and whether the filter used for its purification is effective in removing germs.

The speaker gave a complete description of the methods pursued in making artificial cultures of different disease germs, and exhibited various colonies in different degrees of development. A suitable medium for the rapid growth of these colonies is found in a preparation of meat juice and gelatine; another in bouillon and agar (a product of an Indian sea weed, *gelidium spiniforme*). To either of these is added a certain percentage of peptone, and, for some purposes, glycerine. It was shown what precautions were necessary to prevent the introduction of foreign germs from the air: how every article used had to be completely sterilized before the germ sought to be cultivated was introduced. The tubes are then placed in an oven which has an automatic regulator of the heat, and kept at a perfectly uniform temperature for such time as may be necessary for the development of the germs.

Some bacteria make gelatine fluid; some grow in the presence, others in the absence, of air; some require acid, others alkaline media; some grow only in the presence of glycerine of sugar. There are differences in the color, in the manner of the formation of colonies, in the microscopic appearances and in the effects when thrown into the systems as shown in the lower animals. It is by taking advantage of these and other peculiarities that we are enabled to make the differentiating or qualitative bacteriological analysis.

Among the bacteria which have been most carefully worked out, and which are most dangerous to mankind, the speaker mentioned the bacillus of anthrax, the

bacillus of typhoid fever, and the spirillum of Asiatic cholera. It is possible for all these to be carried in the water supply. It may be asked, if there can be so many germs in water, why are not all affected? The answer is easy. Many of the germs are entirely innocent, just as many plants are. Of the remainder, many are destroyed by the various processes of digestion. — *Microscopical Journal*.

A Well-Known Firm.

Their Enterprise and Popularity.

The *Pharmaceutical Era*, published in Detroit, and one of the leading Drug Journals of the United States, in its October issue, notices in a very pleasing way, one of our best known and most enterprising Canadian business establishments.

It is flattering to Canada and Canadians to know that our powerful neighbors appreciate push and solid business men outside of their own territory.

This influential Drug Journal, in noticing the extensive establishment of the Wells & Richardson Co., of Montreal, says:—

"The laboratory of the Wells & Richardson Co., of Montreal, is probably the most complete establishment of its kind in Canada, and there are very few in the United States which excel it.

This company first located a branch in Canada some eight years ago. They soon discovered that there was a large field there for the sale of their specialties, and in 1888 they built their present handsome factory, located on Mountain street. The building is 66 x 100 feet in size, with five floors, devoted exclusively to the interests of their Canadian trade. The offices in the front part of the building on the ground floor are finished in hard wood and present a particularly pleasing appearance. Everything has been done in a very substantial manner; fire-proof vaults, automatic fire sprinklers throughout the building, time detector, electric motor and lights all add to the convenience and completeness of the structure.

Mr. C. M. Johnson has been manager of this branch ever since it was started, and this enterprising American firm are justly proud of their business in Canada."

The wholesale and retail drug trade throughout the Dominion have had very pleasant business connections with the Wells & Richardson Co. for a number of years; and are justly proud of having such an extensive concern in their midst.

The Wells & Richardson Co. have made Paine's Celery Compound, Lactated Food and W. R. & Co.'s Improved Butter Color grand successes in every section of Canadian territory. They have extended the name and fame of Diamond Dyes to such an extent that all homes are now using them for dyeing and other purposes. These dyes have been imitated, but never equalled, and have invariably taken the medals and diplomas wherever exhibited, because of their purity and superior qualities. This enterprising firm have never

handled anything but reliable and first-class preparations; and their efficient style of advertising seems to produce a demand that the entire drug trade look for and appreciate. It certainly pays to stock up well with such fast selling goods.

We are informed by the popular manager, Mr. C. M. Johnson, that the two new lines — Harvard Bronchial Syrup and Wells' English Pills, which were recently added to the list of proprietary articles made by the Wells & Richardson Co. — are now having a large demand in every quarter; and, if we are to judge from the past, we can safely predict a great future for the Syrup and Pills. We have already heard favorable and glowing opinions expressed by private individuals in favor of these two important remedies, which are sufficient to commend them for family use.

These two lines, we believe, are to receive the same attention in newspaper advertising which has been so liberally and judiciously bestowed on Paine's Celery Compound and other goods, which have now such a wide-spread reputation.

Mistura Glycyrrhizæ Composita.

WALTER L. STEPHEN.

The following method of making mistura glycyrrhizæ comp. yields a preparation affording no sediment whatever, as proven by my experiments:

Acacie pulv.,	1 1/2 oz.
Ext. glycyrrhizæ pulv.,	1/2 oz.
Sacchari pulv.,	1/2 oz.
Spte. æth. nit.,	1/2 oz.
Vin. antimonii	1 oz.
Tr. opii camph.,	2 ozs.
Aque dest.,	12 ozs.

Having mixed well the powders, add 6 fluid ounces of water gradually and rub to a paste. Place this in an evaporating dish and heat until perfectly fluid. Add the sweet spirit of nitre, wine of antimony and paregoric and enough water to make the required amount. The heat employed destroys molecular aggregation otherwise not effected and results in better and perfect diffusion of the solid substances, which gives a product devoid of sediment. — *Amer. Jour. Pharmacy*.

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