

### WYETHS' ELIXIR OF GENTIAN WITH TINCTURE OF CHLORIDE OF IRON.

In this preparation, by the addition of a small quantity of acidulated Citrate of Potash, the peculiarly disagreeable and styptic taste of the Chloride of Iron is avoided. Physicians will find this preparation the most agreeable and effective mode of administering this pure bitter Tonic, with the most prized of all the salts of Iron, but hitherto often inadmissible owing to difficulty of inducing nervous and fastidious patients to take it, on account of styptic taste, effect upon the teeth, as well as the occasional diarrhoea it induces, etc., etc. This preparation may be given to children and delicate females with great benefit, and with but little fear of disagreeing with the most sensitive stomachs.

#### REVIEWS.

*The Bacteria.* By DR. ANTOINE MAGNIN. Translated by Dr. G. M. Sternberg. Little, Brown & Co., Boston.

This book concludes by saying: (1) "Bacteria are cellular organisms of vegetable nature.

"(2) Their organism is more complicated than was for a long time believed. The principal points brought to light are: their structure, the presence of cilia, the nature of the substance contained in their protoplasm, colored granules, grains of sulphur."

We doubt if more than a small minority of our professional brethren are aware of above facts. Should this surmise be correct, perhaps no better *raison d'être* could be for this volume.

Independent movement does not, of itself, indicate animal life, as such movements are seen in diatoms, spores of algæ and some fungi. The presence of cilia, which are found in nearly all bacteria, seem, according to some microscopists, to account for their movements. Dr. Magnin, on the other hand, agrees with Cohn in believing it to depend on the presence of oxygen, as, when this gas is absent, the bacteria are motionless. No doubt now exists as to the true nature of their bodies. Cohn asserts that, with high powers, he has been able to see the cell membrane. The action of chemicals proves that it exists and is composed of cellulose, the reactions being the same as that of vegetable cells. The contents consist of protoplasm which is highly refractive. Whether the gelatinous substance in which some forms of bacteria are included, forming zooglea, is a secretion from the protoplasm, or is pro-

duced by a thickening and jellification of the cell membrane, is not satisfactorily established.

To distinguish bacteria from inorganic substances, optical and chemical signs are given: These, however, are frequently fallacious. Men of admitted scientific attainments and renown have minutely described as species of bacteria the results of their method of procedure, such as the effects of chromic acid, etc.; others have described as specific forms what have been proved to be well-known organisms present in many putrefactive processes. The method of *cultivation*, which within the last few months has been followed by important practical results in France through the labors of Toussaint and Pasteur, is by far the best means of distinguishing the bacteria. Koch of Wollenstein, Greenfield and Burdon-Sanderson of London have also done much good work in this field, but Pasteur's name stands pre-eminent. The presence of bacteria in a fluid does not necessarily signify putrefaction. This is well exemplified in the case of a microorganism discovered by Toussaint in what is inappropriately termed fowl-cholera, with respect to which Pasteur has particularly directed his attention during the last few months. The organism, which is most destructive as a disease, occasions no putrefactive changes in chicken broth, in which it may be cultivated.

Although these investigations are not referred to in Dr. Magnin's book for the very good reason that they were undertaken since its publication, the author does justice to his previous labors.

The work is a particularly good *resumé* of what is known with respect to bacteria. Without such a book as this it would be a difficult matter to acquire correct knowledge of their true nature. That such is the case can easily be imagined when the "Bibliography" alone in Dr. Magnin's book occupies thirty-two pages, referring to about 600 different monographs and publications.

We cannot leave the book without referring to the micro-photographs which have been made by the translator under the auspices of the National Board of Health of the United States.

Although all the plates are not equally well executed, the work reflects credit not only on the artist but also on a Board of Health that should hold such enlightened views as encourage such a method of recording scientific investigations.

G. W.

#### BIRTH.

At Emileville, St. Pie, on the 11th June, the wife of Dr. E. A. Duclos of a daughter.