

be properly regulated, and with this proper precaution—although the writer has used the subgallate quite extensively during the past three months—the results have been but little, if any, more satisfactory than he has experienced with the same dose of bismuth subcarbonate.

Unfortunately, the profession has gotten into the habit of prescribing bismuth in the form of subnitrate instead of the subcarbonate, and the favorable results following the employment of the latter are not appreciable when the former is given. The reason for this is obvious, since the subcarbonate is an amorphous powder, while the subnitrate is a crystalline substance, and no matter what may be the amount of the dose it always enacts the role of an irritant. But even with the administration of subcarbonate, and the rule is equally applicable in the case of subgallate, one or the other of the digestive ferments should be added. In all cases the addition of either pepsin or pancreatin, or the simultaneous exhibition of malt extract, will materially enhance the bismuth effects, and we, therefore, submit this proposition to the profession in the firm belief that it will prevent much disappointment on the part of physicians and patients.

That bismuth preparations act as disinfectants in the alimentary canal is freely admitted, but that they stimulate or measurably improve the digestive function proper there is room for serious doubt, and it would be well, therefore, in estimating the therapeutics of the remedy to take into consideration the physical demands of the patient. With our superior pepsin preparations and the elegant pancreatic extracts now at our command, it seems the part of wisdom to consider the ultimate effects of indiscriminately prescribing the popular remedy of the day.

To give the present article a practical turn, the following formulæ are suggested as a marked improvement over the use of bismuth alone in the treatment of dyspepsia and indigestion:

R.—Ext. nucis vomicæ, gr. $\frac{1}{4}$.
Pepsin pur., gr. i.
Bismuthi subcarbonas, vel bismuthi subgallas, gr. iv.

M.—Et fiat Tab. vel Chart. No. 1.

Sig.—Take one tablet or powder before and after eating.

R.—Ext. nucis vomicæ, gr. $\frac{1}{4}$.
Ext. pancreatini, gr. iss.
Bismuthi subcarbonas, vel bismuthi subgallas, gr. iijss.

M.—Et fiat Tab. vel Chart. No. 1.

Sig.—Take one tablet or powder before, and one two hours after meals.

The first of these formulæ will be found avail-

able when the fault lies with the stomach, the second when intestinal digestion is deficient. In the former case the diet should be regulated with a view to lessen the work demanded of the stomach; in the latter the starchy food-stuffs and fats must be diminished, the diet being principally of a nitrogenous character.—*The American Therapist.*

THE CHANCELS OF INFECTION IN TUBERCULOSIS.

—At the opening meeting of the North London Medico-Chirurgical Society on October 18th, Dr. Sims Woodhead delivered an address on this subject. After briefly adverting to the occasional direct inoculation of tuberculosis into the skin or subcutaneous tissues, he proceeded to consider the circumstances under which tuberculosis may find a point of entrance from the throat. In certain animals and in man (dirty or mixed feeders) there was, he said, a ring of lymphoid tissue surrounding the entrance to the larynx, and a similar ring surrounding the entrance to the œsophagus. The pharyngeal tonsil was a great local development of the two poles of the latter ring. So long as all this lymphoid tissue remained healthy, or was not attacked by an extraordinary number of micro-organisms, it was capable, with the assistance of the epithelium, of dealing with even virulent micro-organisms. But, if overstrained, the lymphoid tissue itself might become the seat of tuberculous disease, or be so disorganized that it allowed the tubercle bacillus to pass into the glands surrounding and immediately connected with them. This method of entrance of tuberculous infection, which had first been worked out in the case of the pig, was probably of comparatively frequent occurrence in children living under insanitary conditions. The very cells which in health destroyed the bacilli—the lymphoid cells—were those which, when the function of the lymphoid tissue was lowered, were responsible for conveying the bacilli from the outer surface to the deeper structures. In children the tuberculous process, started in this way, might extend at first entirely through the lymphatics, the lungs escaping until the glands at their root, or in the pleura, had become distinctly affected. In early life also the primary seat of infection was very frequently in the alimentary tract. The importance of this mode of infection was, in Dr. Woodhead's opinion, not yet fully appreciated. Even when the chief stress of the disease fell upon the lungs, it might be that the infection had obtained entrance from the alimentary canal, and had spread upward by the lymphatics to the glands at the root of the lung. In many farms in Denmark, fortnightly inspection of the cattle had revealed facts which had led the Danish Government to make an annual grant of £3,000 for five years to defray