MEDICAL MATTERS.

THE PATHS OF RHEUMATIC INFECTION AND THEIR PROTECTION IN CHILDREN.

Dr. J. Ross Mackenzie, of Abertillery, Mon., contributes a most interesting article on the above subject to the *British Medical Journal.* After showing that the *Micrococcus rheumaticus* can now be isolated, he says that the paths by which the specific agent finds access to the system, as well as the prevention of such invasion, still demand attention. In regard to local invasion Dr. Mackenzie writes :—

"The most important, as well as the most frequent, path of infection is undoubtedly the throat. . . . A relationship is at once suggested by the large percentage of children suffering from rheumatic phenomena who, at the same time, present enlarged tonsils and hypertrophied tissue in the naso-pharynx."

The writer also believes that in cases when sore throat does not occur, certain mild catarrhal conditions of the mucous membrane may owe their inception to the *Micrococcus rheumaticus,* and that a general infection may take place through the impaired mucous membrane.

Conclusions.

1. The *Micrococcus rheumaticus* takes the path of least resistance.
2. This may be an unhealthy throat, absorption from which frequently gives rise to general rheumatic infection, including peritonitis and appendicitis, directly through the vascular system.
3. Or it may be localized in the bronchial tubes and give rise to pneumonia, with polyarthritis and endocarditis.
4. An unhealthy condition of the intestinal wall may excite to activity the rheumatic agent, setting up acute rheumatic phenomena with peritonitis or appendicitis as part of a general infection.
5. A mild catarrh is produced at the seat of inoculation, and one or more of three factors in each case are present and promote the inroads of the micrococcus. Either
   (*a*) The physical resistance, or
   (*b*) The protective properties of the local tissue, or
   (*c*) Defensive agencies of the blood, are below par.
6. The distinction between acute and subacute or latent rheumatism is mainly due to general infection with the actual rheumatic agent in the former and with the toxins only in the latter.

THE DELETERIOUS EFFECTS OF CHRONIC CONSTIPATION.*

By W. Arbuthnot Lane, F.R.C.S.Eng.

When Miss Hobhouse did me the honour of asking me to address the Nurses' Social Union, I hesitated for a time before venturing to entertain what I feared would be, for me, a very difficult task.

After some consideration I felt that I could, perhaps, clothe our drainage scheme and the faults which it develops with enough interest to occupy your attention for an hour. Should I not succeed, I must ask you to condone my failure and to take the will for the deed.

The subject of the faults that arise in our drainage scheme—in the first instance through unsatisfactory food, and later from the prolonged assumption of the erect posture as demanded by our habits of life—is of overwhelming importance, since, as I will show you, the large majority of the diseases which affect our bodies result either directly or indirectly from them.

Perhaps I can best deal with this subject by considering some points in the mechanics of our drainage scheme or, as it is technically described, as our gastro-intestinal tract. We can then observe the points at which the effluent may be controlled and the mechanical results of such obstruction.

Leading from the mouth to the stomach you have the œsophagus, and where the œsophagus passes through the diaphragm to enter the abdomen it may become spasmodically blocked and the contents of the œsophagus may accumulate in it. These may pass on slowly or may be discharged into the mouth after a varying interval of time. This condition is called cardiospasm.

The food then enters the stomach, from which it passes into the duodenum. Opening into the duodenum you have the ducts of the liver and of the pancreas. The duodenum, the end of which is fixed, opens into the small intestine, which is freely movable, and the contents of the duodenum should pass easily into and along the small intestine.

The small intestine opens into the large bowel or cess-pool of the tract, the commencement of which is called the cæcum.

Opening into the cæcum is the appendix, a relic of an ancestral type.

* Read before Nurses' Social Union Health Conference, Bristol, 8th June, 1912.