symptoms of disease are the expressions of abnormal functional activity and come under the head of pathologic physiology.

The etiology of disease is discussed under the headings, predisposing causes, such as heredity, the lack of immunity against certain diseases, acquired characteristics. Determining causes are grouped under traumatism, heat, cold, atmospheric pressure, poisons, living organisms, parasites, intoxication from within the body.

In discussing tumors the author speaks of lymphadenoma as most likely due to some form of organism. Tubercle bacilli, micrococci and various bacilli have been found. Sarcomatu yield the best evidence of the of the Cohnheim theory of embryonic rests. There is a close resemblence to tubercle in some respects. It is not improbable that lymphosarcoma is due to bacteria. On the etiology of carcinoma, the author states that Cohnheim's theory on the origin of tumors is less applicable to this form than to certain others. Much importance is attached to the influence of repeated injury as in smoking on the lip, but a single injury has probably little effect. The parasitic theory has not yet been proven. No bacterium has yet been isolated. The search for some protozoon has also failed so far. Nor does implantation prove its biologic origin. Where such experiments have succeeded, it may be only the reproduction of the cancer in the new host. The theory of a special dyscrasia is dismissed as having no foundation in experience as the cause of carcinoma.

Immunity is handled ably and with much interest. It may exist as natural immunity. Thus the dog is refractive to anthrax, or in the case of lower animals against syphilis. Immunity may be acquired from a previous infection, the natural acquired form. It may also be gained by artificial means. In some cases there seems to be a permanent adaptation of the organism. This is active immunity. In other cases it is temporary, and is called passive. The various theories of immunity are examined. The bactericidal power of the blood serum, or its power to modify the properties of the bacteria. The weak points in the phagocyte theory are mentioned. The theory, deduced from the clumping of bacilli as in typhoid fever, is also shown to be inadequate as an explanation of immunity. It is of two kinds, namely, against the germ and against the toxin. The side chain theory of Ehrlich explains the phenomena of immunity better than any other. By this theory, the toxin has a two-fold nature and composition, one the poisonous action, the other the combining power.

Rabies, many cases of purpura, and acute articular rheumatism are regarded as due to germs, though they have not been discovered, unless Achalme's bacillus be that of rheumatism.

The diseases of the blood are well written. Leuksocytosis is stated to be due to inflammation, infections, cachectic conditions, malignant-tumors, hemorrhage, mechanical and thermal causes, the use of certain medicines. Progressive pernicions anaemia is caused mainly by depressing emotions, fright, exposure, unsanitary surroundings. But more especially by pregnancy, lactation, intestinal diseases and parasites.

In dealing with arteriosclerosis the author cites as causes syphilis, gout, chronic alcoholism, chronic nephritis and generally chronic intoxications. Long continued excessive muscular exertion is a cause. He discards the view that the thickening of the intima is due to the direct act-