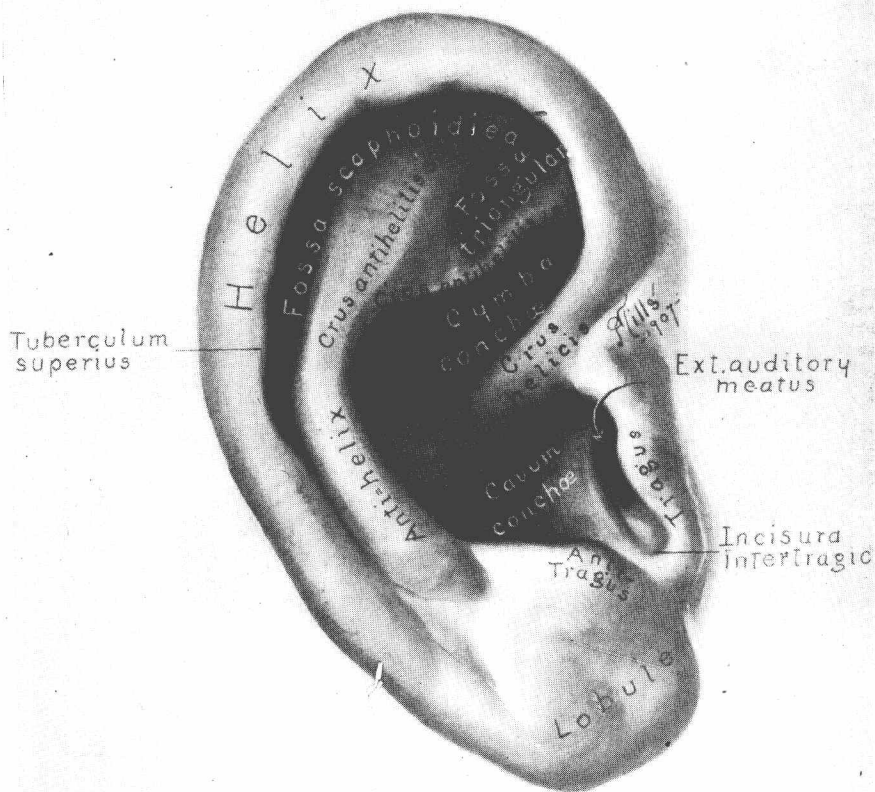


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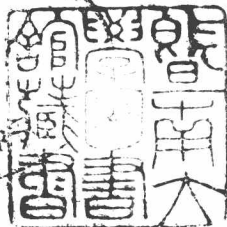
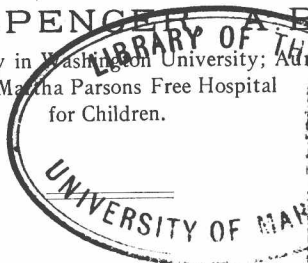
TO THE

Examination of the Ear

BY

SELDEN SPENCER, A. B., M. D.

Instructor of Otology in Washington University; Aural Surgeon
to the Martha Parsons Free Hospital
for Children.



With an Introductory Chapter

BY

H. N. SPENCER, M. D., LL. D.

Professor of Otology in Washington University.

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C. V. MOSBY

Medical Book and Publishing Company

St. Louis

1908

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NOTE.

My thanks are due to my father for the introductory chapter, to my clinical professor, Dr. D. C. Gamble, for his kind approval of this publication, and to my colleague, Dr. Eugene Senseney, for the suggestion that there was a necessity for such a treatise.

Dr. Eugene Senseney and Dr. W. Mills have rendered valuable service in making drawings.

2723 Washington Ave.,
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P R E F A C E .

This little book is offered as an aid to students in attendance upon the undergraduate course in otology. The hope is also entertained that it may be found useful to many physicians who, from lack of opportunity, have not acquired the experience and skill necessary to conduct an examination of the ear. It is not designed as a work on the anatomy so much as a method of study and the means by which a familiarity with pathological conditions of the ear may be acquired.

Diagnosis is the fundamental part of any branch; and essential to a diagnosis in otology is the ability to make an intelligent inspection of the drumhead, of the tympanic cavity and of the otitic region, as well as the nasal cavities and the pharynx. No one should attempt ear work without this ability; and to the end of aiding students and physicians in acquiring such ability this work is undertaken.

INTRODUCTION.

Specialism in medicine goes back to the beginning of medical history. It was the practice of the Greeks and of the Egyptians, and at no time has it interfered with the unity of medicine, but on the other hand we are able to trace to it whatever advancement has been most substantial and most enduring. The benefit of a part has redounded to the interest of the whole. It must ever be in the interest of progress that this division of labor should be maintained. There was true wisdom in the Hippocratic oath that surgery should be set apart and allowed only to those who make it a business. There was equal wisdom in the contention of John Hunter that surgery and medicine cannot be divorced. Just as the practice of medicine and surgery have been conducted with the full knowledge of their interdependence so the growth of specialism has been fostered and quickened by a knowledge of the interrelation of all the organs of the body. So great has been the advance of knowledge in scientific medicine and scientific surgery—the institution of such diverse methods, required in different regions, and the control of variable technics—that a distribution of labor is more necessary today than ever before. The advance which has been made in otology quite equals that which has been wrought in other departments. In the progress of investigation and clinical study it came to be known that the ear could not be considered as an independent organ. The evidence of ear disease, it was soon found, was often manifested by symptoms which appeared in other and remote regions of the body. Cough, spasm of the glottis, aphonia and asthma, in instances, were relieved by treatment of the ear. Faintness instead of being regarded necessarily as a cardiac lesion *per se*, it was discovered,

might be a reflex irritation due to an aural lesion, and so of nausea and vomiting. Vertigo, visual disturbances and headache, all were found to be common in association with disorders of the ear. Brain complications, as abscess of the brain, meningitis, phlebitis, sinus thrombosis, epilepsy and facial paralysis, were referred to the ear by clinical experience and post mortem examination. The rich supply of nerves to the external and middle ear and the free anastomoses of these nerves when traced out served to solve many and perplexing questions. Through the trigeminal and pneumogastric nerves, branches of which supply the external and middle ear, the stomach, lungs or diaphragm may suffer from reflex irritation induced by so simple a thing as the presence of a foreign body in the meatus, or lesions in the external auditory canal or tympanic cavity. On the other hand it came to be known that most diseases of the ear were the result of infection, directly or indirectly, the consequence of disease processes in other organs of the body or in the system. It is important for the student to learn and for the general practitioner to remember that the great majority of ear diseases have their incipiency in infancy and early childhood. Many of them are closely connected with such general diseases as the acute exanthemata. It is of the utmost importance to bear this in mind for the ear complication is liable to be overlooked, at the moment of crucial importance for the preservation of the hearing, by the medical attendant whose resources are severely taxed in combating the systemic trouble. During the course of any of the acute febrile or infectious diseases frequent and thorough inspection should be made of the ear even though there may be no aural symptoms complained of. The rhinitis of scarlet fever and measles especially predispose to ear trouble of virulent form. In pneumonia and

bronchitis a middle ear trouble may result from the passage of the infectious germ through the blood current to the middle ear or by the condensation of air in the tympanic cavity. Lesions of the ear are as common as lesions of the eye with kidney troubles. In Bright's disease a change in the tension of the labyrinth may be brought about by interference with the general venous circulation. Diabetic patients are commonly affected with eczema of the auricle or furunculosis of the external auditory canal. It would be tedious, as it is unnecessary, to continue this recital so as to include all the diseases in which an ear complication might arise. It is too well known to necessitate a mention of the fact that the syphilitic, rheumatic, tubercular and strumous cachexiae predispose to and unfavorably influence diseases of the ear. I have desired mainly to impress the undergraduate students with the necessity for the place which is given to this branch in the university curriculum.

To refer to the scope of otology and the many interesting problems which are engaging the minds of aurists today would be manifestly out of place in an introduction to this small volume which deals only with the first lessons.

The introductory study of otology contemplated in the undergraduate course of the university is well outlined in the pages of this little brochure. With the extensive curriculum necessary in the teaching of modern medicine it will be readily understood that more than this could not be undertaken even if more might be deemed desirable. The extent of the instruction in this branch is limited, and considering the difficulty of grasping a subject so intricate and so concealed, owing to the anatomical peculiarities of the part, the student, I am sure, will welcome the effort that is here made to assist him. The laboratory training has long seemed to me to require some such elucidation as this.

It is not intended to supplant but to supplement what is to be found in many admirable text books on diseases of the ear. Permit me to repeat: The necessity for some knowledge of the diseases of the ear and an understanding of their relation to other disease conditions is too well understood at the present time to require contention or argument on the part of those who have made special research and have had peculiar experience in this department of physiological and clinical medicine. The reflex phenomena have become better understood and the more immediate relation of the ear to the respiratory and nerve center functions emphasize the importance of this study and demonstrate its necessity to an intelligent practice of medicine. The difficulty of obtaining a clinical picture has been one of the chief hindrances in the way of studying the evidences of otic influence in disease. This can be overcome only through patience. By manipulation and observation the necessary skill will be gradually acquired, and a recognition of this fact is the best protection against the likelihood of venturesome interference. The limitations of the general practitioner will be comprehended and the better informed will be more ready to call into requisition the services of an accredited specialist.

The local and general therapeutics of the ear, the surgery of the ear and the physics of the ear may be considered as beyond the scope of this little volume and as belonging more properly to the post graduation study of this branch. The contributions of comparatively recent surgery to our former knowledge and the great possibilities of cure for many diseases of the ear which we were in the habit of considering incurable, have done much to exalt this branch in the confidence of the profession and has served to place otology in the front rank of recognized specialties.