

the extent of destruction of the whole epithelial coating. As a result, the pale, bloodless, stringy epithelium would give place to a pinkish membrane of more healthful character.

One peculiarity of formation I have remarked in several instances; and in each case it was confined to the side affected by the more marked atrophy. This was the attachment by cicatricial band of the greater part of the inferior border of the middle turbinal, either to the upper part of the lower turbinal or the external wall of the middle meatus. These special instances seemed, in my mind, to owe their origin without doubt to a previous hypertrophic condition. In the treatment of these cases, I have under cor. separated the attachment by galvano-cautery with marked advantage to the progress of the case.

Formerly, after thorough cleansing of the nares and pharyngeal vault, I would use one of the many stimulating sprays so freely vaunted for the treatment of atrophic rhinitis. I cannot say, however, that my patients derived any perceptible advantage from their use. It always seemed to me, that the more you stimulated the shrunken, withered, pallid membrane, the less serum would be secreted, and the quicker would the surface dry. It must also be remembered that anything like successful treatment of atrophic rhinitis, is a matter requiring years of careful and systematic management; and that the daily application of stimulants for all this period could scarcely fail to have an injurious effect upon any mucus membrane.

For years now I have usually, as second treatment, applied nothing but the blandest of simple carbo-hydrates—one of the many refined petroleum extracts. At first I used petrolene, and latterly as they came into the market, liquid albolene or glycolene or benzoïnol. They are essentially bland and unirritating, soothing to the mucus membrane, and protective from atmospheric influences. The best means of applying them is by means of any good atomizer, capable of throwing an oil spray. In this matter atomizers differ materially. A large number of those in the market, while they will throw an aqueous solution with a satisfactory degree of atomization, have too small a bore to throw the hydro-carbous efficiently; and hence I find the best way to secure a good instrument is to test it with either albolene or glycolene before completing the purchase.

I may close with a few words relative to the results of my own personal treatment. In cases of recent origin, before shrinkage had developed to any great extent, the crustation being limited, and with little odor, treatment has sometimes been productive of permanently good results. The pallor of the mucous membrane would be replaced by the normal pink color, the crust deposit would cease and the odor likewise. This would be after office treatment, lasting over a number of weeks; but in each case the patient would follow out the same line of treatment at home for weeks or months afterwards as required. The first case is an exception to this rule:—

CASE 1.—Nov., 1886, Mrs. B., wife of a blacksmith, æt. 65 yrs., was referred to me by her physician for treatment. She had been suffering for several years from what she called "chronic catarrh" with "spitting of scabs." On examination I found offensive crusts in the posterior nares and naso-pharynx with some pharyngitis sicca in post pharynx. After cleansing there was pallor of mucous membrane and some shrinkage of posterior ends and middle and inferior turbinates. After a few weeks' treatment the tendency to crustation seemed to cease. The intervals between treatments became longer, and on last of January or ten weeks from first consultation, she came to the office for the last time. In her case I prescribed no home treatment, as I was under the impression that she would not carry it out successfully. My instructions were to return for a treatment whenever the catarrhal symptoms gave her any trouble.

I did not hear of her again for more than four years and my impression was that the disease had probably returned and discouraged her about the efficacy of treatment. But in Mar., '94, she came back with laryngeal disease as a sequel of grippe which she had suffered from during the winter. I was glad to find the nose and naso-pharynx in a perfectly healthy condition. The woman said that she had never been troubled with her catarrh since I last saw her. Her present subacute laryngitis soon passed away.

CASE 2.—Aug., 1889, Miss W., æt. 22 yrs., was referred by her physician. I found a large perforation of the cartilaginous septum. The middle and posterior nasal cavities and vault of the pharynx were filled with foul greenish gray