disease;" and another point which I believe I am right in stating as opposed to Mr. Hutchinson's view is, that no well-authenticated case exists (at least of late years) where true sympathetic ophthalmitis originated without a traumatic interference with the exciting eye. Certainly the evidence, as at present adduced, is incomparably stronger in favour of a bacterial origin; and the demonstration by Max Kries of lymph-space infection acquires such additional force and certainty as to make the evidence overwhelming. It is interesting, before closing the subject, to compare the three methods of treatment now in vogue.

In evisceration we have the antithesis of neurectomy. The neurectomist, with a courage that might be better employed, seeks to secure the safety of his patient by a process of "bottling up;" he professes a sublime indifference to bacterial gambols, and by "cutting off their exits, hopes to confine them within the globe." The enucleationist assimilates his treatment somewhat to that of evisceration by removal of the *fons et origo mali*; but like a heavy man seeking to catch a butterfly, throws himself headlong upon insect and flower, and congratulates himself upon his skill, though the flower be broken and the insect crushed. Of the three operations, I cannot doubt that the profession will elect, in all suitable cases, "evisceration." The medical profession is notoriously conservative; but the public, when cosmetic operations are required, are apt to decide somewhat for themselves, and will naturally prefer a pleasing result to the oftentimes hideous deformity which at present exists.

As an example of the method of traumatic infection, I may quote a case from my outpatient clinique of Wednesday, November 21st. "A mechanic was struck on the left cornea by a small chip of steel; a corresponding mark on the iris showed the track of a minute foreign body, which we could not detect" (that it is in the eye is certain). Vision was good, in spite of a streak of blood in the vitreous body; but the point of special interest was a bubble of air floating in the aqueous, which had evidently been carried through the cornea, but wiped off as the chip penetrated the iris. There had been no escape of aqueous humour, the iris being in its proper plane and the anterior chamber full. We shall watch the further development of this case with great interest; at present, operative interference is contraindicated.

REMARKS ON THE THEORY OF BRONCHIAL ASTHMA.

By E. CRESSWELL BABER, M.B. Lond.,

Surgeon to the Brighton and Sussex Throat and Ear Dispensary.

DR. BULKLEY's paper, in the BRITISH MEDICAL JOURNAL for November 21st, 1885, on Asthma as related to Diseases of the Skin, and the article by Sir Andrew Clark, on the Theory of Bronchial Asthma, in the current number of the *International Journal of Medical Sciences*, lead me to make a few remarks on the congestive theory of asthma, more especially as the views which I have formed agree to a great extent with those expressed by the latter author. I do not propose to discuss the validity of the spasmodic theory of asthma. This has been ably done by Sir Andrew Clark; I merely wish to bring forward a few facts, the result of a prolonged study of the nasal mucous membrane during life, which appear to lend support to the view that the bronchial mucous membrane undergoes a temporary swelling similar in kind to that which occurs in certain morbid states of the nasal mucous membrane, though of course infinitely less in degree.

The respiratory nasal mucous membrane contains, as is well known, a large tract of erectile tissue, which is chiefly situated on the inferior turbinated bones. This consists, roughly speaking, of numerous large venous vessels, which, by their distension, cause temporary swelling or erection of the turbinated bodies. The swelling may be observed going up and down very rapidly, and within certain limits, is a normal occurrence. When excessive, and accompanied with sneezing and serous secretion, it constitutes the neurotic attacks which are very commonly seen quite independently of hay-fever. Sir Andrew Clark describes these cases as "hay-fever;" but, inasmuch as they are unconnected with pollen, and are not accompanied by fever, the term is obviously inapplicable to them, and should be confined to those instances in which, from their occurrence at certain periods of the year, pollen is the probable exciting cause. The symptoms already mentioned may be attended by any of the numerous reflex phenomena now known to be associated with the nose, the chief of which are: cough, asthma, redness and itching of the outside of the nose, nightmare, migraine, constant headache, supra-orbital neuralgia, giddiness, epilepsy, etc. Hay-fever is, therefore, according to this view, simply a neurosis of the nasal mucous membrane,

accompanied by certain reflex phenomena, which at particular seasons of the year is produced by the pollen of plants in specially predisposed persons. In other cases, these neurotic attacks are caused by some local irritation in the nasal cavities (such as nasal polypi) or by other irritants inhaled in the air, or they are produced reflexly by the irritation of some other organ (for example, by the action of strong light on the eyes). The constitutional element is, as Sir A. Clark insists, a very important factor in the causation of these symptoms. When a morbid predisposition to erection of the turbinated bodies exists, very slight and trivial causes, which it is unnecessary to detail here, are sufficient to produce swelling of these structures.

The intimate connection which exists between the bronchial mucous membrane and that of the nasal cavities is shown, not only by the occurrence of neurotic nasal symptoms (swelling of the turbinated bodies, watery secretion, and sneezing) at the commencement of an attack of bronchial asthma—a circumstance, in my experience, of very common occurrence—but also by the fact mentioned above, that asthma is frequently a reflex symptom produced by intranasal irritation, many cases of this description being now on record. If further proof were needed, Hack has reported a case in which an attack of bronchial asthma was produced by the application of a powerful irritant (galvanic cautery) to the nasal mucous membrane, in a person who had previously never suffered from the complaint. In many cases, also, bronchial asthma has been temporarily or permanently relieved by treatment applied to the nasal cavities. These few points, which might easily be enlarged upon, suffice to indicate the intimate relation existing reflexly between the nasal and bronchial mucous membranes.

It is, moreover, a remarkable fact that, in true hay-fever, all the other symptoms, with the possible exception of the sneezing, appear to be of a congestive (vaso-dilator) character, whence it may be argued that the asthmatic symptoms are probably of similar nature.

Sir Andrew Clark not only compares the supposed bronchial swelling to that occurring in the nose, but speaks of "mucous wheals" in the bronchi, and likens the swelling, which he supposes to occur there, to patches of urticaria, whose pathology, according to a recent authority (Fagge's *Principles and Practice of Medicine*, vol. ii, p. 673) is that of "acute inflammatory oedema of the cutis, which fills the lymph-spaces and expels the blood from the venules." The much greater frequency of association of asthma with neurotic nasal symptoms than with urticaria, and the closer resemblance of the two mucous membranes, I venture to think, favour the view that if the dyspnoea of asthma, as seems probable, is produced by temporary tumefaction of the mucous membrane, such swelling partakes more of the nature of that occurring in the nose than of the wheals of urticaria.

Whether the structure of the bronchial mucous membrane admits of its undergoing a pathological swelling, by simple distension of its blood-vessels, is a question which must be decided by future research.

An attentive study of the nasal mucous membrane, I have for some time thought would throw light on the pathology of the less accessible parts of the respiratory tract. It is impossible, for instance, to treat many nasal cases without arriving at the conclusion of the importance of distinguishing between the local symptoms which are neurotic, and those which are truly catarrhal in character. The former are marked by distension of the erectile tissue and watery secretion; the latter, by distension of the capillaries near the surface, and by the presence of a mucous or muco-purulent discharge. In the nose, we are able very fairly to separate these two conditions, although, of course, they are very commonly associated. The importance, if possible, of drawing a similar distinction in the bronchial mucous membrane needs no recommendation of mine; it has not only a theoretical, but a very practical, significance.

BRIGHTON THROAT AND EAR DISPENSARY.—At the annual meeting of the Brighton Throat and Ear Dispensary, it was stated that the number admitted during the past year alone was 757; of these, 163 were paying patients, from whom the amount received was £44 9s. 11d., including the "mites" placed in the surgery boxes by many others. The subscriptions, donations, etc., amounted to £217 14s. 9d., which sum had enabled the committee, for the first time for several years, to meet all expenses, and to discharge their last year's indebtedness to the treasurer, amounting, together, to £184 6s. 3d., leaving a balance in the hands of the treasurer of £33 8s. 6d. There was, however, still a debt of £700 on the building fund.

OXFORD UNIVERSITY: DEMONSTRATORS.—J. R. Green, B.A., of Trinity, has been appointed Demonstrator in Physiology, in place of Dr. Lea, resigned; and H. D. Rolleston, of St. John's, Assistant Demonstrator of Physiology, in place of J. R. Green.