number about 119,000 would be tainted with syphilis, with an annual death-rate amongst infants directly caused by syphilis of 21 per 1,000 of the infected part of the population, or 4 per 1,000 of the whole—a condition of things so disgraceful to humanity and civilisation, so utterly disastrous and intolerable, that, in my opinion, to be cognisant of, or even to suspect it, without taking steps to remove it, is little short of a crime; and we shall be ill performing our duties, as guardians of the public health, if we do not at once take active steps to mitigate, as far as possible, this monster evil, which is so fearfully undermining our strength, energy, and mental capacity as to endanger our position as a nation.

The British Medical Association, counting as it does about 9,000 members, with Branches in all the principal towns in the kingdom, appears to me to be admirably adapted for the work of thoroughly elucidating the subject; and demonstrating, in a manner that no number of individual members ever could, let them be ever so acute or untiring in their zeal, not only the actual prevalence of the disease, but its ultimate effects as well, in these two great classes—viz., acquired and congenital; and, by this, I mean not only its direct effects, but its influence upon the death-rate, etc., in other diseases, to which all classes are liable; its share in the causation of other diseases—as cancer, lupus, rickets, granular kidney, and perhaps many others; and, lastly, the effects of other diseases in modifying the progress of syphilis.

We have, thanks to the acumen and untiring industry of such men as Hutchinson in England, and many others abroad, charts laid down to guide us in our investigations; and I hope that, before we part to-day, we shall carry one or both of the following resolutions.

“1. That it is, in our opinion, imperative that steps should at once be taken to investigate the subject of syphilis in all its bearings, more particularly in the large mercantile and maritime towns.

“2. That, to accomplish this, the British Medical Association be requested to form a central committee, with powers to appoint local committees in such places as they think desirable; such local committees to consist, not only of the members of the Association, but of all medical men resident in the place or neighbourhood, who are willing to assist in the work; to lay down the lines upon which these committees are to work, and to receive and digest their reports.”

And I am sure that, if these propositions are carried and acted upon, we shall soon be in a position to arouse the earnest attention of the Government; and our Association will have commenced a work which must eventually be of inestimable service, not only to our own country, but to all civilised nations. But, for this inquiry to be full and complete, it will be necessary, as I have done throughout, to assume, until the contrary is proved, that a man or woman once syphilitic is always syphilitic; and, secondly, that the children of syphilitic parents are also syphilitic; and their behaviour, under all the varying conditions of life, in health and disease, carefully noted and compared with that of the rest of the community who are presumed to be free from this taint: for I am sure that, by such means only, can we ever arrive at even an approximative estimate of the amount of mischief wrought by this disease.

Another question, full of interest and of the greatest importance, is, what are the main sources of infection and what the channels through which it is disseminated through our towns, and villages too, in maritime populations like ours, which draw a considerable proportion of their sailors and fishermen from the surrounding country? And this question is, I think, fairly answered by the first and third series of cases; for they appear to me to prove clearly that, practically, the prostitutes are the main sources of the mischief; and the sailors (young, and for the most part unmarried at the time of infection) the principal means by which it is disseminated throughout our civil population with such deadly effect. And this brings me to a consideration of the means at our disposal to diminish the evil, if not to eradicate it; and if, in doing so, we consider as proved the following points: that practically the prostitutes are the source of the mischief, and the young unmarried men the means by which it is disseminated, and that the fruitful causes of this dissemination are inefficient treatment before marriage, and marriage too soon after infection, it follows that it is of the first importance to reduce the amount of disease amongst prostitutes to a minimum; and, to fulfil this indication, the Contagious Diseases Prevention Act, without going into the question of its merits and demerits, appears to be well adapted; it works well in the towns where it has been applied, and has undoubtedly diminished the number of prostitutes as well as the number of infections; and no doubt its good effects would be still more marked were its application more general; whilst, if it is necessary for the protection of our army and navy, it is doubly so for that of our civil population, where the number affected is so much greater, and the consequences so much more terrible; but, at the same time that I

advocate the more extensive application of the Contagious Diseases Prevention Act as a means of mitigating the evil, I do not wish to lose sight of the fact that, promiscuous intercourse being the cause of the spread of syphilis, rationally the effectual way of preventing it is to, as far as possible, get rid of the cause.

Next to this in importance is provision for the early and effective treatment of all cases of infection, and the repression, as far as possible, of all irregular treatment by chemists or quacks; whilst, to fulfil the last indication, viz., the prevention of marriage too soon after infection, I think that a system of registration might be devised, and a certificate required from all infected persons before marriage, that they have been properly treated, and a fair time has elapsed since the disease was contracted. But I feel that this subject is beyond the scope of my paper, which is, I know, only a very imperfect outline of what it ought to be; but, if it have the effect of directing your attention to the subject, it will have answered the purpose for which it was written.

REMARKS

ON

ADENOID VEGETATIONS OF THE NASOPHARYNX.

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

Surgeon to the Brighton and Sussex Throat and Ear Dispensary.

I PROPOSE to make a few practical remarks on adenoid vegetations of the naso-pharynx, a subject which, although it has been carefully studied by specialists, both of the throat and of the ear, has, from its comparatively recent discovery, attracted very little attention amongst the profession at large—at least, in this country. The merit of first accurately describing this affection is due to my friend Dr. L. Meyer of Copenhagen, who, in his monograph published in the *Archiv für Ohrenheilkunde*, and in a paper in the fifty-third volume of the *Medico-Chirurgische Transactions* (1870), has given an exhaustive account of the pathology, diagnosis, and treatment of these growths. A copious literature, almost entirely from the pens of continental authors, has followed Meyer's original work, and has culminated in the elaborate discussion on the subject at the recent International Congress. My own interest in the matter dates from the year 1874, when, being on a visit to Copenhagen, Dr. Meyer kindly showed me the first case in which he had operated for the removal of these growths. During the last two and a half years my attention has been more particularly drawn to them, and I have found that they are by no means of rare occurrence in this country.

Pathology.—The pathology of the disease is simply a hypertrophy of the adenoid tissue, occupying the posterior wall and roof of the naso-pharynx (“pharyngeal tonsil”), giving rise to soft tumours of varying shape and size projecting into that cavity. Two chief forms are recognised by Meyer, viz., the *cristate* and the *cylindrical*. The former, which in my experience are the most common, occupy the posterior wall near the roof of the naso-pharynx. The latter are found on the sides of the cavity, and are probably unconnected with the pharyngeal tonsil. Hypertrophy of the pharyngeal tonsil also often assumes the character of a soft elastic cushion on the posterior wall, with a surface of more or less uneven character. The structure of the vegetations, as their name indicates, is that of adenoid or lymphatic tissue, containing a large number of blood-vessels.

Etiology.—With regard to the etiology of these growths, little definite is known. They may, according to Woakes, be congenital, and the influence of heredity as a cause is insisted on by Meyer. He also mentions as occasional causes colds, measles, and local irritation (such as occurs in cleft palate). In several of my own cases, the accompanying deafness was attributed to scarlatina; and it is quite possible that the hypertrophy of the adenoid tissue may have been due to the same cause. On the other hand, as Meyer suggests, the presence of adenoid vegetations may be an additional element of danger to the ears during an attack of measles or scarlatina.

Symptoms.—The symptoms of the disease are very characteristic, and, when once seen in a well marked case, can hardly fail to be recognised again. They are due chiefly to the mechanical obstruction of

the naso-pharynx. In severe cases in which the cavity is completely occluded (or almost so), nasal respiration being impossible, the mouth is kept constantly open, and the nose from disuse, except in scrofulous cases, assumes a pinched and wasted appearance. A most important symptom is what Meyer terms a "dead" pronunciation, *i.e.*, there is a want of resonance about the voice, which causes the patient in well marked cases to pronounce *m* and *n* as *b* and *d*, saying "cobbod" for "common", "rig" for "ring", "ted" for "ten", etc. The speech, in fact, resembles, at a superficial glance, that met with during a bad cold; and, unless the attention be alive to these cases, the symptoms are easily attributed to a chronic cold. In slighter cases, the defect of speech is, of course, less marked, and consists in a want of clearness about the voice, owing to a partial blocking up of the naso-pharyngeal cavity with growths. The patency of the mouth during the night gives rise to dryness of the throat on waking, and the patient often suffers from headache. He also has a thick tenacious discharge running down behind the soft palate, which is said to be occasionally tinged with blood. Epistaxis sometimes occurs from the soft character of the growths. A deformity of the chest-walls from the obstruction to respiration has been described by Löwenberg. The most important complication of this disease, which I have left until the last, is undoubtedly the affections of the organ of hearing, which are present in a large proportion of the cases. Deafness was present in the great majority of the cases which have been under my care. It can easily be imagined that the adenoid growths interfere with the patency of the Eustachian tubes, not only by the mechanical obstruction to nasal respiration, but also by the chronically inflamed condition of the surrounding mucous membrane which attends them. The affections of the ear vary from the most transitory form of middle ear catarrh, to acute or chronic suppurative inflammation of the tympanum, in which more or less extensive destruction of tissue takes place. It is universally agreed that adenoid growths are more common in childhood and adolescence than in adult life. In my own cases, the age ranged from six to nineteen or twenty years. The "dead" speech, the parted lips, and perhaps wasted nose, which together lend a characteristic vacant expression to the face, having thus led us to suspect the presence of these growths, the diagnosis has to be made certain by physical examination. For this purpose, two methods are available, *viz.*, palpation and posterior rhinoscopy.

Palpation, i.e., the exploration of the naso-pharynx with the finger, is the method most universally applicable, and can be carried out without any special practice on the part either of the surgeon or of the patient. The patient being seated, the surgeon stands to one side of him, and, steadying the vertex of his head with one hand, passes the forefinger of the opposite hand (preferably the left, on account of its smaller size) rapidly to the posterior wall of the pharynx, and up behind the soft palate to the roof of the naso-pharynx. A few lateral movements will then give a very fair idea of the state of the walls of that cavity, and of the nature, size, and situation of any growths which may be present. The sensation to the finger in a marked case has been well described as that of a bunch of worms. The whole manoeuvre must be rapidly and gently executed, as it is disagreeable to the patient, and may easily produce vomiting. If any growths be present, the contact of the finger usually causes them to bleed. In children and refractory patients, it is well to guard the first phalanx of the forefinger with an India-rubber ring; and the finger may, I have found, with advantage be lubricated with a mixture of glycerine and water. After palpation has been repeatedly practised, the sensibility of the parts becomes blunted. The size of the naso-pharynx from before backwards, which can be ascertained by palpation, is, I consider, an important element in the case; for, if the antero-posterior diameter be small (*i.e.*, if the septum nasi extend far backwards), a smaller amount of growths will suffice to interfere with nasal respiration than would otherwise be the case.

Posterior Rhinoscopy, unlike the preceding, cannot always be practised, and necessitates some skill on the part of the surgeon, and tractability on that of the patient. It is useful for watching the clearance of the cavity in operative removal of the growths; but in severe cases, as in the one related below, the growths so entirely fill the cavity, that the posterior nares are at first quite invisible.

In these cases, examination of the fauces with a tongue-depressor in the usual manner may show the tonsils enlarged, or the lower pharynx in a state of granular pharyngitis, but often the lower pharynx appears merely congested, and perhaps slightly swollen.

Treatment.—From the very rare occurrence of these growths in adults, it is generally agreed that they have a tendency to disappear spontaneously in adult life; and did they do so without having previously given rise to any serious mischief, there would be no object

in removing them. The serious affections, however, of the organ of hearing, not to mention the obstruction to nasal respiration predisposing the patients to lung-affections, pharyngitis, deformity of the chest-walls, etc., render it advisable that, when the growths impede free respiration through the nose, their removal should be accomplished before they have done any irreparable damage. Constitutional remedies directed against any existing diathesis may be employed; but they are not, as far as I am aware, of any avail in reducing the tumours. Local treatment is best commenced by the systematic syringing of the nasal passages from the front with a saline solution; and in mild cases, the growths waste by this treatment alone if perseveringly carried out. When the naso-pharynx is almost filled with growths, the fluid cannot of course return by the opposite nostril until they are cleared away. More marked cases require operative removal of the vegetations, which may be done either through the mouth or through the nostrils. The former is the method now almost universally employed, but removal by a ring-shaped knife introduced through the nostrils is the method originally recommended by Meyer, and the one which he still employs. Through the mouth the growths may be removed in slighter cases by scraping with the finger-nail, or with a suitably curved scraper, of which several forms have been invented.* In more marked instances removal may be effected by forceps introduced through the mouth, such as Catti's or Löwenberg's. Still another method remains to be mentioned, and that is the galvanocautery, with which the growths may be burnt off. In my own practice I have hitherto employed either scraping with the finger-nail, or removal with Catti's forceps, or with the galvanocautery. The latter has appeared to me more painful than the forceps, and without any corresponding advantage; it is useful, however, in certain cases. If the growths are to be removed without an anæsthetic with forceps, the patient must be prepared to give half-a-dozen sittings, more or less, according to the case. Removal under anæsthetic has the great advantage, that the naso-pharynx can be cleared out at one sitting. It has been practised to a considerable extent by Dr. Woakes in this country, and is to be recommended in nervous patients, and where, as sometimes happens, the parts are exceedingly sensitive, even to the introduction of the finger. A certain amount of care is required to prevent the blood from running into the larynx during the anæsthesia. Many surgeons follow up the operative removal of these growths by repeated cauterisations of the naso-pharynx with solid nitrate of silver, in order, by destroying all traces of the vegetations, to prevent any recurrence. For my own part, I am more inclined to follow Löwenberg's plan, *i.e.* to remove sufficient of the growths to allow unimpeded nasal respiration, and to free the Eustachian tubes, and not to employ the caustic. Before removing adenoid growths the tonsils, if much enlarged, should be excised, and the patency of the nasal cavities ascertained by anterior rhinoscopy.† After they are removed it is usually necessary, in order to overcome the habit of sleeping with the mouth open, to make the patient wear a bandage under his chin at night to keep his mouth closed, or else to let him use one of Guye's contra-keepers. The aural complications of course require suitable treatment, which need not be described here.

One of the most marked cases of the disease which I have met with in this country is very briefly as follows.

CASE. Polypus of Right Ear: Cicatrix of Left Tympanic Membrane: Adenoid Vegetations of Naso-pharynx occluding the Posterior Nares, successfully treated with Catti's Forceps and Galvano-cautery.—Alice B., aged 19, became a patient at the Throat and Ear Dispensary on January 30th, 1880. She was suffering from polypus of the right ear, in the anterior inferior segment of the membrane. In the left tympanic membrane, the malleus was retracted, and there was a cicatrix in the anterior segment. The right tonsil was enlarged. The fauces were congested. The polypus having been removed, attention was directed to the throat; and the following note was taken on February 11th. "She can scarcely breathe through her nostrils at all, and cannot keep her mouth shut without producing a feeling of suffocation. Her speech is 'dead', saying 'cobbod', 'kig', 'ted', etc.; and the nose is somewhat thinned and compressed. Anterior rhinoscopy shows no obstruction of the nasal cavities, beyond slight swelling of the mucous membrane on the right side of the septum, and the movements of the palatal muscles during deglutition can be discerned on both sides. By posterior rhinoscopy, nothing distinct can be seen, owing to blocking of the cavity with vegetations; and palpation, as was to be expected, reveals a large quantity of adenoid growths on the vault of the pharynx.

* Compare Victor Lange, *Monatschrift für Ohrenheilkunde*, February 1880, and C. H. Golding-Bird, *Guy's Hospital Reports*, vol. xxv.

† A good test for this I have found to be the possibility of seeing the movements of the palatal muscles during deglutition, by a strong light thrown through the anterior nares.

Syringing is unsuccessful in making the fluid return by the opposite nostril." On February 21st, a large mass of adenoid growths was removed with a single grasp of Catti's forceps; and on the 28th, part of the left posterior naris was visible by posterior rhinoscopy. Repeated applications of the forceps (altogether seven), and the use of the galvanocautery (five applications of Voltolini's galvanocautic gauge), were so successful in clearing the cavity, that on April 9th it was noted that the patient could sit with her mouth shut; and finally, a few small vegetations on the posterior pharyngeal wall were all that could be detected with the finger.

If, in this condensed and fragmentary communication, I have not been able to bring forward anything novel, I trust that it will at least have served the purpose of drawing attention to this important and widespread disease.

THE LARYNGEAL COMPLICATIONS OF CONSUMPTION.

By JAMES M. WILLIAMSON, M.D., Ventnor.

ALTHOUGH the average case of phthisis cannot be said to run by any means a painful course, the disease is very far from being a painless one when particular complications arise. Perhaps the laryngeal complications are those which a patient has most reason to dread in this respect; for, the functions of the region being so important and so constantly in operation, the encroachment of destructive disease there nearly always entails a form of suffering which is not only painful, but harassing and exhaustive.

The existence of laryngeal complications in a case of phthisis indicates that the affection has become, even if it were not at first, a constitutional one; and the new malady, like the cerebral and intestinal complications which also occur, is one of its local expressions. Now, although the predisposing cause is the constitutional disease, we may look for many exciting causes to explain why the morbid action should localise itself in the larynx. First of all, sex has considerable influence. Although, on the whole, women are somewhat more prone to phthisis than men, men are much more subject to the laryngeal complications than women are. Out of fifty cases, thirty-nine were men and eleven women. Possibly the changes going on in the male larynx during and for some time after puberty have something to do with this. Then age might be expected to have some effect; but, phthisis being for the most part a disease of early life, it is difficult to estimate this. So far as I have seen, this complication more often occurs towards the later rather than the earlier limit of the average phthisical age. I have not been able to satisfy myself that occupation has much to do with it. In some cases, there has been a history of considerable vocal exertion; in others, there has not. Something probably depends on the abuse of alcohol and tobacco, especially the former, and particularly when the upper part of the tract is involved. Lastly, is the exposure to infection from the passage of sputa an exciting cause? If it be, it surprises us that its effects are not more common. It is worth noting, also, that a patient with an actively softening lung usually lies on the sound side. Hence sputa lying about the upper respiratory tract would gravitate to the side corresponding to the healthy lung; whereas we know that the disease attacks by preference the side of the larynx corresponding to the unsound lung.

There is good reason to believe that laryngeal complications are more prevalent in phthisis than we generally realise in practice. Out of 500 cases of consumption which came before me consecutively, no more than 34 complained of symptoms pointing to laryngeal mischief; in other words, 6.8 per cent. It must, however, be borne in mind that the complication is mostly found in the advanced stage of the disease. Taking none but fatal cases of consumption, therefore, I find that in 106 there were 25, equal to 23.6 per cent., who complained of throat-troubles. Even this would not appear to convey a full idea of the frequency; for Louis, in his *post mortem* examinations, found ulcerations in one or more portions of the tract in 33.2 per cent. of the subjects. Probably the discrepancy is due to the overlooking of tracheal and certain epiglottic ulcers during life. Some of these the laryngoscope would detect; and, in the interests of exact diagnosis, it is to be hoped that before long no investigation of chronic disease of the respiratory organs will be deemed complete unless both stethoscope and laryngoscope have been used with equal thoroughness.

It will be gathered, then, from what has been said, that symptoms are not by any means always present. At the same time, when we have them to guide us, it is generally possible to judge from them what part of the tract is involved. When there is heat and pricking low

down in the throat, with dryness and dysphagia, we suspect inflammation or superficial abrasions about the epiglottis, or in the folds of mucous membrane running between it and the tops of the arytenoid cartilages. Great suprathyroid pain, with burning and marked dysphagia, and with pain shooting up to one ear, will point to acute inflammation or deep ulceration of the same parts. I think the dysphagia is greatest when the angles of the epiglottis and the aryteno-epiglottidean folds are involved. Pricking in the box of the larynx, with hoarseness or intermitting aphonia and semilaryngeal cough, most often depend upon thickening or inflammation of one or both cords. Thyroid pain, with aphonia and more or less complete laryngeal cough, are caused by deep ulceration about the cords. Then suprasternal pain, constriction, or perhaps spasmodic dyspnoea, generally none of them very positive, will give a hint of inflamed spots, thickened patches or ulcers of the trachea. Of course, various combinations of lesions will occasion correspondingly combined symptoms. It is most usual to find tracheal and laryngeal ulcers combined, or else these with epiglottic ulcers superadded. It is rare for the disease to pass over the vocal cords. It is worth observing that the symptoms of pure laryngeal ulceration are the most constant, those of the trachea being vague and uncertain, and those of the epiglottis being often more or less latent, especially when the destruction of tissue is small and the damage is near the middle part of the border of the cartilage. The parts are not all equally liable to suffer. The nearer the lungs, the greater the danger. Fortunately, the urgency of the symptoms is the reverse of this; the nearer the lungs, the less the suffering.

In addition to these symptoms, some help will be obtained by observing the physical signs of the chest. The laryngeal affection is largely unilateral, corresponds to the side of the chest implicated, and goes with advanced mischief. So far as my experience has gone, ulceration never exists in the larynx unless the pulmonary phthisis has reached the stage of excavation. It is true that such symptoms as aphonic cough and diarrhoea are met with at a seemingly early stage of some primary tubercular cases; indeed, they may almost appear to be initial symptoms. But one characteristic of this variety of consumption is the want of definition about the physical signs over the chest; and this very indefiniteness is apt to mislead even a vigilant observer as to the condition of the lungs.

In considering the diagnosis, the first point to decide is that the symptoms do not arise from some morbid state of the fauces or pharynx, but that they are due to causes in the larynx. This question settled, the laryngoscope will eliminate hysteria and paralysis of the vocal cords. Dr. Walshe says that, as a rule, if a woman with hysteria become genuinely phthisical, the nervous affection falls into abeyance. If this be so, exceptions cannot be scarce. I have seen several cases of hysterical aphonia in phthisical women. As to chronic laryngitis, if it coexist with pulmonary phthisis, it is correct to connect the two pathologically. It must be remembered, too, that where there is no morbid constitutional tendency, such as phthisis or syphilis, ordinary inflammatory action about the larynx does not tend to run on to ulceration of tissue, nor does it resist treatment. Putting these foregoing conditions aside, only phthisis, syphilis, and cancer are left. Although so much has been written about the distinctions between the appearances in these diseases, I doubt very much whether anyone can form an absolutely reliable diagnosis from simply looking into the larynx. Such attempts are likely to trip up the specialist. Besides, other information is to be had for the seeking. The best plan, after examining the interior of the larynx, is to investigate thoroughly the general condition and history of the patient. My figures show that, at any rate, 23.6 per cent. of phthisical patients may be expected to have laryngeal complications. The syphilitic individual has a better chance of escape from them. Mr. E. C. Morgan, in a recent paper, says that 4.8 per cent. of the syphilitic have the larynx affected. On the other hand, instances of primary laryngeal cancer, which is generally of the epithelial variety, are very rare. I believe I am right in stating that, although there may be no constitutional antagonism between cancer and phthisis, yet clinically they are not often found in combination. We cannot say as much for phthisis and syphilis. It will be evident, however, that it will not do to neglect the valuable diagnostic information which is to be had for the trouble of examining the patient's chest, his lymphatic glands, and his history. It is not too much to say that, if the general and local signs are taken together, there should not be any insuperable difficulty in diagnosing between syphilitic, cancerous, and tubercular disease of the larynx.

It is impossible to touch upon the pathology in a paper confined to such brief limits as the present; but, before passing on to the subject of the treatment of this complication, a word should be said on the prognosis. Prognosis in phthisis, trustworthy prognosis that is worth the patient's having, and is at the same time quite satisfactory to our-