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LECTURES
ON
SYPHILIS OF THE LARYNX

LESIONS OF THE SECONDARY AND INTERMEDIATE STAGES

RECAP

BY

W. MAC NEILL WHISTLER M.D., M.R.C.P.

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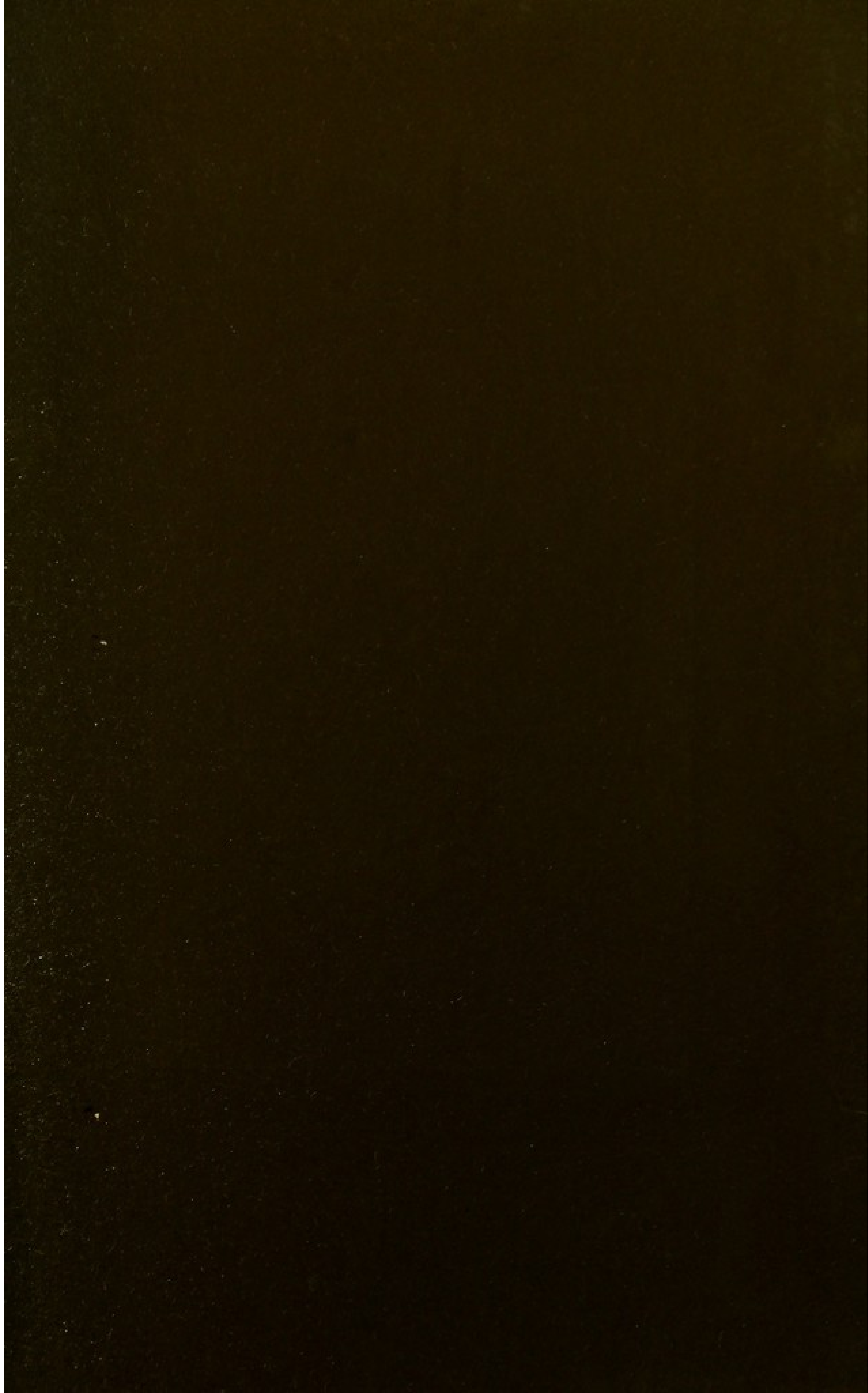

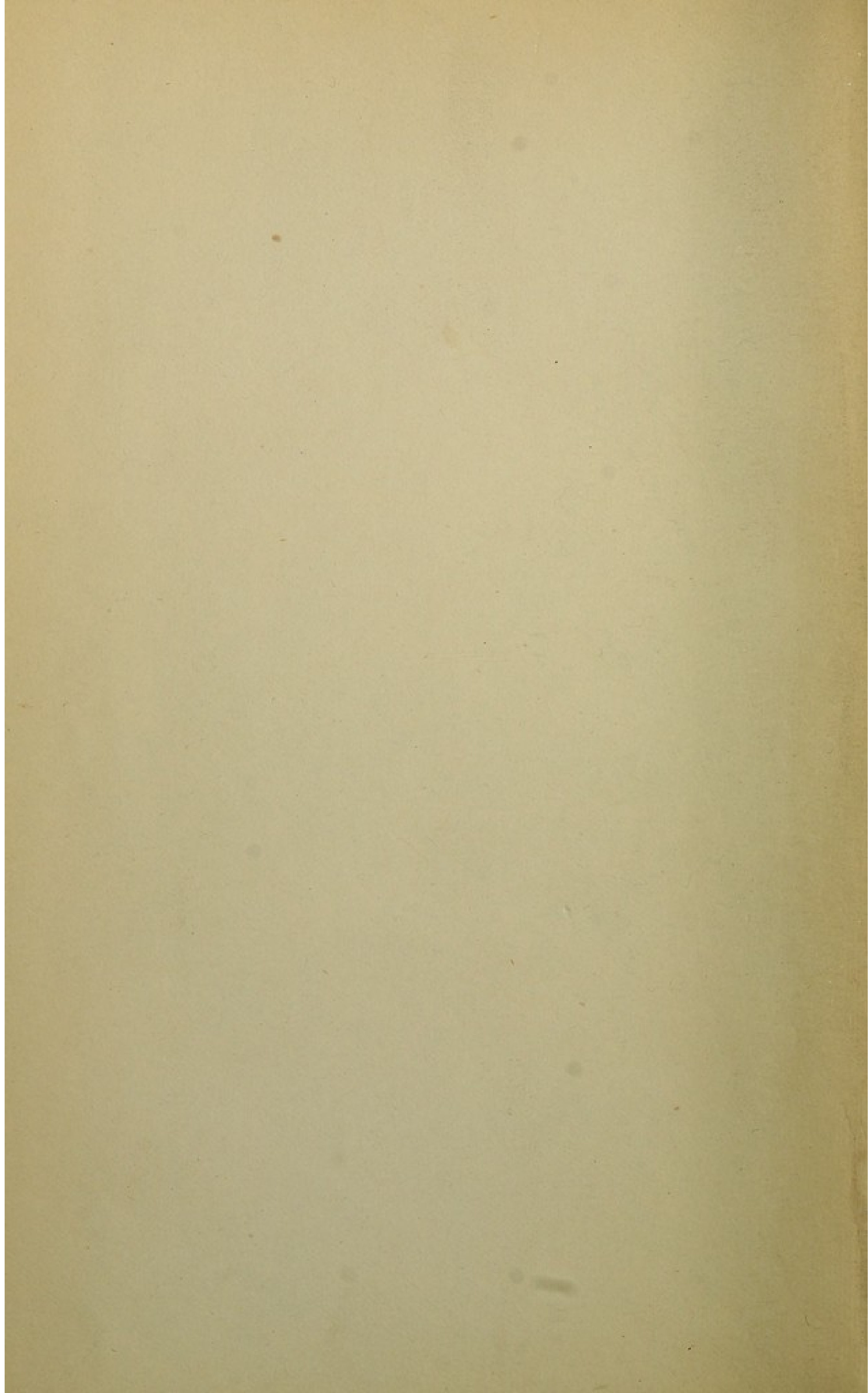

Dr. Beverley Robinson
from his friend the Author

LECTURES

ON

SYPHILIS OF THE LARYNX

DELIVERED AT THE HOSPITAL FOR DISEASES OF THE THROAT AND CHEST, LONDON

LESIONS OF THE SECONDARY AND INTERMEDIATE STAGES

BY

W. MAC NEILL WHISTLER, M.D., M.R.C.P.
Physician to the Hospital; Honorary Physician to the National Training School for Music, etc.

LONDON
J. & A. CHURCHILL, NEW BURLINGTON STREET

1879

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Dedicated

TO

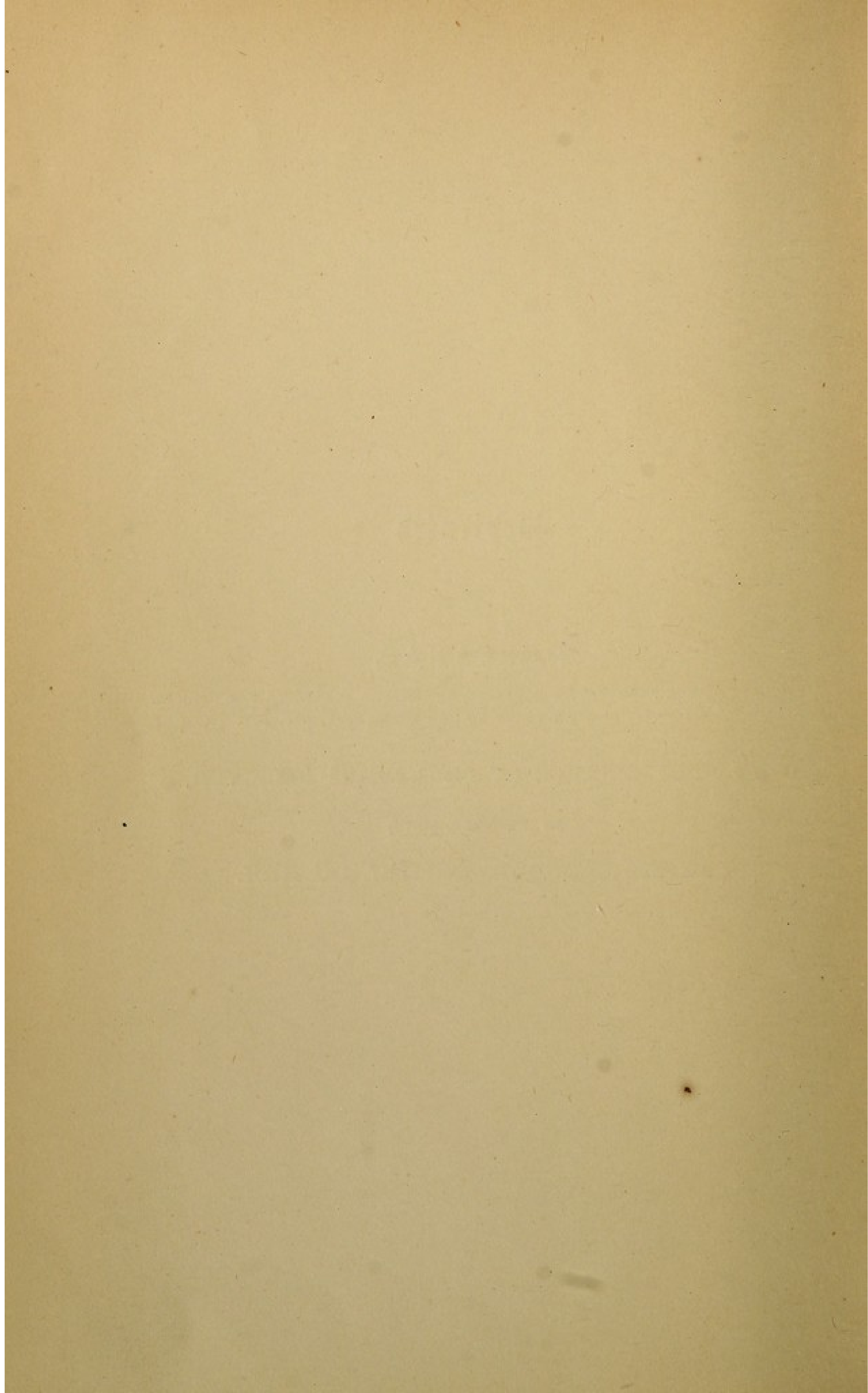
DR. PANAS,

MEMBER OF THE ACADÉMIE DE MÉDECINE, PROFESSEUR AGRÉGÉ TO THE MEDICAL FACULTY, PARIS, SURGEON TO THE HÔTEL DIEU, ETC. ETC.

IN REMEMBRANCE OF COURTESIES RECEIVED,

IN BY-GONE DAYS,

AT HIS CLINIQUE—HÔPITAL DU MIDI.



PREFACE.

In these lectures on Syphilis of the Larynx, I have confined myself entirely to a description of the *secondary* and *intermediate* lesions. The signs of Syphilis in the Larnyx are subdivided, as a rule, into secondary and tertiary, but as between the two extremes there exists an important class of cases quite distinct from the deeper lesions of the tertiary stage, I have preferred the above named subdivision ; nor will it, I am sure, be found an artificial one in practice.

These lectures were delivered originally at the request of my colleagues at the Hospital for Diseases of the Throat and Chest. They subsequently appeared in *The Medical Times and Gazette*, and I now venture to publish them in book form, with only very slight

additions, hoping that the work may prove to be not without interest.

They are based principally upon the work of my clinique at the hospital, and I have sought simply to give an account of the course of these affections when followed over a long period, and to describe the manifestations as I have met with them in the patients under my charge—together with such treatment as I have found best suited for their cure.

W. MAC NEILL WHISTLER.

28, WIMPOLE STREET,
CAVENDISH SQUARE,
March, 1879.

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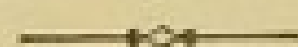

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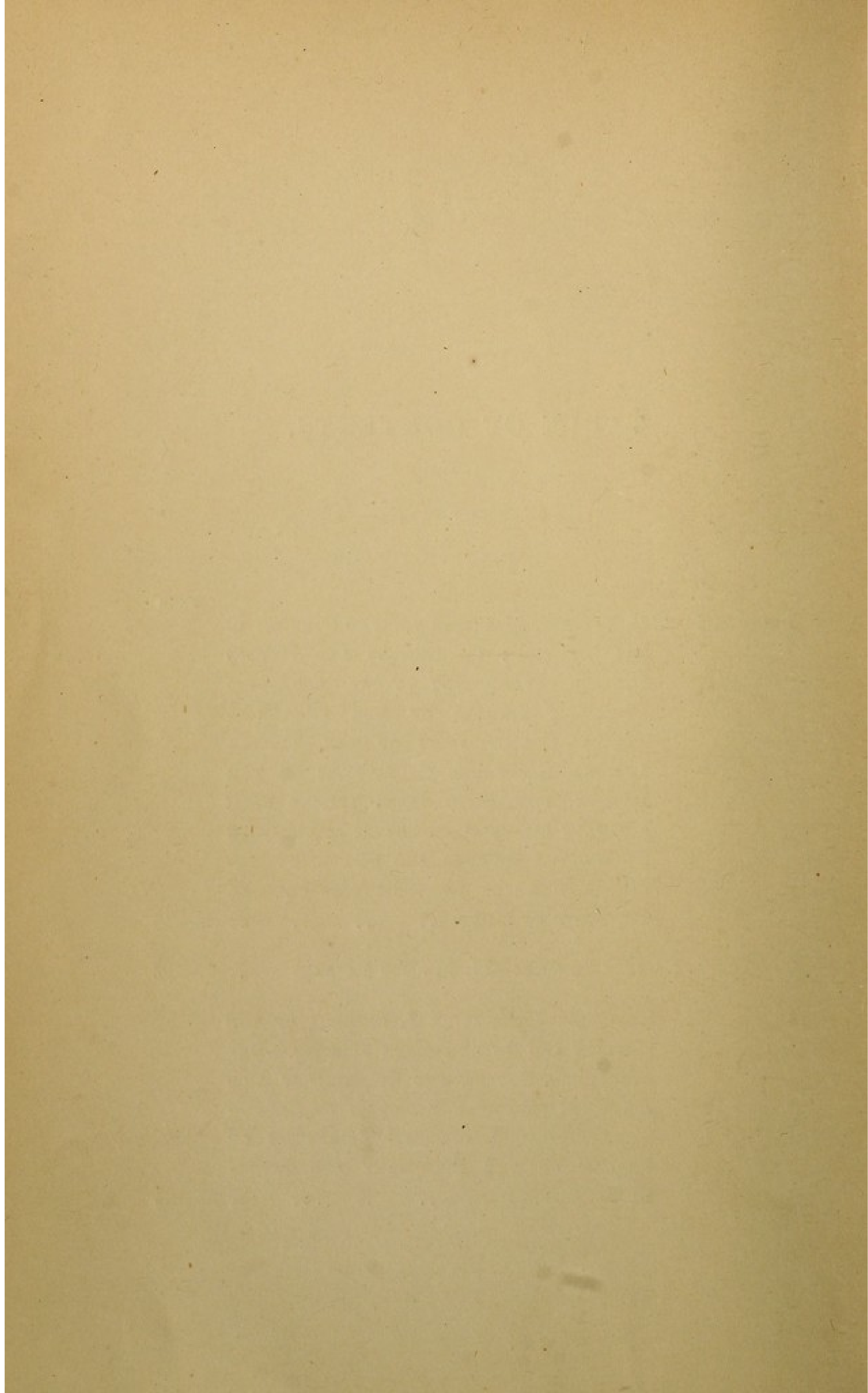


LECTURES

ON

SYPHILIS OF THE LARYNX.

LECTURE I.

The Earliest Manifestations of Syphilis in the Larynx—Congestions and Mucous Patches.

Gentlemen,—As the study of laryngeal syphilis is recent when compared with the investigations that have been made into the manifestations of this disease in other organs, there has existed, naturally enough, until but a comparatively few years ago, a very uncertain opinion as to the lesions most commonly met with there. Especially was this the case in reference to those to which I would call your attention this evening—namely, such as are connected with the early periods of the disease. In the days before the laryngoscope was known, some of the appearances in the later stages of syphilis, as seen in post-mortem examinations, are described, including swellings, tumours, and deep ulcers.

Most of the phenomena, however, could be but a matter of surmise, and so we find, for instance, such statements as the following:—"It is very plain that when the syphilitic ulceration is confined to the larynx, and notably to the ventricles, it cannot be distinguished by any special sign, and one can only recognise it to be syphilitic by means of the antecedents of the patient, and by the symptoms which may at the same time exist upon the skin, in the bones, etc." And, again, "Syphilitic laryngitis in the great majority of cases is the extension of the lesions of the pharynx and nasal fossæ which are so common in syphilis. It is important, therefore, to take into consideration this special march of syphilitic laryngitis, for experience shows that ordinarily the larynx is the seat of lesions which are analogous to those that one had previously noted in the throat. For instance, a non-ulcerating laryngitis follows upon an erythematous syphilide of the nasal fossæ and of the pharynx; while, on the other hand, one has reason to presume that there exists in the larynx syphilitic ulceration and necrosis when one sees an analogous lesion in the nasal fossæ, and that the tonsils and velum palati have been deeply ulcerated."

These were the views published by Trousseau and Belloc* in 1837, in their description of what they call "syphilitic laryngeal phthisis." It is only since the introduction of the laryngoscope that any accurate or reliable information has been gained on this subject. Even since that date

* *De la Phthisie Laryngée Chronique.* Paris, 1837.

opinions have differed a good deal, certainly as to the frequency of laryngeal complications in syphilis, if not as to the actual phenomena, though in regard to these also there has not been complete accord. To some of these observations I will now allude very briefly; for, to go at all deeply into the literature of the subject would be foreign to the purpose of my lectures, in which I intend to bring before you the result of my own observations here rather than those of others, and during which I propose to show you cases, instead of overburdening you with views which you may read elsewhere for yourselves.

In 1860 Czermak* describes deep redness of the mucous membrane with a small ulcer on the ventricular band, or false cord, in front of one of the arytænoid cartilages. This was in the case of a young man who contracted a labial chancre through kissing a syphilitic girl. He suffered some time afterwards with pain in the larynx and hoarseness, and this brought him under Czermak's care. This author does not speak of the other constitutional symptoms in this case, nor of the lapse of time between the primary sore and the invasion of the larynx—which is an unfortunate omission when one is describing the lesions of a certain period. He proves its specific nature by its quickly yielding to constitutional treatment, although the local applications were very imperfectly made.

* *Der Kehlkopfspiegel und seine verwerthung für Physiologie und Medizin.* Leipzig, 1860.

In 1866, Türck,* in his investigations, notices syphilitic catarrhs of the larynx. He says that they very often do not differ in their appearance from other catarrhs, but that their specific nature may be suspected when they are very persistent, especially if there be no other cause shown for this chronicity—as, for instance, phthisis. He adds that they may be known to be syphilitic when they are associated with papules. The following cases give his description of the appearances at this period:—A seamstress, with secondary syphilis, had ulcers on the tonsils; she had also a vaginal discharge, and enlargement of the glands. For three months she had been suffering with burning pain in the larynx, and had also lost her voice. Both vocal cords had a wrinkled look, especially at their anterior part, on the upper surface and free edge; they were without lustre, and resembled very much a mucous membrane which had been scalded or superficially cauterised. The other case is that of a servant girl who had been hoarse for two months, and had completely lost her voice for six weeks. She had an ulcer between the pillars of the fauces, and a roseola on the trunk, as well as papules on the vulva, and leucorrhœa. The vocal cords were uneven, thrown into ridges, and looked as though their surfaces had been cauterised. There were several prominences on the posterior wall of the larynx. The epiglottis was moderately reddened.

Gerhardt and Roth, whose examinations are among the

* *Klinik der Krankheiten des Kehlkopfes.* Vienna, 1866.

most important, and whose researches are reported in Virchow's *Archiv*,* speak of acute catarrhs, of slight or partial œdemas, and of condylomata as the first laryngeal manifestations of constitutional disease. They found these latter lesions eight times in fifty-four cases of syphilis; forty-three of which were suffering with the early signs of the disease, and they are of the opinion that in the earlier period of syphilis condylomata are the most frequent lesions in the larynx. They describe these as dull white, or reddish-white elevations, which are generally flat, occurring on the cords and posterior wall of the larynx. Their reasons for considering these papules to be true condylomata are their remarkable resemblance to those of the mouth, pharynx, and portio vaginalis, and also that in all the cases in which they met with them they were associated with others in other parts of the body.

After this, M. Dance published a thesis in Paris in 1864, entitled "Eruptions of the Larynx in Syphilis." He is more minute in his divisions. He speaks of a laryngeal roseola occurring *always* at the period of a general roseola. In this there is increased redness of the mucous membrane, arranged in very distinct patches, calling to mind the mottled appearance of the skin. He also describes papular and tubercular eruptions occurring in the same rotation as they do on the cutaneous surface.

* Virchow's *Archiv*, vol. xxi. 1861.

Thus Czermak, Türck, Gerhardt, and Roth recognise as early manifestations of syphilis in the larynx, catarrhs with no very distinctive appearances, mucous papules or condylomata, and superficial ulcers; while M. Dance considers the eruptions which he describes—roseolar, papular, and tubercular lesions—to be quite as marked here as on the surface of the body. These are the main features of every description you will find of these early lesions in all subsequent treatises, and so quotations from them would be but repetitions. There is one other, however, to which I will refer. That is a thesis published in Paris in 1872 by M. Pierre Ferras, on Syphilitic Laryngitis.* This gentleman's observations led him to oppose the view that definite lesions are found in the larynx corresponding to the chief divisions of the stages of syphilis into primary, secondary, and tertiary. He says that since the laryngeal affection does not correspond to that of the skin in the majority of cases, one is not justified in describing a roseola, mucous patches, or laryngeal papules, implying thereby a direct relation in the order of their appearance in the larynx and on the skin, for no lesion of the larynx, he says, could be foretold by knowing the co-existent one of the skin. He cites, in support of this, the fact that patients with advanced tertiary lesions present on laryngoscopic examination nothing but redness of the vocal cords to account for the trouble of voice from which they are suffering at the same time. He divides syphilitic

* *De la Laryngite Syphilitique. Thèse*, Paris, 1872.

laryngitis, therefore, into two forms, either of which may occur at any period of the disease. These are the non-ulcerated and the ulcerated: the former including hyperæmia, œdema, and hypertrophy; the latter comprising the various forms of ulcers, together with their complications—perichondritis, caries, and necrosis. As regards mucous patches, a most typical lesion of secondary syphilis, he considers them quite exceptional, if they occur at all. He does not quite like to deny their existence in the larynx, but he only found one out of all the cases examined by him, amounting to nearly one hundred, taken at various stages of the disease. M. Ferras, in endeavouring to controvert the errors of what he considers a too arbitrary law of evolution of this disease in the larynx, has, in my opinion, gone too far in the other direction; and incurs the risk of being considered himself as arbitrary and too exclusive. There appears to be no more real reason for subdividing the lesions of the larynx into non-ulcerating and ulcerating than there would be for the same classification as regards the more general lesions.

There can be no doubt that certain phenomena of a more superficial nature do occur in the earlier periods of the disease, while deeper and more destructive ones mark a more advanced stage, and this with sufficient constancy to justify certain types being grouped together to represent certain periods. Nor can this be overthrown by the negative evidence of the presence in individual cases of comparatively trivial congestions of the larynx, associated

with advanced tertiary manifestations in other parts of the body.

Congestions of the larynx may and do occur from accidental causes at any period, but when they do attack the larynx in an advanced stage of the disease, *and especially if they be neglected,* they sooner or later assume the characteristic type of that period. When I come to speak of the later stages of laryngeal syphilis I shall be able to show you cases in illustration of this. In most of them the exciting cause had been exposure of some kind. In one of them the irritant was a specific poison—diphtheria. On the other hand, the destructive ulcers of the larynx do not occur in the first months after infection, which period has also its constant lesions. These I will now describe to you, as I have found them in observations which were made upon eighty-eight cases which were treated at my clinique here for secondary syphilis. With one or two exceptions these patients were all under observation for several months, and some, at intervals, for two years. This gave me a better opportunity for watching the course of the disease in each patient, and made it less likely that any lesion would escape my notice. All cases in which there was any doubt of the existence of syphilis were excluded. The lesions that I found in these cases I have grouped together as follows:—

1. Catarrhal congestions simulating those arising from ordinary causes.

2. Congestions accompanied by *diffuse redness* and *swelling.*

3. Mucous patches of various types.

4. More chronic inflammations, occupying as it were the period of transition, the signs of which are—*diffuse redness, thickening,* and *ragged ulceration,* especially of the vocal cords.

1. Now, as regards congestions of the larynx in early syphilis simulating ordinary catarrhs, I need not say much to you. They are for the most part superficial in character. Increased redness is their chief feature. This colour varies in intensity and in tone. It is bright red when acute, more dusky when chronic, but it certainly has not a coppery hue. From being unequally distributed it gives to the membrane a mottled appearance. The epiglottis is redder than usual. The mucous membrane is no longer so transparent, and the yellowish hue of the normal epiglottis is lost, while tortuous vessels are seen running over its surface. In some cases the vocal cords are chiefly affected. Sometimes they are pinkish and dingy-looking, at others deeper red and dry. They may be merely streaked with a few red lines, or the mucous membrane is occasionally eroded. With this there is a want of proper tension, with defective approximation, and this leads to alteration of voice. All that these patients suffer from, as a rule, is hoarseness. Occasionally one meets with intense redness of the interior of the larynx, with swelling of the ventricular bands and ary-

tænoids, accompanied by pain and cough. When such complications arise they are generally due to some cause other than the syphilitic poison, such as, for instance, either cold, or excesses in drinking or smoking, or constant use of the voice. I have seen a good many such cases; they resembled the acute catarrhs, and were relieved by somewhat the same measures. Confinement to a warm room, the inhalation of vapour medicated with benzoin and tincture of tolu, at intervals of two or three hours, will reduce any urgent symptoms more quickly than mercury would do without these aids. They should, therefore, be always added to the constitutional treatment in all such cases, for it is more than ever important that a laryngeal inflammation be reduced as quickly as possible when it occurs in a syphilitic person. This type of laryngeal catarrh occurs at any time during the period of general eruption—that is, during the first two years, as a rule. In the later months of this period it is apt to be associated with thickening and other structural lesions, which then give to it a more characteristic appearance. Naturally, those who have had syphilis, like others who have not, may have catarrhs of the larynx from other causes years after their specific eruptions have been cured. I would not refer to a fact which appears so self-evident if I had not seen patients with acute and sub-acute congestions of the larynx put upon mercury and iodide of potassium over and over again, merely because they had

a history of syphilis. Frequently it dated back many years. They have kept this treatment up for months, all to no purpose. Then these remedies have been stopped, and under non-specific treatment they have been relieved of their trouble. Now, however, I am referring to those which occur while the poison is active, and which accompany syphilitic manifestations on the body elsewhere. Without these associated phenomena the diagnosis could not be established. Even their course does not differ, in many cases, from catarrhs due to other causes. Greater chronicity is said to be a distinguishing feature, and certainly they often last a long while, but you will see many non-syphilitic catarrhs of the larynx fully as persistent, and sometimes more so than these. They are frequently cured in a month, and almost invariably subside in three or four months at most in the more intractable cases, but, like all other specific lesions, they are liable to recur, and when left to themselves they have a tendency to increase in gravity, and to become the seat of mucous patches and ulcers. The following case taken from the list of out-patients will give you a very fair example of a mild type of this affection :—

A. G., aged twenty-five, a traveller, applied April 17, 1875. He had contracted a chancre two months previously. For three weeks prior to his coming to this hospital he had had a sore throat and eruptions. When he presented himself at my clinique he had a roseola on the trunk

and arms, mucous patches of the lips and palate, also on the glans penis, on the scrotum, and about the anus. The posterior cervical and inguinal glands were enlarged. He had headache, and he was losing his hair. The only laryngoscopic appearance was increased redness of the whole mucous membrane. This was most especially marked on the ventricular bands and vocal cords. Under the administration of mercury—blue pill in one-grain-and-a-half doses three times daily—he was very much relieved in three weeks, at which time he was obliged to leave England. The eruption on the body had disappeared, and that of the pharynx was nearly all gone. No mucous patches appeared in the larynx while he remained under observation, and the congestion was entirely gone at the end of three weeks' treatment.

In another case—that of a stoker—the laryngeal symptoms were much more marked and persistent. He had a chancre six months before applying here, followed by eruptions. For several months he had had a sore throat, and his voice was very husky. On examining his throat I found his tonsils deeply congested, a good deal enlarged, and covered with mucous patches. The mucous membrane of his larynx was deep red, more intensely so on the vocal cords which were dry and rough. He was put upon a mercurial treatment similar to the preceding case. During the course of this he had several eruptions of mucous patches in the throat, extending over the palate and fauces. These did not

disappear until after three months' treatment. All this time the congestion of the larynx persisted, and his vocal cords were still very red; nor did they assume their normal appearance until after another month's treatment. The delay in his improvement was probably due to the irritation his air-passages were exposed to in the pursuit of his business, which he insisted upon attending to all the time.

2. I come now to another type of laryngeal congestion which occurs at precisely the same period as the one I have just been describing—that of general eruption. In this the redness is equally diffused over the affected surface, like an erysipelatous blush or an erythema. No small vessels are seen running over the surface. Together with this, there is swelling; or maybe puffiness would better express the condition, as though there were a slight amount of œdema associated with it. This is most striking on the epiglottis. Its edges are rounded and cord-like, instead of being thin and sharply defined. From this it has a peculiar fleshy look when contrasted with the delicate tint of the normal epiglottis. Sometimes this redness extends over the whole mucous surface of the larynx. When, on the other hand, it is limited to certain parts—and this is more apt to be the case—the line of separation is well defined. The colour in the earliest stage is rosy and somewhat opalescent-looking, gradually shading into a deeper red. The intensity of the colour may vary in different parts. In some cases it is some-

what patchy or spotted, like the condition spoken of already as a laryngeal roseola. In two cases of this kind which were seen by me here, the laryngeal affection was, however, associated with a squamous syphilide, and not with a roseolous eruption. This diffuse redness with swelling I found twenty-six times out of the eighty-eight cases of secondary syphilis I have alluded to.* In twelve of them it was associated with mucous patches of the larynx, and next to these undoubted signs of syphilis it is the most characteristic. In this, my experience coincides with that of M. Ferras. I do not mean to say that in acute catarrhs of the larynx you will not get diffuse redness and swelling. Far from it. You will find bright redness diffused over the whole surface, with sometimes great swelling, in a good many such cases; but when you do, you will find it accompanied by pain, irritable cough, and sometimes dyspnœa, depending upon the amount of inflammation. In these catarrhs there are no urgent symptoms of distress. If the vocal cords are implicated there will be alteration of voice, varying from mere huskiness, or loss of vocal power, to a hoarseness which culminates in aphonia. If the vocal cords are not affected—and sometimes they are pearly white—there may be no symptoms to indicate that the larynx is affected. These patients occasionally complain of soreness and some pain in swallowing, but when you reflect that there is almost invariably pharyngeal disease as well, it

* See Table, p. 47.

would be difficult to distinguish between the pain in deglutition caused by this, and any which may arise from a swollen epiglottis. The essential points, then, which distinguish these syphilitic catarrhs from others associated with diffuse redness and swelling, are these—

(1.) The redness is often more limited in its distribution, and it is not so bright. It is often rosy in the earlier stages, becoming darker in cases of longer standing. It is not vivid unless accidentally inflamed.

(2.) They are accompanied by general puffiness instead of great swelling.

(3.) There are no very acute subjective symptoms.

But none of these signs or symptoms will justify you in *absolutely* pronouncing the case syphilitic, if they are the only ones you have to go by. Fortunately, you will have the history of the case and the other constitutional manifestations to guide you to a correct diagnosis, if you will look for them. This shows how essential it is that the physician should be thoroughly acquainted with the general manifestations of syphilis before he is competent in many cases to pronounce definitely upon the laryngeal affection, and to undertake its treatment; for the signs in these cases are worth more than the history. Patients may try to deceive you, or they may innocently mislead you. A syphilitic patient may tell you that he never had a chancre or any signs of contamination, and, on the other hand, one

who is quite free from the disease is convinced that "his system is poisoned," because he has had a gonorrhœa or a soft sore some months before. Both of these patients are suffering from a sore throat. Mercury will cure the one, and only aggravate the symptoms of the other, and at any rate produce no good effect upon it. What are you to do? Examine well the larynx, and the appearances that I have been describing to you will help you materially to distinguish between the two. Then examine your patient thoroughly, and you will find in the case of the syphilitic patient either enlarged inguinal or cervical glands associated with a roseola, a papular or squamous eruption, or mucous patches in the mouth and throat. Perhaps he will tell you also that before his throat was affected he had been having headaches and night-sweats, and had been feeling very weak. This he may tell you or not, for these symptoms of debility incident to the early stages of syphilitic poisoning, though frequent, are not constant, and plenty of strength and apparent good health are not incompatible with the disease. But in all of these cases of syphilitic affection of the larynx the general lesions I have just spoken of will not be wanting: it will be exceptional if you do not find some of them at the first examination; you will be sure to do so if your patient remains under your care for a few weeks. Those which are most constant are the mucous patches of the pharynx and mouth. In connexion with this I will cite to you the following case:—

M. A. F., aged twenty-nine, a labourer's wife, applied here on October 21, 1874. She was very hoarse, and she complained that her throat was very painful in swallowing. She had been suffering for a month. She thought she might have caught cold, but was not aware of having been subjected to any exposure which might have led to it. Her voice had been gradually failing, and she had experienced no relief from any of the remedies she had used. On examining her pharynx, I found dusky redness of the fauces and mucous patches on the tonsils. The laryngoscopic appearances observed were these: the vocal cords were very red and superficially eroded; the arytænoids and inter-arytænoid fold were swollen; the mucous membrane over them was dark red, and the redness was diffuse; the redness of the ventricular bands was of the same tone, but more irregular and patchy. She was not aware of any primary sore, but she said she had had rashes on the body. On examining her I found a squamous syphilide. She was ordered blue pill, one grain and a half with one grain of quinine three times daily, and her larynx was painted once a week with a solution of chloride of zinc, half a drachm to the ounce of water. At the end of a fortnight she was greatly improved. The redness was much paler, the swelling had diminished, and her voice was much clearer. At the end of a month the only morbid appearance in the larynx was a slight congestion of the vocal cords. The treatment was kept up. Her larynx was also sprayed with a zinc solu-

tion, three grains to the ounce of water. Soon after this she ceased to attend, being quite relieved of her trouble. The cutaneous eruption and the mucous patches were cured in one month's treatment.

3. Taking these last-named phenomena as typical of this period, we come now to the questions, Do mucous patches, or condylomata of some authors, occur in the larynx? and, if they do, are they at all in proportion to those appearing elsewhere? Notwithstanding what may be said against their presence in this organ by Mons. Ferras,* whose views on this question I have cited to you, nearly all laryngoscopists testify to having seen them. Dr. Morell Mackenzie † says, in describing the syphilitic lesions of the larynx, "In secondary syphilis condylomata are the most characterised condition, but chronic hyperæmia (without the mucous tubercles) and superficial ulceration are often met with." When Türck ‡ speaks of the uneven vocal cords, looking as though they were superficially cauterised, he gives a very good description of certain mucous patches of the cords. Gerhardt and Roth I have quoted to you. Tobold, § in his article on Syphilitic Laryngitis, in referring to their observations and the difference of opinion that exists in reference to their views, says:—"As regards my opinion on this question, I lay but little stress upon the

* *Op. cit.*

† Reynolds's *System of Medicine*, vol. iii. London, 1871.

‡ *Op. cit.*

§ *Laryngoskopie und Kehlkopf-Krankheiten.* Berlin, 1874.

term 'broad condyloma.' I have, however, not unseldom seen neoplasms which did not at all resemble in form or appearance the various kinds of so-called laryngeal polypi, but which recalled at first sight the characteristic appearance of condylomata; so that I am inclined to retain for this kind of growth—at least, from a clinical aspect—the term 'condyloma-like growth.'" Further on he says:—"The so-called condylomata of the mucous membrane (*Schleimhaut Condylome*) and tertiary ulcers alone allow the true nature of the affection to be arrived at with greater certainty by means of the laryngoscope alone, without the aid of the history of the case." He then speaks of two forms of these condylomata—those which are flat, oval, grey elevations, and others which are more papular and pointed. Zeissl, in his work on Syphilis,* speaks of mucous papules of the larynx associated with catarrhs. Drs. Krishaber and Mauriac, of Paris, who have made a very careful study of the appearances of the larynx in the early period of syphilis, have written a most interesting pamphlet† on the subject, in which they give a detailed account of fourteen cases in which these lesions occurred. They describe them as small oval exfoliations of the mucous membrane, with either even or fringed borders, sometimes thickened or even vegetating; in other cases they appear as erosions,

* *Lehrbuch der Syphilis.* Stuttgart, 1875.

† *Des Laryngopathies pendant les premières phases de la Syphilis.* Paris, 1876.

surrounded by an opalescent zone. These observers found them on the vocal cords only.

My own observations, carried out with care over a period of five years, have thoroughly convinced me that this essentially secondary manifestation has its place in the larynx as elsewhere. More than that, I am sure that although these mucous patches are rare when compared with the numberless ones in the mouth and pharynx, still they do occur more often than is allowed by some authorities. From the large number of patients that I am thrown into contact with at this clinique, I have records of 170 cases of syphilis, extending over a period of between three and four years. Out of this number eighty-eight cases were suffering with secondary syphilis, and eighty-two with later manifestations, some of these belonging to what is called the period of transition, the greater number representing tertiary lesions. Out of the first eighty-eight cases to which I have already alluded in connexion with the catarrhal congestions, I met with mucous patches in twenty-four.* There were none among the eighty-two belonging to the other class. A fact like this latter one is, I think, sufficient to refute the theory that all superficial lesions of the larynx may occur indiscriminately at any stage of the disease.

I do not wish to offer this large average as a percentage of such cases. Were I to attempt to arrive at

* See Table, p. 51.

such an estimate I should have to collect all of the cases that I have seen in that time, and the number I speak of is far from representing the total. I have, however, recorded nearly all of the cases of laryngeal mucous patches that I have seen here. Trusting to my memory, I should say that those which I have not recorded would not amount to more than ten or twelve more cases. This may, perhaps, give you a better idea of the rarity of this lesion. I cannot help thinking that the different views respecting its frequent or rare occurrence are based upon too limited a number of cases. Gerhardt and Roth* call them frequent manifestations, because they found them eight times in fifty-four mixed cases; that is, in about 15 per cent. It is evident that this is too small a number upon which to base any such statistics. Dr. Mackenzie,† taking the same class of cases, found these lesions in two cases only, out of fifty-two patients whom he examined at the Lock Hospital in 1863—that is, in 4 per cent. Mons. Ferras‡ says, on his side, that he only saw one out of nearly one hundred cases. He does not say how long he had these cases under observation; and this, I wish to impress upon you, is an important consideration. They may be present at the first laryngoscopic examination, or you may, on the other hand, carry out these investigations on the same patient for many weeks or months before you see one. Out of my twenty-four cases,

* *Op. cit.* † *Op. cit.* ‡ *Op. cit.*

the lapse of time between infection and the date of their occurrence was as follows:—In the first month and a half, three cases; at two months, one case; at four months, four cases; at five months, one case; in the sixth month, four cases; one case at eight months; two at ten months; and two at the end of one year. In six cases the precise time after infection was not ascertained. The greater number, therefore, were met with within the first six months after infection. As regards the general manifestations that accompanied the laryngeal affection in these cases, mucous patches of the mouth and pharynx, or on the genital organs, were present in all of them; papular and papulo-squamous eruptions existed in seven, associated with a roseola in one. In one case which occurred at six weeks after infection the indurated cicatrix from the chancre was found. Enlarged glands with alopecia occurred in many of them. The mucous patches were upon the epiglottis in ten cases, and the vocal cords were also the seat of these lesions in ten cases. One I found upon the glosso-epiglottic fold. They were upon the arytænoids in four cases, twice upon the inter-arytænoid fold, and twice upon the ventricular bands or false cords. Those which most closely resemble the opalescent patches which are found upon the pillars of the fauces, or on the soft palate and tonsils, and which therefore may be called *opalescent patches* of the larynx, occur most frequently on the epiglottis and its folds, and on the arytænoids. They

affect more often the upper surface of the free border of the epiglottis. They are seen there as small oval or roundish elevations, rising gradually towards their centre, about the size of a pin's head or a shot, of a dull whitish-grey colour, not unlike the stain of nitrate of silver (which simile is often used in the description of such lesions). When situated upon the glosso-epiglottic or ary-epiglottic folds, they sometimes become somewhat lacerated, and assume the more decidedly ulcerated appearance of those on the frænum of the tongue. On the arytænoids there are two forms. When situated on the posterior surface they are still flat opalescent patches, but larger in size. Sometimes they are symmetrically arranged, and extend outwards from the inter-arytænoid fold towards the ary-epiglottic ligaments. None of these attain any degree of prominence unless they become irritated. I have seen them then get thickened and stand out as red papules with an ulcerated surface, like hypertrophied patches in other parts of the body. These true mucous *papules*, or condylomata, occur also, apparently without irritation, and from the very first, upon the anterior surface and upper border of the inter-arytænoid fold, upon the anterior surface of the arytænoids, and on the ventricular bands just in front of the arytænoids. When they occur in these situations, they appear as circumscribed elevations or papules, firm, greyish or reddish-grey. The summit of these papules is covered with a scanty

secretion like the others I have mentioned. This may be sometimes brushed off, leaving a denuded surface. On the vocal cords they occur as small opalescent bodies, more or less elevated, especially when on the edges, or arranged in lines when on the upper surface. These grey streaks stand out upon the reddened cord, giving to it a mottled look, and from their form they might be called *linear patches of the cords.* Another form that they have when in this situation is a circular erosion. The colour of this is red, and contrasts strongly with the whiter surface. Sometimes it is grey, with a red, excoriated-looking centre. They are all slightly above the level of the surrounding membrane. Sometimes they are prominent on their borders with a depressed centre.

You will see from this that they vary in their appearance according to their situations, and in this they resemble other mucous patches. Though differing from each other in certain respects, they have, however, one type in common, which is that in their primary stage they are all more or less papular. This would serve to distinguish them from superficial ulcers or erosions associated with ordinary catarrhs. When they ulcerate, the ulcers are more regular in outline. They are more distinctly circular and isolated than are those associated with ordinary catarrhal laryngitis, which have more the type of general erosion, with no well-marked outline. Take, for instance, an inflammation of the larynx of a non-specific

nature; the patient complaining of hoarseness, dryness of the throat, and a constant desire to clear it—not uncommon symptoms in such cases. If you examine his larynx you will probably find, together with general congestion, more or less thickening of the vocal cords, which will be bright red, raw-looking, with very likely a certain amount of tenacious, adherent mucus. The patches of mucus might mislead you, but only for a few minutes, for they could be brushed off or coughed up, leaving the cord as I have described it. The ulcerated mucous patch will either be a papule with an ulcerated summit, or an oval grey ulcer, which may sometimes be somewhat ragged on the edges. It never attains any depth, and, as a rule, yields readily to treatment. Moreover, comparatively recent non-specific congestions of the larynx do not ulcerate. When ulcers are met with in more chronic cases, they might be confounded with the later syphilitic ulcers, but not with an ulcerated mucous patch.

I will now read to you the clinical histories of a few cases which have come under my care here. These will illustrate these various types of laryngeal mucous patches, and point out to you the ordinary course of these affections, together with the treatment adopted.

Case 1.—*Opalescent mucous patches of the epiglottis, appearing six months and a half after infection.* J. B., aged twenty-nine, a clerk, applied at this clinique, October 31, 1874, for sore throat and hoarseness. He contracted

a chancre six months previously, followed some time afterwards by eruptions about the body, on the trunk and legs, and a sore throat. When he came to me the eruption was gone, but there were a few stains remaining about the legs. His palate and fauces were covered with mucous patches. These were oval, slightly raised above the surface, of a dull grey colour. The mucous membrane of the fauces was dusky red. On examining the larynx, I found increased redness of the epiglottis and arytænoids. The redness was more intense in some parts than in others, and tortuous vessels were seen running over the surface. The vocal cords were a little dull and pinkish, and their approximation was defective. This condition did not differ from one of ordinary catarrh of the larynx. He was put upon a mercurial treatment. Nearly a month afterwards (November 25) his voice was more husky and he complained of a slight cough. The laryngoscopic appearances were now quite different. The epiglottis was swollen, its edges were rounded instead of being sharp and crisp. Its surfaces, both upper and under, were deep red, and the redness was diffuse. No small vessels were seen on it. On the upper surface, quite near to the free edge, were three mucous patches, two on the right side and one in the centre. Each of these was oval, about the size of a large pin's head, slightly raised, opalescent-looking, covered with secretion, which, when brushed off, left a bleeding surface; in fact, they were the image in miniature of those

in the pharynx. The mercurial treatment was kept up, with occasional intermissions when the gums were tender. The patches on the epiglottis were touched with a solution of nitrate of silver. They did not disappear until January 15—viz., after nearly eight weeks' treatment. The peculiar redness and swelling of the epiglottis persisted, and it was not until April (three months later) that it resumed its normal appearance. There were constant crops of mucous patches of the tongue and fauces during all this time, but there never was any return of them in the larynx.

Case 2.—The following case was shown to me by my colleague, Dr. Semple :—E. S., aged twenty-four, a servant girl, came to his clinique on account of soreness of the throat and deafness of eleven weeks' duration. The morbid signs in the pharynx were diffuse dusky erythema and œdema of the soft palate and fauces. This surface was covered with opalescent mucous patches. The history that she gave was as follows :—She had been ill for a year. During this time she had constant eruptions on the vulva and its vicinity, together with rashes on the skin and a sore throat. She knew nothing of the primary lesion. The laryngoscopic appearances were these—swelling and diffuse deep redness of the epiglottis. There were three papules on its upper surface and free edge, oval, grey, and covered with secretion. Her voice was unaffected.

Case 3.—Mucous erosion of the vocal cord and mucous papule of the ventricular band. J. F., aged twenty-five, a painter, applied November 20, 1875. Three months before this he had had a chancre. For two months he had been suffering with a sore throat, sores in the mouth, and spots on the skin. When he came to me he complained of some pain in swallowing, but not enough to cause him much inconvenience. He sought relief on account of his voice, which was very much affected. He had been very hoarse for some weeks; he had no cough. On examining his mouth and throat I found mucous patches on the tip of the tongue and on the tonsils. The right tonsil was very much swollen. The laryngoscopic appearances were these: uniform deep redness of the epiglottis and ventricular bands; the vocal cords were reddish-white; on the right cord there was a small erosion, having the following character—a network of small vessels forming a bright red zone close to the vocal process, and in the centre of this a slightly raised, flat, grey, ulcerated spot; there was another mucous patch at the posterior part of the left ventricular band just above the cord, which was more raised, grey in colour, with no surrounding red zone. He had at the same time a squamous eruption on the chin, neck, and body, slight alopecia, and headache. The posterior cervical glands were enlarged. Mercury was administered internally, and nitrate of silver applied to the patches in the pharynx and larynx. The right tonsil was removed. The mercurial

treatment was kept up until January 1, with weekly applications of the nitrate of silver. At this date—that is, after six weeks' treatment—the mucous patches of the larynx were healed, and there remained only a slight redness of the vocal cords. There were still some patches on the sides of the tongue and on the tonsils. The squamous syphilide was gone. His headaches were cured and his voice was fairly good. The mercury was kept up for another fortnight, and then discontinued on account of slight ptyalism. Zinc sprays to his larynx were added to the treatment. The mercury was renewed again in the early part of February, and continued till the middle of March, when he was discharged cured of all lesions. He remained under treatment four months.

Case 4.—Annie J., aged twenty-six, a labourer's wife, applied September 18, 1875. The primary sore passed unnoticed. She had been ill for five months. She had suffered much with headache and night sweats, and had been losing her hair. She was very weak, and for six weeks her throat had been sore. She had also had a rash on her skin. At this visit she complained of pain in swallowing. Her voice was very husky. On looking at her throat I found mucous patches of the soft palate and tonsils. The laryngoscope showed increased redness of the vocal cords, with a mucous patch at the anterior third of the right one. This was about the size of a small canary seed, oval, slightly raised, greyish-red, with a denuded sur-

face. She was put upon a mercurial treatment, but the case was lost sight of after a fortnight.

Case 5.—Hypertrophic or papillary mucous patch on the front of the left arytænoid in the earliest stage of the disease. J. B., a servant-girl, aged twenty-three, applied February 17, 1875. She said she had never noticed any chancre, and did not know when she contracted the disease. She had had a sore throat for one month. She complained of headaches. Her hair was falling, and she suffered much from night-sweats. She had a squamous eruption on the chin, papular and papulo-squamous syphilides on the neck, chest, and back. There were the remains of a roseola on the sides; papular syphilides covering the thighs and legs, and mucous patches of the vulva. There was indolent enlargement of the inguinal glands, and also of the posterior cervical chain. She had mucous patches on the lips and on the right tonsil. The laryngoscope showed the following condition:—A general slight dusky redness of the whole larynx, excepting the vocal cords, which were quite white. This redness was not diffuse. It was especially marked on the epiglottis, on the ventricular bands, and over the arytænoids. There was swelling of the ventricular bands and of the arytænoids, especially the right one. At this examination the appearances in the larynx did not differ from those of an ordinary catarrh. If I had never seen this case again I might have added it to the list of those where,

the patient being covered, as it were, from head to foot with eruptions, the larynx presented no specific lesion to account for a husky voice. A week afterwards she came again, and then I found one small papillary mucous patch on the front of the left arytænoid—a true mucous papule. It was raised to the extent of about a line and a half above the surface. It was round in form, and surmounted by a grey superficial ulcerated surface. A mercurial treatment was instituted, and nitrate of silver applied locally. The girl ceased to attend almost immediately afterwards.

The following case is another illustration of the same type of mucous patch :—

Case 6.—*Mucous papule on the inter-arytænoid fold five months after infection.* J. L., aged twenty-three, a porter, applied to me here on April 28, 1877, on account of pain in swallowing of two months' standing. He said he had contracted a chancre three months previously, and one month after that he had an eruption on the skin. On looking at his throat, I found mucous patches of the soft palate and fauces. The larynx was not affected. The eruption on the skin was gone. Blue pill was ordered for him in small doses three times daily. Soon after this I lost sight of this case until May 16 (nearly three weeks), during which time he had been taking iodide of potassium in twelve-grain doses three times daily. I now found him much worse. He was in more pain, and very hoarse ; and on looking at his larynx I found deep redness of the

vocal cords. The blue pill was renewed, and after ten days it was changed for liquor hydrargyri perchloridi, a drachm and a half three times daily. The mucous patches of the pharynx were touched twice a week with dilute acid nitrate of mercury, one part in ten. By June 6 the pharyngeal lesions were fading, but the laryngitis persisted. At this date—five months after infection, and after nearly six weeks' treatment—I found a mucous papule on the right side of the inter-arytænoid fold on its anterior surface. This was almost the counterpart of the one in the case I have just read—a grey, distinctly raised, round papule, with a secreting surface. Mercurial frictions were substituted for the perchloride of mercury. At the end of a week his gums were tender, and the frictions were discontinued, to be renewed again on the 20th. At the end of the month the laryngeal mucous patch had disappeared, and he was much relieved in every way. The treatment was continued a short time longer, and then he ceased to attend. This case was under treatment for two months. There are a few noteworthy points in it—the development of the laryngeal affection during the treatment; the inefficacy of iodide of potassium, even in large doses, at this stage, compared with the rapid amendment under treatment by mercurial inunctions.

The next two cases illustrate the form taken by opalescent mucous patches when situated upon the posterior surface of the arytænoids.

Case 7.—M. D., aged forty-two, a carman, came to see me here on February 23, 1875, for a slight sore throat. His tonsils were covered with mucous patches, and there was dusky erythema of the fauces. He said he had never noticed any chancre, but that six weeks previously he had had night-sweats and an eruption on the trunk and upper extremities, for which he was treated by mercury at the Hospital for Diseases of the Skin, Blackfriars; and he said that he "took pills until his gums were sore." All that I found remaining of the eruption was a slight staining of the trunk and arms. The inguinal and posterior cervical glands were enlarged. The larynx was not affected. The treatment prescribed for him was blue pill in small and repeated doses. After a fortnight's treatment, on March 8 I examined his larynx, and found increased redness over the arytænoids and inter-arytænoid fold, and an opalescent mucous patch on the posterior surface of each arytænoid. These were very slightly raised, broad, covering the base of the arytænoids, and extending outwards over the ary-epiglottic folds on each side. Their colour was dull grey, and their arrangement was symmetrical. The patient had no pain in the larynx nor cough. The pills were continued, and a solution of sulphate of copper was applied to the larynx twice a week. The laryngeal and pharyngeal mucous patches were very persistent; after five weeks' treatment they were fading. Then he caught cold, and had an acute laryngeal attack, with œdema of

the arytænoids. His larynx was acutely inflamed, and he was in much pain and very hoarse. Vapour of benzoin was added to the treatment, and the acute symptoms subsided in a week. From this time he improved rapidly, and after undergoing one more month's treatment he was discharged cured.

The next case of this kind, which is still under treatment, I will show you this evening. In this the laryngeal symptoms commenced ten months after the date of the chancre.

Case 8.—Wm. G., aged twenty-five, a porter, applied here on May 4 last with the following symptoms:—Hoarseness to a very marked degree, and a slight sore throat. He said that in June, 1877, eleven months before the date of his presenting himself here, he had three chancres on the prepuce and glans penis, which were treated by topical remedies, and for which he also took medicine. These were followed, according to his statement, by no eruptions. In January last, six months after the chancres, he began to have a sore throat, from which he had been suffering nearly ever since, and for which he had been undergoing treatment. His hoarseness had existed for one month when he came to me. His actual condition when I examined him was as follows:—He had mucous patches on the anterior pillar of the fauces, on the right side. No eruptions on the skin. The inguinal glands were somewhat enlarged. He was thin and pale. The laryngoscopic appearances were as follows:—There

was deep diffuse redness of the whole mucous membrane. The vocal cords were swollen, especially the left one. They were deep red and excoriated, and their surface was covered with elongated, raised, grey papules. These were arranged in lines, and from this disposition the vocal cords had a mottled look. Their free edges were fringed with similar patches. These were very prominent on the left cord at the anterior commissure, and materially interfered with the approximation of the cords in phonation, so that during this act there was a wide gap left between them. The arytænoids were deep red and swollen, and on the posterior surface of each one there were symmetrical, broad, grey patches. Mercurial inunctions were ordered for him, and topical applications to the larynx of a solution of nitrate of silver; one drachm of the salt to an ounce of water. Under this treatment he has got very much better. The larynx, though still congested, is paler. When you examine him you will see that there is still some swelling of the arytænoids, especially on the right side, but the mucous patches that were on them have disappeared. There is a swollen prominent mucous papule at the posterior part of the right cord, opposite to the vocal process. This is deep red, with uneven edges, a flattened summit, and an excoriated secreting surface. This is the only papule remaining upon the vocal cords. His voice is clearer; he has no pain. Having no other history to aid us than the ulcers on the genital organs,

followed by a sore throat six months afterwards, the diagnosis in this case was based upon the unmistakable character of the pharyngeal mucous patches, and the similarity of the lesions in the larynx. If any verification of this were needed, we have it in the improvement under mercurial frictions in a very short space of time. As an interesting point to which I have referred this evening, I would call your attention to the comparatively slight subjective symptoms compared with the actual pathological condition of the larynx. Here there was intense congestion of the whole mucous membrane, deep redness and swelling, with an eruption on the vocal cords and on the arytænoids. Yet all that the man complained of was roughness of voice, and a sense of heat in the windpipe.

Case 9.—Another case which I will show you this evening is that of W. A., a labourer, aged twenty-seven, who applied to me at this hospital on September 22, 1877, suffering from a sore throat and extreme hoarseness. He said that he had had a chancre two years before. He was not aware of having had any other since that time. He had never noticed any general manifestations of syphilis until two months previous to his coming here, about one year and ten months after contracting the chancre spoken of by him. It is more than probable that he had had a second chancre which had escaped his notice, and that the date of infection was at a much later period than that mentioned by him. Be this as it may,

he first noticed eruptions on his skin, about the same time a sore throat, and very soon after these he was troubled with a cough and loss of voice. His actual condition on presenting himself at the clinique was as follows. He had a papular syphilide on the chest and back, and mucous patches of the pharynx. These were very symmetrically arranged, covering the velum, the tonsils, and the uvula. The mucous membrane upon which they were studded was of a dusky redness. The sides of his tongue were covered with them as well, and (what is rather rare to find) there were a good many over the base of the tongue as far back as the glosso-epiglottic folds. The laryngoscope showed diffuse redness of the laryngeal mucous membrane. There was swelling and a fleshy look of the epiglottis, and redness of the left vocal cord, which was spotted with small erosions. A mercurial treatment was instituted, and a solution of nitrate of silver applied to the patches. The lesions were very persistent, and did not yield until after four months' continued treatment. In this interval the inflammation of the larynx extended; mucous patches formed on the epiglottis, and the left vocal cord became thickened and ulcerated. The chief symptoms were tenderness over the thyroid, deep-seated pain in the throat, and a troublesome cough. After January he improved steadily, and by March he was very much relieved. Then he had another severe relapse. Mercurial frictions were substituted for blue pill, which

he had been taking, and he rapidly improved. The frictions were commenced on March 13, together with inhalations of vapour of benzoin. By the 30th, in a little more than a fortnight, the mucous patches on the epiglottis were gone. There remained still some swelling and deep redness of the vocal cords, with erosion of the left one. From this date he has been improving, and though he has had relapses, at various times, of mucous patches of the tongue, there has been no return of them in the larynx. You will find, this evening, congestion of the epiglottis and ventricular bands, with some thickening of the vocal cords and roughness of their surfaces. This is most marked at their posterior part.

With the description of these cases I will now conclude this evening's lecture, as I fear I have already trespassed very long on your patience. I must plead, as my excuse for entering upon detailed descriptions, the importance of these early indications of laryngeal syphilis. Though comparatively trivial in their symptoms, they may, if unrecognised and neglected, be the forerunners of grave disturbance, eventuating in serious alterations of structure, and leading not only to permanent impairment of voice, but also to painful and dangerous interference with respiration.

These later manifestations of syphilis in the larynx will be the subject of my next lecture.

DIFFUSE REDNESS.

Time from infection to laryngeal symptoms.	Situation.	Concomitant manifestations.
1. About four months.	Epiglottis rather puffy; rose-coloured; slight muddiness of vocal cords.	Papular and papulo-squamous syphilides; periosteal pains; enlarged cervical and inguinal glands; mucous patches of velum and tonsils.
2. Two months.	Ventricular bands swollen and dark red; arytænoids and inter-arytænoid fold the same.	Great enlargement and induration of inguinal glands; enlargement of posterior cervical glands; mucous patches of tongue, soft palate, and labial commissure.
3. Five weeks.	Epiglottis red and puffy; vocal cords the same, though in a slighter degree.	Remains of chancre; enlarged inguinal and posterior cervical glands; mucous patches on tonsils, tongue, and inner surface of cheeks.
4. Three weeks.	General congestion of larynx. Epiglottis swollen; peculiar flesh-like look, associated with a mucous patch on the centre of the free-edge.	Papulo-squamous eruption on the trunk and arms; papular on the face; alopecia; headaches; mucous patches of anus; enlarged inguinal glands.
5. About six months.	Epiglottis puffy, diffusely red, flesh-like, studded with small opaline mucous patches along free border.	Alopecia; night-sweats; headaches; mucous patches on tongue, fauces, and palate.

Time from infection to laryngeal symptoms.	Situation.	Concomitant manifestations.
6. Between eight and nine months.	Diffuse redness of epiglottis, with a puffy, fleshy appearance; vocal cords a little dingy.	Scaly patches on arms, with stains; enlarged inguinal and posterior cervical glands; opalescent mucous patches on fauces.
7. Uncertain.	Redness general; swelling and fleshy appearance of epiglottis, associated with mucous patches on free edge of epiglottis.	Papular eruption on the chest and back; mucous patches involving the tonsils, uvula, velum, and tongue, very symmetrically arranged, covering base of tongue as far as glosso-epiglottic fold.
8. Less than six months, probably, but not quite accurately made out.	Epiglottis swollen and deep red, peculiar fleshy look; mucous patches on free edge.	Remains of squamous eruption on arms; enlarged posterior cervical glands; alopecia; deafness; mucous patches on very swollen tonsils.
9. Ten months.	Deep, diffuse redness of whole of larynx. Arytænoid cartilages much swollen and deep red; grey mucous patches (papules) of cords.	Mucous patches of fauces.
10. Unknown.	Epiglottis and arytænoid cartilages dark red; mucous patches on epiglottis.	Had eruptions; mucous patches on tongue; symmetrical erythema of fauces; dusky redness of pharynx.
11. Stated five years.	General deep redness; epiglottis thickened and fleshy.	Mucous patches on palate. Had eruption five years ago, with sore throat.

Time from infection to laryngeal symptoms.	Situation.	Concomitant manifestations.
12. Three months.	Epiglottis puffy and of a diffuse red colour. Subsequently mucous patches on free edge at ten months.	Mucous patches on lips, tongue, and soft palate.
13. Six weeks.	General congestion of larynx ; ventricular bands dark red and swollen ; vocal cords mottled ; mucous patches on them.	Mucous patches on glans penis ; indurated cicatrix ; mucous patches on lips.
14. One year.	Epiglottis with mucous patch.	Mucous patches on soft palate.
15. Six months.	Deep, diffuse redness of epiglottis, associated with mucous patches.	Mucous patches on fauces and palate ; stains on legs from previous eruptions.
16. Three months.	Epiglottis puffy ; border rounded. Vocal cords dingy ; dull red in colour.	Mucous patches on pharynx and tonsils ; crescentic patches on velum and uvula ; headaches ; enlarged glands ; alopecia.
17. Seven months.	General congestion ; diffuse redness and swelling of epiglottis.	Mucous patches on tonsils and sides of tongue.
18. Three months.	Epiglottis, vocal cords, and arytænoid cartilages.	Mucous patches on tongue and arches of palate.
19. Four months.	General congestion of epiglottis with swelling.	Mucous patches on pharynx, arches of palate, and tongue.
20. Six or seven months.	General congestion, more especially of epiglottis; diffuse rosy redness, puffy and fleshy.	Stains on forearms from previous eruptions ; mucous patches on soft palate, fauces, and tongue.
21. Unknown.	Epiglottis bright red, swollen, and fleshy.	Mucous patches on tonsils and fauces ; papulo - squamous eruptions ; enlarged cervical glands.

Time from infection to laryngeal symptoms.	Situation.	Concomitant manifestations.
22. Six weeks (?). Seen three months after infection.	Deep redness of epiglottis and ventricular bands, associated with mucous patches on vocal cords and ventricular bands.	Squamous syphilide on chin, neck, and trunk; slight alopecia; enlarged cervical glands; mucous patches on tongue and tonsils.
23. Unknown.	Redness diffuse; rosy on ventricular bands.	Mucous patches on pillars of fauces and tonsils.
24. Unknown.	General congestion; deep, diffuse redness of epiglottis, ventricular bands, vocal cords, and arytænoid cartilages.	Papulo-squamous eruption on face and arms.
25. Four months.	General congestion, associated with mucous patches on glosso-epiglottic fold and vocal cords.	Mucous patches on fauces and tongue.
26. Eighteen months.	Diffuse redness, with puffiness of epiglottis and left ventricular band.	Mucous patches on tonsils: has had eruptions.

MUCOUS PATCHES.

Time from infection to laryngeal manifestation.	Situation.	Concomitant manifestations.
1. Ten months.	Vocal cords and arytænoids.	No eruptions; enlarged inguinal glands; mucous patches of fauces.
2. Not known.	Free border of epiglottis.	Mucous patches of tongue.
3. Two months.	Anterior surface of arytænoid.	Mucous patches on the vulva; roseola, papular, squamous, and papulo-squamous eruptions; mucous patches of the pharynx.
4. Ten months.	Raised mucous patch in centre of the free border of the epiglottis.	Mucous patches of the lips, tongue, and palate.
5. One year.	Free edge of epiglottis.	Mucous patches of palate and fauces.
6. Six months.	Right vocal cord.	Mucous patches of soft palate.
7. Eight and a half months.	Free border of epiglottis.	Mucous patches of tongue and fauces.
8. Six weeks.	Vocal cords.	Induration from primary sore; mucous patches on glans penis; enlarged glands; mucous patches on the lips.
9. Six and a half months.	Vocal cords.	Mucous patches of lips and tonsils; ulcer of septum nasi.
10. Six months.	Anterior surface of inter-arytænoid fold.	Mucous patches of soft palate and fauces.
11. Between four and five months.	Left vocal cord in front of the arytænoid.	Mucous patches of velum and arches and lower lip.
12. One year.	Free margin of epiglottis.	Mucous patches of tongue, tonsils, and lips.
13. Four months.	Vocal cords.	Mucous patches of the soft palate and tonsils. Iritis.
14. One month.	Epiglottis.	Papulo-squamous eruption on the arms, back, and chest; alopecia; enlarged inguinal glands; mucous patches of the lips and anus.

Time from infection to laryngeal manifestation.	Situation.	Concomitant manifestations.
15. About six months.	Free edge of epiglottis.	Mucous patches of the tongue, pillars of the fauces, and soft palate.
16. Unknown.	Vocal cords.	Mucous patches on the tonsils.
17. Unknown.	Epiglottis; vocal cords.	Mucous patches on the tonsils, velum, uvula, and tongue as far back as glosso-epiglottic folds; papular syphilide on the chest and back.
18. Unknown.	Vocal cords.	Cicatricial induration on penis; mucous patches of the tongue, tonsils, and palate; papular syphilide on the chin, neck, and lower part of the face; enlarged inguinal glands.
19. Six weeks.	Vocal cords and ventricular bands.	Squamous syphilide on the chin, neck, and trunk; alopecia; enlarged nuchal glands; mucous patches of the tongue and tonsils.
20. Between three and four months.	Arytænoids and inter-arytænoid fold.	Mucous patches of the tonsils; stains on the trunk and arms; enlarged post-cervical and inguinal glands.
21. Unknown.	Centre of left ventricular band.	Mucous patches of nostrils, and on the tongue.
22. Unknown.	Free edge of epiglottis.	Mucous patches of palate, fauces, and tongue; stains on the legs
23. Four months.	Glosso-epiglottic fold and vocal cords.	Mucous patches of the palate; ulcerated fissure on the dorsum of the tongue.
24. Unknown.	Epiglottis — free border.	Mucous patches of tonsils; enlarged post-cervical glands; alopecia; squamous syphilide on the arms.

LECTURE II.

Relapsing Ulcerative Laryngitis of the Earlier and Intermediate Periods.

Gentlemen,—The affection of the larynx which I will next describe to you is (4) one of more chronic inflammation, in which the signs are *diffuse redness, thickening,* and *ragged ulceration,* especially of the vocal cords. This occupies an intermediate line between the early and later lesions of syphilis in the larynx. It may occur close in the wake of the former, and be the immediate outcome of the catarrhs and mucous patches of the larynx I have described to you in my last lecture; or it may show itself three or four or more years after the primary sore.

In the first instance there would be still remaining, as accompanying manifestations, some more or less general eruption on the skin, with mucous patches of the mouth; while in the other there may be tubercular eruptions limited to the arms or legs, periosteal inflammations, or scars from ulcerating syphilides, with ulcers of the fauces and chronic glossitis. This condition of the larynx is developed in somewhat the following way. A patient will

have a laryngeal catarrh in the first few months of the disease. Mucous patches of the cords appear and ulcerate. Under treatment they cicatrise imperfectly. Several relapses occur. The cords become more deeply reddened. They lose their flat appearance; they get rounded and roughened on their surface as though worm-eaten. The ulcers again break down; their edges swell, become thickened, and are bordered by vegetations. The ventricular bands and inter-arytænoid fold participate in this inflammation. They are thickened, their surfaces are roughened, and warty growths often spring up and form spur-like projections over the vocal cords.

This is an accurate description of the growth and development of this affection at an early stage. Again, the case will be this. A woman, married ten years before, subsequently has sores on the vulva, and rashes on the body. Her first child is born fifteen months after marriage, has rashes on its body, and dies at three months. The second one, born a year after, dwindles away and dies at three weeks. Fifteen months after this she has twins, and they die at six weeks. The mother now has a bad sore throat, between three and four years after the primary lesion. Subsequently this woman has two miscarriages. All this time she is ailing, but she has no return of eruptions, and her throat is only occasionally sore. Nothing more occurs until over four years have passed. Then she has headaches, and her throat becomes

bad again. She is treated for it and gets better, but never quite well, and then her breathing becomes embarrassed.

This is not an imaginary case. I have only been relating to you the history of a woman whom I showed to you last Wednesday evening, with thickened ulcerated cords like those I have just described to you in the other case, as following upon the mucous patches of the cords. In that one this condition of the larynx dated eight months after infection. In this woman's case ten years had elapsed since infection when I first saw her. She presented herself here with hoarseness and dyspnœa four years ago (in July, 1874), and told me her story as I have told it to you. She had superficial ulceration of the tongue, and deep redness of the larynx, with redness and picked-out ulcers of the vocal cords, and thickening of the inter-arytænoid fold. She was treated at first by sedative inhalations alone; but, getting no better, she was put upon iodide of potassium. This did not relieve her, and by the end of October I took her into the hospital, as I thought she would require tracheotomy. There was inflammation and swelling of the ventricular bands and inter-arytænoid fold. The vocal cords were highly inflamed, deep red, and ulcerated. They were thickened, and their movements in abduction were impaired, so that the chink of the glottis was not more than half the usual size in inspiration. There was no œdema. Besides the dyspnœa she was almost aphonic. She had a bad cough and pain

in the larynx. She recovered rapidly under mercury and iodide of potassium, and was discharged cured in a month. She attended subsequently for relapses. She had been away one year, and only returned on account of another relapse of a fortnight's standing when you saw her last week.

Here is another case of this form of syphilitic laryngitis which presented itself here four years after infection :—

L. H., aged thirty-three, unmarried, applied at my clinique on April 22, 1876, suffering from intense hoarseness, stridor on exertion, with paroxysms of dyspnœa, and slight cough with mucous expectoration. She had a chancre four years previously, followed by eruptions on the body and head, with headaches, loss of hair, and night-sweats. For these symptoms she was treated at the Lock Hospital, and took mercury. Ever since this time she had been troubled with ulcers in the mouth and throat. She was the mother of two children—the eldest one, aged seven, was healthy; the youngest, aged one year, had a sore mouth a fortnight after its birth, and eruptions about the buttocks. Her condition on presenting herself at the clinique was as follows :—No eruptions, excepting a prurigo on the back and shoulders. On the tip of the left shoulder there were three depressed circular white cicatrices from an ulcerating syphilide she had had two years before. She had ulcers on the tongue and fauces. The mucous membrane of the larynx was dusky red, dry,

and swollen, especially over the arytænoids and inter-arytænoid fold. The vocal cords were deep red, thickened, and ulcerated at the posterior part; their abduction was impaired. Under a mercurial treatment, together with inhalations of vapor benzoini, she soon got better. The swelling and redness of the laryngeal mucous membrane subsided, and the movements of the vocal cords were freer. By May 13 her breathing was comfortable, and she was free from pain, though still very hoarse. The treatment was kept up throughout the summer, with occasional intermissions of the mercury. The ulcers in the mouth and pharynx were healed after three months' treatment; the laryngeal inflammation was, however, very intractable. After nearly four months' treatment, during which the voice had got much better, the patient had a relapse, and by the middle of August she was again suffering with great hoarseness and some distress in breathing. The laryngoscope showed thickening and deep redness of the arytænoids and inter-arytænoid fold. Both vocal cords were thickened: the right one was red and ragged from loss of substance, and it had an irregular ulcer with sharply-cut edges on its anterior third; the left one was roughened, mottled red and white, but not ulcerated. A solution of sulphate of copper (fifteen grains to an ounce of water) was applied to the larynx, and these applications were renewed every third day. Inhalations of vapor pini sylvestris, morning and night, were sub-

stituted for the vapor benzoini; the treatment by blue-pill was continued. By the middle of September she was somewhat better, but her voice was still very rough. The right vocal cord was much hypertrophied, red, and ulcerated. The blue-pill was discontinued, and twelve grains of iodide of potassium combined with one drachm of liquor hydrargyri perchloridi was ordered to be taken three times daily, with the vapour and local applications as before. From this date she made rapid progress. By October 7 the appearance of the larynx was in every way improved; the inflammation was reduced, and the ulceration of the right vocal cord was healed. There remained still some redness, thickening, and roughness of both vocal cords. In one month more her voice was fairly good; the vocal cords were nearly white. The patient continued the treatment until the end of the month, when she was discharged cured, after nearly seven months' treatment. For five months the treatment was by mercury alone, during which time the patient made slow progress, and was subject to constant relapses. She was then subjected to a mixed treatment of biniodide of mercury and iodide of potassium for two months, by means of which she progressed rapidly to a cure.*

* This patient came to see me in March, 1879. She was suffering from an ordinary catarrh following upon a cold she had caught. There were a few bronchial râles to be heard in the chest. The laryngoscope showed only a trifling congestion—a little dulness—of the vocal cords. The right vocal cord remained slightly thickened.

Now, if you have followed me through these cases, you will see that they are all identical in their main features, and you will notice also that they differ from the class of cases I last lectured upon to you. The ulcers are deeper: they are ragged, with thickened edges; they are small, irregular in shape, and often multiple; and the vocal cords upon which they are situated look as though pieces had been torn out of them. Still, they are comparatively superficial, and are not accompanied by perichondritis and necrosis of the cartilages, as are the burrowing ulcers of a later period. There is also more thickening of tissue, and this growth is not only diffused, leading to hypertrophy of the ventricular bands, vocal cords, and other parts of the larynx, but it also manifests itself in a more limited way in the production of warts and nodules, as you have seen. These latter do not differ in appearance from those arising from other causes, and there is nothing specially indicative of syphilis in their presence. They are found in laryngeal phthisis, although may be not so frequently, as there the destructive process is more rapid. Some authorities consider the presence of warty growths in phthisical ulcerations of the larynx to point to a possible association of syphilis in such cases. I have, however, met with them often under such circumstances where there was neither a history of syphilis nor

Their movements were perfect. The patient had never had any return of her former trouble since November, 1876, and she presented no syphilitic lesions anywhere at this visit.

any manifestations of such a taint. Moreover, they are met with in ordinary chronic inflammations of the larynx.

Owing to these more serious changes in the larynx, the functions of this organ are more impaired, and, as might be expected, the symptoms from which the patients suffer are graver. The hoarseness is often extreme, and it is not unfrequently associated with some difficulty of breathing, together with troublesome cough and pain in the larynx. Every now and then acute attacks occur, accompanied by swelling of the tissues, producing great difficulty in breathing; but this is exceptional, and even the most threatening cases frequently escape tracheotomy. Besides the greater degree of chronicity of this affection, relapses are more common, and these relapses are for some time similar in every way to the preceding attacks. In this way you will get cases of this *relapsing ulcerative laryngitis* of the secondary and intermediate periods extending over several months, and sometimes over a year or two, with slow changes in the larynx. If the affection be arrested in time, the ulcers cicatrise, leaving a smooth edge to the cords, the thickening is absorbed, the congestion passes off, and the patient's voice is restored. On the other hand, should the disease be allowed to progress, large portions of the cords are lost, their movements are irremediably impaired, and permanent hoarseness is the result. Still further, they may be the forerunners of the more deeply destructive alterations of the larynx belonging to the tertiary period.

I will now put before you, in as few words as I can, the salient points of distinction between this form of laryngitis and those others with which it is most likely to be confounded.

The differential diagnosis between this affection and the earliest inflammations of the larynx in syphilis, though not of so much importance, is as follows:—The colour of the mucous membrane is not so deep in the catarrhs of the earlier period. In them there may be the redness of ordinary congestion, frequently diffuse, but varying in intensity. In these others the redness is always dusky. In the first class of cases there is often general puffiness, but little or no thickening. In the chronic recurrent laryngitis of this period there is always thickening, although this thickening is not so great as in the tertiary affections. The earlier congestions of the larynx, when associated with mucous patches, present papules, with superficial flat ulcerations, not uncommonly seated on the epiglottis, as well as in the interior of the larynx. When we examine these other cases, we find excavated ulcers with very scanty secretion, distinct and separate like the former, but not resting upon a papular base; and instead of papules, warty growths are frequently seen. The ulcers in these cases are more often limited to the vocal cords. Chronic glandular laryngitis, although it is associated with deep redness and thickening of the mucous membrane, may be distinguished by the enlarged, prominent papillæ on the surface; sometimes there

are small follicular abscesses containing muco-pus or pus, and presenting themselves as yellowish-red or yellow eminences. These, at times, are converted into follicular ulcerations. These ulcers, however, are quite superficial, and never lead to the destructive changes that are found in syphilis. Moreover, this condition of the larynx is almost invariably associated with a similar affection of the pharynx. It will be, however, a far more important question for you to solve, whether the case be one of phthisis or syphilis. As a rule, you will have signs of lung disease in the former cases associated with the laryngitis, but they will not always come to your aid. In the tertiary affections, which are more apt to be confounded with phthisical laryngitis by those who have not much experience, you may have signs of softening and cavity of the lung due to syphilis.

I had a very interesting case of this kind under my care not long since in a woman aged fifty. She had deep burrowing ulceration of the larynx, associated with cough, copious expectoration tinged with blood, night sweats, and rapid emaciation. She was in a wretched condition when she came here: she was feeble and haggard, and looked like a woman of sixty or more. The appearance of her larynx was characteristic of specific disease; and she had a deep ulcer of the forehead to confirm this diagnosis. At the upper portion of the right lung there was dulness, with coarse râles over a limited area, and blowing respiration. Under iodide of potassium and tonics she at once

began to improve, and in two months' time the ulcers of the larynx had healed, the disease in the lung was arrested, she had gained flesh, and was discharged strong and well.

In that form of phthisical laryngitis which has to be distinguished from the syphilitic affection under consideration, the lesions are more superficial than those which simulate tertiary disease; and I have only referred to this case to impress upon you that signs of disease in the lung accompanying laryngitis do not *necessarily* point to tubercle.

In tubercular laryngitis the congestion in the earlier stages is more limited, so that, instead of the dusky redness of syphilis, you will find redness and swelling, and especially œdema, of the arytænoids, or redness of the vocal cords, while there will be anæmia amounting often to extreme pallor in other parts. The mucous membrane, when ulcerated, instead of being dry, is bathed with purulent mucus. In both affections there is thickening, but in phthisis there is a greater tendency to softening, and the ulceration is more general. It often commences in the ventricular bands. It is formed of many small ulcers running into one another and creeping over the surface. These ulcers secrete freely, and are paler in colour than the syphilitic ones. Their course is more rapid, and progressive destruction rather than chronicity serves also to separate them from the syphilitic ulcers of the larynx which we are talking about this evening. I have a case here of tubercular laryngitis, which I will show you. It

is that of a man aged twenty-two, who has been ill for one year. He is pale and emaciated. He has a constant hacking cough. His voice is *whispering*, and (if I may so express myself) it is has a *moist* sound, as though the cords were vibrating in the midst of mucus, and the air were passing through the same medium. This sound is very different from the rasping, rough voice of the syphilitic cases I will also show you. I do not wish to lay too much stress upon this difference of voice as a diagnostic sign, but I have noticed it too often to entirely ignore the fact that in many of these cases of phthisis the voice-sound is weaker than in the syphilitic ones we are treating of, although the amount of ulceration of the cords may be equal in both. This loss of vocal power is evidently due, in a measure, to the implication of the lung in the disease ; while the other peculiar quality of the voice arises from the greater amount of secretion in the air-passages. In examining his mouth and throat you will find no ulcerations. There is a slight congestion of the posterior wall of the pharynx, but you will be struck by the excessively blanched condition of the mucous membrane of the palate and fauces. This same pallor extends to the larynx. There you will see great enlargement of both arytænoids from œdema. You will find, as I have told you it was not uncommon to find in such cases, a growth projecting from the anterior surface of the inter-arytænoid fold and interfering materially with the approximation of the vocal

cords. On either side of it there is a spreading ulcer covered with thin purulent secretion. The ventricular bands are roughened and ulcerated. The ulceration is superficial and creeping. The cords are red, and their edges serrated. This patient is very weak, and has profuse night-sweats; his temperature is 102°. At the apex of the right lung he has harsh breathing with crepitation, and moist bubbling sounds at the apex of the left lung. There is marked dulness over both sides.

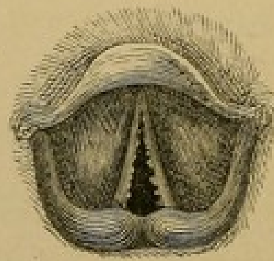
Now contrast this case with the next one that I show you. This man, aged twenty-six, who is a turner by trade, has been under my observation and care for two years. He applied here for the first time on June 24, 1876, on account of extreme hoarseness, from which he had been suffering for three months. He had contracted syphilis twelve months previously. He had had loss of hair, eruptions over the body, and a bad sore throat. When he came here there was general diffuse dusky redness of his larynx. The vocal cords were almost as red as the ventricular bands. Their edges were jagged with ulceration. This was most especially marked on the left vocal cord, amounting to a considerable loss of substance. When the cords approached the median line in phonation, there was a wide gap left between them. He was put upon a mixed treatment of mercury and iodide of potassium, and after one month's treatment the ulcers of the cords were healing and his voice was much improved. The treatment was

continued for another month, and he did well all through the summer. In September he caught cold, and had an acute attack in consequence. His voice was almost lost when he came to the hospital, and he complained of a good deal of pain in the larynx. There was so much swelling of the ventricular bands that they overlapped the vocal cords, and these were seen to be deep red and ulcerated whenever they emerged from beneath the bands. The iodo-mercurial treatment was renewed. The improvement was very gradual. By the middle of the month there were two ragged ulcers on the ventricular bands. By the end of October all the ulcers were healed. The vocal cords were still very rough, red, and dry, and there were two nodules at the posterior part of the left cord. The inter-arytænoid fold was thickened, and its inner surface was roughened from the development of a warty growth. His voice was rough, but quite distinct, and he had no pain. He continued to improve. The redness of the larynx diminished. The vocal cords, though still somewhat congested, were much paler and smooth, and the vegetations of the inter-arytænoid fold were gone by the beginning of the year, when he ceased to attend. His voice was restored. He had a relapse about one year afterwards, and came here again on January 26 last, with laryngitis of a few weeks' duration. He was again hoarse, his throat was sore, and his larynx was tender. There was deep diffuse redness of the mucous membrane, with thickening of the

ventricular bands and vocal cords, which were again superficially ulcerated on their edges. He was put once more upon a mercurial treatment. After three weeks the ulcers of the cords were healing. He continued to take mercury until the end of March (for two months); from then he took iron and quassia.

In May last, as there was a relapse of ulceration of the larynx, he commenced to take mercury and iodide of potassium again. All this time he has had various astringent applications to the larynx. Sulphate of copper, fifteen grains to the ounce of water, was that from which he derived most benefit for a time. Latterly, I have been applying a solution of nitrate of silver (one drachm of the salt to the ounce of water) once a week. When I began the use of this topical remedy in this case in May last, there was redness, thickening, and ulceration of the left vocal cord at its posterior part. The cords approximated very badly and the man was extremely hoarse. In one week the cords were whiter and smoother, and he has gone on improving. When you examine him now you will see some redness of the vocal cords, and a certain amount of thickening. They are also uneven still on their edges, but the ulcers are healed. This case has been a very tedious one—more so than you would find in a person under different circumstances; but, with this exception, I do not think I could bring before you a better case as an illustration of the course of this form of

laryngitis. He has continued his vocation at Woolwich all the time, and has come up here through all weathers. Latterly, I have induced him to become an in-patient, and I hope to discharge him cured before many weeks. When he entered the hospital he was put upon mercurial frictions for ten days. Now he is taking iron and cod-liver oil, and he is using a solution of chloride of zinc in spray to his larynx. As regards his general health, he complains of nothing, and you see he has not the look of a sick man. The drawing which I have here is a very good



representation of the ulcerated condition of his larynx before he entered the hospital.

In relating to you the clinical histories of the cases I have brought before you, I have noted the treatment in each individual one. I will now sum up these notes in a few general remarks on the treatment of the affections I have so far described. These cases require both constitutional and local treatment. None of them can be relieved without the former, while local applications are not only very important, but they are often indispens-

able means to complete the cure. The drug which ranks above all others in the earlier affections is mercury. It controls and removes symptoms more speedily and effectually than any other remedy; and it is, I think, the only reliable one to use where our object is to arrest the disease as soon as possible. I feel sure that many cases of syphilis may even escape laryngeal complications through its use; certainly when such manifestations show themselves no time should be lost in having recourse to this remedy. So far as concerns the form of the medicine you may select, or the particular mode of its administration, you will be guided by the peculiar features of the case. The manifestations of syphilis in the larynx do not call for any special preparations of mercury; still, you will have to vary the treatment in this respect from time to time, owing to a tolerance becoming established, or on account of urgent symptoms arising, or because of idiosyncrasies of the patient. The same rules that would be your guide in the general management of syphilis will direct you here. Remember, however, that in treating syphilis of the larynx you should more than ever try to avoid salivation, on account of the irritation to the throat it produces. Therefore, stop the mercury the moment your patient complains of tenderness of the gums, or you yourself detect the commencement of such an accident. When this stomatitis has passed off, begin the mercury again, but in smaller doses at first; then gradually increase the

dose until you reach the same strength as before, and so keep the treatment up until the lesions have disappeared. Push the remedy a little further, and, after this, rest from mercury for a few weeks. Commence with it again (in smaller doses should there be no relapse), and continue these for a month or six weeks; then desist from mercurial treatment until further symptoms may arise.

In the early laryngeal catarrhs, with or without mucous patches, small doses of blue-pill, one or two grains combined with opium, three times daily, will give you very good results. This is a mild form of mercury; and in the out-patient department here I prefer it to any other because of this quality. Patients may take it without becoming rapidly salivated; and, if you do not see them every few days, this is a matter to be considered. You may give the protoiodide of mercury in more stubborn cases of ulcerated patches of the larynx, where there is a tendency to thickening, especially if there be much glandular enlargement about the patient, associated with papular and squamous eruptions. Three-quarters of a grain may be administered morning and night, combined with two grains of pilula saponis composita, or a quarter of a grain of extract of opium. Given in this way, this preparation may be taken for some time without much fear of producing stomatitis. Owing to the liability of this complication arising from its use, and with the view of obtaining a local curative

action, Dr. Créquy, of Paris, proposed some few years since to combine the protoiodide of mercury with chlorate of potash, in the form of a pastille or lozenge. His formula was—protoiodide of mercury, and iodide of potassium, of each three-quarters of a grain, and chlorate of potash three grains and a half, made into a mass with sugar and gum, and flavoured with oil of peppermint. This lozenge was allowed to dissolve in the mouth, morning and night, and by this means stomatitis was avoided, and the mucous patches of the mouth were cured sometimes in a fortnight. These lozenges might be well adapted to the treatment of the syphilitic lesions of the larynx I have brought before your notice, but their disagreeable taste makes them objectionable to patients.* Bichloride of mercury acts also very beneficially. One drachm of the liquor hydrargyri perchloridi, given three times daily, sometimes arrests laryngeal inflammation very speedily in these cases. It is apt, however, to produce gastric irritation and diarrhœa, and cannot be kept up for any length of time. When combined with iodide of potassium you will find no better remedy in those affections of the larynx associated with ulceration and thickening about which I have spoken to you to-night. I read you a case this evening where all traces of a most

* At my suggestion, Messrs. Wyeth & Bros., of Philadelphia, U.S.A., have made a very elegant and somewhat more palatable preparation of these lozenges in the shape of compressed tablets.

persistent affection of this nature were removed after two months of such a treatment, when other preparations of mercury had failed to accomplish a cure. In these deeper lesions, as in some of those belonging to the tertiary period, the combined treatment by mercury and iodide of potassium is the quickest and most certain.

Mercurial frictions I can recommend to you very highly as having given me the best results; but this method has the disadvantage of being somewhat troublesome, and patients look upon it as an unpleasant remedy. For this reason you can often resort to it only when the effects of other treatment flag, or to meet emergencies. It has the advantage of not causing gastric irritation or speedy salivation; and it frequently produces all the curative effects of mercury more quickly and surely than when this drug is taken into the stomach. Patients will often keep up the use of these frictions for weeks with no irritation of the mouth, especially if you direct them to use, in the meanwhile, an astringent mouth-wash. A teaspoonful of alum to a tumblerful of water is as good as any; much better than chlorate of potash. In this way the lesions of the larynx will entirely disappear, sometimes after twenty or thirty frictions. The calomel vapour bath of Mr. Lee is a nicer way of applying mercury to the surface of the body than the method by inunction, but its effects are not always so rapidly realised, so far as my experience goes. It is very well adapted to certain cases of chronic syphilitic laryngitis

where it is desirable to keep up the use of mercury for a long while. Inhalation of the vapour, with the view of obtaining a local effect on the larynx, is not advisable owing to the irritation to the air-passages it is liable to produce if this method be at ali constantly carried out. The administration of mercury by inhalation has been tried, but this mode has not been followed by as good results as were looked for, owing to the accident I speak of and the uncertainty in regulating the dose. Many experiments of this kind were made at the St. Louis Hospital in Paris, by Dr. Panas. In some cases the inhalations were administered by special apparatus; in others, frictions of mercurial ointment were made over the upper part of the chest before the patient went to bed, in order that he might breathe in during the night any vapour arising from the mercury. The mercury was administered in this way rather as a means of obtaining more ready absorption than as a topical agent.

Hypodermic injections of corrosive sublimate, ever since their prominent introduction to the notice of the profession by Lewin, of Berlin, in 1865, have been employed against almost every manifestation of syphilis. Lewin obtained some remarkable results, causing the disappearance of secondary symptoms in from fifteen to twenty days; and this method was offered as the most speedy and an almost infallible remedy for eradicating the disease. When, however, all the hopes that it raised were not realised it fell

into some disfavour; so, like all other remedies, it had strong supporters and determined opponents, and its merits were hotly contested upon the Continent, where it was more extensively tried. Lewin's solution contained one-tenth of a grain of sublimate for each injection, which strength was found liable to produce abscesses. Liégeois, of the Midi Hospital in Paris, who tried this method very fully, reduced the quantity in each injection to one-thirtieth of a grain, and he obtained such results from these small doses that he became the most zealous supporter of hypodermic injections. He made his injections morning and evening, and these were followed by very slight irritation, while abscesses were very rare complications. From his experiments, Dr. Liégeois estimated that from 100 to 120 injections would cure patients of their lesions.

In this country Mr. Berkeley Hill introduced hypodermic injections of sublimate into the treatment of syphilis, and they have been used with success by many since. Dr. Walker, of Peterborough, published some years ago an account of fourteen cases of secondary syphilis very successfully treated in this way. But the difficulty of carrying out a plan of treatment which requires the personal supervision of the medical attendant, sometimes twice daily, makes this method impracticable for ordinary cases, not to speak of the objection of patients to the pain and annoyance of this proceeding. From its rapid action it is specially suited to certain grave affections, and among

them laryngitis threatening suffocation. Fortunately, imminent symptoms of dyspnœa are more rare complications in the earliest syphilitic affections of the larynx, as I have pointed out to you. Looking to my own practice, I have not met with any cases at that stage that called for very active measures for relief. Among the class of cases which have been the subject of my lecture this evening, I have, however, met with a few where difficulty of breathing has been not only a distressing symptom, but even involved danger to the patient. By perfect rest in bed, however, and under the administration of biniodide of mercury and iodide of potassium, they have been cured. The following was a case of this kind :—

M. F., aged forty-eight, a lockmaker's wife, applied here on April 5, 1876. Her breathing was stridulous and very much embarrassed. She had a distressing cough, which added to her trouble and brought on most painful paroxysms of suffocation. Her voice was reduced to a harsh whisper. Her pharynx was congested, but presented no special signs. The laryngeal appearances were these :—Swelling of the ventricular bands and inter-arytænoid fold, the former meeting in the central line for fully one-half of their length anteriorly, hiding the vocal cords. The interior of the larynx was greatly diminished in size, funnel-shaped, with a small triangular opening at the posterior part. At the base of this triangle there was a projection of thickened membrane from the inter-arytænoid fold, covering the

rima glottidis behind. The whole mucous membrane was deep dusky red. No history of primary or secondary lesions could be made out clearly. She said that she had had painful swellings on her collar-bones four years previously, and, latterly, much rheumatic pain in her legs at night. Four months previous to her coming to me (in December) she had a bad sore throat. For the last two months her breathing had been affected; she had lately taken cold, and this had brought her to the condition she was in. I ordered her to go at once to bed, to inhale vapour of benzoin every four hours, and to take, at the same intervals, half a scruple of iodide of potassium, with one drachm of liquor hydrargyri perchloridi in water. She felt decidedly relieved after two or three days. In one week the swelling in the larynx was much reduced, the cough was better, and her breathing was greatly improved. There was a marked gain upon this after another week's treatment; and at the end of the third week the glottis was fairly open, and she was breathing very comfortably. The left vocal cord was plainly visible. It was thickened, roughened, and dusky red. In colour it could scarcely be distinguished from the ventricular band. The right cord was still hidden by the ventricular band of that side, excepting a small portion close to its posterior insertion, which was destroyed to a considerable extent by ulceration. From this date she steadily improved; neither her breathing nor cough

distressed her, but her voice remained impaired. She continued under treatment until the autumn. The mercury was discontinued at intervals, and from August iodide of potassium alone was administered in ten-grain doses three times daily, together with the use of a spray of chloride of zinc to the larynx, until early in November. At this date there was very little thickening remaining in the larynx. The left vocal cord was smooth and white. There was redness and immobility of the right cord. Her voice was permanently destroyed. I will show her to you this evening.

It may be thought that I am not justified in putting down this case as a syphilitic one, owing to the absence of history and scarcity of other signs of the disease. The

appearances of the larynx, however, which are exceedingly well shown in these drawings, were so characteristic that I had no doubt in my mind of its nature; and the prompt effect of the treatment, I cannot but think, confirmed the diagnosis.

This patient was not treated in the wards of the hospital, so that she had no special nursing, but merely

kept her bed at home, and yet this severe laryngitis was under control after two days' treatment.

Now I will give you the short notes of a case treated by hypodermic injections. It is reported by M. Le Moaligou in his thesis on "Subcutaneous Injections of Sublimate in the Treatment of Syphilis" (Paris, 1873). It occurred in the service of Dr. Liégeois, at the Midi Hospital. A painter was admitted there for a urethral discharge of five months' standing. On the fourth day after admission he complained of much pain in his throat. This showed the signs of acute tonsillitis, and it was treated as such. He grew worse, and on the next day he could hardly swallow, and his breathing was laboured. In twenty-four hours more there was orthopnœa. The saliva was running from his mouth, and his case was desperate. The tonsils were highly inflamed, and blocked up the whole pharynx. Their surface was now found covered with ulcers, which resembled mucous patches, and led to a suspicion of syphilis. This suspicion was confirmed by finding a commencing roseola on the chest, abdomen, and shoulders. Hypodermic injections were resorted to: two milligrammes of sublimate every six hours, and tincture of iodine was applied to the tonsils. This was on April 13. He slept a little during the night; but his breathing being still embarrassed on the 14th, the injections were made every four hours. 15th: Breathing better. 16th: Dyspnœa and dysphagia steadily passing off. The tonsils were still swollen and

covered with mucous patches, and there were many of these also on the velum and scattered over the mucous membrane of the mouth. The roseola was well out on the skin. The injections were reduced to two a day. On the 19th there remained only a few squamous papules on the shoulders, back, and forehead. The throat was well. This affection was completely cured in seven days with twenty-four injections.

The intense dyspnœa occurring at so early a stage of syphilis is an interesting point in this case. As there is no account of the laryngoscopic appearances, one is left somewhat in the dark as to whether the dyspnœa was mainly due to laryngitis. The pharyngeal inflammation, with the tonsils meeting in the median line, is sufficient to account for it. It looks more like an outburst of secondary syphilis and acute tonsillitis; still, it is cited as a case of acute laryngitis cured by injections. Let us take it as such, and compare the immediate effect of this treatment with the treatment by biniodide of mercury given internally, in my case which I have just stated. In Dr. Liégeois' case the breathing was not much improved before the third day: in mine the patient was relieved just as soon. In the case treated by hypodermic injections the affection was cured at the end of a week: in the other one the patient was breathing comfortably at the end of the week also, but as there was grave disorganisation of the larynx, the process of subsequent restoration was slower.

However, sometimes at this stage of the disease, as at a later one, urgent cases of laryngitis may arise, that admit of no delay, and are not amenable to internal remedies. Then they may be controlled by inunction or hypodermic injection. I used this last method not long since on an in-patient here, who was suffering from stenosis of the larynx, associated with deep ulceration and œdema. It checked the disease for five days, but failed to cure it, and I was obliged subsequently to perform tracheotomy. When, however, cases are so far advanced, they very frequently run on to operation in spite of all treatment. Dr. Liégeois says that hypodermic injections of mercury are of questionable value in deep ulcerative lesions of syphilis, and that in some in which he used them the injections seemed rather to stimulate the ulcerative process into increased activity. They did not produce this result in this case or in any that I have used them in. In this case of stenosis of the larynx, though I used these injections at last every four hours, there were no abscesses formed at the points of injection, and there was only a very slight amount of tenderness of the gums at the end of sixteen injections.

Some of these cases of impending suffocation are accompanied and induced by œdema. Should this be the case, you have another important and most effective remedy, viz., scarification of the larynx. These scarifications should be freely made, and repeated every few hours if necessary. Patients are often greatly relieved by the first operation ; and

this means has saved many a case from tracheotomy. If I have mentioned it last, it is not because I consider it of less potency than the other remedies. On the contrary, it is the most prompt of all measures under such circumstances, and should be resorted to first. Inunction and injection may be associated with this treatment, but after scarification you may get such relief that you will have plenty of time for the internal administration of mercury.

As regards the local remedies most suited to these earlier cases of syphilis of the larynx, they comprise the various astringent applications I have alluded to in the individual cases. For the more superficial congestions you will find a solution of chloride of zinc, fifteen or thirty grains to the ounce of water, a very serviceable application. It should be applied to the larynx every third day in ordinary cases. Sulphate of copper, fifteen grains to the ounce of water, acts very beneficially in cases of mucous patches of the larynx; so does a solution of nitrate of silver, five grains to the ounce. A strong solution of this salt, one drachm to the ounce of water, gives the best results in chronic ulcerations with thickening; but it must be applied with care, and not too often; as a rule, once a week is quite enough. Iodoglycerine is sometimes very useful also in these last affections. Iodoform may be applied with benefit to the ulcerated surface in relapsing syphilitic laryngitis, either in combination with glycerine or by insufflation. These applications, as they require to be made by the physician, can only be

occasional; and no doubt more good could be obtained by using this remedy in any form that would bring it into more frequent and repeated contact with the diseased surface. For this purpose I am now trying it in the form of pastilles —two grains of iodoform to each pastille, made up with gelatine basis. These pastilles, which have been made for me by Messrs. Bullock and Co., have the great advantage of being soft and flexible, and do not irritate the tongue, which in these patients is apt to be tender. One of these is allowed to dissolve slowly in the mouth three times daily, and in this way the patient may derive benefit from the medicine both locally and constitutionally. I anticipate from their use very good results in mucous patches of the mouth also, which are among the most intractable lesions of this stage of syphilis. I am using at the same time a solution of iodoform with Siegel's spray-producer, of which the following is the formula:—Iodoform, two grains; ether, sixteen drops; Cologne water and rectified spirits, of each two drachms; glycerine, to one ounce. This solution does not precipitate the iodoform, and its advantages are that the unpleasant smell of the drug is in a great measure disguised, and that it is not irritating to the fauces. I use two drachms, containing one-half of a grain of iodoform, in the steam spray-producer for each inhalation. Medicated atomised fluids are valuable remedial agents in these affections of the larynx. Those which you will find most useful are the solutions of chloride of zinc, sulphate of

zinc, and perchloride of iron, two to three grains of each, or five to eight grains of alum, to the ounce of water. These sprays should be administered once or twice daily.

Strong solutions of perchloride of iron, or nitrate of silver (one drachm of either salt to one ounce of water) are the best applications you can make to the small growths which occur in these earlier affections. They sometimes subside without local treatment. Should they attain larger proportions and give rise to cough or dyspnœa, or if they materially affect the voice, they must be extirpated. I have met with cases where I have been obliged to remove such growths with the forceps, but my experience is that they very seldom require operative interference.

Pain and cough, although they are not often distressing symptoms in secondary syphilis of the larynx, may sometimes be a source of trouble to your patients, in which case insufflations of morphia afford a good deal of relief. You may blow into the larynx, by means of a laryngeal insufflator, a powder containing one-quarter of a grain of morphia with one grain of powdered starch, morning and evening.

Beyond all these curative means, no measure that tends to invigorate the patient should be overlooked. Tonics—iron, quinine, cod-liver oil, all find their place in the treatment. Early hours, plenty of rest, and good air, should be insisted upon. Great care should also be taken to avoid all exposure to cold, especially night-air and sudden

changes of temperature. Smoking should be discarded altogether; loud talking or singing prohibited. Keep the larynx, in fact, as much at rest and shielded from irritation as possible.

I have thus given a cursory view of the treatment that is best adapted to these cases. If I have insisted much upon the use of mercury, it is because I believe it to be the only radical treatment. I have not had the time to enter into the discussion of the treatment of secondary syphilis of the larynx by iodide of potassium alone, or by the expectant method of tonics and local applications. There may be—indeed there undoubtedly are—mild cases of syphilis which, from the few slight, scattered symptoms they evince, pass so lightly over the individual that they seem hardly to require treatment at all. Syphilis does not differ from other diseases in furnishing exceptional cases such as these; but cases involving so delicate and important an organ as the larynx cannot be numbered among them. The former may possibly be watched or treated locally, although even then the experiment would be hazardous. If you use this method in these other cases you will fail, and have cause to regret your want of energy. If you rely upon iodide of potassium alone, I fear you will at best only relieve and not cure your patient.

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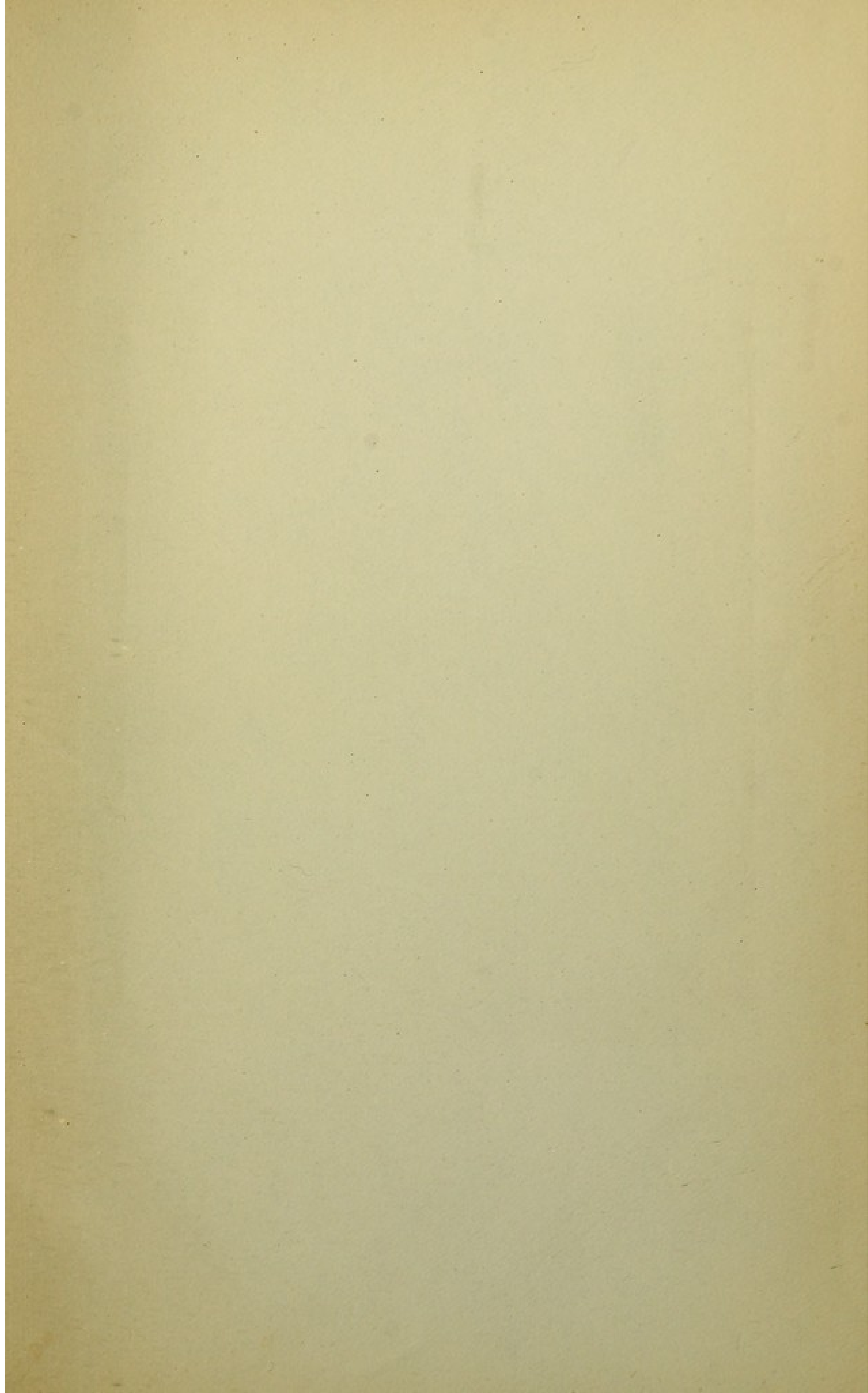

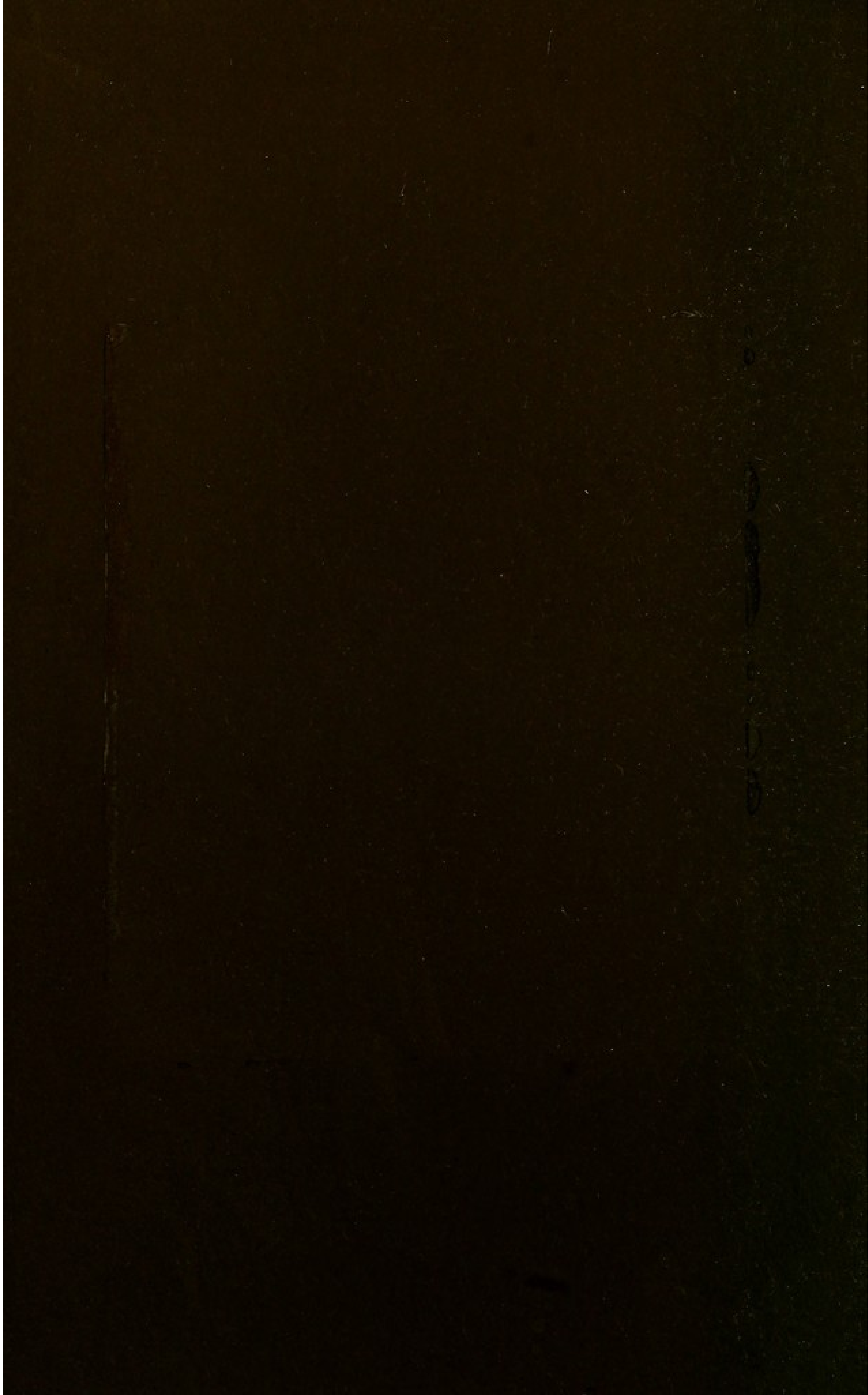

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