passes on, and the transient congestion leaves no trace behind it. But it is very different if the attacks last several days, or even weeks, as is sometimes the case. Then the capillaries and venales, long distended, never completely recover themselves, their tone is lost, and the pulmonary congestion, manifested by chronic dyspnoea and expectoration, is permanent. This pulmonary congestion, involving as it does the bronchial tubes, and occluding them with mucus, becomes, in its turn, a source of bronchial irritation, and thus tends to excite and keep up the asthma which has caused it. The length of the attacks, therefore, has an important bearing on the prognosis, because it has an important influence in determining the production of that particular damage of the lung which is the commonest way in which asthma becomes hopeless.

The frequency of the attacks is another point bearing directly on the prognosis, and for the same reason and in the same manner as their duration. The more frequent they are the worse the omen. If the intervals are so short that the lungs have not time completely to recover from one attack before the occurrence of another, the omen is very bad, because the mischief of each attack being engrafted on some portion of that of its predecessor, the organic derangement is accumulative, and the case one of progressive disorganisation.

Another point that should be carefully ascertained is the completeness of the recovery between the attacks. I always ask a patient, "Is your breathing in the intervals of the attacks perfectly free from any shortness or difficulty whatever? If he says "Yes," then I know that his attacks leave no permanent vestige on his pulmonary circulation, that it recovers itself absolutely, and that the disorganising tendency of asthma does not, in this case, furnish any ground for alarm. But if he says "No," I am sure that the mischief which the attacks inflict persists, I confidently expect to find other evidence of organic disease, and I form an unfavourable prognosis.

Especially do I draw an unfavourable inference from the persistence of expectoration. Spitting is one of the worst signs in asthma. In fact, what is called "humid asthma," is neither more nor less than asthma complicated with bronchial inflammation or congestion.* Wherever there is chronic expectoration, we may be sure that the lining membrane of the air passages is the seat of organic change. Indeed, the mucous exudation is a positive evidence of, and in its quantity a measure of, that loaded condition of the bronchial vessels which it is its object to relieve. A certain amount of expectoration after each attack, of a thick gelatinous mucus, like pellets of very thick arrowroot, is common, almost universal; especially in the morning succeeding the attack (indeed, the most transient fits of asthma, lasting only a few minutes, are generally followed by the expectoration of a pellet or two of this mucus, with whose discharge the little attack appears to terminate); and from such an expectoration, if it lasts only a few hours, or even days, no harm is to be inferred; it is when it never completely ceases that it becomes ominous. Wherever there is mucous exudation there is cough; *chronic cough*, therefore, is a very bad sign in asthma, and tells just the same tale as the expectoration.

There is one prognostic sign, common to all disease, and which should not be disregarded in asthma; it is, the direction that the disease appears to be taking. Is it becoming more or less intense? Are the attacks becoming more severe and more frequent, or milder and more distant? One often derives from this source a most valuable indication of what the upshot of the case will be. The loss and the acquisition of the asthmatic tendency is generally a gradual process, and the future of a case of asthma often but a reflection of its past history. If a patient can tell you that his attacks have mitigated in severity and are getting less frequent, you have, especially if he is young, one of the most hopeful auguries of his ultimate recovery. Such a case would probably get well of itself without any medical interference. If, on the other hand, the disease is gaining on him, you have what must be considered a very bad sign, and one which, unless some speedy and great change is induced by some of those means which control asthma, will leave but very little hope.

There is yet one more circumstance, to which I have not yet referred, that will very materially affect our prognosis; it is, our ability or not to detect the exciting cause of the attacks, and the controllability of that exciting cause. If the exciting cause is clear, single, and such as may be prevented, nothing is simpler than the treatment of the disease, or more certain than

a favourable prognosis. We hold in our hands, as it were, the key of the disease, and by shutting off the exciting cause we may indefinitely postpone a repetition of the attacks. If the attacks never occur but as the consequence of this exciting cause, and its recurrence is permanently prevented, this preventive treatment amounts to an absolute and final cure. If, for instance, what is not uncommon, there is some particular locality where the asthma is sure to come on, and in no other, you have simply to say, "Avoid that place and you are cured." Or if, which is much commoner, there is one place and only one, where the patient never has any attacks, you may say, with almost equal certainty, "Stick to that place and you have seen the last of your asthma." Or if, again, the asthma never comes on but as the result of some error of diet—eating something known to disagree, or eating largely and late in the day—the patient's cure is certain if he will only keep himself within strict dietetic rules, and he may safely and positively be told so. If, on the other hand, the exciting cause is not to be detected, or, being detected, not to be prevented, the omen is bad: for, in the one case we are debarred from adopting any preventive treatment, or in any that we may try we are hitting in the dark; and, in the other, the prevention of the attacks is manifestly impossible.

If, then, an asthmatic were to present himself to me and seek my opinion as to his prospects, I should, having ascertained his age, and carefully scrutinized the condition of his chest, put to him the following questions:—How long do your attacks last? How often do they occur? Do you lose all traces of shortness or difficulty of breathing between the attacks; or is the breathing always a little difficult? Do you habitually cough and spit? Does the disease appear gaining on you, or the reverse? Is the exciting cause of the attacks clear; and can you undertake that it shall not recur?

If the patient is young, the chest sound, the attacks short, the intervals long; if there is no permanent shortness of breath, no cough or expectoration; if the attacks are getting milder or rarer, and if the exciting cause is clear and such as may be obviated, then a favourable prognosis may be given.

If the patient is old, the lungs damaged, the attacks frequent and severe, the breathing never quite free, coughing and spitting constant, the disease apparently gaining ground, and the exciting cause occult or irremediable, then, *quoad* all or any of these circumstances, there is no alternative but to give an unfavourable prognosis.

ON A PECULIAR AUSCULTATORY PHENOMENON.

By J. THORBURN, M.D., Surgeon to the Chorlton-on-Medlock Dispensary, Manchester.

HAVING several times met with a rather peculiar auscultatory phenomenon which I do not find described or explained in works on the subject, I wish to record it, in the hope that such other members of the profession who may have encountered it in practice may be enabled to compare notes with me, and thus perhaps elicit something which may be of use to other auscultators. The first time I heard the sound in question, I was somewhat puzzled as to its meaning; and even now, though I am quite assured of its existence, I am not positive as to its real pathological bearing.

The best mode of describing the phenomenon will be to detail one of the cases in which I first encountered it.

This patient was a young man suffering from a digestive disorder, and with no symptoms of chest-disease. I examined the thorax merely as a precautionary matter, and found percussion perfectly normal everywhere; no unusual dullness at either apex, nor in the cardiac nor sternal regions. On auscultation, the cardiac sounds were quite healthy, as was also the respiratory murmur over the greater part of the chest. Over the most of the left apex, however, and at the inner third of the right, there was audible what I took to be a loud blowing murmur with the first sound. It was distinctly of a blowing character, without much harshness, perfectly synchronous with the cardiac systole and with the pulse, and very loud. There was no *bruit* in the cervical vessels. To examine the sound more carefully, I made the patient hold his breath; when, to my surprise, I found that the murmur completely ceased. This I repeated several times, that there might be no mistake. It was perfectly plain that, though completely identified with the vascular systole, the sound was present only during the expiratory and the end of the inspiratory process.

* By an unfortunate looseness of nomenclature, the term "humid asthma" was formerly, and is even now, applied to cases of simple chronic bronchitis that have nothing specially asthmatic about them.

There was nothing else abnormal present; and I treated the digestive symptoms, giving no opinion about the thoracic murmur. The patient has since continued for more than two years in apparently perfect health; and I have ascertained that the same sound is still present, but much weaker.

In this case, then, the sound was met with in one who, in the absence of other evidence, has no thoracic disease. I met with a precisely similar sound in a woman, who had distinct evidence of tubercles and of a large vomica on the left side. It was confined to the same regions; and *post mortem* examination, while it confirmed the existence of the phthisis, showed nothing else to account for the peculiar murmur. I have noted five or six other cases where I have met with the same thing, and in no particular were they the least alike with regard to the existence of tubercular, cardiac, or aortic disease.

The question then is—What produces this sound, and what condition may we regard it as evidencing? It must be either a respiratory sound modified by the heart or great vessels, so as to have a cardiac rhythm; or a vascular sound modified by the respiration. From a careful examination, I have come to the conclusion that it is of the former character; and that what is heard is the expiratory murmur and the end of the inspiratory murmur itself, *saccadée* or jerked by some undue impulse. I think it probable that this impulse is communicated by a nervously excited or perhaps *slightly* dilated aorta, just as the action of the heart may sometimes give a cardiac rhythm to a friction-sound, which is really pleural. The greater comparative weakness of expiration will account for its being heard chiefly at that time.

There are certainly some difficulties in the way of this explanation; but I cannot arrive at a better. I cannot conceive that any sound of vascular origin so loud as this could be masked by inspiration, or lost when the breathing ceased. One would, however, suppose that some similar jerking of cardiac rhythm should be heard over the trachea; and in one case, though only in one, I fancied that this was the case. In this instance, the patient declared also that, after much running or the like, he could hear and feel his breath come out "in jumps", as he expressed it. I have myself felt the same thing after great exertion, and have ascertained that it corresponded with the pulse. It has always, however, disappeared before I could have a stethoscopic investigation. I believe that, in the cases I have cited, the condition is owing to slight over action, from some cause, of the aorta; but I should be glad if any one could afford a better explanation. I am convinced that the sound is not very infrequent; that, though loud, it does not indicate serious organic disease; but that, by a not very skilful examiner, or by one unaware of its existence, it might easily be supposed to have such an indication.

Transactions of Branches.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

ON PRIMARY AND SECONDARY SYPHILIS OF THE UTERUS.

By LANGSTON PARKER, Esq., Surgeon to the Queen's Hospital, Birmingham.

[Read April 15th, 1859.]

THE effects of syphilis on the uterus and its appendages have not till lately attracted the attention of practical men. This is hardly to be surprised at, when we find so recently as the time of Hunter, the influence of syphilis on the fetus *in utero* denied.

There can be little doubt, however, that the uterine organs suffer to an extent much greater than has been generally supposed from the attacks and ravages of syphilis; and not only is this of importance as far as the individual affected is concerned, but such diseases have a distinct bearing, in case of the future pregnancies of such patients, upon the health and even upon the life of the infant, or the fetus *in utero*.

The literature of this subject is as yet comparatively meagre. Treatises on syphilis are almost silent on the subject; and monographs, with one or two exceptions, are entirely wanting. When I say this, however, I must not include the valuable treatise of Dr. Whitehead of Manchester, "On Hereditary Diseases," nor the paper of Dr. Mackenzie, read before the

Royal Medical and Chirurgical Society in 1854, and published in the ASSOCIATION MEDICAL JOURNAL for that year. Both these works contain much valuable and original matter on the subject of uterine syphilis.

I need not remark that syphilis, as we know it in its external or visible manifestations on other parts of the body, is observed under two forms, as a primary or local disease, and as a secondary or constitutional one. The uterus appears to suffer in the same way as other parts, and in addition it is the seat of another class of morbid actions, not due to syphilis, but to gonorrhœa, which are different in their primary and remote effects upon the uterus and upon the infant, from those which I am about now specially to consider.

Primary venereal ulcers, as we observe them on the external parts of the organs of generation, are rarely found on the neck, on the lips, or in the canal of the cervix uteri, yet they have been found in all these situations. I can only find one case on record where an ulcer of the uterus yielded a positive result when tested by inoculation, and this is mentioned by M. Ricord, at page 212 of his *Treatise on Inoculation*. Another case is given, by the same surgeon, at page 11 of his *Iconographie*, and figured in the fifth plate. Here the ulcer was single, and was only discovered by two persons having contracted chancres from the subject of it. No account is given of its having been inoculated artificially, and therefore I conclude that no test of this kind was instituted. It is described as "a round ulcer, with well defined and sharp edges, and an ash-coloured surface, surrounded by a red areola or border."

A man was admitted, under my care, as an out-patient at the Queen's Hospital, some time ago, with several soft chancres round the corona glandis. He said the disease had been given to him by his wife, who was suffering from syphilis when he married her, and soon after this event, the disease under which he laboured broke out. He brought his wife with him for examination.

On the lower lip of the cervix existed a deep ulcer with sharp edges, surrounded by a well defined inflammatory patch; the ulcer appeared to run into the canal of the cervix. I never saw anything more closely resemble a chancre, yet it produced no result when inoculated.

Dr. Whitehead, at page 367 of his treatise on *Abortion and Sterility*, says: "I have seen but one case of this kind. The husband had official chancre with gonorrhœa, which were contracted about three months after marriage. His wife had no external sores; she had constitutional syphilis. The ulcer occupied the boundaries of the orificium uteri to the extent of a sixpenny piece; it had lost its primary character, as far at least as the infecting power of its secretion was concerned, as no result was obtained by inoculation of the matter on the skin; but it still retained a genuine chancrous appearance, having an excavated centre with raised overhanging margins and a yellow base."

"A girl was admitted into the Queen's Hospital, under my care, in August of last year, with a syphilitic eruption, a well marked 'lichen corymbosus.' On examination by the uterus, a large well defined ulcer was discovered on the lower lip, which ran into the canal of the cervix. It was surrounded by a ring of inflammation. The remaining portion of the mucous membrane was healthy, and contrasted strongly with the diseased one. I was led to regard this ulcer as primary, from the fact of the skin disease constantly relapsing under the same form when apparently cured, a circumstance not common; it did not permanently disappear till after three or four cauterisations of the uterine ulcer."

Nothing appears more likely to happen than inoculation of the uterine surfaces, when the male has chancre of the urethra. The comparative frequency of this may be seen from an examination of the work of M. Fournier, who, out of 824 cases in which the seat of chancre was noted, found thirty-two of the meatus urinarius, and twenty seated within the urethra, which could not be seen till the lips of the urethra were opened.

The latter belong to the class of concealed chancres, or "chancres larvées," as they are termed by the French pathologists. These chancres in the female are commonly seated within the canal of the cervix, and thus bear a strong analogy, as far as their seat is concerned, to those situated within the urethra by the male. The 17th case, narrated by Dr. H. Bennet, in his treatise on *Inflammation of the Uterus*, appears to have been one of this kind. It occurred in a female, who had communicated to her lover a chancre and a bubo; and these circumstances led to an examination of the vagina and uterus. No trace of disease could be discovered, except a profuse puriform discharge from the vagina, and a muco-pus