the diseases can be understood. It is not necessary to this definition of simple healthy inflammation, that *all* the nutritive elements furnished by the blood should undergo a conformable metamorphosis; it is sufficient that they do so within a reasonable time, to the extent of restoring the irritated, wounded, or inflamed texture to its normal state and function.*

Practical medicine is based upon the recognition and appreciation of visible or sensible signs: the physician cannot treat diseases ascertainable only by the microscope; but if this instrument carries our analysis of change of texture into hitherto unknown regions, the medical practitioner must be prepared to accept or reject its testimony *in toto*. There can be no halting between the microscope and the eye,—interpreting one part of physiology and pathology by the vision of nature, and another by the improved vision of art. If the microscope is to be relied on as an analytical means, then not only is every *post-mortem* examination imperfect and the majority useless without it, but we must no longer speak of vessels or ducts secreting. Vessels convey or transmit incoherent corpuscular forms, and are the means of their accumulation; and ducts convey them away out of the body. Transformations of matter are effected, or secretions formed, within the cells.

* The phenomena of inflammation, although very multitudinous, may in fact be resolved into the morphology of the contents of individual cells, the conformability or unconformability of the product being dependent upon the normal or physiological type of the elements of the texture, and the form resulting from the last stage of the inflammatory metamorphosis. This is shewn by the phenomena of inflammation in the several textures of the lung,—pleurisy (*fibres*), bronchitis (*cells and mucus*), and pneumonia (*a mixed product*.) I would beg to suggest to Mr. Hassall the benefit he would confer on physiology and pathology, by extending his "Microscopical Anatomy," so as to include the elements of the various parenchymata, and the structure of their nutrient vessels in the embryo and in the adult, viewed with a power of 600 or 700. If these were correctly established, the phenomena of scrofulous diseases and inflammation would be rendered easy.

(To be continued.)

CASES AND NOTES FROM HOSPITAL AND PRIVATE PRACTICE.

By C. M. DURRANT, M.D.,

Physician to the East Suffolk and Ipswich Hospital.

(Continued from page 547, of last Volume.)

CASE XVII.

CIRCUMSCRIBED EMPYEMA, COMMUNICATING WITH THE BRONCHI: ABSCESS OF THE LUNG: PHYSICAL SIGNS: TREATMENT: RECOVERY.

J. M.—, aged 27, a labourer, admitted into the Ipswich Hospital, September 3rd, 1846, under the care of my colleague, Dr. Beck, who being prevented visiting the hospital at the time, the case in part fell under my observation.

He stated, that seven weeks prior to his admission,

he was seized with rigor and pain in the right side, succeeded by slight cough, at first dry, subsequently with some expectoration. He attributed his illness to drinking a pint of very cold water from a spring, when greatly heated by hay making.

The symptoms on admission were thus noted:—Complexion muddy; tongue tolerably clean; bowels regular; urine natural; pulse 80, of good strength; cough not very urgent; expectoration muco-purulent, having a peculiarly unpleasant sickening odour.

Physical signs.—*Inspection*: Evident bulging of the antero-inferior region of the right side of the chest, from between the third and fourth ribs downwards, the affected portions rising *en masse*; vocal and tussive vibration not particularly noted.—*Percussion*: Complete dullness over the anterior and lower part of the right side in front; normal sonorosity behind; the left side healthy.—*Auscultation*: Total absence of breath-sound over the lower-third of the right lung in front; slightly exaggerated in the antero-superior region of the same side; fistulous breathing audible between the fourth and fifth ribs; respiration natural over the back; no abnormal rhonchi; resonance of voice and cough unaffected; left lung healthy.

These phenomena continued for about a week, with but little variation, the pulse remaining at 80, soft, and of moderate strength; tongue clean; appetite excellent, and bowels regular. At this period the patient became suddenly worse; he had a rigor; the skin was hot; the cough greatly increased; expectoration purulent, the odour from which was now scarcely bearable; he had nocturnal perspirations, and evidently emaciated; the pulse, however, remained steadily at 80, of fair tone, and the appetite continued tolerably good. There was occasional vomiting, which was justly attributed to the horrible fœtor of the expectoration. On examining the chest, the respiratory murmur was now feebly audible over portions of the affected region, on the right side in front, in which it had hitherto been extinct; the fistulous breathing had disappeared, and about two inches to the outer side of the right nipple, and a little above that projection, there now obtained, in addition to a modified amphoric stroke sound, cavernous breathing, loud bronchophony, and slight gurgling, clearly indicative of a pulmonary abscess. The vesicular murmur immediately around this spot was healthy.

Treatment. This consisted of counter-irritation by means of two successive blisters to the side, followed by antimonial pustulation, mercury (Hydrarg. cum Creta,) to affect the gums, the influence of which was prolonged, salines; subsequently the iodide of potassium, creosote internally, and by inhalation; and lastly, quinine and nitric acid, with the syrup of the iodide of iron. The diet, with the exception of the first few days after admission, and the period of the rigor, was "full" throughout—viz., meat daily, with a pint of porter. Under the above treatment the patient rapidly gained flesh and strength, the cough subsided, the expectoration became less, with diminished fœtor, and the progress of the case towards recovery, although slow, was uninterrupted. He was discharged perfectly well, the respirations being fairly audible

over the entire lung, with but comparatively slight falling in of the lower ribs.

Remarks. The phenomena of the preceding case, although full of practical interest, are so clearly developed both by the general symptoms, and also by the physical signs, that it sufficiently elucidates itself; still a passing remark upon one or two points may not be deemed superfluous.

That the patient was correct in ascribing his illness to the draught of cold water taken when heated, there cannot be a question. In our agricultural districts during hot weather this dangerous practice becomes, I believe, not unfrequently a ripe cause of internal disease among the labouring classes.

The history of the case, the aspect of the sufferer, the cough, and the peculiar expectoration, at once aroused suspicion of some formidable chest affection. That such existed was most unequivocally revealed by the stethoscopic examination; indeed I do not remember to have seen any case in which the phenomena described in the report were so clearly developed. The bulging of the lower ribs, the circumscribed dulness, with corresponding absence of respiration strictly limited to this spot, at once bespoke the presence of a fluid, enclosed by pleuritic adhesions; while the co-existence of fistulous breathing with the fetid expectoration, farther indicated that nature had already formed an exit for the discharge of the foreign matter.

The occurrence of abscess in the lung was an unusual feature in this case, its formation was so rapid as to lead to the probable belief that its origin resulted in the introduction into the venous system of purulent matter, followed, as we see in the liver and other parenchymatous organs, by suppurative inflammation. With the exception of a very few days, two most favourable circumstances obtained throughout the progress of the case—viz., the continuance of appetite, and an unvarying steady pulse, seldom above 80, and of moderate strength. When these conditions present, in the absence of tuberculization of the lungs, we shall, I think, for the most part be justified in giving a favourable prognosis.

Cases of this kind require support almost from the onset, steadily having recourse, however, at the same time, to repeated counter-irritation. The creosote in this instance was administered both internally and by inhalation, and as in gangrene of the lung, and other affections in which the expectoration is offensive, with the result of lessening, and finally removing, the factor.

CASE XVIII.

INFLAMMATION OF THE DIAPHRAGM.

F. S——, aged 34, a tailor, admitted into the Hospital February 18th, 1846. States that he enjoyed good health until about eight years ago, when he had an attack of acute rheumatism. From this he recovered, but has since been the subject of two or three similar seizures. About eight months since, while labouring under a severe attack of rheumatic fever, he was seized with a sudden and severe pain, of a constrictive character, extending completely across the body from one hypochondrium to the other, accompanied by great tenderness on pressure, dyspnoea, cough, palpitation,

and, as reported by his wife, considerable delirium. On the occurrence of the pain in the body, the rheumatic pain of the joints became greatly lessened. The patient stated that on different occasions, unconnected with the present attack, he had expectorated large quantities of blood, amounting altogether to between one and two gallons. Of the accuracy of this statement I am sceptical, although the patient adheres most rigidly to the circumstance of the blood being ejected by cough and expectoration, and not by vomiting. On his admission his general appearance was strongly that of advanced phthisis, so much so that I confess that before making an investigation of his case, I was fully prepared to find extensive tuberculous disorganization of the lungs.

His countenance was anxious and exsanguine; eyeballs prominent; tongue coated; total anorexia; bowels sluggish. He complained of a violent sharp burning pain, with great tension and constriction across the lower part of the thorax, extending between the hypochondria and beneath the sternum, and stretching to the loins, and which was greatly aggravated by coughing, sneezing, and deep inspiration. Pressure between the lower ribs, over the epigastrium or hypochondriac regions, and more especially pressure on the abdomen upwards, towards the diaphragm, caused most acute suffering. Respirations short and hurried, and chiefly performed by the intercostal muscles, with slight short dry cough; pulse small, quick, and very weak, and beating irregularly in the right radial artery.

The chest sounded tolerably resonant throughout on percussion; respiratory murmur was audible over both lungs, slightly deficient at the left apex in front; action of the heart weak and irritable, but regular; its sounds unaccompanied by bruit.

Treatment. From the extreme anæmia and general weakness of the patient, neither general nor local depletion appeared admissible. Two grains of calomel with one grain of opium, were given night and morning; a mixture containing an excess of alkali, with spirit of nitrous æther, and small doses of the tincture of colchicum, was directed to be taken three times a day, and a blister, encircling one half the body, was applied to the left side. On the mouth becoming sore, the opium was continued without the calomel, and the subsequent progress of the case to convalescence was uninterrupted. On his discharge from the hospital he was perfectly free from pain, bore firm pressure without complaint, the cough had ceased, but the pulse in the right arm remained irregular, and the respiratory murmur in the apex of the left lung, although more perfect, yet less pronounced than in that of the corresponding side.

I have since heard that he has been the subject of a similar attack, but I have not been able to ascertain the result.

Remarks. While inflammation of the serous covering of the diaphragm, in connection with its contiguous extension over the pleura and liver, is by no means uncommon, inflammation of its musculo-tendinous structure is, I apprehend, decidedly rare. In the foregoing case, the affection was associated with

rheumatism, the extension or repression of which disease is, perhaps, one of its most frequently exciting causes.

The symptoms from the first were well marked, and require no comment. Upon what the permanent irregularity of the pulse in the right radial artery depended, I am not prepared to say, the stethoscope did not indicate either cardiac or arterial disease; it arose, in all probability, from local pressure upon the artery, but in what part of its course this obtained, repeated examination failed to elicit.

In the treatment, in addition to the other remedies, I am disposed to attribute a large share of the benefit derived to the free use of opium; and this leads me to allude briefly to the question lately brought before the Association,—viz., "The treatment of internal inflammation, by opium," an important practical subject, and one which I trust that we shall sooner or later see discussed in the pages of our Journal, by not a few only of its many talented members. Without entering upon the theory of the action which opium exerts upon healthy and diseased organs, I can most fully assent to the opinions which have been recently expressed by Drs. Chambers and Ranking, in reference to its utility in the treatment of many cases of acute internal inflammation. The power of allaying pain, subduing nervous excitability, and thereby reducing the irritability of the heart's action, peculiarly belongs to this drug; and however difficult or impossible it may be to instance, by writing, those particular conditions in which its adoption is so generally followed by benefit, still how vividly will the reflecting physician, unshackled by hypothetical notions, revert to the satisfactory results which in his hands have attended its use.

In the selection of the cases most requiring the opium treatment, as also the precise period at which this medicine is called for, (and this is all important,) medical tact and observant experience can alone direct. A volume upon the subject would, in many instances, utterly fail to indicate the peculiar circumstances requiring opium, but in which to give it is recovery to the patient,—to withhold it is probable destruction; and who cannot call to mind the look of gratitude beaming in the countenance of the sufferer relieved, if not rendered out of danger, by the timely and judicious exhibition of this valuable drug. Independently of those diseases in the treatment of which opium is commonly prescribed, as delirium tremens and some other nervous affections, there exist others, in which at one period or other of their course, the exhibition of opiates is attended with the happiest results.

In the second stage of pneumonia, if the cough be constant and harassing, the expectoration scanty, and the countenance anxious, with an exalted state of nervous sensibility, full doses of opium at bed-time often act like a charm. In pleurisy, prior to effusion, the same medicine administered at night, giving mercury *per se* during the day, is equally valuable. If effusion obtain, the balance of the circulation is often so much interfered with, that the propriety of opium, in these cases, becomes questionable. In

rheumatism, the best effects result from opiates; but in this disease, as in pleurisy, I believe that more benefit will be derived from administering opium in full doses at night, with mercury during the day, instead of the more common practice of combining the two remedies. In croup also, in lymphatic children, after the urgency of the symptoms have abated, opium to prevent spasm is often imperatively called for. In peritonitis, enteritis, diarrhoea, and dysentery, opium judiciously used is invaluable.

The forms which I myself prefer are the crude opium and the muriate of morphia.

In reference to the constipating effects of this drug upon the bowels, I do not regard it as any reason for withholding its use. In enteritis and peritonitis, it becomes often of paramount importance, while allaying pain, to ensure quietude in the intestinal tract; and not unfrequently shall we find obstinate constipation attended with, and perhaps produced by, spasm, effectually relieved by the free administration of opium. Within the last few weeks, I have witnessed the most decidedly beneficial result obtain from the exhibition of opium, in strangulated irreducible hernia, for the relief of which, neither the patient (a female, aged 64,) nor her friends, would sanction an operation. After all other measures had been adopted, by the surgeon in attendance, without avail, and repeated stercoraceous vomiting taking place, a grain of solid opium was administered every two hours, with the effect of not only allaying the vomiting, but also (after half a drachm had been taken,) of inducing free and repeated evacuation of the bowels, which function had not previously been performed for fourteen days. The patient, although relieved from the consequences of the hernia, ultimately sank from exhaustion, the friends pertinaciously refusing a *post-mortem* examination.

In thus briefly advocating the powers of opium in the treatment of internal inflammation, I must again repeat, that it is clinical observation alone that will suffice to demonstrate, in many instances, the particular time and circumstances by which its exhibition must be regulated. When calculated to benefit, the relief which it affords is often immense, while on the contrary, if given under disadvantageous conditions, its injurious effects may be irreparable.

(To be continued.)

A CASE OF DYSMENORRHOEA IN WHICH THE TINCTURE OF CANNABIS INDICA WAS EMPLOYED, WITH SOME OBSERVATIONS UPON THAT DRUG.

By BENJAMIN BARROW, Fellow of the Royal Medical-Chirurgical Society, of London.

In offering the following observations to the perusal of the profession, it must not be supposed that I consider the *usual* effects of the hemp to be those which came under my notice in the case in which I employed it, but simply that they are *some* of those which *may* occur and cause much alarm not only to the patient and friends but also to the medical attendant. It is