part, but when a serous cavity intervenes, and widely separates the vascular plexuses of the cutaneous surface and the subjacent mucous. It is beyond all question that leeches to the epigastrium relieve an inflamed gastric membrane; but surely no one will imagine that this relief depends on any withdrawal of blood from the engorged gastric capillaries. General bleeding may be of service, if the heart's action, as evidenced by a firm pulse, is over-powerful; but it is of no much avail as a tissue-sedative alone. In some instances, we have drugs which exert a decided sedative action on the inflamed membrane. In inflammation of the air-passages, antimony or ipecacuan; in enteric catarrh, hydrargyrum cum cretâ and Dover's powder; in dysentery, ipecacuan; in tonsillitis, an emetic,—are all means of well proved efficacy. It must be confessed this list is a short one, and we should be glad to be able to enlarge and amend it. We have no reliable tissue-sedative for ophthalmic or nasal catarrh, for vesical, or urethral. In the former, we have a valuable substitute for internal remedies in the application of nitrate of silver collyria, of various degrees of strength. The arrest of severe purulent conjunctival inflammation by the application of solid lunar caustic, or Mr. Guthrie's ten-grain ointment, is a striking therapeutical fact. It is a clear proof of the vital power of an inflamed tissue being modified and altered by a means directly addressed to it. Vaginal catarrh may be dealt with sometimes in the same way; and so, according to some, may urethral. Counterirritation by blisters, turpentine stupes, mustard poultices, etc., is a valuable means of tranquillising the morbid excitement in the inflamed tissue; but it does not find its opportunity until the force of the disease is somewhat broken, or unless it be of semi-asthenic character from the outset, or is not yet fully established. The turpentine stupe is an especial favourite with me, and may be used with advantage much earlier than a blister. It may probably act to some extent as a beneficial stimulus to the cutaneous nerves, propagating through them an impression to the sympathetic ganglia and vaso-motor nerves, which obviates and nullifies the original morbid impression. A blister should seldom be applied until all fever has nearly subsided. Perpetual poultices or fomentations are often of great service in the treatment of the earlier stages of catarrh. The proceeding of incubation, as it is termed by M. Guyot (which consists in exposing diseased parts, ulcerated or inflamed, to a dry (?) heat of 96° or thereabouts), is described by him as having the effect of dissipating pain, inflammatory redness, and swelling. Heat, in fact, seems to have a general relaxing and sedative effect; it causes very positively relaxation of the contractile tissues of arteries, and it seems to act in an analogous manner upon other parts. Cold has the opposite effect, inducing reaction and elevated temperature; while heat leaves the part or the system with a diminished caloric-producing faculty.

For the purpose of allaying tissue-irritation, alkalies with their vegetable salts, as well as the so-called neutral, are remedies worthy of notice. They seem to act beneficially on all mucous surfaces when inflamed, excepting the intestinal canal, which the neutral and vegetable salts are apt to irritate. When freely administered, these agents have also a decided effect in calming the action of the heart, and in promoting the excretion of retained matters. Hydrocyanic acid is often a valuable adjunct to these remedies, and acts in the same direction. Opium, or other sedatives, may often be conjoined with antimony, mercury, or ipecacuan; and their action thereby be rendered much more safe and easy. Independently of this auxiliary action, opium in some cases by itself appears to exert power as a tissue-sedative. This effect may be produced through the nerves, but it is certainly not confined to them.

If the state of the affected part or system be one of depression, rather than of excitement—i. e., if the state be asthenic—we have recourse to various means of more or less stimulating or toning quality. These act beneficially by rousing the languid vaso-motor nerves, contracting the arteries, and so both diminishing the afflux of blood to hyperæmic parts, and quieting the hurried nutritive actions that ensue when the controlling nerves are paralysed. At the same time, they raise the often impaired power of the cerebro-spinal nervous system. Of this class we may enumerate carbonate of ammonia, the ethers, valerian, arnica, sumbul, as especially acting on the cerebro-spinal nervous system as stimulants or excitants, rather than as tonics. They may be usefully combined with salines where we wish to have but a moderate effect. On the other hand, when the signs of depression are predominant, we give them full play. Quinine, strychnine, nitric acid, the sulphates of iron and copper, the muriate and permuriate of iron, are mostly

appropriate to cases of asthenic mucous or muco-serous flux, and may be often advantageously associated with a little opium. In cases not admitting of the use of these latter tonics, the balsams, squill, turpentine, copaiba, are often very useful. Their mode of action seems to be of the same kind as that of the stronger tonics, but they are better adapted for peculiar states and special tissues. Thus copaiba has eminently an influence over the bladder, urethra, and rectum; balsam of Peru, squill, and Canadian balsam, on the bronchial membrane. A remedy of the same class is ergot, which Dr. Churchill has found efficient in some cases of uterine catarrh. The especial advantage of all these is, that they suitably stimulate and tone the delicate nervous tissue in cases where, from one cause or other, the stronger tonics would irritate, and so fail of their desired effect.

Astringents are appropriate to all cases where the exudation is mainly of the nature of passive flux; i. e., where the tissues are in a languid state, not prone to irritation. The action of astringents is probably mainly expended on the capillaries, rendering their delicate membrane firmer, and less permeable by fluids or corpuscles. I am aware that I am here touching on the oft debated question of diapedesis; but I am supported in the view, that red corpuscles do pass through the walls of capillaries and small arteries and veins, by Virchow's positive testimony, based upon actual observation. He states that openings may be seen in vessels through which red globules escape in single file, and which again close completely (*Handbuch der Speciellen Pathologie und Therapie*, p. 231); and, at p. 237, he refers the escape of the menstrual blood to a diminished cohesion of the vessels of the mucous surface. This diminished cohesion, which would of course favour the escape of mucous or serous fluid, is just what astringents correct, whether they be locally applied, or carried in the blood-currents. It is clear that it will be judicious practice in any case where the large open quality of the pulse conveys the information that the arteries are uncontracted, to administer at the same time a nerve tonic, so as, if possible, to diminish the local supply of blood, and so relieve the weak capillaries from undue strain or pressure of the current. Gallic acid, tannin and all the vegetable preparations containing it, alum, and iron alum, are our best astringent remedies. The influence of cold, also, ought not to be omitted, though this is exerted rather on the small arteries than on the capillaries. When locally applied, it will produce, of course, a local effect; but it may also operate on remote parts by the impression it makes on a sensory surface being propagated as a stimulus to the arteries of the seat of internal disorder through the medium of the nervous centres and connected vaso-motor nerves.

The foregoing exposition is presented rather as an attempt to colligate familiar facts than to educe new. I believe in the grouping of these several morbid conditions. I have strictly followed natural affinities, and it appears to me some gain to be able to regard a number of ordinary phenomena from the same point of view. He must, I hold, have a better comprehension of individual cases of disease who contemplates them always as far as possible with reference to the great pathological families to which they belong, and to their mutual affinities, than he whose attention is taken up with hair-splitting distinctions which Nature for the most part entirely ignores.

STRICTURE OF THE ŒSOPHAGUS.

By ROBERT BATTY, Esq., Liverpool.

THE subjoined case of œsophageal stricture may prove interesting more from the manner of death, and symptoms preceding it, than from any additional light which it throws upon the usual treatment and pathology of such cases. It occurred in the private practice of Mr. Bickersteth (through whose kindness I am enabled to give, briefly, the history of the patient), and was brought under my notice only two days previous to the fatal termination.

Kate W., aged 19, of apparently vigorous constitution, consulted Mr. Bickersteth about two years ago, complaining of symptoms of dysphagia. A bougie was passed with ease into the stomach. Her general health was good, and although she was not apparently of an hysterical temperament, yet her state seemed to indicate the existence of spasmodic affection of the tube dependent upon some obscure emotional cause rather than that of any organic change of structure. She herself persisted that food in a solid form did not reach the stomach; but as the bougie passed without difficulty and the food did not return, this was regarded as a morbid impression.

From that period till this year she had sought advice from different surgeons, both in this town and in London. She stated that none of them ever attempted to pass a bougie; they merely prescribed for her; and it may therefore be presumed that they adopted the view of the affection being spasmodic.

On August 16th, she again consulted Mr. Bickersteth. She had lost but little flesh, and presented no appearance of tendency to emaciation. She still declared that food did not enter the stomach. Some bread soaked in water was given her, which she swallowed; but affirmed that it did not seem "to go down properly." A bougie was again used; but this time it was distinctly arrested at the lower part of the œsophagus, a little above the cardiac orifice of the stomach; but upon slight pressure being made it passed easily onwards. Before the instrument was removed, she vomited the bread and water by its side. Upon its withdrawal, it was observed that the instrument was tightly grasped throughout the whole of the canal. No blood followed, and she walked home (a few hundred yards distance) suffering no particular inconvenience.

In about two hours Mr. Bickersteth was hurriedly sent for, and found her in a state of collapse, with cold extremities, fluttering, feeble pulse, and a clammy state of the surface. From these symptoms she rallied upon the administration of stimulants, which were swallowed with reluctance and difficulty, and on the application of external heat.

She was seen again at five p.m., when she complained of tenderness upon the right side of the neck, near the mesial line, and immediately above the clavicle. Some leeches were applied. She was rather restless, and apprehensive of choking; but there was no anxiety of countenance.

At eleven p.m., emphysema, in the region just indicated, was discovered—the cracking of air in the areolar tissue being palpable. The respiration was somewhat embarrassed, but no abnormal sounds were discovered upon stethoscopic examination of the lungs. A copious secretion of clear mucus provoked cough; which act, however, she avoided, as it produced dull burning pain, referred to the intrascapular region.

August 17th. The emphysema had extended over the upper part of the thorax and lower part of the face, and her pulse was much accelerated. She was ordered small quantities of stimulants and beef-tea; but there was great disinclination to swallow, and the pain in the back before alluded to, increased when she did so, and also on coughing.

August 18th. The emphysema had extended very considerably; the whole face and neck being much swollen, and the eyes nearly closed. An erysipelatous blush was also seen upon the neck and upper part of the chest.

August 19th. The same condition continued; but a rash of rose-coloured patches also appeared over the whole body. She remained very restless and apprehensive. Quinine, with fifteen minims of tincture of opium, was ordered every four hours, and as much nourishment as she could be persuaded to take. No vomiting had occurred; indeed, from the commencement of her ailments this had never been present as a symptom. The bowels had been duly relieved by enemata. On this evening I saw her for Mr. Bickersteth, and was informed that she had been less restless since taking the medicine, but that otherwise her condition was as before. The neck and chest were dredged with flour.

August 20th. There was no improvement, and the erysipelatous state of the neck and chest had not altered. The sounds of respiration were normal, but the breathing was short, from the pain experienced on expanding the chest.

At seven p.m., I was hurriedly called to the patient, and found her more restless than hitherto and complaining bitterly. I induced her to cough up a considerable amount of mucus which had accumulated in the larynx and trachea; but she did not seem to suffer to any extent; in fact, nothing at all equal to the distress produced by the same act in a pleuritic case. I gave twenty minims of Battley's solution of opium, in addition to the fifteen of laudanum she had taken as her ordinary dose.

At eleven p.m., she had slept. She appeared relieved. The sensation and dread of choking continued. Her pulse was rapid and more feeble, and she was very unwilling to swallow anything.

At three p.m., on August 21st, she died.

Thirty hours after death the body was examined. It presented no emaciation. There was general tumefaction of the face and thorax, and indistinct crepitation over the neck and breast. The cellular texture of the neck was found infiltrated with sero-purulent fluid and distended with gas. Both the pericardiac and pleural cavities contained a small quantity of bloody serum. The lungs were healthy, but somewhat congested.

The trachea, with the œsophagus and stomach, were carefully removed. A mass of soft grumous tubercular substance, of the size of a large fig, flattened from before backwards, was found adhering to, and incorporated with, the posterior wall of the œsophagus, a little below the level of the cricoid cartilage. A similar deposition, but softer, and infiltrated with pus, extended downwards, behind the œsophagus, as far as the cardiac orifice. The walls of the œsophagus were generally hypertrophied, chiefly posteriorly, at some places not being less than half an inch in thickness. Just above the cardiac orifice the canal was distinctly contracted, not admitting the passage of the finger. The stricture was annular and of cartilaginous hardness, not exceeding a quarter of an inch in width. The mucous lining was fissured longitudinally at the point of stricture. The stomach contained a quantity of red-coloured serous fluid.

REMARKS. Cases of œsophageal stricture are fortunately rare. In this instance the patient was spared the lingering death by slow starvation, which is the ordinary mode of fatal termination. The stricture itself had not attained that degree of contraction which would prevent food from entering its ordinary receptacle. No sac-like pouches were found above the narrowed part, indicating that lodgment of food, distending the tube, had existed, and this will account for the absence of vomiting; but the amount of disorganisation of the posterior wall of the œsophagus and the structures behind it, evidently of long existence, was sufficient to explain all the difficulty of deglutition.

It is most probable that, upon the passage of the bougie on the 18th of August, rupture of the tube had occurred, allowing of communication between the œsophagus and the suppurating textures behind. No opening, however, could be clearly made out; but the extreme collapse mentioned would favour this view; and adopting it, the emphysema is accounted for by presuming that gas, generated in the stomach, passed from the œsophagus into the cellular tissue behind, and, under the expulsive efforts of coughing, etc., was forced into the tissues of the neck and thorax.

The occurrence of the erysipelatous tinge, and the eruption over the body, were considered diagnostic of a poisoned state of the blood; and the amount of pus discovered, under conditions favourable to absorption, confirmed this opinion.

A stimulating treatment was adopted; but death anticipated the establishment of more marked symptoms of pyæmia.

Transactions of Branches.

READING BRANCH.

TRANSACTIONS OF THE READING PATHOLOGICAL SOCIETY.

By FREDERICK G. HARCOURT, Esq.

[Continued from page 762.]

II.—DISEASES OF THE RESPIRATORY AND CIRCULATING ORGANS.

Disease of Heart: Pneumonia: Coagula in Heart and in left Jugular and Subclavian Veins. On August 25th, 1858, Mr. WALFORD presented the case of a woman, named Susan Cresswell, aged 33, who died on July 17th, 1858, and whom he saw only three days before death, with disease of the heart, and some pneumonic condition of portions of the lungs.

About four a.m. she was seized with violent and continued pain in the left arm, with great œdema of the whole limb, and discoloration, accompanied by frequent vomiting and restlessness. The pulsation of the radial artery could not be felt. She lived about fifty hours after this seizure.

The previous history of the case, obtained from Mr. Dryland, was as follows:—

She was a married woman, but separated from her husband for the last five years. She was of spare habit and dark complexion. During the ten years she lived with her husband she only had one child, and at the time of her lying-in with this child was seized with convulsions which lasted forty-eight hours; and she remained ill for some months afterwards. She had always enjoyed tolerably good health with one exception, when she was supposed to be suffering from heart disease, and spat a considerable quantity of blood. She had never suffered from rheumatism; but her mother suffered much from it, and was supposed to have died of disease of the heart.

She first came under Mr. Dryland's notice in November 1857, when she was suffering from an attack of acute nephritis and