On the 26th, the urine was examined, and found free from albumen.

On the 27th, croton oil liniment was ordered for the chest.

On the 28th, she was much improved. The pulse was 100; respiration 40. She had taken her wine and ammonia regularly. There was but little dyspnoea; and the râles over the lungs were coarser. The expectoration was still copious. She was ordered to omit the ammonia, but to continue the wine, and to take ten minims of the ethereal tincture of the acetate of iron every four hours.

On May 1st, the sputum was less copious and more tenacious. The pulse was 100; the respiration 32; and appetite good.

On the 2nd, the dose of tincture of iron was increased to fifteen minims every four hours.

On the 3rd, the pulse was 90; the respiration 25. The tongue was clean, and the expectoration much diminished. She complained of the cough giving her some trouble. She was ordered twenty minims of tincture of iron and ten of laudanum three times a day, and meat diet. The wine was reduced to six ounces daily.

She rapidly recovered from this date, but was kept in the house for some time to be treated for the emphysema from which she suffered. She took a course of iron, with good diet; and under this treatment she gained flesh, and her cough and dyspnoea materially improved.

She left the hospital on June 9th.

[To be continued.]

ST. MARY'S HOSPITAL.

PRACTICAL REMARKS ON THE PATHOLOGY AND TREATMENT OF SKIN-DISEASES.

By C. HANDFIELD JONES, M.B., F.R.S., Physician to the Hospital.

[Continued from page 570.]

HAVING considered the exudative, we proceed to the so-called squamous eruptions. This group comprises lepra, psoriasis, pityriasis, and white ichthyosis.

Lepra and Psoriasis. While fully recognising the propriety of distinguishing between these, it seems needless for the purpose I have in view to separate them. Nothing that we know of their causes or their remedies, or any part of their history, indicates that there is any important difference between them.

Mr. E. Wilson says the similarity in their essential natures is so complete as to render them almost identical. The chief diagnostic features are the more circular or arcuate form of the patches of lepra, their tendency to heal in the centre, their more elevated margins, and the absence of fissures, which are not uncommon in psoriasis. The pathology of the two, we cannot doubt, must be identical. What are we to say of it? If we read over the list given by authors of the causes of these eruptions, we shall be puzzled, I think, to detect any motive element common to them all whereby they come to produce such uniform effects. It is difficult to conceive how mental emotions, salted food, cold and wet, insufficient nourishment, excesses, drinking cold liquids when the body is heated, and external irritants, as flour and soap, can occasion similar morbid phenomena. It may, perhaps, be said that they do this by all occasioning the same disorder of assimilation, and giving rise to the same *materies morbi* in the blood. This appears a very gratuitous supposition, it not being in the least demonstrated that there is any *materies morbi* at all. Further, one may ask, if flour and soap, sufficiently dissimilar substances, cause psoriasis, why should sugar and heat give rise to eczema? Why should not they produce psoriasis too? In my own experience, drinking

cold liquids when hot has been the only cause mentioned by the patients sufficiently often to attract my attention. The most certain thing that we know of this influence is that it is liable to produce dangerous arrest of the heart's action. We may, therefore, suppose it might affect also the nutrition of the skin, the irritation being reflected on cutaneous, instead of cardiac nerves. In any case, it is difficult to understand how it could alter the composition of the blood.

The subjects of squamous eruption often enjoy remarkably good health, and are vigorous and robust; but this is not invariably the case. We might account for this on the view of the disease being an eliminatory effort, if its arrest or cure caused disorder elsewhere. Mr. E. Wilson, indeed, mentions one instance where this seems to have occurred; but it is certainly quite the exception. Even while the eruption persists, it is not very credible that the health should continue perfect if the crasis of the blood be so unhealthy as to derange seriously the nutrition of the skin. It is not what we find in other instances of blood-poisoning that one part alone suffers, the system remaining healthy. Such is not the case in syphilis, gout, malarious, or lead intoxication, or the exanthemata.

Our knowledge of the state of the secretions in squamous eruptions is very imperfect. L. Beale (*Archives of Medicine*), in a very severe case of lepra, found only that the urine contained about double the normal quantity of fixed salts, while the scales presented nothing special. According to microscopic examinations which I have made, the detached scales consist almost entirely of normal looking epidermic cells. It would certainly be satisfactory to have thorough investigations as to the condition of all the excretions in these disorders; but such a task, I fear, is not very likely to be soon accomplished. Nor is there much hope that the search, if made, would detect any characteristic anomaly. Our chemistry is not yet sufficiently penetrating to enable us to distinguish minute variations in the composition of organic compounds. If anywhere, we must suppose that the *materies morbi* would be contained in the scales; but none has been discovered there, nor has any proof been given that they are capable of communicating the disease. It is universally admitted that lepra and psoriasis are non-contagious; but Mr. F. Wilson has observed that the gyrate form of the latter is apt to affect several children at the same time in one household, especially those who sleep together. Possibly this was syphilitic.

Failing more direct information, we turn to the action of remedies as capable of throwing some light on this obscure part of pathology. Mr. E. Wilson seems to have no strong faith in any specific remedies; he attributes their success chiefly to the quietude, diet, and ablutions, which are enforced. A cooling, unexciting regimen, will often cure the eruption alone, he says. Dr. A. T. Thomson confided in liquor potassæ, which Watson also praises; and also in biniodide of mercury with iodide of arsenic. Mr. Green is satisfied of the value of a course of purgatives, of arsenical preparations, tincture of cantharides, and the sulphur fume bath. Bloodletting, he shows to be essential in cases of sthenic inflammatory excitement and leeching of the parts in the local varieties is not to be omitted. Mr. Hunt, appreciating fully the inflammatory character of the disorder after subduing this element, is satisfied with arsenic alone. Donovan's solution has succeeded well in the hands of Erichsen and others. Cazenave speaks quite in the same strain as Green. Gelatinous and vapour baths in the earlier and acuter stages; and various mercurial unguents or lotions, or one of iodide of sulphur, in the later, are generally approved of. Hebra applies a sulphide of calcium solution energetically till all the morbid epidermis is removed, and the corium is bare, and bleeds slightly; this is done to every patch;

the patient then has a bath of an hour's duration, and is then rubbed with ol. morrh. or tar. Clarus has seen excellent results from lotions of protonitrate of mercury used twice or thrice daily, and warm baths. My own experience leads me to rely on arsenic or the sulphur fume in cases unmarked by inflammatory excitement; and in cases of a more irritable nature, on wet-packing, aided, if need be, by antiphlogistic measures.

Now, from all this detail, we may gather: 1. That there are sthenic, or irritative, and asthenic, or non-irritative, forms of squamous disease; 2. That the former are benefited by antiphlogistic treatment, especially by bloodletting and purgatives; while 3. The latter require arsenic internally and sulphur fumigation; 4. That external applications seem to be very efficient in some cases, which can only act by modifying the vital condition of the affected part; 5. That, in other cases, liquor potassæ and tincture of cantharides are of much efficacy. The former of these, when taken upon an empty stomach, increases the sulphuric, and sometimes the phosphoric, acid of the urine, causing probably disintegration of some organic matter containing sulphur and phosphorus. The latter may act as a diuretic; but this condition is not insisted on by any writer that I have consulted; nor does it at all appear that other diuretics will replace it. It may be added as a positive certainty, that if arsenic be given in cases that are unsuited for its use, it will aggravate the disease fearfully; and the same may be said of the sulphur fume.

We see, then, in a general way, that these squamous affections correspond to a considerable extent with the exudative, the irritative forms of both being meliorated by antiphlogistic treatment, emollient baths, wet-packing, and the like, and aggravated by internal (arsenic) or external (sulphur) stimuli, which again are most efficacious in cases where they are tolerated. It also appears that certain agents, which we can only speak of as vitality-modifying, such as those recommended by Hebra and Clarus, may cure. That purgatives act as eliminants is by no means certain; it is quite as probable that they only act as they do in any common inflammation, as of the eye, or tonsils. Moreover, they are not advisable in the asthenic form, which would not be the case if they availed to carry off a *materies morbi*. Tincture of cantharides may operate as a diuretic, and so eliminatively; but I think it is more probable that it acts, like arsenic, on the nervous system, especially on the vasomotor nerves of the cutaneous arteries. That it may act as a nervine we know, from its remarkable efficacy in the spasmodic stage of pertussis. Liquor potassæ may, also, possibly act by disintegrating some morbid organic matter; but I suspect that this is a secondary effect, and that when it acts beneficially, it is by increasing the alkalinity of the blood, and rendering it less stimulating. It has not been of much service in my hands. I have not touched upon various remedies which are occasionally lauded, and not without reason; because whatever action they may exert, we can only term them specific, and cannot utilise in any way to elucidate the pathology of the disorder. Such are dulcamara, urtica dioica, galium aparine, etc. I have tried them, but not extensively, and have very small faith in them.

On reviewing all the above evidence, I feel that the only conclusion I can provisionally adopt is this: that in squamous diseases the vital nutritive power of the skin is impaired, and primarily, and that the tissue is, therefore, prone to irritation and inflammation from slight causes, internal or external; which, in more healthy states of cutaneous nutrition, would prove inoperative. The habitual dryness of the skin in the psoriatic shows that, independent of the actual disease, the tissue function works badly. I reject, therefore, as at present unproved, and as not well according with the general bearing of the therapeutic facts, the poison

theory; in so far, at least, as the poison is regarded as the essential cause of the disorder, which I believe rather to consist in a deranged vitality of the skin itself.

I have used these common expressions advisedly, well knowing that to many such will appear highly unscientific and objectionable, obstructive to inquiry and progress. While, however, I see that in one man a keloid tumour develops in the skin, in another an epithelioma, in another a fibroid; while one man's respiratory nerves or centres are so hyperæsthetic that the slightest cause will suffice to induce asthma, while a second is almost as prone to bronchitis, and a third to dyspepsia in spite of the greatest care; I cannot but regard the original vital endowments of the tissues as having a very large share in determining, not only the locality, but the forms of the disease.

Let it not, however, be supposed that I do not admit the probability of the blood also being in an unhealthy state; I do so fully; but I believe that there is nothing constant or definite in this condition, and that but for the impairment of the vitality of the skin it would take no effect. The case mentioned by Bateman of a man who was always attacked by lepra whenever he took spices with his food, seems to me quite in point. To him the spices were a poison, either directly irritating his susceptible tegument by being received into his blood, or indirectly by causing gastric or intestinal irritation, which was reflected on the skin through trophic nerves. But no one will maintain that spices always contain a poison capable of producing lepra, as the variolous poison produces variola. In the same way, a great variety of different substances, among which is mentioned that usually most wholesome food, oatmeal, may set up severe urticaria in the predisposed. Clearly, in all these cases, the real error lies in the tissues or their nerves; not in the blood or in the ingesta. In squamous diseases generally, I quite disbelieve that there is any separable and eliminable poison in the blood; or that the cutaneous eruption is an effort to get rid of it. The more or less unhealthy blood irritates the unhealthy skin; and *voilà tout*.

It will be said that I have been wandering a good deal in the regions of theory; but it has been in search of true indications for practice. If there is one thing more unsatisfactory than another, it is to undertake treatment, especially of a refractory disorder, and try one remedy after another, without having one clear idea the whole time of what we are really about. As M. Baily says, "On perd la tête et devient polypharmacale." Out of such empiricism no progress can ever come. Now, if the exclusive poison theory be true the only rational proceeding must be either to neutralise the virus if we know how, or to eliminate it from the system if we can. But no experienced man will say that he has much hope of doing either. On the view, however, which I propose, that the vital actions of the skin are primarily and chiefly at fault, needing essentially correction and renovation, our efforts will be set in a more hopeful direction. We shall consider carefully what is the character of the morbid action; we shall test the degree of irritability of the affected structure; and we shall adjust our remedies according to the great principles which guide us in our treatment of inflammations elsewhere. Antiphlogistic measures will be clearly indicated in one state, stimulant and alterative in an opposite; and in doubtful conditions we must trim between the two sagaciously. Arsenic will be resorted to in cases which we judge will tolerate it, with the view of stimulating the tissue to more healthy action and contracting the relaxed arteries; and the sulphur fume will be also employed with the like intention. The success, however, of either must depend wholly on the passivity of the tissue; for both may aggravate the evil if the skin be too irritable. The various stimulating or alterant lotions and ointments are to be employed on the same

principles. Dietetic regimen must also be adjusted to the more or less sthenic or excitable state of the system. Doses of remedies will have to be varied according to the same rule; the dose that cures one patient may be wholly insufficient for another. When we have done our best, according to this rational proceeding, and failed, we may then turn to specific remedies, and become "polypharmaceutical."

[To be continued.]

Transactions of Branches.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

POSITION IN ACCIDENT AND DISEASE.

By ROBERT L. BOWLES, Esq., Folkestone.

[Read May 15th.]

I FEAR the title of my paper will lead you to expect a more general consideration of the subject of position than it is at present my intention to submit to you; so, before proceeding, I must beg you to consider that what I have to say is chiefly suggestive, and more intended to provoke a discussion than to be exhaustive of the influence of position in the treatment of disease.

In a paper communicated to the Royal Medical and Chirurgical Society by Mr. Caesar Hawkins in January 1860, and subsequently published in vol. xliii of the *Transactions* of the Society, I assumed that the cause of stertor in apoplexy and apoplectic conditions was due in great measure to the position of the patient at the time; that, by altering the position, the stertor would cease, and with it other symptoms of importance; and that life might be saved by doing away with the cause of stertor.

From anatomy, experiment, and clinical observation, I attempted to demonstrate that when, from any cause, the nervous system is so affected as to give rise to general paralysis, the tongue (when the body is supine) falls back into the pharynx by gravitation, and prevents the easy access of air to the lungs.

There is every reason to believe that the stoppage of the entrance of air, under these circumstances, may be absolute, and cause immediate death; or it may be more or less modified, and give rise to sounds also more or less modified, which collectively have long been known as "stertor". As, however, the different varieties of stertor arise from causes essentially different, it becomes necessary to define them, and to attach to each definition its true value.

Shortly, then, I would recognise three varieties of stertor—

1. *Palatine*, when the air, in rushing through the nose or mouth, causes a vibration of the soft palate;

2. *Pharyngeal*, when the air gives rise to a harsh, sharp, husky noise, by passing through the narrowed interval between the base of the tongue and the posterior wall of the pharynx;

3. *Nervous Stertor*, which depends upon air bubbling through mucus in the larger air-tubes.

The variety of stertor which indicates the greatest amount of danger from impediments to the respiration is the *pharyngeal*; and this is the most common in apoplexy and apoplectic symptoms arising from accident. It occurs in its worst form when the patient is supine and the mouth is widest open, from the tongue being brought into closer contact with the posterior wall of the pharynx by the dropping of the jaw; or when the head is much bent upon the sternum, thus raising the back of the pharynx up to the base of the tongue, the tongue itself being fixed by the resistance of the thyroid cartilage. This impedes the respiration to such an ex-

tent that the jugulars and other vessels of the head and neck become greatly distended; and the increased congestion of the brain thus caused reacts and increases the paralysis of the tongue; and in this manner things go on steadily and surely to death, if no relief be afforded. If, however, the tongue be hooked forward with the finger, or, better still, if the patient be turned on the side, so that the tongue may fall away from the back of the pharynx, the stertor gradually ceases, the mucus drains away from the air-tubes, the congestion of the face and other symptoms of serious import disappear, sensation will partially if not wholly return, and, if there be not too much destruction of a vital organ, recovery will take place.

In a former paper on this subject, already referred to, cases are detailed illustrating all that has just been stated; and, since the publication of that paper, I have seen other cases which demonstrate still more clearly the great importance of careful attention to position in the treatment of accident and disease.

CASE I. An elderly gentleman, staying at an hotel in Folkestone, fell down in a fit in the reading-room. He was laid on his back in a senseless state, and stertor at once commenced. The proprietor was sent for; and (as he had seen me do on similar occasions) he immediately turned the patient on his side. The stertor soon ceased; and, by the time I arrived, the patient began to move and evince signs of returning life. In half an hour he was out of danger.

CASE II. About two months ago, a man was struck by a heavy chain, and knocked off the Folkestone new pier into the sea. The poor man fell head foremost on the rocks, and was wholly submerged about three minutes. When brought to land, he was supposed to be dead; but one of his comrades commenced rolling the body from side to side, "to get the water out of him", as he expressed it. The man soon began to exhibit slight gasping attempts to breathe; and, on my arrival, I found him most judiciously placed upon his side, but apparently dying; his pulse was irregular, and scarcely perceptible; and his breathing feeble, slow, and irregular. There was a quantity of water, tinged with blood, lying on a coat which had been placed under his head; and I observed that, at the end of every inspiration, more of this frothy water drained from the mouth—doubtless, from the inspired air displacing water from the air-tubes. Besides the immersion, a compound fracture of the skull and a compound comminuted fracture of the jaw had been sustained, as well as very extensive contusions of the spine and buttocks. By the constant application of ammonia to the nostrils, dry warmth to the body, and friction to the limbs, the poor man was so far restored in two hours as to be able to be taken to bed. Since then, he has struggled through either gangrene of a portion of the left lung, or purulent infiltration from secondary deposits; but, I am thankful to say, he is now sitting up, and nearly well. I cannot but think that, so near death as this poor man was at the time of the accident, he certainly would not have recovered if he had been placed on his back, for the tongue to strangle him, and the sea-water to choke up his lungs.

And now, with your permission, I will add a few general remarks on cases to which the subject of position appears to apply, though my remarks will more particularly refer to apoplexy and its treatment.

Since the days of Abercrombie, so much light has been thrown on the different causes of apoplexy, that his division of the primarily apoplectic (where no apparent change has taken place in the brain) may be broken up into several subdivisions. It is now fully acknowledged that many of these cases depend primarily on some disease of the heart or its valves, upon aneurism, upon atheroma, upon engorgement of the pulmonic circulation, and upon uræmia. Consequent upon these