after death from bronchitis, but the lips and other parts which were livid were of a remarkably deep colour. Very dark blood flowed freely from the distended veins about the neck. The thyroid gland was much enlarged, and hard, forming a very firm bronchocoele, which probably had added to the other causes of difficult breathing. The mucous membrane of the trachea and bronchi was deeply injected with an appearance of ecchymosis in small spots between the annular cartilages. On the right side there was little, if any, pleuritic adhesion, but a considerable amount of serous effusion, apparently cadaveric. The substance of the lung was generally emphysematous, but without any very large dilatation. It was partially gorged with blood, forming considerable masses in a state of pulmonary apoplexy. Much smaller scattered portions were hard, and nearly black, evidently the result of sanguineous effusion of older date. On the left side there were numerous old pleuritic adhesions, especially towards the upper part. There was likewise serous effusion. The upper lobe was corrugated and puckered, and a considerable portion was dense and indurated, and internally of a dark, almost black colour. There was some appearance of there having been a cavity in this part. The other portion of this lining was much in the same state as the right as respects both the general emphysema and the engorged or apoplectic state, but the latter condition was perhaps rather more considerable. Both lungs were perfectly free from tubercles, and the pulmonary veins were filled with very dark grumous blood. The pericardium was healthy, the heart was of very large size, and all its cavities were filled with very dark grumous blood. The right cavities were more particularly dilated. At and near the apex of the appendix of the right auricle the blood was firmly coagulated, and all but adherent. The parietes of the right ventricle were nearly as thick as those of the left, and its cavity about as large. The edges of the tricuspid valve were much thickened and firm, those of the mitral much less so. The semilunar valves were beautifully healthy. There was evident venous congestion in the abdomen, as well as in the thorax, but the viscera themselves were generally healthy. The liver, in particular, was gorged with fluid blood, and the spleen was remarkably small, though turgid and firm. There was no kidney in left lumbar region; the kidney which should have occupied that situation being placed on the bodies of the lower lumbar vertebrae, about the promontory of the sacrum. It was small, and much distorted in figure, having depressions from the compression of the neighbouring parts; but its substance, like that of its fellow, was healthy. The uterus was rather large, the ovaries of fair size, and their surfaces only partially corrugated. It may be suspected that this was an ordinary case of emphysematous lung, but I would observe that the condition of the lung was not of an extreme character, whilst the whole train of symptoms were those of a very weak heart, which, from its size, it would not have been had it not been attended with degeneration of substance. The remarkable traces of old affection of the lung were traceable to a former attack, which, like the last, did not seem to be of an inflammatory character.

DANGEROUS EFFECTS OF CHLOROFORM.

By EDWARD JACKSON, M.B., Sheffield.

A FEW years ago, I published in this JOURNAL a case in which a fatal result occurred from the incautious use of chloroform, for the relief of tic douloureux. In that case, a young gentleman laid down in bed, and putting some chloroform on a handkerchief, pulled the bedclothes almost over the head: insensibility ensued, and, from the inhalation continuing and access of air being prevented by the close application of the handkerchief, death was the result.

The case, which is the subject of my present communication, was as follows:—

CASE. A young gentleman, aged about 20 years, suffered severely from pain in the face, for which he was accustomed

to inhale chloroform. On the 11th of May, it appears, he retired to his bedroom about 6 P.M., and lay down on the bed, dressed, and inhaled chloroform from a bottle containing about two ounces. About half-past six, the female, in whose house he lodged, going up stairs, heard some one breathing stertorously, and, being alarmed, entered the room, and found him laid perfectly insensible, with his body almost prone, the bottle still in his hand, and almost close to the nostrils; it appears to have fallen over, so as to have spilled a considerable quantity (I should say, more than an ounce) on the bed, immediately under his nostrils.

I was sent for, and arrived a little before seven o'clock. I found him still breathing very laboriously, the countenance livid, and the pulse slow (about 40), but moderately full; the jaws were firmly locked, so that I could not open the mouth. In a short time, the respiration became easier and slower; but with this, the pulse became weaker, until, at length, I could not detect the slightest movement of the chest, and no pulse was to be felt: in fact, I thought that, if not dead, at least, that he was moribund. I at once used artificial respiration, as in the case of still-born infants, and was gratified, after a time, to find that the chest began to expand without my efforts; at the same time, I could detect the pulse. These gradually improved for half an hour, assisted somewhat by his vomiting. I now administered a little ammonia, seeing that there was a slight effort to swallow; the pulse about this time was 30 per minute. After this, it again declined, and symptoms of sinking reappeared, but not to such an alarming extent as previously.

I now administered stimulants more abundantly, and he gradually improved, but was not at all sensible until about three o'clock the following morning: vomiting occurred frequently during the night. On the following day, he appeared to have but little control over muscular action, and appeared exsanguineous, but otherwise he did not suffer; the breath had a strong odour of chloroform all the day.

REMARKS. This case shows how a person may thoughtlessly produce a fatal result, from the position in which the chloroform is inhaled. This could not happen, if every one using it, without another party present, would simply sit, or be reclined in a chair. Again, it shows the necessity of having at hand some ready means of artificial respiration, which was so markedly beneficial in this case. In speaking of the action of the chloroform in this case, it appears that respiration was first affected, afterwards becoming almost paralysed. The heart was affected secondarily, as exhibited by the alarming syncope which ensued.

Clinical Lectures:

DELIVERED IN

GUY'S HOSPITAL, LONDON.

BY

W. W. GULL, M.D., F.R.C.P., Assistant-Physician to the Hospital.

No. I.

ON THE VARIOUS DERMATOLOGICAL CLASSIFICATIONS OF AUTHORS: WITH SOME NEW HINTS ON SKIN DISEASES.

GENTLEMEN,—Unless some steps be taken to stop specialities, I am quite prepared to hear some one of you say, the student will not know soon what to learn, or the general practitioner, though ever hard worked and discriminative, what line of practice to adopt. One set of specialists take the eye, another the ear, a third the heart, a fourth the brain, a fifth the rectum, and so on: the sick patient will be left to you mere skin and bone. I am not now going to give a dermatological address; but, as many of you expressed a wish in the wards up stairs (seeing that you will be, as general practitioners, left even skin and

bone) that I should say something in a general way on skin diseases, so as to direct you to the best plan of studying them, as many of you seemed not to know well what classification to adopt, I purpose to-day to show you the salient points in the different classifications of authors which have made a noise in the schools, and fix your study on that which is most natural.

Now I must tell you there is no perfectly natural classification of skin diseases; and though it is desirable you should have some map as it were of these affections laid down in your mind, you will at the same time not fail to recognise the great and puzzling variety which exists in the phases of skin diseases. Some such diseases are situated in the glandular follicles of the skin, as molluscum, for instance; some are inflammations of different layers of skin; then sudamina, again, not inflammatory; others, diseases of the appendages of the skin rather than of the skin itself, as porrigo, where we have epiphytes or vegetable growths in the skin. Again, psoriasis and eczema are often the same disease; and porrigo lupinosa, let Erasmus Wilson and Carpenter say what they please to the contrary, is the result of certain sporules or ectozoa, of which I shall speak again. All this shows how incongruous, almost contradictory, the grounds are from which a natural classification must ever spring, if we are ultimately to have a natural classification; and a classification of some kind I strongly recommend to you, as even from the very worst classification some habits of accurateness and some knowledge may be obtained. In fact, without some classification, it will be impossible for you to benefit by your daily visits in the hospitals, or by what you see in the out-patients' department.

Now, the first classification of these diseases we are acquainted with is that by Hippocrates, founded very much on the humoral pathology. Some skin diseases were, according to him, *local*; others were intended to purify the blood of certain dyscrasie, therefore *constitutional*. The small-pox eruption was one of the latter; and the warmer the patient was kept, to favour this concoction or purifying of the blood, and separation from the constitution of the variolous poison, the more completely it was thought the disease was cured. Sydenham first fought against this doctrine, and successfully. Now I do not believe there is any variolous matter in the blood at all; we have no evidence of the kind to lead us to think there is. Many thousands of lives were sacrificed to the blind worship of Hippocrates on this point. Patients were covered in hot blankets, and supplied with hot drinks; but it is questionable if they were thus cured.

Many diseases, no doubt, are constitutional. Here is a wax model of ichthyosis. A young woman was brought to me the other day; she was treated for eczema by a very respectable practitioner. I saw at once it was incurable—and, in short, ichthyosis. This disease is essentially a constitutional error in the desquamative process of the skin. Here is a model of a family known as the "porcupine family". Look at these strange porcupine quills, so to say, on the skin: all this, no doubt, is constitutional and hereditary. [Dr. GULL illustrated the several points as he went along by the rich collection of wax models at Guy's, the finest, perhaps, in England.]

Hebra's classification is the second I show you: it is very recondite and physiological, but it is neither practical nor pathological; and these are just what we want. Hebra gives us hyperæmia and anæmia of the skin, with the almost infinite varieties under these divisions. We have next hæmorrhages of the skin—purpura, for instance: then all shapes under the terms hypertrophies, atrophies, neoplasies, etc., of purely theoretic interest, but not practical, and not without various other faults. These neoplastic formations, for instance, look interesting, but they are not neoplastic or new formations in the skin; they are under the skin, in the areolar tissue.

Next we come to Alfraro's, or what is the same, Wilson's classification—a system highly estimated by Alfraro's colleagues in Spain; but it is not at all natural in a pathological point of view; it is founded on a minute

anatomy of the skin. We have inflammation of the dermis, diseases of the vascular tissue, diseases of the sudoriparous glands, of the sebaceous glands, of the hair-follicles, etc.—purely anatomical divisions, to which pathology is made to bend.

We have diseases of the sensibility of the skin, but these are really not skin diseases at all. Again, diseases of pigment: roseola is put as an inflammation, but it is not an inflammation. Pityriasis, again, is not a squamous disease, it is a fungus growing in the skin; variola is called by Wilson a congestive inflammation; but it is more properly a suppurative inflammation, as we see so often. A strong analogy is sought to be shown between this quasi-natural classification of Wilson, and other natural classifications, as in botany. Now, there are natural groups of plants in botany, but there is no perfect natural classification. You know, of course, the *umbellifera*, the *solanaceæ*, or the old Linnæan *tetradynamia*, or the grasses (*triandria digynia*); but these are all only groups of plants, not a natural classification. Without going into Jussieu, perhaps we may say, however, that there is a natural classification of animals, though we have only groups of plants. We have a natural classification of animals, for this reason, perhaps, that everything seems subservient to, or connected with the nervous or neurological system; we have nothing exactly analogous as coordinating plants; we have, therefore, only groups such as those mentioned. In the same way, we have groups of skin diseases, but no natural classification.

We now come to the classification of Willan. This, I believe, will last as long as medicine is a science; it is a perfect dictionary of skin diseases, and one which you should study before any other system. Willan has succeeded because he did not try to do too much. His system is more pathological than the others; it is founded, in fact, on the anatomical relations or pathological character of the eruption, not the anatomy of the skin in health; and as a system, with certain modern microscopic facts to elucidate obscure points, it is almost as perfect as any system purely artificial can expect to be. Willan, for instance, thought porrigo was a pustular disease; but now, with some very hard big words, and a microscope, we find it a vegetable product. Willan's divisions are the following; but I do not pretend now to go through them all in one lecture: 1. Papulæ; 2. Squamæ; 3. Exanthemata; 4. Bullæ; 5. Pustulæ; 6. Tubercula; and 7. Maculæ; these are, in fact, the lexicon of skin diseases understood all over Europe, and to these you should, in a measure, confine your attention. If you strictly limit yourself to Willan's classification, you can make yourself understood anywhere; and what is another great thing, the moment you see a case of skin disease, you can at once look out its name in this classification or lexicon of Willan and Bateman (Dr. Gull here took several specimens at random, and showed how their names were to be found out). Nay more, the moment you have its name, you can refer to all the books* that treat on that disease. Now that is perhaps very artificial, but I assure you it is very useful.

A classification I would be inclined to adopt myself is founded on the pathological facts of common inflammations of the skin, and specific inflammations, in the first place. Next, hyperæmia of the skin, as roseola or rubeola, pure congestion, but no inflammation; and hyperæmia passing into hæmorrhage, as the familiar disease purpura; and lastly, epiphytes and ectozoa, one well demonstrated in porrigo lupinosa and porrigo scutalata—ectozoa by the in-

* Rayer, on the continent, has merely followed out the plan laid down by Willan; nor does the great continental dermatologist Alibert deny that he owes his system also to the English physician. Willan's greatest merit seems to have been, not only that he drew the attention of medical men generally through Europe to the question, but he examined with unusual care the writings of the older medical authorities. Some practical men seem to think he divides and subdivides skin diseases too much; but this can only set prejudicially when we lose sight of the broad practical history of cases as relates to diseases of the digestive or other organs, in our eagerness to force them into some of Willan's classes and orders. Thus, small-pox, measles, and scarlatina, are rather fevers than skin diseases; erysipelas, a surgical accident at certain seasons; purpura, a hæmorrhage rather than a skin disease.

sect in scabies. It is the common inflammations of the skin that puzzle the student, not the ectozoa with the long names, such as *microsporon furfur*, the new name for the sporules of dandruff, *trichophyton tonsurans*, the sporules of porrigo, or another, *microsporon* in the bulb of the hair in porrigo decalvans. Common inflammations puzzle the student, because there is such a puzzling variety of constitutions met with; such a variety of applications, also, are used by patients themselves, that the appearances of the disease are changed. The student is seldom at a loss to recognise at once syphilitic lepra, small-pox, purpura, or porrigo; but in common inflammations (and these are the varieties of skin diseases to which I would more particularly direct your attention), he will be constantly at sea.

Now, in conclusion, there are some diseases apparently of the skin, but not skin diseases at all, such as erythema leve, so common in young women, or the skin disease apparently of varicose veins in older people, or take *lichen circumscriptus*, where you have itching and papules. A young woman, perhaps, sitting up at night with a sick friend, watching, bowels neglected, etc., gets covered with lichen, but the disease is in the general system; let her rest forty-eight hours, and have a little opening or other medicine, and it disappears. I was consulted the other day in such a case; another practitioner sent her away, and said he did not pretend to understand skin diseases; but it was neither a skin disease nor one difficult to cure. Then there is the "Barbadoes leg", thought to be a skin disease, but it is a disease of the areolar tissue, with permanent deposit under the skin. Prurigo pudendi, again, arises from a varicose conditions of the veins of the vagina; but though classified as such, is not a skin disease, and so of a few others, as ephelis, the scorched leg of people who sit much at the fire, freckles, spots of epidermis not bleached, etc. I think the greatest improvements of late years are those few new facts of a microscopic character added to Bateman and Willan, and the fact of recognising the causes of some disease as *non-inflammatory*. No doubt this is the direction in which further improvement lies; for, as Bacon well says,—*Per causas scire, vere scire*.

Reviews and Notices.

CELL THERAPEUTICS. By WILLIAM ADDISON, M.D., F.R.S. pp. 84. London: John Churchill. 1856.

THE main object of Dr. ADDISON's work is to show that therapeutic actions in the body are, in the main, effected by means of cells. The following conclusions express his meaning in as plain terms as we can use:

"1. Reparation in the human structure is not limited to wounds and fractures from mechanical violence. It extends to injuries of the blood, and to disease in the parenchymatous organs. It is accomplished by a new or preternatural cell-growth in the common vascular tissue; and of this growth there are two prominent forms—the one a vascular form, *granulation*; the other a deciduous form, termed *pus*.

"2. The cells of granulations and pus exhibit peculiar relations to the surrounding parts—a property of selective absorption. Those of granulations open blood-vessels for the junction of new ones, and are elements of repair in virtue of a capacity, in the cells or cell-contents, of metamorphosis into fibrous tissue. Those of pus are elements of repair, in virtue of the deciduous mode of cell-growth. The same sort of vital activity which causes leaves to fall in autumn discharges sloughs from sores, and poisons from the blood, without bleeding.

"3. During the formation of granulations and pus, the natural blood-vessels undergo a species of retrograde metamorphosis, for the fibrous coat of the vessels becomes the seat of new cell-growth—a state of growth in which, we know, in the embryo, blood-vessels bleed upon the slightest touch, and multiply with great rapidity.

"4. The formation of granulations and pus are accompanied by phenomena termed *inflammation*. That is to say, inflammation is the sign or signal of a change commencing in

the coats of the blood-vessels, and thereby is distinguished from congestion, in which there is no morphological change in the coats of the vessels." (pp. 31-3.)

The therapeutic indication in the process of repair of injuries of any kind by cell-growth is, Dr. Addison points out, to restrain the cell-growth when it becomes excessive, or to stimulate it when deficient. These objects are fulfilled, in the instance of external granulations, by pressure and caustics, or by stimulants, according to the circumstances of the case. In the process of reparation of the blood and of parenchymatous organs—as in the elimination of poisons—is there any agent capable of moderating the cell-growth? and how does it act? This is a question to which we trust Dr. Addison will continue to give his attention.

And, after all, another question arises—Is cell-growth a *necessary instrument* of the therapeutic process, or a mere *accident*? There is much room for theorising here. Waiting the solution of this and other interesting physiological problems, we in the mean time thank Dr. Addison for what he has already done, and hope he will continue his researches.

Association Medical Journal.

SATURDAY, MAY 31st, 1856.

THE TRIAL OF WILLIAM PALMER.

AFTER a patient trial of twelve days, William Palmer has been found guilty of the foul murder laid to his charge. This verdict is, without doubt, in accordance with the voice of science and the feeling of the country; day by day, as the trial proceeded, it became more and more apparent that the evidence was too strong to be contended against, and when the jury retired, Palmer, by the pencil communication which he had with his counsel, was the only person, perhaps, in Court who doubted that they would return with his death warrant.

The trial will certainly stand among the most celebrated criminal proceedings ever witnessed in this country, whether we consider the time to which it has extended, the amount of evidence recorded, or the purely circumstantial nature of the testimony it has called forth. To the medical profession it will be for ever memorable; but we fear it will not be referred to with entire satisfaction. In the whole range of pathology there is not, perhaps, so obscure a branch as that of convulsive disorders—not one certainly on which so many different opinions may be held by conscientious and well informed medical men. Yet this is the subject, as fate would have it, which has been dragged into the witness box, subjected to the scrutiny of counsel, and made the rock on which, they would fain persuade the world, medicine has dashed itself.

Yet, notwithstanding all the chaos of opinion, the truth, as we believe, has prevailed, and William Palmer will answer for his crimes with death. It would most certainly have been more satisfactory, both to science and the public, if Dr. Taylor had been able to discover the drug by which the prisoner accomplished the murder. Had he done so we should have avoided the scandal of seeing the leading toxicologists ranged on opposite sides in a matter which should be simple of solution. It appears to us that the reasons which might have led to this failure have not been suffi-