deciding the plan of management to be pursued. Such appearance, even if it be remarkably unhealthy, cannot be modified by poultices and lotions; but pressure is resorted to *at once*, by which the veins are supported, adventitious deposits are absorbed, the capillary circulation is reestablished, and then the local character of the ulcer is changed. In other words, a mechanical correction of the general cause is followed by a vital improvement in the local effect. All the directions for cleansing and purifying the ulcer, which occupy so prominent a place in the writings of the older surgeons, as well as in many of those of more recent date, may be at once superseded by the proper and immediate use of compression.

The first thing, then, is to cover the surface and sides of the ulcer, for some distance beyond the edges, with the chalk ointment, spread about the thickness of a wafer on thin linen. No compresses of any sort are to be placed upon this; they interfere with the regular operation of compression; they heat and overload the ulcerated part; and they prevent the escape of purulent secretion.

The second stage of the proceeding consists in the application of the bandage. A bandage frequently possesses advantages over strapping, by being less irritable to the skin; by being more quickly put on, and more quickly taken off; by being more easily removed without disturbing the surface or injuring the margins of the ulcer; and by more completely allowing the formation of the chalky incrustation. Equally superior is a bandage to a laced stocking, as the latter does not properly embrace the whole foot, nor can it be well fitted under the ankles. Placing a card, a piece of vellum, or beaten lead, between the limb and laced stocking, as advised by Wiseman, is also objectionable, from its being calculated to afford partial and unequal pressure. Then, with regard to the material of which the bandage is made, this may be either flannel or calico. The first possesses the advantage of being more yielding and elastic, and is, therefore, preferable in those cases where the greatest pressure is not required. In cedematous enlargements especially, the flannel appears the more suitable, as it is softer to the skin, and accommodates itself to the greater or less distension of the limb, arising from the augmentation and diminution of the fluid. The calorific properties of flannel are sometimes very useful, as in all structures and parts in which the capillary circulation is obstructed, the vital heat is reduced below the standard. Strong calico is the better material when very powerful and continued compression is demanded, as in most instances of indolent sores. The breadth of the bandage is an important point in practice. If the bandage be of flannel, the breadth should rarely exceed two inches; and if of calico, it should be still narrower. A roller of this width can be placed over the foot, around the ankle, and up the leg, without making the slightest wrinkle or irregularity, which cannot be done if it is broader. The length varies from four to eight yards, according to the age of the patient and bulk of the limb.

The bandage should be put on the limb in the ordinary way recommended in works on mechanical surgery; commencing at the metatarsal end of the toes, and carrying it completely up to the knee. With regard to the tightness with which the roller is applied, much more force may be used than is generally employed. Each turn may be pulled as strongly as the arm allows; for the firmness with which the bandage is put on is not only for the purpose of gaining the good effects of compression on the structures underneath, but it also contributes very much to make it remain in its place when once applied. Patients usually bear the bandage exceedingly well, provided it be smoothly and evenly rolled around the whole limb.

The length of time which elapses before the bandage and ointment are removed and reapplied must, of course, be regulated by the circumstances of the case. When the ulcer is very extensive, and the discharge proportionally great, it will be necessary to dress the leg every day, perhaps, at the commencement of the treatment. But, generally speaking, ulcerated legs are disturbed much too often; and, as a

general rule, all interference should be postponed as long as possible. One of the benefits belonging to the simple chalk ointment is, that by its unirritating properties, by its neutralising the acrid secretion, and by its protecting the neighbouring delicate skin, it permits the linen and bandage to remain on much longer than when nearly all other applications are resorted to. This is one of the capital advantages resulting from its employment, as it is obvious that the more seldom the dressings are disturbed, the less is the probability of the healing process being interrupted. Some local uneasiness is the best indication of the propriety of removing the dressings, in order to permit the escape of the discharge, which is always more frequently required in the early stages of the treatment.

The bandage being undone, the thin linen dressing is raised very gently, in order to allow as much of the chalk ointment to be left behind as may be attached to the surrounding parts and surface of the ulcer. In a very short time after the treatment of the case has been commenced, a thin film is formed about the margin of the ulcer; and if the ulcer be small, some of the incrustation may probably be observed on the surface. This must never be disturbed or taken off, for injury would thereby be done to the tender and sensitive granulations which are busy in filling up the cavity, or forming the cicatrix, and the protective covering of purulent fluid would be stripped away. At each succeeding dressing we shall commonly observe a gradual increase of the chalky incrustation; but it never forms an impervious coating, so as to prevent the escape of fluid, as might possibly be the case if a layer of powdered chalk in substance, or a thick watery solution of it, were employed.

The progress of healing in an extensive ulcer is frequently not confined to its edges, but sometimes small central spots pass onwards to recovery faster than the other portions of its surface. These, as they increase in size, tend to convert a large ulcer into a number of smaller ones: each central spot serves as a foundation for the commencement and attachment of the incrustation; and the chalky formations radiate from these as from so many points, until the circumference of one meets with the circumference of another.

When an ulcer is very extensive, and the healing slow and tedious, the successive deposition of chalky layers on the bordering skin occasionally forms so thick an incrustation as to require its removal; for otherwise it might prevent the ulcer itself from experiencing all the good effects of the use of the pressure. When the whole of the ulcerated surface is at length included by the incrustation, it should not be disturbed until a sufficient time has been allowed for the entire part to heal underneath. As soon as this is accomplished, the chalky crust becomes hardened, from the absence of moisture from the discharge; it then cracks, and separating into pieces, comes off by degrees itself. Its removal may be hastened by gentle manipulation, if we are quite sure that the ulcer is entirely obliterated.

In this account of the application of the method of cure, it will be seen that we are literally obeying and fulfilling nature's principles, and assisting her in carrying them into practice. In my next and concluding paper, I shall speak of the modifications of this treatment which are occasionally required, and take a brief survey of the more recent literature of the subject.

[To be continued.]

CASE OF PURPURA HÆMORRHAGICA.

By JOHN SNOW, M.D., London.

THE following case presented an appearance which is not clearly described in the works with which I am acquainted.

CASE. I was called on Aug. 13th, 1855, to see a patient, aged about 45 years. He is a mechanic, in business on his own account. He had formerly a good constitution, and enjoyed good health; but within the last few years he had

acquired a habit of hard drinking, and had suffered from attacks of dyspepsia and a morbid sensibility of the nervous system. On the present occasion, he had been drinking to excess for two or three weeks, and eating scarcely any food. I was sent for on account of a copious bleeding from his nose, which he had, however, stopped before my arrival, by the application of turpentine on cotton wool. There were large ecchymoses on his arms, hands, thighs, and legs, and some smaller ones on his head. They had appeared at various times within the three previous days, and some of the earlier ones were already fading. In the centre of each patch of ecchymosis there was a small hard tumour, over which the skin was quite white. These tumours or nodules felt almost as hard as cartilage, and were proportionate in size to the ecchymoses: where these were as large as the hand, the tumours were as big as a horse-bean; where the purple patches were smaller, so were the tumours. The pulse was bounding but compressible; there was great debility, and the limbs were rather tremulous. He was treated with lemon-juice and decoction of cinchona with dilute sulphuric acid, and was directed to take such nourishing food as his appetite would permit. He improved during the next two days. On the 15th, the patches of ecchymosis had faded considerably, and the nodules were diminished in size.

I was sent for again on the 18th, and found the patient labouring under a rather severe attack of erysipelas of the face and head. He took quinine and a nourishing diet; nitrate of silver was applied externally; and on the 26th, he was convalescent.

REMARKS. I consider that the small hard tumour situated in the centre of each patch of ecchymosis consisted undoubtedly of the fibrin of the blood, which had coagulated quickly at the point where it escaped from the ruptured vessel, whilst the serum and globules spread all round in the cellular tissue. The above case of purpura did not differ in any essential particular from that important variety of the disease we call scurvy; and although in some cases of scurvy the blood seems to have lost its power of coagulating, there are other cases in which this fluid coagulates more quickly and strongly than usual. This was remarked by Dr. Milman, who wrote on scurvy in 1782, and attributed the disease to impaired nutrition of the blood-vessels. Dr. Budd has since observed that the blood in many cases of scurvy retains its power of coagulating undiminished.

Although I have not observed the above mentioned little tumours in any other case of purpura, I cannot consider this to be a solitary instance of their presence. I think it probable that they may have been passed over, as belonging to what is called purpura urticaria. The tumours, however, have no relation to the wheals of urticaria, and do not in the least resemble them.

Backville Street, April 1856.

THE OPERATION FOR THE EXTRACTION OF CATARACT.

By AUGUSTIN PRICHARD, Esq., Bristol.

It is as disagreeable to report cases of unsuccessful operation as it is satisfactory to narrate those with an opposite result; but, at the same time, the greater amount of information generally conveyed by the former renders the task a matter of duty; and I therefore send the following unusual and unsuccessful cases for publication in the JOURNAL.

CASE I. In a patient operated upon by the late Mr. Estlin, there had been an escape of vitreous humour during the operation, but the sight immediately afterwards was good: hæmorrhage came on subsequently, filled the space between the lids, and, separating the corneal flap, completely destroyed the sight. The patient had vomited in the night, and had probably ruptured some little vessel of the choroid coat, which poured out the

blood. The other eye was operated on at the same time, and ultimately did well, although the convalescence was tedious and troublesome.

CASE II. I operated, in the autumn of 1855, on the left eye of an old man whose right eye had become staphylomatous after an unsuccessful cataract operation. The left eye had been injured by a blow many years ago, and cataract, with adhesion of the iris to the capsule, had resulted; subsequently the right eye became blind, and he came up for operation, which I performed in May 1855. No union of the flap (made by an upper section of the cornea) took place, and the eye became staphylomatous. As a last chance, I operated upon the left eye six months afterwards, and extracted the lens without any great difficulty. The only unusual occurrence which I noticed was a drop of blood on the knife whilst it was in the anterior chamber, from which I concluded that the cornea was in an unhealthy state. The pupil was adherent to the capsule, and irregular in its outline. Hæmorrhage came on in the night; the eye filled; and a large black clot protruded between the eyelids, having the appearance of melanotic growth from the eyeball; and, after a good deal of suffering, the eye sloughed, and the patient became totally blind.

I have in one instance noticed a similar occurrence after an operation for the removal of the anterior part of a staphylomatous eye, but I have never heard of other cases of hæmorrhage following the extraction of cataract. In each of these instances there must have been some peculiarity in the nutrition of the eye, as there had been nothing untoward in the operations.

The following cases are of a different nature.

CASE III. A. G., aged 71, a healthy old man, with excellent eyes for operation, came under my care with fully formed amber-coloured cataract in the left eye, and with the lens so opaque in the right that he could barely see to go about.

I operated on the left eye on the 3rd of December, 1852, and made a lower section in a most satisfactory manner. After rupturing the capsule as usual, upon raising the lid to make the requisite pressure to ensure the escape of the lens, a little clear and bright vitreous humour flowed out, and I just caught sight of the lens falling backwards and outwards to the lower part of the eye. It went completely out of sight, leaving the pupil perfectly clear and circular. I made no attempt to get at the lens, but fastened up the eye in the usual way, and put the patient to bed. He had no bad symptoms, and in ten days he went home with good sight.

He returned in little more than a month, complaining that his sight was becoming dim again; and, upon examination, the pupil was found to be drawn downwards and outwards, and the cataract was in sight below. At the same time, the patient could see tolerably well with this eye. A little inflammation ensued, but it was soon relieved.

I subsequently performed two operations on the same eye, to remove the lens and enlarge the pupil, but without success. At the same time as the right eye became more dim, the little sight which still remained in the left became more valuable.

On the 5th of October, 1855, I operated on his other eye (his age being now 74), and made the upper section through a well marked arcus senilis, and removed the lens. He had no bad symptoms, and was well in ten days after the operation, and now enjoys good sight with the right eye.

CASE IV. On the 19th of Feb. of this year I operated on the left eye of a woman, aged 63, who had been blind for nearly two years. After completing a fair lower section, I introduced a curette to divide the capsule, when some clear vitreous humour began to protrude; and although the lens seemed at first to be adherent to the margin of the pupil, it gradually fell backwards, and disappeared from view. She could see immediately afterwards sufficiently well to distinguish my hands, face, etc., but she complained of great aching of the eye. Considerable inflammation followed, but there was nothing approaching to suppuration,