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THE  
PATHOLOGY AND TREATMENT  
OF  
DISEASES OF THE SKIN.

BY

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## P R E F A C E.



THE following work being devoted almost solely to Treatment, but little has been attempted in the way of systematic arrangement. The observations in it are principally clinical.

As far as opportunities admitted of doing so, the views of those most capable of forming an opinion on the subject of Treatment have been carefully, and I hope I may say truthfully, given. Any shortcomings in this respect are due to the impossibility of reproducing everything that has been written on so wide a subject.

There is a good deal in these pages which would be sought for in vain in any other work. For instance, I believe that up to the present time scarcely any mention has been made of Mr. Startin's excellent Lectures published in the *Medical Times*, while but very scanty justice has as yet been done to the various Papers by Dr. Hilton Fagge, one of the best and most truthful observers of the present day. The reader will see that I have, however imperfectly, tried to remedy these omissions.

No attempt has been made to set up a new classification ; but as some arrangement was necessary, that of Willan—a system which bids fair to live as long as any of the thirty classifications brought forward during the last few years—has been followed. Here and there I have departed a little from it, and perhaps in some few cases

might have departed more, and with advantage. Thus it might be better to class Pityriasis rubra with Eczema, and Pityriasis versicolor with Tinea. But, after all, such an arrangement might only be temporary, and I have therefore left both diseases where I found them.

Brief definitions have been added for the purpose of enabling the reader to identify the diseases for which treatment is recommended. I hope, however, it will be distinctly understood that these are not intended as descriptions.

The reader will observe that no mention is made of many diseases, such as Vitiligo, Pellagra, &c. The reason is that the observations being, as I have already said, chiefly clinical, it seemed better to confine them to diseases I had seen and treated. Syphilitic diseases of the skin are omitted altogether. To my thinking they are altogether unsuited to such a work.

The number of cases of Skin Diseases from which these notes have been taken is variously put down, sometimes at five, sometimes at ten, or again, at sixteen thousand. This is owing to the fact that the diseases were examined and reported on in sections, and consequently at one time from a larger, at another from a narrower, field of observation.

An attempt has been made to break up the host of remedies advised for these diseases into groups. This seemed to me the only way of grappling with an evil which gathers strength almost daily.

Very free use has been made of the pages of the *Journal of Cutaneous Medicine*. Indeed, this paper was started in the belief that it might be made a storehouse of original communications which, without it, would be difficult of access. As some very erroneous statements have been made about the origin of the journal, I will take the liberty of giving the true version of the case.

*Preface.*

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Towards the close of 1867 I proposed to Dr. Fox to bring out a periodical of this kind. After some discussion, we both agreed that, considering Mr. Wilson's position, it would only be courteous to propose that he should edit it. This task Mr. Wilson undertook. It was stated in the *Medico-Chirurgical Review* that he was assisted in it by Dr. Fox, but I always distinctly understood from Mr. Wilson that, beyond the contribution of an occasional paper with his name to it, he received no aid from that gentleman.

I am sorry there should be so many errors of omission. Their number is due to the fact that some of the sheets were printed while I was almost entirely unfitted, by repeated attacks of pain and illness, from attending to work of any kind.

ST. JOHN'S HOSPITAL,  
*October, 1872.*





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*LIST OF CORRECTIONS.*

Page 93, line 33, *for* " to show " *read* " I have shown."

Page 136, line 35, *for* " pustules " *read* " papules."

## CHAPTER I.—PAPULÆ.

*A. Strophulus. B. Lichen. C. Prurigo.*

A. STROPHULUS (*us, i, masc.*), possibly from *στροφήος*, pain in the bowels, or *στροφάω*, to turn.

*Definition.*—An eruption of small, prominent, generally hard papulæ, varying in colour from a vivid red to white, attended with some itching, and ending, after a few weeks, in branny desquamation, generally seated on the face, but may appear on the neck, arms, shoulders, back of hands, breast, and loins. Peculiarly a disorder of early infantile life.

*Divisions.*—1. *S. intertinctus* or red gum, red gown of the older writers, in which the papulæ are red; 2. *S. confertus*, or rank red gum, or tooth-rash, in which the papulæ are paler, but more numerous; 3. *S. volaticus*, wildfire-rash, in which the papulæ are red, and grouped in small clusters of from three to ten or twelve; 4. *S. albidus*, white gum, in which the papulæ are hard, small, and whitish, with a red halo; and 5. *S. candidus*, pallid gum-rash, in which they are white, without a halo.

*Treatment.*—Strophulus rarely requires active treatment. Sometimes the bowels are a good deal disturbed, there being griping, irregular purging, and symptoms of acidity. In such cases mild doses of antacids and aperients,—for instance, a combination of soda and magnesia with a little mercury and chalk, will do good. To this some carminative, like dill-water or cinnamon-water, may be

added. Strophulus is by no means necessarily connected with dentition, but if there be any irritation set up from this cause, it cannot too soon be removed by lancing the gums.

A lotion, containing half a drachm of borate of soda and two drachms of glycerine, in three ounces of elder-flower water, may be employed almost *ad libitum* during the day, and at night cold cream or an ointment containing five minims of chloroform, half a drachm of glycerine, a scruple of calomel, and three drachms of lard, may be smeared on the part. If, however, these remedies are to do good, it is absolutely necessary that the materials employed should be pure, and this is only too often *not* the case. The stuff constantly sold as cold cream, prepared with bladder lard adulterated with lime and salt, is a very different thing from cold cream made by a first-class chemist. I have known two or three applications of what passed for zinc ointment remove the epidermis from the scrotum of a patient, suffering under a tender state of that part, almost as effectually as a blister would have done, and yet the irritation of the surface thus denuded has been relieved by the use of the same ointment properly made. Mr. Wilson relates, that having been consulted by a surgeon, he ordered him zinc ointment, which the surgeon procured from his own hospital. Mr. Wilson, anxious to know what a hospital's idea of zinc ointment might be, asked to see a specimen, and was favoured with a view of some stuff much more fitted for greasing cart-wheels than for applying to the human skin.

This neglect is all the more unpardonable because very simple measures will ensure efficiency. Thoroughly purified lard should be used, and this can only be had by paying a higher price than usual, or by taking the trouble to melt down the flare, after soaking it in cold water, and strain it through flannel: the addition of ten grains of gum-benjamin to each ounce will prevent any rancidity. The pure gum or tears should be picked out, broken, and digested in warm lard for forty-eight hours. This mixture is afterwards strained, and then the active ingredient is added. For zinc ointment the oxide is used,\* and as anything to be used for the hands, head, or face cannot be too free from colour, and, as the white

\* Bell's formula for preparing the benzoated oxide of zinc ointment is as follows:—R. Adipis præparatæ ℥vj, Gum. Benzoin pulv. ʒj; liquefac cum leni calore per horas xxiv. in vaso clauso; dein cola per linteam, et adde oxyd. zinc. purif. ʒj; misce bene et per linteam exprime.

oxide, made by combustion, can now be had very pure, I decidedly prefer it to the buff-coloured oxide.

Some writers say ointments are barbarous\* and apt to become rancid. But a remedy which promotes the patient's comfort and the cure of the disease most certainly ought not to be called by such a name, and when it is rancid either there has been a great neglect or bad materials have been used.

The reader has only to use ointments properly in order to satisfy himself that in eczema, and many other allied affections, they not only exert a most decided action over the disease, but that they form the best defence yet discovered against the irritation which the contact of air with the diseased surface is apt to set up, a point of vast importance in very raw or cold dry weather, preventing all the injurious symptoms which so often follow the admission of air to a denuded and irritated surface.

Most ointments, if properly prepared, will keep good for months. In general, however, patients are quite in the dark as to what is requisite for securing the benefits which these valuable applications yield. They think, when an ointment is ordered, that anything will do, and that it can be got equally good anywhere; whereas, comparatively speaking, few chemists really pay such special attention to the subject as is requisite to ensure excellence. Again, ointments are left uncovered, often in warm rooms, while too much care cannot be taken to preserve them fresh and sweet, and this is in general only to be effected by keeping them closely covered up and in a cool place. The pot used for holding an ointment should have a tight-fitting lid, and a piece of wet bladder or lead-paper should be inserted under the cover, which is always to be replaced so soon as the ointment is no longer required. Finally, when an ointment is to be applied to an irritable skin, it should either be melted by placing it in a saucer over boiling water, or thinned down with almond-oil and smeared gently over the part, no more being prepared at a time in either way than is requisite for the occasion.

For strophulus confertus Mr. Startin prescribes the internal use of biniodide and bichloride of mercury, and directs the irritated surface to be bathed in yolk of egg mixed with tepid water. When the surface is dry or chapped, Mr. Wilson recommends the use of an ointment containing half a drachm of liquor plumbi to the ounce (the

\* "Greasy applications under any circumstances are barbarous, and often injurious in the treatment of cutaneous disease."—BURGESS.

*Definition of Lichen.*

spermaceti cerate or ointment of the London Pharmacopœia being both very good vehicles), or an ounce of oxide of zinc ointment, rubbed down with a drachm of spirit of camphor.

B. LI'CHEN (*en, enis* or *enos*, masc.), from *λειχῆνι, ος*, 'a scab, lichen ; tree-moss. *Gonæus* derives it from *λείχω*, to burn, to creep.

*Definition.*—An eruption of small, hard, red, conical papules, not followed by ulceration, pustules, vesicles, or discharge, though one or more of these may complicate it in very severe cases, accompanied by heat, tingling, and often violent itching ; each papula becoming covered by a thin, small scale, or having the summit torn off by scratching.

*Divisions.*—1. *L. simplex*, where the eruption is moderately red and scattered over the surface of the body. In more severe cases, and when it has lasted a long time, the pimples are seen in clusters, and the cuticle grows harsh, thick, and chapped (*L. agrius*). 2. *L. urticatus* (nettle lichen), in which the pimples are large, often bear a suspicious resemblance to flea- or bug-bites ; and, on scratching, look like spots of nettle-rash : seen almost exclusively in children and delicate women. 3. *L. tropicus* (prickly heat), very small, hard, rough papules, generally in clusters, attended with the most violent itching, and mostly seen either in the tropics or in persons who have resided there. 4. *L. planus* (Wilson), in which the papulæ are dull, red, flattened, and glazed at the summit ; always associated with constitutional disorders. 5. *L. scrofulosorum* (Hebra), in which the papulæ are the size of a millet-seed, pale, yellowish, and red, scattered in smallish clusters, covered with little scales, and not excoriated. 6. *L. lividus*, the same as *L. simplex* ; but the papules are of a purplish colour. 7. *L. pilaris*, in which the papules surround the hairs at their base. Both these divisions might, I think, very well be abolished, but Mr. Wilson and Mr. Startin retain them.

*Treatment.*—In simple lichen, especially when acute, it is not necessary to do more than keep the patient quiet and give a febrifuge and brisk aperient. Citrate of potass or soda taken effervescing every hour or two acts very well in these cases, and now and then it may be requisite to give a mild sedative at bedtime, such as five grains of extract of poppy or lettuce, with a little opium ; or tincture of hyoscyamus, to be taken in camphor mixture, may be prescribed. So soon as convalescence is established, a grain or two

of quinine dissolved in a little dilute sulphuric acid can be given two or three times daily.

My business, however, lies principally with the chronic forms of lichen, and of these, lichen agrius and lichen urticatus are selected as typical divisions, the tropical form being very rarely seen in this country, and the forms mentioned by Hebra and Wilson having been very seldom seen, even by them. The remedies, then, for these varieties of lichen may be arranged in the following order; and, provided the leading indications they afford be carefully looked to, the form in which they are given may be left to the taste and judgment of the surgeon.

These remedies are :—

1. First a tonic such as nitric acid given in some bitter infusion for two or three weeks. About fifteen minims in an ounce of infusion of quassia, or a wine-glassful of water with a drachm of some tonic tincture, like calumbo or cinchona, may be taken three times a day about half an hour before meals, or quinine may be ordered.\* When the patient is low and anæmic steel may be given in the form of citrate or tincture instead of nitric acid.† Which ever be given, an aperient should always be ordered at the same time.

It is advisable, in some cases, to examine the urine, and should oxalate of lime be found, nitro-muriatic in the same doses may be substituted for nitric acid.

2. Any particular disorder of the health, such as rheumatism, gout, or wasting, for instance, or of a function affecting the health, such as indigestion or inactivity of the liver, should be met by

\* The following formula will, I think, be found very useful :—

R. Quinæ disulphatis, gr. xij.  
Acidi sulph. dil. ʒiiss.  
Tinct. cardam. c. ʒss.  
Aquæ cinnam. ad ʒvj. ℥.

Coch. amp. i. ter quotidie sum.

† The reader can try the subjoined formula :—

R. Ferri et quinæ cit. ʒj.  
Ammon. sesquicarb. ʒij.  
Spir. myristicæ ʒss.  
Syrup. simpl. ʒij.  
Aq. ad ʒvj. ℥.

A table-spoonful, in a wine-glassful of water, to be mixed with half an ounce of lemon-juice and drunk effervescing three times a day.



appropriate remedies, as, for instance, iodide of potassium and colchicum, cod-liver oil, mild doses of mercury, &c. ; and *I would most strongly recommend any such disturbance being thoroughly set right before the real curative treatment is begun with*; by curative treatment I mean that alluded to and the use of arsenic.

3. Lastly, in all refractory cases, a course of arsenic should be ordered, and as so very much depends upon the way in which it is given, I shall once for all venture to bring forward what I believe to be the conditions essential to success ; for if arsenic is to do good it must be used properly. By this I mean, that whether the plan of prescribing it in small doses at first and gradually increasing them, or of beginning with large doses and decreasing them, be adopted, the plan, once decided upon, should be regularly and consistently carried out ; and if any interruptions to it be thought requisite they should only be made on really valid grounds, and be as systematic as the rules for taking the medicine. The surgeon may often suspend the use of arsenic with advantage ; the suspension of it by the patient without orders can scarcely fail, sooner or later, to retard the cure. If the patient will give up arsenic whenever he is going out to see his friends, or when he has friends coming to see him ; when he is away on business or on pleasure, both being, of course, potent reasons for neglecting treatment ; when he is tired of medicine, or fancies it may not agree with him, in short, if he will take it in any way but the right way, he had better not take it at all. Properly employed, arsenic is quite as safe a medicine as mercury or antimony—if, indeed, it be not much safer ; though some practitioners who give these freely enough, seem to regard arsenic with a special horror ; but it is only safe, just as it is only useful, when given in this way.

I cannot say that I think the plan so strongly pressed upon notice by Mr. Hunt, of giving full doses at first, and gradually reducing them to such an amount as will maintain a decided action on the system, and of always giving the dose upon a full stomach, is the best, and, I believe, he himself does not stand out so very strongly for it as he did. Mr. Hunt deserves the highest praise for the resolution with which he has sought to force upon the profession a recognition of the value of arsenic. But, at the same time, I think it cannot be denied that the opposite system, if carefully worked out, is equally useful. It is therefore, perhaps, of little moment which system is adopted ; but it is of great moment that it should be

steadily adhered to, and that a proper preparation of arsenic should be given.

For lichen, De Valangin's solution is one of the best formulæ; but the surgeon must remember that there are now two preparations of this name: the original, twelve minims of which are equal to five of Fowler's solution, and that recommended in the British Pharmacopœia, which is of the same strength as Fowler's solution. Ten or twelve minims of the former, or four or five of the latter, may be given three times a day, either with the food or directly after, but on no account on an empty stomach.\* If taken with the food, it may be mixed with anything the patient is drinking, as tea, beer, wine, &c.; if taken after food, with a wine-glassful of water.

I have no faith in arsenic in the shape of pills, or indeed in any solid form whatever. Besides, many persons cannot take pills, especially in great numbers, and they are not at all suited for children. The only remaining preparations of arsenic, of which I have any great experience, are Fowler's solution and Donovan's. Till I tried the solution of the chloride of arsenic, I thought Fowler's the best of all, and even now I would not undertake to prove that De Valangin's is better though I believe it to be so. In most skin diseases, except lepra, I think that, as a rule, it will be found to agree better with the digestion. Should the reader prefer Fowler's solution, he will find it, despite the changes in opinion called into life by fashion, a most valuable remedy. But I would strongly recommend the omission of the compound spirit of lavender, the objection to which I pointed out years ago. The faint mawkish taste it gives to the medicine is far more repulsive to many patients than anything either bitter or sour. I am glad to find that both Wilson and Hardy sanction the expulsion of such a nauseous and useless ingredient. Donovan's solution proved useless in my hands. I never saw any harm arise from using it, but it would seem that others have. Mr. Hunt says, "If there be one medicine more dangerous than another, it is the villanous compound of arsenic, iodine, and mercury, known by the name of Donovan's solution." I share in this view so far as to believe that it is generally unde-

\* Liq. arsen. hyd. ʒij.—Ph. Brit.  
Aquæ ʒxxij. ℥.

Coch. min. i. ter quotidie sumend.

More should not be ordered at a time, as it spoils. When a larger quantity is required, a small portion of some strong spirit or tincture should be added.

sirable to give either iodine or mercury in combination with arsenic; an occasional dose of either can do no harm, but we retain a much better control over them by giving them separately.

In an able paper\* on the action of arsenic, Mr. Hunt, who now admits that this drug may be given in rising doses, makes the very important statement, that after one preparation of arsenic has been taken for some time, another may often be given with the best effects. The absorbents seem to take up a mineral poison very well for a while and then to refuse it, just as the stomach sickens after a while at a monotonous diet. At this juncture, if a different preparation be given it will be taken up greedily. I have repeatedly tested this observation of Mr. Hunt's with two arsenical preparations,—the solution of the chloride and the liquor arsenicalis, and have frequently remarked that when the action of the former began to flag, there was a rapid and manifest change on resorting to the alkaline solution. Whatever preparation of arsenic be employed, it is essential that it should be freshly made, especially in warm weather.

The dose and the mode of taking the arsenic having been decided upon, the next consideration is the length of time it requires to be taken; and respecting this I believe there is but one opinion among those who have most carefully studied the subject, which is, that it must be continued till the disease is thoroughly subdued if not altogether cured. Mr. Hunt looks upon a pricking sensation in the conjunctiva as a sign that the curative action of the arsenic has been set up, and he considers that, if just enough of the mineral be given to keep up the action, we shall get all the good we can from the remedy with the least amount of disturbance. In some persons arsenic brings on a dirty brown staining of the skin, with desquamation, where it is hidden from light, and Mr. Hunt finds that a dose large enough to keep up this discoloration, and yet not large enough to make the conjunctiva tender, will ensure the curative action of the medicine just as effectually as the largest amount. I believe myself that one of the best guides we can have is the action of the bowels. When the arsenic is making the stools a little more fluid and frequent than usual, it is doing all it can do, and it is rarely necessary to make any change in the mode of administering it. I have repeatedly found that after a short course of three full doses

\* *Journal of Cutaneous Medicine*, vol. ii. p. 350.

daily, the daily use of five minims of Fowler's solution would cure the relics of an obstinate skin disease and at the same time keep the bowels in perfect order ; for arsenic, properly given, instead of exasperating soothes an irritated state of the bowels.

With some persons, arsenic in very small doses will bring on nausea, irritability of the stomach, sickness, purging, and a general feeling of being very much out of sorts. Perhaps the best method of meeting these disagreeable symptoms is the following :—The arsenic is interrupted for one day, a mild pill is given the night previous, and a dose of magnesia in the morning ; the patient may lie in bed, if practicable, during the early part of the day, and take only very light food ; the arsenic is then resumed the day after, and taken the last thing before going to bed. If it still produce sickness and irritation, the dose must be reduced again, for there is always a point at which arsenic will do good, without inducing disorder of the health ; in fact, the dose which just stops short of this is precisely the dose that effects the greatest amount of benefit. Some surgeons, in case of great sickness and irritation, add opium, hydrocyanic acid, &c., in order to diminish these ; but my opinion is quite opposed to the practice. I have always found that arsenic answers best when its action is not masked.

I may here remark, that in many thousand cases of disease of the skin, I have never seen an instance of such remarkable intolerance of arsenic as Mr. Hunt speaks of. The smallest quantity I have known to disagree with a grown-up person was about two minims of Fowler's solution daily. I had under my care a woman suffering from erythema, who complained so much of disturbance in her head, and excitement, from the use of De Valangin's solution in very small doses, that the quantity was gradually lowered to two minims a day, but in this instance, I had every reason to believe that the patient was not very anxious to be cured.

Patients often get tired of the mere repetition of medicine, however well it may be agreeing with them, and then they or their friends propose giving it up for a little while, and trying change of air, &c. I believe this to be, in almost every instance, a mistake to which the surgeon should not yield : once a hold gained over the disease, it ought never to be relaxed ; patients suffering under complaints for which arsenic is required generally derive much less benefit from change of air than they expect, certainly far less than compensates for interrupting a course of arsenic and having to go

through the whole process again ; and travelling, unless it can be continued for a very long time indeed and under very favourable circumstances, will not cure a bad case of skin disease.

Mr. Wilson recommends\* for the constitutional treatment of lichen, the mildest aperients, followed by bitters and mineral acids, by chalybeates and quinine, or by quinine and iron. In chronic cases he has much faith in arsenic. For lichen planus he gives the ferro-arsenical mixture. His local treatment consists of juniper tar soap, tepid bathing, emulsion of bitter almonds, with hydrocyanic acid, bichloride of mercury and spirit of wine, and lotions of carbolic acid. His great remedy for the itching, and one which he considers a most valuable agent in lichen urticatus, is a lotion of pyroligneous oil of juniper and spirit of wine, an ounce of each in six ounces of water. In obstinate lichen circumscriptus he recommends gentle friction with ointment of ammonio-chloride or nitric oxide of mercury, or the ung. picis liquidæ. For lichen planus, lotion of the bichloride of mercury or the solution of the pentasulphide of calcium.† Mr. Wilson thinks daily bathing of great value.

Mr. Startin bleeds for this affection. For the lichen sparsus of authors, he uses a lotion of bichloride of mercury and creosote water to allay the itching. In cases of lichen pilaris, accompanied by asthenic look and languid circulation, he prescribes the persulphate of iron in infusion of quassia, and ointment of white precipitate of mercury and levigated sulphur. For the feverishness of lichen agrius he gives purgatives and diaphoretic diluents, with a very strictly regulated diet ; after these a quarter of a grain of iodine, with twenty minims of liquor potassæ and ten of colchicum wine, three times a day, with creosote ointment and a very free use of baths. He then gives calomel and opium at bedtime, to which succeed bichloride of mercury, in doses of one-sixth of a grain, and lotions of bisulphuret and bichloride of mercury applied warm.

\* *Diseases of the Skin*, sixth edition, p. 202.

† The following formulæ may be employed :—

R. Hydrarg. perchlor. gr. viij.

Mist. amygd. ℥viiij. ℥.

Lotio ft. Or elder-flower water may be added in the same proportions.

R. Calcis vivi ℥j.

Sulph. sublim. ℥ij.

Aquæ ℥iv.

Boil, stirring with a wooden spatula till the fluid assumes a greenish hue ; then strain.

Finally come aperient chalybeates and lotions of borate of soda and glycerine. For the livid form (*lichen lividus*), Mr. Startin uses acid chalybeates, hot-air baths, and sulphur fumigations. *Lichen tropicus*, which he considers to be the same complaint as pellagra, is not marked out by him as requiring any particular line of treatment.

C. PRURI'GO (*o, inis, fem.*), from *prurire*, to itch.

*Definition.*—An eruption of small, pale papules, with a dry, greyish, or yellowish state of the skin, accompanied by intense itching, stinging, and burning; wasting of the body; skin often marked by long abraded lines.

*Divisions.*—1. *P. mitis*, in which the papules are soft, smooth, solitary, and dispersed; generally scattered on front part of fore-arms, belly, and thighs; often nearly of same colour as the skin; seen mostly in middle-aged persons, or the young. 2. *P. senilis* or *formicans*, *emmet prurigo*, where the papules are fewer and larger, and accompanied with the most violent itching sensation of being stabbed with a needle, crawling and tingling; generally preceded or accompanied by considerable disturbance of the health, and a dirty-looking state of the skin, which is almost always marked by scratching.

*Treatment.*—In all forms of this justly-dreaded affection, the remedies which seem to have succeeded best resolve themselves pretty well into six classes.

1. An alkali.—Soda, for instance, seems to have always been a favourite ingredient in the prescriptions of the most successful practitioners. I do not attribute much importance to the form in which it is given; perhaps the carbonate, or a mixture of carbonate and sulphite, answers best. If there be much indigestion or acidity, ten grains may be given two or three times a day just after meals, either in an ounce of bitter infusion with which a little compound tincture of cinnamon or spirit of nutmeg is combined, or it may be administered in conjunction with aromatic confection and dilute hydrocyanic acid.\* These remedies should be continued till all indigestion is removed; should no indigestion be present they may be given up at the end of ten days or a fortnight.

\* R. sodæ carb. ʒj; Acid. sulph. dil. ʒj; Conf. aromat. ʒiiss; Acidi hydrocyan. dil. Ph. Lond. m. xx; Aq. menth. pip. ad ʒviij. Coch. amp. duo bis terve quotidie sumend.

*Treatment of Prurigo.*

2. A remedy is required which will act on the skin. Sulphur in some form or other is perhaps the mildest and most certain. Antimony, however, in such a preparation or dose as will not nauseate or depress, may also be prescribed with benefit, and I see no objection to combining these remedies with a little nitrate of potass. When the skin is very dry and harsh, as it almost always is, a powder containing these ingredients may be given on going to bed in a little gruel or warm whey.\* Like the previously mentioned remedies, these need not be continued more than about a fortnight.

3. The use of either these two sets of remedies should be accompanied by a course of medicine which will act gently on the liver and bowels, as, for instance, the occasional use of small doses of iodide of potassium, with rhubarb, either in the form of infusion or pill. A little mercury may be given in the shape of blue pill, combined with soap henbane, and jalap or colocynth; or as grey powder, with nitrate of potass.† Mr. Startin places mercury under interdict, though I have never seen it do the least harm.

\* Or try—

R. Antimon. sulphur. gr. xij.  
Pulv. resin. guaiac. gr. xxiv.  
Olei ricini q. s.

f. pil. xii. ij omni nocte sumend.

R. Liq. ammoniæ acet. ℥iij.  
Vini antimon.  
Spir. æther. nit. aa ℥iij.  
Mist. camph. ad ℥vj. ℥.

Coch. amp. duo horâ somni sumend.

Whichever of those two may be selected, it should be followed by a glass of hot whey taken after getting into bed. The antimonial wine should be prepared by first dissolving the tartar emetic in ten times its weight of boiling water and then adding the wine. When it can be procured, essence of camphor, two or three drachms to six ounces of water, is much superior to camphor mixture, which is almost, if not quite, inert for adults.

† For instance—

R. Potassii iodid. ℥j.  
Syrupi aurant. ℥iij.  
Mist. camph. ad ℥ij.

Coch. min. i. bis quotidie ex aquæ cyatho vin. sumend.

R. Pil. rhei c. ℥ij.

Divide in pil. viij. i. omni noct. sumend.

R. Pil. coloc. comp. ℥ss.  
— hydrarg. ℥ss.

Ext. hyoscy. ℥j. ℥.

et divide in pil. xii. i vel ij pro re natâ sum.

4. But the great internal remedy in prurigo is arsenic, and in all very severe or long-standing cases, and in those which do not seem to be benefited by the preceding treatment, I would advise that it should be immediately begun with, and the other remedies used only as auxiliaries, or in the place of the arsenic when it is necessary to withhold it. It may be prescribed in full doses, and when this is done, I am disposed to share Mr. Hunt's opinion that prurigo is not such an intractable disease if properly treated, although I am aware that the statement may be looked upon as a modern heresy. Under the old plan of treatment it seems to have resisted every attempt to subdue its malignity, and, perhaps, there were more suicides from prurigo than from all other diseases of the skin put together. Mr. Hunt says—"Of the entire recovery of a patient thus affected, or even of considerable alleviation of suffering, not one single gleam of hope can be gathered from any author who has written on the subject. And yet there is no truth in the whole circle of medical science more vividly impressed on my own mind, than that, under proper management, arsenic is an effectual remedy for this disease." Mr. Hunt bleeds to faintness in refractory cases before giving the arsenic: in one case he took about seventy ounces of blood from the arm, and probably fifteen additional ounces by leeches; and certainly, according to his statement, the success seems to have quite justified the means. Lisfranc used also to bleed in cases where the itching was connected with difficult menstruation, and the practice is said to have been very beneficial.

5. Certain remedies which seem to stimulate nutrition in some as yet unknown way. Of these two are well worth a trial—strychnia and cod-liver oil. The strychnia may be given in doses of a sixtieth or a sixty-fourth part of a grain every three or four hours till a decided effect is produced upon the disease, or till nervous symptoms show themselves, when it may be left off. It sometimes acts like a specific upon the pruritus, and when this symptom is once thoroughly quelled we shall seldom, if ever, have much difficulty in dealing with the remaining symptoms. Nux vomica was a favourite remedy with Neligan, but I believe we are indebted to Dr. Burgess for this mode of exhibiting its active principle. It should not be taken along with any other remedy, whereas the cod-liver oil may be given almost as an article of diet for a long time and in moderate doses, quite irrespective of any other medicine the patient may be taking. I confess my entire ignorance as to



how cod-liver oil and strychnia may act, and it may perhaps save some trouble if I say, once for all, that I am not prepared to offer any explanation of the action of medicines, for the simple reason that in respect to most of them nothing whatever is known for certain, and as to cloudy conjectures and cabalistic forms of speech, I leave them to those who like them. I am content to admire at a distance the person capable of solving such questions as causes and modes of action,\* as I quite despair of my own ability to do so.

6. A free use of hot baths, especially the vapour bath and the turkish bath. I prefer the latter when it can be used; next to that, I decidedly give the preference to the vapour bath. But when the patient is very nervous, suffering, or supposed to suffer, from disease of the heart, or subject to fainting; where he resides at a long distance from any establishment or baths of either kind, or where expense is an object, the hot bath is our only alternative and fortunately it is a very good substitute. The water should be at quite ninety-eight or a hundred degrees of Fahrenheit. The patient, so soon as he enters the bath, should scrub himself all over with the flesh-brush, lather the affected parts with either the soft soap of the London Pharmacopœia or Pears's transparent soap, and then let himself down into the hot water, in which he ought not to remain more than three or four minutes. Having dried himself thoroughly, he should apply any ointment he may be using and dress directly.

But the turkish bath is the thing; it scarcely ever fails to do good, and is, perhaps, more peculiarly suited for prurigo than for any other disease of the skin. There are many persons in the habit of sponging all over daily and who, therefore, have quite made up their minds that they require no other kind of purification. They cannot too soon be undeceived as to the efficacy of water used in this way; it will no more free the skin from soot, dust, dead scarf-skin and secretion, than rubbing a horse gently down with a soft towel will make his coat glossy. To rid the surface thoroughly of these impurities two things are necessary: free perspiration must be induced and the skin must be well rubbed and kneaded. Trainers are well aware of this, and when preparing a man for a fight make him perspire freely and then rub him down with a hard towel. The vigorous system of cleansing adopted in a turkish bath is more

\* *Felix qui potuit rerum cognoscere causas.*

like that used in training than any other, and will soon open the eyes of those who put their faith in cold sponging only, by bringing away an unexpected quantity of dirty skin. As there is no danger to be apprehended from the use of the bath so long as the simple precaution is adopted of not staying in too long at first and always taking the bath on an empty stomach, it can scarcely be overdone. I have known one taken three or four days together without any harm arising from it, and should not anticipate any.

Some most extraordinary objections have been made to it. Mr. Hunt, for instance, expatiates with grim sarcasm on the portentous aspect of things on entering a turkish bath—the air so hot as to make one fancy that it cannot be breathed without setting the lungs on fire, the kneading and trampling on the patient and the drowning with a deluge of cold water; but he admits that it cures fanciful people of their whims in superlative style. Then one of the whims it will cure them of is fancying there can any harm come from using the bath.

Whichever form of bath be adopted, I would strongly insist upon the necessity for taking it regularly and often enough and not yielding to any nonsense about baths being lowering, weakening, &c. I dwell upon the subject because the advantage of hot bathing in prurigo generally so soon becomes manifest. If nothing else be gained, free perspiration is promoted, and though this is no panacea yet it is attended with relief. Prurigo often breaks out in persons who have nothing to reproach themselves with in regard to cleanliness. Mr. Startin, indeed, says,\* “that the neuralgic itching which some writers consider as a form or variety of prurigo is, perhaps, more frequently met with in the respectable walks of life than any other cutaneous affection.” Such persons often seem surprised at being told to make free use of hot baths, but they forget that they do not take sufficient exercise to keep the skin in a healthy state, and that means which would do very well with men riding twenty miles a day or working hard at training, are quite inefficient when exercise is reduced to a gentle stroll. Elderly persons in good circumstances, and people who have retired from business, often seem to think it is hardly respectable to go beyond a steady walk, but prurigo will not yield to such gentle means, and till regular active exercise has become a settled habit, the action

\* *Medical Times*, vol. xiv. p. 193.

of the skin must be encouraged. In all cases I think no woollen ought to be worn next the skin.

Mr. Wilson gives generous diet and tonics in this disease and considers arsenic, properly given and watched, as a specific. Frictions, baths, carbolic acid soap and juniper-tar soap are his chief local remedies, but he looks upon the prognosis as doubtful on account of the exhaustion and suffering which accompany the complaint.

Mr. Startin's treatment of prurigo is that of lichen; he relies chiefly on mineral acids, chalybeates, opium and ammonia, and has never found benefit from mercury or arsenic; on the contrary they rather do harm. In a very severe case of prurigo formicans, recorded by this gentleman, twenty drops of dilute sulphuric acid and ten of Batley's sedative three times a day, followed by tincture of muriate of iron in infusion of quassia and an opiate at bedtime, proved perfectly successful. These means were, however, seconded by the use of an ointment of white precipitate of mercury and creosote, ten grains of the salt and a few drops of the fluid to an ounce, and after this a weak solution of bichloride of mercury in creosote water, used warm; later on, the ointment was entirely discontinued and bisulphuret of mercury was added to the lotion. A strict diet, consisting of milk, bread, and boiled meat was observed. Mr. Startin finds hot-air baths and cinnabar fumigations of great service. Dr. Neligan\* used to prescribe iron in infusion of hops, with the juice of conium in pretty large doses. He found in the prurigo of old people great benefit from the use of this remedy along with magnesia. Some years ago, Dr. John Waterfield communicated to the *Lancet* and *Medical Gazette* a paper on the value of tar and charcoal pills, and he now tells me that he has treated several cases of prurigo very successfully with this remedy. Dr. Hillier† says that in some chronic cases diuretics, "such as the sweet spirits of nitre, decoction of broom, with the compound tincture of juniper and saltpetre," are of benefit. Dr. Purdon communicated to the *Journal of Cutaneous Medicine* ‡ three cases in which the bromide of ammonium in doses of from ten to twenty grains effected a very rapid cure.

Hebra's treatment of prurigo is simply palliative, and even in this he does not appear to be very successful; but the explanation

\* *Practical Treatise on Diseases of the Skin*, p. 210.

† *Handbook of Skin Diseases*, p. 79.

‡ Vol. i. p. 326.

is, that *the disease which he describes under this name is quite distinct from what we call prurigo*, and it has more than once struck me with surprise, that authors professedly familiar with his works had never noticed this. I sought to call attention to the fact in a paper written for the *Medical Press and Circular* some two years ago, and I had occasionally in conversation pointed out the distinction between the Austrian and the English disease ; but, so far as I know, the observations fell to the ground. I was, therefore, not a little gratified, on reading Mr. Hutchinson's "Norwegian Notes," in the *Medical Times*, to find that he had, on independent grounds, arrived at the same conclusions as myself. Speaking of Hebra's account of the disease, he says : \*—

"I think it will be granted by English observers that cases fitting with this description *are very rare*. I have myself been carefully on the look-out for such, and have found *very few indeed*. Two recently under my care, to which I was disposed for some time to give this name, were afterwards proved to be attended by body-lice, and in all probability caused by them. Yet in Vienna Hebra speaks of the disease as frequent, and refers to an experience of thousands.

"Dr. Bidentkap, who formerly studied under Hebra, showed me two patients in whose cases this diagnosis had been given. One was a girl of about fifteen, and the other a lad a year or two older. Both had suffered for years, and in both, from scratching, &c., *the skin had become thickened, of a deep brown pigment, and spotted with small whitish but indistinct scars*.

"In both cases I thought there was good reason to suspect scabies ; indeed, in one it was known to have been present, and both were to me suspicious of pediculi. We talked over these conjectures, and Dr. Bidentkap alleged, with much force, that if any large proportion of the cases of Hebra's prurigo are really badly-cured scabies or pedicularia, then ought that malady to be very frequent in Norway, whilst, in truth, it is very rare.

"The state of skin in Dr. Bidentkap's two patients, as regards pigmentation and evidences of scratching, very much reminded me of some of Hebra's plates illustrating the eruption consequent upon lice, and I cannot still help feeling some suspicion that, after all, a local, and not a constitutional, cause may possibly be at the bottom of the matter."

\* *Medical Times and Gazette*, 1869, vol. ii. p. 44.

Of course, observation alone can settle this point; but in the mean time I may remark that Hebra denies that prurigo is, or ever can be, caused by any kind of insect (*durch irgend eine Gattung Epizöen* \*). It is a disease of the skin, he says, in the strictest sense of the word, and never arises from external irritation. It is the result of an inborn tendency to the disease; the germ of prurigo exists in the child in every instance. ("Jede Prurigo ist schon beim Kinde vorhanden.")

Hebra describes † prurigo as "a peculiar disease of the skin, characterized by the development of small papules of the same colour as the healthy skin or slightly reddened, and violent itching, corresponding to the description by Willan of prurigo mitis and prurigo formicans," the only forms which he recognizes. The symptoms, as given by him, are an eruption of small sub-epidermal papules, rather to be made out by the feel than the sight, isolated, the skin between them intact, causing most severe itching, the summits occasionally crusted with blood. With the long continuance of the complaint ensues a dark staining of the scarf-skin, and the natural furrows, lines, and shallow pittings in the skin become deeper and stand further apart, particularly in the fingers, backs of the hands, and wrists. With time, the skin becomes harder and thicker. Many patients never suffer more than this, but in prurigo agria or ferox, the symptoms, though the same, are far more severe; the papulæ are larger, the itching more intense, the excoriation more extensive. The whole of the epidermis is converted into a kind of white, flour-like dust. Sometimes symptoms like those of eczema rubrum are added, or pustules may appear and even assume a confluent form, *so that a tract of the epidermis may be undermined by suppuration. Many cases might be taken for ichthyosis, eczema, impetigo, or ecthyma.* It may attack the face, but the scalp escapes; the hair, however, of such patients is dull, quite without sheen, feels dry, and frequently looks as if covered with dust. The skin of the lower parts of the legs is often as rough as a file; *when the closed fingers are passed over it there is a sound as if they had been drawn across a short-bristled brush, such as a nail-brush for instance, or a piece of coarse packing-paper, and a pricking feeling is felt in the tips of the fingers for some time after!* The extremities are generally the

\* *Handbuch der speciellen Pathologie*, 3er Band, 3e Lieferung, S. 490.

† *Op. cit.*, p. 478.

parts most affected ; flexion surfaces, such as the armpit, &c., are seldom, if ever, attacked. When there are many pustules on the extremities the corresponding lymphatic glands swell. When the feet are thus invaded the glands in the groin may enlarge to such an extent *that the mass protruding above the level of the skin is as big as a man's fist, (!)* and they take on this change in a more symmetrical manner than in any other disease.

The complaint begins to show itself in early life. It is often milder in summer and after a good deal of hot bathing. He has not found either that it tends to bring on dropsy, mania, and tuberculosis, as imagined by some authors, or that it wards them off. The sufferings of the patient, however, are so atrocious that it is no wonder his mind gives way sometimes. Its tendency to induce suicide he thinks has been greatly overrated. That it should bring on weariness of life is only natural. "If we look," he says, "at the existence of a patient afflicted with prurigo, even as a child constantly harassed both by schoolmasters and playmates for scratching himself; if we view him later in life, especially if he belong to the working classes and be not in a position to have a bed to himself, grumbled at by his bed-fellows, and even banished from their society—partly owing to dread of infection, partly to their sleep being broken by his incessant scratching—if we contemplate him in still more advanced life (particularly should he be in a good position) looking upon himself as *an object to be shunned by all the world*, and dreading to make himself a home or take to himself a wife—the weariness of life in one so frightfully tortured can be easily understood." Yet, strange to say, the patient endures life even under these circumstances, and Hebra tells us that he has only known one case of suicide from prurigo.

Prurigo altogether, as I understand Hebra, is utterly incurable, and he thinks\* it is much to be regretted that this fact is not pointed out in a sufficiently emphatic manner in any dermatological work! For incurable it is; the patient may do what he likes, his malady will follow him to his grave, and only those who are unacquainted with the course of the disease would use such an expression as that of its being difficult to cure, seeing that this would imply the possibility of removing it in some few instances. Many other writers have drawn pictures of prurigo which are gloomy enough, but none

\* *Op. cit.*, p. 452.

that can be compared with this by Hebra, which is shaded in with such sombre hues that the mind can scarcely realize the idea of sufferings which might vie with those described in Dante's "Inferno." Hope is out of the question, and art, regarded as a curative power, is useless, whereas the two writers who, perhaps, after Hebra, take the gloomiest view of the inveteracy of the complaint, and of the little control over it exerted by medicine—Willan and Rayer—express themselves in a very different way. The former distinctly says \* that even prurigo formicans is not unfrequently cured by a course of treatment (which he speaks of) in the short period of a month or six weeks, and that "sea-bathing has also, in some cases, entirely removed the complaint," while Rayer's statements go no further than saying that prurigo senilis often resists the best-directed treatment.

The only instance I have ever seen in which I thought I could detect even the germs of the disease described by Hebra was the following:—

- Alfred B., aged 5 last birthday, was brought to St. John's Hospital, April 2nd, 1869. The skin was in hue almost like that of some mulattoes; I could only compare it to a tint between citron and olive; in texture and feel it resembled that seen in ichthyosis in the young. From the lower part of the back of the neck to the lowest part of the left scapula, and from the spine to the point of the left acromion, the skin was thickly sown with papules. They were small and reddish; the tops had been torn off by scratching. But for this they might have been very fairly compared to the papules of prurigo senilis as seen in Willan's plate of that disease. The mother described the itching caused by these papules as being of the most rabid description; it began to be manifest so soon as ever the lad was able to scratch himself, and since that time he had never passed a night without lacerating his skin. The papules had begun over the ridge of the scapula, and had never extended beyond the district which I have described. There was not a single sign of scabies. The boy had always enjoyed good health in every other respect, and had suffered from no illness except chicken-pox and measles, through which he passed very well. A brother, a year or two older, who had much the same peculiar colour, had never shown any signs of skin disease.

\* *On Cutaneous Diseases*, pp. 78 and 79.







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**PRURIGO IN A BOY.**  
**SUPPOSED INSTANCE OF THE PRURIGO OF HEBRA.**

*To face page 31.*

He was placed on full doses of arsenic, which were continued three times a day with great regularity. By the beginning of August the disease had in a great measure yielded, and five or six weeks later it had quite disappeared, the itching of course going with it. Since then the boy has remained well.

It may be said that the symptoms here were due to pediculi, but I submit that there must be another and more potent factor in the case. When the patient was first brought to me I had his shirt taken off and thoroughly examined; I believe I searched every fold of it, but I found no traces of lice. At a subsequent period, without giving the mother any warning, I repeated the process, but with the same result. There were some nits in the back hair, and the mother had occasionally detected a louse or two, but I need scarcely say how common such things are in the heads of children, whereas this is the only instance I have seen of these symptoms in more than 10,000 cases of skin disease. According to my experience, lice only set up irritation in their immediate vicinity; here a distant solitary part was affected. The child was evidently, for his station in life, kept very clean and well attended to. Finally the disease passed off under internal treatment only, no external means whatever having been employed, so that its removal was not due here to the destruction of the parasite by topical applications.

For the purpose of more clearly elucidating the point here discussed, I give a photograph of the appearance presented by the patient.

In some cases, particularly when prurigo attacks the pudendum, scrotum, or anus, the itching is so intolerable that something must be done locally for it, although it is rather a wild-goose chase, for the itching is the symbol of the malady, the one essential and tangible symptom, and the cure of it is the cure of the disease. Mr. Wilson recommends, in a general way, that the skin should be frequently rubbed with a damp sponge dipped in fine oatmeal; after this, the tincture of croton, made by steeping an ounce of bruised croton-seeds for a week in four ounces of spirit, is applied, and after this has been done a few times a lotion of bichloride of mercury in almond emulsion, fifteen or twenty grains to a pint, will often prove very efficacious. Painting the surface with iodine is useful, as is also glycerine applied with a sponge. For the affection of the pudendum, Bateman recommends a lotion made of two grains of bichloride ("oxymuriate") of mercury in an ounce of lime-water.

Mr. Wilson says the juniper-tar ointment is peculiarly valuable in this variety. In pruritus of these parts injections of very hot water, juniper-tar ointment, blisters to the thighs, and small bleedings, seem, from all accounts, to be the most reliable means of cure. Mr. Wilson has found an opium injection relieve the irritation after all other means had failed. Strong nitric oxide of mercury ointment, and podophyllin in doses of one-sixth of a grain are said to have proved of great service in prurigo of the anus. Mr. Startin, in a case related in his lectures, where the scrotum was also affected, directed mucilaginous hip-baths, daily ablutions with yolk of egg and tepid water, the application twice a day of very dilute mercurial ointment with a few minims of creosote, strict diet, and one-sixth of a grain of bichloride of mercury in cold infusion of hops three times a day. The case was very severe and occurred in an old man, but a cure was effected in little more than two months. In the prurigo of old people generally Mr. Startin's prescription for external use is a liniment of glycerine and trisnitrate of bismuth, or powdered talc rubbed in with a flesh-brush. Dr. Frazer recommends\* for trial finely powdered camphor mixed with six or eight parts of rice or potato starch, and a small quantity of acetate or carbonate of lead. This is dusted on the skin three or four times a day, its action being aided by calomel ointment. Latterly Dr. Neligan confined himself almost entirely to chloroform ointment, which seems one of the best, if not the best, ever introduced. It is made by mixing half a drachm of chloroform with an ounce of cold cream. I believe this and the lotion given below† are two of our most valuable remedies.

Mr. Balmanno Squire considers‡ that prurigo senilis is always due to pediculi and we may naturally expect to find that his principal reliance is upon external means. That in some persons pediculi will induce symptoms which might very easily be mistaken for prurigo is possible enough, but that they ever bring on genuine prurigo, a disease in its severer form so generally associated with some deep-seated constitutional disorder, is a very different matter.

\* *Treatment of Diseases of the Skin*, p. 131.

† R. Hydr. bichlor. gr. iv.

Bismuth oxyd. ʒss.

Acidi hydrocyan. dil. Ph. Lond. ʒss.

Aq. calcis ad. ʒviij. m.

To be applied warm two or three times daily.

‡ *Medical Times and Gazette*, 1865, vol. ii. p. 211.

Mr. Naylor, who thinks \* the insect cannot produce any form of this complaint, says he has known a very weak nitric acid lotion—half a drachm to eight ounces of water, or one of bismuth, a scruple to six ounces of water—prove exceedingly serviceable. He also says that when prurigo is an idiopathic affection the use of chloroform is often of great service, applied either in the form of vapour or of an ointment consisting of equal parts of chloroform and camphor liniment.

Mr. Hutchinson,† in fifty-five cases of prurigo senilis, found lice in fifty-two, and Dr. Hillier says that out of fifty-one cases under his care in University College Hospital the pediculus was met with in thirty-five. Dr. Drysdale also holds ‡ that prurigo is almost always caused by the presence of the pediculus vestimenti. Still the existence of intense itching from undoubted prurigo, in eczema, in disturbed health, from pregnancy, &c., shows that the presence of the insect is not a necessary feature in the generation of this distressing symptom.

Dr. Hillier speaks highly of stavesacre ointment, also of an ointment containing one or two drachms of the powdered pyrethum roseum (the persian insect-powder) to an ounce of lard. Dr. Cheadle has also found stavesacre ointment very useful. Dr. Van Buren strongly recommends a solution of sulphurous acid, freely applied two or three times a day. One part to two of water might be used. Iodoform ointment, a scruple to a drachm of the salt mixed with an ounce of cocoa butter (oleum throbromæ), has been recommended.

\* *Treatise on Diseases of the Skin*, p. 86.

† *British Medical Journal*, 1870.

‡ *Journal of Cutaneous Medicine*, vol. iv. p. 79.

## CHAPTER II.—SQUAMÆ.

*A. Lepra and Psoriasis. B. Pityriasis. C. Ichthyosis.*

A. LE'PRA (*a, æ, fem.*) and PSORI'ASIS (*is, is, fem.*) (λέπρα, from λεπρός, rough, scaly; psoriasis, from ψώρα, the itch).

*Definition.*—An eruption of ham- or salmon-coloured slightly elevated papules, often looking at first like scattered drops of tallow grease, gradually becoming covered with thin, extremely dry, hard white scales, often coalescing into large irregularly-shaped patches, peculiarly prone to appear, among other parts, on the knees and elbows; the scales becoming very light and silvery in some cases. Not accompanied or followed by vesication, ulceration or forming of pustules. Often a good deal of itching, sometimes accompanied by aching pain in the parts affected, heat, stiffness, and uneasiness, a brown state of the tongue and other signs of disorder.

The sooner the word psoriasis is entirely omitted the better. It is really in the ordinary sense of the word a form of lepra, displaying the same features and requiring the same treatment. I have therefore left it out altogether, and all that is said of lepra must be understood as applying to psoriasis also. Mr. Wilson, indeed, has proposed that the latter word should be used only for the dry, scaly stage of eczema, and that lepra should be known in future as alphas. I would suggest the entire expulsion of psoriasis, and should it be considered indispensable to use a greek word for the dry state of eczema, I would suggest that psora be retained, being classic Greek and a very significant word.

*Pathology of Lepra.*—I subjoin a few observations on this subject, which will not, I think, be found in any other work.

In the *Allgemeine med. Zeitung* of Vienna for July 16th, 1867, there is a paper on the pathology of lepra by Dr. J. Neumann. Having quoted the statement of Gustav Simon, that the red spots which precede the formation of scales probably arise from chronic inflammation, and the swelling of them from inflammatory deposit in the skin the nature of which has not yet been examined; and that this chronic inflammation occasions the profuse formation of epidermic scales, in the latter part of which view Neumann himself coincides, and having mentioned that Hebra in his post-mortem examinations could not, either with the naked eye or the microscope, detect any adequate pathological appearances; he goes on to say that Wertheim removed some of the affected pieces of skin from persons suffering under lepra (psoriasis he calls it) and found both the longitudinally and transversely placed papillæ enlarged to twelve or fifteen times their natural size. He has also found that the vessels of the papillæ take on the appearance of being more bent and twisted on their way to the top of the papillæ, and he conjectures that the vessels may be enlarged.

Dr. Neumann then proceeds to give the results of his own observations. In his cases the portions of skin affected with lepra were soaked in solution of glue for twenty-four hours, and then microscopically examined by Professor Wedl. The most successful sections, which were treated partly with vinegar only, partly with a preparation of ammonia (*karmin-saurem Ammoniak*), yielded the following results. The epidermis cells, as also those of the rete Malpighii, were largely developed and hypertrophied. Both the corium and the papillæ were filled with numerous cell-growths. These occurred especially along the course of the vessels, sometimes they appeared singly, and exhibited numerous continuations. They were met with principally in the upper layers of the corium and the tips of the papillæ, where they are aggregated into little masses.

If we take one of the larger vessels of the corium and trace it to the branches going to the papillæ, we find, beside the cell-growths which gather round the wall of the vessel, the little twigs which run into the papilla in a graduated line, spreading themselves along the whole papilla; in some we find the vessel winding round the tip of the papilla in such a manner that the cells lying on the wall of the vessel, which in its previous course held a position corresponding to

its long diameter, now take on at the tip a horizontal or oblique direction. A transverse cut through the papilla gives a clear view of the cell-growths which almost fill out the stroma, forming a very visible ring in the middle of the section.

Neumann therefore considers that lepra is to be ranked as an inflammatory process of the upper layer of the corium and the papillary bodies, but with exuberance of cell-growth and enlargement of the papillæ, an enlargement, however, which is not peculiar to lepra, for it is found in other chronic diseases of the skin, as, for instance, prurigo and eczema; but in these the enlargement is only found when the disease has lasted a long time, whereas it is met with in lepra at the very outset. The excessive formation of epidermis scales is therefore only to be regarded as a hyperplasia of the cells of the Malpighian tissue.

According to Wilson,\* the papillæ in lepra become congested and infiltrated, and there is possibly even in an early stage hyperplasia of the cell-tissue; in the mature state the papillæ of the cutis are hypertrophied, so that when a scale is forcibly removed the heads of the papillæ are torn off. They are sometimes so large and so closely surrounded by the substance of the scales in the central part of the matrix as to hold the scale almost as firmly as a nail.

As to the pathology of pityriasis versicolor, there are very good grounds for relegating it to the tineæ, but doing so would only increase the confusion on these points, already too great to admit of any addition until such time as some of the disputed points shall be set straight. Its predominant pathological character appears to be a change in the structure of the rete mucosum.

The latter tissue loses its cell-form; it no longer undergoes its normal change from an incomplete and albuminous tissue into a horny tissue, but retains its growing function, and instead of normal cell-growth, its component elements take on a linear proliferation, which converts them into independent fibres, simple and branched, and separate granules. When we look at this structure with the microscope, we see, in lieu of normally-formed nucleated cells, an abnormal growth of the constituents of the cells, a change in the direction of growth, and a substitution of abnormal growth for normal development and perfectibility of tissue.

I have here to say a few words respecting the light thrown upon

\* *Journal of Cutaneous Medicine*, vol. ii. p. 86, &c.

the prognosis of this disease by the different forms which it assumes. Leaving aside the divisions and subdivisions set up by some writers, we may here trust solely to Nature, who points out four clear forms.

1. An eruption of very large patches, few in number, sometimes solitary, seated on the front of the chest or abdomen, or on the outer part of the arm. This variety is often unaccompanied by any decided scaliness of the elbow or knee. It is rare, and generally rapidly removed, especially in young persons.—2. A form of the disease, which only attacks the front part of the leg from below the knee downwards. It is composed of from two to six or seven large patches, seated on an elevated base. It is very rare, and its duration seems almost interminable. It shows no disposition to spread to other parts. Sometimes, too, it assumes, when scratched, an appearance closely resembling eczema, but the surface secretes only a very small amount of serum, while the silvery scales on other portions show it to be clearly lepra.—3. Lepra affecting chiefly the knee and elbow, principally taking on the form of a few scattered small spots with extremely bright silvery scales, sometimes solitary; intensely obstinate, yet generally remediable, especially when blistering is freely employed.—4. General diffused lepra, where patches come out in hundreds and run into large masses, a form in which art is only too often powerless.

*Treatment.*—If I were to rely exclusively on my own experience, I should say that time was lost, at the beginning at any rate, in trying any remedy for this complaint except arsenic, which should be commenced at once and taken in the largest doses the patient can bear. Should the arsenic disagree with the patient the dose may be lessened, or when the stomach is considerably out of order, it may even be given up for a day or two, and a saline prescribed instead till the arsenic can be borne again, when it is to be at once resumed. It is given in the same doses and in the same way as for lichen and prurigo, but cases may occur in which it is as well to leave the beaten path and try what amount of this potent mineral can be supported, as nothing short of the maximum quantity will do good. Dr. Moriarty, in a case of inveterate lepra, gave ten-minim doses of Fowler's solution four times a day and effected a complete cure, though the disease had lasted seven years and four months. Dr. McCall Anderson also mentions a case in which a young girl took thirteen drops three times a day.

Suppose, however, it should be absolutely necessary to suspend

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the arsenic, are there any other reliable remedies? I know, by experience at least, of none that can be depended upon as a substitute for the arsenic, but there are several which will improve the health, and when arsenic has done its work will often contribute to the disappearance of the eruption.

Among these steel holds a foremost place. It may be given both when the patient is taking arsenic and when he has suspended it, but I would always advise that the two medicines should be prescribed separately, and independently of each other. I have not in practice found any preparation superior to the tincture of the sesquichloride (*Pharmacopœia Lond.*), which may be given to even quite young persons, in doses of thirty minims, twice or three times a day, in a large wineglass of water a short time before meals. Another useful auxiliary is the iodide of potassium in tincture of bark, accompanied by small doses of biniodide of mercury. Some writers recommend the nitro-muriatic acid in doses of fifteen or twenty minims, with the same quantity of compound tincture of cinnamon and a drachm of tincture of gentian or calumba, two or three times a day a little before meals. In my hands such remedies have invariably proved perfectly useless as regards any power over the lepra, or even in inducing tolerance of arsenic. From a course of cod-liver oil I have often seen the best effects; in fact, I may say, that as a rule I give it in every refractory case of lepra, and that means the great majority of cases. De Jongh's oil has hitherto answered the best, and most patients can take it better than the pale oil. Generally moderate doses, such as a teaspoonful or two two or three times a day, are quite sufficient. The best vehicle that I know of for the oil is ginger-wine. Some persons, however, prefer coffee. Finally, I may add the *Galium aparine*, a remedy which has been highly praised by Dr. Winn. At one time in consequence of Dr. Winn's recommendation I gave it pretty freely, and though I never cured undoubted lepra with it, yet certainly the eruption, and the health too, improved under its use. Mr. Hunt seems to have given it a very fair trial; he procured the fresh herb itself from the fields near Kentish-town and had it boiled down. Considerable benefit resulted from the use of it, but in every case this was only temporary. The inspissated juice, when properly prepared, is so costly that it can never be generally employed among the middle and lower classes.

There are some other remedies of reputed efficiency but of which

I have no experience. Among these are dulcamara, considered by Bateman as one of the most effectual medicines in all varieties of lepra ; the great dock of India, or *Asclepias gigantea*, discovered by Playfair, formerly said to be possessed of such extraordinary power over the leprosy of the East, but now considered by many writers to be totally inert ; the great marsh-wort of India or *Hydrocotyle asiatica*, also said by Bazin to be powerless in cutaneous disorders,\* though considered extremely efficacious by some writers. Psoriasis is also said to have been cured by the use of the turkish bath, of mineral waters, such as those of Harrogate, Purton Spa, and Barèges, and to have disappeared under the influence of vaccination, tincture of cantharides, sulphur, frictions with juniper tar, with which Bazin says he has cured cases which had resisted every kind of treatment (*toutes les médications*), copaiba, and sundry other remedies.

With regard to the statements respecting the curative power of these remedies I have little to say, as I have not tried them. I assume they are made in good faith, but I confess I am sceptical as to the curative power of the medicines themselves. It is to be remembered that the complaint will sometimes disappear under the influence of medicines which improve the health, and I am strongly disposed to believe that with attention to the general condition, arsenic will cure any case likely to yield to simple means, and cure it, too, more quickly and certainly ; indeed, it is not improbable that some of the cures said to have been effected by the use of chalybeate waters were really due to the arsenic said to have been discovered in some of these solutions. †

Of the external treatment there is not very much to be said. Vapour-baths are often extremely useful, and where the circumstances of the patient allow of their being procured, I should strongly advise their use. To be of any real service, however, they should be taken at least two or three times a week, and the use of the bath should be prolonged each time till free perspiration ensues. In order to watch their effects most carefully, I had a vapour-bath fitted up at St. John's Hospital, and after a great number of observations, I think I am warranted in saying that these baths will always do good if perseveringly employed, and that they may be taken with

\* *Leçons théoriques et cliniques*, p. 79.

† Address of the President to the British Medical Association.—*Medical Times*, 1865, vol. ii. p. 149.

impunity in every case, and in any state of the health or stage of the disease. A lotion of carbolic acid, beginning with five grains to an ounce of water, and gradually increasing in strength, is also useful. It should never be used so strong as to give pain, and probably a solution of ten or fifteen grains to an ounce is as high as the surgeon will require to go. The best plan of employing it is, I think, simply to rub it well in, once every day, with a piece of linen. When the smell is objected to, chloride of zinc may be substituted. It can be employed of a strength of one or two grains to the ounce, simply dissolved in water, with a very small quantity of mucilage added.\* The zinc is peculiarly useful when the disease is seated on the face and head, although for the latter site the ammoniated mercury ointment thinned down with a little almond-oil and slightly scented generally answers better.

*Diet.*—A patient suffering under this complaint is sure to ask about his diet and particularly whether there is anything he must abstain from. So far as my experience goes I should say not in general, so long as anything like moderation was observed. It is quite as necessary in lepra as in any other disease to abstain from all very gross food, and from everything likely to produce a sense of heat, overloading, and constipation. I would therefore condemn too much pork, beef, sausages, curry, hard adulterated beer, and coarse spirits like new rum or whisky. I never saw high-feeding do good, and I have certainly seen cases where it clearly appeared to have aggravated the symptoms. When a patient suffers from dyspepsia, irritability of the stomach whether induced by arsenic or otherwise, from catarrh, influenza, &c., I would restrict him to a light but not a low diet.

In severe and obstinate cases, however, I would go much further, and utterly interdict animal food, especially in hot weather, restricting the patient entirely to milk, eggs, light fish, &c. Beer, too, I think is always prejudicial. Of the beneficial effects of this restricted diet both surgeon and patient soon become convinced when it has a fair trial, and strange to say, patients so treated, instead of their health and strength giving way, as they generally fear will be the case, almost invariably find themselves at least quite as well, often much better, than when taking meat. Occasionally at the first they

\* R. Zinci Chloridi gr. viij ad gr. x.

Mist. Acaciæ ʒss.

Aquæ Rosæ ʒvj. m. ft. Lotio, omni mane leniter infricand.

flag a little, but this soon passes off, and so speedily does the system become reconciled to the change of diet that very often even a small quantity of meat makes them ill.

At the time I am writing this I have under my care a gentleman who has now suffered for ten years from lepra. Each year with the returning spring he has a fresh attack, and each year it has lasted with very little abatement all through the summer. He is a man of very active habits, extremely fond of cricketing and other out-of-door sports, and has always been in the habit of eating a great deal of meat with the view of keeping up his strength. Naturally enough he rather rebelled at the idea of being put on what he called baby's food. But he soon found the benefit. For the first time since I knew him the spots began to get less scaly within three or four weeks, there was no continuous eruption of fresh patches as had hitherto always been the case, he feels quite as well and as strong as when taking meat, and having been made rather ill by indulging on one occasion in it, he has quite renounced the use of meat as an article of diet during summer, as he now firmly believes it is injurious to him.

I am indebted to Dr. Barker, of Brighton, for the suggestion of trying this kind of diet. This gentleman wrote to me as follows:—  
“It may be interesting to you to learn that for years I suffered from the latter [psoriasis] with which I was literally covered at times, and for which I have taken I may almost say some quarts of ‘Fowler's solution,’ which always gave me a ‘splitting headache,’ but seldom more than very transient relief.

“Last year I was in the south of Italy during the hottest of the summer, and I never perspired more continuously for a whole month, nor did I ever subsist on so little animal food. However, I lost my old enemy *most completely*, for I have since had no symptoms of return, which I am inclined to attribute to a more than usual abstinence from meat.

“Having a gouty history, I am in the frequent habit of taking twenty grains of bicarbonate of potash the last thing before bed, which also, I *think*, has some influence over the other symptoms.”

This is nearly all I have to say on the subject; but as others attach some more, some less, importance to diet, I proceed to give a digest of some of the principal points.

Mr. Wilson \* says nothing of diet in his chapter on “Alphos,” but

\* *Diseases of the Skin*, sixth edition.

in his work on "Healthy Skin," he advises as a general rule that we should look suspiciously at potted meats, sausages, game, &c., that variety at a meal should not be indulged in, and that children should have plenty of good wholesome food, and sufficient variety in it. He thinks that people who give their children invariably one kind of diet or too little of it, should be looked upon as dangerous lunatics, and made to understand that sickness and deficiency of food, with too little exercise and defective ventilation, are the cause of ringworm and scalled head being so common in schools. Mr. Wilson clearly thinks M. Soyer a better judge of diet than those mischievous obstinate people who starve children because they have been told by dear mamma, or have read in Buchan, that children ought always to rise from table with an appetite, and such rubbish. He has no particular views as to the efficacy of any particular kind of food in skin diseases, for the simple but rather pertinent reason that very "little is known" on the subject.

Mr. Hunt seems to think that all restrictions whatever are unnecessary, and asks why the taste for so many different kinds of food was given to man unless it was right for him to enjoy them. The answer is very simple, for the case is not fairly put. Most likely man living in a state of nature, leading the wild but anxious life of a hunter or fisher, sheltered at night in a cave or wigwam and seeking his food by day amid ceaseless care and danger, could eat any kind of food he was likely to find. But he is not living in a state of nature, he has elected to lead a life of restraint, and he has to bear the consequences. The advantages derived from civilization tend inevitably to induce a state of the system which requires from every person more or less self-control in respect to diet; the evils of civilization create still more imperative demands, and therefore the great mass of mankind cannot be left to the unrestricted sway of their appetites, and if control be necessary in health it is still more so in disease.

Mr. Naylor \* recommends a very strict diet in lepra, excluding salads, sweets, salmon, pork, and shell-fish, alcoholic and other fermented liquors. Dr. Hillier † adds coffee to the Index Expurgatorius. Dr. Neligan ‡ says that a milk diet should, if possible, be enforced, and that when it cannot be adopted, farinaceous articles should, as far as possible, enter into its composition, fresh meat or

\* *Op. cit.*, p. 36.† *Op. cit.*, p. 93.‡ *Op. cit.*, 1852, p. 244.

poultry only, plainly dressed, being allowed. Dr. Willshire keeps his patients on a very strict diet, forbidding meat and limiting them to milk and bread, watercresses, &c. In Mr. Hunt's practice also, an exclusively vegetable diet has sometimes been found necessary.

Mr. Hunt speaks highly of the value of exercise in this complaint, and says that "many cases have occurred in which patients who, when pursuing a sedentary life, were martyrs to lepra, became comparatively free from the disease when engaged in active occupation in the open air." I am quite disposed to believe that there is a good deal of truth in the statement, but I have at the same time seen several cases where lepra proved refractory enough in persons taking very active exercise.

The influence of too much light is often very prejudicial in lepra, especially when accompanied by great fatigue or agitation of mind. I have several times known a long journey undertaken in bright, hot weather bring back within a few days an outbreak of lepra, when the disease had been for months steadily disappearing under the influence of treatment and quiet; and this result has occurred too often to admit of its being explained by the supposition that it is a mere coincidence.

Mr. Wilson gives arsenic for this disease in the form of Fowler's solution, and the ferro-arsenical mixture.\* He begins with two or three minims of the solution and gradually increases the quantity to five minims, beyond which he does not often go. Mr. Wilson considers the white precipitate ointment very useful in lepra.

Mr. Startin treats lepra with a great variety of remedies, relying little upon arsenic alone; but there are so many ingredients in his prescriptions that an analysis of them is difficult. Chalybeates, both internally and in baths, arseniate of mercury dissolved in hydrochloric acid, iodide of mercury and opium, persulphate of iron and hydriodic acid, arseniate of potass with aperients, such as sulphate of magnesia, constitute the chief items of his treatment. When inflammation runs high, he gives sulphate and carbonate of magnesia with colchicum

\* R. Vini Ferri ꝑiss.  
Syrupi simpl.  
Liq. Arsenicalis sine Tinct. Lavand. comp. præparat. aa ꝑij.  
Aq. destill. ꝑij. m.  
Coch. min. j. ter quotidie sumend.

and Plummer's pill ; for indigestion and clay-coloured stools, liquor potassæ and mercury.

Externally, Mr. Startin prescribes, when there is much inflammation, trisnitrate of bismuth, five grains to an ounce of water, used warm ; later on he employs alkaline baths and ointment of the iodide of mercury. He also makes use of the sulphur-fume bath and creosote ointment. For the solitary form of lepra he employs blistering.\* Glycerine is prescribed by some practitioners, others consider oatmeal gruel very useful. I have not noticed any very appreciable effect from either.

Dr. Willshire in bad lepra gives decoction of elm bark as a vehicle for some more active remedy, such as bichloride of mercury. He also gives lemon-juice and tincture of cantharides. Bazin in arthritic psoriasis, gives a tablespoonful of alkaline syrup and some alkaline mineral water at meals. He also applies the huile de cade, and orders weak alkaline lotions with a little glycerine every three or four days ; also alkaline and vapour baths. For the herpetic form M. Bazin prescribes frictions with oil of juniper-tar and internally arseniate of iron. In the young adult, when the urine shows a continued low specific gravity, and a less than normal amount of urea, Mr. Naylor finds a combination of steel and arsenic very useful. Dr. Hillier gives liquor arsenicalis in large doses, beginning with five or six minims three times a day, and increasing the quantity to ten or twelve minims. He expresses himself as so well satisfied with the result that he has not given cantharides a fair trial. He speaks favourably of the action of the empyreumatic oils, such as the tar of the *Betula alba*, after the scales have been removed by water-dressing, and considers that the diet should not be too rich or azotised.

Hebra breaks loose in one overwhelming anathema against the drugs recommended for lepra ; root and leaf, bark and flower, acids and alkalis, sulphurets and muriates, old messes and new-fangled compounds, are all included under one common ban. The anthrokokali, which was to cure every disease of the skin, is just as powerless as the Chinese Ethiop's mineral, or the stibium with which of old the Greek ladies painted their eyebrows. I wish some person in this part of the world would be as plain-spoken. There are positively hundreds of remedies recommended for diseases of the skin, of which

\* *Medical Times*, vol. xiii. p. 334.

it is very doubtful whether one was ever subjected to such a test as it ought to have gone through before being admitted to the privilege of having a word said in its favour ; yet once it gains a footing there is little chance of getting rid of it. Year by year the journals and societies help to swell the huge aggregate of mischief, and when an honest investigator like Hebra sets fairly to work to see what will do good and what will not, he has to waste years in useless or dangerous experiments before he can make *maison nette* of all this rubbish. Mr. Wilson has arranged alphabetically upwards of fifty remedies employed in this complaint, every one of them useless or nearly so.

Hebra uses arsenic internally in all the usual modes of giving it, but he also places great reliance upon external means, the principal of which seems to be a method very like that employed by Priessnitz. The patient is packed in a wet linen sheet, over which are laid a thick doubled blanket and a waterproof covering. He is allowed to drink water freely and is kept in this state of maceration for three or four hours. The patient is then plunged into a cold bath, and, if possible, a cold douche follows the bath, after which he goes out for a walk. This process is repeated twice in the twenty-four hours. A light diet is ordered and no spirits are allowed. Hebra also uses the potass soap, which is rubbed on each patch of lepra till a slight bleeding comes on, the tar oils, and the solution of pentasulphide of calcium recommended by Vlemingx, which is rubbed on like the soap till excoriation is produced. The patient after using any of these takes a bath.

As to the results of treatment or the prognosis of the complaint, I assume it is almost unnecessary to say that, however thoroughly all traces of an attack may be removed, the disease will tend to return. At the same time, under proper treatment, a long immunity can often be secured.

B. PITIRI'ASIS (*eis, is, fem.*), from *πίτυρον*, bran, scurf.

*Definition.*—A loosening and falling of the epidermis in the form of minute branny scales, accompanied by more or less itching, and sometimes in recent cases by heat and redness.

*Divisions.*—1. P. simplex (dandriff, scurf), or that just described, generally seated on the head, but may also assail the beard, eyebrows, &c.—2. P. rubra, in which, besides these symptoms, the true



skin is inflamed. May attack all the surface. Accurately considered, it is a form of eczema, though sometimes it does not reach the serous stage.—3. *P. versicolor*, often though wrongly called chloasma, in which irregular-shaped patches appear on the skin, sometimes almost of the colour of a withered leaf, again of a dirty clay tint; generally beginning on the front and middle part of the chest, or in the armpits, accompanied at times by fine desquamation, and a good deal of itching.

*Treatment.*—All forms of pityriasis, and especially the two first, are in the majority of cases connected with considerable disorder of the health; in one person assuming the form of weakness, lassitude, and weariness; in another of furred tongue, foul breath, loss of appetite, and so on; a third person may suffer a good deal from indigestion and biliousness; a fourth may be labouring under oxaluria, &c. Now there need be little hesitation observed about saying, that when any of these symptoms are present in an advanced stage, and very often when they exist to only a trifling extent, local treatment will be of little avail, and special treatment of no use at all. The first thing therefore is to attack them with their appropriate remedies, such as citrate of iron with an ample addition of lemon-juice, a mineral acid like the dilute nitric or aromatic sulphuric acid, in some bitter infusion or tincture, the action of which is often greatly aided by the use of small doses of mercury, such as four or five grains of grey powder taken three or four times a week, or a grain of blue pill with an equal quantity of acetic extract of colchicum, taken every night. It often happens that such disorder of the health is so slight as not to require the continuance of those remedies more than two or three weeks, but I believe patients are always better for a course of them.

When this has been done, a long steady course of arsenic in small doses may be prescribed with every hope of benefit. Bichloride of mercury given daily to the extent of one-eighth or one-quarter of a grain, is an extremely useful adjunct. The nitric oxide of mercury may be applied every day in the form of ointment. The ointment should be thinned down with a little spirit of wine, or glycerine may be added. When the disease is seated on the head it is always best applied by another person, as the patient will smear the greatest part of the ointment on the hair, thus causing an unnecessary amount of dirt and discomfort without doing any good. I beg, however, it may be understood that I do not take upon me to say

the nitric oxide ointment is the best, but that it is the ointment from which I have derived the best results ; indeed, it is the only one the action of which I have been able to examine with such care as would justify me in giving an opinion ; the only similar preparations with which I have compared it are those of the chloride of mercury, the ammonio-chloride, and the yellow nitrate.

When pityriasis rubra is severe and extensively diffused, I have found no remedies so useful as a course of saline purgatives, followed by a combination of steel and arsenic. The saline, for which the formula below \* will, I fancy, be as appropriate as any, should be given continuously for three or four weeks at the least, and in such doses as decidedly to affect the bowels every day. Along with this I generally order small doses of mercury and chalk, three to five grains every second night, or an aperient pill of colocynth, hyoscyamus, and blue-pill.† After these have done their work, the tincture of the perchloride of iron may be prescribed. It should be given in full doses, say thirty to forty minims three times a day in a large wineglassful of water before meals. Where expense is an object, the acid solution of iron used at St. John's Hospital may be substituted in doses of eight to ten minims three times a day. It is made by putting two ounces of iron wire drawn by the magnet into a pint of hydrochloric acid, 1,160 sp. grav., and allowing the mixture to stand for some time. It should always be taken freely diluted with water. After a little while I would suggest that the steel should be combined with arsenic ; but I would on no account give the two together, even when the combined remedy agrees perfectly well with the patient. A fair trial will, I think, satisfy any one that arsenic is much better taken after or with meals, while steel has always appeared to me to act most beneficially when taken on an empty stomach. Besides some persons who bear arsenic very well do not always tolerate steel, and conversely it will sometimes happen that a patient who can support almost any amount of steel is peculiarly sensitive

- \* R. Magnes. Sulph. ʒss.  
Magnes. calcin. pond. ʒiss.  
Potass. Nitratis ʒiss.  
Tinct. Zinzib. ʒiss.  
Tinct. Cardam. c. ʒiij.  
Aq. Ment. pip. ad ʒiv. ʒ.  
Coch. amp. j. bis terve quotidie sumend.

† For formula, see p. 12.

to the action of very small doses of arsenic. By dividing them then the surgeon is enabled to proportion the dose to the exigencies of the case. I know I shall be told that this is a very inconvenient system, but I have generally found that patients soon fall in with it when once they have tried the plan. Along with this I would recommend the use of red wines, such as port, tarragona, and claret, which, judging from my own experience, surpass all other wines from whatever country they may come. Africa and California, Sicily and Greece, Hungary and Germany must in this respect yield the palm to France, Spain, and Portugal.

Tarragona is a perfect boon to poor patients. Although it is so cheap that it is sold by the Wine Agency Company at seventeen shillings per dozen, it contains so much natural alcohol that the heavier duty is charged on it; and I very much doubt whether any fluid of the kind used in this kingdom contains so much tonic power at so low a price. In my opinion it is far superior to any kind of beer, which is indeed in no way suited to most diseases of the skin, and in some, such as the disease now treated, eczema, rosacea, &c., is often perfect poison. Two or three glasses of tarragona daily impart more stimulus than twice their cost in the form of malt liquors, while at the same time the wine has the vast additional advantage of agreeing much better with the nutrition, as is evidenced by the fact that it does not produce anything like such a discharge of phosphates as malt liquors effect in many persons. Even where expense is no object tarragona may be safely recommended in preference to any port kept in bottle, as, unless my observations have strangely deceived me, it possesses much greater curative power. Indeed, considering that it really forms the basis of at least half the port wine sold in London, some of the benefit derived from the latter may fairly be set down to the account of the tarragona itself. The great point naturally is to obtain it pure; indeed too much care cannot be taken on this head, as a great deal of what is sold as tarragona is nothing more than wretched claret, worth at the utmost eight or nine shillings a dozen, liberally sweetened. This rascally trick can generally be detected with ease. Real tarragona possesses a deep tawny hue, whereas the claret substituted for it is of a bright ruby colour. Tarragona was, I believe, first used at St. John's, but since then it has been largely employed in other hospitals, especially at Guy's. In summer it should always be taken diluted with water, and when at this season

of the year it tastes too strong even diluted, or if the patient have grown tired of it, for it is naturally too sweet to be quite agreeable to most persons, claret may be substituted for it; and here I may remark that claret at twelve or fourteen shillings a dozen is, so long as it can be procured sound and not too austere or sour, quite as good for medicinal purposes as if it cost a guinea a bottle. The œnanthic oil, which lends to wine what people pedantically call the bouquet, plays no part in the treatment of disease.

This method of treating pityriasis, seconded by a very free use of the ointments mentioned, especially those of zinc and the yellow nitrate of mercury, has proved very successful in my hands. So far all the cases have done well, and I am consequently disposed to think it is a much more manageable and less dangerous complaint than it has been held to be by some writers. Even cases of long standing and great severity have yielded to this treatment. There is a patient now attending at St. John's Hospital, with scarcely a trace of the disease on him, who first came under my care a few months ago in a lamentable state, being obliged to have his arms nearly up to the shoulders and a great part of the rest of the skin constantly swathed in linen, as the irritation induced by his clothes touching any part affected was quite unbearable. Though very strongly made he was a very unhealthy-looking man, his colour being almost like that of putty, and I did not augur a good result; but he began to mend very decidedly within the first month, and with one or two slight exceptions the improvement has gone on rapidly and continuously.

In pityriasis versicolor, unless there be any signs of ill-health, arsenic may be at once begun with and given till a distinct impression is made upon the disease; should there be any disorder of the health it will be absolutely necessary to set this right, for it is of no use giving arsenic till the stomach is in a fit state to bear it. So soon as the patches begin to grow paler under the influence of this potent mineral local means may be put in operation. One of the best that I know is strong tincture of iodine, made by adding at least a scruple of iodine to an ounce of the ordinary tincture; this may be painted on the surface with a glass brush three or four times a week. The sulphur-bath taken once or twice a week is also a valuable remedy, but it is so often impossible to obtain it that the recommendation is almost nugatory.

The sulphite of soda in solution, half an ounce to eight ounces of

water, well rubbed into the spots every day, is also useful. It may be employed when the sulphur-bath cannot be procured and when the iodine gives too much pain, but I have not seen any such superiority in its action as would justify me in recommending it in preference to them. At the suggestion of a friend I tried carbolic acid, but with very indifferent success, and I am disposed to set it down as much inferior to the others.

For pityriasis, as also for red general pityriasis, Mr. Startin gives demulcent and slightly diuretic medicines. His external treatment is directed towards soothing irritation, being principally demulcent baths, such as glue in solution, linseed mucilage, milk, yolk of egg, bran liquor, or quince-seed gruel thinned down with water. He also prescribes mild alkaline baths, and follows these up with the sulphur-fume bath. For local pityriasis Mr. Startin gives aperient chalybeates and small doses of bichloride of mercury, aided by lotions of borate of soda, by the sulphur-fume bath and by creosote ointment. For pityriasis nigra, a disease I have never seen, he prescribes lotions of bichloride of mercury, dissolved in a small quantity of hydrochloric acid. When the head is the seat of the disease Mr. Startin advises that it should be washed every third morning with yolk of egg and tepid water. He is entirely opposed to the use of soap. Mr. Wilson, for red general pityriasis, gives nitro-muriatic acid with a bitter, citrate of iron and quinine and phosphate of iron. Externally he has found the best results from warm baths, used daily and prolonged for an hour or more. The whole affected surface is afterwards smeared over with benzoated oxide of zinc ointment. He says pityriasis capitis, or rather erythema capitis, as he calls it, for no very valid reason so far as I can see, invariably yields to an application composed of one part of red precipitate ointment and three of lard, or to the white precipitate ointment diluted in the same proportion. For pityriasis versicolor Mr. Wilson recommends a lotion containing half an ounce of hyposulphite of soda and half a drachm of carbolic acid to the eight ounces. M. Hardy treats pityriasis of the scalp with soap and water and a solution of carbonate of potass, afterwards using an ointment of one part of sulphur to thirty of lard, or one gramme of nitric acid to thirty of lard.\* When the disease occurs in old people, Dr. Frazer uses a weak solution of tannin in glycerine.† When

\* *Leçons sur les Maladies de la Peau*, 1860, p. 132.

† *Treatment of Diseases of the Skin*, 1864, p. 12.

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crusts form in children suffering under this complaint, he directs that they should be got off with a wash made of equal parts of spirit of rosemary or brandy and strong vinegar. In diffuse pityriasis, Dr. Neligan used to prescribe mild mercurials and alkalis, with taraxacum and hyoscyamus; for external use mild gelatinous baths. If the eruption resisted this treatment he ordered alkaline baths, the patient on leaving the bath being well rubbed over with fresh elder-flower ointment, containing glycerine. In local forms the dilute citrine ointment was rubbed in. In obstinate cases iodine and arsenic were resorted to. All stimulants were excluded from diet. Dr. Neligan was strongly opposed to the indiscriminate use of stimulating applications, a canon of treatment in which I quite agree. Sir Wm. Jenner uses a solution of bichloride of mercury, four grains to the ounce.

Respecting the contagious nature of pityriasis versicolor, we find, as we might expect, every shade of opinion. Mr. Wilson utterly scouts the idea and Mr. Startin is, I believe, silent on the subject. Mr. Nayler considers it contagious in, perhaps, one case in ten. Dr. Hillier says nothing about the matter. Some writers hold that it is contagious beyond all question.

I at once admit that I have paid so little attention to the subject that I am scarcely qualified to give an opinion at all. At the same time, I am quite prepared to abide by the consequences of stating that the disease is certainly not contagious as a rule. Beyond all doubt cases will occasionally occur which bear the appearance of having arisen from contagion, but in the great majority of them nothing of the kind can be made out. And as in addition to this it does not matter one straw, practically, whether or not it is contagious, I make no further apology for disposing of the subject so briefly, but content myself with giving the facts of several cases admitted at St. John's Hospital, and leaving the reader to draw his own conclusions. It is, however, to be borne in mind that another series of cases might present a different set of facts.

Out of more than twenty cases noted at the hospital *there was no history of contagion in any except two*. In the first a father and mother, middle-aged, healthy people, living a short distance from London, their two sons and two daughters were all admitted as out-patients, suffering under this affection, and at least two had it in a very severe form. Another daughter and her husband were also attacked by it and were admitted about the same time. The disorder

was stated by them to have been given by a little girl suffering under the complaint, and who had been staying with the family. The second case was that of a husband and wife, their history being that the husband had had the complaint for a long time and in a severe form at the time of marriage, whereas the wife had never shown a symptom of the complaint till she married, soon after which patches of pityriasis versicolor began to appear on the bosom, front of the abdomen and thighs. At the time they began attending they both had unmistakable symptoms of the complaint in question.

As some of my readers may wish to examine the parasite, I quote from Mr. Naylor's work the recommendation to try the plan suggested by Gudden, of raising a blister on the skin by means of some vesicant, and removing the epidermis. The spores will be seen on the upper surface with mycelium penetrating between the scales of the epidermis.

C. ICHTHYO'SIS (*is, is, fem.*), from *ἰχθῦς*, a fish; *ἰχθυόεις*, fishy, resembling a fish.

*Definition.*—A dry, harsh, warty or scaly state of larger or smaller portions of skin, attended by change of colour in the affected parts, and extreme deficiency of perspiration; often congenital, unaccompanied by pain.

*Divisions.*—1. I. simplex. A general dryness and roughness of the skin, with fissuring of the epidermis, which is of a dirty grey or tawny colour; often beginning early in life. It may assume a very aggravated local form, the papillæ becoming covered with hard, tenacious scales, of a dull greyish-green colour. 2. I. cornea (a form of sclerosis); dry, hard, extremely tense state of the skin, beginning at one spot and gradually extending all over the body, greatly impeding movement of every kind, attended with diminished warmth and sensation. Very rare; possibly of traumatic origin. 3. I. sebacea. Formation of small, hard, prominent, tenacious crusts, the skin beneath which is red, glazed and tender. The form of ichthyosis mentioned by Willan and accompanied by the formation of horns, is referred to that head (horns). The porcupine disease is simply a variety of ichthyosis simplex.

*Treatment.*—My experience of the treatment of ichthyosis is limited to that of the simple form. So, as far as internal treatment is concerned, the action of any remedy, even arsenic is so slow that

it is very doubtful whether the majority of patients will ever persevere in the use of it. Happily enough, I believe that local treatment will, in some cases at any rate, suffice to remove the complaint. I shall, perhaps, be able to make this more evident by the details of the following cases than by any argument :—

CASE I.—A. L. L., aged three, residing at 5, Clifton-street North, Finsbury, entered as out-patient at St. John's Hospital, July, 1865, with general ichthyosis.

The skin of the face was of a brownish red, and but for its singularly cracked appearance, and for the thin figure of the child, she would have had the look of very high health. The skin, however, was superficially fissured in every direction, and the child looked attenuated. From head to foot the epidermis wore the same dry, cracked, harsh appearance, in many parts looking almost as if it had been recently dusted with flour. On the arms and legs the skin was almost of the colour of Bath-brick dust. About the lower parts of the legs it was remarkably harsh, and round each ankle ran a belt formed by elongated and enlarged, warty-looking, hard, dry papillæ. These were most numerous and largest directly in front of and behind the ankle, the largest being as big as a good-sized pea. The child seemed of a most excitable temperament, with a thin shrill voice. She has never been seen to perspire except on the forehead. She is very subject to coughs and colds, but in other respects enjoys very good health.

It appears, from the mother's account, that she noticed nothing particular the matter with her daughter at birth, but that within a month after the skin peeled off, and the cuticle which succeeded it was dry, harsh, and cracked, like that often seen on the hands of persons who have washed them in cold water during winter. This state of things seems to have gone on getting worse till the patient had ended her second year, by which time the ichthyosis had pretty well assumed its present form. At this time she was placed under the care of a gentleman whose treatment afforded her some relief; but the abatement in the disease was only trifling and of very short duration. After this it began to get speedily and steadily worse, till it had reached the aggravated form in which I found it.

The mother says that no member of the family on her side ever suffered from the disease, but that the father and his brother are both afflicted with it. I examined the father, and found very decided ichthyosis on the back of the arms, and in the shape of a broad band



extending and sloping irregularly downwards from between the shoulders quite round the abdomen, the greatest part of which it covered, while it was much narrower on the posterior surface of the body. The skin here is dry-looking, hard, rough, fissured and dotted, and of a very pale yellow hue. There is no other part of the surface affected, but he thinks the skin of his hands is much rougher than it ought to be, and in cold weather it soon gets very dry and chapped. He has never been treated for the complaint, and has never noticed any change in it. He has felt no inconvenience from it, and has never suffered in any way from ill health. He tells me that the affected surface perspires the same as other parts, and that when he perspires much the skin here peels off a good deal. The mother states that his twin brother is affected in the same way and at the same part ; but I have had no opportunity of verifying the fact. Two other brothers, who are also twins, and a sister, are quite free from the disease.

The little patient was ordered three-minim doses of liquor potassæ arsenitis three times a day, at first alone, but subsequently accompanied by an occasional dose of calomel or grey powder. The arsenic, however, was principally trusted to. It seemed on the whole to agree very well with her, and she took it very regularly up to December, when the dose was increased to four minims three times a day, and again in February, 1866, to about four minims and a third. This was continued, and though during the latter part of the spring and the summer the medicine was remitted for a few days out of each month, this was done with great regularity, and the patient's attendance was most satisfactory. In the autumn, however, the child lost her appetite and her tongue became coated. It was therefore thought better to suspend the administration of arsenic and give an acid and bitter till these symptoms passed off. It was, however, resumed in the following January, and the month after the use of small doses of mercury was again resorted to. These remedies were persevered in during the spring, summer, and autumn of 1867, when they were again given up, in consequence of loss of appetite, and the dilute nitric acid and quassia were substituted. In November recourse was again had to the arsenic, which was now given in the form of solution of the chloride, and in rather smaller quantities. It was not, however, taken very regularly, on account of her being a good deal troubled with cough and sometimes feverishness. In March, 1868, it was again given, and continued for the next six

months, generally for about ten days in each month, after which she again took the acid and bitters.

Up to February, 1868, she had experienced a certain but slight improvement. The skin was decidedly softer, smoother, and healthier; still, there seemed little prospect of any great amendment; but at this time I resolved to put some local treatment in force, and after some trials I found reason to believe that the external remedies now to be mentioned would possibly be of service.

The child was placed in a warm bath containing a scruple of carbonate of soda to three and a half gallons of hot water, and immediately after the bath the ointment\* mentioned below was rubbed over the whole of the affected surface, and allowed to remain in contact with it till the next bath was taken.

The action of these was very rapid, and perceptible to the most uninstructed observer. In a few weeks all the more evident symptoms of the disease had gone, and by the end of six months an apparent cure of the disease in most parts of the skin had been effected. At her last visit the skin of the face was still red, and on the nose slightly cracked; that of the hands and arms and body quite natural, and looking at her, I should have had no hesitation in saying that a person unacquainted with her history would never have imagined that she had had ichthyosis. The only places where evident traces of the disease could be said to linger were the legs from the knee to the instep; and even here all that was seen was a dry, rough, brownish state of the skin. The warty growths had quite disappeared.

Up to the present time the child has remained quite well, and I feel sure that the mother would be very glad to show the case to any one interested in the subject.

CASE II.—Julia J., a middle-sized, slender, pale young woman, entered at St. John's Hospital, October 24th, 1868, suffering from ichthyosis of the same form as in the preceding case. It extended over the back of the arms, the lower part of the back, and over great part of the lower region of the abdomen. From the upper part of the front of the thigh to about three inches above the knee, the disease was quite perceptible; but it existed here in a very mild form.

\* R. Potassii iodidi ʒj.  
Olei pedis bubuli,  
Adipis purificati, aa ʒss.  
Glycerini ʒj. m fiat ung.

It was, however, very fully developed from about three inches above to about three inches below the knee, where it disappeared, with the exception of a patch on each instep. She does not recollect having ever perspired, except occasionally during some of the hottest days of the summer. The disease has existed as long as she can remember. She has always enjoyed good health. I asked her to inquire if any of her relatives had ever suffered from this affection, and she did so; but the answer was that neither her father nor mother knew of any such thing having been seen in any member of their family.

She was at once placed on the solution of the chloride of arsenic, of which half an ounce was given weekly, in doses of rather less than five minims three times a day, to be taken either with or directly after her food. On the 17th of November soda baths of the same strength as in the preceding case were ordered, accompanied by the daily use of the same ointment, and with the same effect. When last seen (1869) the disease had disappeared, except that on the lower and front part of each knee a small wrinkled patch was noticed.

CASE III.—A young lady who had suffered from this affection almost since her birth was placed under my care by her mother in the spring of 1869. The disease was entirely local, being restricted to a band about an inch in depth which surrounded each ankle. It was a very well-marked instance of simple ichthyosis. As the child seemed in excellent health, and was extremely strong and well-made, I resolved to try the effects of purely local treatment. The same ointment was accordingly applied night and day to the patches, which were also steeped daily in the soda bath. A very rapid improvement took place; the patches peeled right off, and within four weeks the disease seemed to be quite removed.

It may therefore, I think, be legitimately inferred that these remedies are capable of producing a certain amount of benefit in ichthyosis, and I have ventured to place them before my readers because I consider carefully-detailed cases and experiments as the only foundation on which a really useful and progressive system of treatment can ever be based. Without such muniments, therapeutics must ever tend to sink into routine or empiricism. They afford the only certain test as to the comparative value of remedies, and as to whether they have or have not been judiciously employed. One man succeeds with means which fail in the hands of others,

who want the industry and judgment to use them as they must be used to insure a fortunate result, and who perhaps do not always wish to succeed. But a clear and detailed history places both on a level, and gives no vantage-ground to the prejudiced and slothful. Convictions and tenets, the results of individual experience and the secrets of practice, too often die out with those who knew and taught them, but cases are always of value. A case related by Hippocrates or Celsus might perhaps be welded into some nineteenth century system of medicine, and those recorded to-day may find their fitting place a century hence.

Nothing was observed in any instance which seems in any way calculated to throw light upon the pathology of the disease. As in most cases I have seen, the frame was, in the two first patients, slender, the bones were small, and the muscular system very sparingly developed. There was nothing amiss with any other function or secretion that I could make out, except the small amount of perspiration; a condition noticed in all subsequent cases. In some patients suffering under this disorder I have seen an unusual development of hair; at the same time this did not amount to anything extraordinary; it was nothing but what could be paralleled in persons not afflicted with any disease of the skin. I have never been able to connect the appearance of the affection with any kind of diathesis.

We have in the first case an instance of the same affection appearing in the father and child. Should either of these children live to marry, it is possible, even probable, that some of their children, if they have any, may suffer in the same way; after which, judging from the average of such histories, the disappearance of the ichthyosis may be predicted. In so far then as the term can be considered to express such a peculiarity or coincidence, the disease may be called hereditary, just as lepra or gout might be so designated. But the word hereditary is employed in two very different senses from this, and each of these meanings again differs widely from the others. By some it is used as though it cleared up some mystery or explained the phenomena of disordered action. Such a solution may satisfy the mind of an inquisitive patient; indeed, most persons seem considerably relieved when told that their complaint is hereditary; it might almost be imagined that the announcement had freed them from the burden of some crime. But it is difficult to see how persons acquainted with pathology can

suppose that any light is thus thrown upon the nature of diseased actions. Again, Mr. Darwin, if I understand him rightly, and certainly some of his followers, speak of hereditary affections, and malformations *as though they possessed such an irrepressible tendency to perpetuate themselves, that in course of time they must constitute species or varieties of the human race.* But it is evident that with such a tendency one of two things must ensue. Either, when a disposition of this kind has once manifested itself, the offspring of those so affected must die out, and the appearance of any hereditary disease or malformation must be accordingly considered as the harbinger of more or less speedy extinction ; or they do not die out, and the abnormal phenomena are continued from generation to generation. Then, inasmuch as many of these affections are of sufficient antiquity to have been coeval with many generations of men, unless we assume that the presence of one disease or malformation secures the sufferer and all his future descendants against any other, of which there is no proof, it is evident, when we consider how often such affections spring up spontaneously, that, comparatively speaking, very few families can have escaped them all, while numerous families must have passed through many ordeals of this kind, that in course of time these affections must so have increased in number and complexity, as to have produced a tolerably numerous race of monsters, such as the world never yet saw, and whose power to exhibit complications of disease and deformity would be only bounded by the extent of surface on which these abnormal phenomena could develop themselves. Yet this is not exactly the case. On the contrary, although throughout a large portion of England we find that in rural districts, where we can more readily and surely trace local and family history than we ever can in cities and towns, some families have always so multiplied as to outnumber others, yet we have still to learn that a race of six-fingered or ichthyotic, of gouty or leprous people have anywhere established themselves ; although such ought to have been the case, for these affections spring up, *cæteris paribus*, as often in a valley or a village as in the fetid courts and by-streets of London, and stand just as good a chance of being inherited in the one case as in the other.

The sebaceous variety is, when the patient will give us fair play, by no means such a formidable affair. Warm baths, frictions, bichloride of mercury in emulsion of bitter almonds, with laxative medicines, are recommended by some authors.

In the chapter on eczema I hope to be able to give my reasons for referring to this disorder the two cases of sebaceous ichthyosis, so ably and lucidly related by Dr. Ogle in the "Transactions of the Medico-Chirurgical Society," and treating them as varieties of eczema, to be met with steel and arsenic. But the complaint is so rare that few men ever have had, or will have, much experience as to the real effects of treatment upon it.

~~Treatment.~~—For simple ichthyosis Mr. Startin recommends bichloride of mercury and arsenious acid, with alkaline baths and lotions containing creosote. An instance of the local form of this affection seated on the cheek, is mentioned by the same author\* as having been successfully treated by blistering with nitric acid and applying arsenical paste. The disease was to all appearance cured but a scar remained.

Mr. Wilson recommends cod-liver oil and arsenic, Donovan's solution, frictions with fresh and sweet neat's-foot oil, brisk rubbing with the Indian flesh-glove or keesah, a tepid soap-bath once or twice a week, and the sponge-bath as often. Croton oil or ammonia may be employed in the form of friction; sulphur and potass were given with great benefit in one case mentioned by him. The prognosis Mr. Wilson considers favourable. If we cannot cure the complaint we can restore the patient to tolerable health and comfort.

Dr. Begbie † found arsenic fail in the treatment of ichthyosis simplex, though in one case it produced some improvement. Mr. Hunt, on the contrary, has been extremely successful with arsenic. He tells us that after the skin has been for many years so rough and rugged that it scarcely wears a human look, it will become smooth and delicate. In some patients this novel state has been permanent; in others the disease has returned. Still, Mr. Hunt maintains we can always give relief. If even we cannot cure the disorder we can ameliorate it and at least get rid of the fissures which torment the patient so dreadfully. For external use Mr. Hunt prefers glycerine with Fowler's solution diluted with water.

Dr. Neligan quotes two cases, published by Professor Banks, of the scaly (or simple) form of ichthyosis which were successfully treated, cod-liver oil being used both internally and externally; vapour-baths were also employed. A flannel dress, thoroughly im-

\* *Medical Times*, vol. xiii.

† *Edinburgh Medical Journal*, 1861-2, p. 1.

pregnated with oil, was constantly worn next the skin. Dr. Neligan himself employed the following plan with great success; in three cases out of four the recovery was permanent. Iodine and iodide of potassium were given in decoction of elm-bark and the affected parts were dressed with an ointment containing, at first, twenty grains and afterwards a drachm of iodide of potassium to an ounce of lard and a drachm of glycerine. Alkaline baths, containing a drachm of carbonate of soda to a gallon of water, were used a quarter of an hour before the ointment was rubbed in and the flesh-brush was freely employed while the patient was in the bath.

In the spinous or warty form, which, as I have said under the head of definition, I mean to be understood as an aggravated variety of simple ichthyosis, Mr. Wilson advises that the skin should be softened with warm alkaline washes and baths, and then stimulated with a lotion such as that of the tincture of croton.\* Constitutional remedies may be tried and both Fowler's and Donovan's solutions will be found useful. He advises also a course of liquor potassæ in decoction of sarsaparilla. Willan and Elliotson have both recommended pitch, to the extent of half an ounce daily. I have had no experience of it in this rare variety, but from what I have seen of the action of pitch in other complaints I should not expect much effect from it. I have, however, only had one case of this kind under my care. In this instance there were several complete ridges of long but rather soft spines. They were all limited to one side of the body, and were seated on the side, shoulder, upper part of the chest and neck. Many of the spines were two-fifths to half an inch in length. This patient was a lad of thirteen or fourteen years old. The case underwent no improvement, and I soon lost sight of him.

Mr. Naylor says † that in ichthyosis there is generally a great excess in the quantity of urine which is, moreover, of a low specific gravity, and usually of the palest yellow colour. In a specimen which I examined lately (a portion of the whole bulk of urine passed during the twenty-four hours by a little girl six years old, labouring under this disease), the colour was decidedly pale and the specific

\* Mr. Wilson's formula for the tincture of croton is :—

R. Tiglii semin. contus., ℥j.

Spir. vini rectific., ℥iv.

Macera per dies quatuordecim et cola. The lotion consists of a drachm of the tincture to a half-pint of fluid.

† *Diseases of the Skin*, p. 63.

gravity 1016. It was acid, and yielded a very small quantity of mucus. Half an ounce treated in the way recommended by Bird,\* gave 0.90 gr. of nitrate of urea and little more than traces of uric acid were found. The addition of nitric acid produced a greenish-grey colour. There was no albumen and no excess of bile. An ounce produced 1.80 gr. of extremely hard white ash. Judging as well as one can from these slight indications it might be worth while to try the effect of colchicum and acetate of potass.

\* *Urinary Deposits*, fifth edition.



## CHAPTER III.—TINEÆ.

ΤΙ'ΝΕΑ (*a, æ, fem.*), from *teneo*, to hold. (ALOPĒ'CIA (*a, æ, fem.*), properly *alopekia* (ἀλωπεκία), from ἀλώπηξ, a fox, because the state of the hair was supposed to resemble that of a fox suffering from the mange, is included in this group.)

*Definition.*—Dry, scurfy, reddened, or pale and shining patches, accompanied, when on the scalp, by shedding, twisting, loosening, and falling of the hair, and in some cases secretion of scales.

*Divisions.*—1. T. areata (alopecia areata or area). Sudden falling of the hairs from small patches of the scalp, often nearly circular in form, leaving a white, polished, and often wasted state of the skin. After the epidermis has once been thrown off there seems to be scarcely any reproduction of it. General alopecia, a simple thinning and falling of the hair, may be classed as a mild chronic variety of this. 2. T. decalvans. An aggravated state of the former, the whole head of hair being swept off in a very short time, only a solitary patch or two, or hair or two, being left. 3. T. tonsurans, or scalp ringworm, in which patches of the hair, generally somewhat circular in form, are cut down to stumps. 4. T. circinata or ringworm. An eruption of red, nearly circular, erythematous patches or groups of very small red papulæ, generally seated on the head, neck or arm. The fungus, trichophyton tonsurans, when present, is found among the scales after the addition of liquor ammoniæ. 5. T. favosa or favus. Formation of red, slightly tender patches, generally on the scalp, which gradually become covered with small, yellow, adhesive tenacious crusts, marked by a peculiar mouse-like smell, accompanied by loosening of the hair, and wasting

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and blackening of the roots. May also attack the face, thigh, nail, &c. Hardy gives as the characteristic signs of favus—1. The mycelium, an assemblage of filaments, sometimes simple, sometimes branched. 2. Tubes, simple or celled, isolated or adhering to one another; some empty, others containing spores. 3. White granules, oval or rounded, sometimes irregular, of variable volume. These are supposed to be the spores or organs of reproduction of a parasite of vegetable nature, the achorion Schönleinii. With a magnifying power of two to three hundred diameters, numerous spores may be seen, and sometimes tubular filaments may be detected in these parts. 6. *T. ulcerans* or kerion. Inflammation of the hair-follicles of the scalp, with great swelling and puffing up of the portion of skin invaded, sometimes accompanied by great redness of the part; very rapid falling out of the hair, followed by profuse suppuration in and gaping of the hair-follicles, with discharge of muco-purulent fluid like that seen in the declining stage of blennorrhagia. Intense tenderness of the skin. The Burmese ringworm seems to be clearly a local form of eczema.\*

As those who contend for the parasitic nature of tineæ found their treatment upon the view that the parasite is vegetable, and as those who deny the vegetable nature of the parasitic structures uphold a very different kind of treatment, it becomes absolutely necessary to examine the contending views, however briefly.

If I understand aright the view put forward by the former, it amounts to this, that the parasitic growths on the skin are as truly vegetable in their nature as the mould on an orange or melon, because we can distinguish the presence of cellulose externally, and can see internally the primordial utricle coloured by iodine, and because we find in the secretions of these diseases the tubed mycelial thread and a fructification unrepresented in animal structures. Ether, chloroform, and spirit of wine, do not affect these parasites, while they make epithelial tissues transparent, and dissolve all fatty matters. The parasites mostly grow in places to which the air has free access, exceptions to this rule admitting of doubt; they grow too, when removed from the influence of blood and living tissue, a separation which is fatal to animal life. A piece of favous matter, if fittingly nursed and tended, will take root and flourish; the nuclear element will assume the sporular form and the sporules will gain in

\* See *Journal of Cutaneous Medicine*, vol. i. p. 379. This is also Mr. Wilson's opinion.

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size, join, bud, and bring forth mycelium, while the very structure on which they are seated is decaying. The trichophyton tonsurans will blossom while the fibres of the hair on which it grows degenerate, and their place is supplied with delicate tufts of crystalline fatty matter.

It is argued that if we take away the damaged hairs, &c., of tinea, nothing diagnostic of the ravages of the parasite remains, while if we remove all the eruptive, the parasitic element remains in its integrity: the necessaries remain, but the accidents are absent. The presence of the fungus increases the local irritation. Now, if the fungi be different, there must be different soils, and the treatment be different in kind. If the fungi be identical in nature, then the treatment is a matter of degree only; if fungi be different, then ought they to be so many indices to certain conditions of the economy.

Accordingly, to cure the disease and destroy the fungus, you must root out every diseased hair, by gentle means if you can, but pull it out. There can be no doubt that such views are now very widely accepted. Dr. McCall Anderson is unreservedly in favour of this system. "Considering as I do," he says,\* "that its [favus] essence consists in the presence of a parasite, I hold that its destruction is the *sine quâ non* of the treatment." He, therefore, has every hair removed with broad-pointed forceps, and clears three or four square inches of scalp at a sitting. Dr. Hillier says† that tinea tonsurans and tinea favosa cannot exist without their respective fungi. The diseases known as tinea, he says, essentially depend on the presence of microscopic fungi. M. Bazin, among others, adopts much the same view.

To all this, Mr. Wilson replies that the parasitic bodies are produced by "granular degeneration" of normal tissues, and he refers for corroboration to such instances as the development of mucus and pus. He says that upwards of twenty years ago he came, after a very careful examination of the subject, to the conclusion that the pathological elements resulted from aberrant cell-growth, consisting in the growth and proliferation of the primary granules of which epidermic cells and hair-cells are nominally constituted; that this growth and proliferation had the effect of arresting the granules at their embryonic stage, and in the per-

\* *On the Parasitic Affections of the Skin*, 1861, p. 32.

† *British Medical Review*.

formance of their embryonic functions, and as a consequence that the cell-tissue (epidermis and hair), composed of these embryonic granules and imperfectly elaborated cells became, upon desiccation by the air, dry, spongy, and brittle; that in trichosis this change alone took place in the hair, whereas, in favus, the granules composing the yellow disks around the mouths of the follicles, pass through a pustular stage, the consequence of a higher degree of inflammation, and in their pustular condition acquire their peculiar yellow colour. This morbid alteration he considered then, and considers now, to be granular degeneration.

As regards the mode of increase and production, Mr. Wilson contends that "the granules are nucleated, separate or in groups, or adherent in moniliform strings of two to four or five in length. The great number of the granules are uninuclear; some, however, are binuclear or trinuclear. The binuclear granule is in process of separation; the original nucleus has split into two, each moiety has become a separate nucleus; the space between them has increased; a septum has arisen in the interval, and the cell has become oblong—an oblong cell with two nuclei, or rather with two independent but adherent cells, cells that may subsequently divide and become separate cavities. This is the mode of all proliferation." At an early stage, and while in near contact with the vital tissues, the tendency is to the formation of granules, but "removed from the source of nutrition proliferation weakens, the divided cells remain adherent, and either retain their globular and independent shape and give rise to moniliform filaments, or they grow in length at the expense of their contents, and form cylindrical and transparent filaments divided by septa, each internodal segment representing a single original globular granule or cell." In the latter case they lapse "into an irregular and filamentary proliferation, giving rise to an inferior form of organization, neither so complete nor so permanent, and which converts the higher animal organization into a lower and phytiform organization—an animal tissue into one which might be likened to a vegetable tissue."

These quotations, then, give us as the sources of the so-called fungus elements: 1. The normal tissues (epidermic granules), the nature of the disease of which is here looked upon pathologically as a granular degeneration. 2. The mode of increase by the division of the nuclei of the cells and the secondary division of the cell itself. 3. The formation of the so-called mycelium by the division

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of the nuclei and the breaking up of the binucleated cells into separate unities. These stages are best seen in favus. The granules are globular, uninucleated, bi- and tri-nucleated; the mycelial forms are moniliform and opaque, cylindrical and transparent, with a branched and ramified filament. "In the case of the trinuclear cell, a bifurcation is effected, and the proliferation of each part of the tissue-cell lays the foundation of a branched and phytiform growth." The peculiarity of favus "is due to a pustular complication;" the layer of the favus mass, next the basement membrane of the derma, is made up of pus-globules; "these pus-globules contain from four to seven or eight well-formed nuclei; and these nuclei, on their escape from the cell-membrane of the pus-globule, become the nucleated granules which are the chief constituent of the pathological product." The moniliform thread is produced by the coalescence of these escaped nuclei. We have then to notice the view that in favus the phytiform elements are derived from the nuclei of pus-cells. Mr. Wilson interprets the term granular degeneration by "the idea of an arrest of development of the cell-tissue of the epidermis at its embryonic stage, and the production of a tissue constructed of crude and imperfect materials, which represent an earlier period of all generation than that which nature intended, and which, in consequence, is truly in a state of degeneration from the perfect type."

Mr. Wilson further says,\* that "every observation seems to show that this phytiform process takes place in the rete mucosum, in the shaft of the hair, situations which the humble seed-like spore could never reach by a process short of necromancy, having epidermis unbroken in both cases." I should have thought his experience had already taught him that such little difficulties never yet did stand in the way of a theory. He also observes that some of the phytiform affections—pityriasis versicolor, for instance—are symmetrical, and that this must be an awkward stumbling-block in the way of "the gardener's theory." He points † to the fact that one of the early promoters of the theory of contagion by vegetable fungi is about to recant. To this may be added, that such careful observers as Dr. Carpenter and Mr. Erichsen deny that a vegetable parasite exists in the favus crust. Mr. Naylor, too, considers that the hair is only *secondarily* affected in favus, and that when it is

\* *Journal of Cutaneous Medicine*, vol. i. p. 345.

† *Ibid.* vol. ii. p. 106.

destroyed, this happens from the pressure from without acting upon the follicle ; a view, however, in which I cannot concur. It has always appeared to me that the disease extends down the sides of the follicle.

To this it has been rejoined that Mr. Wilson's arguments are anatomical, that the botanical view of the question had been quite ignored, and the growths in question are vegetable. But, after all, the victory practically remains with the antagonists of the parasite doctrine. Its supporters unreservedly admit that ill-health yields the soil on which alone the fungus can root itself. Sir William Jenner says that parasitic diseases seem to take little hold on those who are constitutionally sound, and in a large number of cases of parasitic disease the general health of the patient is at fault. What part, then, can be played in the production of disease by a parasite which can only find suitable nourishment in a state of skin which would require setting right just the same were there no parasite at all ?

So far, however, will passion for a prevailing theory blind men, that the disappearance of a tinea, after some strong local treatment has been applied, is triumphantly appealed to in support of the doctrine. The caustic has killed the parasite and the disease has disappeared in consequence. But the argument is not only useless, it is worse—it is delusive, *for it would only hold good if it could be shown that the caustic destroyed the parasite without touching the skin !* It is just as likely that a powerful stimulant may do good in a so-called parasitic disease as in one for which a parasite has not yet been discovered, for instance, lupus and erysipelas, though how long they will enjoy such an immunity is doubtful enough. But when once the tide of reasoning has set in one particular direction, it is useless attempting either to check or direct it ; the only plan is to let it expend its force, which generally ensues spontaneously, and then perhaps the voice of reason may be heard. This state of matters is, I need scarcely say, not in any way peculiar to medicine ; it infects the whole empire of literature, those branches as well in which taste and feeling are the only arguments as those in which neither taste nor feeling is allowed a hearing. The rule of Mr. Tennyson is not more absolute than that of Mr. Darwin, Mr. Huxley, or Sir Henry Rawlinson, and any one bold enough to use his own reason about any of their respective views or theories, is at once

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treated by certain organs of the press as if he were a fool or a criminal.

I admit at once that this question of the contagiousness of the tineæ quite puzzles me. Favus boasts of a most luxuriant fungus ; it has all the qualifications necessary for giving the disease to any extent ; it is said to be highly contagious ; yet it is quite certain that children affected with this disease in a most virulent form remain for long periods at home in quite as close contact with parents, relatives, friends, &c., as is adequate to transmit scabies in a fraction of the time, and that the extremely rare occurrence of the disease proves how very seldom it is communicated under such circumstances. Again, we find an advocate of contagion—Mr. Hutchinson,—driven to admit\* that tinea circinata is very rare among the lower classes, where we generally find contagious diseases extend most rapidly and widely. It is very common in the upper classes, a circumstance Mr. Hutchinson can only attribute to the more general use of the same combs and brushes among the upper classes, when visiting at each other's houses, whereas the poor only use them at home. But it is difficult to understand how a brush or comb, kept in a cleanly family, can convey a disease more certainly than the wearing of each other's caps and hats by children, as is constantly done among the lower orders ; or how it happens that servants, who are often not at all scrupulous about employing the same comb and brushes as the young ladies and gentlemen use, should escape.

Now, considering that it may assail adults in a very severe form indeed, and that the same young ladies and gentlemen not unfrequently use papa's comb and brush, it is curious that *he* never gets tinea and propagates it through his club, where, perhaps, fifty or a hundred members use the same comb and brush in a day—a state of matters which ought to favour the diffusion of this disease to an extent, compared with which an occasional visit, at which, after all, it is only *assumed* that the practice is put in force, sinks into insignificance. Possibly we shall, some day, stumble on the truth, and find it lying midway between the extremes of scepticism and credulity.

At the time of writing this, a child is under my care for tinea circinata. She is remarkably cleanly, as are her parents, and

\* *Journal of Cutaneous Medicine*, vol. i. p. 171.

has been brought up in such strict seclusion that she was not allowed to play with any other children ; yet the complaint has established itself on the skin over the lower part of the scapula—a place constantly covered with clothes. It is difficult to understand how any fungus could have been conveyed here, and yet had this child been at a school where there were other children affected with ringworm, her complaint would at once have been ascribed to this source.

Again, a boy was lately in attendance at St. John's Hospital, suffering from the same affection, which his mother said he had caught from the baby whom he was in the habit of nursing. On examining the infant I found there was certainly well-developed tinea circinata on the lower part of the belly ; in the case of the boy it was seated on the front of the wrist. The mother said the lad was in the habit of sitting with his hand up the baby's clothes. On further examination, I elicited that the tinea appeared in the latter (now several months old) soon after birth, whereas the boy had only had it a very short time, though he had constantly nursed the infant—a fact which seemed to be explained by the statement, that up to a recent period the baby had worn long clothes, as these prevented the boy from placing his hand in contact with the skin. I could find not a tittle of evidence to prove that any one suffering from ringworm had ever been in contact with the baby.

I think, then, we are quite justified in concluding that there is not one jot of evidence to show that any form of tinea *necessarily* depends on the transplantation of a fungus or the diffusion of it by spores. That contagion may be conveyed in this way in some few instances, there seems reason to believe. But it is to be remembered that this point is not yet proven, nothing like a demonstration of it has been attempted. I offered to give every facility for putting it to a crucial test at St. John's Hospital, but the offer was not accepted. These diseases most assuredly spring up spontaneously in some cases, and therefore those who assert that the fungus is the sole cause simply put themselves out of court. The fallacy of such a mode of arguing becomes evident enough when we deal with visible and tangible agents. It would be simple absurdity to say, that because cantharides will blister the skin, therefore every blister on the skin must be caused by cantharides ; yet this is not more illogical than asserting, that as contagion probably takes place in some cases it must be assumed to happen in all.



Mr. Erasmus Wilson\* considers that nervous exhaustion is the cause of the falling of the hair, in tinea areata at any rate. Neuralgia, anxiety, &c., bring on the exhaustion and anæsthesia accompanies it, the result being that the tissues of the skin waste from want of nourishment, and that the hairs, at a short distance outside the follicles, grow thin and brittle and break off. Moreover, this form of alopecia occurs at spots assailed by neuralgic pain; it occurs during pregnancy, and is in some cases hereditary—facts which he thinks clearly fatal to the fungus theory. But I would venture to hint, that, however adequate this theory may be to meet some cases, it does not explain others. Alopecia areata and even tinea decalvans are seen where there is no anæsthesia and no history of neuralgia; children too, do not suffer much from neuralgia, and generally very little, except at the time, from mental agitation. Yet we see them victims to tinea of every kind and grade. The hereditary nature of any form of tinea may be doubted, although the coincidence of its occurring in both parent and child is probable enough. Finally, there is reason to believe that tinea is in all cases the result of a process analogous to that which produces eczema—a slow inflammation, often less the redness, under the influence of which the hairs and cuticle are killed and thrown off piecemeal—a process as thoroughly constitutional as that which occurs in cancer, phthisis or lupus.

Dr. Purdon, who, I must say, although I dissent from his doctrines, approaches the subject in the spirit of a true worker, says† that favus is much more common in wet and rainy cities than in those of a drier atmosphere. But I never yet understood that Edinburgh is *much* moister than Glasgow, while favus is infinitely more rife in it than in the latter city. I lived for some years in one of the wettest counties in England (Cumberland), and never saw a case there. At the same time I feel bound to admit that Dr. Purdon's views merit investigation, containing, as they do, germs of discoveries infinitely more important than all the marvellous performances of fungi—for marvellous they are beyond the mind of man to conceive. In other instances where fungi develop themselves on decaying and fermenting matter, their form is determined by that of the matter they assail and its condition at the time; in diseases of the skin it is the reverse; the fungi develop

\* *Journal of Cutaneous Medicine*, vol. iii. p. 99. † *Ibid.* vol. iii. p. 394.

the state of the matter, for otherwise they cannot cause the contagion and they are an accident. "A fungus," says Pouchet,\* "is known which never grows except on the bodies of dead spiders; another only appears on the surface of horses' hoofs in a state of putrefaction." There is one of enormous size, and always solitary, on the neck of a caterpillar of tropical countries; another (*Racodium cellare*), which has never been found except in the casks of our cellars; and a third only met with on the drops of tallow which the miners, in working, let fall on the soil. Every form of fermentation has its particular vegetation, and every sick and dying plant is attacked by its special parasite.† Unless, then, we admit, that the forms assumed by these growths are, as I said, determined by the form and state of the structures on which they appear, in which case they are clearly results and not causes, they must spring from special germs. But these germs, to fertilize on such countless millions of objects, must exist in prodigious numbers, and yet we never find them till they have selected their site. To appear as they do, immediately that the conditions which permit of their existing set in, every form they assume must be present in every part of the atmosphere where we yet never detect them. But the most miraculous thing is, that though strictly vegetable in their nature, they must be endowed with intelligence and muscular power, for unless they existed in such inconceivable numbers as the panspermists would have us believe, in which case they would render the air opaque, they must have the faculty of perceiving—often, indeed, where it is invisible to mortal eyes—the object on which they are to fructify, and of traversing immense distances to reach it.

*Diagnosis.*—The first step towards forming a really satisfactory diagnosis of these affections is to eliminate all true pustular diseases—that is to say, those which begin with pustules, or in which pustules form the great predominant feature, and refer them to impetigo, which is, except in some very rare instances, not a contagious disease at all. In some affections of the scalp pustules may form a complication of a true tinea, but they are not an essential element of any stage of the disease. Next, vesicular diseases of the scalp, if any such exist, for I never saw one, may be thrown out. Thirdly, true eczema of the scalp—that is to say, an inflammation of patches of the skin, followed by throwing off of the

\* *The Universe*, p. 715.

† *Ibid.* p. 719.

cuticle, weeping, and the formation of crusts, resembling dried honey, fragments of dirty green soap, mortar, resin, &c., may follow the same path. There then remain the true tinea—that is to say, dry, scurfy, reddened patches, accompanied by clipping, shedding, twisting, and loosening of the hair, and in some cases by shedding of the epidermis; in others, by the formation of a secretion very closely akin to that of eczema as in favus, or even passing gradually into eczema as is occasionally seen in tinea circinata.

*Prognosis.*—This must I think be looked upon as essentially favourable. Hair will not grow again after a certain period and scars are of course indelible, but the progress of the disease may always be checked even in favus, and in most cases success will follow proper attention. That tinea areata is perfectly and permanently curable, even in tolerably severe forms and of considerable duration, I have every reason to believe. In the latter part of 1868 a woman attended at St. John's, from whom I learned that her sister, whom I had cured of this affection four years previously, had remained well ever since. In this case the disease had existed several months, and some of the patches, which were nearly as large as the palm of the hand, were perfectly devoid of hair. At the present time there are three patients attending at St. John's Hospital, in all of whom the complaint is progressing steadily towards a cure. In two of these it had lasted some years; in one I know this statement was substantially correct, because the patient had attended on a previous occasion for the affection, and a very considerable interval elapsed between the first and second course of treatment.

*Treatment.*—Tinea areata and tinea decalvans ought, I think, to be at once attacked in the most vigorous manner by means of vesicants, such as Bullin's blistering fluid, or solution of cantharidin in glacial acetic acid, four grains to an ounce. These should be rubbed in to such an extent as to produce blistering, for it is to be borne in mind that the complaint has little if any tendency to disappear spontaneously, and that if it be trifled with the hair will not return. Should there be anything wrong in the state of health, it should be set right as far as possible; many of these patients are pale, delicate, and underfed children who require a long course of tonics and aperients. Steel is often very useful as regards the health; whether, even in conjunction with arsenic, it possesses any real influence over the local complaint I am unable to say. Some-

times, however, the complaint makes its appearance in very healthy persons, and in these cases I think arsenic ought to have a fair trial; but I have rarely succeeded in inducing a patient affected with one of these diseases to take it long enough to produce any effect. I believe it is beneficial, especially conjoined with steel, as it certainly induces a healthier state of the skin in some not very dissimilar affections, but my observations do not allow me to assert this as a fact. The grand practical point, however, is that, treated in this way, many patients are unquestionably cured. Many indeed neglect the complaint to such an extent that all attempts to benefit them are simply thrown away, while others only make their appearance when irretrievable mischief has been done. Not long ago a patient, who had lost all the hair from the back of her head twenty-five years previously, applied at St. John's Hospital to be cured of this complaint. Whatever applies to these affections applies also to tinea tonsurans. As to tinea circinata, it for the most part requires only some local application, of which the simple nitric oxide of mercury ointment, with a little glycerine,\* and the ointment of the red iodide of mercury of the British Pharmacopœia, are, perhaps, the best.

Not long ago I showed several gentlemen a case which, so far as one case can be supposed to prove anything, showed that internal treatment has some, but not complete, control over this affection. The patient, a girl, suffered from tinea areata, not only on her head, but her arms, where the hair had been removed in long strips. She was treated with steel, arsenic, and blisters. At the end of a few months it was found that the hair was growing on the head where it had been blistered, as also on the arms where no external application had been used, while two spots on the back of the head, to which, also, nothing had been applied, were almost *in statu quo*.

In all cases of obstinate or confirmed alopecia, my own experience would lead me to rely entirely upon two remedies and on these only; they are the internal use of arsenic and the external use of the Spanish fly. A regular course of arsenic should be given as for an obstinate form of erythema or pityriasis. As to the cantharides, fancy or experience will readily enough dictate some form in which this potent ingredient can be applied. But the cheapest and most

\* R. Ung. hydrarg. oxidi rubri, ʒij.  
Glycerini, ʒss. ℥i  
Ft. ung.

certain method that I am acquainted with, is simply to powder the fly and macerate it in glacial acetic acid for a fortnight. The mixture at first should be almost as thick as printer's paste; after a short time a clear fluid gathers at the top, and this, after being strained off and well brushed over the bald surface, or rubbed in with a piece of lint, is by far the most powerful vesicant for a cheap preparation that I know of. A piece of skin the size of a shilling is blistered every second or third day, and in this way the whole of the surface may be operated on without any great soreness being induced. Care should be taken to keep the fluid from the fingers. I have suffered severely from handling it carelessly. Bullin's blistering fluid is also a most valuable preparation, but on account of its cost is not so well suited for hospital or dispensary practice. When patients will not submit to blistering, frictions with a mixture of spirit of horseradish, tincture of cantharides, and Cologne water may be tried instead; but this method is far more expensive and less certain than the other.

But tinea favosa, or favus, demands much greater care. For the most part, a long course of internal treatment is absolutely requisite, and I cannot understand the persistency with which some writers dwell on the value of local applications to the entire exclusion of general means; for, although these may possess little control over the disease when unsupported by suitable external means, they still form very useful auxiliaries. So far as my experience goes, it is quite in favour of the conclusion that good general and local treatment combined will cure these cases more speedily and effectually than local treatment only. Besides most of those patients are in a bad state of health and constitutionally weak. I have never seen favus in a sound, strong child. In three cases under my care, of which I took copious notes, the whole frame appeared feeble and unsound; *the children were said to have always been delicate; their bones were small, and their heads looked as if they had suffered from hydrocephalus when young. In all three the breadth across the parietal bones was greater than natural, and the upper part of the frontal bone overhung the lower.* In one patient there was, at each side of the forehead, a sulcus, which took its rise at the middle of the eyebrow and sloped upwards and outwards for a considerable distance. The features in two out of the three were thin and pinched. One girl had suffered from suppuration of the lymphatic glands below the chin. In all three cases the parents and the rest of the family were,

so far as I could learn, healthy; certainly, all those that I saw looked so.

In all cases of favus I would suggest a very free use of purgatives. I believe there is no step more imperatively called for. Purgatives should be continued till the stools become of a bright yellow, and this state should be maintained by employing them at least once or twice a week. It is surprising how well this treatment agrees with children, and how they make flesh on it. For children I believe scarcely anything surpasses grey powder, given three or four times a week, accompanied by a dose of a magnesian saline, or salts and senna, every morning. The only medicine which, in addition to this, I have seen do any good is a combination of steel and arsenic. Small doses of the saccharated carbonate of iron and tolerably large ones of the liquor potassæ arsenitis, seem to me to answer best.\* I never saw the slightest benefit arise from the use of any sort of tonic, either in my own practice or that of others.

Favus, when remediable at all by external treatment, requires only mild means. The barbarous practice of tearing out the hair by means of a pitch plaster ought not to be suffered any longer. Indeed, if I had the power, I would put it down by the arm of the law. It is horribly painful, perfectly unnecessary, and in certain cases fatal. One case was communicated to me in which, to all appearance, death arose from this brutal practice; and Sir William Jenner saw

\* For a child two years old the following prescriptions may be used:—

R. Hyd. c. Creta, gr. x. (vel gr. xv.)

Pulv. Cinnam. c. gr. v. ℥.

et divide in pulv. iij.; i. alternis noctibus horâ decub. sumend.

R. Mist. Sennæ comp. ℥ss.

A third part to be given on the morning following the administration of the powder. Syrup of senna in doses of ℥ss., or calcined magnesia in doses of five to ten grains given in milk, may be substituted if the child object to the mixture. Citrate of magnesia, albeit it is said to contain neither citric acid nor magnesia, answers very well in those cases, and children seem to like it. A teaspoonful may be given here in a wineglassful of sweetened water. Fox's "palatable castor-oil," which can be procured at the "Sanitary Institution," 2, Adelphi Terrace, might be tried. I have, however, had no experience of its use.

R. Ferri carbonat. sacchar. ℥i. Divide in pulv. xiv.

One of these powders may be given twice daily mixed with a small quantity—about a quarter of a teaspoonful—of water.

R. Liq. Potass. Arsen. ℥xxiv.

Aquæ, ℥xiss.

Coch. min. i. ter quotidie sumend.

2 /

v

a case in which a child was nearly killed by the application of pitch to the scalp. All loose and diseased hairs should certainly be removed, but this should be done as gently as possible ; for the most part cutting the hair quite close to the scalp is sufficient. The head or any surface affected should be washed occasionally with the transparent soap made for St. John's Hospital, which I have no hesitation in recommending as the best I have ever met with. Only *very hot* water should be employed for this purpose. The affected surfaces should then be covered with freshly-prepared dilute nitrate of mercury ointment, thinned down with almond-oil to the consistence of cream, and over this a covering of linen should be worn night and day.

Of the three patients alluded to above, one, a girl, made a very good recovery. She had been treated with cod-liver oil—in fact, almost fed on it at one time—quinine, steel, wine, jellies, and beef-tea for five months, and during the whole of this time had got steadily worse ; but so soon as she was put on a plain, wholesome diet, and was well purged, she began to mend. A continuance of this process, aided by gently removing all the hairs which were manifestly weak and loose, effected all that was requisite. A few months ago the mother, who, I feel sure, would be very happy to show the case to any one, called, after an interval of four years, to say that the child had remained quite well, and had now a famous crop of hair. The second case was hopeless from the beginning ; the child was ill cared for and ill fed ; she had suffered from suppuration of the submaxillary glands, and was of very delicate build. The disease, which had lasted several years, had already destroyed nearly all the hair-bulbs and great part of the upper surface of the true skin, which was white, shining, and scarred. Epilation could not be tried, for there were only a few scattered hairs left, and the child violently resisted every attempt to touch them. Lastly, I could not get her mother to attend regularly with her. The third case, that of a boy, was progressing favourably under the use of saccharated carbonate of iron and liquor arsenicalis, the favus having almost disappeared, when he suddenly left off attending.

In respect to kerion, I can only suggest the same internal treatment as for favus. Externally, I believe nothing succeeds better than painting the whole of the affected surface with tincture of iodine, diluted the first time or two with an equal weight of water, and subsequently pure or even strengthened by the addition of

iodine. Should it begin to lose its effect a solution of nitrate of silver, five or ten grains to an ounce, may be substituted. The painting should be carried as far as practicable short of giving severe pain.

For the simple falling of the hair in grown persons Mr. Wilson advises that the hair should be cut with great care, and by a person thoroughly skilled in the matter. The tips of all the hairs require to be cut off: this is the grand point. A secondary but still more useful one is the use of a spirit-wash and a stimulating ointment.\* The same treatment, with free brushing, is applicable to general falling of the hair as also to area; the head is also to be washed in cold water and dried with a hard towel; it is then to be well brushed, the great point being, it seems, to brush the skin more than the hair—steel medicines and tonics being also requisite.

His general directions as to the treatment of tinea and favus are to remove crusts and furfuræ by thorough washing with juniper tar or petroleum soap, or by the use of a liniment consisting of equal parts of soft soap, juniper tar, and alcohol; the diseased parts are to be washed daily with tepid or cold water, and the skin of the head is to be gently stimulated; the hair is to be combed and brushed when it is not too sensitive; a little dilute nitric oxide of mercury ointment is to be rubbed in night and morning; tonics, cod-liver oil, iodide of iron, and arsenic are to be given internally. Mr. Wilson says there can be no doubt that depilation disposes to the cure of the local disease; the statements of Bazin that he succeeds in effecting this object cannot be ignored, but the removal of the fungus is not the proper explanation of the cure. Depilation is a valuable stimulant: it will transmute the white hair of age and

\* The unguentum stimulan is made by macerating six drachms of the powdered cantharides with a gentle heat for twenty-four hours, in three ounces of pure lard. It is then strained through blotting-paper.

He also recommends for a wash this prescription:—

R. Olei Amygd. dulc.  
Liq. Ammon. fort. aa ʒj.  
Spiritus Rosmarini, ʒss.  
Aquæ Mellis, ʒij.   m ut fiat Lotio.

I prefer the following:—

R. Spiritus Armoraciæ,  
—— Rosmarini,  
Tinct. Lyttæ, aa ʒss.  
Aquæ Lavand. ʒviss.   m fiat Lotio.



sickness into the natural hue ; it is a successful mode of treatment ; but the success depends really on its power of producing deep stimulation of the cutaneous tissues, and of setting up a new action in the papillæ of the hairs. It is in fact the only remedy by which we can effectually reach the fundus of the follicle. It sets up a new action, a healthy instead of an unhealthy inflammatory process—a process the natural end of which is resolution, instead of one that goes on to all perpetuity. In the place of morbid cell-genesis it establishes healthy plastic action, and sometimes healthy suppuration, in the midst of which, as Bazin avers, the fungus is starved or drowned. I must say, however, that I never observed this phase of the operation, and that I should consider suppuration an unnecessary evil to be avoided by every means in the surgeon's power.

Mr. Wilson's particular treatment of tinea consists in giving sulphur and cream of tartar, cod-liver oil, especially if there be struma ; citrate, acetate, and hydrochlorate of iron, iodide of iron, iron and quinine, nitro-muriatic acid, a good diet, and plenty of porter.

The hair is to be cut and the crusts are to be detached with water-dressing ; the head is then washed with old-fashioned yellow soap. After this the patches are well painted with tincture of iodine, or strong acetic acid, or vinegar of cantharides ; subsequently an ointment of one of the nitrates of mercury is well rubbed in. When ointments are objected to, a lotion of sulphuret of potassium, a drachm to a pint, or of bichloride of mercury, a grain to an ounce, may be used instead. The dry scurfy state of the skin which remains is generally removed by dipping the head in cold water and rubbing in some simple pomatum.

Dr. Frazer recommends vesicating collodion and strong iodine paint for the patches of tinea ; he also speaks highly of carbolic acid. Mr. Startin uses a compound sulphur ointment of his own,\* and Sir William Jenner recommends one in all essentials the same as Mr. Startin's. For the strictly local form (area) Mr. Startin uses,

\* R. Sulphuris, ℥ss.  
Hydr. ammon. chlor. ℥ss.  
Hydr. sulphur, ℥ss.  
Olei Olivæ, ℥iv.  
Adipis purif. ℥xvi.  
Creosot. ℥xxx. ʒ.  
Ft. ung.

among other remedies, a lotion composed of infusion of white hellebore, bichloride of mercury, sulphurous acid and glycerine, applied warm with a soft brush; he has generally found a few applications of this prevent the falling of the hair, and extension of the disease from any patches which may happen to exist. The use of this lotion is followed or accompanied by friction with an ointment made of two ounces of fresh lard and the same quantity of cold-drawn castor-oil, half a drachm of tincture of kino, the same amount of Goulard's extract, and twenty mims of oil of rosemary. Dr. Frazer employs a lotion consisting of an ounce of aromatic vinegar and six drachms of Spanish flies, united with six ounces of rose-water, and the same of either rum or whisky. Mr. Hunt does nothing for ringworm beyond keeping the head clean, and prescribing a moderately nutritious diet. Oiled silk caps and such things he looks upon with horror, and very justly.

Dr. Drysdale, in a paper \* in which he has done me the honour to speak favourably of my labours, gives us to understand that his practice is to use stimulant lotions and vesicants in area and tinea decalvans. He mentions one very severe case where these were employed. The patient left off attending in the middle of the treatment, and reappeared a year after, having grown a fine crop of hair, which he ascribed to the local use of rum and milk, recommended to him for this purpose by an old lady. The probability however is that Dr. Drysdale's vesicants had a vast deal more to do with the result. The disorder was reappearing in some spots, but the persevering application of the liquor epispaeticus of the British Pharmacopœia checked it. Dr. Cheadle in tinea areata seems † to have been very successful with arsenic and steel, nitrate of silver lotion and strong creosote ointment.

M. Bazin treats tinea as follows:—The hair is cleansed and cropped close, the crusts are then removed and the affected surface painted over with the oleum picis juniperi, which, according to him, not only renders the skin healthier and less sensitive, but loosens the bulbs of the hair and at the same time makes the fungus shrivel up and destroys it. I have repeatedly used the oil and a very good remedy it is, but *I have never seen anything like such an action from it as loosening the bulbs of the hair*, or, indeed, from any remedy

\* *Journal of Cutaneous Medicine*, vol. iv. p. 78.

† *Ibid.* vol. iiii. p. 442.

whatever. The day following the head is to be washed with soap, and then every hair is removed over the whole extent of the diseased surface. As this is far too painful a process to be borne for a long period at a time, it may have to be extended over five or six sittings, and to be repeated two or three times, *or even more frequently*, (!) before the cure is effected. The epilator sits for this purpose on a chair and places the patient on a cushion at his feet, with the head resting on his knees. The hairs are then removed with tweezers, one or two at a time. When the surface is cleared it is brushed over with a solution of the bichloride of mercury to destroy the fungus. Four or five hours later the head is well anointed with the following ointment:—

R. Hydrargyr. subsulph. flavi, ℥ss.  
 Olei Amygd. dulc.  
 Glycerinæ destillatæ, aa ℥ij.  
 Adipis purificati, ℥ij.  
 Misce.

Or with this—

R. Olei Juniperi pyrolignei, ℥ij.  
 Adipis purificati, ℥iiss.  
 Misce.

M. Bazin, however, prefers the first. On the following day the depilation, the washing, painting with bichloride of mercury lotion and anointing with the ointments given above are repeated, and this is continued daily till not only all the diseased hairs, but a great many of those in the vicinity, are removed. The process is painful as the reader may easily imagine.

When the extraction of the hairs is completed the surface is painted over, night and morning, with the solution of the bichloride of mercury. M. Bazin however does not say how strong this solution is. When the hair begins to grow it must, if unhealthy, be pulled out again, and it may be necessary to repeat this three or four times.

M. Hardy's treatment is very similar to that of M. Bazin, except that he does not employ the empyreumatic oil of juniper. He extracts the hairs, and after this applies a lotion of bichloride of mercury, a grain to the ounce, and, in the latter part of the treatment, sulphur ointment, half a drachm of sulphur in the ounce.

Probably sulphurous acid lotion,\* the solution of pentasulphide of calcium used in scabies,† or a lotion of carbolic acid, ten grains in two ounces of water, would answer the purpose intended equally well, at the same time be more cleanly and easy of application.

When we analyse the treatment of favus as adopted by the most successful practitioners, we find that, in however many divisions it may radiate, however numerous and discordant may be the elements of which the various systems are composed, they admit of being resolved pretty well into the following groups:—1. Tonics, such as steel, nitric acid, quinine, &c., remedies which, however they may improve the health, never appeared to me in a single instance to possess the slightest control over the disease of the skin. 2. Alteratives, such as cod-liver oil, iodine, and iodide of potassium, mercury, and arsenic. Cod-liver oil never seemed to me to do any good in favus. I have great faith in it in many diseases of the skin, but I never saw it produce even the most insignificant effect here. Iodine and iodide of potassium proved quite useless in my hands, and mercury was only valuable as a purgative; the most valuable remedies, fluid purgatives, especially salines, appear to me little used. 3. Some means of softening the crust which may be more or less complicated, nothing, perhaps, being superior to wet lint. 4. The removal of the hairs, a practice which, kept within reasonable bounds and practised without cruelty, seems warranted by the results of combined experience. 5. The application to the denuded and diseased surface of some powerful antiseptic such as carbolic acid, bichloride of mercury, sulphurous acid, &c., followed or not by the use of various ointments containing some preparation of iodine, sulphur, or mercury,—remedies from which I have never in a single instance seen such an amount of benefit as would justify me in preferring any or all of them to a simple blister.

In favus Mr. Wilson gives tincture of the sesquichloride of iron even to quite young patients; his dose for a child ten years old is ten minims. If too much heat be caused by the iron, he sub-

\* R. Acidi sulphuros.

Glycerin, aa ʒj.

Aquæ, ʒij. Ft. Lotio.

The sulphurous acid should always be fresh made, as after a time it is converted into sulphuric acid.

† The formula for the pentasulphide of calcium is given at page 10.

stitutes for it the nitro-muriatic acid. When there is a tendency to enlargement of the lymphatic glands Mr. Wilson uses cod-liver oil, and if the bones be slender and weak, lime-water or phosphate of lime. He advises a liberal diet, plenty of fresh air, exercise, sponging, &c. His local treatment is to get away the crust with Alison's lambskin, and then to apply the ceratum tiglii.

Favus is looked upon as incurable in the Hospital for Diseases of the Skin in Bridge-street. Fortunately it is a very rare complaint, not being seen very often, though too frequently as it is. In more than fifteen thousand cases which I have entered at St. John's Hospital and elsewhere I have only met with three of genuine favus. At Aberdeen only 24 cases were seen in the Royal Infirmary during nine years, and at Glasgow only 15 were met with among a large number of patients in this space of time. It is true we find that 120 cases were admitted into the Royal Infirmary at Edinburgh in ten years. Such a very great excess may be due to some local peculiarity not yet accounted for, or it may be owing to difference of classification.\*

At one time Mr. Startin† certainly did not consider favus as incurable. True, he does not mention it in his lectures, but he takes a very different view of porrigo favosa and porrigo capillæ crustata, affections which he separates,‡ but which appear to me simply favus in different degrees of severity. His treatment is to have the hair cut short but not shaved; the crusts are then to be softened with very hot water, washed with tepid water and yolk of egg, and dried. After this the places are well anointed with an ointment of iodide of sulphur or bisulphuret or mercury and creosote. Iodide of potassium is given internally with infusion of quassia.

Dr. Neligan says§ he has never failed in curing favus permanently by the following plan:—He gives a tenth of a grain of iodide of arsenic made into a pill with manna and mucilage. A child ten years old may take one of these three times a day. When the patient is scrofulous cod-liver oil is also given, and if the arsenic disagree iodine is given instead with the oil. The hair is cut and a linseed poultice applied till the crusts are well softened; the scalp is next washed with a strong carbonate of potass lotion, a drachm to a pint

\* *Lancet*, 1860, vol. i. p. 559.

† *Medical Times*, vol. xiv. p. 235.

‡ *Ibid.* 1857, vol. ii.

§ *A Practical Treatise on Diseases of the Skin*, 1852, p. 356.

of distilled water, and then slightly brushed ; it is afterwards covered with carbonate of potass ointment, a drachm of the salt and the same quantity of glycerine to an ounce of lard ; the head is then covered with a close-fitting oiled-silk cap. This process generally removes the crusts in two or three days, and the carbonate of potass ointment is then exchanged for the iodide of lead ointment, half a drachm of the iodide to an ounce of lard ; the head being always covered with the oiled-silk cap, and well washed with the carbonate of potass lotion every time the ointment is reapplied. The patient is kept upon a mild and farinaceous diet, and the bowels are regulated by means of small doses of mercurials and saline cathartics.

M. Bazin's special treatment of favus is to crop the hair down to the crusts, to paint with the oleum juniperi pyroligneum, and then to apply a starch poultice to soften the crusts. When this is effected, they are gently lifted with a comb and the juniper-oil is applied as before. After this depilation is begun with.

When the body is the seat of the eruption and the latter is extensive, baths containing sulphur or the bichloride of mercury will be necessary : the patient should repeat these several times. After the bath the crusts are to be removed and depilation is to be begun. This process may last fifteen to twenty days ; during this time the subsulphate of mercury ointment may be rubbed in night and morning. In favus of the nail, the horny portion of the nail is scraped till the fungus is laid bare and the part is well soaked with the bichloride of mercury lotion.

After the extraction of the hairs, the redness of the diseased skin gradually diminishes for about a month ; then possibly the hyperæmia reappears, a few pustules are seen and favus cups begin again to develop themselves, but smaller and more scattered than at first. Depilation is now repeated in the same manner and to the same extent as before. The patient is then left for another period of five or six weeks ; if any favus crusts show themselves they must be removed and depilation be recommenced. Generally after this has been done a third time the disease is effectually cured.

Dr. Bennett, of Edinburgh, treats favus with local applications of cod-liver oil, but Dr. Stewart, his assistant, told Dr. McCall Anderson \* that this treatment proved only palliative. Sir William Jenner†

\* *Medical Times*, 1861.

† *Ibid.* 1857, vol. ii.

gets the crusts off with a piece of lint soaked in a solution of sulphurous acid, and then applies sulphurous acid to destroy the parasite. M. Huet \* seems to have had great success in the treatment of tinea favosa—which, I presume, includes favus, if, indeed, the term be not restricted to it—with the use of carbonate of copper, two drachms and a half of the salt to fifteen ounces of lard.

Here, then, we find that, while several surgeons cure favus by totally opposite modes of treatment, it is considered incurable at a hospital where, perhaps, more cases are seen than at any institution in the British empire. All this disparity only confirms the views I have often expressed ; that, if we are to make any real progress in treatment, *a series of special observations as to the comparative value of every remedy should be made, and that this can only be done, with anything like an approach to accuracy, in an institution entirely devoted to such purposes.* The special departments in general hospitals about which some persons write in the journals, as if they had been directly qualified by the Deity to decide on every point connected with medicine, have proved, and will prove, perfectly useless in this respect.

\* *Bulletin Général de Thérapeutique*, 1861.

## CHAPTER IV.—ECZEMATA.

A. ECZEMA (B. ULCER, *Ulcus, -eris*, neut., ἔλκος, is included in this group).

A. ECZEMA (neut.), from ἐκζέω, to boil over.

*Definition.*—An eruption of red, low, flattened, usually very small papules, often assuming the form of a general congestion as in pityriasis rubra, or limited congestion as in tinea circinata; the papules sometimes few and scattered, at others numerous and confluent, followed by death and shedding of the cuticle, infiltration of the cutis, discharge of serum, sometimes puriform, and formation of crusts. In some rare cases vesicles, ill-formed bullæ or pustules, may complicate or take the place of the papules. Accompanied by great itching. Health generally somewhat disturbed.

*Pathology.*—Up to a very recent period eczema was classed, with scarcely a dissenting voice, among the vesicular diseases.\* When

\* “It is characterized in its commencement by an eruption of very minute vesicles” (Rayer, *Diseases of the Skin*, 1835, p. 282). “It is characterized by an eruption of numerous minute transparent vesicles” (Neligan, *Diseases of the Skin*, 1853, p. 70). “An eruption of minute vesicles” (Copland, *Dictionary of Practical Medicine*, vol. i. p. 547). “An eruption of minute acuminated vesicles” (Good, *Study of Medicine*, vol. v. p. 629). “An eruption of small vesicles” (Burgess, *Manual of Disorders of the Skin*, 1854, p. 96). “Caractérisé par des vésicules ordinairement petites” (Cazenave et Schedel, *Abrégé pratique*, 1838, p. 90). “Une inflammation de la peau caractérisée par une éruption de vésicules ordinairement aplaties” (Cazenave, *Leçons sur les Maladies de la Peau*, 1856). “Les vésicules sont la lésion élémentaire habituelle de l’eczema” (Hardy, *Leçons sur les Maladies de la Peau*, p. 3). “Caractérisé par le développement d’une éruption de vésicules” (Bazin, *Leçons théoriques et cliniques*, 1860).



in a paper read some years ago at the Medico-Chirurgical Society I opposed this view, not a single writer, so far as I could then learn, with the exception of M. Devergie and Mr. Erasmus Wilson, had ever expressed a doubt as to the propriety of this arrangement, and even these two authors had not gone so far as to abandon the old classification. M. Devergie at that time seemed to be struggling against the conviction forced upon him by his own observations. In 1857, after saying\* that "if eczema be a vesicular disease by virtue of its morbid element, *the development of the vesicles is only momentary*, and appears, at the commencement of the affection, to disappear in a few hours;" he in other respects left the classification where he found it. What M. Devergie really meant by eczema being "*vesicular by virtue of its morbid element*," I am quite at a loss to comprehend; but as the fleeting nature of the vesicles is so fully acknowledged, we need scarcely be surprised to find him stating directly after, that it is *very rarely the physician can see them* [the vesicles], and that their covering is so thin *that they can only be made out by the reflection of sunlight!* a very difficult kind of vesicle, I should say, for any one to find. Yet a little further on, apparently mistrusting his own words, we find M. Devergie describing eczema as a punctiform, reddened state of the skin discharging serum very abundantly. He was evidently afraid to rely on the evidence of his own observations, which would soon have shown him that eczema, in the majority of cases at least, *is not a vesicular disease at all*. Mr. Hunt, too, at the very time he was classifying eczema as a vesicular disease, got very near the true facts of the matter, in one instance at any rate. He says,† in speaking of the symptoms of a case of eczema, "the vesicular character was not distinctly seen, *the original eruption presenting rather the character of papulæ containing no visible fluid*."

In the discussion which followed the reading of the paper alluded to, the view I had taken up, namely that eczema is really not a vesicular disease, was opposed very decidedly, and I need scarcely say that it would be opposed now by some writers. Wilson, Hebra, M'Call Anderson, and others, however, *now distinctly admit what I then contended for, namely, that the elementary lesion of eczema is not necessarily a vesicle*; but, on the other hand, they go farther and

\* *Maladies de la Peau.*

† *A Guide to the Treatment of Diseases of the Skin*, 1857, p. 138.

assert that it may be an erythema, a vesicle, a papule, or a pustule—a view which will beyond all doubt be ultimately adopted, and which is even now spreading pretty quickly, but which to my thinking requires considerable modification.

This change of opinion seems, so far as I can make out, to be very generally attributed to the great influence exerted by Hebra. Not long ago, in a paper by Dr. Hugenberger, published in the *St. Petersburger Medizin. Wochenschrift*, of which a condensed translation was given in the *Journal of Cutaneous Medicine*,\* the question was treated as if Hebra were the only person who had ever touched upon the subject. Till lately I believed that Hebra only published his views on the subject in December, 1862, in the *Wiener Medizin. Wochenschrift*; whereas the paper I speak of, in which eczema was defined as *an inflammation of the skin, followed by death of, and throwing off of, the cuticle, and discharge of serum*, and in which I expressly denied its vesicular nature, and described pityriasis and tinea circinata as capable of passing into decided eczema, was read before the Medico-Chirurgical Society in 1860 and 1861, and a translation of it appeared as early as May, 1861, or nearly a year and a half prior to what I thought was the appearance of Hebra's first communication on the subject, in the very journal in which Hebra made known his own views. I spoke under correction, and said that M. Hebra might have anticipated me, and that I could only judge from dates I had been able to obtain access to.

I now learn that Hebra's views were published prior to this, or in 1859, in the *Wiener Allgemeine Medizin. Zeitung*, and that they had been mentioned in his lectures in 1856. Dr. Foster Swift, Professor of Dermatology in the Medical College of Bellevue Hospital, having, in a very able paper on the pathology of eczema,† noticed the dates mentioned in the above paragraph, the statement was attacked in a very intemperate letter by a Dr. White,‡ who attributed the idea of preferring such a "claim" to "English conceit," and the desire so persistently manifested by English authors to appropriate the discoveries of other nations and reproduce them as their own!! This statement, however, found no echo in the journal. On the contrary, the editor pointed out very forcibly the impropriety of bringing

\* Vol. ii. p. 204.

† *The American Journal of Syphilography and Dermatology*, edited by Dr. Henry, 1870, vol. i. p. 94.

‡ *Ibid.* p. 282.

such sweeping charges against a body of gentlemen, and stated quite plainly his opinion that Dr. White's scientific status did not for a moment justify his taking up such a position or speaking with so much authority. Dr. White, in a letter which the editor evidently inserted with great reluctance, replied\* that he could not believe Dr. Milton was ignorant of a fact familiar to others, and that he "preferred to refer this somewhat oblique view of dates to *that well-known national trait which has so often prompted his countrymen to assign to themselves the most important share in modern scientific discoveries,*" &c. The only comment the editor deigned to make was, that he published the letter at the special request of Dr. White, and that if any additional evidence were required to prove the correctness of the strictures passed on his first letter, it would be "certainly furnished in the above communication."

However, if Dr. White's attack upon English dermatologists in general, and upon myself in particular, met with no sympathy at the hands of Dr. Henry, it was received in another quarter with an amount of approbation which must have gone far to console him for the snubbing he got at home. The editor of the *Archiv für Dermatologie und Syphilis* says † he took no notice at the time it was mooted in the American journal of such a claim, evincing, as it did, the grossest ignorance (gröbsten Unkenntniss) of literature, because he felt sure that the journal would soon find out the mistake it had made. The editor winds up by saying that he has been too indulgent in the matter, and that Dr. White's strong expressions were only called forth by a feeling of honest indignation (gerechte Entrüstung) at Dr. Swift's strange attempt!

I am afraid the editor of the *Archiv* does not understand English, otherwise he would not, if he had consulted the original papers, have committed such blunders. Dr. Swift never undertakes to support my claim. He simply quotes from my paper in the *Journal of Cutaneous Medicine*.‡ Whatever blame, therefore, is to be attached to the statement he must clearly be exonerated. Again, if the editor had read the paper from which Dr. Swift quotes, he would have seen that I said there what I say above; namely, that I spoke under correction, and could only judge from documents I had access to; that Hebra might have anticipated me, but that I

\* *The American Journal of Syphilography and Dermatology*, vol. i. p. 385.

† 1870, p. 659.

‡ Vol. iii. p. 141.

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had met with no account of his having published his views prior to 1862. If it be gross ignorance not to have been aware that Hebra made them known in 1859, that is to say, in other words, not to have read the *Wiener Allgemeine Medizin. Zeitung* for that year, then to that amount of gross ignorance I plead guilty. What is more, *I fear the medical profession in England must be enveloped in the same charge*; for I question if half a dozen men here were aware of the fact. I know that in 1860 I had grown so tired endeavouring to inoculate my friends with my views, and had met with so much opposition, that I resolved to bring the subject before the Medico-Chirurgical Society; but neither in the discussion there, nor in any subsequent discussion on the subject, did I ever hear it stated that these views had been anticipated by Hebra. There is another thing too that I fear, which is, that *exclusive of Hebra's own pupils, the bulk of medical men, not only in England, but in other countries, and even in great part of Germany itself, were in the same state of "gross ignorance."*

However, though I feel perfectly justified in defending myself against any charge of unusual ignorance, or of having sought to appropriate the discovery of another writer, I take this opportunity of withdrawing, in the most unqualified way, all claim to priority of publication, which undoubtedly belongs to Hebra.

It simply requires that surgeons should judge for themselves to be convinced that true eczema is not vesicular at any period of its course. It was not without considerable diffidence that I first hazarded this statement, standing, as I then thought I stood, quite alone in this view. Having suffered from this complaint, I had on numerous occasions watched the development of the morbid process hour by hour from the very beginning, and had long ago satisfied myself that there was no real foundation for the opinion so very generally entertained. Being unwilling, however, to rely exclusively upon my own case, I examined a great many patients of all ages with a good lens and wrote down the observations as they were made, but I looked in vain for the vesicle of eczema. I found, it is true, vesicles enough, *but none which passed into an eczematous surface.* Again, on reading a paper in the *Medico-Chirurgical Review* in which eczema was mentioned, I repeated these observations with all the care I could, but with the same results. Some circumstances were, however, noticed, which probably contribute to support the view so generally taught.

## 80 *Possible Reasons for Belief in Vesicular Theory.*

1. The first is, that when the discharge comes from a part furnished with hair, as the leg for instance, minute accumulations of fluid form at the junction of the hair with the skin. These are possibly considered as vesicles—M. Devergie, for instance, seems to take this view ;—but on more close scrutiny it will be found that *neither their course, situation, nor form corresponds* with those of a true vesicle, and on touching one of them *gently* with a blunt-pointed glass rod, a minute drop of serum will be found adhering to it. I have always failed to detect the slightest trace of cuticle on these little drops of fluid ; certainly if there were any the pressure was much too slight to break it, whereas we know that the covering of vesicles will resist some force. When M. Devergie speaks of the fleeting nature of the vesicles of eczema, he overlooks the fact that genuine vesicles are not very fleeting even in such transient disorders as miliaria, and that those of herpes, with which eczema, if vesicular, must be classed, not only bear such distension as to become globular without bursting, but endure the friction of the clothes for days without rupture. Herpes may appear again and again without a single patch becoming eczematous ; eczema, so far as I have been able to observe, never becomes herpetic, nor have I ever seen an outbreak of vesicles on a patch of eczema. At times large patches of skin are seen covered with ill-developed vesicles, looking as if they would become eczematous. I have never observed them do so, but I do not impugn the accuracy of those who say they have ; they sometimes complicate or accompany genuine eczema, but if the latter complaint continue ever so long, or reappear ever so often, they do not make their appearance again. And these facts are, I submit, strong grounds for believing *that there is a radical and unalterable difference between eczema and herpes, the papule and vesicle.*

2. The second circumstance is, that in the vicinity of eczematous patches vesicles and even bullæ are occasionally found ; the former not unfrequently appear about the knuckles or back of the hand. These vesicles, however, last but a very short time, and in most of the cases I have seen they did not return after being once removed ; in a few instances they did. No connection seemed to exist between the number of attacks of this kind of complication and of the outbreaks of eczema. One patient, who had had eczema continually breaking out for years, had never suffered from vesicles ; another, under the same circumstances, had had five or six attacks ; in

another case I was informed that each eruption of eczema had been complicated in this way, and so on. So far, however, as my own observation goes, I never saw it more than twice in the same patient. This eruption seems to be in no way dependent on the state of the eczema; it will disappear when the latter complaint is stationary or getting worse. In all the cases I ever saw the vesicles were rare in proportion to the numbers and extent of the eczematous patches; a patient might have thirty or forty of these and yet only one near which there were vesicles. These vesicles always healed quickly and did not become eczematous, nor was the disease in their immediate neighbourhood influenced either by their outbreak or their departure; sometimes appearing afterwards in its usual form on the very spot where the vesicular eruption had been—a still stronger proof, it seems to me, than even any of the foregoing, that there *is a wide distinction between the vesicular and eczematous inflammations.*

3. The third reason is that a disorder, which seems to me to be a form of herpes, has been confounded with acute eczema. It begins with heat, severe itching, and pungent, stinging pains. Vivid red patches form and serum is effused under the cuticle, which is raised up in firm irregular vesicles; then the serum becomes of a whitish hue and grows turbid; the vesicles break, the fluid oozes out, the cuticle is next thrown off, leaving the skin red and tender, and the disease passes away, mostly, I believe, to return no more. In still more severe cases numbers of little pustules form round about the vesicles, constituting really an impetiginous herpes. Now this complaint, seen when the cuticle has just given way and when the serum is pouring out freely, might be taken for eczema. But except that the vesicles run into a mass instead of remaining separate, I see nothing that distinguishes it from herpes zoster; it never tends to take on the one essential character of eczema, that of discharging serum for an indefinite period of time; it disappears almost, if not quite, as fast when nothing is done as when it is actively treated; the vesicles are firm, and only break when the fluid has become turbid and flaky. *At the end of two months' duration of the disease in a chronic form I have seen some of the vesicles still full of fluid; how long they had lasted it was of course impossible to say, as I am speaking of the time the disease had endured when the patient first came under my care, and the accounts given by patients or their friends of any particular vesicle, to which very probably their attention has never been previously directed, were not likely to be*

very connected or reliable. Still there was every reason to believe that vesicles had existed for two months, and the very fact of their continuing to exist under any circumstances proves that the tendency to form vesicles predominates in these cases, *and this we certainly do not find in eczema.*

On every ground of analogy as to anatomical and pathological features, course, and cause, eczema solare, eczema mercuriale, vesicular eruptions on the hands in bakers, confectioners, &c., and vesicular scabies ought, I think, to be referred to the variety spoken of in the last paragraph, and the whole group classed with herpes, of which they are only forms. They are simply instances of blistering induced by heat or some other irritant, and no more eczema than blistering with cantharides or boiling water would be.\* There is, I may here remark, one form of solar eczema which might be mistaken for the genuine complaint. It is that affection in which a large portion of skin in an exposed part, as the back of the neck, is steadily invaded by a crop of vesicles which gradually turn flaky and yellow. It is very slow and will last a long time. I have seen cases in which it had not altered materially during two months. It is not always due to extreme heat. In children, during cold, dry east winds in spring, the vicinity of patches of eczema will sometimes be invaded by vesicles in considerable numbers. For the most part these cases may be referred to the variety just spoken of. Eczema mercuriale I have never seen in the vesicular stage, but I think, from the description given, that it clearly belongs to this group, and that it is manifestly herpetic. The very course which it runs proves it to be different from pure eczema. It generally yields promptly if merely let alone or under any simple treatment, and shows no tendency to come back again and again, which cannot be said of eczema. It is true this arrangement is quite antagonistic to all established views, and clashes with the pathology of Plumbe and Willan; but the fact is that the eczema of Plumbe simply embraces the eczema solare and mercuriale; *he never alludes to the severe*

\* "I have no doubt that the minute vesicular form which the disease assumes, when occurring from exposure to the sun, is materially dependent on the degree of heat applied; that a blister of the skin would occur if the heat were increased, while a minor degree of the latter would only be followed by erythematous redness; that it is therefore to be considered rather as an accidental injury, and treated on surgical principles in a manner similar to a slight burn or scald, than to be spoken of as a disease."—Plumbe on *Diseases of the Skin*, 1829, p. 353.

*affection nowadays called eczema as being a form of that complaint;* possibly he was influenced by the old view which named our eczema scabies.\* Any confusion, therefore, likely to ensue from the change I have proposed is due, not to a desire of introducing novelty on my part, but to the fact *that what we recognise as eczema* is a very different disorder from that which was classed as such within quite a recent date. A new pathology has sprung up.

The chronic form of eczema in the vast majority of cases begins as an eruption of papules; in rarer instances as an erythema † or pityriasis. These may therefore for the present be laid aside, in order to examine acute eczema, which we might expect to find more closely connected, if any form of eczema can be connected, with vesicular disease; but the more narrowly we scrutinize it, the more certain does the conviction become that its course and symptoms ally it rather to an acute erythema, erysipelas, or kerion (scalled head). In this form of eczema a large portion of skin, as the forehead for instance, becomes red, swelled, glazed, and stiff. This is followed by desquamation of the cuticle and the formation of moist scales, or even crusts; or there may be a slight though decided weeping. Now an observer, bent on finding out the truth, and not on merely supporting a theory, may see this over and over again in several persons, or several times in the same person, without ever finding a vesicle. I attended a gentleman for this complaint who was a good deal alarmed about it, as an intimate friend of his had been quite a martyr to eczema; for eighteen months the patient seldom passed any great length of time without an outbreak on the face, yet on no occasion could either he or I detect a single vesicle.

*Pustular Origin of Eczema.*—Mr. Frasmus Wilson and Dr. M'Call Anderson clearly assign the origin of eczema to a pustule, but I have never myself seen a true pustule pass into a surface secreting serum. To judge, too, from the way in which some writers speak of eczema impetiginodes, we must conclude that the pustule is only a stage in the process; that, in fact, the vesicle becomes developed into a pustule and this into a weeping surface, to be afterwards covered with crusts. If I am to decide from what I have been able to make

\* "The disease which the ancients described under the name of scabies is identical with that disease which at the present time we call eczema."—*Dermal Pathology of Celsus.*

† (?) Purpura.



out, no such process takes place, and two or three different stages of cutaneous affections have been confounded together. Eczema is here, at all events, not vesicular, and vesicles do not become pustular; the fluid in them may become turbid, flaky, and even contain a few pus cells. On the other hand, a genuine pustule never contains serum in its cavity; the secretion is pustular from the time that it is a secretion at all.\* Ragged, irregular vesicles, however, form alongside of patches of eczema as they will in other parts, grow turbid, flaky, and break. One or both of these symptoms then—that is to say, either pustules or irregular vesicles—may coexist with true eczema; but in all the cases I have seen these were complications, not starting-points.

Pustules, I need scarcely say, form in children on the head and face, and are followed by crusts which may be easily confounded with those of eczema; but, unless I am mistaken, this is a much more manageable complaint, and ought, I think, to be referred to impetigo. At other times unhealthy bullæ appear in children; these grow rapidly flaky, burst, and are also followed by crusts which bear a resemblance to those of eczema. But the course of these, too, is different; and I think it would save confusion were all forms of this affection classed with herpes.

*Nature of Morbid Process in Eczema.*—The following appears to be the process which ensues in all cases of a truly eczematous nature. A portion of skin becomes red, inflamed and uneasy, stiff and itching, but rarely swollen except when the complaint attacks the ear. Some authors seem to think that itching is occasionally the first symptom, but I have every reason to believe that it is always preceded by a certain, if not very visible, amount of inflammatory action. The cuticle rapidly dies, and is cast off or torn off by scratching. To this succeeds a discharge of serum, which seems to be poured out by the sudoriparous ducts, at which stage the disease may be considered fairly established. M. Rayer says “the follicles of the skin” are the parts essentially affected. Under this term he includes, I presume, the sebaceous ducts; but unless my observations have misled me, there is no proof that they are actively concerned in secreting the serum poured out in such cases, although it seems difficult to understand how they can escape being involved to a certain extent. When the process is slower, the falling off of

\* *Abrégé Pratique par MM. Cazeneuve et Schédel*, p. 102.

the epidermis is succeeded by a cuticle thicker and coarser in its texture, and gradually assuming the look of a soft scale. For the most part the redness starts from several points, or papulæ, which are sometimes almost as pointed as those of lichen, sometimes not raised above the level of the skin. These may spread very slowly, or they may grow so rapidly as to coalesce within twelve hours. It often happens that a small spot will inflame and, without becoming either a pustule or a vesicle, will desquamate and secrete a crust which looks very like impetigo; and if the patient be seen in this state it may be taken for that affection. But it is eczema; and, though it may pass away and never be known as such, future observation will verify what I state. This variety, too, may be complicated by pustules, and the combination of these two perhaps most frequently constitutes the affection called impetiginoid eczema, although the term really embraces every form of eczema complicated by pustules, and they may attend any severe case of eczema. Again, the serum, instead of being of its ordinary consistence, may be almost purulent in character, as constantly happens in persons of a pyogenetic tendency, and in weakly lymphatic women or children; sometimes even in healthy persons, as, for instance, when eczema is seated in the fold of the groin and the patient has had a good deal of walking. Now, although I have the greatest horror about inventing new names, yet as these two affections are so totally distinct, I would suggest, that if a name for each be thought essential, the latter of the two forms should be called *pyogenetic eczema*, and the former *impetiginoid*; the latter term, albeit so used, not being applicable to an affection in which there are no pustules.

I have spoken above of pityriasis and erythema becoming starting-points for eczema. As long ago as 1853 I had quite satisfied myself of the former, as in my own case pityriasis of some two or three years' standing had become developed into eczema. Erythema in the form of intertrigo turns to a pyogenetic surface when seated between folds of skin, as in the groin, but I have not seen this pass through the intermediate stage of secretion of serum. In some cases erythema assumes a form which might be very easily mistaken for eczema. A portion of skin assumes a fiery-red colour, that is to say, becomes affected with a deep limited erythema. When seen at this stage and actively treated, it may pass away, and be considered very justly as erythema. But again, in neglected cases, we find at a later period firm, brownish, yellow, adherent crusts, the

surface beneath which is tender and discharging very slightly. It is at this epoch that the affection might so easily be mistaken for eczema, but certain rare cases, in which it is seen in a still more developed form, will betray its real nature. In these, when the crusts are removed, which is only done with some difficulty, ulceration is found to be going on beneath them; sometimes superficial, sometimes so deep and painful, that the disease might be taken for *impetigo rodens*. I have repeatedly watched these cases, but I never saw either a proper pustule or vesicle precede the formation of the crust. The affection is not very common, and the cases I have seen were nearly all seated on the knee or calf of the leg. Suspecting syphilis might be at the bottom of the matter, I have always inquired very carefully after every symptom likely to betray such a history, but have never made any out. In purpura again the process is different. In pityriasis the whole or the central portion of a patch becomes moist; generally from disturbance of the health, severe friction, as in scratching, the use of a hard hair-brush, or, lastly, from the employment of some irritating application, as tar-soap; but in the few cases where I have seen purpura pass into eczema, it was a small outlying portion of a tolerably large patch that discharged serum. All the instances I have observed were in elderly persons, and the seat of the disorder was in the leg.

In some cases of old standing eczema the eruption, even at a very early period, particularly when seated on the backs of the hands and wrists, presents the appearance of numerous minute, detached, low elevations of thickened red skin, partly denuded of all covering and partly covered by discoloured but firmly-attached cuticle, and sometimes indented so as to assume a cup-like form. Their appearance at this stage would scarcely show them to be eczema, but when torn or rubbed, and often in a short time spontaneously, their character is established by a discharge of serum, though this is seldom abundant; indeed, I believe the appearances just spoken of indicate a declining state of the disease.

In some few inveterate cases I have seen this indented, irregular state of the skin so strongly marked on the head and hands, that I have been tempted to ask myself whether favus is not a localized form of this affection in a bad constitution, *especially as it is possible, by keeping the crusts on a patch of eczema moist a considerable time, to induce a smell very like that which distinguishes favus*. I do not allude to that rare form of the disease which begins with an eruption

of pustules, and which I have never seen, but to favus as ordinarily met with. In all the instances where I have been able to trace the progress of the diseased action, it was, though much slower, essentially the same as in eczema; that is to say, it really consisted of inflammation and redness of the skin and death and removal of the cuticle, followed by the formation of crusts. The reader will say that the presence of the parasite constitutes a distinction so strong that there can only be analogy, no community between the two, no passing of favus into eczema. But it is admitted that without a peculiar fitness of the soil the parasite cannot flourish at all; and there *is* something peculiar in favus. It is not a mere result of want, darkness, scrofula, dirt, or contagion, even if the latter be a factor (and its value is very doubtful), or of any conjunction of these causes, otherwise it would be common instead of being extremely rare. Then there must be a variety of constitution—a variety which, peculiarly and alone, yields the proper soil for receiving and fertilizing the said parasite, *and this variety may modify an eczema.*

MM. Cazenave and Schedel,\* Bazin, and some other writers speak of a change in the vesicle quite as surprising as its being converted into a pustule, and one which I have been equally unable to detect. They tell us that in simple eczema the liquid of the vesicle is *absorbed*, and that the vesicle fades and falls by an imperceptible desquamation.

*Divisions.*—The reader will probably expect me to say something as to the number of forms into which eczema is to be subdivided, for it seems an established rule that an author can scarcely do justice to his subject without introducing some new varieties, expunging others, and re-christening and re-arranging those which he keeps. I have here a very simple answer ready. There are just as many varieties of eczema, as there are adjectives expressing a morbid state of the system, or a difference in severity in any one of the symptoms it exhibits, and all divisions and arrangements of them are equally useless. Like other diseases of the skin, eczema may soon be recognised under all its varying phases, but a knowledge of these cannot be taught in books, though it may be easily acquired by the same method as conduces to accuracy in other branches of research—the clinical study of disease. Beyond all question, there

\* *Abrégé Pratique*, p. 91.

are vast and striking differences in the forms which eczema assumes. In one patient redness may predominate to such an extent that the denuded surface is darkly stained, and sometimes even discharges venous blood ; in another it may pour forth serum ; in a third be quite pale and coated with viscous or purulent fluid, particularly if it be seated between the folds of the neck or in the groin ; in a fourth covered with dry scurf ; in a fifth there may be no discharge at all, but simply a cracked and stiffened surface, as we often see in eczema of the hands. There may be crusts of every thickness and hue which dirt and neglect can create. Inflammation may attack principally the interior of the sweat-ducts, it may assail the follicular plexuses, or show itself chiefly in the spaces between them. There may be little infiltration of the true skin, or it may extend even to the subcutaneous tissue ; little or no pruritus or intense rabid itching. The disease may appear in any temperament and be complicated with many varieties of local or constitutional disorder. Yet amidst all these causes of obscurity it remains one and the same disorder, and therefore, though I can quite understand the value of each observer drawing up for himself a classification of its varieties, which may serve as a guide for diagnosis, I would expel everything in the shape of complicated nomenclature from books, and entirely eliminate all such terms as *porrigo larvalis*, *porrigo crustacea*, *tinea amientacea*, *asbestina*, *micacea*, *crusta lactea*, &c. &c., regarding them merely as a display of so much valuable learning made to very little purpose, and indeed rather thrown away.

I therefore leave the matter to others, and should be inclined to admit no divisions except the simple and convenient one of acute and chronic, with the addition of perhaps eczema impetiginodes. Papular and red eczema are simply different degrees of severity in the same affection ; eczema solare I would reject altogether, as I would any vesicular disease. I venture to suggest, too, that eczema should be entirely removed from the vesiculæ, and either be made to form an order apart, or, for convenience-sake, be relegated to the order of papulæ. I say for convenience-sake, because it evidently does not always begin as a papule, the starting-point being a form of inflammation of the skin closely allied to impetigo in some cases, to erythema in others, and to pityriasis in a third set of cases. But I would extend it so as to let it embrace some disorders which are at present otherwise classified.

And first, for reasons now to be mentioned, I think we might include under the head of eczema an exceedingly obstinate affection attacking the leg, and running into ulceration; a complaint generally seen in persons of middle age and advanced life. On as good grounds as have often been urged for giving a name, this variety might be called *ulcerative eczema*; but as I have no wish to introduce any new terms, I shall confine myself to noticing it simply as a variety of eczema, the variation being, I think, *due solely to its attacking a part peculiarly liable to ulcerate.*

It is attended by all the signs of an acute but local attack of eczema, and perhaps in no part of the frame is this malady more distressing than when it fixes on the lower part of the leg; the pain, heat, and itching tormenting the patient almost incessantly, especially at night. In very severe cases one or more spots will rapidly pass into ulceration; indeed, this seems the natural termination of the attack, and there is often some mitigation of the symptoms when it has ensued. This ulceration is very refractory, often requiring months to cure even under the most careful treatment. It is peculiarly this stage which seems to stand so far apart from eczema, owing to the fact that a large proportion of patients suffering under the complaint are never seen by the surgeon till it has reached this epoch. I have, however, repeatedly traced it from eczema. In other cases the orifices of the sudoriparous and probably of the sebaceous ducts become so large that they can be easily seen. Eczema in this part, unless effectually cured, is very apt to return, the attack being heralded in as before by pain, itching, and redness, sometimes of a purple hue, and extending over a large part of the leg.

It does not in any way follow from all this that ulceration of the leg or ankle is always due to eczema; many ulcers are free from any complication of this kind, the skin around being never more than merely red and tender, while eczema may run its course without being attended by ulcer; but assuredly out of a given number of cases of ulcer complicated by eczema, a certain proportion begin with the latter complaint; how many I am not prepared to say, but judging from the entries in the case-book at St. John's, the numbers are pretty evenly balanced. Perhaps, as a rule, it will be found that when the ulcer is seated about either malleolus it is the first in order, and when higher up the leg, especially if it be superficial, that eczema or erysipelas was

the first to appear ; but I do not bring this forward in any way as an established fact.

Occasionally a patch of old superficially ulcerated eczema is seen on the ankle, covered with a crust almost like dried gruel in colour and appearance, or even like nail or horn. The crust is naturally quite insensible, and not always calculated to reveal the nature of the affection, but if it be removed by macerating it for some time in solution of carbonate of soda and covering it with oiled silk, the skin beneath is found to be affected with the ulcerative form of eczema just described, being red or purplish, painful, and superficially ulcerated. These patients are generally in an infirm state of health, most of those I have seen having suffered from bronchitis. The process here is very closely allied to the obstinate purplish discoloration of the lower part of the leg, caused in many cases by eczema.

In the forty-sixth volume of the Transactions of the Medico-Chirurgical Society, Dr. Ogle describes two cases of what is called spurious or sebaceous ichthyosis. The patients were two girls, sisters, and the symptoms consisted of a slow formation of hard crusts, much like what I have described, seated on the lower part of the leg and foot ; when these were removed the skin beneath was found to be red, glazed, and disposed to crack. Under the microscope the scales seemed to consist of layers of epithelium, with some round and reddish-coloured, solid-looking bodies, along with numbers of old and evidently worn-out epithelial cells. Now, I think, were this affection removed from ichthyosis and added to eczema or favus, it would be a step in the right direction. It is not ichthyosis and has nothing in common with it, while it has a very great deal in common with eczema. The skin beneath the crusts is found in the same state as when those of old standing eczema are removed, and the crusts seem to form in the same way ; that is to say, a small patch of skin slowly inflames, the cuticle dies, and is thrown off, and a crust is gradually formed. In one case which I examined with great care this seemed to me clearly the process which took place. The pathognomonic sign, therefore, is due here to accumulation of serum, &c. ; in ichthyosis it is the cuticle itself which is altered and hypertrophied, but still attached, or only thrown off when a new cuticle is formed. I have only seen one instance of this affection in 16,000 cases of cutaneous disease. The patient was a young girl and the disease was seated on the legs, there being some scores of these spots on each limb, giving them a most singular

appearance. It is true the secretion of eczema, when microscopically examined, is different from what was seen in Dr. Ogle's cases, consisting generally, when hardened into crusts, of layers of albumen or lymph mixed with a few blood-discs or globules ; but this may have been due to the disease having, in the cases mentioned by Dr. Ogle, penetrated more deeply into the ducts of the sebaceous glands than eczema usually does.

In the paper spoken of above I stated my reasons for believing that both pityriasis and tinea circinata occasionally form starting-points of eczema. Pityriasis rubra is indeed, so far as I have been able to observe, an undeveloped eczema,\* and, along with that rare affection known as red general pityriasis, ought, I think, to be referred to eczema altogether. But tinea circinata will certainly also pass into eczema, though under what circumstances of health and constitution this transformation takes place I have been quite unable to determine. Sometimes it is seen in healthy children, or again the very reverse may be met with. In the first instance of this which I ever observed, three children of the same family were placed under my care for impetigo, principally affecting the scalp. The eldest of these children, a boy, and the youngest, a girl, suffered only slightly ; the second, a boy, had it in a very severe form. A considerable time afterwards two children came to stay with this family for some little while. They were both suffering from tinea circinata. Whether as a coincidence or a result I know not, but the fact is certain that the other three children were very shortly also affected with ringworm. The younger boy, who had suffered so severely from impetigo, displayed here a similar peculiarity, for one large patch became strictly eczematous, discharging serum very freely, while no symptom of the kind was seen in either of the others. Yet this boy was far the healthiest and strongest of the three. In another case, in which six young ladies, sisters, were affected with tinea, several of the patches in two of the patients turned to obstinate eczema ; yet there was no perceptible difference of constitution among these girls, nor have subsequent observations thrown any more light upon this point.

The few cases of Burmese ringworm which I have seen appeared to me to be true eczema, beginning as tinea circinata, and developed

\* "Il est très difficile, avons-nous dit, et même impossible de reconnaître le pityriasis de l'eczéma arrivé à une certaine période de son développement."—Hardy, *Leçons sur les Maladies de la Peau*.



by friction into a discharging surface, the form called eczema marginatum by some writers; indeed, the disease has been described as such by Hebra, as also by Devergie but under another name. Köbner, however, looks upon it as a tinea due to the presence of the trycophyton tonsurans. But Mr. Nicholson, who has had ample opportunities of judging, describes\* under this name a disease which is quite unknown to me, and appears to be *a true vesicular disease marked by a tendency to ulcerate*. He says it begins with a vesicle in each groin, which is scratched and broken. From this point it spreads by an *advancing line of vesicles*, which are followed by a free discharge of serum from the affected surface. Small irritable *ulcers* and *patches of ringworm* break out on the legs, armpits, and neck. Those on the legs sometimes degenerate into ulcers. The complaint *in men invariably appears in the groins*; in women it may show itself in any part. Mr. Nicholson, who has tried tincture of iodine, nitrate of silver, nitric oxide of mercury, and many other remedies, has found none so successful as the nitrate of mercury ointment.

I know nothing of the complaint in this form. I never saw any vesicles, and as Mr. Nicholson, who has himself suffered from the complaint, speaks positively as to their existence, as also to the existence of ulcers about the nates, I can only assume that the affection he describes is distinct from anything seen in this country, and is an ulcerative form or herpes.

Mr. Erasmus Wilson recognises six essential varieties of eczema: —1. the erythematous; 2. the papular; 3. the vesicular; 4. the ichorous; 5. the pustular; 6. the squamous. The arrangement seems to be essentially faulty. The erythematous is either very rare, or simply a variety of the papular form; the diffused redness arising from the coalescence of a mass of papulæ is only a degree of the other, and is a different state altogether from genuine erythema. True eczema is not vesicular; the vesicle, as I hope to show, is an accident, a complication, as is the pustule, while the squamous and ichorous forms depend for their existence on the conditions incident to the mature state, not the origin, of the complaint, and, as such, should have been separated at the very outset from the others; unless under squamous Mr. Wilson comprehends those cases in which a dry, scaly state precedes or

\* On *Burmese Ringworm*, by Edward Nicholson, Assistant Surgeon, Royal Artillery, *Journal of Cutaneous Medicine*, vol. i. p. 377.

even takes the place of the watery stage, as for instance, in eczema siccum of the hands, feet, and ankles.

Hebra\* divides eczema into five kinds:—1. eczema squamosum, or pityriasis nigra; a complaint so rare in this country that I have not seen an instance of it in more than sixteen thousand cases of skin disease; it is seen in children born in India and brought to this country;† 2. eczema papulosum, or lichen eczematodes; 3. eczema vesiculosum or solare; 4. eczema rubrum or madidans; 5. eczema impetiginosum, or impetiginoid eczema. This classification is very similar to that adopted by Dr. M'Call Anderson.‡ Hebra does not view eczema as a vesicular disease, but classes it with prurigo. He does not, however, entirely reject the vesicular form; on the contrary, he not only admits eczema solare, but says,§ “while in one case the eruption of vesicles forms the starting-point of the eczematous symptoms, in another case we first of all see red scaly spots.” He even recognises it as a necessary lesion in one variety. He considers as kinds of eczema all morbid appearances on the general covering of the frame which are peculiar either to the development or the decline of eczema.

I cannot say that this arrangement is to my thinking quite satisfactory. The form of eczema which Hebra considers essentially vesicular is simply a form of herpes and totally distinct from true eczema. He only allows forty-eight hours at the utmost for the existence of the vesicles of acute eczema, whereas the true vesicle runs longer. Eczema solare itself undoubtedly lasts beyond this time. Hebra maintains that eczema is still the same complaint whether it appears under the form of papules or vesicles; and this view he upholds on the ground that an artificial eczema—as, for instance, one produced by rubbing in croton oil—will appear in the form of papules, vesicles, &c., according to the part it is applied to. But, with all possible deference, I submit that the reasoning is faulty, seeing that it is as certain as any fact can be, that *the papular form of eczema will appear on the very places where we at times see*

\* *Handbuch der speciellen Pathologie und Therapie*.—Dritter Band. Dritte Lieferung. S. 337.

† *A Practical Synopsis of Cutaneous Diseases*. By Thomas Bateman. Fifth edition, 1819, p. 50.

‡ *Medical Times*, 1863, vol. i. p. 472.

§ *Handbuch der speciellen Pathologie und Therapie*.—Dritter Band. Dritte Lieferung. S. 337.

*undoubted eruptions of vesicles*, for I need scarcely state that both are occasionally found on nearly every part of the frame. It is therefore clear that there must be *a fundamental, essential difference between the process which brings forth the papule and that which generates the vesicle, and that difference in the eruption is not due merely to difference of site*. There is another point on which I must also differ from Hebra. He looks upon the infiltration of the skin and the itching as *the disease*, a view in which he is backed up by Dr. M'Call Anderson, who seems to have almost literally adopted his tenets. I consider the essential feature of eczema, the test of its nature, to be a chronic weeping surface, which I have never yet seen called into being by an eruption of true vesicles or pustules.

Hebra says that he looks upon all diseased conditions which occur in eczema, whether in the advancing or declining state of that disorder, *as varieties of that disease*. I really cannot see on what grounds this proposal is to be considered tenable. I imagine that if a pathologist had made such an innovation with respect to better known diseases, *e. g.*, if he had suggested that the diseased conditions which arose in pneumonia in the stage of congestion, solidification, resolution, &c., should rank as so many varieties of pneumonia, he would have met with some opposition to his views.

*What is Eczema?* We have, as yet, nearly everything to learn with respect to the nature of the complaint. We can put together some few scattered observations, and draw the fairest inference they admit of, and that is about all we can do. Up to the present time it has escaped the fate of so many disorders, for no parasite or fungus has as yet been discovered peculiar to it. Nor is it usually attributed to a blood poison, hereditary gout, tubercle, or inherited syphilis. We may therefore look upon it for the time being as a waif and stray, the pathology of which may thus stand some chance of being cleared up by a diligent observation of facts.

I have long striven to show that the essence of disorder is excessive action of some part of a function, and I venture to class eczema thus. I have also in different papers endeavoured to combat the idea of scrofula, rheumatism, &c., having anything to do with the duration or severity of diseases. I am glad to find that Hebra has long been an active supporter of a similar view; morbid innervation (*krankhafte Innervation*) is, according to him, the great agent in the generation of eczema, and we require no such machinery as

that which starts from a peccant matter in the blood.\* Scrofula does not modify it for better or worse ; a scrofulous person throws off eczema like any other patient. Just as little faith has he in the belief that mental disturbances influence the outbreak of eczema.

Eczema, though very often quite independent of any visible disorder of the health, is certainly to some extent due to impaired nutrition, because patients suffering from it improve under the use of red wines, cod-liver oil, fat meat, and medicines, which, judiciously given, increase the appetite and augment the weight, as tonics and purgatives undoubtedly do at times. It is, too, dependent to some extent on the state of the nervous system, for it is incontestable that great anxiety will bring it out in persons disposed to it. Cold dry winds, and great heat, especially if combined with much exposure to light, will both develop it. Contradictory as this may seem, it is not more so than the fact that excessive heat and cold will both bring on blistering of the skin. Chilblain is, when not an erythema, as essentially a low form of bulla as that produced by boiling water, and the irritant action of light is not more mysterious here than in small-pox. Eczema does not appear to have any essential connection with other diseases often seen in persons suffering from it. It is often met with accompanied by other diseases of the skin, such as lichen, scabies, pityriasis, tinea, lepra, lupus, boils, and impetigo ; and it may be seen combined with asthma, bronchitis, hæmorrhoids, scrofula, gout, rheumatism, neuralgia, and dyspepsia ; but none of these or any combination of them exert the slightest influence on its course. It is met with in persons who perspire profusely, and again when the skin is extremely dry. With the exception of the local forms, I have not been able to make out that it depends in any way on the nature of the patient's occupation. It is met with in half-starved persons, and in the overfed. Dr. Smith, of the Sheffield Public Hospital, considers that in eczema there is probably deficient renal secretion, in consequence of which urea and other waste products accumulate. In proof of this he adduces the facts :—1. That the urine of inveterate eczema contains indican in pathological quantities. Indican is a very complex product, easily resolved into leucine, indigo, glucine, &c., and its presence is supposed to prove that the natural transition from the more complex to the more simple of the products

\* *Handbuch der speciellen Pathologie, &c.*, 3r B. 3e L. S. 386, 387.

of secretion and function is going on more slowly than natural.

2. That observation shows there is a very deficient secretion of urea and the chlorides in persons suffering from eczema. In three cases of the urine of persons suffering under eczema, it showed in one case 22 grammes of urea in 1,200 cc. of urine ; in another, 15 grammes in 1,000 cc. ; and in a third, 22 grammes of urea in 1,200 cc. The serum of the blood of one of these patients yielded urea in considerable quantity. The urine in inveterate eczema, Dr. Smith says, is what may be called a constant quantity. It is either colourless or a rich cider colour, with a specific gravity about 1.017 to 1.022. It is acid, and remains so for many days, with, in well-marked cases, a peculiar odour like that of cider. We have therefore little or nothing to warrant us in going further than saying that eczema is a disorder of the secreting surface and nervous structures of the derma, and that as disorder means exaggeration of some part of a function or functions, so we find here excessive secretions, formation of defective cuticle, and defective secretion with extremely heightened tactile sensation.

In conclusion, I would venture to define eczema as a non-contagious inflammation of the papillæ of the skin, attended with increased nervous sensation in those parts, augmented and abnormal action of the perspiratory ducts, the contents of which often exhibit pus globules and plastic lymph, and increased secretion of very imperfectly formed epidermis, standing nearer to erythema and pityriasis than to herpes or impetigo, though capable of being complicated by both ; divisible in its natural state into two great forms, the acute and chronic, between which it is not always easy to draw a clear and positive line of separation, instances, out of both divisions, of cure under the same form of treatment being numerous enough.

*Causes.*—These admit of a very simple division into (A) the predisposing cause, a tendency to the disease, or eczematous diathesis if the reader prefer the term, which goes for everything in the production of eczema and is in effect *the* cause ; and (B) the exciting, meaning by this term every influence that can disturb the health or irritate the skin. Thus care, grief, privation, friction, the bites of insects, baths, and so on, may all, simply or combined, bring out eczema in a person predisposed to it while they do not effect any such thing in a person free from this diathesis. It need scarcely be said then, that the list of predisposing causes is merely that

of all injurious agents. It would, however, be overrating their influence to place them on anything like a par with the others. An eczema brought out by an irritating application, as for instance friction with croton oil, to the skin of a person not predisposed to it, will heal of itself or with the simplest remedy; the same disorder breaking out *suâ sponte* in a person of eczematous diathesis will resist all treatment for a long time.

The only instances in which the exciting causes of eczema seem to me to rise to importance, are those in which, after a suspension of the noxious agency and consequent removal of the disease, a relapse is immediately induced by a return to the occupation which first of all brought it on. Thus women employed in the workshops of some of the large shipping clothiers, or in the Government store-rooms, making up uniforms, are very apt to suffer from a cracked, tender, peeled state of the skin of the hands, especially about the tips of the fingers; playing on the harp will induce the same thing, and a very similar state is brought on in some persons by constantly handling acids, the pressure of tools against certain parts of the hands, &c. Grocers and bakers too suffer a good deal from eczema, not merely about the knuckles as is often supposed, but over the back of the hand and a considerable part of the radial surface of the arm. Now in some of these cases it might be worth the patient's while, not only to take particular precautions in the shape of local means, such as in respect to the use of pure soap, washing only with hot water, wearing gloves, &c., but also to consider whether he would not gain by changing his employment.

*Seat.*—According to Dr. Purdon,\* the anatomical seat of eczema is the Malpighian layer, and when it is artificially induced in animals, one of the first changes is rhythmical contraction of the vessels, followed by permanent stasis, the transparency of the part experimented upon being obscured, while there is increased serous infiltration and growth of cells. But I feel little hesitation in saying, that the structure of the corium is, in some cases at least, much more deeply affected, and that the morbid action may even reach to the subcutaneous cellular tissue. At the same time the superficial part of the derma † is the more usual seat.

Eczema does not, except in very rare instances, permanently affect the derma, but there is one set of cases in which it does, and

\* *Medical Mirror*, April, 1870.

† Or rete Malpighii.

produces marks which I have seen endure so many years, that I am disposed to think them indelible. It is when the disease fixes on the corners of the mouth in unhealthy and delicate children. Long after I have seen the surface pale, furrowed, and bearing unmistakable marks of erosion of the derma.

*Morbid Anatomy.*—This is thus described by Biesiadeski.\* He says that when papules and vesicles form in eczema, the papillæ widen at their base and lengthen by infiltration with young cells and fluid blastema. From the cells in this latter (the blastema) the connective-tissue cells in the papillæ are developed. Numerous spindle-shaped cells appear in the mucous or lower layer of the epidermis. These push upwards into the horny layer of the epidermis and separate its cells, forming a network which receives the swollen cells of the epidermis. A papule is thus formed. But if the growth of spindle-shaped cells take place principally within the papillæ, then the young cells of the mucous layer become distended with fluid, burst, and form an eczematous vesicle. The spindle-shaped cells serve as channels for the passage of the serum, which accumulates to such an extent that the vesicle bursts. This fluid does not differ from ordinary serum. In chronic eczema this engorgement goes on till the papillæ become so prominent as to be visible to the naked eye. This development of cells of both kinds is preceded by hyperæmia, and, it would appear, stasis in the capillary loops of the papillæ. In this hæmic change we may recognize three stages. 1. Active hyperæmia, particularly noticeable when there is a punctate reddened state of the skin, disappearing under pressure and returning so soon as the pressure is removed. Such congestion as this may arise from a burn, scald, from internal irritation, as gout or rheumatism, or from the manifestation of a constitutional diathesis. 2. This state is rapidly followed by formation of minute evanescent vesicles, principally near orifices of sudoriparous glands: it may terminate by resolution, or it may be protracted, when the capillary vessels lose their power of contraction, so that the current in them becomes sluggish and fluid is poured out from them under the epithelium with different degrees of rapidity and extent, thus forming a vesicle, papule, pustule, or scale, as the case may be. 3. In the third stage there is, in addition to this

\* See also an excellent memoir on the pathology of eczema by Dr. Foster Swift, *American Journal of Syphilography and Dermatology*, 1870, p. 93.

stagnation, a mechanical impediment to the free return of blood from the derma. The liquor sanguinis, exuded from the over-charged capillaries, becomes organized into cells and fibres, or the spindle-shaped cells become developed in greater numbers and permeate the corium in every direction, which in consequence becomes inelastic, cracked, and doughy, constituting serous infiltration.

*Contagiousness of Eczema.*—I presume that the question of whether eczema is contagious or not has been long ago settled in the negative among dermatologists, and that M. Biett was almost the last author of eminence who gave credence to such a phantasy;\* but, certainly, the belief in its contagious nature has not yet quite died out in the profession, and M. Bazin wants us to believe that it may be communicated, not by any property inherent in the disease, but by the irrepressible parasite. Mr. Erasmus Wilson says that in such cases it is simply the fact of the discharge acting as an irritant that has given rise to such a view in these cases. Mr. Hunt also thinks the discharge acts as an irritant.† All I can say is that I have never been able to meet with the cases themselves. I have made some scores of experiments, and have never met with a single fact that proved anything like transmission of real eczema from one person to another, nor have I been able to observe anything which showed that the serous discharge of eczema is an irritant. On the contrary, it proved quite innocuous in the trials I made with it. Pieces of lint soaked in the serum were bound on the skin and kept there for twelve hours together without any effect being produced. Again, it was found that, however carefully the skin in the vicinity of an eczematous patch was defended from the action of the serum, the disorder still continued to spread, just the same as when the serum was allowed to come in contact with it. Long-continued contact of an eczematous surface with a sound skin may bring on some irritation, as any irritant would. I have not seen any cases in which I could satisfy myself that this process really ensued, but I can conceive it to be possible. The discharge from the eczematous eruption sometimes seen in persons bedridden from rheumatic gout is loaded with crystals of urate of soda, and this may be sufficiently irritating

\*.“M. Biett,” say Cazenave and Schedel, “a rapporté dans sa clinique plusieurs exemples d'eczéma qui s'étaient transmis par le coït.”

† “They [the vesicles of eczema] pour out an irritating fluid which excoriates the surrounding skin.”—*Hunt*. Also Burgess's *Manual*, pp. 98 and 100.



100 *Vaccination of Eczematous Patients.—Statistics.*

to set up a morbid action, as a very slight cause will bring out eczema in some persons strongly prone to it; but the reader will see that all this is very different from contagiousness as we understand the term.

*Should Children suffering from Eczema be Vaccinated?*—When the disease is extensive, I should say decidedly not. In a slighter degree, I see no objection to the performance of the operation, and have repeatedly sanctioned it without ever having had occasion to regret doing so. The vaccination takes perfectly well in such cases, and provided treatment be carefully pursued, the child scarcely ever suffers any relapse in the eczema.

*Statistics.*—I have not meddled with the statistics of eczema, because I do not see that they throw light upon any point connected with either its pathology or treatment. Observations which would show the influence of certain trades and localities on the origin and severity of the disorder might yield something to deal with, but in their present form the accumulation of statistics seems to me simply a very harmless form of arithmetical amusement. Besides, it is impossible to make such calculations with exactness till men are a little more in unison as to the exact signification of the terms they use, and agree to accept one common standard of nomenclature.

I have heard it stated at a medical society that “in medicine you can prove anything you like with figures,” and the statement passed without any dissent. I believe the first person who propounded this caustic tenet was an eminent surgeon, still living; at any rate it passed for his and in virtue of its distinguished birth was rather fashionable at one time. No doubt there is a great deal of truth in it. With figures, a man who contends only for victory can prove anything he likes *to his own satisfaction and that of persons who are very easily pleased or silenced*. But he can really prove nothing with figures which is not true, and the fact that *the former kind of proof was that which was tacitly accepted as current with the profession* speaks volumes as to the mode of reasoning adopted in medicine. Had a man maintained that in arithmetic you can prove anything you like with figures; as, for instance, that the square root of nine or sixteen can be anything but three or four, it would have been considered sufficient to settle his pretensions to sanity, while in medicine such a statement would be thought rather clever, or, quite as bad, philosophical. The reader will therefore easily conclude that it is

not any scepticism of this kind which makes me underrate the value of statistics in eczema, but because I believe that they teach nothing which cannot be learned by simple observation.

*Is Eczema Hereditary, as maintained by some Authors?*—Being well aware that I approach this part of the subject prejudiced against the view that any disease is hereditary in the meaning usually assigned to the word, I am naturally rather reluctant to say anything about it. However, as such a position is impracticable, I will endeavour to state, as simply and dispassionately as I can, my reasons for objecting to a doctrine which appears to me so untenable that I am quite at a loss to understand how it maintains its ground at all. When I find such names as Prichard and Holland ranged against me, I confess I am completely staggered, and disposed to admit that there must be some idiosyncrasy in my mind which prevents me from seeing the matter in its true light.

That a child inherits the tendency to eczema from its parents is true. It inherits this disposition with its life, and without its parents there would have been no life. That a child sprung from weakly parents, especially if born and reared under unfavourable circumstances, is more likely to have eczema than if descended from healthy persons is possible enough, and even probable. That eczema should spring up in some one, and, indeed, in almost every generation of persons so situated, is natural, inasmuch as it is a very common complaint, and in certain constitutions a natural result of all agencies which injure the health. But there is nothing in this, and, indeed, there is nothing in any statistics or arguments brought forward, which proves that a child has any more tendency to eczema because either one or both of the parents suffered from it. If there be any assumption justifiable here, I submit that it is, not that eczema begets eczema, but that weakly parents are apt to beget weakly children, and that weakly persons, whether parents or children, are more apt to suffer from eczema than strong persons are.

I have spoken of statistics, but indeed they scarcely deserve the name, or indeed mention at all, were it not to show on how slender grounds some portions of this theory rest. Several children of one family are found suffering from eczema, or are known by the medical attendant to have laboured under the same complaint. By-and-by it is ascertained that the father or mother suffers from eczema, probably both. If the family be noble, so that there is a history of each generation, the presence of the disease is forthwith traced

through three or four successive descents, and the theory is established to the satisfaction of all parties.

But closer examination will reveal the weakness of the argument. It is very seldom that the fact can be verified of eczema passing through even two generations. The statements of patients, on which reliance is often placed, should, I submit, go for nothing in such cases. But even were the fact attested, I do not see that it proves anything. It would be necessary to show *not only that eczema occurs more frequently among the children of eczematous parents, but so much more frequently than it does even among the children of weakly parents, though brought up under the same circumstances and exposed to the same deteriorating agencies, that we must admit eczema in the parent to be a factor of absolute value in the production of the same disease in the children.* But this has not been done. On the contrary, all that can be said in favour of the doctrine of descent is, that a certain number of coincidences have been observed, against which it would be easy to set off at least quite as many cases where eczema exists in the children without either parent having been found to show a trace of it, and eczema in the parent while the children are free from it; or, at any rate, if we admit Dr. McCall Anderson's conclusion that scarcely any person escapes eczema, as free as the rest of mankind. Notwithstanding all this, it must, however, be admitted that the doctrine of such affections being hereditary will always be a favourite tenet, inasmuch as the mind of man naturally tends to grasp at familiar images.

When Sir Henry Holland suggested,\* as an explanation of the tendency of diseases to become hereditary, that it is simply an extension of the law discovered by Dr. Prichard, that all bodily peculiarities tend to become hereditary, he overlooked one flaw in the argument. Either this tendency means nothing and is a mere figure of speech, or it means that all the children must inherit a bodily defect or disease, and each succeeding generation exhibit more and more of this particular development till disease or deformity becomes their normal state, or they all die out. In speaking of ichthyosis, I have endeavoured to show that this *must end in a state of things never yet seen.* Apply it then to eczema, which is such a common disease that it is quite certain two parents must often be eczematous; the natural result of this would be

\* *Medical Notes and Reflections*, 1855, p. 16, &c.

eczematous families getting worse with each successive descent. I need scarcely say that such productions are not to be found, though we ought to be able to find them easily enough. Mr. Wilson says,\* that eczema is transmitted to children because the tissues of children resemble those of their parents. But this is *endeavouring to support an untenable assertion by another which requires to be proved*, for it has not yet been proved in any instance, and is palpably contradicted in a vast majority of cases. It is simply doubling the rope of sand—a process which may add to its bulk, but does not increase its strength. Children quite as often as not are a cross between the tissues and features of both parents. It must be a rare occurrence for a child so entirely to resemble one parent in either features or tissue as to exclude all likeness to the other. Whenever, then, a child inherited eczema from one parent only, as would be frequently the case, the disease would be a cross between eczema and health, or some other disease, and that is a thing yet to be discovered. Finally, the argument, that disease may be hereditary, because features pass through long lines of descent, is faulty, because the facts proving these cases of descent are, for the most part, simply random assertions, easily made, but from their very nature not easily refuted, and only too greedily caught at—very suitable material for the reveries of a dreamer like Oken or Darwin, but very unfit to be admitted into the rank of established facts.

*Diagnosis.*—I should scarcely have thought eczema could be mistaken for any other complaint, unless it were scabies, with which, indeed, it is often confounded. Its slowness, superficial nature, and the general absence of great constitutional disturbance, will separate it from erysipelas; while the slower spread of the redness, and the presence of itching at the commencement, distinguish it widely from erythema. It may attack several spots at the same time, which is not the case with these complaints. The eczema of infants is often mistaken for infantile syphilis; but in the former the little patients have not the look of premature old age, the snuffing hoarse cry, and the papules of syphilis. The eczema of grocers, &c., attacking the knuckles, is constantly mistaken for scabies, and no little care is often required to discriminate between them. The absence of the cuniculus, the history of the mode in which the complaint has arisen, and often the presence of fissured eczema on the palmar surface, an

\* *Journal of Cutaneous Medicine*, vol. iii. p. 106.

uncommon accompaniment of the other, ought to suffice to make the diagnosis clear. Eczema siccum on the palm of the hand is frequently confounded with syphilitic psoriasis palmaris (especially if the patient have a syphilitic history, although when duly investigated this ought to be an excellent guide) and lepra palmaris (psoriasis palmaris). It is exceedingly difficult to give any rules which shall serve as a certain guide. Lepra palmaris however is, I believe, never seen unless there be lepra on other parts of the body, and the syphilitic form is invariably preceded by other symptoms, and generally by a chancre, and no history of a bubo, or, at any rate, one that has not suppurated. Dr. Cheadle, speaking of these three affections, says,\* "It may be stated generally, perhaps, that where the affection is limited to one hand or one foot, where the palms or soles are only partially affected by patches of eruption, where there is any great but very unequal thickening of the epidermis, which is exfoliated in thick plates, where the fissures are wide and deep, and the sensation of burning and aching extremely severe, independently of the history and collateral evidence, the eruption is a manifestation of tertiary syphilis. Where the palms or soles present one uniform sheet of thickened cuticle extending over the whole surface, furrowed by numerous fine cracks and desquamating in small scales but not peeling in plates, the eruption is a psoriasis or eczema depending upon some other cause, and generally excited by local irritation." I may observe here, with regard to the valuable and suggestive hints contained in these remarks, that though many kinds of local irritation undoubtedly possess the power of evoking eczema, it is very questionable whether such agencies ever yet called forth a patch of psoriasis (lepra).

*Prognosis.*—This may, in a large majority of cases, be set down at once as favourable. When of great extent in delicate infants, eczema may prove fatal, especially if not carefully managed. Eczema of the leg, especially in elderly persons, is very obstinate. Red general pityriasis developed even partially into eczema is very serious in some cases, particularly when the patient is old and infirm; fortunately it is, comparatively speaking, a very rare disorder. There is an old woman who occasionally attends now at St. John's Hospital, and who was cured of it quite four years ago, though it was difficult to imagine how any person could have it in a worse

\* *Journal of Cutaneous Medicine*, vol. iii. p. 440.

form. In a more limited form, even when covering a considerable extent of surface, it may be removed. When the disease has existed through many years of early life, and is developed in an essentially feeble frame, and particularly when there is a pasty, putty-like look of the face, with superficial erosion of the derma about the corners of the mouth, eczema has in my experience proved very obstinate. Still as a rule I should say that the disease is essentially curable.

At St. John's Hospital it has been shown over and over again that eczema in every form and at every age can be thoroughly cured; not, perhaps, in every case, but certainly with very rare exceptions, not amounting to above one in two or three thousand. And it is to be remembered that the observations on which this statement is based have been made in the presence of some scores of medical men, and that all possible publicity has been given to them. Eczema, indeed, is not so intractable as it has been represented. If a steady and proper course of treatment be followed, without swerving to right or left, it will almost invariably be successful; but if the great guiding principles of treatment are every now and then to be abandoned for the sake of meeting some complication, or in deference to some theory, or out of dread of some imaginary danger, then good-bye to all chance of a cure.

*Is it ever dangerous to cure Eczema?*—Many authors recommend us not to do so too hastily in certain cases, especially in children, when the disease is seated on the head, and when of long standing in old persons, unless we open a compensating drain in some other part. Some even go so far as to denounce the closing of such an efficient outlet for the peccant humours, and startle us with the precautions to be taken before we venture on such a step.\*

I should be sorry to speak with disrespect of any opinion held by men who rank among the leaders of professional opinion, but, in

\* M. Devergie says that in bad cases in children the duty of the physician *is limited to mitigating the disease; in curing it he might compromise the health and sometimes the life of a patient* (p. 242); and that at a certain period of life eczema becomes a drain which must not be meddled with (p. 245). Mr. Wilson says, "When the eruption is of long standing, and there exists any reason for the belief that arrest of the secretion would be attended with injury to the health, counter-irritation should be established upon the trunk or limbs, or even on both;" see also Rayer (pp. 288 and 385). "No observant man can see much of skin disease without coming to the conclusion that the system of making cures of old-standing eruptions which prevails at the present day *is fraught with danger.*"—Tilbury Fox, p. 182.

justice to myself, and in what seems only a fair defence of the doctrines I ventured to put forward years ago, I feel bound to maintain, not only that the doctrine is untenable, but that it ought never to have been put forward; for *it is not a question here of an apparently well-founded opinion being overthrown by some unexpected discovery, but of a theory and practice inducing wide-spread misery which a very simple amount of observation would have averted.*

The more we examine the subject the more are we struck by the absence of all proof in favour of the theory itself. The experience of Rayer and Alibert has been vaguely alluded to, for a bugbear of this kind generally assumes a form which eludes our grasp the moment we attempt to grapple with it, but the cases are few and irrelevant. Rayer mentions a case given by Alibert in which insanity followed, not the cure, but the disappearance, of the eruption, and cites an instance from his own practice where a long-standing eczema disappeared during an attack of inflammation of the pulmonary and gastric mucous membrane! Dr. McCall Anderson also says that he was attending two children for very severe eczema covering the greater part of the surface, when one of them was seized with measles, the effect of which was that in two or three days the eczema had almost disappeared. The eruption on the other child continued to flourish for a few days longer, when she was likewise seized with measles, and in her case too the eruption disappeared. But it is quite certain that this does not always occur, and that internal complaints do not even always stop eczema. I have seen a child suffering under this disease complicated with ill-matured pustules, go through measles without any particular check being given to either eruption. M. Bazin relates a case, which I give in his own words, in order that the reader may decide for himself how far it sanctions the precept laid down by this writer, that when a complaint of this kind has existed a long time, it is only to be touched with extreme reserve. The case is thus told:—"A man was attacked with extensive (*généralisé*) eczema, of which he wanted to be quickly rid. An energetic treatment was employed against the affection, which disappeared in fifteen days. Gastric symptoms soon showed themselves, and a few months after the patient died of a cancer in the stomach."

Possibly other cases may exist. I have, however, not been able to meet with any, and the reader will see at a glance that these only show that eczema disappears with the development of any internal

complaint. *I have not found a single case proving that the cure of eczema could bring on any internal affection.* Yet this is the induction drawn from such cases as those I have given, and I need scarcely say that it is essentially vicious. To argue that because an internal illness causes an eruption to disappear, therefore curing an eruption can bring on an internal illness is, *mutato nomine*, the same thing as to say that as a blister on the chest will relieve bronchitis or pneumonia, so healing a surface blistered for some other affection, may bring on one of these complaints. If the opinion have any definite meaning it means this. In whatever amount of verbiage it may be shrouded, with whatever weight of authority and experience it may be given to the world, the theory, stripped of superfluous matter, reduces itself to the form in which I have put it.

Did the evil go no further than argument it might not be worth while to assail it. The simplest and perhaps best plan would have been to leave it alone and trust to time for its gradual extinction. But the process would be too slow and the interests involved too serious for this. Mr. Locke calculated that on an average it takes about a century to extirpate an error; in medicine he might have perhaps allowed a rather longer period; and when all the great aggregate of suffering that must result from putting such a doctrine in force, and refusing, from a dread of a perfectly chimerical danger, to cure a disgusting and distressing complaint, the case passes out of the region of mere abstract discussion.

*I challenge those gentlemen who tell us that it is dangerous to arrest the eczematous discharge to produce a single instance in support of their views.* Surely there can be no difficulty in their doing so. If serious results had ever followed such a practice, the records of those who have studied skin diseases would long before this have yielded some few cases. In England alone, if we were to estimate the number of cases of eczema yearly at a million, we should, I suspect, be considerably under the mark; yet where is there a single history which in the least proves the fear of checking eczema to have any foundation? Men are fond of quoting Hebra, and he has well earned the distinction, for honesty and genius stand revealed in every page he has written. His practice ought to furnish us with plenty of fatal results from the suppression of old-standing eczema, as he not only cures the complaint out of hand, but utterly scouts internal means in nearly all cases. Yet Hebra tells us that *he never saw disorder of any kind arise from arrest of eczema!* He asserts, too, that all his



*experience never yielded him a single instance of ophthalmia, disorder of the digestion, or any serious affection relieved by eczema!* I will venture to go further and predict that such cases never will be found, for the simple reason that they never happen.

Besides, it may really be stated, without in any way qualifying the assertion, that it is not possible to check eczema except by such means as improve the health and thus directly lessen the tendency to any disease. If by repelling the eruption be meant causing the discharge to cease suddenly by some astringent local application, I can only say that *I am totally unacquainted with any agent possessed of the power to produce such an effect. It must be immensely difficult, if not impossible, to effect such a purpose.* I have in my own person made more attempts than I care to mention, in order to check the discharge of serum. I have used for this object solution of carbonate of soda, dilute sulphuric acid, strong solution of sulphate of zinc, nitric acid, chromic acid, nitrate of silver and nitrate of mercury, collodion, pressure, &c., but in no one instance did I succeed in procuring more than a short respite from the nuisance. Indeed, the influence of remedies in this respect seems to me only too limited. As to the power of medicines to effect such an extraordinary process as transplanting eczema from the skin and transmuting it into an affection of the brain, lungs, or bowels, I can only say that I should be glad to be made acquainted with the remedies themselves. Till then, I must take the liberty of saying that I consider such attributes purely imaginary. What effect an issue may have I know not, and the information given in books amounts to a vague direction to use one in long-continued discharge before closing this up. I should think nothing but harm could come from such a practice. At one time, in compliance with this time-honoured piece of humoralism, I used small blisters, and kept up a discharge from the surface by means of irritating ointments, but I never saw any result beyond distressing the patient.

Further, it may be asserted that if a surgeon were so reckless as to try and remove eczema at the risk of setting up an internal affection of this kind, he would certainly fail; for ordinary remedies and ordinary doses clearly produce no such effects, and extraordinary ones would be speedily followed by such fatality as would cause them to be discontinued. Besides, it is quite certain that the medicines which do most good in eczema, effect this only when given in such a way and in such doses as to improve the health. Medicines

—such as purgatives, diuretics, mercury—are continually taken to such an extent as to set up considerable irritation in the stomach and bowels. I have noted down a good many cases where this had happened, but the excessive action set up was never attended by a corresponding amount of influence on the eczema.

Perhaps the reader will say, as men certainly have said, “But there are cases where eczema acts as a safety-valve; it is a salutary effort of nature, and ought not to be interfered with; you don’t follow these cases up, and, for anything you know, the most serious results may follow.”

To all this it may be replied that the discharge is not salutary, but morbid, and would appear so to any one whose judgment was purged from the grossness of humoral theories. It always disappears so soon as the patient gets quite well; it never exists when a patient is really in perfect health. The more discharge there is, the lower and more exhausted does the patient feel. An outbreak of eczema does not in any way relieve a morbid discharge, nor does the establishment of a morbid discharge, by means of a blister, seton, &c., in any degree relieve the eczema.\*

For years past I have, in every instance, done my best to check the discharge of eczema as quickly as possible. During that period, about five thousand cases have passed under my notice, and, as I have never seen or heard of any injurious results, I can only conclude that treatment cannot produce such an effect as bringing on internal disorder by relieving eczema. *Properly employed, treatment is either innocuous or beneficial.* I can scarcely help thinking that, in such a large number of instances, if injurious results had been at all common, I must have heard something of them. On the other hand, it is quite certain that a number of patients cured of profuse discharge, often of years’-long duration, are at the present time not only well, but all the better for being freed from such a disgusting nuisance. I laid before the Medico-Chirurgical Society the particulars of a case, where the discharge from an eczema, covering the leg from the calf to the sole of the foot, was so profuse, that the patient, an old man in shattered health, said that often, after a day’s work, he returned home with his shoe half full of water. This state of things had gone on for three

\* Devergie justly says, the renewal of a suppressed discharge will not remove the eczema.—*Maladies de la Peau*, p. 247.

years, and yet the speedy removal of it, so far from bringing on any internal affection, was followed by a decided improvement in the patient's health. This old man was very well known in the part of the city where he resided, near London Bridge, and some years after was certainly quite as well as he had been previous to having the eczema. At the same time another instance was quoted, where a case of long-standing eczema of the ham was cured, and four years after the patient was in excellent health. This man, too, could have been easily identified, being a signalman on the Great Eastern Railway. I could easily add to the list, were I not afraid of making this chapter—already too long—still longer.

No doubt if a patient suffering under eczema be attacked by some malady assailing the surface of the skin and the internal organization at the same time, as one of the exanthemata, for instance, the eczema may be suspended, or perhaps removed, as would many other complaints, such as gonorrhœa; but I presume it would scarcely be considered the proceeding of a rational being to leave a gonorrhœa to take its own course, lest the removal of it might cause the development of some internal malady.

In all the cases I have seen where eczema was complicated by an internal disorder such as bronchitis, an exacerbation of this, so far from relieving the eczema, either had no effect or made it worse; while in no case did the increased discharge, when the eczema was worse, in any way mitigate the internal affection. A poor weaver suffering from eczema of the leg came under my care. The disease of the skin was cured, and the patient remained well till an attack of bronchitis at the beginning of the ensuing winter prostrated him. In a very short time the eczema returned as bad as before, but without in the least relieving the bronchitis. A few years ago an old man came under my care for eczema of the leg. He was cured, and after an interval of quite four years, he again applied with the same complaint in both legs. I questioned him closely, and learned that he had fallen into bad health; that then the eczema came on, and that the worse it grew the worse he became in other respects—a statement quite borne out by the results of treatment, for the eczema disappeared as he improved in health. A poor woman was recently in attendance at St. John's Hospital who had been four times the subject of a bad attack of bronchitis; each time she was prostrated in this way, an old eczema of the ankle relapsed and passed into a state of ulceration.

I could have added many more cases, but I now no longer note them down, as I have found no evidence on the other side of the question, and to heap together facts merely to swell the bulk of testimony, without adding to its real value, seems to me sheer waste of time. My experience is, *that if two or three cases will not induce men to reopen a question, two or three hundred will not.* I shall therefore content myself with adducing the evidence of M. Rayer, an observer who supports the view I have endeavoured to combat respecting the connection between the healing of an internal complaint and the cure of eczema. M. Rayer, then, says\* that he treated a patient for gastro-enteritis who had already been previously suffering from eczema, and that *during all the time the gastro-intestinal inflammation lasted the eczema was worse.* Again, he says,† of another patient, “the appetite fell off remarkably (a certain sign that the health was not so good as formerly), an occurrence which was followed by a notable exacerbation of the eczematous affection.”

I think, then, we may conclude that the fear of curing eczema, of however long standing it may be, and however delicate the health of the patient, *is not warranted by either proof or analogy*; that no known agent possesses the power of repelling eczema; that we can cure it only by means which improve the health at the same time, and that it is as justifiable to arrest its discharge as that of diarrhoea or cholera. All that has been said of eczema may be said of ulcer; there is no danger in healing it up, no bad symptoms ever followed from doing so. Those reported to have occurred were the offspring of prejudice or faulty observation, and offer only a too painful comment on the mode in which surgery has often been studied and taught.

The doctrine that it is never dangerous to cure eczema or ulcer, that discharge from either is never a salutary outlet but a morbid exhausting drain, and that neither can be repelled into the system, or be cured in any way except by improving the health, was very unpalatable when I put it forward years ago. So radical a change, however, has occurred in the views of some of our writers, that now, *after appropriating these tenets wholesale,* they speak in calm derision of humoral pathology, as though they had never believed in it or indeed had utterly scouted it from the very beginning. Dates,

\* *Treatise on Diseases of the Skin*, translated by Willis, second edition, 1835, p. 316.

† *Ibid.* p. 322.

however, are awkward things, and a reader who is sufficiently interested in the matter to seek out the *pro* and *con*, might be apt to think there is something in this sudden change of opinion yet to be accounted for.

*Treatment.*—I now proceed to examine the treatment of eczema, and I need scarcely apologize for devoting a great deal of attention to this subject, when it is remembered that the question affects the health and comfort of hundreds of thousands; that it is no uncommon occurrence for patients to be reduced to utter destitution by this complaint; that till quite lately medical men were unanimous in regarding it as only too often utterly intractable; and that little more than half a century ago it was pronounced, when inveterate, beyond the reach of art and only to be palliated by treatment,—views which are unhappily only too widely current yet among the profession, and which are certainly likely to remain current under some kinds of treatment.\*

As always happens with severe chronic maladies, more remedies have been recommended for the cure of eczema than any one person could examine in the course of years, at least in such a manner as to form a reliable opinion upon their value. It is not uncommon to find an author speaking of twenty or thirty powerful medicines, some of which—such as saline cathartics, antiphlogistic remedies, neutral salts, and emollient diluents—may mean almost anything. It is rarely that even an approach to striking a correct balance is made; a list of remedies is given, to be used on general or particular principles, as circumstances may direct, till we arrive at tincture of cantharides, mineral waters, and change of air, as our last resources. All knowledge of such a kind must, of course, consist to a great extent of conjectures, which only great experience can render useful and safe, but which, in the hands of the uninitiated, may be scattered to the winds by the first difficult case met with in practice. Such

\* Dr. Neligan speaks of eczema lasting five-and-twenty years; Dr. Copland, of its resisting every known method of cure. M. Devergie says he knows nothing more intractable than eczema; Cazenave and Schedel give the same account. "Some forms of this eruption baffle for a long time every remedy and every kind of treatment."—Burgess. Dr. Anderson says he has been consulted by persons whose lives had been rendered so burdensome to them by the itching of eczema, that they had *wandered from town to town, and from country to country*, in search of relief! "Elle récidive souvent, finit par devenir permanente et par se généraliser . . . . Nous devons dire que l'affection arrivée à ce degré est placée ordinairement au-dessus des ressources de l'art."—Bazin.

experience, too, means simply conviction—the principle which guides the nurse and the empiric. The form in which it is clothed may be more scientific; the spirit is essentially the same. It is gleaned too loosely, and in too wide a field, to admit of the tenets on which it is based ever being proved. No lasting structure of therapeutics, no enduring system of treatment, can ever be erected on so unstable a basis; and without a far more extended and accurate series of observations than we possess, we shall have to arrive at an estimate of the comparative amount of success and failure rather by collateral evidence than direct proof. Convictions and sweeping assertions do not serve us here, and have indeed nothing to do with the subject. No man's opinion respecting medicines commonly used in eczema—such, for instance, as sulphate of magnesia and calomel—has any more influence upon what ought to be really the question at issue than it has upon the qualities of matter; and can no more limit or alter their action on the nervous and vascular systems, than it can affect the proportion in which sulphur combines with oxygen to form sulphuric acid, and this, again, with water and magnesia to form Epsom salts.

The discrepancy in the statements of different authors as to the power of medicines over eczema, the irreconcilable differences in the results arrived at by different observers, are proof enough that I am not making out a case against the present system. While the most experienced surgeons in England declare that it is often a difficult complaint to manage, requiring a long course of treatment, and surrounded by complications which frequently demand a variety of remedies to subdue them, the french physicians seem to remove it by means which I should have supposed possessed no control over so refractory a malady, and some of which in my hands proved quite inert. M. Cazenave quotes a model case, cured, apparently, by the use of a little marsh-mallow infusion, and M. Bazin's treatment, when we come to individual cases, is equally simple. Alkaline syrup and starch baths form the entire sum of his rules in one case, while starch baths and arseniate of ammonia fill up the formula in another. Dr. Kempster, of Utica, cured a case of neglected eczema of the scalp by simply applying a weak lotion of carbolic acid. In London men rely to a great extent on internal remedies in eczema, and employ external applications principally as adjuncts; in Vienna they trust almost entirely to outward applications, and profess to have scarcely any faith in medicines.

If there be one skin complaint in which this discrepancy of opinion is more injurious than in another, it is eczema ; for it comprises nearly or quite one-third of all the cutaneous affections seen in practice, so that the surgeon who can most thoroughly master eczema has already overcome the most frequent difficulty, and one of the greatest he has to encounter. For all these reasons I resolved to watch the action of several drugs successively, restricting myself, as far as possible, to one drug or one group at a time, eliminating as well as I could all those which seemed superfluous, owing to their not possessing equal curative powers to those reserved for more special observation. Thus, for instance, tar, antimony, guaiacum and sulphur were soon given up. The results were as follows :—

1. Antiphlogistic treatment, taken as a whole, failed entirely in every case of severe eczema, both as to its power of curing the complaint and of preventing relapses. Calomel, antimony, and cathartics, in large and repeated doses, as advised by some authors, did no good in any case and made many patients much worse. Bleeding either local or general was only tried to a limited extent. The patients generally contrived to evade bleeding from the arm, and the results, as given by those who advocate it, are not very encouraging. Sir William Jenner, however, M. Bazin, and Mr. Hunt still recommend venesection, though Mr. Hunt admits that of late he has rarely found it necessary. Leeches never seemed to do any good, and the low regimen which, according to all orthodox rules, ought to go hand in hand with antiphlogistic treatment, was quite as injurious as the use of depressing medicines ; whereas a good diet, accompanied in all cases of exhaustion by a moderate use of red wine, such as claret or tarragona, singly or mixed, and plenty of fresh vegetables, proved of the greatest service.

If the reader will analyze the results of this anti-inflammatory or devastating treatment, *taking them just as they are given by those who employ it*, I think he will confirm what I say. Bleeding, leeches, salines, antimony, and mercury, employed in the most vigorous style, rarely produce much effect on a sharp case of eczema in less than three or four weeks. Now, my experience is, that rest from toil and worry, fresh air, good diet, and mild aperients, followed by the use of steel, will do the same good in the same, if not less time, and do it, too, much more agreeably, perhaps also more safely and effectually. Mr. Hunt, however, devoutly believes in the virtue of lowering treatment. Besides bleeding and leeching, he gives large

doses of antimony and salines, accompanied by a vegetable diet and no stimulants ; a plan which, at any rate, is energetic and consistent, but for which I do not see the necessity, as I have never met with severe eczema unaccompanied by a certain feebleness of health. He stands, however, almost alone, and two of our leading authorities, Mr. Startin and Mr. Wilson, are both averse to the use of lowering means.

2. Mercury, even in the doses recommended by Dr. Elliotson and M.M. Cazenave and Schedel, never seemed either to arrest the progress or hasten the disappearance of eczema. Except where an aperient was required, or where it was necessary to stimulate and unload a sluggish liver, no great benefit resulted from its use *in whatever form it was employed*, when given in purgative doses ; and in some cases where it was pushed so far as to produce a decided action on the system, an aggravation of some of the symptoms took place. It seemed only useful as an adjunct ; but, employed for this purpose, it was most valuable. Calomel, mercury and chalk, blue pill, biniodide, and bichloride were all at times most serviceable, the two latter as alteratives : the mode of giving them will be stated farther on. Children were found to bear mercury very well, and a long course of it, in doses which just purged mildly about every second day, was almost always beneficial and often effected a cure.

3. Sudorifics did not produce much effect in eczema, and, according to my observations, are next to useless in almost every case of this kind, as, indeed, with few exceptions, they are in skin diseases altogether, generally failing, I think, most completely where they are most requisite ; that is to say, where the skin is dry and harsh. I have tried them all, or pretty nearly so,—my observations being, however, principally confined to sulphur, antimony, guaiacum, spirit of nitric ether, and warm drinks internally, turkish baths, vapour-baths, and packing in a wet sheet—and failed with all, not only to do good, but even to induce free perspiration, which, however, was often frequently brought on by a medicine from which I should not have expected such a result ; namely, the iodide of potassium in tincture of bark. Five grains of this salt, given twice or thrice a day in a teaspoonful of the tincture, often made the skin quite moist. But however given, or for whatever purpose, it produced no beneficial influence on the eczema. Indeed, to give medicines simply to produce perspiration appears, so far as I observed, simply equivalent to



so much waste of time and money. The benefit they induce is rare and problematical ; the mischief they do is abundant and palpable. Sir Henry Holland says\* that no more beneficial change has occurred in modern practice than that of abandoning the system of trying to force perspiration ; and, so far as eczema is concerned, I quite assent to his views.

Giving sudorifics is a practice founded on misconception. Men saw that sweating often accompanies the resolution of certain disorders, such as typhus, ague, the exanthemata, &c., and therefore gave medicines to produce perspiration, with a view of accelerating resolution in this, and subsequently in other, complaints. They forgot, however, to observe that pyrexial disorders are often thrown off without any particular outbreak of sweating ; whereas, on the other hand, this may occur most profusely and yet not be followed by any relief, even in the exanthemata, while it is often attended by manifest aggravation of the symptoms in other cases. They called this treatment “ following Nature’s indications,” but it really meant misinterpreting Nature and following their own theory. They looked upon a person in a fever as a disordered body, clogged and overloaded with peccant matter, to be drained off as an engineer would drain water from a morass, or evaporated as a chemist would get rid of superfluous fluid—by raising the temperature ; for beyond material processes gross enough to be visible they could not go.

Mr. Nayler finds† sulphur useful in those cases where eczema is both acute and general, and when the urine is scanty and loaded with crystals of urate of soda. He gives a drachm of precipitated sulphur and bitartrate of soda, with fifteen grains of bicarbonate of potass, in a cup of milk every morning, half a grain of calomel, and three grains of James’s powder every night, being added in severe cases. I have never tried those remedies exactly as given by Mr. Nayler, but I have used some so closely resembling them, such as the compound calomel pill at night and the phosphate and tartrate of potass, sulphate and exsiccated carbonate of soda in the day, that I can scarcely imagine there was any substantial difference, yet I was never able to satisfy myself that they possess any control whatever over eczema. Indeed, so far as my own experience goes, I am rather disposed to

\* *Medical Notes and Reflections.* By Sir Henry Holland. 1855, p. 510.

† *Diseases of the Skin*, p. 101.

agree with Dr. Frazer, who says \* that "sulphur is worthless for eczema." However, as Mr. Nayler's work is very carefully and impartially written, and is evidently from the pen of a man who has paid great attention to his subject, perhaps the best plan will be for me, after indicating his views on the matter, to recommend the reader to consult the original work, which I most gladly do. It possesses far more merit than some of the pretentious things about which so much fuss has been made.

4. Iodide of potassium proved inert except in cases complicated with rheumatism, and the same result attended the observations on iodine ; but there was considerable difficulty in coming to any definite opinion on the latter point, as the iodine was only given in scrofulous cases.

Having now eliminated those remedies which seem to exert no influence over the disease, or to be useful only as adjuncts, I pass to the consideration of those on which more reliance can be placed, and which will, given singly, produce a very decided effect on certain stages of eczema ; but in order to bring all the conclusions arrived at into as compact a form as possible, I propose to lay down certain general rules, and append to them more full observations on the action of particular remedies in their proper places.

In eczema, then, the remedies which succeeded best in my hands, and which, as a whole, appear to have been most useful in the practice of others, are :—

1. A saline aperient containing magnesia, preceded by a dose of mercury.† In acute cases, as where the face has suddenly become partly red and glazed ; in the first stage of the ulcerative form ; in sudden and severe relapses of chronic eczema, especially where the patient has been living too freely ; at the commencement of treat-

\* *Journal of Cutaneous Medicine*, vol. i. p. 67.

† For formula of saline aperient, see p. 37 ; for that of a pill containing mercury, see p. 12.

The following may also be used for adults :—

R. Pil. hydrarg. subchlor. co. ʒss.

Divide in pil. vi. i. pro re natâ horâ somni sumend.

R. Hydrarg. subchlor. gr. xij.

Conf. opii q. s. ft. pil. viij.

i. omni secundâ nocte sumend.

R. Magnesiæ levis (Henry's), ʒss.

Coch. min. i. omni secund. mane ex lactis cyatho sumend.

ment in almost every case when the tongue is coated ; where the patient has been nauseated with tonics or arsenic ; and lastly, when progress, after being satisfactory for some time, begins to flag, those remedies generally prove very serviceable. The reader may here object that the instances in which benefit flowed from this system were cases of cure by antiphlogistic treatment ; to which, however, it may be replied that, on the contrary, these medicines were never given to such an extent as to produce any depression or severe purging ; that they were not aided by leeching, bleeding, or antimony ; and that a good diet and wine were always ordered along with them.

Of all the aperients I have tried, those containing magnesia seem to answer best. Henry's calcined magnesia is an excellent preparation ; a teaspoonful taken in milk before breakfast will produce an action of the bowels which few other agents can effect. If by any chance the patient happen to be suffering from acidity, the beneficial action of the remedy is twofold. I know it may suit the tactics of mere theorists, or some anonymous critic in a weekly journal, who considers it infinitely better that a hundred persons should die under orthodox treatment than that one should be cured by such improper means,—to denounce this preparation as a secret medicine—a cry which always ensures a certain amount of approbation. My answer is, that the cure of disease is a more important matter than their opinions. Its efficacy, however, is very decidedly increased by the addition of a drug which is as unpleasant as it is valuable—the sulphate of magnesia. I know of nothing which effectually disguises its taste or entirely prevents the griping which is apt to follow the use of it in some persons ; perhaps the compound tincture of cardamoms, tincture or essence of ginger, and peppermint-water are as useful in this way as anything. Peppermint lozenges, made with the real english oil, are also of service ; but the high price of the oil, which is, I believe, about ten times as much as that of the french, renders them liable to adulteration. Many persons, too, object to the taste of peppermint as much as they do to that of the sulphate. I always add the nitrate of potass or the spirit of nitric ether, though I cannot say that I have in any way satisfied myself as to the value of either. A dose of a mixture of this kind before breakfast and dinner, or lunch, is generally sufficient. Its administration should, I think, always be accompanied by the use of a dose of mercury, two or three times a week,

in the form of calomel or mercury and chalk,\* in a powder for children, and for grown persons in pills. It is not necessary to carry the remedies to such an extent as to bring on any severe purging; about two loose stools a day will be quite sufficient. In the case of infants at the breast, the mixture may be given to the mother, as it acts very gently and yet actively enough through the medium of the milk.

Except in some slight cases of eczema in grown persons and in eczema in children, in which forms these remedies often suffice of themselves, it is of very little service to continue them beyond two or three weeks, a period, however, which is generally long enough to admit of their doing a great deal of good; the tongue getting cleaner, the stools of a brighter colour, and the patient feeling altogether better under their influence.

2. An astringent, accompanied by an occasional aperient or by an alterative. When the appetite is bad I would suggest the free use of a mineral acid, such as the nitric or nitro-muriatic, in tolerably large doses, in some bitter tincture or infusion. I believe drachm doses of tincture of calumba and ounce doses of infusion of quassia are equal to anything yet discovered. Fresh-made infusion of valerian, serpentaria, or cascarilla answers very well when the patient is low and nervous.† It is, however, to be borne in mind

\* I would suggest giving an aromatic along with the mercury and chalk when it is prescribed for children.

R. Hydrarg. c. creta, gr. xvij.  
Pulv. cinnam. co. gr. xij. ℥.

et divide in pulv. xij.

One of these powders may be given to an infant of almost any age to begin with; it will scarcely ever distress even the most delicate, and generally for children approaching a year old the dose must very soon be raised. Patients between one and three years old may commence with twice the dose. These powders may be taken in a little of anything thick, or simply laid on bread-and-butter. One should be taken at least two or three times a week.

† R. Acid. nitric. dil. ℥iss.  
Syrupi aurant. ℥ss.  
Infus. chiratæ ℥iij. (Infus. valerian. ℥iij.)  
— quassia ad ℥vi. ℥

Coch. ampl. ij. bis terve quotidie sumend.

R. Acidi nitric. dil. ℥ij.  
— hydrochlor. dil. ℥i.  
Tinct. cinnam. c. ℥iij.  
— calumbæ ℥vi. ℥

Coch. min. i. ter quotidie ex aquæ cyatho vin. sumend.

that these remedies do little more than improve the appetite and health, and that their control over the eczema is very limited.

3. A course of steel. When the discharge is profuse, when even in the dry form eczema has existed for a long time, and in all cases when improvement has come to a standstill, I would advise a course of steel; a remedy which, in my hands, has proved of more use against eczema in this stage, and under these circumstances, than any other I have tried or seen tried.

Steel wine, carefully prepared, and given in doses of one or two drachms two or three times daily, will remove most cases of eczema during the first year or two of life. The wine should be procured from a really good chemist; I have tasted specimens of it so harsh and acid that I could not wonder at children disliking it. Some of them seemed to me compounds of rusty iron and the worst kinds of acid sherry. A very agreeable preparation is made by Messrs. Bell, of Oxford Street. When children have passed this age steel wine requires to be given in large doses to produce any effect, and therefore becomes rather an expensive medicine, especially in hospital practice. Here the saccharine carbonate may be substituted, two or three grains being given twice a day. Should its effect not correspond with the surgeon's anticipations, I should recommend that the tincture of the muriate in doses of five to fifteen minims three times a day, sweetened, be given instead. In hospital practice the acid solution of iron, mentioned at page 37, from three to five minims in water three times a day, though not quite so pleasant, is quite as useful as the tincture.

From puberty to the decline of life, I would most decidedly recommend the tincture of the sesquichloride, or the acid solution spoken of in preference to any other preparations.\* Indeed, I can safely say that I have seen no internal remedy influence the discharging stage of eczema, or eczema siccum of the hands, so rapidly and effectually as these. When properly aided by aperients, ointments, exercise, and suitable food, nearly every case of eczema in the stages I have mentioned will be cured or relieved by a steady, persistent use of them, as I have had the pleasure of demonstrating to several gentlemen at St. John's.

\* Whichever be selected, I would strongly advise the use at the same time of one of the pills prescribed at p. 12, given to the extent of at least three or four a week.

*Tincture of Sesquichloride of Iron.* 121

There are, however, some precautions with respect to the mode of taking them which are of vital importance.

In the first place it is essential that the tincture should be prepared, not only according to the London Pharmacopœia, but with such care as to ensure that no great amount of free acid is present, seeing that this frequently preponderates to such an extent that the tincture cannot be given in the proper doses; indeed, the fluid part of a good deal of the trash sold under the name of tincture is composed almost wholly of hydrochloric acid: it is sold to patients at a price for which a surgeon could not buy it from a respectable chemist. When properly made, a drachm or more may be given at a time, whereas half a drachm of the coarse acid tincture will set the teeth on edge and make the patient feel sick. I have often known a patient who was taking the pure tincture with benefit turn quite ill after a dose of this stuff: severe vomiting has followed in several instances, and in once case where I was consulted, the patient was so sick and was purged so violently from taking two drachms of the common tincture in divided doses, that his friends thought that he had got english cholera. This kind of thing has now happened so often that I always beg of patients, if they run short of the genuine tincture, rather to do without it for a day or two than get it from any source they are not certain about. The tincture of the perchloride of the British Pharmacopœia is a much inferior preparation. With whatever care it be made the iron speedily precipitates, and as druggists do not like to send out a thick-looking tincture, they pour off the clear fluid and make use of that only, rejecting the greatest part of the iron. But it is only too often not prepared with care. In making the solution of the perchloride, instead of evaporating this in a water-bath the ingredients are simply mixed and the spirit added subsequently; an addition which is the signal for approaching precipitation of the metal. Indeed, I would in every way recommend the acid solution in preference, giving the spirit separately and in a more palatable form.

The tincture must be given in pretty large doses and for some time. It is of no use prescribing fifteen or twenty drops for two or three weeks; as well not give it all. The patient, if an adult, should begin with half-drachm doses at least, and increase this as rapidly as ever he can to a full drachm, beyond which it is rarely requisite to go. The dose should be measured out in a minim

glass ; for, as a drachm is equivalent to quite a hundred and fifty drops, the surgeon who prescribes a certain number of drops is evidently not giving the quantity he wishes to do.

Now and then, if the patient grow sick of the medicine, or suffer from dyspepsia, loss of appetite, headache, &c., the steel may be given up for a day or two till these symptoms pass off ; but so soon as they have vanished it should be resumed. The constipation which generally accompanies its use may be easily remedied by the occasional use of a mild pill, *which should, however, always contain aloes.\** This symptom frequently passes off when the steel has been taken for a little time, and especially when the larger doses have been reached. I have so repeatedly noticed this, that I have been obliged to conclude *that a small dose of steel constipates as readily as a large one, and that the constipating action begins almost as soon as the patient begins with the medicine ; whereas the purging induced by the acid is in exact proportion to the quantity taken, and comes on more slowly.* The dyspepsia—the most frequent form of which is marked chiefly by coldness at the stomach, nausea, griping, and flatulence, is generally soon got over by leaving off the steel and giving some mild aromatic and antacid, such as carbonate of soda, along with compound tincture of cardamoms or aromatic confection, or the aromatic spirit of ammonia in some bitter infusion.† Should the appetite flag very much, the patient may give up the steel for a week or two and take the nitric or nitromuriatic acid, as previously suggested, for a few days. In some extremely rare instances it may happen that the patient cannot take either of these preparations, in which case it should be abandoned in favour of the ethereal tincture or Griffiths' mixture ; but

\* R. Pilulæ aloës et myrrhæ ʒj.

divide in pil. xiii. i vel ij alternis noctibus sumend.

Or the colocynth and hyoscyamus pill recommended at p. 12.

† R. Sodæ carbon. ʒj.

Tinct. lavand. c. ʒij.

— cardam. co. ʒijj.

Aquæ menth. pip. ad ʒvi. ℥.

Coch. amp. duo bis terve quotidie sumend.

R. Spir. ammon. arom. ʒijj.

Acidi hydrocyan. dil. (Pharm. Brit.) m. xviii.

Infus. rhei ʒijj.

— calamb. ad ʒvj. ℥.

Coch. amp. duo bis quotidie sumend.

See also formula at p. 11.

neither of these is equal to the former. Indeed, in my hands the ethereal tincture proved perfectly useless. It is altogether a medicine not to be trusted to, and the dose usually given (5 to 30 minims) is far too small. The first-named dose would be about the right strength for quieting the nerves of a hysterical baby. I have never seen anything exert so much control over eczema as the acid solution and the tincture of the sesquichloride. At one time I believed that, provided steel were given in a soluble form which would sit lightly on the stomach, it did not much matter what preparation was used ; and I believe that in the discharging stage almost any preparation of steel, perseveringly given, will effect a certain amount of good ; but I consider my observations warrant me in drawing the conclusion that those I have recommended are among the most potent we possess. I have frequently treated two similar cases of eczema—one with the acid solution and one with some other preparation. I have also, in such cases, given one patient the acid solution and one the nitro-muriatic acid or a saline. I have suspended the acid solution, and given something else ; and sometimes, when a patient has returned with a fresh outbreak, I have tried this time to do without the solution, but always with the same result. Even in the dry furfureous state of the skin, with firm, thin, adherent crusts, the solution of iron, properly seconded by aperients, often proves useful. I have seen lichen too, which had improved under salines, develop into eczema under the influence of the biniodide of mercury and again improve directly the acid solution was given.

These preparations of steel, given in this way and aided by an aperient, will cure a great many cases without anything further being required ; but in some cases the dry stage itself of eczema demands a particular course of treatment, and in others not only does improvement cease without any manifest cause, while the patient is taking the steel with every possible precaution, but an unmistakable relapse ensues. In the latter case the best plan seems to be to give up the steel altogether for a week or two, to purge the bowels well and then resume the steel *in increased doses*, by which means the surgeon can generally succeed in bringing the disorder up to the third or dry stage. The health almost always improves visibly under the use of these remedies, the skin grows clearer and the muscles become firmer, while the face frequently loses to a great extent the careworn look it had acquired from long ill-health.



4. A course of arsenic, aided occasionally by cod-liver oil and an alterative preparation of mercury.—Arsenic properly given, that is to say, just in such doses as the patient can bear without being made really unwell by it, will cure a great many, perhaps most, cases in the dry stage, in which alone it is useful. In other phases of eczema it has always appeared to me inert or injurious; but when the skin is simply red and tender, with a quick reproduction of unhealthy cuticle or scales, it is often of great benefit. Given alone in eczema before steel has been tried, and in the weeping stage, it makes the patient sick, languid, and weak, destroys the appetite and purges the bowels.\* Should, however, the surgeon only see the patient first of all at this stage, and ascertain that he has not taken steel, then I would suggest that the patient should either go through a short course of steel, or that this medicine should be combined with the arsenic; for though the statement may excite scepticism, I feel justified in saying that many patients bear arsenic decidedly better after a course of steel. I have repeatedly observed that, where patients could not tolerate even five-minim doses of liquor arsenicalis without so much irritation of the stomach, nausea, and purging, sometimes even followed by a very disagreeable result—peeling of the skin of the hands and feet—that the medicine had to be given up, even at the risk of seeing the worst symptoms return; these doses, after a course of steel, excited no discomfort, except in the conjunctiva, and not much even there. I believe, however, that this toleration of arsenic is quite artificial; after a respite of a few months I have seen the same quantity of it produce the same disagreeable effects.†

\* In the *Dublin Quarterly Journal of Medical Science* (May, 1870) there is a case by Drs. Benson and Smith in which the patient's debility steadily increased under quinine, iron, mineral acids, &c.; whereas the use of arsenic was followed by immediate and lasting improvement.

† As a formula for giving arsenic in pills is sometimes useful, I subjoin one:—

R. Arsenici albi gr. j.  
 Pulv. piperis nigr. ℥j.  
 Olei cinnam. m. ij.  
 Ext. hyoscy. ℥ss.  
 — anthem. ℥ij.    ℥ ft. pil. xxiv.

i ter quotidie sumend.

When it is considered necessary to add steel, ℥ss of the magnetic oxide of iron may be substituted for the extract of hyoscyamus; but I should not anticipate any great results from either arsenic or iron taken in this way.

One of the fashions or crazes of the day is that of giving arsenic in every form of disease of the skin. The extent to which this has grown of late years is almost incredible, and is perhaps only known to the druggists who supply the material. A few years ago arsenic was scarcely employed at all internally, and was given with great caution or even altogether withheld in complaints like lepra, which could scarcely be cured without it. Nowadays it is constantly given in every case that proves the least refractory, and very often before any other medicine is tried. Indeed, medical men often adduce as evidence of the refractory nature of a particular case, that the patient has taken a quantity of arsenic without doing any good. Why, I don't know, as certainly it never was recommended in every disease of the skin, and especially in the weeping stage of eczema, by those who are supposed to lead opinion. But there are some affections of the skin which never require arsenic, and many which only tolerate it at a certain stage. Among the latter is eczema. So long as ever there is a discharge of serum, arsenic never does any good, and often does a great deal of harm by inducing sickness, purging, headache, and general irritability. *It is only of use when the dry stage has set in, and is not always called for then.* Attention has often been directed to the injurious nature of such treatment as that of acute eczema with preparations of arsenic, but so far without result ; indeed, the practice seems largely on the increase.

5. Cod-liver oil is one of the most valuable remedies in eczema, and perhaps it would hardly be going too far to say that every chronic case is more or less benefited by it, if taken long enough and in a proper way. Eczematous patients are generally very sensitive to cold, and means calculated to evoke heat seem to agree best with them. The great obstacles to its use, the nauseous taste and the idea of swallowing a coarse, animal oil, are soon overcome, and the result quickly compensates the patient for any disgust felt at the outset. Should the difficulty of taking it be insurmountable—as when it always brings on sickness, or when the patient is an infant at the breast,—a broad fold of linen or flannel, steeped daily in the oil, may be worn round the waist. The worst of this plan is, that it makes such a filthy mess that one can only employ it in the case of children and persons who are or can be confined to bed ; but it certainly does good and patients get well and fat on oil used in this way.

I give the preference to Dr. De Jongh's oil over all I have tried.

A pretty wide experience has satisfied me that the opinion I expressed some years ago as to its superiority, both in diseases of the skin and neuralgia, is well founded. I have heard men say that it cannot and ought not to do any more good than the pale oil, because the colour and taste are simply due to the blood and bones of the fish being pounded up with the liver. But a fair trial of its powers will soon dispose of such puerile objections ; and, whatever the taste may be due to, most persons certainly find it less disagreeable and mawkish than the pale oil. Its cost, too, is less, as such a much smaller quantity of it is required. The dose should not be too large, never more than the stomach can bear comfortably. Grown persons seldom require more than five or six teaspoonfuls daily, often not so much ; children bear relatively a much larger quantity, and may take, even when quite young, two to four teaspoonfuls a day. It seems to sit best on the stomach after plain food, not always digesting so well after soups, stews, hashes, curries, &c. I think also it answers best when given directly after meals ; but this is purely an affair of individual experience. The most agreeable vehicle for taking it in is a small quantity of wine, like manzanilla, orange, or ginger, or coffee ; the last suits some persons very well. Winter and spring are the most suitable times for taking it, and patients who cannot retain it on the stomach during hot weather, or lose their appetite for food under its influence, bear it perfectly well so long as the cold lasts. If the patient is to derive lasting benefit from its use, it should be given for quite three to six months. Should circumstances require a trial of it to be made during the summer, I would suggest the use of the cod-liver oil chocolate made by M. Lebaigue, of 9, Langham Street, Portland Place. Each pound of it contains four ounces of the oil. Should all these resources fail, I would recommend a trial of cream, from four to eight ounces daily, or of the pancreatic emulsion prepared by Messrs. Savory & Moore.

6. But there are some stubborn cases which resist all these remedies, and in these a course of mercury will often give the *coup de grâce* to a disease which has defied everything else. The biniodide and bichloride of mercury seem to be the most powerful salts of this class. I at once admit that after many trials I have been unable to satisfy myself as to which is the most potent of the two ; but on the whole I think the bichloride, and Mr. Startin seems to have had great success with it. The biniodide, however,

is also an excellent preparation. About one-twelfth, steadily increased to one-eighth to a sixth of a grain of either, will generally prove sufficient for a dose. This quantity may be taken once, twice, or thrice a day, according to the severity of the complaint or the age of the patient. I have repeatedly given young boys and girls a sixth of a grain daily, with the best results. If given in a pill, the mercury should always be combined with the compound extract of sarsaparilla, or else with a sedative and aromatic, such as the extract of lettuce and the essential oil of peppermint or cassia, to prevent griping.\* When much pain of any kind complicates eczema, or when there is a tendency to diarrhoea, a quarter of a grain of pure opium may be added. If the form of a pill be objected to, it may be given in some bitter tincture, such as cinchona or calumba; syrup of some kind or other should always be added when these salts are prescribed, dissolved in water. The biniodide can always be given in solution, by mixing bichloride of mercury and iodide of potassium in proper proportions.† But such adjuncts as tinctures and syrups cannot, I need scarcely say, be procured in hospital practice, and accordingly I have found that these preparations of mercury do not always answer so well, and that the patients without exception complain of their depressing effect.

Almost the only complication likely to be met with in the

- R. Hydrarg. perchlor. gr. j.  
Extracti sarsæ comp. liq. ℥iij. ℥.
- Coch. ij min. bis quotidie sumend.
- R. Hydrarg. perchlor. gr. j.  
Extracti sarsæ comp. ℥ij. ℥.
- et divide in pil. xxiv. ij nocte maneque sumend.
- R. Hydrarg. iodidi rubri gr. j.  
Extracti lactucæ gr. xlviij.  
—— anthem. ℥j.  
Olei cassiæ m. ij. ℥.
- et divide in pil. xxiv. ij nocte maneque sumend.
- † R. Hydrarg. perchlor. gr. j.  
Syrupi rosæ ℥ss.  
Tinct. cinnam. c. ℥j. ℥.
- Coch. min. i bis quotidie ex aquæ cyatho vin. sumend.
- R. Potassii iodidi gr. xxxij.  
Hydrarg. bichlor. gr. j.  
Syrupi zingiberis ℥ss.  
Aquæ cinnam. ℥iijss. ℥.
- Coch. min. ij ter quotidie sumend.

treatment of eczema, that is, so far as one can be considered incident to the other, is rheumatism, the remedies for which are the same as in other cases; hydrochlorate of ammonia, iodide of potassium, colchicum, and embrocations, of which by far the best I have seen is a combination of *strong* tincture of opium, containing quite four times as much opium as the ordinary tincture, or of the same strength as Cooke's black drop, chloroform, camphor liniment, and soap liniment.\* The rheumatism of eczema seldom resists these.

The pressure of inflamed lymphatic glands induced by eczema, and of the troublesome thickening of the skin, sometimes even extending to the subcutaneous cellular tissue, and ending in the

\* When the attack is severe and the pain very great, I would advise the following:—

R. Ammon. hydrochlor. ℥ij.

Syrupi simpl. ℥ss.

Aquæ menth. virid. ad ℥vi. ℥.

Coch. amp. duo tertiis horis sumend.

R. Liquoris morphiæ bimeconatis m. xx.

Mist. camph. ℥j. ℥.

horâ somni sumend.

Chlorodyne m. xxx. may be substituted for the latter. The hydrate of chloral proved in my experience a most unsuitable medicine, bringing on, especially after the first or second night, excessive cerebral excitement, inability to lie down, and a beating like that of a hammer inside the head. At the same time, the part affected should be dry-cupped *with any materials at hand* for quite an hour, and the following embrocation applied by means of a flannel steeped in it:—

R. Guttæ nigræ (Cook) ℥ij.

Chloroformi ℥j.

Lin. camph. c. ℥iij.

— saponis ℥vi. ℥.

ft. embrocatio. Over the flannel should be laid a pile of soft cotton-wool,—medicated cotton-wool, as it is commonly though erroneously called,—kept on by a bandage.

After the pain has yielded the patient may take—

R. Potassii iodidi ℥j.

Aquæ ℥iij. ℥.

Coch. min. ij bis quotidie sumend.

The simplest way of taking this is to put the dose into the *first* portion of the fluid drunk at any meal.

R. Extracti colch. acetici.

Pilulæ hydrarg. aa gr. vi.

Extracti hyoscyami gr. xii. ℥.

et divide in pil. vi. i omni noct. sumend.

formation of abscesses, are complications over which we have little control. Scalding with very hot water, followed by the use of ice or evaporating lotions, and subsequently painting with tincture of iodine or a solution of nitrate of silver, ten grains to an ounce, are nearly all the remedies I know of which are likely to be of much service. In unhealthy children, swelling of the glands at the back of the neck, from eczema of the posterior part of the scalp, is extremely apt to end in abscess, unless much stronger measures are employed than we can generally adopt.

*Change of Air.*—Supposing all this has been done, and that the eczema, though better, is not quite well, or, after being over and over again cured—so far, at least, as external symptoms are concerned—it perpetually shows a tendency to return, what is to be done? Shall we send the patient for change of air to some mineral spring, or give tar, cantharides, or some other drug recommended as a last resource?

To judge from my own experience, I should say most decidedly not. *I never yet saw such agencies, under such circumstances, effect a cure*; and I believe the best plan is to leave the case to nature, feed the patient as well as possible, and give no medicine whatever for a period of several months; at the end of which time it will often be found that the health has improved, remedies long previously given perhaps aiding somewhat in the work, and then very slight means will frequently remove all visible traces of the disease. Almost the worst case I ever saw was set right in this way. The patient had been in a most deplorable state from eczema and exhaustion for years, and at the end of a long course of treatment was still worried by the perpetual recurrence of the complaint. I recommended him to take no medicine whatever, to have meat twice a day, fat ham or bacon once daily; at least four or five glasses of port wine and one or two of old whisky every day; to eat brown bread in place of white, and to take work as quietly as he could. These instructions he faithfully carried out. In the course of two years he had increased above a stone in weight, and for several months he had only suffered occasionally from a stray patch of eczema, which invariably disappeared under the use of the dilute nitrate of mercury ointment. One year later his condition had improved still further, and at the present time he continues well.

*External Applications.*—In acute or very slight cases of eczema, almost any mild astringent will suffice. Perhaps among the best

we may rank subnitrate of bismuth in elder-flower water or camphor mixture, or liquor of the diacetate of lead, two drachms to ℥vi of either fluid. When expense is not an object half an ounce of glycerine should be added, as from its faculty of retaining moisture it powerfully aids the purpose which lotions are intended to serve.\* When there is a large weeping surface, particularly in children, or of long standing in adults, the reader may try Dr. Hughes Bennett's plan.† It consists in applying a solution of carbonate of soda, half a drachm to a drachm in eight to ten ounces of water, by means of a piece of lint soaked in the liquid and laid upon the part affected. The lint must be covered with thin gutta-percha or oiled silk, to prevent its getting dry, or else the management of the affair must be entrusted to the care of some person who will see that the lint is kept moist, for which purpose it should be sprinkled continuously with cold water, the lotion being only occasionally applied. If this plan be properly carried out, if the linen be kept wet all day long, and still more if this can be effected day and night, the effects are often marvellous ; but if it get dry, the soda speedily irritates the surface. The addition, however, of glycerine, half an ounce to eight ounces of fluid, will mitigate this to a certain extent, but nothing compensates for want of attention. Dr. Wallace has reported‡ some cases in which the beneficial results of this plan were very marked. My experience of it is that, though it gives great relief, yet it has very little curative power ; that it is only suitable for a large wet surface, and that it is apt in eczema of the head to give a bad cold.

In chronic eczema, a lead lotion—the same as above—can be used. In many cases, where the surface is very irritable, it answers best when gently warmed previously. So soon as the discharge and in-

- \* R. Bismuthi subnitratis ℥ss.  
Glycerinæ ℥ss.  
Spiritus lavandulæ ℥iij.  
Aquæ flor. sambuci ℥vij.   ℥ ft. lotio.
- R. Liq. plumbi subacetatis ℥ij.  
Spiritus rectificati ℥iij.  
Glycerinæ ℥iv.  
Mist. camph. ℥v.   ℥ ft. lotio.

When the soluble essence of camphor can be procured, it may be substituted for the rectified spirit.

† *Lancet*, 1863, vol. ii. p. 259.

‡ *Ibid.*

Inflammation are checked, zinc ointment forms an admirable dressing. It should be gently melted down, or rubbed down with an eighth part of spirit of camphor, and smeared like thin cream on the part. All surfaces to which ointment is applied should also be covered with old linen. When once ointments are begun with no more watery applications should be used, nor should the part be washed, except when the eczema is seated on the head and is discharging freely, as happens sometimes, especially in children, or when it is seated in parts where washing cannot always be avoided, as the hands, face, &c. At such times the discharge, when the eczema assails the head, is sometimes retained under the crusts, or the hair gets matted with it. Here it is very useful to poultice the crusts with mashed turnip or bread and water, till they are thoroughly softened, and then remove them by very gentle washing with hot water and yolk of egg, or, what I prefer to anything else, the St. John's Hospital soap. Mashed turnip is the best poultice I know of; it possesses the great advantage of rapidly removing any unpleasant smell. In some cases a weak lotion of chloride of zinc, a grain to an ounce, with the addition of half a drachm of mucilage, is a very valuable application to the head: it is only here that I have found chloride of zinc useful. But for the entire removal of eczema *in the dry stage*, especially if obstinate, we must turn to a more potent remedy, one of the nitrates of mercury. I have never seen the oxide of zinc ointment, even that prepared by Messrs. Bell, of Oxford Street, really cure this disease when severe, and I have repeatedly treated in the same patient one patch of eczema with the dilute nitrate of mercury and one with the oxide of zinc, the result being invariably most decidedly in favour of the former; I have also made similar trials with the ointment of the nitric oxide with the same result. Indeed, in my hands the yellow nitrate, diluted, has proved superior to any application I have seen tried. Two or three years ago I showed several surgeons the effects of its action compared with those of chloride of zinc, as recommended by Dr. McCall Anderson, and the zinc ointment. Three patches were selected on the same patient, pretty nearly of the same size and in the same stage. One was treated only with the solution of the chloride, one with the zinc ointment, and one with dilute citrine ointment. At the end of a few days it was manifest to every one that the action of the nitrate was superior to that of the zinc ointment,



and this again to the action of the chloride; and by the time that the patch treated with the nitrate was healed, that to which the zinc ointment had been applied was much better, while that treated with the solution might be roughly computed, so far as such computations hold good, at only halfway towards a cure. These applications were now abandoned, and the diluted nitrate was alone resorted to, under the influence of which the progress of the two remaining patches was soon visibly accelerated.

But if the application is to be useful, it is indispensable that it should be properly made up and properly employed. In the first place, pure, well-made nitrate of mercury ointment only should be selected. A great deal of that which is generally used is totally worthless, being dry, dirty green, and rancid, spoiling almost as soon as it is made; whereas, when properly prepared, it retains its bright yellow colour for months. The dilute ointment should only be prepared when it is wanted, and the best plan is simply *for the patient to rub it down with a little sweet-almond oil till it is of the consistence of cream*, and always to throw away what is left. If the eruption be seated on the head in children, the hair should be cut off and the ointment applied night and morning; a linen cap should also be worn day and night. But grown persons cannot or will not submit to this; the hair should therefore be parted, any crusts gently detached, and the ointment rubbed carefully but not roughly in, the cap being worn at night only. Should the hands be affected, soft leather gloves, with the tips of the fingers cut off, should be worn during the night, and if possible, the day also. Where there is very little hair, and the eruption is only slight, the ammoniated mercury ointment of the British Pharmacopœia may be tried: it is one of the cleanliest and least offensive preparations that we possess, but in point of efficiency I would place it decidedly below the nitrate ointment. Some persons with a strong tendency to eczema, or after the cure of the worst part of their complaint, suffer a good deal from a chapped, red, and tender state of the skin. Cold cream is often very useful in relieving this. A powder composed of equal parts of rice powder or American corn flour and oxide of zinc with camphor, dusted over the face during the daytime, especially when the patient is going into cold east winds, is also of great service. Whatever theoretical objections may be made, ointments cannot be too sedulously employed in eczema, even during the day and when the eruption is seated on the face

and hands. When the hair is falling from eczema, I know of no remedy so effectual as cutting it quite short, and blistering the skin, as for alopekia. With regard to the itching, I never yet saw any remedy materially affect it. The cure of the itching is the cure of the disease. The same statement holds good of another disagreeable but rare symptom,—a kind of neuralgia or rheumatism of the skin, sometimes seen in eczematous patients. Mr. Wilson says he has found no remedy for it equal to a solution of nitrate of silver, a grain in an ounce of spirit of nitric ether.

Dr. McCall Anderson seems to think that the lard is the chief agent in the benefit said to be effected by mercurial ointments. It happens that I not only have subjected, but am every day subjecting this doctrine to a test; for it is a constant practice with me to prescribe at the same time pure lard and ointment of the nitrate of mercury, the former to be used when the nitrate sets up much irritation, and I have repeatedly had occasion to satisfy myself that the ointment is much more powerful than the lard.

There is one form of eczema which is peculiarly refractory,—viz., *eczema siccum* of the hands. It is seated on the palms of the hands, and both palmar and dorsal surfaces of the distal phalanges, which are fissured deeply and extensively. The skin often looks as if pieces had been chipped or torn out. Sometimes a small patch on the palm of the hand discharges for a time, especially in workmen when fretted by the continual pressure of the tools they use; more frequently it is only red, tender, stiff, and partly deprived of cuticle. It is often seen in those who have to handle a good deal of cloth, and is widely different from the grocer's itch, which attacks the backs of the knuckles, hands, and wrist, often discharges serum, is occasionally complicated with impetigo, and is easily curable. The treatment which has succeeded best in my hands is to give a course of steel and arsenic for some time, to steep the part all night by means of a piece of wet lint wrapped round it, and over this a sponge-bag, with a cloth tied over the bag again, and to rub in the ointment of the red iodide of mercury of the British Pharmacopœia, with at least eight or ten grains of veratria to the ounce, raising the quantity of the iodide, if the patient can bear it, till a drachm to an ounce is reached. These are the only remedies I have ever seen effectual. Mr. Gay, I believe, has used the decoction of hellebore for this affection with

great success. He directs it to be strongly rubbed in, and uses no particular general treatment.\*

This is the only form of eczema in which water-dressings, especially when covered with oiled silk or other waterproof materials, are not decidedly injurious. Indeed, a skilful application of this method will not unfrequently develop an eczema where there was none; as for instance, round a small ulcer or boil.

Eczema siccum, when it fastens on the tips of the fingers and palm of the hand, is often a very serious affair for those who have to gain their living by manual labour. I have had many patients under my care whose earnings had been materially diminished from this cause. One patient, a seamstress, forty-four years old, had, in the course of ten years unbroken suffering from this affection, been at last brought to such a state that she was incapacitated from following her employment. This woman had been at five hospitals and under different medical practitioners. I have reason to think she gave their treatment a fair trial, as she was so extremely regular in her attendance at St. John's. The measures I adopted were of very little service. I was not at that time acquainted with the value of the acid solution of iron and the biniodide of mercury ointment; but two or three other forms of mercury in ointment failed, as did the biniodide internally, arsenic, &c. The caustic potass solution, as recommended by Hebra, was tried, but no good resulted from it. The acid nitrate of mercury seemed to do some good, but after the second application I lost sight of the patient. The remedies that would have answered best are undoubtedly the acid solution of iron, followed by arsenic or bichloride of mercury in pills, with the biniodide of mercury ointment of the Pharmacopœia and veratrine. The biniodide of mercury in pills sometimes acts very well in eczema siccum of the lips, especially if free use be at the same time made of the compound senna mixture, so as to keep the bowels rather loose.

Patients suffering from eczema should never wash in cold water; on the contrary, I think they cannot use it too hot. If expense be no object, a sixteenth to an eighth part of glycerine should be added

\* Mr. Gay's prescription is—

R. Hellebori rad. ℥ij.  
 Aquæ bullient. ℥j.  
 Coque ad ℥viij et adde  
 Eau de Cologne ℥ij. m ft. lotio.

to the water. When the surface is too tender to bear even this, I would recommend a decoction of linseed. The uncrushed seed only should be used: four or five tablespoonfuls are put into a quart of water, and boiled down to a pint. The fluid is then strained, and used hot. Thin gruel boiled for quite twenty minutes is also very useful; it seems to soothe the irritation in the skin when nothing else is tolerated.

Soaps should, I think, with one exception, be abolished. As a rule, the best kinds are imperfect and contain free alkali. When the soap is dissolved in the water still more alkali is set free, and this acts on the acid fats in the cutaneous secretions. Bad common soaps and the trash generally sold as toilet soaps are still worse; they are made of the coarsest kinds of fat and contain a larger proportion of alkali. In proof of this it may be stated that they are sold much cheaper, even scented, than pure soap, without the addition of such an expensive ingredient, can be procured direct from the soap-boiler. All the golden, aniline, red soaps, &c., owe their colouring to some noxious or useless ingredient. Most of the foreign soaps are still worse than the worst english ones, as, in consequence of their being made by what is called the cold process, much more alkali is required to fix the oil. The soaps sold as glycerine, sunflower-oil, &c., are simply in most cases impositions. Price's solidified glycerine contains a large amount of pure glycerine; a very excellent glycerine soap is also made by Messrs. Bell, and no doubt a pure article of this kind can generally be procured from any large chemist; but I have been assured on undoubted authority that whole tons of soap are sold, bearing, according to the demand in the market, the name of glycerine soap, or sunflower-oil soap, and coloured according to the taste of the day, which do not contain a drop of the liquids from which they take their names. Most of the medicated soaps, if strong enough to have any effect at all, set up such irritation in some persons that they cannot be borne. I have heard in especial several persons complain most bitterly of the suffering they endured from the use of juniper-tar soap.

The one exception I have mentioned is the transparent soap made by Messrs. Pears originally for St. John's Hospital, and since that time for at least two other hospitals. It is, after boiling, thoroughly dissolved in alcohol, precipitated and made up again. It consists of pure oil and the lowest necessary amount of alkali. It contains no scent and no medical ingredient whatever, and thus

produces, perhaps, less irritation in the skin than any known substance of the kind.

It is almost time the authorities agreed on some of these points. Mr. Startin denounces soap,\* substituting paste made of oatmeal, or gruel made of bran, oatmeal, linseed-meal, arrow-root, or starch; or he prescribes warm milk-and-water, or yolk of egg and water. Mr. Wilson, on the other hand, is such an advocate for soap that he thinks there can hardly be too much of it: when it sets up irritation, the fault lies not with the soap but with the skin; if the skin will not bear soap it must be trained to do so. He recommends,† almost indiscriminately, the better kinds of glycerine soap, Carrick's elder-flower soap and Groux's turtle-oil soap. The latter, I believe, is no longer made, not having proved remunerative. Glycerine soap is, I believe, useful, in so far as it does no harm; but I have invariably found yellow soap irritate the skin in eczema, however useful it may be in health.

The preparations of tar, such as those from juniper tar, the russian birch tar, creosote, &c., form so important a group as to merit a notice by themselves. I have had little experience of juniper tar, but both the others appeared to me inert. I never saw creosote do any good, and I know that others have noticed the same thing. Perhaps Mr. Nayler's statement,‡ that there is a wide difference between the ordinary creosote prepared from wood and the german creosote obtained from coal tar, which is almost identical with carbolic acid, may account for some of the discrepancies in the results. The russian tar produced no effect except sometimes in the dry stage, whereas in lepra it is often very useful.

Baths, hot or cold, simple or medicated, saline or chalybeate, turkish or russian, are one and all useless or injurious in eczema; more generally the latter.§ Sheridan is said to have remarked that man is not altogether an amphibious animal, and certainly eczema does not prove him to be one. In fact it is one of the complaints in which the human skin will not bear much steaming of any kind. Dr. Ross says that in weakly persons suffering from lichen, he has seen a fresh crop of pustules break out after each warm bath, and I have observed the same thing in eczema;

\* *Medical Times*, 1858, vol. ii. p. 245.

† *Healthy Skin*, sixth edition, p. 162.

‡ *Treatise on Diseases of the Skin*.

§ *Journal of Cutaneous Medicine*, vol. i. p. 67.

Dr. Lorry has noticed it in prurigo.\* Vapour-baths of dry air and sulphur-baths proved still more injurious than the others. Still there is no denying that baths with linseed, gelatine, quince-seed mucilage, glycerine and starch seem to have been very useful in the hands of Mr. Startin, some of the physicians at St. Louis and other writers. Some of the continental surgeons make great use of baths, sometimes employing various kinds in conjunction; for instance, M. Bazin† uses starch and sulphur or alkaline baths at the same time, prescribing along with them a vapour-bath occasionally. M. Hardy also uses baths in eczema,‡ as does Hebra.

There is one way in which the sulphur-bath may be occasionally very useful, and that is, as a rude means of diagnosis. The papular or pruriginous form of eczema is, like impetigo about the hands and feet, only to be discriminated with great difficulty from scabies; there is little to rely on except the presence of the insect and the history of the infection. The latter is often obscure, and the detection of the acarus is difficult enough to those not versed in such vexed matters, and not very easy to the most experienced. Eruptions on the mammæ in women, especially those who are suckling and have infected children, on the insides of the thighs, lower part of the belly, and the knuckles in adults, and on the breech in infants are, of course, suspicious, but they are not pathognomonic signs. Now, a few sulphur-baths generally do a great deal of good in eczema *really* resulting from scabies—for this is sometimes a complication and not a cause—whereas in eczema proper, they are useless or set up irritation, which, however, disappears promptly when they are left off.

Mr. Alfred Pullar has given§ a short but very clear account of a mode of treating eczema by means of an impermeable dressing, which seems to answer very well in some cases of eczema of the limbs in old people. It was first brought into notice at St. Louis by M. Hardy, and consists in covering the parts completely with vulcanized india-rubber cloth, made of ordinary cotton cloth overlaid with a solution of caoutchouc and subsequently vulcanized. Hebra, who has tried the plan, had stockings, gloves, caps, &c., made of this cloth for his patients, and found it answer very well.

\* Bateman's *Synopsis*, p. 16.

† *Affections cutanées*, p. 311.

‡ *Leçons sur les Maladies de la Peau*, p. 77.

§ *Journal of Cutaneous Medicine*, vol. iii. p. 41.

After a covering of this kind has been kept for a few hours on a patch of eczema, the surface appears quite wet, and the fluid, which collects on the skin in considerable quantity, emits a very penetrating odour. The application is not uncomfortable, inducing neither heat nor itching, and when sufficiently long continued, seems to have the effect of gradually removing all the symptoms. Some cases are mentioned by McCall Anderson, in which old-standing eczema was promptly and thoroughly relieved by the use of these impermeable dressings.

*Exercise.*—After counselling the patient to protect the skin as much as possible from the air, it may seem a contradiction to recommend plenty of out-of-door exercise ; but trial will show that they are quite compatible. All things that irritate the skin should be kept from it, and the air does irritate it. The most successful local treatment seems to be that which most effectually wards off the air, and I suspect that the efficacy of the nitrate of mercury ointment is due, not to any curative power it possesses, but to the fact that the nitric acid combines with the albumen of the serum and epidermis so as to form a crust almost impermeable to the atmosphere. Too much light is almost as injurious, and I have often traced relapses to long exposure to the sun, or to the east winds in very bright days. Indeed, in some very severe cases, and until a certain progress has been made towards recovery, the best plan would probably be to shut patients up in a dark room. But cases which require such stringent measures are exceptions, and in general the patient is all the better for plenty of fresh air and exercise. As a rule, I have no faith in any system of treatment which compels people to stay in the house. M. Rayer says \* that he has met with “several cases of eczema, in which a vast variety of therapeutic agents had been fruitlessly employed whilst the patients went on with their usual occupations and took active exercise, but which were successfully attacked by the same means from the moment these individuals consented to lay themselves up.” This may now and then happen with patients who are unable to procure a sufficient supply of wholesome food ; who sleep in close, overcrowded, stinking bedrooms ; who have to stand a great deal, and to face all weathers, or who lead a very hard, anxious, or wearing life ; but I have never seen an instance in which I could fairly trace the incurability of eczema to such causes as exercise only.

\* *A Therapeutical and Practical Treatise, &c.* By P. Rayer, M.D., p. 302.

Again, great exhaustion may militate against the patient taking much exercise, especially in the shape of walking, which is not a desirable method when there is any great weakness, or when it is carried to the extent of inducing fatigue. Apart from these exceptions, I always advise as much of it as the patient can get, especially in the shape of boating, cricketing, riding, &c.

*Diet.*—As to diet, all that ever I have observed points to one conclusion, namely, that eczema is another word for exhaustion. It occurs to a great extent among those who work too much and use an innutritious diet, or in whom mal-assimilation is going on. In some persons it seems to be almost a necessary result of an improper mode of living and overtaxed energy. Great anxiety, which is so potent and prevalent an agent in the development of this malady, almost certainly entails some degree of exhaustion. I have often found that patients suffering from eczema, as indeed from many other forms of exhaustion, either owing to want of appetite for plain wholesome food, or to want of means, go day after day without dining; living on tea or coffee and bread and butter, or bacon, bloaters, sausages, or something of that kind, “as a relish.” One of the worst cases of eczema I ever saw was in a gentleman, who boasted that he never dined. He took six or seven cups a day of strong coffee and the sort of diet I have just mentioned. Long before he was rid of his tormentor he was quite satisfied that he had been making a mistake. In some few cases this complaint may be brought out or kept up by the over free use of stimulants; but it prevails very extensively among temperate persons and total abstainers; and in children, among whom it is seen to such an extent, stimulants can have nothing to do with its appearance. Occasionally it seems to come on from want of fresh vegetables, and wears much the appearance of scurvy (for which it is frequently mistaken by patients), being marked by great loss of strength, soft, spongy state of the gums, indented tongue, foul breath, tendency to bleeding from the mucous membranes, costiveness, coldness, and coarse muddy look of the face, often with great dejection of the spirits.

I have always found that a good plain diet, containing a fair amount of meat, say half a pound a day for an adult, with a large proportion of fat, an item only too often omitted or objected to by patients, with plenty of well-boiled vegetables, fat ham, or bacon and eggs daily for breakfast, and some good red wine, was most suited



for eczematous persons. The patient should eat only brown or household bread, the white bread commonly sold containing scarcely any nutrient matter. Fat bacon fried, boiled eggs, and brown bread form perhaps the most nourishing and digestible diet that can be put upon the table. After numerous trials, in which I have been very kindly assisted, I am disposed to say, with very little if any qualification, that in eczema red wine is much superior to any kind of beer or spirits, and that the best kinds I have tried are tarragona and claret. As in pityriasis, the latter answers very well in extremely hot weather. A grown person suffering from eczema may take at least three to four glasses of tarragona a day ; and even children bear a glass daily very well, particularly if made into negus. When the weather is neither very hot nor very cold, two glasses of tarragona and four of claret mixed together make a very useful and pleasant substitute for either separately. In women who are suckling stout may sometimes be given, but it never answers so well. When the scorbutic symptoms just spoken of are prevalent, pure lemon-juice becomes invaluable ; and it is a singular fact that no remedy which I have tried relieves the sensibility to cold, often noticed in eczema, so quickly as lemon-juice ; but only the freshly-squeezed juice should be employed ; that sold in the bottle by fruiterers and confectioners cannot be relied on. The same effect from lemon-juice has been noticed in the cold stage of ague.

From starving, bleeding, and purging, men have gone to the other extreme. Fat meat, cod-liver oil, bran biscuits, five or six glasses of wine daily, stout to dinner, rum-and-milk first thing in the morning, hot milk and beef tea between breakfast and lunch, and even food during the night, are now given to patients who a few years since would have been restricted to gruel and tea, dry toast and barley-water, with about as much solid food as would just keep a baby alive ; a diet much more calculated to hasten the passage of the spirit to another world than to support the frame under the devastating action of calomel, antimony, and black draught ; bleeding and leeches. In skin diseases, at any rate, extremes meet, and at a point where they do mischief ; the high feeding of the present day is as hurtful as starvation was. It might in rare cases be put in requisition for a few days, with the view of relieving great exhaustion, but as a system it does not answer. Too much animal food is especially injurious in eczema. We do not know very much about the action of food, but this much is well known ; for it is an established fact,

that however good may be the meat on which soldiers and sailors are fed, if they have too much of it and too little vegetables, they get into a state of purpura, frequently accompanied by eczema and certainly close akin to it ; both blood and tissues being in such a state that a slight blow will blacken a whole limb. In training for prize-fights the men are put on a diet composed almost exclusively of bread and meat, and for a time seem to get into extremely high health on it ; but in a very well-informed paper (*All the Year Round*) it was stated, some few years ago, that the health of a great number of these men very rapidly breaks down after a few trainings, and that an unusual proportion of them are cut off by dropsy and consumption, to an extent which the supposed looseness of their lives will not altogether account for. On the other hand, the better the feeding, so long as it is well digested, the healthier the skin : starvation makes it coarse, flabby, and offensive to the smell. Hufeland mentions \* that a lunatic, who wanted to starve himself to death, exhaled a most noisome smell from his skin so soon as the starvation began to tell upon his health. To a certain extent I can confirm this. Not only have I observed that the skin is upon the whole more offensive in the underfed, even when cleanly, but I have notes of six or seven cases where, to my surprise, I had remarked that persons whom I had known in better circumstances, and in whom I had then never noticed it, had acquired during poverty a very unmistakable odour. At the same time, I cannot say that these observations are sufficiently complete to warrant me in drawing any particular conclusions. They point to some fact, but nothing more.

In acute eczema, or very sudden and severe relapses, a light diet, such as chicken, rabbit, ham, veal broth, with fish, as soles and whiting for instance, and farinaceous diet, is often advisable for a few days. Again, I have often seen people worse after indulging too freely in pork, curries, or strong soup, and patients themselves frequently notice the fact.

Mr. Wilson does not fear any ill effects from the use of salt meats ; he thinks it bad reasoning to argue that, because soldiers and sailors suffer from scurvy owing to their being fed so much on junk, therefore our salt meats, which are fresh and sweet compared with junk, are likely to bring on scurvy. A monotonous diet he thinks injurious, as does Mr. Hunt, who holds that so long as

\* Hufeland's *Art of Prolonging Life*, edited by Erasmus Wilson, second edition, p. 29.

there is plenty of change it is of little moment what people eat, and that half the skin diseases under which children at boarding schools suffer, owe their existence to the sickening monotony of the food and the restraint. As a change, salt meat occasionally, especially such salt meat as good fat bacon or boiled ham, can do no harm, at least I never saw any; but the frequent use of meat out of which the juice has soaked, and the fibre of which has perished and become saturated with salt and nitrate of potass, cannot fail to be productive of mischief. The patient just spoken of took no meat except of this kind. Mr. Wilson also looks with little favour upon salads, potatoes, and watercresses; salads he thinks are only made tolerable by adding the oil to them, and watercresses have merely their pungency to redeem them. On the other hand, Dr. Edward Smith\* and Sir Thomas Watson consider potatoes as a very valuable article of diet.

It must be obvious too that if all substances are to be expunged from our diet because they do not evidently contain nutriment, we should have to reject salt, which is one of the necessaries of life, and tea, coffee, pepper, and many other things which common experience has agreed to look upon in the same light. Moreover the positive craving felt by sailors for food of this kind, when they have been on a long voyage where none could be obtained, shows that the almost universal taste for such things as watercresses, salad, &c., is founded on a want felt by the system—the prompting of an instinct likely to be quite as sure a guide as the ponderings of a philosopher.

I am strongly inclined to agree with what Mr. Hunt says in the former part of the preceding paragraph, though I quite dissent from his view as to diet having no influence over eczema. Boarding schools, as a rule, all deteriorate the health; but I think it is of great consequence what people eat when suffering from this complaint, and that very few can be trusted to exercise their own discretion. There is a proverb which says that at thirty every man is a fool or a physician. The wide-spread acceptance of this adage shows how much men like to be relieved from the trouble of thinking. As often happens in such cases, a very thin husk of truth conceals a mass of absurdity. It is true that at thirty a great many men are fools; Carlyle says this is the case with most of us. Again, it is true that at thirty a few men are physicians, that is to say, in the true sense of the word; but a man has only to cast his eyes about,

\* *British and Foreign Medico-Chirurgical Review*, 1865, vol. ii. p. 103.

and he will see that the majority of mankind are neither the one nor the other. The proverb, however, is generally supposed to mean that at thirty every man who is not a born fool knows what is best for him in the way of diet, exercise, baths, &c. Admitting that a few men, who have contrived to ruin their digestion at that early age, or who have naturally a very weak stomach, or are extremely fastidious, are aware that certain things will agree or disagree with them, it is yet quite certain that they know nothing of what is best suited to repair the waste going on in disease. The best authorities are so completely at variance here, that anything like certainty is quite out of the question, and we have only crude observations and convictions to rely upon. As to baths, &c., men have been in general so little able to judge rightly, that nearly every improvement in this direction, as in ventilation, drainage, &c., has been forced upon them by medical men; and with regard to exercise, the form in which it is taken by nine persons out of ten is absolutely injurious in such exhausting diseases as eczema.

Hebra doubts altogether the power of diet as a cause of eczema; he has seen it amongst the most regular-living people using the most rational diet, while others, committing every excess, never showed a sign of it. Equally does he object to the idea that the seasons, such as the spring time and fall, have any influence in causing its outbreak, and that the cold of winter and great heat in summer cause more attacks than the times of the equinoxes. The first of these views may be met by this question—Do errors of diet tend to cause outbreaks of eczema in those predisposed to the complaint? *to which I think a decisive answer in the affirmative may be given.*

For young children the best kind of food appears to be a farinaceous diet, with plenty of milk, and a fair amount of fresh meat. Their taste for sherbet and whey, shell-fish, sweets, and green fruit should be kept in check. Cod-liver oil is an excellent article of diet for most children suffering from eczema, especially during the winter months. Too much animal food, however, especially lean meat, is almost always injurious here, as indeed it is generally for young subjects. "I have certainly," says Dr. Henry Bennett, "throughout my professional career remarked, as already observed, that meat-fed children, and great meat-eaters are not stronger than other people. With children, indeed, it is the reverse. The children whom I have attended, who have lived on meat,

eating it three times a day—certainly not by my advice—have not proved as strong nor as healthy as those who lived on a more mixed dietary ;” experience which will, I think, be borne out by every observing physician. Pale brandy may be given to children when they are suffering greatly from exhaustion ; but to be of any service must be administered in tolerably large quantities.

One thing ought never to be omitted in respect to the diet of children, and indeed of adults too, and that is, to supply them with good bread ; by which I do not mean fine and white bread, but that which contains, in addition to the starch, certain necessary elements of nutrition—the gluten, cerealine, and phosphates. A great deal of the stuff sold as white bread, especially that made with what is called cones flour, is simply a bad kind of starch and yields little more nourishment than as much sawdust. Instead of being adequate to support life, it is doubtful if it can effect any purpose beyond distending the stomach and diluting more concentrated food : in this way it may have its use. Pure brown bread, properly made, is much superior in nutritive power ; but in order to save trouble, bakers often prepare it by throwing so much bran into the “sponge” of the ordinary white bread. The consequence is, that when new it lies too heavy on the stomach of a delicate child, and if kept for a day or two, even in a covered pan, gets so dry and hard that children cannot be induced to eat it. Irrespective of this, the coarse particles of the bran frequently irritate the bowels in children and even in many grown persons. Patients with a strong constitutional tendency to rosacea are very apt to suffer in this way. Bread, however, prepared with the flour made by Messrs. Orlando Jones, the proprietors of Chapman’s patent, is free from this objection. Mr. Squire states that this flour contains a considerable amount of phosphates more than can by the same process be obtained from ordinary wheat flour, and also more gluten, probably derived from the finely ground bran which is mixed with it. Mr. Attfield fixes the proportions at 14.1 of gluten and 1.62 of phosphates (ash), while the same preparation, sold roasted, is even richer in these bodies. It also contains the cerealine which adheres to the inner surface of the bran and is entirely lost in the ordinary process. I have long been in the habit of recommending patients to make their own bread, first of all boiling the bran for quite twenty minutes in water and then using this decoction to make the bread with. The deficiency of cerealine, for which this process was intended to compensate, being,

however, now supplied by Chapman's invention, I have for some time substituted his flour, especially as it is extremely difficult to get people to make their own bread at home though they commit a great mistake in neglecting to do so. So far it has answered extremely well. The bread made from it resembles the "bolted bread" used in the north-west of England and the brown bread of the north-eastern counties, on which some of the finest and healthiest peasantry and farmers in the world are reared. Children generally take to it very well. When they do not I find that a mixture of equal parts of the flour used for good brown bread and the entire wheat flour makes a very good stepping-stone—an intermediate stage which reconciles them gradually to the use of the entire wheat bread. Grown persons make no objection about beginning, and when they have once begun, soon acquire such a taste for it that many of them never like any other kind so well. It does not, however, find favour with some of the bakers, and naturally enough ; as a pound of it contains about as much nourishment as a pound and a half to two pounds of common bread, an extensive use of it would materially interfere with their profits.

This flour, as has been shown, contains a large amount of phosphates in a natural form, and to this fact some portion of its value may possibly be due. It is not a subject on which I feel at liberty to speak with any degree of authority, but from observation I am strongly disposed to consider the importance of these salts as overrated. Certainly, artificially made and given, they appeared to me inert, and I have seen no evidence that their administration benefits the health in any way, *unless when combined with means which often suffice to effect such a change even when phosphates are not given* ; while it is certain that some children grow up strong enough on diet which is assumed to bring on in others a state requiring the use of phosphates. Observation has shown me over and over again that there is every reason to think, that to whatever extent the material wanting to the system is thrown into the stomach, no more is taken up than previously until some improvement in the health ensues ; whereas, under purgatives, brandy, wine, cod-liver oil, *et similia*, which do not contain the wanting element, the very object sought to be attained by giving the phosphates ensues to as great an extent as I believe it can under any system of medication ; that is to say, children get stouter, stronger, and healthier, and this on such various kinds of diet that it seems

as if any sort of food used in this country yielded sufficient phosphates for the restoration and preservation of health, if only the digestion and assimilation be first of all set right. To administer these salts then, in excess, seems to me a step negatived by reason and not sanctioned by experience; indeed such treatment appears to be founded on the theory that certain effects ought to follow, *not on observation of results which have followed* the administration of certain substances, the only base on which any system of therapeutics can rest.

The greatest attention should be paid to the diet of infants. In the *Medical Times and Gazette* for 1867 there is a very well-written article on this subject, and the different addresses are given where the best varieties of infant's food can be procured. The writer's bias seems clearly to be towards Liebig's food, prepared, however, in a better way than at first recommended. My own experience would lead me to look upon it as superior to any other kind of infant's food; but it is difficult to prepare, and mothers must be warned that remissness on this head will ruin everything.

But there is one article of diet for these little folks, when suffering from bad eczema, syphilis, or severe scabies, which I give to an extent that will probably excite scepticism when I announce it. I am quite prepared for this, having repeatedly noticed the surprise and incredulity which the statement almost always elicits. However, it is a question of fact, not of credibility. The article I allude to is pale brandy, and the amount given is four, five, and even six tablespoonfuls a day to children under a year old. One or two tablespoonfuls mixed with a little warm water, and a small quantity of sugar, may be given the first day, and the quantity be gradually increased. The brandy should always be given after a meal, and the quantity administered during the day should be divided into equal portions for each dose; for instance, should six tablespoonfuls be given, and the child have the breast or food eight times within the twenty-four hours, about two-thirds of a tablespoonful should be given after each time of feeding.

It is surprising how very well young children thrive upon this system. Mothers who were quite horrified at the idea of giving even a teaspoonful of brandy to a baby, have become so convinced of the benefit the children derived from it that they were only too solicitous to continue the treatment. Several have said that under its influence the children have recovered, quite against their

expectation. The quantity is large, I admit; but small quantities, such as a teaspoonful, have never appeared to me of any service whatever. It is absolutely necessary to use pure cognac; even a small quantity of grain spirit will often make a child quite ill. I therefore wish to be distinctly understood on this point. I do not say that brandy is suited to such cases, but that pure pale grape brandy is.

When that cannot be procured, the best beetroot brandy, which is now made by some distillers with great skill, being indeed so exceedingly well flavoured that it can scarcely be distinguished from genuine brandy, may be used instead, but I have no hesitation in saying, that good as it is, the superiority of genuine cognac still remains established.

Such are the remarks I have to make with regard to the leading forms of eczematous disorders. The varieties offer nothing to detain us. Those like eczema solare, I consider to be simply blistering from heat, and therefore requiring little beyond a mild febrifuge or aperient and cold cream, or a soothing lotion of bismuth or lead.

The mode in which Mr. Startin's principles of treatment were given to the public does not enable one to reproduce his opinions upon individual remedies, or even a particular course of treatment, so much as it does upon the mode in which certain special cases are to be treated. I have, therefore, selected some cases from his lectures, published in the *Medical Times*,\* and endeavoured to give as brief and accurate an analysis of them as I could. It may be stated, however, in general terms, that Mr. Startin's treatment of eczema is much the same as that for impetigo, and which the reader will find in the section devoted to that complaint, and that he relies very much on baths, using vapour baths, daily tepid ablutions with yolk of egg, mucilage or bran water; he places great confidence in the bisulphuret of mercury in ointment, and for children, when there is great irritation, a mixture of Goulard's liquor and cream.

Case 1. Eczema solare. Purge with calomel. Iodide of potassium gr. iv., liq. potassæ m. xx.; ter die sum.; vapour baths, lotion of borate of soda used tepid; ointment of bisulphuret of mercury. Cure in less than three weeks.

Case 2. Eczema rubrum in a man seventy-two years old. Wash

\* Vol. xiii. pp. 449 and 489.



with warm linseed tea, after which an ointment composed of mercurial ointment diluted, and creosote ; mucilaginous bath once or twice a week ; one-sixth of a grain of bichloride of mercury internally. Relapse : iodide of potassium, purge with infusion of senna, opiate at bedtime, lotion of trisnitrate of bismuth warm twice a day, afterwards a small quantity of liquor arsenicalis. Cure.

Case 3. Eczema rubrum complicated with hepatic derangement in a woman aged forty-four. A quarter of a grain of bichloride of mercury with ten drops of laudanum three times a day. Bathe daily with yolk of egg and tepid water ; wash off this, and apply ointment of bisulphuret of mercury ʒ to ʒi. ; after this, trisnitrate of bismuth suspended in water by means of glycerine ; aperient chalybeate in bitter infusion ; vapour bath once or twice a week. Cure in less than five weeks.

Case 4. Chronic eczema rubrum in a strumous lad of sixteen. Liquor potassæ in large doses, with five-minim doses of tincture of iodine, to be taken three times a day ; a twentieth of a grain of arseniate of potash at bedtime ; biniodide of mercury ointment, a scruple to an ounce, at night ; weak saline bath containing a few grains of iodide\* once a week. Afterwards, biniodide of mercury in solution internally and creosote ointment. Cure in forty-two days.

Case 5. Chronic eczema rubrum in a female aged forty-three ; a very aggravated form of the disease, the skin being almost like the shell of a boiled lobster. Daily baths of linseed mucilage, ablutions with yolk of egg in water, trisnitrate of bismuth and bichloride of mercury in lotion ; internal use of bichloride of mercury with opium. Restoration to perfect health in a month. Chalybeate waters and bitters. Remained well.

Case 6. Impetiginous eczema in a woman. An emetic for disorder of the stomach caused by overfeeding, followed by iodide of potassium in infusion of senna, with weak ointment of bisulphuret of mercury and creosote ; warm baths. Large doses of liquor potassæ, with four-minim doses of liquor arsenicalis. Nearly well in thirty-five days

Case 7.† Eczema in a child two years old. Six-ounce mixture, containing one ounce of the iodide of potass mixture of this hospital and five ounces of water ; a teaspoonful three times a day ; wash with yolk of egg and water, and rub in nitric oxide of mercury ointment.

\* I presume iodine is meant here. † *Medical Times*, 1858, vol. ii. p. 245.

Rapid improvement is said to have ensued in this case, which belongs to a much later date than the others, and is selected by the reporter as a specimen of the treatment generally adopted at the Blackfriars Hospital, but the subsequent progress of it is not mentioned. The iodide of potass mixture consists of a drachm of iodine, an ounce of liquor potassæ, and a pint of distilled water. The ointment is made with two ounces of lard, two ounces of olive oil, a drachm of powdered nitric oxide of mercury, half a scruple of oil of bitter almonds, and a drachm of glycerine.

Mr. Wilson treats eczema with strengthening medicines and arsenic. Steel is his principal tonic; next to it, but subordinate, is the nitro-muriatic acid in bitter infusion.\* Arsenic he employs in all the usual forms, except that of Donovan's solution, against which he cautions his readers.† Purging he seems resolutely to avoid, especially in the case of children, for whom he only prescribes the most gentle aperients, such as magnesia, rhubarb, and manna. He considers no external applications necessary beyond the benzoated oxide of zinc ointment, which is suitable alike to all stages of the complaint. A part affected with eczema should never be washed. To relieve the itching he orders emulsion of almonds with hydrocyanic acid,‡ or a spirit and borax lotion,§ or some preparation of tar;|| but he holds lotions to be objectionable, as, unless they contain oil or glycerine, they are apt to leave behind them a certain

\* He does not give the formula or doses in his last work on these diseases, but I believe the following represents one of his favourite prescriptions:—

R. Acidi nitrici diluti,  
— hydrochlorici dil., aa. ʒij.  
Infus. quassiaë ʒxix. ℥.

Capiat cochlear. ampl. duo bis terve quotidie.

† The formula for the ferro-arsenical mixture will be found at p. 33.

‡ R. Acidi hydrocyan. diluti ʒij.  
Spiritus rectificati ʒxiv.  
Emuls. amygd. amar. ʒvj. ℥ ft. lotio.

§ R. Boracis ʒij.  
Olei benzoat. vel glycerini ʒvj.  
Emuls. amygd. amar. ʒvij. ℥ ft. lotio.

|| As; for instance, Hebra's:—

R. Olei picis juniperi  
(Huile de cade, vel oleum cadmium),  
Saponis mollis,  
Spiritus rectificati, aa. ʒj.  
Aquæ ʒix. ℥ ft. lotio.

degree of dryness. When there is a good deal of hardness and infiltration in the affected part he employs Hebra's plan, that of painting, by means of a sponge-brush, a solution of equal parts of caustic potass and water over the surface. When there is very great irritability he brushes the part with a solution of nitrate of silver (two grains up to a drachm in an ounce) in distilled water or nitric ether. This treatment, especially in respect to eczema infantile, is almost infallible. No relapses or adverse circumstances ever occur under his care.\*

One of the most valuable papers I have ever read on this subject appeared in the first number of the *Journal of Cutaneous Medicine*.† It is by Dr. Frazer, and contains a digest of much original observation. Strengthening medicines are his great remedies. He uses iron in certain cases, particularly when anæmia is present ;‡ but his chief tonics seem to be yellow cinchona and cetraria ; the syrup and tincture of cinchona for children, the decoction and infusion for adults. Along with these he gives bichloride of mercury, one-twenty-fourth to one-sixteenth of a grain twice a day. When there is gout he prescribes colchicum in small and repeated doses, along with bark and mercurials, following it up with daily doses of citrate of lithia in some aerated fluid, or with lithia water, with the view, I presume, of obviating deposit of urate of soda by forming a soluble urate of lithia.§ When the nervous energy is exhausted, dilute

\* "With one exception, all the cases recovered. . . . The only numerical evidence that we can offer in support of this statement is, that fourteen cases we only saw once, eleven cases twice, . . . and so on. . . . If the case went on satisfactorily, the child was not brought back. . . . If any adverse change had occurred, *there can be no doubt that the patient would have been brought again!*"—*Natural History of Eczema*, by Erasmus Wilson, *Journal of Cutaneous Medicine*, vol. iii. p. 403. The inference drawn here, then, clearly is, that every patient not seen again was cured.

† Vol. i. p. 63.

‡ As in the following form :—

R. Ferri ammon. tart. ʒij.

— et quinix citratis, ʒij.

Acidi citrici ʒss. Misce et solve in vini Xerici ʒxxiv.

Capiat cyath. vinar. dimid. bis quotidie.

§ I would suggest a trial of these formulæ :—

R. Lithix citratis ʒij. Divide in chart. vj.

Capiat i. ex aquæ selzer vel liquoris sodæ effervescent. ʒvj. omni mane.

Or R. Liquoris lithix effervesc. ʒvj.

omni mane sumend.

phosphoric acid and strychnia may be ordered ; the latter is especially useful when severe pruritus is present ; indeed, Dr. Frazer seems to have had great success in the treatment of this troublesome symptom. He gives one-fiftieth to one-twenty-fourth of a grain three times a day.\* Acidity of the stomach and dyspepsia he meets with bismuth and soda.† Sulphur and arsenic he finds useless.

Dr. Frazer's local treatment consists in the use of bran baths, and the application of the yellow nitrate of mercury with glycerine,‡ working the ointment into any fissures by means of a small mop of lint tied to a wooden penholder, and the cerate of the red iodide of mercury ointment. Lotions he thinks a mistake ; baths, especially those containing sulphur, he places in the same category. When eczema attacks the scalp, he finds yolk of egg, mixed with an equal quantity of water, the best detergent he knows of. To fissures he applies red iodide of mercury, six to twenty grains in an ounce of cerate, sometimes adding a little iodide of potassium ; a method which he considers equal to Hebra's application of caustic potash and much less dangerous. If the patches be very extensive, and the moist secretion from them considerable, he dusts the surface with an astringent powder.§ Dr. Frazer considers "expatriation to distant

\* His prescription is :—

R. Strychniæ gr. j.  
Tinct. aurant. ℥ss.  
Acidi phosphor. diluti ℥iij.  
Infus. caryophyll. ℥xj. ℥ fiat mistura.

The subjoined formula is, I think, rather an improvement on Dr. Frazer's :—

R. Strychniæ grani partem tertiam.  
Acidi phosphor. diluti ℥ss.  
Syrupi aurantii ℥ss.

Infus. caryophyll. (vel calumbæ) ℥xj. ℥. Capiat ℥j. ter quotidie.

† R. Bismuth. trisnitratis,  
Sodæ bicarbon., aa. ℥iss.  
Pulv. gum. acaciæ,  
Sacchari albi, aa. ℥ij.  
Olei cinnamomi gtt. ij. Misce.

About half a drachm to be taken in water after each principal meal.

‡ R. Ung. hydrarg. nitratis,  
— cetacei, aa. ℥ij.  
Glycerini ℥ij. ℥.

§ R. Amyli zci maidis ℥j.  
Zinci oxydi ℥j.  
Pulveris iridis, ℥ss.  
Olei amygd. essent. gtt. x. Misce ft. pulv.

watering-places uncalled for," a view in which I think every sensible person will agree with him.

Dr. Tanner, in a work \* which is an honour to the age that has produced it, recommends mild, local applications, such as thin gruel, barley-water, linseed-tea, lead lotion, &c. He also finds frequent bathing with warm alkaline or starchy water very soothing. Glycerine, too, mixed with starch or water, is often beneficial. In some cases a mixture of soft soap, and the tar ointment of the British Pharmacopœia, rubbed in night and morning, has answered better. He also uses the linimentum calcis, and the ammoniated mercury ointment. The latter he finds very useful when there is thickening and infiltration of the skin. Cleanliness should be carefully attended to.

His general treatment consists in the use of warm and tepid baths, plain diet, with fresh meat, and plenty of milk, and daily walking exercise. As medicines he orders saline laxatives, or an occasional dose of blue pill and colocynth, slightly acidulated drinks, opiates to relieve irritation, sarsaparilla, and mineral acids. If the kidneys act insufficiently he gives a diuretic like the acid tartrate of potass. In severe or chronic cases, steel, quinine, arsenic, separately or combined,† and cod-liver oil have proved most useful. For gout Dr. Tanner prescribes colchicum,‡ and when

\* *The Practice of Medicine*, sixth edition, 1869, vol. ii. p. 396.

† R. Tinct. quiniæ ʒ fl. j.

Liquoris arsenicalis m. xvij.

Ferri et ammoniæ citratis gr. xxx.

Aquæ aurant. ad ʒ fl. viij. m.

Pars sexta bis terve quotidie sumend.

Dr. Tanner directs this medicine to be taken *after meals*. Although the authority of so excellent a practitioner is against me, I must adhere to the opinion I have elsewhere expressed (an opinion founded not only on experience, but what I rate still higher in such instances, **observation** specially directed to the point in question), that steel and quinine should be given before meals, quinine especially, and separately from the arsenic.

‡ R. Hydrargyri subchloridi,

Extracti colch. acet.,

—— aloes Barbaden.,

Pulveris ipecacuan., aa. gr. j. Miscæ ft. pil.

To be taken every four hours till the bowels are well acted on. In gout, with congestion of the liver. Or

R. Extracti colch. acet.,

—— aconiti, aa. gr. j.

Pilulæ hydrargyri gr. ij. m. ft. pil.

To be taken every night at bedtime. In gout, with deficient action of the liver.

rheumatism is present iodide of potassium and bark,\* or iodide of iron.† In great depression of the nervous system he resorts to hypophosphite of soda or lime, and where there is a syphilitic taint to mercurial vapour baths and the red iodide of mercury. In one very obstinate case of eczema he gave the patient, a lady, two tar capsules‡ three times a day, with excellent results.

In infantile eczema Dr. Tanner gives aperients of magnesia, rhubarb, and calomel, and directs that great care should be taken to secure a supply of pure milk. The scabs are to be softened with olive oil and bread poultices, zinc ointment, acetate of lead ointment, or elder-flower-water lotion being subsequently employed. He also gives arsenic with steel wine, and cod-liver oil with a little sweetened orange juice.

Dr. Marris Wilson recommends § a trial of sedatives when there is much nervous excitement. In one case which he mentions, that of a female patient who had suffered long and severely from eczema, the benefit was very marked, and possibly the plan might succeed ; but in two or three cases where I gave these medicines I noticed no particular effect either from large or small doses. In one there was considerable improvement. The patient, a man in the prime of life, took four successive nights a scruple dose of hydrate of chloral to relieve the pain of rheumatism. He had at the same time several irritable patches of eczema in the dry stage and of long standing. The use of the remedy was followed by great sleepiness the two first nights, and still greater excitement the two succeeding. Profuse sweating occurred each morning. At the end of six days the patches

\* R. Potassii iodidi gr. xxx.  
Potassæ bicarbonatis gr. lx.  
Tincturæ hyoscyam. ʒ fl. iij.  
Infus. cinchonæ flav. ad ʒ fl. viij. m.

Sumat partem sextam ter quotidie.

† R. Potassii iodidi gr. xij.  
Ferri et quinix citratis gr. xxx.  
Tincturæ aconiti m. xxv.  
Infus. chiratæ ʒ fl. vj. m.

Capiat partem sextam ter quotidie.

Or, R. Syrupi ferri iodidi,  
Extract. sarsæ liquidæ, aa. ʒ fl. j. m.

Capiat coch. min. i. ter quotidie ex aquæ cochlear. amp. ij.

‡ These tar capsules each contain about six grains of tar.

§ *Journal of Cutaneous Medicine*, vol. ii. p. 45.

had improved so much that only the stains remained, and he has been, on the whole, better since that time.

I am inclined, therefore, to think the plan might be useful in the dry stage. When eczema is secreting freely, and especially in the ulcerating form, the only sedatives I have tried, opium and morphia, have, I confess, disappointed me as regards the cure of the disease. I have frequently kept the pain under by the free use of these means for weeks, without bringing on any change for the better in the eczema. I have then given the acid solution of iron, and have seen a rapid improvement both in the pain and the disease of the skin.

Dr. Hillier,\* in a case of general eczema of twenty years' duration, accompanied by chronic bronchitis, gave five-minim doses of liquor arsenicalis and ten grains of sulphate of zinc, three times a day, applying zinc ointment at the same time. The patient recovered rapidly. In acute eczema he used to give a purge such as colocynth and calomel, following it up with salts and senna. If the pulse were full and bounding a quarter of a grain of tartar emetic was added to the draught. After this salines were given. To less robust subjects he gave a milder purge, such as sulphate of magnesia with bicarbonate of potass and tartaric acid with lemon juice. Externally he employed a powder of starch, oxide of zinc, and camphor. Later on he prescribed arsenic. When there was any suspicion of a syphilitic taint he ordered Donovan's solution. Alkalies, such as liquor potassæ, he thought decidedly useful. Dr. Hillier held that the diet should be very simple, pork, cheese, highly-spiced food, pastry, and all indigestible things being prohibited. Locally he preferred mild preparations of mercury, and for severe itching, cyanide of potassium ointment, four to eight grains of the salt to an ounce.

Mr. Nayler has great faith in antimony in the acute stage. In the summer months he gives alkalies, such as the acetate or chlorate of potass, to children. In the pyogenetic form of eczema he finds an ointment of fifteen to thirty grains of sulphur and the same quantity of blue ointment to an ounce of lard, very efficacious. As a lotion he praises the carbolate of glycerine made by Calvert, and in chronic eczema recommends a solution of sulphate of copper as very useful in allaying irritation.

\* *Handbook of Skin Diseases*, 1865, p. 116.

Dr. McCall Anderson gives, when there is any tendency to gout or rheumatism, acidity of the stomach and deposit of lithates, sesquicarbonate of ammonia in doses gradually increasing up to forty grains twice a day. He recommends a suitable diet, but after all seems to place more reliance on local than on constitutional means. He removes the crusts by softening them with oil, then bathing with warm water, poulticing, &c. The surface beneath is then dusted with some mild astringent powder, such as starch, over which a cold starch poultice may be laid. He also uses occasionally an ointment, such as that of the oxide of zinc, or cucumber, or cold cream. When there is much infiltration he employs the solution of potass recommended by Hebra,\* and in troublesome chronic eczema solution of chloride of zinc, a scruple to an ounce.† He recommends as a lotion, free from both staining and smell, carbolic acid, four grains to an ounce. Against pruritus he employs hydrocyanic acid and chloroform ;‡ he also makes free use of preparations of tar.§

\* R. Potassæ causticæ gr. ij. ad gr. xx.

Aquæ ℥j. ℥ ft. solutio.

Or,

R. Potassæ causticæ,

Aquæ, aa. ℥j. ℥ ft. solutio.

† As the addition of gum acacia is useful, I give a formula which, I think, represents Dr. Anderson's views :—

R. Zinci chloridi ℥j.

Mucilaginis acaciæ ℥ss.

Glycerini ℥iij.

Aquæ rosæ ℥ij. ℥ ft. lotio pro eczem. manuum.

‡ R. Acidi hydrocyan. dil. (Pharm. Brit.) ℥ij.

Aquæ rosæ ℥viij. ℥ ft. lotio.

R. Chloroformi ℥j.

Linim. camphoræ ℥vj. ℥ ft. liniment.

Neither of these should be applied too freely at first : the chloroform liniment because it acts on some skins with great rapidity, setting up considerable irritation ; the acid lotion, because absorption of it by an abraded surface is not free from danger. Should the reader wish to combine chloroform with hydrocyanic acid in a lotion, he should bear in mind that the first of these two fluids, when mixed with water, glycerine, or weak spirituous solutions, immediately separates from them.

§ R. Olei rusci,

Spiritus rectificati,

Eau de cologne, aa ℥j.

Potassæ causticæ gr. xv. ℥ ft. linimentum.



Dr. Swift considers\* the external treatment of infinitely more importance than the internal, and relies on baths, and fluid and oleaginous preparations; using in this form nervous sedatives, as opium, camphor, or hydrocyanic acid. He also makes use of cold in the shape of lotions, and sheaths the part attacked in some mild oleaginous preparation, such as benzoated zinc ointment, cucumber ointment, or carron oil. In the second stage he employs astringents, such as acetate of lead, in the form of ointments, oil of cade or carbolic acid. Absorption of the thickened state of the derma is to be effected by blisters, tincture of iodine, strong solution of potass, or rubbing in green soap as suggested by Hebra.

Dr. Spender thinks black wash very useful in eczema rubrum. He applies it by means of strips of lint, over which is placed a thin calico bandage. In some bad cases where this treatment has failed, he has used nitrate of silver with great benefit. Dr. Durkce finds carbonate of lead ointment (ʒij.), mixed with prepared chalk (ʒiv.), and simple ointment (ʒij.), very useful when the eruption is limited and the discharge active. For eczema of the lips he uses a cerate of oil, yellow beeswax, new honey, and oxide of zinc.

Holding such views as Hebra does about the entire independence of eczema on any internal disorder, we can scarcely wonder that he entertains no very high opinion of the action of internal means of cure. All these medicines, he says, are useless and wasteful. They are injurious except when eczema is called into play by previous disorder of the organism, or when it is complicated by another disorder. Antimony, iodine, sarsaparilla, and purgatives are equally bad; arsenic itself is only useful in a few refractory cases; cod-liver oil internally is useless.

What, then, are the almost omnipotent means destined to outvie mercury and arsenic, iodine and steel, sulphur and cantharides, and

R. Picis mineralis,  
 Spiritus rectificati, aa. ʒj.  
 Liquor. ammoniæ m. iv.  
 Glycerini ʒiij.  
 Aquæ ʒiijss. m ft. linim.

Or,

R. Hydrarg. nitr. oxid. ʒj.  
 Ung. hydrargyri nitratis ʒj.  
 Olei betulæ albæ ʒiss.  
 Adipis benzoat. ʒiv. m.

I should have thought that even a small quantity of benzoin in the lard would reduce the mercury.

\* *American Journal of Syphilography, &c.*, 1870, p. 103.

dismiss them to the limbo of forgotten horrors ; which are to degrade them to the rank now held by the old sweating tub and rolled clout of the quicksilver doctors? They are certainly a most formidable phalanx. I cannot spare space for them *in extenso*, and am not sure that I clearly understand to what particular class of cases or exactly in what order Herr Hebra applies his means of treatment ; but I believe the following condensed account may be relied on as representing his system fairly. Free use is made of water which has been boiled so as to throw down its salts, rain water, distilled water, or water in which almond bran or wheat bran has been boiled, or decoction of marsh mallow, common mallow, or marsh violet (pansy, *viola tricolor*). By constant use of these we soften and relieve the itching, possibly quell it, and even cure many cases of eczema. Then come vapour and shower baths, particularly useful in eczema of the head or hairy parts of the body. The shower baths are to be taken three or four times a day, with half an hour's walk after each. By these means we can, in the course of a few months (im Zeitraume von mehreren Monaten), cure eczema or aid other means of cure. After the shower baths comes the consideration of the value of fatty matters. So long as we can secure a due consistence, the nature of the material is unimportant, and a long list including such materials as cream, nut oil, linseed oil, &c., is given, which may be used at discretion. The grand object is to keep the oily substance constantly on the part and prevent its being rubbed off. For the latter purpose wool may be used without any fear of its irritating. In eczema of the hairy scalp, Hebra rubs in at least twice a day about an ounce of oil, and covers the head with flannel. He seems to be partly of M. Rayer's opinion, that it is as well for the sake of the moral effect to have at command a number of ointments, even if some of them only differ in colour. With this object in view, he gives a list of those which may be employed ; they are very numerous, and comprise lead, quicksilver, and zinc, and ointments of various kinds, which may also be combined with spirit of wine and camphor, glycerine, peruvian balsam, &c. His favourite preparation seems to be one of lead or diachylon. Then come the caustic ointments, such as those of white and red precipitate, and yellow ioduret of mercury, to be employed in the papular and squamous forms. Next we have the substances to be used in watery or spirituous solution, such as sulphate of zinc, corrosive sublimate, borax, and caustic potass. These are adapted for red

eczema of small extent. A strong solution of caustic potass (one part of the salt to two of distilled water) is our last refuge in obstinate cases, as it heals them infallibly (*indem es allerdings jedes Eczem ohne Ausnahme heilt*), but occasions great pain. All crusts and scabs having been first removed, the solution is quickly rubbed over the part with a dossil or brush of lint (*Charpiepinsel*), and directly after the hand or a piece of flannel soaked in water is passed rapidly over the part. Compresses dipped in cold water are then applied and covered with wax-cloth or gutta-percha tissue. The cauterization may be repeated every eight days, and on an average not more than twelve cauterizations are needful. In general, however, Hebra prefers to this friction with potass soap (*Schmierseife, savon mou*) or spirit of soap. For partial frictions a piece of this soap, the size of a walnut, is laid upon a cloth and rubbed hard upon the eczematous patch for several minutes, the cloth being repeatedly dipped in water. After this either water is applied or one of the ointments or oils spoken of. This is done twice a day till no more excoriations are seen. For more extensive outbreaks it is simply smeared upon a cloth and laid upon the part for several days together. For eczema of the hairy scalp the spirit of soap (*spirit. saponatus kalinus*). Tar is very useful when there is not much infiltration and weeping, but it should be used with great scruple at first, only a small patch being selected for experiment, as it sometimes increases the itching to an intolerable degree. It is not to be used in acute eczema, or where there is great serous infiltration of the skin. When it can be borne it is to be painted on the part twice daily till the secretion no longer washes it away. Carbolic acid he considers a valuable preparation in eczema of the hands, face, or any part that cannot be covered. To sulphur he ascribes very little virtue; indeed in acute eczema and red eczema when discharging freely, in the impetiginous and vesicular forms, it is injurious. The different forms of eczema also require means which form a protecting surface, as collodion, or absorb the exudations, as do the seed of the club moss (*witch-meal*), powder of starch, orris root, alum, zinc, &c. &c. In acute eczema the two last are useful, but if there be much burning and itching, cold lotions with acetate of lead or Goulard's water may be applied, but they are to be employed sparingly till we see if the patient can support them.

Herr Hebra then goes fully into details as to the treatment of eczema fixed in any particular part. I would gladly enter here

more fully into these, but it is not practicable. It must suffice to say that he treats eczema of the head and face with local applications of cod-liver oil, tar soap, carbolic acid, &c. ; adding, in grown persons, the cold dash, painting with spirit of tar, and the oils spoken of. For eczema of the face he employs solution of sulphate of zinc, caustic potass, &c. ; of the ear, compresses smeared with some of the ointments given above ; of the nipple, solution of sublimate, five grains to an ounce, or the solution of caustic potass, one drachm to two of water ; for eczema marginatum, preparations of sulphur, as sulphuret of potassium in water ; for eczema of the lower extremities, of the armpit, bend of the arm, thigh, &c., the diachylon ointment, &c.

Bazin's treatment of eczema in the acute stage consists in the frequent use of light purgatives, baths, and small doses of alkalis ; externally, cataplasms of flour or rice, powder of rice or flour, &c. Later, pomade of glycerine, or calomel, sulphate of iron, or carbonate of soda. In the acute herpetic form he follows up the antiphlogistic treatment with acid drinks, as of lemon or dilute sulphuric acid. For the dry and scaly stage, oil of cade, pure or mixed with an equal quantity of sweet almond oil ; also alkaline, sulphur and vapour baths ; for red eczema he advises rest, bleeding, light diet, diluents, dusting with starch, and afterwards emollient and sulphur baths.

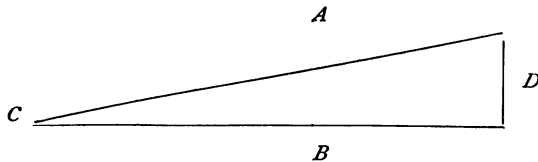
#### B. ULCER.

To my thinking all divisions of ulcer into painful, irritable, indolent, &c., however valuable they may be from a pathological point of view, are useless in practice. The only division I would recognize is that into specific ulcers, such as those from syphilis, and common ulcer. The former I leave aside ; the latter I propose to treat as one and the same disease, under whatever form it may appear, and however it may be complicated ; as after all ulceration, whether slow or rapid, whether painful or indolent, is essentially the same process so far as the effects of treatment are concerned. All other questions are merely matters of extent, degree, complication, &c. ; they do not in any way touch the fundamental part of the subject.

The only means of treatment which I have seen useful in ulcer are :

1. Raising the position of the foot at night, and, if possible,

by day also. Putting a stool or pillow under the foot is useless ; it only increases the pressure of the bedclothes on the affected part, especially in winter, and even when this is averted by means of a cradle; the limb gets wearied and aches, and the patient is kept awake and distressed by the irksome posture and want of support for the back of the leg. To secure a proper position, the foot of the mattress must be raised, so that there is a regular slope from the hip to the far end of the bed, the patient's foot being raised quite eight or ten inches above the hip. The best plan that I know of for attaining this end is to procure two pieces of board, *A*, *B*, long enough to reach from the hip to the end of the bedstead, and quite eighteen inches broad. These meet at *C*, and are there firmly fixed together, the edges being planed off so that they run to a sharp line, thus securing an even, unbroken slope. A third piece, *D*, of



the requisite depth, that is to say, six, eight, or ten inches, as the size of the patient may require, is placed between the other two, and the whole nailed together. The rest is now simply placed under the mattress of the bed (*D* resting against the foot of the bed) or the squab of the sofa. This done, the surgeon may confidently assure the patient that the pain, weariness and engorgement of the part under which he has been suffering, will speedily begin to yield.

2. A sedative every night. Taking all things into consideration, opium is perhaps the best, and the best suited to hospital practice because it is the cheapest. I am inclined, however, to think that so long as two or three indispensable conditions are attended to, it is of very little consequence what sedative the surgeon uses ; extract of poppy, lettuce, henbane or hemlock, nepenthe, chlorodyne and morphia are possibly all equally good. Some of them I have never tried, and, therefore, cannot give any reliable opinion as to their powers. I have, however, made numerous observations with respect to hyoscyamus, lettuce, poppy, opium, and acetate of morphia, and am disposed to put as much faith in pure opium as in anything

Morphia is, however, a very valuable remedy, particularly in conjunction with ammonia.\*

But there are certain conditions necessary for success, whatever ingredient be selected. The first is that the drug employed should be pure and fresh, a great deal of what is sold as opium, extract of hyoscyamus, &c., being so adulterated and stale, as to be well-nigh useless. The second, that however high we may carry the dose, we must subdue the pain. Accordingly, though the patient need scarcely begin with more than a grain of opium, or a third of a grain of morphia at bedtime, yet I have never any hesitation about giving three times this amount if necessary. The third requisite is to take care that the liver does not get too sluggish, and the bowels too confined, complications which are apt to follow the prolonged use of sedatives. Hence an aperient is often very useful here.†

When the appetite is bad and the tongue foul, the surgeon may give an acid and bitter, or the acid of solution of iron of St. John's Hospital, previously mentioned, which often relieve these symptoms though they possess little if any control over the ulcer. I have repeatedly seen a sore which was progressing very well under their use, aided by proper local treatment, begin to relapse so soon as ever the latter was remitted, although the medicines were continued; I observed this happen three times in the same patient. Indeed, I have never been able to satisfy myself that any medicine possesses the slightest power of making a common ulcer heal up. In sluggish ulcers, I have sometimes given a long course of small doses of biniodide of mercury, with a view of inducing absorption of

\* A grown person may begin with any of these preparations :—

R. *Liquoris morphiæ acetatis* ℥ss.

—— *ammoniæ acetatis* ℥iij.

*Syrupi rosæ* ℥ij.

*Mist. camph. ad* ℥iss. ℥.

*Fiat haustus horâ decubit. sumend.*

R. *Tinct. opii crocatæ* m. x.

—— *camphoræ compos.* ℥ss.

—— *cardam. comp.* ℥j.

*Mist. camphoræ ad* ℥iss.

*Misce et fiat haustus omni nocte sumendus.*

R. *Opii purificat. gr.* xij.

*Divide in pil. xij. Sumat unam omni nocte.*

† As, for instance, the pill at p. 12.

the hard, thickened welt surrounding the sore, which is supposed to prevent healing (though I believe that this view is erroneous, and that a coincident symptom has been here confounded with a cause), and have now and then fancied it did some little good in this way, but it was very slight if not altogether an illusion.

3. The avoiding of all irritating applications. Generally speaking, all ointments, lotions, poultices, concretes, plasms, operations, irritating and expensive contrivances like elastic stockings, are, with a few exceptions, one and all *utterly unnecessary in every kind of ulcer.*

The exceptions, then, are these :—Should there be much inflammation round the ulcer, a weak lead or bismuth lotion \* may be applied to any extent thought proper. Such occupation as this sometimes amuses an anxious patient, and that is something ; but I should very much question whether the lotion possesses the least influence over the sore. When an ulcer is healing, that is to say when the bottom of it is level with the surrounding skin, and the edges begin to draw near each other, the use of benzoated zinc ointment will often expedite the healing process ; it acts, I think, solely by soothing the surface and warding off the irritating action of the air. A turnip poultice may be used to remove any foul smell, particularly in close weather, or when there is a very free discharge of serum with very dark colour of the adjacent skin. When turnips cannot be procured, a weak solution of chloride of zinc or carbolic acid, used warm, proves a very good substitute. Strong decoction of poppies, applied hot, possibly has the power of relieving pain and may be tried when this symptom is very troublesome. Indolent ulcers should be freely blistered. I always employ this remedy at least once a month in such cases, but I consider it a mistake to restrict it to this form of sore. *Any ulcer may be blistered.* I have repeatedly tried the experiment with very painful sores, and can assure the reader that there is nothing to dread. Should the patient be very timid, or the surgeon very nervous, about doing this, the ulcerated surface may, first of all, be covered with lint, and the blister applied over this and the surrounding skin ; but

\* R. Liq. plumbi subacetatis ℥iij.

Glycerinæ ℥iv.

Mist. camph. ad ℥viiij. ℥ ft. lotio.

R. Bismuthi subnitratris ℥ss.

Glycerinæ ℥iv.

Aq. flor. sambuci ad ℥viiij. ℥ ft. lotio.

the precaution is scarcely called for. Except, however, in indolent ulcer, blistering is not absolutely demanded unless other means have failed. The only dressing the blistered surface, or indeed the ulcer itself, requires, is soft cotton wool or lint, and, generally speaking, the best fomentation or lotion for the ulcer is simple hot water poured from a moderate height upon it.

4. Proper bandaging. This is the grand thing, the one really indispensable feature in the treatment. In the first place a good bandage must be selected, and to my thinking there is no material equal to flannel. When the sore is small and superficial, or when the weather is very hot, a thin, cheap variety, such as is used at St. John's Hospital, may be employed ; but when the weather is cold, or even temperate, and when the ulcer is deep or indolent, so that a good strain is required to bring the edges together, there is nothing like the best welsch flannel. It should be all in one piece ; the system pursued by poor patients at hospitals, of tearing a yard into strips and felling those one on another, is bad : the pieces are rarely of the same breadth, so that the bandage does not lie flat at the folds, and the ridges, where it is joined, fret the skin. The selvage should be rejected. A width of from two inches to two and a half is quite sufficient, and the bandage should not be less than seven or more than eight yards long. When taken off, it should be carefully sponged with lukewarm or cold water, ironed with a flat-iron at as low a heat as will allow of the creases being taken out, and then rolled very firmly up ; one person holding it while the other winds it. If hot water be thought necessary to secure cleanliness, it may be washed in hot soap-suds and then wrung out, without putting it into any other water, so as to avoid shrinking. A pad of lint being now laid upon the ulcer, the bandage is passed twice firmly round the instep, and then the heel, ankle, and leg are carefully and uniformly bandaged up to the knee. When the ulcer is indolent, considerable pressure may be applied almost from the outset ; when very painful, too much gentleness cannot be exercised. As the bandaging cannot always be borne at first, the patient should be told to take it off so soon as ever he finds that it is occasioning more pain, and then to have it put on again as soon as possible. Mr. Hunt, when bandaging, fills out the hollows of the ankles with tow or cotton wadding ; I have not found this necessary. If possible, the surgeon should bandage the ulcer two or three times a week.



But all the advantages likely to be gained by the most careful attention to these points will be thrown away, unless the surgeon is quite *au fait* at putting on the bandage itself. I do not know whether this little operation is now taught in our medical schools or not. Judging from what I hear, I should not expect it. An age which has pretty generally expelled from its curriculum vaccination, spermatorrhœa, almost everything connected with skin diseases and the surgical part of dentistry, diseases of the eye and deformities ; which quietly proposes to destroy the special institutions in which these great branches of surgery are studied and taught, because it is found that they prove dangerous attractions to students and patients ; which reserves its honours for useless and cruel experiments in physiology, and its censures for those who strive to improve treatment ; is scarcely likely to recognize such a very elementary subject as bandaging. Indeed, among the leaders of the medical world we should be sure to find a good many who would not even try to hide their contempt for persons so far behind the age as to think it of more consequence to show how a few thousand ulcers may be healed, than to demonstrate how the process of ulceration takes place—the one promotes the march of science, the other only relieves misery. One is therefore not surprised to find Mr. Gay, in his truly admirable Lettsomian lectures on ulcers, after devoting a hundred and sixty-seven pages to pathology, dissections, &c., giving us, at the very close, *four* pages of treatment, heralded in by something which sounds very like an apology for broaching such a topic.

Rest is often a most important part of the treatment. In slight cases the patient may continue his ordinary work, and generally a certain amount of exercise, such as a moderate walk, will do no harm ; long sitting or standing almost certainly retards the cure. In severe ulcers the patient should, if possible, lie up. I know it is very difficult to carry out this rule, but it is sometimes the only means of insuring success. A short time ago I had under my care a most severe case. The patient was a very tall, meagre, underfed and overworked man, seventy-four years of age, with a large deep ulcer on the lower and inner part of the left leg ; on the right leg was a large sore over the tendo Achillis, and a deep one on each side of this, while on the front of the leg, reaching from the middle of the tibia to the middle of the dorsum of the foot, was an immense, ragged, deep ulcer. Three times I had succeeded in reducing this large ulcer to one-third of its original dimensions, and bringing the skin and granu-

lations to a level, and each time a relapse took place in consequence of his having to go to work again.

Some surgeons consider that in varicose ulcer we cannot rely on effecting a cure, or at any rate a lasting one, unless the state of the veins be remedied, for which I need not say that several different operations and forms of treatment are recommended. I believe this to be a mistake. I was at one time under the same impression, but experience has taught me that this kind of sore may be cured quite as fast as any other without doing anything for the veins, and that the treatment of these can be more conveniently carried out afterwards. I am quite of Mr. Gay's opinion ;\* the varicose state is here simply a complication and not a cause.

Of all the modes of treatment I have seen put in force, I prefer that of tying the veins by simply passing a needle underneath them, without any cutting, and then winding a thread over the two projecting ends, like a figure 8, the sharp end of the needle being subsequently cut off with pliers. When the patient objects to this, a very simple and efficacious plan is to wear the flannel spiral bandage made by Messrs. Walters and Co., the extreme cheapness of which



renders it peculiarly adapted to hospital practice. It consists of a narrow slip of flannel, not more than an inch in width, and bound at the edges with white silk. It should be quite eight yards long. The part intended for the foot should be made like a stirrup, and drawn well up on the instep. The rest of the bandage

\* "It is impossible, I think, to avoid the further inference that ulceration is not a direct consequence of varicosity, but of other conditions of the venous system, with which varicosity is not unfrequently a complication. . . . I infer, therefore, that pathologically, this doctrine of the varicose ulcer does not appear to 'hold water;' that, to reiterate my conclusions, ulceration, when it exists with varicosity, but without other complication, is a coincidence and not a consequence."  
 —*On Varicose Disease.* By John Gay, F.R.C.S. 1868, p. 99.

is then wound pretty tightly in a spiral line round the leg up to the knee, where it is tied in a bow by means of the tapes, as shown in the engraving. This bandage gives the patient great comfort, and relieves the aching, weariness, and sense of weakness about which patients suffering from varicose veins often complain. It is very cleanly, does not confine the perspiration like elastic stockings, and being very inexpensive, is easily renewed. Moreover, the adjustment of it is a very simple matter. I need scarcely say, that though it may relieve, it is not very well adapted to the cure of varicose veins.\* Elastic stockings, being based on an unsound principle, that of trying to compress a *whole* vein instead of a *part*, should, in my opinion, never be resorted to. I believe them to be perfectly useless, while they are at the same time dirty, uncomfortable, and expensive.

The quickness with which ulcers of every kind, except the indolent, heal up under this treatment, must be seen to be realized, and even the most sluggish ulcers yield to it much more quickly than to anything else I have seen put to the test. Ulcers which had gone on getting worse for months and years have begun to narrow and fill up almost directly. Among other cases I may mention that of an immensely stout old woman, a patient at St. John's Hospital; she was so corpulent that she could not stoop to touch her foot, and had two enormous ulcers, one on each leg. They had been open for nearly seven years, and for some time past the pain had been so great as to deprive her, to a great extent, both of sleep and appetite; she had not, she said, been able to taste plain food for weeks; yet both these large ulcers closed up rapidly and healthily, under bandaging, aided by a sedative every night. In another case, an ulcer of the leg in a patient at the same institution, a delicate underfed woman, which had lasted more than twenty years, healed in a few weeks when properly bandaged. I treated a girl who had been nine months under the care of a very skilful surgeon with a bad ulcer of the leg. The gentleman in question seemed to have taken all possible pains with the case, except that he did not resort to bandaging, and the patient to have faithfully carried out his instructions, using a perfect host of lotions, poultices, ointments,

\* I believe Mr. Startin was the first to employ a bandage of this kind, but I am not sure.

mixtures, &c. Notwithstanding all this the sore had got persistently worse, yet, under bandaging, it had diminished to less than half its size, within a fortnight, and in less than a month had cicatrized, though no dressing was applied beyond a piece of dry lint. There is a patient now attending at St. John's Hospital, whose disease, when he first came under my care, was of the most unpromising nature. The patient was an elderly man, of most unwieldy frame, being almost as stout as the woman referred to. Being a watchman, he was greatly exposed to inclement weather, and could get no rest. He had a very large, deep, indolent ulcer on the lower and outer part of the leg; the surrounding tissues were so infiltrated as to feel like brawn, and the ulcerated surface was covered with a tenacious, adherent, greenish slough. When I last heard of him this sore had considerably diminished under bandaging, blistering, and opiates. These are only a few, out of many instances—sufficient however, I hope, for the purpose aimed at.

I believe most cases of ulcer will yield to this treatment when it has fair play. I should not expect to have any success with one which had encircled the leg or nearly so. What is more, I believe it would be useless trying any method of treatment with persons in this condition, as they either could not, or what is more probable, would not, carry out any instructions. A patient, with an ulcer in this state, has in general systematically neglected it and will most likely continue to do so. Mr. Gay mentions a form of ulcer which he calls the "arterial" and considers utterly incurable. I have not seen this variety, but, judging from my own observations, I should have said that the only thing likely to make an ulcer incurable was its having extended over the whole, or nearly the whole, circumference of the limb. My readers, however, I doubt not, know that Mr. Gay has studied ulcers with great care, and that he has written two excellent works on the subject. I therefore do not for a moment expect them to prefer my opinion to his, nor do I indeed seek to controvert Mr. Gay's views. I merely state the result of my own experience.

Mr. Gay recommends,\* in all cases, rest, with the foot elevated above the pelvis in the simple and venous ulcer, and on a level

\* *On Varicose Disease*, p. 167.

with it, or inclined in another direction in the arterial ulcer.\* The simple sore, if acutely inflamed, is to be treated with leeches, scarification across the edges of the ulcer, hot applications, constitutional remedies, purgatives, calomel when the biliary system is deranged, and opiates if the sore be painful. When the inflammation is subacute, when the tissues are thickened and the edge welted, he blisters. Irritability is to be subdued by opium, quinine, and iron, applying, at the same time, a strong solution of nitrate of silver to the surface. For constitutional weakness tonics and change of air with generous diet. When, after all this has been done, the ulcer still refuses to heal, the surface should be destroyed by some powerful escharotic, as the solution of the per-nitrate of mercury. In tedious and doubtful cases of simple chronic ulcer he has seen the best results from the administration of the liquor hydrargyri bichloridi with iodide of potassium. For venous ulcers he still prefers incisions at the edges.† When great pain accompanies an ulcer, especially at night, it arises from periosteal complication and requires opium, iodide of potassium, and occasionally free subcutaneous division of the periosteum. The arterial ulcer is incurable. In conclusion he again adverts to the value of incisions, and tells us that sores of from one to twenty years' standing have been made to heal under this treatment. Without wishing in the least to detract from the justness of Mr. Gay's estimate respecting the value of this measure, I may still remark that at one time I tried incisions very extensively, and that I found many patients refuse to submit to them the first time, while few would endure a repetition. Yet he tells us that "it may be necessary to repeat the incisions, even to two or three, on either side of the ulcer." That ulcers of twenty years' duration heal under it, I firmly believe, but so they do under bandaging.

Some authors recommend yeast poultices; Mr. Wilson holds that

\* "Ulcers of the leg are, in relation to their pathological genesis, divisible into three species:—

"1. The *simple* ulcer; that in which the morbid processes are limited to the confines of the tissues directly engaged therein. 2. The *venous* ulcer; most frequently with 'bronzing' and induration of the skin; dependent upon obstructive disease of the trunk veins, superficial or deep. And 3. The *arterial* ulcer; generally without bronzing, but with induration of the tegument, and due to incompetency of the arteries through disease of their coats."—*Ibid.*

† *On Indolent Ulcers.* By John Gay, F.R.C.S. 1855, p. 94.

if we can keep a layer of carbonic acid between the ulcer and the air, the healing of the former is only a question of time; the explanation, I suppose, being, that the irritating action of the air is thus effectually warded off. The simplest way to do this would be to place the whole limb, up to the knee, in an oiled-silk bag filled with the gas, taking care that there was no escape at the place where it was in contact with the skin. Galvanism has been very successfully employed by some surgeons; it may be applied by means of a piece of thin silver, the size of the ulcer, laid upon it; over the silver is laid a piece of flannel, which is kept wet by sprinkling it with a solution of salt and water (one part of the salt to twenty of water) or weak dilute sulphuric acid (half the dilute acid of the pharmacopœia and half water). Over the flannel a plate of zinc, three times as large as the ulcer, is laid, and then the whole is fastened with a bandage. I have seen granulation take place at a wonderful rate under this treatment, but it requires more rest than most patients can get. I need scarcely repeat, that where there is a varicose state of the veins, some surgeons prelude all treatment of the ulcer by endeavouring to obliterate some of the veins. When there is a thick hard welt Mr. Startin gives mercury, and, I believe, prefers calomel. M. Velpeau employed\* a kind of cement to remove the smell. It was composed of a hundred parts of chloride of lime and one to five of dry tar, rubbed down to powder, and either laid upon the ulcer in that form, or first made into an ointment with olive oil. On the same principle it has been recommended to fill the ulcer up with chalk, or precipitate of iron.† For very painful and irritable ulcers Mr. Hunt recommends applying a dossil of lint dipped in chloric ether.

Skin grafting seems to have succeeded in the hands of so many surgeons, in indolent ulcers, that it ought to have a fair trial. I need scarcely say that it is effected by transplanting minute portions of sound skin to one or more points in the surface of the ulcer. Mr. Goldie recommends‡ that these should be kept *in situ* by means of soap plaster. Chlorate of potash, in ten-grain doses, twice a day, internally, with solution of the same salt in glycerine,

\* *Medical Times*, 1859, vol. ii. p. 237.

† Braithwaite's *Retrospect*, vol. xlv. p. 260.

‡ *Lancet*, 1871, vol. i. p. 46.

a drachm to an ounce, has been favourably spoken of. As an outward application it seems to have been useful.\*

Professor Fischer, of Breslau, considers that chronic ulcer invariably leads in time to amyloid degeneration of the kidney. Supposing, in the first place, a coincidence to be established, it will be, I think, a question as to which is the cause and which the effect.

\* *Journal of Cutaneous Medicine*, vol. iv. p. 10.

CHAPTER V.—ERYTHEMATA.

*A. Erythema. B. Erysipelas. C. Urticaria. D. Purpura.  
E. Pernio.*

A. ERYTHEMA (*a, atis, neut.*) ; from *ἐρυθρός*, red.

*Definition.*—A superficial, vivid redness, appearing in spots or patches, sometimes attended with swelling and itching. Redness sometimes migratory, occasionally of a purplish hue ; fades into a blue and yellow stain like that of a bruise. Followed by throwing off of the cuticle.

*Divisions.*—1. E. simplex, marked by the above-mentioned symptoms. 2. E. fugax, in which the patches form and fade with great rapidity ; are of irregular or circular shape. Common on face ; may also appear on arms, neck and breast. 3. E. læve, a red, glazed state of the skin, often accompanied by tenderness and itching. 4. E. papulatum, in which the patches are raised almost like those of nettle rash. 5. E. nodosum, in which the patches are very large, roundish or oval, much raised and very tender. Recurrent. Often accompanied by great pain. Patches may run together.

Dr. Purdon proposes\* to group together erythema, herpes, pemphigus, and urticaria, as being all neuroses of the skin. Erythema nodosum, in young chlorotic girls, he looks upon as a reflex neurosis arising from uterine derangement. Acrodynia, as an erythema, ushered in by pains, loss of appetite, blood-shot conjunctiva, and

\* *On Neurotic Cutaneous Diseases.* By Henry Samuel Purdon, M.D. 1869, p. 18.



development of erythematous patches on the legs and arms. From purpura to pemphigus again there is, he considers, only one step. The latter will appear while the former still lingers.

*Prognosis.*—Erythema, even in its mildest form, is often troublesome, as it so frequently appears when the health has long been giving way, or when the patient is constitutionally weak, or has a marked tendency to nervous irritability, dyspepsia, rheumatism, and chlorosis. The prognosis of E. læve, when connected with anasarca, will, of course, depend on the condition of the latter, its cause and so on. The papular form, passing into the tuberculated, is serious at all times. Dr. Durkee has seen four fatal instances of this variety.

*Treatment.*—When mild, erythema scarcely demands anything beyond very simple remedies, such as lead lotion, or any mild ointment, and an occasional aperient. In more severe cases, as for instance, in E. nodosum and papulatum, the patient for the most part requires a pretty long course of iron and quinine, often accompanied by colchicum.\* Should the appetite be bad, I would suggest a course of acid and bark in preference to anything,† subsequently following it up with iron, or iron and quinine. Aloes

\* R. Ferri et quiniæ citratis ʒj.  
Liquoris ammoniæ citratis ʒj.  
Syrupi ʒiv.  
Aquæ ad ʒvj. m.

Capiat coch. ampl. j. ter quotidie. Or  
Vini citratis ferri et ammoniæ ʒiij.

Capiat cochlear. min. duo ter quotidie.

The former of these may be preferred when there is loss of appetite as well as of strength. The following suits nervous women very well :—

R. Mist. ferri aromat. ʒviiij.

Capiat cochlear. duo bis quotidie.

Should rheumatic symptoms be present, I would add—

R. Sodæ carbon. exsicc.,  
Extracti colchici,  
Pilulæ hydrargyri,  
Ext. rhei, aa. gr. vij. m ft. pil. vj.

Capiat unam omni nocte.

† R. Acidi nitrici diluti ʒij.  
Syrupi aurantii,  
Tinct. cinnam. c., aa. ʒiv.  
Dec. cinchonæ flavæ, ad ʒxij. m.

Capiat cochlear. amp. duo bis terve quotidie.

should, I think, especially in the cases of girls, be given along with these remedies,\* and when the patient is hysterical, assafœtida requires to be added ; or a full dose of the compound decoction of aloes may be given daily, when they will take it, which is not always the case. A combination of this with Griffiths' mixture answers very well with some persons.† In some elderly persons, when the colon is torpid, a dose of the compound gamboge or scammony pill answers very well. I cured a case which had resisted treatment for a long time, by giving the latter until I had brought away a quantity of fæces almost like sheep-dung, which had evidently been adhering to the sides of the colon and cæcum. The patient, who had been perpetually tormented with griping and flatulence, began to improve almost directly and made a rapid recovery. When heartburn (pyrosis) is present, I would recommend a trial of the prescription given below.‡ With the addition of some simple syrup, this medicine answers very well for children, especially if aided by the exhibition of small doses of hydrargyrum c. cretâ, two or three times a week. A short course of iodide of potassium is requisite when rheumatic symptoms linger, but unless I have deceived myself, it is rarely requisite to give more than two or three grains twice or thrice a day.

But when erythema is refractory, and especially when it is so in adults, when it settles on the face, about the nose and cheeks, returning and persisting when there is no complication to account for its obstinacy, then I would suggest giving a course of arsenic as

- \* R. Pil. aloes et myrrhæ ʒj.  
divide in pil. xij. Sumat j. vel ij. omni nocte.
- Or,  
R. Pilulæ aloes et assafœtid. ʒj.  
divide in pil. xij. Capiat j. vel ij. omni nocte.
- † R. Mist. ferri co. ʒvjss.  
Decoct. aloes comp. ʒiss. m.  
Capiat cochlear. amp. duo bis quotidie.
- ‡ R. Radicis rhei concis. ʒj.  
—— calumbæ —— ʒij.  
—— zingib. —— ʒj.  
Coriandri fruct.,  
Cardamom. semin., aa. ʒj.  
Sodæ carbonatis ʒj.  
Aquæ bullient. ʒvj. m. Post horas duas cola et adde  
Syrupi aurant. ad ʒvj.  
Capiat cochlear. amp. j. bis quotidie.

In hot weather, only half this quantity should be made at a time.

for lichen. I believe, however, this remedy is never called for in young persons.

For external use in erythema, a weak Goulard lotion, of two or three drachms of liquor plumbi in eight ounces of strong camphor mixture, may be prescribed, or a scruple or two of oxide of bismuth may be mixed with eight ounces of elder-flower water, to which a little glycerine is added. These lotions are simply poured upon a fold of linen rag laid upon the inflamed part. Arrowroot jelly may be used instead. It is made by mixing a drachm of arrowroot with a little water and two ounces of glycerine, and gently warming the whole till it becomes a soft clear jelly. This jelly is then simply applied in linen or a soft handkerchief the same way as a poultice.

When erythema nodosum is extremely painful, a strong sedative may be applied directly to the part. Veratrin in ointment answers, in the proportion of two or three grains to the half-ounce, or ten grains of well-powdered opium may be added to the same quantity of lard. The ointment should be laid on pretty thickly. In girls, bandaging with flannel has answered very well in my hands. Dr. Spender employs this remedy in nearly every case, using Domette flannel. For the treatment of erythema læve I must refer the reader to works on general medicine. I may, however, suggest acupuncture.

Dr. Purdon treats\* simple erythema externally with a mixture of five parts of glycerine and four of yolk of egg. In *E. papulatum*, *tuberculatum*, *fugax*, and *marginatum*, he gives aperients and alteratives, such as mercury and chalk, dried carbonate of soda and rhubarb. When acidity is present he prescribes the liquor calcis saccharatus in drachm doses, or calcined magnesia or bismuth. If mucous diarrhœa exist, chlorate of potash, syrup of iodide of iron, cod-liver oil, or pancreatic emulsion; in *E. nodosum*, steel, aloes and borax† are his principal aids. In one case‡ of this variety, in a lady sixty years old, which had resisted every remedy, the peroxide of hydrogen was given with complete success.

Dr. Cheadle, in his "Report on Hospital Practice," gives the

\* *On Neurotic Cutaneous Diseases*, p. 37.

† R. Dec. aloes compos.,  
Mist. ferri compos., aa. ℥ijj.  
Boracis ꝓss.

Tinct. hyoscyam. ꝓss. ʒi. Capiat ꝓss. ter die.

‡ Published in the *Glasgow Medical Journal*, September, 1867.

case of a woman in whom papular erythema was accompanied by acid dyspepsia, and in which bicarbonate of soda, with hydrocyanic acid, effected great benefit.

Dr. Thomson, in *E. nodosum*, used to give bark in preference to quinine.\* In *E. læve*, when there is ground to suspect that gout is the cause of any obstinacy, Mr. Wilson says we may give a warm antacid purgative, such as Gregory's powder, or a powder composed of rhubarb, soda, and calumba, with or without colchicum, or iodide of potassium, two or three times a day, and the juice of two or three lemons as a cooling drink. Dr. Gregory's powder is such an unpalatable jumble that I wonder how people can take it at all. I have more than once seen it expelled immediately from the stomach, after a child had been compelled to swallow it, and on one occasion I saw a man of great resolution nearly suffocated by an attempt to get down a dose. As all the materials of which it is composed can be given in a much more palatable form,† I think some change for the better might be effected in this direction.

B. ERYSIPELAS (*as, atis*, neut.), from ἐρύω, to draw, drag, &c., and πέλας, near, surrounding.

*Definition.*—Redness and swelling of a portion of skin, accompanied by pungent burning, tingling and heat, sense of stiffness and weight in the part affected. Redness disappears under pressure; returns when this is removed; vesications, containing a pale, clear, yellow serum, often supervene and burst quickly. Fluid albuminous, with a neutral or alkaline reaction. Usually ends in resolution, but suppuration or mortification may supervene: latter very rare. Often migratory; most frequently met with in head or face. Commonly preceded by disorder of health and pyrexial symptoms. In acute cases resolution may be accompanied by free discharge of brick-red or fawn-coloured urates. Quantity of urea normal or less than usual; proportions of other constituents unchanged. The traumatic form is omitted here as belonging more exclusively to surgery.

*Treatment.*—To judge by the number of remedies advised for this

\* *Medical Times and Gazette*, 1857, vol. i. p. 133.

† For instance, magnesia may be given in milk, as already mentioned; rhubarb in the form of tincture, syrup, or pill, and ginger in the shape of syrup or tincture.

complaint, there ought to be no difficulty in curing it, whatever form it may put on; in the storerooms of surgery there seems to be a salve for every wound of this kind at least. Long ago I tried to draw attention to this fact, and remarked that here was a disease of almost uniform course and symptoms, a pure inflammation, treated by surgeons of great eminence *on the most opposite principles and yet with much the same success*; proving that, on one side or the other, there must be something strangely and radically wrong in the theory of the disease; for, if six men found each a different system upon the same symptoms—if it be considered by one an excess of strength and another a loss of strength, by one a spasm, and another a plethora; and if such opposite means as the knife and lancet in the hands of one man, black draught, calomel, antimony, and starvation under the care of another, lead yet to the same goal as wine, bark, and ammonia, when given by those who hold the heat, pain, and throbbing to be only so many signs of prostration, the irregular action of weakness—then I think it is pretty clear that at least five theories out of six must be wrong. How are we to decide here, and by what mysterious process of induction are we to evolve some stable theory of treatment out of positions and statements so conflicting? or has internal treatment, as Hebra saw reason to believe, no control over the course of erysipelas? I confess that I see no solution of the problem except that disorder arises from misdirected flow of vital power to the affected part, and that a remedy acts by attracting it back to its natural seat. Therefore, the most opposite things may be equally good remedies, when they possess a power in common of attracting abnormally directed vital power to the nearest, or most attainable, natural seat of such power.

Some years ago Dr. Balfour called attention to the great power tincture of sesqui-chloride of iron exerts over erysipelas.\* I believe Mr. Hamilton Bell first recommended it, but about this I am not confident. Dr. Balfour gives first of all a sharp purgative, such as ten grains of calomel with a drachm of jalap, or two drachms of sulphate of potash, and then twenty drops of the tincture every two hours till the disease is quelled. It may be given at any stage; it never brings on any headache, and it would not matter much if it did; it checks suppuration, and cures in less than a week. Dr.

\* *Monthly Journal of Medical Science*, vol. xvi. (1853), p. 426.

Balfour gives the tincture even to infants at the breast. To an infant four months old he gives two minims at a dose.

All I can say of this treatment is, that, with the exception of the powder, I consider it admirable, and by far the best ever introduced. I have used it for years, and have never seen a case do badly under it. It will not always check suppuration, but it will limit this process, and support the patient's strength. It has always appeared to me greatly superior to antiphlogistic treatment, and to have a decidedly more powerful control over erysipelas than either bark or ammonia. I have never seen any harm arise from the tincture, though I use it in larger doses than Dr. Balfour, generally giving quite thirty minims every two or three hours. But I altogether object to the purge; patients get refractory about powders, and pronounce them disgusting messes. Besides, I think the purging simply lowers the patient, and valuable time is lost in waiting for its action being set up before giving the iron. I therefore always begin with this at once.

Of the treatment with ammonia and bark, or quinine, I have of late years had very little experience, and that with wine, recommended by Dr. Williams, I have never tried, but I understand it has not proved so successful in the hands of others. The antiphlogistic treatment always appeared to me useless except for mischief.

Hebra seems to think there is nothing like cold dressings for erysipelas. He uses ice very freely, continuing it at times till the part gets quite numb. The plan introduced by Mr. Grantham \* I have tried in a great number of cases, and found it most useful. The inflamed part is thoroughly bathed with hot water, dried, saturated with hot lard, and covered with cotton wool. Any similar substance, as melted flare, beef or mutton suet, zinc ointment, &c., would, if I am to judge from my own observations, answer especially well; the object being to secure immediate contact of the skin with a thick layer of some material which is a bad conductor of heat, not irritating, or rather sedative if possible, and impermeable to air. The application of white paint seems to have been successful.† Dr. Walter Curran has witnessed ‡ great benefit from the iodide of ammonium ointment, the same strength as the iodide of potassium ointment of

\* *On Diseases of the Skin.* By Erasmus Wilson. 1863, p. 129.

† *Lancet*, 1856, vol. i. p. 610.

‡ *Journal of Cutaneous Medicine*, vol. iv. p. 35.

the Pharmacopeia. The application was uniformly successful in sixteen cases.

C. URTICARIA (*a, æ, fem.*), from *urtica*, a nettle.

*Definition.*—A rapid formation of white or pink, usually evanescent, flattened swellings; generally from the size of a sixpence to that of a shilling, but may be much larger; sometimes in long irregular wheals, like those made by a whip; generally with marginal redness. Accompanied by burning, aching, or tingling. Usually attended, when acute, with very considerable disturbance, such as headache, coated tongue, weariness, sickness, &c.; occasionally by symptoms of poisoning, such as giddiness, severe oppression at the stomach, anxiety, with sense of burning of the throat, constriction of this part. When attacking face, mamma or scrotum may be followed by œdema.

*Divisions.*—1. *U. acuta*, arising from some substance used as food or medicine in having acted as a poison: eruption in such cases preceded by the more severe symptoms just mentioned. 2. *U. communis*, in which there is little if anything more than the sudden swelling and itching. 3. *U. evanida*, in which the burning, itching, and swelling continue to recur for years, not unfrequently with symptoms of dyspepsia and exhaustion. In a variety of this, described by some writers as *U. perstans*, the wheals remain sometimes for days.\* 4. *U. tuberosa*, in which the swellings are much larger in size, and often accompanied by considerable and serious disturbance of the health. The connection between urticaria and disease of the liver, sexual organs and acne, has been adverted to by some authors; † I have not been able to verify the fact except as a mere coincidence. Dr. Gull considers ‡ that the wheal is due to “contraction of the muscular tissue of the skin.”

In a paper read before the British Medical Association, § Mr. Balmanno Squire stated that many cases considered as urticaria are really dependent on the irritation of the *acarus scabiei*, or, in other words, are cases of itch. I am not aware that this view has been confirmed by any other observer, and I cannot understand how such a mistake, as that of confounding urticaria with either scabies or

\* Hillier, *Op. cit.*, p. 48. † *Id.*, *Op. cit.*, p. 23.

‡ *Guy's Hospital Reports*, Third Series, vol. v. p. 191.

§ *Medical Times and Gazette*, 1865, vol. ii. p. 210.

phthiriasis, could be committed by any one versed in those disorders. The rapidity with which the swellings of urticaria form is so much greater than that seen in either of the latter complaints, and the swelling itself is so much more extensive as alone to constitute a decided line of separation. Besides, in even mild cases of scabies, pustules, fissures or vesicles rarely fail to appear, while in the most severe cases of genuine urticaria they are absent, or very rare.

*Treatment.*—Simple or febrile urticaria requires in general little beyond the use of a mild effervescent aperient, such as citrate of magnesia, or some remedy to allay the thirst and act upon the bowels at the same time, such as sulphate of magnesia in infusion of roses ;\* that from taking any noxious substance, an emetic or purgative. In the treatment of the chronic forms (the urticaria evanida, tuberosa, &c.) the first step is to simplify our means, as so many remedies have been recommended.

These are then—1. Saline aperients containing magnesia, which should form the staple of treatment so long as the tongue is foul and there is much feverishness, dryness of the mouth and lips, thirst, and heat. 2. These may be followed, when there is much anæmia, by small doses of aloin or strychnia in a pill,† and a steady course of steel. 3. The state of the digestion must be sedulously inquired into, and if anything transpire which leads to the suspicion that it is at fault, every effort must be made to set it right. Alkaline remedies, and those suited to painful digestion or gastralgia, seem most adapted to the case. Mr. Wilson speaks very highly of bismuth and oxide of

\* Patients who have reached puberty, and adults, may take the following :—

R. Pil. hydrargyri gr. xij.

Sodæ carbon. exsicc. gr. vj.

Extracti hyoscyam. vel conii ℥ss. ℥ ft. pil. vj.

Sumat unam horâ decubitûs.

R. Magnesiæ sulphatis ʒvj.

Acidi sulphuric. dil. m. xv.

Infus. rosæ acid., ad ʒvj. ℥.

Capiat coch. ampl. duo bis terve quotidie.

† R. Extracti colocynth. compos. gr. xij.

—— rhei gr. vj.

—— hyoscyami gr. x.

Strychniæ grani quartam partem. ℥ ft. pil. vj.

Sumat unam horâ decubitûs. To this may be joined the saline mixture prescribed at p. 37.

For formulæ for steel see p. 172–3.



silver ; he gives as much as a grain of the latter at a dose, a quarter of an hour before meals. The reader will see in the section on "silver staining" an objection to the use of oxide of silver. Sir Benjamin Brodie told me that nothing answered so well in his hands as the "caustic alkali." Mr. Startin, in obstinate cases, bleeds and gives iodide of potassium and colchicum. 4. If there be any tendency to gout colchicum may be given, and here I may say, that at the first outbreak of this complication I have found no plan answer so well as that of Sir Everard Home. He used to keep the colchicum wine in large bottles, so that all the mucilage fell to the bottom, and of the clear fluid above he gave drachm doses in an ounce of water.\* This plan I have followed for many years, and have never seen these large doses bring on either vomiting or purging, except now and then to a very trifling extent. If rheumatism be present iodide of potassium and biniodide of mercury may be given along with colchicum.† 5. When urticaria assumes an intermittent form, quinine or bark is called for.‡ Many practitioners indeed give quinine in all cases. Dr. Frazer prescribes quinine before meals and trisnitrate of bismuth after.§ He also administers an ipecacuanha emetic and a brisk purgative. 6. In obstinate cases no remedy appears to answer like ars nic. Mr. Wilson gives it, and Cazenave, who like Bazin takes a very gloomy view of inveterate urticaria, mentions a case of tuberoso nettle-rash, which had lasted four years and was cured by the use of Fowler's solution. Mr. Startin uses it along with large doses of liquor potassæ,|| and Mr. Hunt turns to it in obstinate cases. My own opinion is decidedly in its favour, and I invariably recommend a course of it in all cases, on the plan laid down at page 6 for lichen, raising the dose till a decided effect is produced. Quinine in large

\* See *Philosophical Transactions* (1817), p. 267.

† For formulæ see pp. 127 and 128.

‡ The formula given at p. 12 may be tried here.

§ Dr. Frazer does not give the dose or formula ; I therefore append a prescription :—

R. Bismuth. carbonatis gr. v.  
Sodæ carbonatis exsicc. gr. ij.  
Confect. aromat. q. s. ft. pil. ij.

To be taken at meals two or three times a day. The subnitrate of bismuth may be substituted for the carbonate, or a drachm of the liquor bismuthi et ammoniæ citratis may be taken three times a day.

|| A very pleasant way of taking potass is in the form of the citrate, flavoured with syrup of roses or orange.

doses appears to be useful in some cases where the disorder returns periodically. When urticaria occurs in a gouty habit of body—for such I understand the *cnidosis arthritique* of Dr. Bazin to be,—this gentleman, in obstinate cases, recommends a course of mineral waters, such as those of Vichy, Ems, and Wiesbaden.

Dr. Neligan does not take by any means a gloomy view of even the most obstinate forms—the *evanida* and *tuberosa*. Chalybeates and opiates combined will always overcome the former. The tubercular form may require a course of arsenic as well. Dr. Neligan's favourite formula was the compound iron mixture in doses of two ounces every morning, or twenty minims of the tincture of the sesquichloride in infusion of quassia three times a day, or two ounces of Bewley's aqua chalybeata twice a day; he also gave eight to twelve grains of Dover's powder every night.\* Dr. McCall Anderson says the bromide of potassium is very beneficial in urticaria perstans when not caused by constitutional vice.

Mr. Wilson speaks favourably of the power of chloroform and laudanum, and soap liniment, in quelling the itching and tingling which so harass many of these patients, but his chief reliance is upon a lotion of bichloride of mercury, nearly a grain to an ounce. Dr. Gull remarked that “after dropping chloroform on the skin, however susceptible it might have been before, no wheal could be brought out by friction, and when chloroform was applied to a wheal already risen it quickly reduced it.” Dr. Neligan employed with good effect an alkaline spirituous wash, containing half a drachm of carbonate of potass and half an ounce of spirit in eleven ounces and a half of elder-flower water; another favourite remedy was the chloroform ointment recommended at page 22 for prurigo. Dr. Frazer says † great relief is given by the use of a lotion made of equal parts of glycerine and liquor plumbi, or of these with the same amount of laurel-water. During winter the hot bath should be used once or twice every week, and very frequently during summer warm sponging affords more relief than any form of cold bathing, though, occasionally, strong persons find benefit in very hot relaxing weather from the use of the shower-bath.

Diet is considered to play a great part in urticaria. Some writers believe that if we are vigilant enough we may always trace it to some noxious article of food. Mr. Wilson mentions a case where even

\* *Practical Treatise on Diseases of the Skin*, p. 60.

† *Treatment of Diseases of the Skin*. By Dr. William Frazer. 1864.

sugar was banished with advantage to the patient.\* Dr. Hillier says that in some cases a milk or vegetable diet has been found to cure the disease. But I apprehend these cases are very rare, and that in by far the greater number of instances the influence of diet is not greater than in other diseases of the skin. Dr. Willan was obliged to admit † that “in some cases a total alteration of diet did not produce the least alleviation of the complaint,” and Mr. Hunt says that disorder of the digestive organs is seldom the cause of this affection. Often, too, where some particular agent brings on nettle-rash, as nuts do, for instance, with some persons, abstinence alone will only do with those who have an inborn inability to support them; where this tendency has been suddenly acquired, it is the disordered state of the health that we must look to. I was consulted in the case of a gentleman who suffered most severely from urticaria, principally in the face, and who attributed it to eating walnuts. On cross-examination it came out that he had previously eaten nuts enough with impunity, and that lately he had fallen into bad health, chiefly from great confinement to business, and anxiety; I therefore gave it as my opinion that the nuts had nothing to do with the matter, and that, though it would be prudent to abstain, yet that it was not really of much consequence, and that if he took plenty of fresh meat and good vegetables, and went out for a ride every day, he might eat as many nuts as he liked. The result proved that this view was right, for he got quite well though he had no particular restraint upon himself.

Exercise in the open air—not mere walking, but active exercise, particularly in company,—is of much more consequence. Many of these patients lead very monotonous lives, and it is very difficult to get them to shake off their habits; but they must do so, or see the complaint endure.

The following very unusual case ‡ seems to me more nearly connected with urticaria than any other disease of the skin. That it was a neurosis I think admits of little doubt. The singular features in it were the extraordinary size of the swellings, and the total

\* I had under my care a strong-looking man in whom a minute dose of opium, henbane, mercury, or antimony at once produced the most violent urticaria I ever saw; he was always quite unfit to work for eight or ten days.

† *A Practical Synopsis of Cutaneous Diseases.* By Thomas Bateman. 1819, p. 93.

‡ From a paper read by the author before the Medico-Chirurgical Society, June 10th, 1856.

absence of all itching. I showed it to several surgeons, but no one recognized the disease except Sir Benjamin Brodie, who had seen one or two instances of it in a very mild form, but confessed himself so entirely puzzled as to its nature that he had not ventured to give it a name. I believe no published account of the disorder is to be found, at any rate I found none after a long search in the Library of the College of Surgeons. The patient was a gentleman in his thirty-fifth year, usually enjoying very good health, though rather below par, owing to overwork. The account is taken almost word for word from the paper read before the Society :—

“ After having long suffered from a slight touch of eczema of the scalp I was attacked in June, 1855, with colicky pains and neuralgia. Soon after this I noticed a large swelling, extending from the inner to the outer side of the left thigh, running just below Poupart's ligament. It was of the colour of the skin, firm and painless ; of a pyriform shape, the broad end being at the inner side of the thigh, over which it extended full three inches. I was alarmed, but on undressing at night found that it had disappeared. The next morning an unusual stiffness was felt along the upper part of the left hip. Remembering the phenomenon of the previous day, I examined in the glass, and was astonished to see a large swelling stretching backwards just below the crest of the ilium. This time it was red, but painless as before. It was five or six inches in length, about two in breadth, and raised a full half-inch above the surrounding skin, the margin being clearly defined. This was quite a new state of things to me, and I watched its progress with no little anxiety and interest.

“ The third day, the left extremity of this swelling had become indistinct, and the other end began to stretch down the left side of the sacrum ; but after a short interval it took another direction, and on the fourth day there was a fully-formed lump creeping along the crest of the right ilium ; it extended but little more than half-way round, when it began to lessen, and passed gradually away. Meantime a smaller swelling formed on the middle and upper part of the left thigh, which disappeared in the same way as the others.

“ For upwards of three weeks one or two of these swellings formed every day about the hips, crest of the ilium, and upper part of the left thigh, the right thigh not being attacked. Sometimes two occurred almost simultaneously ; on one day there were three. In

every instance they appeared in the same manner and over the same tract as those first described, being only more isolated. From this time they diminished in frequency, and became more dispersed.

“Towards the end of October the face was attacked. A hard swelling passed slowly over both eyes, beginning outside the external angle of the right eye, and subsiding considerably there before it reached the corresponding point of the left eye. It ran its course in about eight hours and then slowly subsided, but considerable puffiness remained for several days. Each eye in succession was so firmly closed at the height of the attack, that not a ray of light could be perceived, even when an attempt was made to open the eyelid forcibly with the fingers. A few days after the mouth was assailed, the swelling being much more prominent. One or two swellings also showed themselves on the legs, and one or two small ones on the arms. There was now generally an interval of a day or two between them, and after a few irregular outbreaks, the disorder almost entirely quitted the lower part of the face to appear with concentrated violence in the face.

“Here, after three attacks, the disorder fairly reached its climax on the 11th of December. About 4 A.M. a swelling commenced with a peculiar sensation of tension and uneasiness in the left cheek, which soon roused me, and prevented further sleep. On grasping it with the hand, it felt like a large walnut. It spread with the most surprising rapidity, and by eight o'clock had reached right across the lower part of the face, which was so swollen as to be visible, like a dark projecting shadow, on casting down the eyes. The anterior surface of the upper lip was protruded horizontally outwards, and firmly pressed against the nostrils; the mucous membrane of the lips was shining, and so tense as to feel as if it would crack. All attempts at articulation were very imperfect, and though the mouth was not firmly closed, yet nothing could be swallowed, owing to its rigidity and the total loss of control over the movements of the lips. The swelling was quite defined, ceasing above on a level with the nostrils and inferiorly about an inch below the mouth. The margin rose abruptly from the surrounding skin, and it lay like an oblong tumour across the face. Thus it remained till early the next morning, when both eyes were for the first time attacked at once; in a short time I became totally blind and remained so for some hours.

“The engraving represents the last and smallest of the swellings on the face; it was taken an hour and forty minutes after I first noticed the peculiar sensation of stiffness. This time the swelling was confined to the lower lip. I regret much that the figure of some of the larger ones was not preserved, but the blindness and difficulty of speaking rendered me averse to leaving my room.



“Three times the throat was affected, and here the swelling reached its maximum in half an hour. A medical friend, whose aid I requested in one of these attacks, said that the posterior fauces presented much the same appearance as in a bad case of cynamche; the uvula, soft palate and tonsils being greatly swollen. Saliva was poured out in large quantities, and for some hours the sense of suffocation was almost unbearable, owing, probably, to the epiglottis being involved.

“From the 11th of December the number and severity of the attacks steadily declined, and they finally disappeared on the 14th of March (1856).

“At no time were these swellings painful, even on firm pressure, to which I may here observe they did not yield. Some of them conveyed a feeling of heat to the hand, but in general the only sensation remarked was an extreme stiffness and distension. The skin was, for the most part, unaltered in colour, though some of the lumps on the arms and legs were of a pale pink, and one or two on the hip of a bright red. The subsidence of the swelling was never followed by any desquamation or itching, but on two occasions the skin of the lower part of the face became slightly yellow, and there was a free secretion of sebaceous matter, which for some days after could be peeled off in flakes.

“No constitutional disturbance of any kind accompanied either the outbreak or decline of these singular phenomena, nor did they seem to bear any relation to such aggravation or improvement as occasionally took place in the eczema. I never succeeded in tracing them to the use of any particular article of food. When once the swellings had begun to form, no local application, such as

vapour-baths, hot fomentations, poultices, cold spirituous lotions, and pressure, exerted the slightest influence in checking their progress. Mr. Gay and Mr. Skey were consulted; both recommended tonics, and these certainly improved the general health, and possibly also controlled the severity of the symptoms. Mr. Robert Taylor kindly examined the urine, but found it quite normal; he moreover advised colchicum and bichloride of mercury, which seemed to hasten the disappearance of the disorder, thus suggesting an analogy with chronic urticaria. Sir Benjamin Brodie considered the affection dependent on disorder of the stomach, remediable by the use of liquor potassæ. Diaphoretics were tried, as the skin was always dry, but I cannot say that I ever noticed any appreciable effect from their employment.

"None of these swellings ever formed in the afternoon or evening. All those of which I noticed the commencement began between four and ten a.m., and with one exception, always reached their utmost height in four hours. Those on the face were generally about a week in subsiding completely; the others disappeared almost as rapidly as they came.

"I have thus endeavoured to give a faithful description of the case while it was yet fresh in my memory, and would gladly learn if any light can be thrown on the pathology and history of the complaint.

"In the beginning of January, 1857, these swellings again made their appearance in as severe a form as ever, but this time confined entirely to the trunk. Iodide of potassium, in doses of seven grains, three times a day; a grain and a half of the acetic extract of colchicum every night, followed by one-eighth of a grain of bichloride of mercury, also at night, removed them. This time also they supervened upon the use of dilute nitric acid taken in moderate quantities for about a month previous to the last attack. Some years later one of these swellings formed on the right wrist. With that exception there has been no return."

Dr. Oppenheim describes\* a very similar disease as occurring in Turkey. The patient, he tells us, goes to bed well, but wakes in the morning with one or more of the tumours *οι τριβουβς*. They are generally seated at some distance from the joint, and at the *inner or flexor side of the limb*. They are globular, but not very sharply circumscribed, hard, scarcely movable, and *very painful to*

\* *Ueber den Zustand der Heilkunde.* 1833.

*the touch.* They are not discoloured or red, neither are they hotter than other parts. They vary in size from the bigness of a *filbert* to that of the fist, and acquire their full size in a few hours. They are *oftener met with on the upper than the lower limbs, and on the leg and forearm than on the thigh and arm.* Dr. Oppenheim speaks also of their appearing *on the palm of the hand and the sole of the foot*, situations in which they never occurred in the foregoing case. When neglected, the disease is apt to continue for life. Dr. Graves, from whose essay on Oppenheim's work I extract this account, saw\* one case of this disorder in the Meath Hospital, but he gives no further account of it.

It will be observed that the affection described by Oppenheim, though perhaps closely allied to that which I have recorded, still differs from it notably, especially in the characteristics in the lines which I have italicized.

D. PÚRPURA (*a, æ, fem.*), from *πορφύρα*, the shell-fish used for dyeing purple. The accentuation has been corrupted.

*Definition.*—An eruption of livid, purple, often rounded spots, varying in size from a line to an inch, bright red when they first appear, principally seated on the limbs, especially the lower ones; do not disappear or fade on pressure; margins of spots abrupt at first. Several successive eruptions of spots. Gradually changing, as they decline, to a green, brown, or yellow hue; often accompanied by languor, weariness, loss of spirits, and other signs of exhaustion. Not attended by desquamation. Seat of disease in papillary layer. Outbreak often preceded by slight febrile symptoms; may complicate lichen, ecthyma, and scabies, and be complicated by eczema.

*Divisions.*—1. P. simplex (the purples), attended chiefly by the symptoms mentioned. P. hæmorrhagica, marked by the same phenomena in a more severe form, accompanied by bleeding from one or more of the mucous membranes. 3. P. senilis, more a dark brown or yellowish staining of the skin than disease. 4. P. urticans, in which the patches are at first elevated like those of urticaria (to *hæmorrhagica* might, I think, be referred with advantage), and are followed by livid, brownish-yellow stains.†

\* *Studies in Physiology and Medicine.* 1863, p. 296.

† A tendency to purpura sometimes runs through several members of a family. I had three sisters, Jewesses, under my care for it at the same time.



*Treatment.*—Simple purpura and purpura senilis alone belong to our subject; the hæmorrhagic form pertaining to general surgery, and purpura urticans being removed to urticaria, the usual treatment for which seems best adapted to it. Purpura senilis is soon disposed of, as unless there be any particular disorder of the health which requires setting right, it demands nothing more than the use of some simple unirritating ointment, such as that of zinc, elder, or spermaceti. For simple purpura I would recommend the unsparing use of purgatives, such as mercury and chalk, in five-grain doses every night, and the acid mixture, with sulphate of magnesia, prescribed at page 179, until free action of the bowels takes place. At the same time I think meat in every form should be forbidden, and the patient should be restricted to vegetables, farinaceous food, milk, red wine, and light fish. When the first symptoms are subdued mineral acids may be given, but I think that in general bitters should be avoided, especially those possessing a tonic action.\* Quinine and iron have always in my hands proved, at the outset, either useless or downright hurtful. I have seen the tincture of the muriate useful in the form often observed in sailors after a long voyage, from a blow, but I am disposed to think it was the acid that did the good. Mr. Wilson however gives them, as also sulphuric acid with bark, and nitro-muriatic acid with bitters, combining all treatment with generous diet, as meat, wine, and so forth. Locally he recommends tepid baths with juniper tar soap, lotions containing the sesquicarbonate of ammonia, or the bichloride of mercury, with emulsion of bitter almonds. Dr. Joseph Lindsay has employed the tincture of ergot of rye, in half-drachm doses every two hours, very successfully in the hæmorrhagic form. Mr. Startin not having published his treatment of this affection, I am unable to state what his views are. Mr. Hunt, I believe, employs purgatives, such as calomel and compound jalap powder, very freely. I do not envy the sensations of the man who has to swallow the latter. Dr. Neligan considered no remedy equal to turpentine.† He used to give an ounce once

\* R. Acidi nitro-hydrochlorici dil. ʒiiss.  
Syrupi rosæ gallicæ ʒiij.  
Infusi dulcamaræ ad ʒvj. ℥.

Capiat cochlear. ampl. duo bis die.

Along with this the patient may take a grain of calomel at bedtime, and a scruple of confection of scammony in the morning.

† *Practical Treatise on Diseases of the Skin.* 1852, p. 305.

or twice daily;\* when there was much hæmorrhage from the intestinal canal, or when the stomach rejected the medicine, he prescribed it in the form of an enema. I should fancy any ordinary stomach would frequently reject such a dose. Some years ago I tried *half-ounce* doses for syphilitic iritis, and since then have repeatedly treated the complaint in the same way, but have often found it impossible to make patients continue the use of the remedy, as even this quantity sometimes induced nausea lasting for hours, and excessive sickness. In extreme debility Neligan recommends astringent preparations of iron, and in cases complicated with bleeding from the mucous surfaces, acetate of lead and opium, or gallic acid. Sponging the surface with cooling lotions he considered† a valuable adjunct. He allowed the free use of acidulated drinks‡ and light diet, taken cool rather than warm. Lime-juice has been recommended in purpura.

E. PÉRNIO (*o, onis, masc.*), said to be derived from *πέρχος* or *περχνός*, black-spotted; just as probably from *πέρνα*, a gammon of bacon, the colour of which it quite as nearly resembles; but derivations are often incomprehensible.

*Definition.*—A red swollen state of a portion of skin, followed by a deep ham-colour, or livid hue. Patch of scarf-skin affected becomes contracted, shrivelled, and drops off. Sometimes

\* R. Olei terebinthinæ fluid. ℥j.  
Mucilaginis ℥j.  
Aquæ menth. piperitæ ℥iss. ℥.

ft. haustus semel vel bis quotidie sumendus.

R. Olei terebinth. ℥j.  
Ovi unius vitellum.  
Decocti hordei ℥vj. ℥ ft. enema.

† R. Spiritús rectificati ℥x.  
Acidi acetici ℥iij.  
Aquæ ad ℥viiij. ℥ ft. lotio.

I think the following will be found equal to this in every form of purpura which requires a lotion :—

R. Liquoris ammoniæ acetatis ℥iss.  
Spiritús ætheris ℥vj.  
Aquæ camphoræ ad ℥viiij. ℥ ft. lotio.

‡ Cold tea, flavoured with rum, very slightly sweetened and acidulated with lemon-juice, may be recommended.

followed by painful, tedious, superficial ulceration. Possibly chilblain is really an undeveloped vesicle, the effusion of serum being checked by the constriction of the vessels in consequence of cold.

*Treatment.*—I need scarcely say that the remedies for chilblains are almost countless. Probably any application which can be made to combine a balsamic principle, such as turpentine or camphor, with alcohol in some form; or which is naturally a strong stimulant to absorption, as for instance tincture of iodine or solution of nitrate of silver, is equally good so long as the skin is unbroken. When this has been removed, or when sup-puration has begun, the benzoated zinc ointment, thinned down with spirit of camphor, say in the proportion of seven parts of the ointment to one of spirit, is a very useful application. It should be laid thinly upon the part (any pus being first removed) and covered with lint, which is to be kept in its proper place by a strip of linen. In many cases it is highly advisable to attend to the state of the health, as most patients suffering from chilblain, at least those who habitually suffer, are in an unsatisfactory state in this respect. Tonics are generally called for in such cases.

CHAPTER VI.—EXANTHEMATA.

*A. Scarlatina. B. Rubeola. C. Roseola. D. Variola.*

A. SCARLATÍNA (*α, æ, fem.*), from *scarlatto*, deep red.

*Definition.*—An eruption of very minute, bright-red papulæ and stains, preceded by heaviness, languor and drowsiness, pains in limbs and head, shivering, nausea and rise in the pulse, followed by swelling of the face. Fauces red; tongue white, except at edges, and moist; soreness of throat; skin hot and dry. Early appearance of throat affection. Eruption appears on second day.

*Divisions.*—1. S. simplex, or sine angina, corresponding to the account given above. 2. S. anginosa, in which both constitutional and throat symptoms acquire greater severity, especially the latter; marked by great heat of skin (temp. 105°), foul deep ulcers in tonsils, great stiffness of neck, and hoarseness; retarded appearance of eruption, which comes out on third or fourth day in scattered patches on chest and arms, and recedes day after with partial reappearance. 3. S. maligna, marked by a typhoid character, great delirium, often diarrhoea, feeble pulse, brown dry tongue, dusky hue of throat; dark incrustations on tonsils and uvula.

*Treatment.*—If I were asked to name a disease which would show the discrepancy between facts and teaching, between the stern irrefutable evidence in the returns of the Registrar-General, and the inferences which flow from reading the settled deliberate opinions of those who ought to know most about the matter, I would name scarlatina. For many years, plans of treatment have been before the world which, so far as we can judge, ought to have almost as effectually

defeated the inroads of this malady as vaccination has defeated small-pox ; yet week after week and year by year this relentless scourge sweeps away its victims, not by hundreds but by thousands. There must be something strangely wrong in a system which presents such a sad and startling contradiction as this.

Long ago I endeavoured to bring under the notice of the profession a mode of treatment which had proved very successful in Germany, but the attempt met with no response except from Mr. Erasmus Wilson, Dr. Routh, the late Dr. Snow, and one or two others. It consists in daily rubbing with hot fat or lard, and the manner in which it checks and quells the violence of the disorder is, if the accounts given be true, most extraordinary. Death is a rare result ; the patient never takes cold ; dropsical symptoms are almost unknown ; no infection is given, because the sources of it are mechanically closed ; the distressing heat and irritation of the skin are abated, and, according to a statement made at the Medical Society by Dr. Routh, the pulse will fall thirty beats in three hours when the patient is subjected to this treatment. I have never noticed such a result myself, but I have seen it sink fifty beats, or from 130 to 80, in three days.

All that needs to be done is to rub the patient over from head to foot with fat ; lard or fat bacon is the best material, and the salt should be removed as far as possible. The rubbing is to be done once at least, twice if thought proper, in the twenty-four hours. No harm can come from rubbing in too much ; a great deal may ensue from rubbing in too little. The patient wants no washing, may wear the same clothes all the time, and requires little medicine and no precautions beyond those which common observation would direct.

I have great pleasure in giving my unequivocal testimony in favour of this excellent plan of treatment. Although I have not had any opportunity of trying it in large numbers of cases, and not at all among the poorer classes, yet I have observed enough of its workings to satisfy me of its vast superiority over any other method I have seen put in force. Dr. Schneemann merits the gratitude of mankind for his discovery, and it is not very creditable to the state of medicine in this country, that a plan, so widely known and justly esteemed on the continent, should have been so utterly neglected here, and that thousands of children should be swept off every year by this fell disease, while a cheap and simple remedy lies untried and almost unknown.

Not long ago I was called in to see two children, girls, who had just had this disease, and had been treated, so far as I could make out, antiphlogistically. One was clearly dying of anæmia ; the other was in a very critical state, being anasarcaous, very weak, and having eczematous crusts forming about the mouth and nose. Within two days another child, a son, was seized with the disorder in a very severe form, the temperature of the skin being extremely high, and the throat affection very marked : pulse also rapid, 136. He was rubbed all over twice daily with lard, and had the sesquicarbonate of ammonia freely, and though his parents tried rather hard to neutralize the effects of any treatment by the most absurd indulgence, the boy had not a single bad symptom, and made a rapid and steady recovery, getting well long before his surviving sister, for the other had died in three days from my first visit.

Mr. Edward Richardson, of Mount Street, London Hospital, having tried this treatment pretty extensively, was kind enough to favour me with the following communication :—

“ I can testify to the great success of the treatment, as within the last three years I have attended upwards of one hundred cases, and have only had one death, and this was caused by a secondary affection. The patients express themselves as greatly relieved by the unguent friction, which I always direct to be used twice a day.

“ I have followed this plan of treatment in private, workhouse and district union practice, and with equally beneficial results in each. I should say that I administer carbonate of ammonia internally every three hours, and give a purge of pulv. jalap. co.”

The next best plan, yet seemingly far behind it in efficacy, is that of cold affusion. Bateman dwells with fervid energy upon the wonderful soothing powers of cold affusion, the great febrifuge as it has been justly called. For ten years he says he had used Dr. Currie's plan without once seeing inconvenience, much less injury, from it.\* It is, however, more than questionable if it could ever be introduced again. There is no getting parents now to allow children, burning with fever and oppressed with bedclothes, to have even a breath of fresh air, much less to come in contact with cold water. The habit of using their senses is not one of the things taught to children at schools, and ladies assume the duties of wives

\* *Practical Synopsis of Cutaneous Diseases.* By Thomas Bateman. 1819, p. 82.

and mothers, as ignorant of the simplest facts of hygiene as the savage who buys a charm from the medicine-man. Every now and then, in a lecture on the exanthemata, the speaker touches with complacent pity on the ignorance and prejudice which Sydenham, Radcliffe, and Mead had to overcome about keeping patients with fever stewing in close, superheated rooms, as though those great men had for ever banished such mischievous practices, whereas they flourish as vigorously as ever.

In my opinion, the medical attendant should either insist upon the free admission of air into the sick-room, or give up the case at once. Unless medical men set themselves vigorously against this mania for keeping doors and windows closed, there is no hope of a more rational system being introduced. When a surgeon or physician finds a patient with scarlet fever, lying, even in mild weather, under a heap of clothes, with a fire burning night and day, and doors and windows closed so as jealously to exclude every breath of fresh air, he may make up his mind that he has got to do with obstinate lunatics, who may be frightened, but who cannot be reasoned into doing anything. If he can succeed in getting in fresh air by means of an open window both day and night during the summer, and all day in the winter, except in very inclement weather; if he can resolutely shut his ears to all nonsense about driving in the eruption; cut down fires to what is simply necessary in order to give the sick-room a cheerful look; stop everything in the way of "stuffing," especially with rich, fat soups; keep the temperature at a rational standard, instead of a heat which will make a strong man feel faint and sick; then he may stand some chance of doing good. If not, he is only doing mischief by sanctioning such destructive folly and is better away.

Mr. Wilson considers sesquicarbonate of ammonia to be a remedy which, in its power over scarlet fever and rubeola, may be ranked with quinine in ague, iron in erysipelas, arsenic in eczema, and sulphur in scabies. I think myself that the success recorded to have followed the use of this remedy is among the most striking triumphs that discovery can boast, and its beneficial results in small-pox are equally cheering. Dr. Witt says "It is the only remedy yet known which appears to have any decided effect upon this terrible malady" (variola); and Mr. Wilson adds, "My own experience of the sesquicarbonate of ammonia fully corroborates the value of Dr.

Witt's suggestion, and I feel that the adoption of this method cannot be too forcibly pressed upon medical men."\* In scarlatina the success has been marvellous. Out of several hundred cases one gentleman did not lose more than one in a hundred. Mr. Henry Jackson, of Sheffield, with his father, treated patients in this way for fifty years, in which time they did not lose more than four patients, and these died from typhus following the scarlatina. Another gentleman reports that he rarely lost a patient during twenty years' use of the remedy, whereas his successor, who rejected the treatment by ammonia, lost seventy-four out of a hundred and six cases in a single epidemic. These results contrast strongly with the havoc this dreadful complaint used to make under the treatment with antiphlogistics, two, three, and even four or five deaths in a single family, and which I am much inclined to believe, from what I saw of it in my younger days, never saved a single bad case, if it even did not hasten the progress of thousands to the grave.

It does not seem necessary to prescribe anything with the ammonia. From three to six or seven grains, according to the age of the patient, may be given at first every hour or two till a decided effect is produced upon the disease, after which it may be taken less frequently. Simple or cinnamon water seems to be the favourite vehicle, but nothing can answer better than camphor mixture. In some slight cases, where there is not much difficulty in swallowing, ammonia may be given in the form of an effervescent drink, the carbonate in solution being mixed with lemon-juice. I believe, however, that it is of little use to employ this medicine if the reader be going to restrict himself to the doses sanctioned by the British Pharmacopeia.

Dr. Sisson considers † that when scarlet fever is complicated with acute catarrh of the stomach, a very likely contingency if east winds prevail at the time, we must have recourse to mineral acids in preference to ammonia, as the tenacious alkaline mucus with which the stomach is lined is not acted on by alkalies. Milk should be avoided in such a state of matters, as there is reason to believe that it is not digested.

Belladonna has obtained a high reputation on the Continent, not

\* *Diseases of the Skin.* 1863, p. 521.

† *Journal of Cutaneous Medicine*, vol. i. p. 376.



only for its curative but its preventive powers in scarlatina. Some of the german physicians seem to think it is the best remedy in use ; one of them goes so far as to say that it may be considered as effective against scarlatina as vaccinia is against small-pox. Even supposing this view to be overdrawn, enough still remains to show that belladonna does exert control over scarlatina, and that there is every reason to believe, if it were freely and judiciously used at the outbreak of an epidemic, the number of fatal or even serious cases would be materially diminished.

It may be given in the form of extract dissolved in water, sweetened and flavoured with orange, cinnamon, or nutmeg ; about three grains of the extract to an ounce of fluid are perhaps the best proportions. Of this solution two or three drops may be given to an infant under a year old twice a day, three or four drops to a child between one and two years old, and from this time of life a drop may be added for each succeeding year.

These, then, are the remedies which the experience of very successful practitioners warrants us in selecting as the most reliable—cold bathing, rubbing with fat, ammonia, and belladonna. They are few, but potent, and all the more valuable because they are few. The peroxide of hydrogen has been recently eulogized\* by a gentleman quite capable of forming a true estimate of its value. It is given in drachm doses with a few minims of tincture of perchloride of iron every three or four hours. All the other means, such as gargles, aperients, &c., are only auxiliaries, for the use of which no general rule can be laid down, but which the experience of every one capable of profiting by experience will teach him how to use. We have the high authority of Sir Thomas Watson, that a weak solution of common salt is a great improvement upon the old capsicum gargle ; it may also in suitable cases be injected by the nostrils, and its effects, when used in this way, are said to be most efficacious. I have often employed it, a teaspoonful or two of salt in three or four tablespoonfuls of hot, not warm, water, not only in the sore throat of scarlatina but in other painful ulcerated states of this membrane, and am disposed to believe it is decidedly useful. Carbolic acid, two grains to an ounce, has been recommended by Dr. Kempster of Utica.

\* *Journal of Cutaneous Medicine*, vol. iv. p. 66.

B. RUBÉOLA (*a, æ, fem.*), from *rūbeo*, to become red.

*Definition.*—An eruption of dull-red spots accompanied by more or less diffuse redness ; sometimes forming patches of a horseshoe shape ; preceded by headache, weariness, feverishness, and general disturbance. Eruption appears on fourth day on forehead and face ; accompanied by white tongue, suffusion of mucous membrane of eyes and nostrils, intolerance of light, frequent and hard pulse. Eruption declines on seventh day. Followed by desquamation, itching, and some albuminaria.

*Treatment.*—Same as that for scarlatina, especially with respect to rubbing in fat, which has succeeded in my hands better than anything else.

C. ROSÉOLA (*a, æ, fem.*), from *rosa*, a rose.

*Definition.*—An eruption of vivid red, small patches of dots, little or not at all elevated, generally in clusters (corymbs), occasionally circular or annular ; preceded by some feverishness and congestion of the fauces, and accompanied by tenderness of the submaxillary glands ; occasionally ending with greenish discoloration of the parts where the rash has appeared. Often accompanied by itching. Occasionally epidemic.

*Divisions.*—1. R. simplex or idiopathica, embracing the varieties known as the corymbose, annulated, autumnal, &c. ; and 2. R. symptomatice, in which it appears as a complication of rheumatism, continued fever, variola, teething, leucorrhœa, surgical operations, &c. Some authors also discriminate such forms as R. infantilis, R. autumnalis, and R. annulata, &c.

*Treatment.*—The simple form of this complaint does not generally call for active interference ; its treatment is that of any mild attack of feverishness, a febrifuge, containing some liquor ammoniæ acetatis and spirit of nitric ether, with a brisk aperient, being generally sufficient.\* Often the best febrifuge is simple unsweetened lemonade drunk *ad libitum*. The aperient for an adult may consist of a mild

\* R. Liquoris ammon. acet. ℥iss.  
Spir. ætheris nitros. ℥iv.  
Vini antimonii ℥ij.  
Mist. camph. ad ℥viij. ℥.

Capiat coch. ampl. duo bis terve quotidie.

## *Definition of Variola.*

~~with~~ ~~and~~ two or three teaspoonfuls of granulated citrate of magnesia.\* It is ~~seldom~~ necessary to continue the use of such remedies more ~~than~~ two or three days, immediately after which a vegetable tonic ~~may~~ be given with some mineral acid, such as the dilute nitric or ~~aromatic~~ sulphuric acid; or a grain of quinine, with five minims of ~~dilute~~ sulphuric acid and half a drachm of compound tincture of ~~cardamoms~~, may be taken three times a day. A favourite prescription of Mr. Wilson's seems to be sulphate of magnesia with quinine and infusion of roses. In some instances I think it would be an improvement to prescribe the magnesia separately, in the form of citrate or heavy calcined magnesia, and the quinine and infusion of roses together. In severe chronic cases of roseola Mr. Startin gives calomel and opium at bedtime, and brisk saline aperients, containing tartar emetic and liquor potassæ and colchicum. The treatment of the sympathetic form will of course depend on the parent disorder. In children suffering from their teeth the gums may at once be lanced, and rheumatism may be assailed with iodide of potassium and colchicum; when the functions of the womb are disturbed it is as well, perhaps, to subdue the roseola first, and then give undivided attention to the uterine disorder.

To relieve the uneasiness of the skin, the itching and tingling, the surface may be freely bathed with a lotion containing equal parts of liquor ammoniæ acetatis and camphor mixture. Emulsion of bitter almonds has been recommended by Mr. Wilson, as also sponging with tepid water containing a little vinegar, which he says answers every purpose. Mr. Startin uses lotions containing a little borax or distilled vinegar, and eau de Cologne diluted with water. Perhaps inunction with hot lard acts as well as anything.

D. VARÍOLA (*a, æ, fem.*), from *varius*, spotted, speckled.

*Definition.*—An eruption of umbilicated vesicles, preceded by red papules. Contents of vesicle subsequently become seropurulent. Preceded by languor, headache, muscular pains in the back, chills, drowsiness, nausea, and often vomiting. Eruption appears on third day: generally breaks out first on upper part of face and mouth. Mucous membrane of nose, mouth, and throat sometimes similarly affected. Unhealthy suppuration in vesicles.

\* Or those at pages 12 and 37.

completed by ninth day. Accompanied by peculiar and disagreeable smell from skin.

*Divisions.*—1. *V. discreta*, in which the vesicles remain separate, and the disorder runs a mild course. 2. *V. confluens*, in which they run together. Accompanied by swelling and closing of the eyelids, severe affection of tonsils and parotid glands; salivation in adults, diarrhoea in children, rapid pulse, great debility. Frequently fatal.

Judging from the preparations mentioned\* in the catalogue of the United States Army Medical Museum, the following pathological changes ensue in small-pox. 1. Thickening of the rete mucosum by cell-multiplication; hypertrophy of papillæ near margin. 2. Separation of horny from mucous layer of epidermis; cavity filled with the contents of the pustule. 3. Appearance of a lining membrane to this cavity, similar in structure to that of the free surface of the epidermis; papillæ shorter than natural, and blunted; active cell-multiplication in connective tissue of corium. 4. "Centre of pustule, under portion of lining wall of cavity, gives way;" rete mucosum degenerates into a mass of ill-defined cells and granules; corium ulcerates superficially; all signs of papillæ gone. 5. Thinning and rupture of superficial horny layer at apex of pustule.

*Treatment.*—Internally the same as for scarlatina. Dr. C. Black recommends,† externally, to prevent pitting, absolute exclusion of light, and guarding the face from the action of the air by keeping it constantly covered with fresh hog's lard. Another author calls attention‡ to the value of darkness in preventing pitting in this disease. He prescribes Fowler's solution internally at the same time. Ample testimony has already been borne§ to the utility of Dr. Black's suggestion. It is, however, to be remembered, that not only did Dr. Benjamin Ridge recommend|| total exclusion of light as far back as 1859, but that the idea has every now and then been mooted ever since the days of John of Gaddesden. In addition to this, an immense number of ectrotic remedies has been recommended; among them nitrate of silver, collodion, mercurial ointment, emplastrum vigo, the best of all being, perhaps, the nitrate and the ethereal solution of mastic and iodine suggested by Dr. T. Smith

\* *Journal of Cutaneous Medicine*, vol. ii. p. 64.

† *Lancet*, 1867, vol. i. p. 792.

‡ *Ibid.*, vol. ii. p. 88.

§ *Ibid.*, vol. ii. p. 284.

|| *Ibid.*, p. 191.

Rowe, of Margate.\* To my thinking there is nothing like puncturing each vesicle so soon as ever it contains fluid, wiping the fluid gently away with lint, and covering the part with thick lard. When practicable, I would advise, in severe cases, touching each vesicle, as it is punctured, with nitrate of silver. I say this in ignorance, however, of the practical effects of Dr. Rowe's treatment, which I have had no opportunity of trying. The room should, I think, be kept as dark as possible. In a case of confluent small-pox lately under my care, this method almost entirely averted all pitting. A case in which pitting was prevented by the use of carbolic acid is mentioned in the *Lancet*, 1868.† Two drachms of carbolic acid were mixed with two ounces of suet; the mass was coloured with lamp-black and applied, spread thickly, on black cotton wadding. It was changed every second day, when the face was washed with soap and water, and then with carbolic acid and water. One arm, to which the ointment was applied, did much better than the other, which was not treated with it.

Dr. Hewan‡ says that at Old Calabar the natives suffer very little from pitting, the reason why they escape being that they cover the parts with burnt clay mixed up into a stiff thick paste with water. Their houses are very dark, and when sick they get into the most obscure part, in fact, they are in almost total darkness. The dyed amadou made by Mr. Ewen of Jermyn-street, has been strongly recommended.

The *Sarracenia purpurea*, at one time very strongly recommended in America for internal use, seems to have answered indifferently in this country.§ Mr. Ch. Miles says|| that if a large wine glassful of the infusion be given to a person suspected to be labouring under the influence of small-pox, the effect of the first dose is to bring out the eruption, and that after a second or third dose, given at intervals of from four to six hours, the pustules subside and apparently lose their vitality. In a person covered with the eruption,

\* R. Spiritus rectificati ℥v.  
 Ætheris sulphurici ℥ij. misce et adde  
 Gummi mastiches gr. xxv. solve et adde  
 Iodinii ℥ij. ℥ ft. solutio.

† Vol. i. p. 151.

‡ *Journal of Cutaneous Medicine*, vol. ii. p. 35.

§ *Edinburgh Medical Journal*, 1862-3, p. 671.

|| *Lancet*, 1862, vol. ii. p. 430.

the prominent symptoms of the disorder subside in three or four days, the urine becomes pale and abundant, and no marks are left when recovery takes place. It speedily quells delirium, clears the tongue, makes the urine clear. No other medicine is required. The root is used, and the firm solid part should be chosen. Two ounces, sliced, are put into a quart of cold water, and allowed to simmer down to a pint and a half. As Mr. Miles is such a painstaking and truthful observer, the matter ought not, in my opinion, to be lost sight of. It is, however, possible, that the dried root may lose its virtue before its can reach England.

## CHAPTER VII.—VESICULÆ.

*A. Herpes. B. Pemphigus. C. Rupia. D. Miliaria.*

A. HER'PES (*es, is, masc.*), ἔρπης, from ἔρπω, to creep. Derivation entirely corrupted, or rather, word quite misapplied.

*Definition.*—An eruption of vesicles in clusters, generally seated on inflamed patches. Vesicles vary in size from a coriander-seed to a split pea; gradually becoming milky but not truly purulent; end by rupture and desquamation; sometimes followed by pitting, occasionally, in bad, cachectic subjects, by ulceration; often accompanied or followed by severe neuralgic pain. Occasionally attacks eye, mouth, &c.

*Divisions.*—1. H. zoster (*zona*) or shingles, in which the vesicles extend in groups, principally seen round one side, or part of it, but may form on back of neck, and many other places; 2. H. circinatus, in which the eruption takes the form of rings; 3. H. c. bullosus seu gestationis, a rare affection accompanying pregnancy, of great severity, the vesicles appearing nearly all over the body; 4. H. perstans, in which the vesicles return, scattered, with great obstinacy for months or years, followed by pitting and often superficial ulceration, seen in face, leg, &c.; 5. H. iris, a still rarer form, occurring chiefly on the backs of the hands of elderly persons. It seems to be admitted that the seat of the vesicle is between the mucous and horny layers of the cuticle.

Dr. Grimshaw mentions\* a case of herpes which proved fatal;

\* *Journal of Cutaneous Medicine*, vol. ii. p. 38.

each vesicle was surrounded by a black areola, "as if a line of ink had been drawn round the vesicle and smudged over the surrounding skin." The hips, nates, and sacral region were so closely covered with the eruption, that they presented a continuous black surface.

Transient hemiplegia has been known to accompany herpes in the aged.\* Dr. Duncan, who tells the story, seems inclined to believe that the herpes was the original disease and exciting cause, and the hemiplegia the effect, just as paralysis may be the effect of teething. It seems pretty certain, from the fact of the vesicles following the distribution of only a branch of a nerve, that the irritation can hardly start from the ganglion, as mentioned by some authors.

Several cases are recorded in which a peculiar form of herpes seems to have been communicated by horses, cows, &c. Mr. Curgenvén has related some.† The disorder attacked the tonsils, uvula, nostrils, eyelids, each side of the neck, left side of the scrotum and prepuce. Vesicles were also seen on the thighs, forehead, and backs of the hands. The constitutional symptoms were very severe. The first patient was a coachman. A week after his attack began his wife was seized in the same way, and his mother, who had sat up to nurse him, was also attacked, but less severely. His brother, who came to see him, had an eruption on the tonsils a week later. In another case, a servant had an eruption of these vesicles on the tonsils, and the day following her mistress was taken ill; but in her, though the tonsils were red and swollen, no vesicles appeared. The servant seemed to have caught it from a fellow-servant with whom she slept. Dr. Burrows described ‡ two cases of this disease, complicated by bullæ, apparently contracted from sheep. Both the patients were butchers.

I was consulted last autumn (1870) by a patient for an affection of this kind. A great number of aphthous spots had formed on the tonsils and insides of the cheeks. They were yellowish and aphthous-looking.§ I could however detect no vesicles, though I saw some

\* *On Herpes Zoster.* By John Duncan, M.A. *Journal of Cutaneous Medicine*, vol. ii. p. 242.

† *British Medical Journal*, 1869, vol. ii. p. 488.

‡ *Medical Times and Gazette*, 1856, vol. i. p. 589.

§ Dr. Hillier states that the development of herpes in the mouth is due to a parasite which can be readily seen on microscopic examination.—*Op. cit.*, p. 130. It seems to be distinctly epidemic at times.—*Journal of Cutaneous Medicine*,



slight elevations on the mucous membrane of the tonsils which a superficial examination might have passed as such. There were no vesicles elsewhere. The patient complained of weariness, dejection, and general feeling of indisposition. As I knew him to be a strong, healthy, temperate man, I felt indisposed to assign any great share in his indisposition to the mere appearance of the apthæ. Having heard a good deal of this epizootic form, I inquired of him, but the only approximation to a cause of this kind was that the patient lived five doors from a dairy which had been recently shut up.

*Treatment.*—H. perstans and h. c. bullosus excepted, zoster is the only variety of this affection which requires more than a mere passing notice, and all that is really required for it is generally to be summed up in a few words; a mild aperient or febrifuge may be prescribed, and every vesicle should be pricked with a needle so soon as it begins to fill with serum; the fluid should then be removed by sponging gently with warm water. The surface may next be bathed with a Goulard lotion containing three or four drachms of the liquor plumbi to the eight ounces, and at night a mild ointment, like elder-flower ointment, or cold cream, may be applied. Dr. Hillier recommends, if there be any sloughing, that a nitric acid and opium lotion should be applied. Dr. Frazer has found great benefit from the internal use of tincture of muriate of iron. When the pain is severe, arsenic may be prescribed. Mr. Wilson here recommends colchicum and iodide of potassium followed by quinine, and has seen tincture of aconite rubbed into the part relieve the pain, while in other cases it has failed. Sir W. Jenner\* recommends belladonna for the pain remaining after the herpes, and Bärensprung blisters near the spine and prescribes the endermic use of morphia. I have never found it requisite to use any of these medicines. If arsenic be given, the pain will always, I believe, yield immediately. I have never yet found this remedy fail. I treated, not long ago, an old lady nearly eighty years of age, who suffered so much from the pain after zoster, that she maintained it was killing her. Sedatives had been tried without effect, whereas the action of the arsenic produced immediate relief. This statement is borne out by the experience of Bazin, who

vol. iv. p. 29. *On Herpetic Eruptions*, by Dr. W. Frazer. According to this careful observer there was a diagnostic offensive odour of the breath in the cases observed in Dublin during the year 1869.

\* *Medical Times*, 1857.

gives\* two cases promptly cured by arsenic, in one of which the pain had resisted all treatment for three months, and in another had lasted six years. When this remedy is withheld, it may endure an indefinite time. Dr. Duncan speaks of the pain lasting a whole year after.

In the days when humoral pathology was in the ascendant, men looked upon the vesicles as an effort of nature to relieve the system of some poison, and to further this purpose the older surgeons, who of course could do better than nature, used to cut the loose skin of the vesicles away and cover the raw surface with red nitrate of mercury. This caused no slight amount of torture, but then it was *secundum artem*; it was supported by theory, without which the world could not go straight, and though it did not promote the patient's recovery, it established a principle, which was of more consequence.

Herpes of the prepuce rarely demands more than water dressing, and herpes of the lip generally only requires to be let alone or treated with camphor cake or cold cream. Dr. Frazer advises for herpes attacking the eyeball, rest of the organ, small leechings, blisters, mercurial alteratives, and full doses of bark and quinine.

Herpes gestationis was first described, under the title of herpes circinatus bullosus, by Mr. Wilson, who has seen and recorded† two cases of this extraordinary affection. Almost directly after I contributed to the *Journal of Cutaneous Medicine*‡ a third case, which I now append, and a fourth case occurred in the practice of Dr. Klein of Jicin, which I recorded in the same journal.§ What little I have to say about treatment is to be found in the narrative of the case which now follows. Intimately connected as the disease is with pregnancy, all treatment must to a certain extent be merely palliative.

Jane S., 45 years of age, a well-made, healthy-looking woman, applied, March 15, 1867, as out-patient at St. John's Hospital, suffering under the following symptoms:—Nearly the whole surface of the inner part of the right arm and forearm, and a somewhat less, but still very considerable extent of the left arm and forearm were covered with vivid red, very slightly elevated patches, varying in size from that of a bean to that of the base of a split walnut. On

\* *Leçons Théoriques*, p. 127.

† *Diseases of the Skin*, sixth edition, p. 294.

‡ Vol. i. p. 311.                   § Vol. ii. p. 203.

most of these patches were vesicles about the size of a small pea, very rarely solitary, and generally in groups of two to four. They were mostly prominent and pointed in shape, but some were oblong, with the ends apparently communicating. They were in all stages; some quite tense from accumulation of limpid serum; others just rising. She tells me that she noticed none of the vesicles before the previous day, though the patches had formed a day or two prior to this. Her face had a peculiarly distressed look, and she complained of utter sleeplessness, occasioned by intense itching, smarting, and heat. She has been pregnant about four months.

As she also complained of being very constipated and feverish, a saline aperient was ordered, with an aperient and sedative pill, so as to procure her some rest if possible; a lotion containing liquor plumbi diacetatis and camphor mixture was directed to be freely applied. She was enjoined to puncture each vesicle as soon as possible, to keep very quiet, have a light, warm diet, with a glass of wine daily, and to leave off beer.

When seen on the 19th, there were rather fewer vesicles, otherwise there was no particular change: the patches had somewhat increased in size, and new ones were coming out. She felt no better, and was still very constipated. The dose of the aperient was accordingly augmented a little.

But a week later, the 26th, the complaint had gained ground in a very decided manner. There were now at least fifty patches on the right arm, all bearing vesicles, varying in size from a pea to a haricot bean; some were also coming out on the outside of the arm which had hitherto remained free. On the inside of this arm, about halfway between the axilla and elbow, were two parallel lines of tolerably large bullæ and vesicles, mixed together, and sixteen in number, and between these again and the elbow there was a patch as large as the palm of the hand, containing between fifty and sixty vesicles. On the left arm also there were now large numbers of vesicles, some of them assuming a whiter look than on the opposite side.

At her next visit, 29th, there were fewer vesicles, but the number of bullæ had increased, there being now quite fifteen to twenty on each arm, fully formed, and great numbers rising; in fact, it seemed as if every part on which vesicles had not yet formed would be invaded. The fluid was no longer limpid, as at first, but white in some and yellow in others. The front part and sides of the





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PHOTOGRAPH OF HERPES (ON ARM).

*To face page 207.*

abdomen and the inside of the thighs were by this time almost covered with the same red patches, but no vesicles had as yet formed upon them. Her bowels had been freely acted upon, and she now complained of being so cold that she shivered all day, and felt as if nothing would make her warm. She was therefore ordered eight minims three times a day of the acid solution of iron, and the free use of zinc ointment to the affected parts, as she thought the lotion rather irritated them.

From this time she got worse, and the day after, a visit to a photographer, to have a portrait taken of the eruption, so completely prostrated her that she was obliged to take to her bed. I visited her on the 1st of April, and found the tongue red and chapped, pulse 120, great prostration both of mind and body, total loss of appetite, utter sleeplessness, and the most distressing irritability of the parts affected; that is to say, of almost all the surface of the frame except the back, face, and hairy scalp. She was ordered a quart bottle of stout daily, with at least one or two glasses of port wine, rum and milk at night, and beef-tea *ad libitum*, as she could not touch solid food now. The steel, having obviously done no good, was given up, and sesquicarbonate of ammonia prescribed instead, ten grains every three hours in one ounce of infusion of cascarilla. She could not bear *even zinc ointment*, and I therefore directed that she should be covered from head to foot with linen rags dipped in fresh-melted suet.

Two days later the pulse had fallen to 108, the tongue was less red, and there were fewer vesicles; the prostration was still excessive, her bowels were obstinately confined, and she thought the ammonia gave her pain. The aromatic spirit was accordingly substituted for the sesquicarbonate, and a stronger aperient pill prescribed, to be followed by the citrate of magnesia. By the 8th vesication had pretty well ceased, and she was so much better that I advised her to go into the country for a week, which she did shortly afterwards with considerable benefit. Her pulse had already fallen to 96, her appetite was somewhat restored, she had been able to get a little sleep, and the irritation in the skin had greatly lessened. On her return to town I carefully re-examined her. She was covered from head to foot with the erythematous patches, but the vesication had ceased some time. She was again ordered steel, and for some time seemed to improve under it; but this was of very short duration, the feeling of languor and irritability

again assailed her, and from this time up to the date of her confinement never left her. No more vesicles formed, and only a few very small pustules, but the patches continued to increase in size and number from the beginning of May onwards.

About the end of the first week in June she noticed a slight show, which gradually increased, and on the Saturday following premature labour took place. The fœtus, which was more than six months old, had, according to the statement of the medical gentleman who attended her, been dead some time. Directly after her confinement the eruption began to relapse, and by the third day she had a tolerable crop of large vesicles on each arm, while many of the spots on the legs and trunk became speedily covered with dry yellow crusts. But these soon abated again; by the 25th of June she was almost entirely free from them, and at the beginning of July she had had no relapse.

Though a very intelligent woman, she committed the singular mistake of repeatedly telling me that this was the fourth time she had suffered in this manner, and always during pregnancy; but when she came to put the dates on paper she found there were only two previous attacks; the first having occurred in 1853, the second in 1860; there being thus an interval of seven years between each. There were three confinements between the eruption in 1853 and that in 1860, and two between the latter and the present attack, so that the entries stand thus:—

William S. ...	...	...	First eruption (1)	...	...	1853.
Still-born child	...	...	No eruption	...	...	1854.
John S. ...	...	...	No eruption	...	...	1855.
Henry S. ...	...	...	No eruption	...	...	1858.
Still-born ...	...	...	Second eruption (2)	...	...	1860.
Louisa S. ...	...	...	No eruption	...	...	1861.
Anne S. ...	...	...	No eruption	...	...	1863.
Still-born ...	...	...	Third eruption (3)	...	...	1867.

All three, she asserts, began about the same time after impregnation, ran the same course, and invaded the same parts in succession. The second attack, however, was more severe than the first, and the present one is more severe than the second. Like the present, the previous outbreaks scarcely seemed to be in any degree influenced by treatment. They both disappeared spontaneously after parturition. I questioned the patient about everything that

seemed in the least degree likely to throw any light upon the subject, but could make nothing out.

In both Mr. Wilson's cases the disorder was associated with pregnancy, as also in Dr. Klein's. In one of Mr. Wilson's cases the disorder had accompanied this state four or five times, in the other six times. The disease proved very serious in the first case, as it did in mine. In both there was intense itching; the bullæ were flat, and accompanied by thin crusts, moist excoriations, and papulæ; and in both there was sympathetic disturbance of the stomach, with duskiness and cachexia of the skin. I did not notice the two latter symptoms: indeed the patient, a comely woman, looked as if, but for the eruption, she would have been a model of good health; and in the notes taken at the time I find it expressly stated that there were no moist crusts and no weeping from the surface at any stage of the complaint,—perhaps in some degree, results of the very free use of the liquor plumbi.

From the very outset I had expressed a decided opinion as to the inefficacy of any treatment whatever, and certainly I never observed that the medicines prescribed exerted the least real control over the progress of the complaint. The sedatives relieved the pain and sleeplessness to a certain extent, and she appeared to be benefited both bodily and mentally by the employment of purgatives, but these remedies exerted no visible influence, at least, over the course of any stage of the eruption. She expressed herself as very grateful for the comfort afforded by the use of the suet, which she believes carried her through her illness. Possibly some of the numerous prescriptions in vogue for itching might have quelled this troublesome symptom, but my experience of them has been so unsatisfactory that I did not make the attempt.

Out of the few instances of herpes perstans which I have seen I select the following:—

George A., an intelligent young lad, a cabin-boy in a river steamer, came under my care for an obstinate vesicular disease of the face, which gave him a most singular, and at times rather revolting appearance, though but for this he would have been healthy-looking. On the ears were several hard, brown, tenacious scabs, while from ear to ear stretched a broad irregular band of scattered vesicles and cicatrices. This band was only about an inch broad where it crossed the bridge of the nose, but further back it extended down to the angle of the jaw; the upper margin lay just below the eye. The



pits were superficial, and might, on a cursory inspection, have been taken for those of small-pox. There were not very many vesicles, and they were tolerably uniform as to size, being generally as large as split peas. They were in all stages, some perfectly clear; some having concreted into the firm brown scabs just spoken of.

The history of the case, as given by the lad's mother, is, that about six years and three months previous to this he suffered from typhus fever, and very soon after the vesicles began to appear on his cheeks; from which time to the present he has never been free from them. Not long after they also showed themselves on the lips, and he was then taken to a surgeon, who seems to have applied the nitrate of silver very freely to them. The remedy, whatever it was, did its work effectually; it gave great pain, but the disease has never reappeared in the part. It, however, soon after began to attack the ears, and there it has abode to the present date—quite six years and a quarter, one year and a half of which he passed at school, and the remainder in his present occupation.

The attacks are always preceded by stiffness, burning, and itching of the skin, and then the vesicles break out. The vesicles vary in number from eight or ten to twenty or thirty; except in respect to the pitting, they run the usual course of vesicles, becoming opaque, rupturing, or drying up, but always forming hard scabs. They are all flat, and some are umbilicated. They are not followed by any weeping surface, nor do any soft crusts form. There are no pustules, in the proper sense of the term. During the six months that I have watched the case, a fortnight has never elapsed without some vesicles appearing, and generally a distinct relapse. The boy's health is, with this exception, excellent; he has no bad habits that I can make out, seems well fed and cleanly, and as he suffered from the affection for quite a year and a half before he left school, it cannot be laid at the door of his occupation.

He was treated with salines and mild aperients, with the free use of fresh-made oxide of zinc ointment to the spots, a lotion of liquor plumbi and camphor mixture being substituted in the daytime when the heat and itching come on. After this the nitric acid was given in infusion of quassia, but as no good resulted from a fair trial of this medicine, arsenic was prescribed instead. But at the end of several weeks no ground whatever had been gained, and the acid solution of iron was substituted. He took it for a month, and during this time he had two bad relapses. It was therefore given up, and

the sulphate of iron in mixture ordered. This he has now taken for four weeks, along with an eighth of a grain of bichloride of mercury daily, and upon the whole he is better. The disease is confined to the ears, and for three weeks he has not had a fresh attack—the first time he can ever recollect having had so long an immunity.

I never saw but one case approaching this in obstinacy. The patient was a chemist, was of a most irritable temperament, and had suffered from herpes of the face for eighteen months. Here, however, the disease speedily yielded to moderately large doses of tincture of steel.\*

B. PEM'PHIGUS (*us, i, masc.*), from πέμφιξ, a bubble, a drop.

*Definition.*—An eruption of one or more bullæ on slightly inflamed surfaces. Bullæ spring up in a few days, and may vary in size from a small haricot bean to a walnut; outbreak of them sometimes attended by severe tingling. May be solitary or very numerous. Burst in a day or two. Surface beneath left excoriated and tender; subsequently covered by a thin brownish or blackish scab. Contents of bullæ stated by Dr. Hillier to be usually alkaline, though said by many writers to be acid. Found by Simon to contain albumen, cholesterin, fat, lactate of soda, free acetic acid, mucous corpuscles, chloride of sodium, and potassium. Uric acid is occasionally found in it.† Sometimes accompanied by great itching.

*Divisions.*—1. *P. vulgaris*, answering, except in the bullæ being never solitary, to the above description. 2. *P. solitarius* (*Pompholyx*), distinguished by the appearance of one very large solitary vesicle at a time. 3. *P. gangrænosus*, the same complaint as *P. vulgaris*, but occurring in poor Irish children, among whom it appears as an epidemic: the bullæ purplish, livid, and with a sloughing base. 4. *P. foliaceus*, in which the bullæ are very imperfectly developed and produced with great rapidity; attended with extreme prostration; generally fatal. *P. syphiliticus*, generally seen only in children and on the soles of the feet; may attack neck, face, and upper extremities;‡ also palms, palmar surfaces of fingers, and soles of feet in adults.§

\* See also *Medical Circular*, 1864, Sept. 7.

† Hillier, *Op. cit.*, p. 141.

‡ *American Journal of Syphilography*, vol. i. p. 205.

§ *Lancet*, 1870, vol. i. p. 65.

Acute pemphigus is sometimes ushered in by a certain amount of heaviness, symptoms of nausea, pyrexia, &c. ; but considering that sometimes fifty or sixty bullæ will make their appearance in twenty-four hours, the amount of constitutional disturbance must be looked upon as remarkably small. When it occurs in children, it proves occasionally a very serious matter. In an outbreak in the Children's Hospital, at Stettin, where eight young persons were attacked, six died.\* In newly-born children it is commonly fatal. This form of pemphigus is usually considered to be syphilitic, but it appears in cases where no syphilitic history can be traced.

Dr. Edward Ballard published in the *Medical Times and Gazette*† a case of pemphigus occurring in a man, which seemed beyond all doubt to have been communicated to him by the cow. He had given a horse a ball, and on withdrawing his hand had been slightly bitten on the back of it ; he afterwards milked four cows suffering from a vesicular eruption on their udders and teats. A bleb soon formed at the bitten spot, which was followed by a large number of others. Dr. Ballard says there must have been in all quite a hundred blebs. In this case also the mouth and throat showed bullæ. The tongue was swollen, and "bloody matter" flowed from the nose. The general symptoms were very severe, there being vomiting, hæmorrhage from the bowels, and apparently also blood in the urine. Mr. Ceely, of Aylesbury, who has paid great attention to the subject, has no doubt that the disease in the cows was that known as the white or blister pock, which often inoculates the hands of milkers but does not afford immunity against smallpox.

*Treatment.*—I believe it is pretty generally admitted that the treatment of pemphigus should be tonic. For the complaint, when it occurs in children, I have found steel answer very well. Mr. Wilson considers iodide of potassium a valuable remedy in pemphigus. Mr. Startin employs quinine, bark, mineral acids, and vegetable bitters. Chlorate of potass often proves very serviceable, especially in the gangrenous form. The state of the bowels, particularly in elderly persons, must be very closely inquired into. Restlessness and pain require to be met at once by opiates. Mr. Startin seems to consider the chronic form (pemphigus diutinus) as incurable.

\* *Journal of Cutaneous Medicine*, vol. i. p. 432.

† 1871, vol. i. p. 45.

Mr. Nayler mentions one case in which pompholyx seemed to decline spontaneously. Dr. Hillier speaks very favourably of arsenic, as does Dr. Spender, and I invariably have recourse to it when the case proves obstinate. Dr. Spender also tells us that in some cases arsenic and bichloride of mercury together succeeded where the former alone has failed; but the prognosis is always grave when the patient is old.\*

For external use most writers have advised the warm bath. Mr. Wilson recommends spermaceti ointment with peruvian balsam, diluted tar ointment, or ointment of nitrate of silver; excoriated surfaces to be dusted with oxide of zinc or starch powder. In the epidemic gangrenous form, Dr. Stokes speaks very favourably of the scrofularia nodosa; the ointment is to be as strongly impregnated with green matter as it is possible to make it. It is laid on with a brush every six hours. Dr. Stokes also recommends carrot poultices when there is swelling of the surrounding parts.

My experience is that the warm bath in the early stages of the disease either does no good or a great deal of harm; it is as useless or hurtful here as in eczema. When the disease declines, it is sometimes serviceable in restoring the skin to a healthy state. I would advise that every bulla should be pricked as soon as possible, and that no other dressing should be employed beyond zinc ointment, *laid on while warm*, and over this soft cotton wool secured with strips of linen.

C. RU'PIA (*a, æ, fem.*), from *ῥύπος*, filth, stains.

*Definition.*—An eruption of sero-purulent scattered bullæ, with a narrow reddish ring round the base. Fluid speedily becoming sanguinolent; followed by formation of thick, more or less conical, dark green, grey, or blackish crusts. After removal of these an obstinate ulcer is left, secreting an ichorous, purulent, foetid fluid.

\* The examination of the urine in this form (pompholyx) does not give us any clue to treatment. Heller found it a little below the normal specific gravity, urea rather increased, as also the sulphates. Hillier observed normal quantity of urea, excess of uric acid, and abnormally small quantity of chlorine. As the results of autopsy, Bamberger met with great deficiency of albumen in the blood. Bielt, who was not always so accurate as he might have been, says fatty liver was almost constantly found in patients who had died of chronic pemphigus. Hirtz found amyloid degeneration of the liver and spleen.

Syphilitic. *Rupia simplex*, it is said,\* may follow measles or scarlatina in children.

*Treatment.*—The best remedy, where it has not yet been given, is, so far as I have seen, the iodide of potassium in five-grain doses two or three times a day, accompanied by the use of iron in some form or other. The cerate of the yellow resin, which should be applied gently warmed to the base of the vesicle or ulcer, all secretion being first carefully removed, is a very useful dressing. Dr. Hillier recommends sulphate of magnesia aperients, accompanied, when there is much debility, by sulphate of iron or quinine. The diet should be strengthening.

D. MILIA'RIA ( $\alpha$ ,  $\alpha$ , fem.), from *milium*, a millet-seed.

*Definition.*—An eruption of minute vesicles about neck and breast, sides of trunk, inner and upper sides of arms and back, often preceded by sensation of pricking and accompanied by signs of great exhaustion, strong and peculiar odour in perspiration. Contents of vesicles generally acid. Vesicles speedily become white and desquamate, while fresh ones appear. Often seen in delicate females, especially after childbirth.

*Treatment.*—The first step is to reduce the excessive temperature to which the part affected has been exposed, for miliaria means heaping up too many clothes on the bed and letting in too little fresh air. The next is to give a mild diffusible stimulant, such as a teaspoonful of the valerianate and tincture of ammonia, or five grains of the chloride of ammonia, every three hours in an ounce of infusion of cascarilla; but indeed almost any preparation of this kind will do. A tonic draught containing a grain of quinine, or some mineral acid, may be given at least once a day, just before dinner. Under such treatment a favourable result may be quite anticipated.

\* Hillier, *Op. cit.* The cases of this kind that I have seen, generally on the face, scarcely merited the name of rupia.

## CHAPTER VIII—PUSTULÆ.

*A. Impetigo. B. Ecthyma. C. Acne. D. Sycosis.*

A. IMPETIGO (*o, iginis, fem.*), from *impeto*, to infest; *ab impetu agens*; acting suddenly and fiercely. About as sensible a derivation as many others.

*Definition.*—True inflammation of patches of the surface of the cutis, accompanied by the formation of pustules, and frequently by some degree of swelling; followed by greyish or yellow crusts, which fall off mostly without leaving any scars.

*Divisions.*—1. I. communis, in which the above symptoms are found. 2. I. contagiosa, in which the secretion is more unhealthy-looking, the crusts of a dirty yellow, the edges more welted and irregular, with a peculiar sodden look. 3. I. rodens, marked by great pain, much thickening of the base of the pustules, unusual size of the latter, and permanent disfiguring cicatrices.

In addition to these, certain forms of what is called impetigo have attracted attention on account of their supposed contagious nature. One of these is that complaint described as a form of favus, beginning with an eruption of straw-coloured pustules, and ending in the formation of favous crusts; a complaint I have never seen, and about which the accounts are not quite clear. If it run the course just described, I fancy its place is with impetigo. Another is the porrigo scutulata or true pustular ringworm of the scalp, beginning with clusters of small light-yellow pustules, which break and form thin scabs over each patch, the skin underneath being red and shining. This form is thought by Bateman\* and many others to be

\* *Practical Synopsis*, fifth edition, 1819, p. 170. Bateman describes it (p. 169) as beginning with "clusters of small light-yellow pustules."

decidedly contagious ; I have not been able to see any proof of its real nature, and I confess myself unable to make out from Bateman's description whether it was kerion, favus, or true impetigo.

Another form has been described as eminently contagious, the impetigo contagiosa mentioned above. The first account of this disease was published in the *British Medical Journal* by my friend Mr. R. W. Dunn, whose attention had been directed to its nature by Mr. Startin. The disease in question occurs mostly on the face, but may appear on the trunk and limbs. It begins with small pustules, which enlarge, umbilicate, and then dry up, leaving a dark scab with a little matter oozing out, or the spot spreads till it reaches the size of a shilling, and then looks like a flattened bleb sunk in the middle, having a ring like soddened white leather round it. Thick crusts then form, and when these are picked off, a sticky puriform fluid is found covering the ulcerated surface beneath. The disease lasts six or eight weeks. There may be only one solitary spot, and then it is generally on the face or head, rarely on the trunk, except from a direct inoculation. This spot is sometimes as large as a florin. On the face several may run together and form a thick crust, like a patch of impetiginoid eczema. The microscopical characters are at the beginning a few pus-cells, but chiefly homogeneous blastema, fat and epithelial débris ; later on the pus-cells predominate. In the crusts are found vegetable parasites ; the steatozoon has been discovered, but is supposed to be an accidental appearance. The small hairs in the centre of the crust are split up by the fungus.

The disease attacks pale, flabby children ; dirt, darkness, and low living favour its development. It may, however, attack any person, as it seems to be highly contagious. Cases are mentioned which are supposed to have been communicated by a bite or scratch, &c. The forearm of a woman was inoculated, and in twelve hours the edges of the wound had become red, swollen, and itching. The day after a slight blush was seen and the centre rose to a little red point ; in forty-eight hours it had the appearance of a small yellowish head. On the third and fourth days there was a well-marked areola ; then it began to dry, and the centre, previously sunk in, puckered together, a little oozing taking place from beneath one edge. The spot was between the size of a shilling and a sixpence ; the parts around felt hot and stiff. The rest of the course run by the disease was the same as in other cases. The disease is not parasitic.

Thinking it desirable to test the accuracy of these views, I performed the following experiment :—

On the 23rd of October, 1866, I inoculated myself with the fluid from one of the pustules on a patient suffering under this disease. The patient was a strong and otherwise healthy young man, the lower part of whose face was almost covered with this kind of impetigo, the greater part of the affected surface being in the healing stage. The part selected for the experiment was the lower and fore-part of the left wrist. At the end of about forty hours there was distinct evidence that inflammatory action had begun, and on the following day, although there were no signs of a pustule, a hard, irregular crust, the size of a small split pea, of a yellowish-green colour, and firmly adherent, had formed at the inoculated part, in the centre of a red patch quite a quarter of an inch across, and raised slightly up in the form of a dome-like swelling, if such a term can be justly applied to an elevation which at the most prominent part did not rise more than a line above the surface. There was a little stiffness and at times a feeling of heat during the whole of this day and the day following. By the 28th the swelling had shrunk, and the redness had faded. There was now no prominence except that of the crust itself.

In the mean time I again (October 27th) inoculated on the inner side of the palmar surface of the same wrist. At the end of about twenty-four hours I noticed that the cicatrix from the puncture seemed broader and more defined than I should have expected to see it from a similar wound made with a clean instrument ; and I may here remark that the instrument used for inoculation was an exceedingly sharp, clean bistoury.

When the crust was lifted up from the first sore for the purpose of inoculating, a distinct discharge of very pale serum took place. On the 29th there was a good deal of uneasiness at the radial side, and on looking at it I observed that a small ragged pustule had formed at this point. I pierced the pustule with a bistoury and put by some of the fluid for examination, but it was accidentally spoiled. On the following morning (October 30th) there was some uneasiness at the same site, and I again pierced the pustule, which now yielded a dirty reddish-coloured pus. A drop of this, well diluted with distilled water, was placed under the microscope, the field of which was at once filled with a mass of very small, irregularly-shaped and almost angular corpuscles. I noticed several which, small as they were,



had a smaller one attached in this manner, oo, as was clearly seen when they moved across the field. A few of these corpuscles were transparent, with a clear outline, but the most of them seemed filled with several dense nuclei.

On the 1st of November the second inoculations seemed to have abated. On lifting up the crusts there was only seen an almost dry, red surface without any matter, whereas this was still present under the crust of the spot first operated on. The day following, however, pustules had clearly formed at both the more recently inoculated spots, and there was distinct heat and uneasiness in both. That (the pustule) at the radial spot was on the outer side of it, and was like an irregular, bisected circle. Unfortunately, in the course of the day both of these got broken, and the only source from which any fluid could be procured for further experiments was that which had dried on the rag tied round the spots. The surfaces of the pustules were now cleaned and painted over with solution of nitrate of silver, ten grains to an ounce. A small portion of one of the crusts, removed at this time and treated with liquor potassæ, showed swarms of light-coloured, transparent, irregular-sized inflammation corpuscles floating in the field of the microscope.

On the 4th of November the crust of the outer spot of the second inoculation was removed. There was scarcely any matter whatever under it. The surface was again painted with solution of nitrate of silver. The inner spot, however, yielded a dirty-coloured pus; it was also painted with the solution. On examining a little of this pus, it presented to view a large number of globules, mostly joined in twos, threes, and fours; a few groups contained as many as five or six. When treated with liquor potassæ the globules rapidly lessened in size, and small specks of débris of tissue appeared.

I need scarcely say that these few observations do not prove anything. We are not yet sufficiently familiar with inoculation from pustules to say how much may have been due to general properties, how much to the specific nature of the fluid inoculated. Taking into account the results of the second inoculation, I think it must be admitted that the balance of evidence is rather in favour of the action being specific.

*Impetigo rodens*, though its characteristics are chiefly due to suppuration arising in a mass so hard as rather to resemble a boil than the base of a pustule, may, I think, be fairly classed with the

foregoing. While in some cases it is clearly syphilitic, others occur in which there is no evidence to connect it with such a cause; and occasionally I have seen, in what were almost certainly non-syphilitic cases, a chain of pustules running across a tract of skin, as, for instance, over the breast, which at once resembled this and common impetigo.

*Treatment.*—The treatment of the milder forms of this complaint need not differ from that of any simple inflammation of the skin, such as zoster for example; mild febrifuge medicines and aperients, such as those already prescribed in earlier parts of this work (*e.g.* page 12), followed by mineral acids,\* iron with an aperient,† or quinine.‡ The lead lotion recommended at page 130, and the zinc ointment, are generally all the external applications called for; the lotion being freely applied by means of a linen rag during the day, and the ointment, which should be applied hot, being substituted at night. Over the ointment should be laid a single thickness of linen. I would most strongly advise that every pustule be pricked as soon as possible, especially in children. When the inflammation is severe, the application of a linen rag dipped in melted suet often affords great relief. Bateman says § it can be borne when no other greasy substance is tolerated, and I quite concur in what he says. It is much more soothing than zinc ointment. If, however, the irritation be very great, sedatives may be given; for instance, half a drachm of the ammoniated tincture of opium, or fifteen drops of the liquor of morphia can be added to each dose of the febrifuge; or twenty minims of Squire's solution of bimeconate of morphia can be given every night. Mr. Wilson says that if the surface be too sensitive to bear even the zinc ointment, it may be pencilled with solution of nitrate of silver, two grains up to six grains to an ounce; he recommends for the same purpose the use of a liniment of olive-oil and lime-water, alone or with liquor plumbi or sedative solution of opium; after using it the surface should be covered with cotton

\* See formula at page 119.

† R. Magnes. sulph. ʒiv.

Mist. ferri compos. ʒvj. m.

Capiat cochlear. ampl. duo bis quotidie.

R. Pil. aloes c. myrrhâ gr. xv.

divide in pil. iij. i. omni nocte sumend.

‡ For formula see page 5.

§ *Practical Synopsis*, p. 155.

wool. Dr. McCall Anderson uses the soothing lotion given below,\* as he also does for acute eczema.

Mr. Startin separates impetigo from porrigo on the ground that impetigo tends to ulcerate while porrigo does not. I cannot say that I see any valid ground for the distinction. I know of no form of impetigo except *i. rodens* which necessarily tends to ulcerate. As to the term porrigo I see no justification for retaining it, as I am ignorant of any disease which can be referred to this head. Mr. Startin's treatment of impetigo figurata is simple ablution with gruel, mucilage, yolk of egg thinned down with water, or decoction of linseed; after this biniodide of mercury ointment, and, later on, creosote ointment are used as dressings. Internally he gives arseniate of potass, and where there is great acidity of the stomach, liquor potassæ. For impetigo sparsa, iodide of potassium with colchicum wine and arseniate of potass, followed by a course of liquor potassæ and mild mercurial alteratives. When there is much irritation he gives laudanum, and for great weakness vegetable bitters and aromatics, persulphate of iron and dilute sulphuric acid, following them up also with arseniate of potass and liquor potassæ. His external treatment of this variety is hot baths, creosote ointment, and biniodide of mercury ointment. In a case of impetigo rodens Mr. Startin gave persulphate of iron and hydriodic acid; the most benefit however seemed to arise from applying a solution of nitrate of mercury in water; equal parts of salt and fluid being used.

The variety called porrigo scutulata, or *true pustular ringworm*, a disease quite unknown to me, has been considered to approach so closely to favus and those obstinate forms of eczema, &c., which in children are often accompanied by great disturbance of the nutrition, sour breath, eructations, wasting, diarrhœa, and other signs of cachexia being at hand, as to require some special remedies. These are—1. Cod-liver oil; 2. Mercury in conjunction with some antacid, as soda or chalk; 3. Sulphur, which often proves peculiarly beneficial in this complaint. 4. To follow these, a long course of arsenic. For any of these to do good it must be taken for a considerable time; say six or eight weeks at least. Sulphur, internally and in the form of baths, has been often recommended in obstinate cases of impetigo.

\* R. Acidi hydrocyan. dilut. ʒij.  
Sodæ bicarbonatis ʒj.  
Glycerini ʒiv.  
Aquæ rosæ ʒvss. m. *Lancet*, 1869, vol. ii. p. 698.

Dr. Hillier advises that when the stomach is out of order it should be given in ten-grain doses, with ten or fifteen grains of nitrate of potass, every morning for a week. I cannot say that I have observed any particular benefit from it. An ointment of a scruple of sulphur and fifteen grains of white precipitate to an ounce of lard, is said to answer very well with the contagious form of impetigo. Dr. Durkee frequently uses in impetigo the ointment given below.\*

Impetigo rodens is, I believe, generally benefited by iodide of potassium and iodide of iron, aided by aperients, which seem to subdue it with tolerable certainty if properly taken. I give a case which will perhaps illustrate the course of the disorder and the action of medicine better than anything I could say in another form. It is taken almost word for word from the patient's own account.

E. M., Esq., a healthy man, aged 51, who had not been confined to bed a single day for thirty-four years, after suffering from bad headache, colds, &c., observed, July 16th, 1867, four pimples on the breast and one on the thigh, which he compared to mosquito-bites, and which gradually became very sore. Five days after this he consulted a gentleman, who prescribed blue pill and Pullna water. Under this treatment the stools became very fetid and the sores worse. Being at a distance from home he consulted another surgeon, who prescribed iodide of potassium in moderate doses.

By the 27th the sores on his chest were much worse. He described them as "hard, purple, rocky lumps"; that on the thigh looked like an angry boil. His surgeon now ordered him quinine and gentian. He then returned home, the journey being very painful, and continued to get worse till the 30th, when he took to his bed. By this time the sores on the chest had, he said, dried up, but that on the thigh was "like a volcano," and extended over a space as large as the palm of his hand, the crust on it being heaved up by ichor and the thigh very painful; smell from discharge very offensive. The medicine was continued. On the 2nd of August he reports the pain as diminishing and the inflammation subsiding: the sores on the chest covered with crusts ("rocky cakes") as big as walnuts. Directly after this the crusts seem to have fallen off, leaving holes

\* R. Pulv. ammon. chloridi ʒj.  
Olei camphorati ʒj.  
Glycerini ʒij. ad ʒiij.  
Sulphuris sublim.,  
Ung. simpl., aa. ʒj. m.

which discharged yellow pus. On the 5th he left his bed, but felt very weak, having generally slept very badly; unhealthy pus was discharging from the thigh. On the 7th the sores were all secreting yellowish-white pus, with what the patient calls a peculiar dry smell, "like that from the paw of a smooth terrier." He was ordered to take the iodide of potassium again.

The report of August 8th represents that he had up to that time continued the use of quinine and gentian. He now discontinued these, and from this time kept to the iodide of potassium. He had lived well but regularly, taking little in the way of stimulants except bottled ale. The sore on the thigh was still two and a half inches long and one inch and a half wide. On the 14th he went for a short distance from home in order to try change of air, took tepid baths and began the use of iodide of iron. Within two days after he reported himself as much stronger, and that crusts had formed over the sores on the chest; that on the thigh his notes state to be at that time about two inches in one diameter by three in another, but getting shallower and looking healthier. On the 23rd he consulted me, being sent by Mr. Robert Taylor. I suggested iodide of potassium and strong decoction of sarsaparilla, a dose of calomel twice a week followed by a purgative draught, and nitrate of silver to the sores. Under this treatment a slow but steady improvement took place, and notwithstanding the depressing effects of a severe domestic affliction, he was able in about a month to lie on the right side. On the 28th of August he was ordered blue pill, for what particular reason does not appear, but I have no doubt it was a valid one, as he was under the care of a very attentive and judicious surgeon. This seems to have been the last medicine given him, and from this time he progressed steadily and rapidly towards a complete and lasting cure. By the 3rd of October the sores had all healed, and more than two years later he reported himself having been in good health ever since. Throughout his appetite had been good. He suffered from sleeplessness during about nine days in the beginning of his illness. He informs me that his hair never grew the whole time.

Twenty-two years previously he had connection with a french woman, which was followed two days after by the appearance of a "large white pimple" on the glans, which the surgeon whom he consulted pronounced to be chancre. This gentleman ordered him blue pill, cauterized the sore, and applied black wash. The sore

closed up within a month, the groin remaining merely tender, and the patient rather naturally thought he was quite well. About six weeks later he had sore throat, for which he took iodide of potassium and sarsaparilla. From this time up to the date of the present attack he seems to have had no symptoms whatever of syphilis.

B. EC'THYMA (*a, atis, neut.*), ἔχθυμα, from ἐχθύω, to break out. This is the usual derivation. I should think it more probably came from ἐξ (ἐχ) and θυμῶω, to inflame. The real meaning of ἐχθύειν is to expiate by sacrifice.

*Definition.*—An eruption of large, roundish or oval, separate, unhealthy-looking pustules, each seated upon a hard, raised-up, reddish or purplish base, followed by formation of thick, hard, dark scabs, which on falling leave a livid spot or superficial cicatrix. Most common on the lower extremities. Average duration of pustules, ten to twelve days.

*Divisions.*—1. E. vulgare, which corresponds to the characters above given. 2. E. luridum, marked by cachexia, purple colour of the patches, ulceration, sloughing, great pain and irritability. 3. E. vesiculosum, in which what is called the pustule is simply an unhealthy vesicle, very closely connected, if not identical, with the form of herpes perstans described at page 209. In many cases the crust seems to form by the same process as in eczema, the difference being here that the base is thickened, and that superficial ulceration, attended by the formation of ill-conditioned pus, goes on beneath the crust.

*Treatment.*—Ecthyma is generally a very manageable disease, and I don't know that there is anything to separate its treatment from that of impetigo. For the lurid form Bateman recommends opiates and the warm bath, with a liberal use of bark. Mr. Wilson's favourite tonic in ecthyma seems to be nitro-muriatic acid and gentian; arsenic, he thinks, is rarely called for. I have seldom found it necessary to give more than sulphate of iron in combination with sulphate of magnesia; \* aloes and myrrh may also be given in pills. Cod-liver oil has been found useful. Most cases of vesicular ecthyma yield rapidly to the use of the acid solution of iron and mild aperients, with zinc ointment followed by ointment of the nitric oxide of mercury.

\* For formula see page 219.

As an instance of the vesicular form I may give the following case.

A gentleman, aged 35, living in the country, placed himself under my care some years ago for disease of the skin affecting the left leg. Nearly the whole surface, particularly in front, from below the knee to the ankle, was one mass of large papules, vesicles, firm hard scabs, and cicatrices. The papules were dark red, very irregularly shaped, varying in size from a quarter of an inch to an inch and a half in their longest diameter, and raised in some places a line or two above the level of the skin. On some of the very smallest of these vesicles were seen in process of formation, and on one was a fully-formed vesicle, or rather a small bulla. On other papulæ were seated small, clean, deep excavations, which looked as if they had been scooped out of the true skin; from these an almost colourless serum was discharged in great abundance, saturating any dressings in a very short time; in fact, it poured out almost worse than from an eczematous surface. On still older papules these ulcers had become covered with hard, tenacious, brown scabs, while last of all, the oldest had given way to deep puckered cicatrices.

The disease had existed several months, and so far had resisted all treatment. Finding it so obstinate the patient tried to cure it himself, but the result was equally unsatisfactory. However, it soon yielded to the use of steel; the tincture in full doses, three times a day, was ordered, and as a necessary accompaniment, a mild aperient pill two or three times a week; the sore to be dressed with a weak ointment of nitric oxide of mercury. Improvement began almost directly, and went on unchecked; the same treatment was continued till all the ulcers had healed, and vesicles had ceased to appear. I then advised the patient to go through a short course of arsenic, but he would not, and perhaps was as well without it, as, quite two years after, he had had no return of his malady.

This disease does not correspond with ordinary vesicular or bullous affections; the irregular thickening, elevation and hardening of the base, and its disproportionate size, entirely remove it from that category. In fact, it was more like ecthyma, but not ecthyma as described generally; the vesicles were not seated on conical elevations, there were no pustules, nor did the vesicles become either purulent or tinged with blood. The complaint did not occur in a broken-down constitution, but in a healthy, ruddy-looking countryman, very strongly built, living a regular life, a great deal out of

doors, and residing in a wild, open district. There was no history of syphilis, no reason to suspect it before or afterwards. The patient, who admitted having exposed himself often enough to such a source of danger, and who was quite familiar with the subject, assured me that he would not have thought of concealing such a fact if he had ever suffered from the disease, and I certainly never had reason to think that he was concealing the truth. The complaint, too, yielded to remedies which possess no control over syphilis. There was no ground to suspect scabies.

C. AC'NE (*acna*, *æ*, fem.), *ἄκνη*, possibly from *a* and *κνῶω*, difficult to scratch, on the same principle as *ἄκνηστικ*, the spine in quadrupeds, so named because they cannot reach to scratch it!

*Definition*.—Occlusion of, sometimes, with increased secretion from, ducts of sebaceous glands, attended by thickening, hardening, inflammation or suppuration. Eruption seated on face, neck, shoulders, back, and breast. Maturation of such pustules as occur very slow.

*Divisions*.—1. *A. punctata* (comedones, grubs), in which there is simply occlusion of the sebaceous ducts with formation of black specks at the orifices, accompanied by elevation and hardening of the sides of the openings. Contents composed of epithelial cells, oil-globules, some fine hairs, and cholesterine. May inflame and turn to acne simplex. When hard and horny, often called stone-pock (*a. indurata*). 2. *A. simplex*, in which this state is accompanied by formation of hard inflamed papules round the orifices of the ducts, and frequently by suppuration. 3. *A. rosacea*. More an erythema, accompanied by papulation, than a pustular disease. Distinguished by vivid red patches on face, sometimes with dry and furfuraceous state, at others by a greasy condition of skin. Suppuration occasional; pustules often painful and stiff. Occasionally varicose dilatation of minute superficial veins. In still more aggravated cases, skin thickened and rough, with red or purplish knobs, greasy and shining (hypertrophic acne).

In acne simplex, as generally met with, it will be observed, on examining the surface carefully with a good lens, that in some of the spots inflammation has occurred round the orifices of the sebaceous ducts, on the apices of which are seated small, brownish adherent crusts. At these places the hair-sack appears to have been torn out



by scratching, or to be imbedded in the crust. In others, where this process has not gone so far, we only see the firmly occluded hair-sack with its blackened orifice. I have never seen a hair issuing from one of these specks. As very often no sebaceous matter can be squeezed out of these places, I am disposed to think that the irritation set up is not due to the imprisonment of the sebaceous matter, but to a morbid action in the hair-sack itself.

Acne is one of those diseases which demonstrate the inherent weakness of any classification. Although it is in one form (*a. simplex*) essentially a pustular disease, and frequently so in another division (*a. rosacea*), yet suppuration, rare in the latter, is sometimes unknown through the whole duration of a case of the punctate variety. This is, however, no more than we find in other groups. Ecthyma is at times a vesicular disease, at others it forms by a process very closely allied to that seen in disorders called, sometimes impetigo, and again impetiginous eczema. Further illustrations of this unsatisfactory state may be found in the separation of small-pox from the vesiculæ, though, so far as I can see, it is as essentially vesicular as herpes, and in the connexion of tinea circinata and pityriasis, which may pass into eczema, with tinea tonsurans and pityriasis versicolor, which do not undergo this change.

*Causes.*—Acne, especially in the form of *rosacea*, is often ascribed to exposure to heat, as in cooking, and to be connected in men (particularly severe *acne simplex*) with spermatorrhœa; hæmorrhoids and dyspepsia in both sexes, and painful or profuse menstruation in women, are often spoken of as general accompaniments of *rosacea*. Thinking it might be as well to ascertain if there were any grounds for this belief, I inquired of several patients, and give their account of the matter. I may observe that the cases examined were nearly all very severe. In order to avoid unnecessary repetition, the reader is given to understand, that when he finds no remarks made as to the state of the health, it is to be considered as satisfactory, and that nothing was elicited which tended to connect the disease of the skin with any internal disorder, beyond that slight amount of disturbance, shown merely by a coated state of the tongue, and perhaps constipation, or even some slight feeling of being rather out of sorts, which we find so prevalent among patients with all forms of skin disease.

*Cases of Acne simplex in Men.*—J. T. B. Unusually severe case.

A hatter. Exposed to heat now, but his complaint began two years previously to his taking up his present occupation, and when he was a good deal out of doors. No cause made out.—G. B. O., draper, 17 years of age. Face almost covered. Much induration and inflammation. Not exposed to any heat. No cause.—R. E., aged 22, reader in British Museum. Not exposed to any heat. No cause.—A. A., aged 26, clerk. Not exposed to any heat. No cause.—J. Y., aged 18, engraver and drawer. Not exposed to any heat. No cause.—J. S., age 21, clerk. Not exposed to any heat. No cause.—R. G., age 17, tailor. Not exposed to much heat. No cause.—W. C., cellarman to a wine-merchant. Extremely temperate, according to his own account. Not exposed to any heat. No cause.—J. H. Not very severe case. Works in a hot place.—W. P., age 20, draper's assistant. Not exposed to heat. No cause. C. T., age 20. Very mild case. Much exposed to heat.—T. G., age 22, engineer. Not exposed to any great heat.

*Acne simplex in Women.*—S. S. Considerable induration. Not exposed to heat. Describes herself as being in perfect health. No cause made out.—E. W. Health delicate. Menstruates regularly. Not exposed to heat.—C. D., age 23, dressmaker. Not exposed to any heat. No cause.—S. A., shopwoman. Not exposed to heat. No cause.—J. V. One of the worst cases I ever saw. Not exposed to any heat. Menstruation very painful. Latter symptom relieved without any change for the better in the acne.—T. R., housemaid. Not exposed to heat. No cause.—A. C. Unusually severe case. Milliner. Not exposed to heat in any way. No cause.

*Acne rosacea in Men.*—A. G. Very severe case. Strong, healthy, middle-aged man, following an out-door employment. Health excellent. No cause.—H. R. Excessively severe case. A joiner. Not exposed to any heat. No cause.—T. W. H., salesman in a lace-warehouse. Not exposed to heat. No cause.—W. H., age 24, printer's warehouseman. Exposed to considerable heat at times. Occupation otherwise healthy, as is the patient.—E. C., age 55, gardener. Not exposed to any heat, except that from the sun in summer. No cause.—F. C., draper. Not exposed to heat. No cause.—W. B., age 34, coffee-house keeper. Not exposed to much heat.—W. G., age 42, mason. Not exposed to heat. No cause.—T. D., age 40, saddler. Not exposed to heat.—F. S., age 35,

bootmaker. Not exposed to much heat.—W. H., age 31. Face almost covered with pustules, intervening skin thickened and almost like the rind of an orange in texture. Not exposed to heat.—W. W., age 30, coachman. Very severe case: whole face invaded by the disease. Not exposed to heat. No cause.

*Acne rosacea in Women.*—C. E., age 39. Had a good deal of cooking to do at the time the disorder came on. No other cause. Health good.—A. B. Was cook at the time the disorder began. For a considerable time past has been a housemaid, and consequently, she says, not exposed to heat. During this latter period the disorder has progressed as fast as ever. No cause.—L. L., age 34, nurse. Not exposed to heat in any way. No cause.—M. J., age 37. Not in any way exposed to heat. No cause.—S. L. Exposed to no other heat than that of gas in the shop for about half an hour daily. No cause.—E. M., age 35, works at a book-binder's. Exposed to considerable heat for two hours in the day: not at any other time. No one in the workrooms suffers from the complaint but herself. Health excellent. No cause.—J. G., age 26, cook. Work not hard. No cause.—J. H., no occupation. Not exposed to any heat. Healthy. Menstruation, &c., good. No cause.—M. D., age 40, no occupation. Not exposed to any heat.—Caroline S., age 40. Health good. No occupation. Not exposed to heat. No cause.—Catherine G., age 32. Very severe. In good circumstances. Not exposed to any heat. Teetotaller.

Indeed, judging from my own observations and statistics, I should feel disposed to conclude, that if the reader were to select any hospital, general or special, and pick out a number of patients equal to that given in the foregoing lists, but not suffering from any skin disease, he would find as much in the way of exposure to heat, disturbance of health, &c., operating as causes, and yet not bringing on acne or rosacea;\* and I can only conclude, that though such causes as have just been examined may in some few cases have evoked the disease,† its appearance in a vast majority of instances is due to the operation of what I have elsewhere ventured to call the "law of proportion of constitutions."

\* As regards menstrual irregularities I quite concur with Hardy, who remarks: "We are obliged to say, that in most of the observations we made the menstrual functions were executed with the most perfect regularity."

† Acne simplex seems undoubtedly to be called forth in some persons by even a moderate use of alkalis.

There are further one or two sources of fallacy which should not be passed over. Rosacea sometimes accompanies a tendency to hæmorrhoids, diarrhoea, prolapsus ani, excessive and painful menstruation, and dyspepsia; not as an effect, but complicated by them; of course, any possible combination of these may appear without the skin disease being present. Now an accidental aggravation of any of these symptoms is generally accompanied by an exasperation of the rosacea, and what improves the one relieves the other; but this simply proves, not that the two states are dependent on each other, but that both may spring from one cause. Again, it has, as I have just mentioned, been stated by some authors, and I believe it is rather generally thought, that acne, and especially acne simplex in young men, is connected with spermatorrhœa. I have known more than one surgeon and physician in hospital and dispensary practice convict every young patient suffering under this complaint of self-abuse, without listening to any protest. Now in quite two thousand cases of spermatorrhœa, I have only found one patient suffering under rosacea, not more than thirteen had acne, and only two of these were affected with it in a severe form.

*Treatment.*—The slighter cases of acne simplex, and of the disorder known as stearrhœa, in which the skin looks greasy, the follicles secreting an excess of fluid fat, often require little more than using no soap and washing in hot water. If somewhat more severe, the spots may be bathed freely with the lead or bismuth lotion prescribed at page 162.

But more advanced cases naturally require more energetic measures, and in order to make perfectly clear what I have to say, I propose to divide the treatment into four stages, embracing four groups of remedies. These are—1. Preparatory treatment, especially called for when the tongue is foul, the appetite bad, the health out of order, and the bowels constipated. 2. Treatment devoted to the restoration of the strength and nutrition. 3. A course of remedies directed towards the absorption of material deposited in the indurated parts. 4. A course of arsenic.

1. The first set of symptoms require, in my opinion, saline aperients, with or without bitters, according to circumstances. Sulphate of soda or magnesia, or the heavy calcined magnesia, may be given with nitrate of potass, in mint-water; or when the appetite is bad, in some bitter aromatic infusion, such as calumba or serpen-

taria.\* However slight may be the signs of improvement which follow the use of these medicines, I feel little hesitation in recommending their steady continuance along with some of the aperient pills already recommended.† I am the more particular in saying this, because I believe that in the treatment of skin diseases, the rock always ahead is *the slow progress made at first*, and that it is most necessary, when we have once traced out mentally the path to be taken, to keep rigidly to it, unless indeed some quite unforeseen contingency should arise. At the same time it is to be quite understood that bad cases are rarely cured by such means, the principal value of which consists in clearing the way for further measures.

Taking all things together, I should say that the first stage of treatment in acne need not differ materially from that required at the outset for eczema ; perhaps a more free use may be made of such salts as sulphate of potass or soda, and the administration of them may be continued for a longer time in acne (say a month or so), whereas in eczema it is rarely requisite to keep them up beyond a week or two ; but the difference is more in time and degree than in character.

2. After salines and aperients, I would advise a course of steel. Perhaps the compound or aromatic steel mixture and the tincture of the sesquichloride are the best preparations for this purpose, and a full dose of one of these, say half a drachm to a drachm of the tincture, or an ounce of either mixture, may be given two or three times daily for six or eight weeks. I have, in some instances, both in those forms and in acne rosacea, observed that the sulphate of iron agrees better than the tincture, and in women of middle or mature age, I have more than once seen it effect a rapid improvement, especially in rosacea, after iodide of potassium, liquor potassæ, Donovan's solution, tonics and aperients had been tried in vain. Dr. Cheadle recommends‡ a combination of this salt with sulphate of magnesia, and occasionally quinine and strychnia, and a very useful combination it is. If any constipation arise from the use of

\* For instance :—

R. Sodæ sulph.,  
Potassæ nitratis, aa. ʒij.  
Syrupi flor. aurant. ʒiv.  
Infus. calumbæ ad ʒvj. ℞.

Capiat coch. amp. duo ter quotidie.

† See pp. 12, 173.

‡ *Journal of Cutaneous Medicine*, vol. iii. p. 418.

iron an aperient may be given. For this to be effectual three ingredients should be present. First, aloes in the form of aloin or some preparation which will not irritate the lower part of the great gut ; secondly, a minute quantity of mercury, so as to act gently on the liver ; and, thirdly, a powerful aromatic, such as myrrh, saganenum, or assafoetida ; an aperient extract or pill may generally be added with advantage. Dr. Frazer says that when emenagogues are required, the oil of savin, in doses of one drop three times a day, is a very valuable remedy in this eruption.\*

3. But in cases where there is no particular weakness or unhealthy state of the system ; no chlorosis or defective menstruation ; where dyspepsia or acidity of the stomach prevails ; where steel induces acidity, headache, giddiness, and pain in the bowels, and where the acne is not benefited by the foregoing medicines, I think it will generally be found that an alkali is more suited to the case. Perhaps it would be difficult to select a better preparation than liquor potassæ, in doses of thirty to forty minims quite twice a day, in a tumbler of milk. Dr. Underwood recommends bicarbonate of potass in punctiform acne. Dr. Hillier used to give the liquor in combination with hydrocyanic acid and a vegetable bitter. As an aperient, calcined magnesia may be prescribed along with the potass ; about half a teaspoonful to a teaspoonful of the heavy calcined is usually enough ; it also may be taken in milk and before breakfast. Generally it acts more satisfactorily if preceded by an aperient pill overnight.

4. The probability however is, that after effecting a certain amount of improvement, the foregoing remedies will cease to exert any control over the disorder. So soon as ever this becomes manifest I should advise that arsenic in the form of Fowler's solution, without the spirit of lavender however, should be added to the liquor potassæ. I have found the combination most beneficial in scores of cases. A young person of eighteen or nineteen, or an adult, may begin with thirty-minim doses of the potass, and five minims of the liquor

\* I subjoin a form :—

R. Pil. aloes barbadensis gr. xvij.

—— hydrargyri gr. vj.

Sagapeni gr. xv.

Extracti rhei gr. x.

Olei sabinæ minim. iv. ꝑ ft. pil. xij.

The oil of savin may of course be omitted when such a prescription is required for men.

arsenicalis, three times a day, taken in milk and immediately after meals. Younger and delicate persons should try smaller doses. After a time these quantities should be increased, but acne seldom seems to require very large doses of arsenic. So soon as decided improvement sets in, the potass may be given up and the arsenic alone continued. While giving either, however, five grains of the compound calomel pill may be advantageously prescribed, to be taken two or three times a week at bedtime. Where expense is no object, the arsenic may be taken in compound decoction of sarsaparilla, but to have any effect the dose must be quite an ounce to two ounces, and the decoction must be good. I have had ample opportunities of satisfying myself that what is constantly sold as some unfailing preparation of sarsaparilla exerts no control over acne, and most probably contains little more than a mere flavouring of this drug. It is no uncommon thing for hospital patients, especially for those whose material interests are likely to be seriously injured by the presence of such a disease, as in the case of men-servants for instance, to spend almost their last shilling on sarsaparilla before applying at a public institution for relief, and that without deriving any benefit whatever.

Mr. Hunt seems to think time and money are simply wasted in trying any remedy except arsenic. I have given his plan a very fair trial, and feel now no hesitation in recommending as superior that which I have laid down. My experience is that the patient bears the arsenic always as well, and generally a great deal better, after a preliminary course of salines, acids, steel, and potass. Besides, arsenic will not set right coated tongue, loss of appetite, sluggish liver, &c., symptoms of which, as already mentioned, many persons complain at the outset.

Some writers have thought very highly of acids (as the basis of treatment), sulphur, and antimony in acne. Dr. Willan used to prescribe oxymuriatic acid. I believe the sphere of mineral acids should be restricted to the cases for which I have recommended them. Bateman used to give antimony and sulphur along with soda. I tried them pretty extensively, but they appeared to me inert. Possibly taken in some hot drink on going to bed they might bring on perspiration, and thus, in the opinion of those who think there is some mysterious connexion between the suppression of this function and the breaking out of acne, a certain amount of success may be achieved. Tar and charcoal taken together in the form of pills

seem, according to the account sent to me by Mr. John Wetherfield, to have answered very well in *acne punctata*. The most extraordinary success however that I have yet heard of occurred from the use of glycerine in the practice of M. Gübler. He gave two dessert spoonfuls daily in *acne punctata* (*acne simplex*), and the pustules began to diminish in number and volume "from the day that the remedy was first taken." \*

I need scarcely say that almost numberless external remedies have been recommended in *acne*. I have no doubt that the accounts given of the success said to have been attained by the use of them are all in good faith, but at the same time I feel bound to say that my observations have led me to a very opposite conviction, namely, that very few local remedies possess any power over this disease, and that the control exerted by these is limited and uncertain. The best of them seem to be preparations of chlorine and iodine with sulphur or mercury as a base. It will be found that they all possess a certain amount of epispastic power, and it is probably to this that they owe their beneficial action, it being, so far as I can see my way into the matter, a very doubtful point whether they one and all equal in efficacy a blister. Foremost among these preparations stands the hypochloride of sulphur, with which the surgeon may begin at once. At one time I used to preclude the employment of it by ordering first the ointment of the subchloride of mercury, and then of the ammonio-chloride; but after watching their effects in a great number of cases, I am led to believe that the former, though recommended for skin diseases generally by so high an authority as the late Dr. Pereira, † is almost, if not quite, useless in *acne*, and the ointment of ammoniated mercury not very reliable.

The ointment of the hypochloride ‡ should be smeared pretty thickly on the spots at bedtime and allowed to remain on all night. In the morning it may be washed off with very hot water and the soap already recommended. It is, however, imperatively necessary that the ointment should be fresh made every four or five days, and

\* *The Practitioner*, September, 1870.

† *Elements of Materia Medica*, 1839, p. 472.

‡ R. Sulphuris hypochloridi ℥v.  
Tinct. lobeliæ m. xv.  
Spir. lavand. m. x.  
Potassæ carbonatis gr. x.  
Adipis purificati ℥vj. m.



that only pure lard and newly-prepared hypochloride should be employed, as without such precautions it very readily spoils.

When the hypochloride begins to lose its effect, biniodide of mercury ointment, fifteen or twenty grains of the salt to an ounce of lard, may be substituted. A very small quantity should be worked into each spot with the point of a butcher's skewer. If there be any large very indurated spots, and if the patient be resolute enough, it is a good plan to pierce them with an exceedingly fine trochar like that represented in the engraving (*A*), or a stout sewing-needle with the point ground to the same shape. The bleeding spot is to be bathed with very hot water. This is easily done by means of the little implement (*B*) engraved here. The round end (*A*) of the mandril is dipped into almost boiling water, shaken, and then pressed against each spot in succes-

sion.\* A blister acts still more efficaciously in clearing the way for the iodide, but then it is almost impossible to get patients to blister. I have not succeeded in doing so more than three or four times. When the patient can manage to take them, I always recommend a course of vapour baths towards the close of treatment.

In common acne, Dr. M'Call Anderson uses † a compound of rumex ointment ‡ and hypochloride of

\* Both these instruments can be procured from Messrs. Walters & Co.

† *Lancet*, 1869, vol. ii. p. 833.

‡ R. Rumicis radicis ℥xviii.

Aquæ destill. q.s.

The root being thoroughly bruised, these ingredients are to be well boiled for two hours, strained and evaporated. Then add—

R. Adipis præparat. ℥xij.

Ceræ flavæ ℥ij. m.



sulphur. It is firmly rubbed into the eruption night and morning, just short of giving pain. I do not observe that he says what kind of rumex he employs. In acne attacking the face and back in young persons he employs a preparation of sulphur and glycerine,\* directing it to be well rubbed in night and morning with a piece of flannel. M. Cazenave speaks highly of iodide of sulphur in indurated acne, fifteen up to twenty-four grains to an ounce of lard. Dr. Burgess recommends the bicianuret of mercury lotion, two grains of the salt to an ounce of distilled water. This he employs in conjunction with bichloride of mercury and iodide of potassium internally, in the proportion of a sixth of a grain of the mercury and ten grains of the iodide three times a day. My experience, however, of the bicianuret in this way was not satisfactory and I gave it up. Dr. Hillier had great faith in the bichloride of mercury in almond emulsion used as a lotion. He also applied a paste of one drachm of sulphur to an ounce of camphorated spirit laid on at night. I have tried both these applications, but could not observe any superiority in them. M. Klezinsky recommends † in the sebaceous form of acne painting with chlorhydric acid, on the ground that a portion of skin thus treated perspires twenty-seven to thirty per cent. more carbon, and seven to twelve less water than a part to which it is not applied. Weak solutions of bichloride of mercury are an old and favourite remedy when the acne spots are indurated, but Dr. Frazer says, that if too long continued they make the skin rough and indurated, and that a solution of borax is better; after using it he directs the skin to be well rubbed with a wash of oil of rosemary or lavender dissolved in spirit of wine, one part of the oil to ten or twenty of spirit.

Rosacea may be fairly cited as one of the diseases which most strikingly point out the great improvement made of late years in the treatment of cutaneous affections. It is not so long since Bateman's time, yet then rosacea was universally thought incurable.

- \* R. Sulphuris ℥vj.
- Glycerinæ (Price's) ℥vj.
- Spiritus vini rectific. ℥vj.
- Olei rosæ minim j. m.

Hebra, I believe, employs a somewhat similar preparation, consisting, however, merely of sulphur and spirit rubbed into a paste.

† *Braithwaite's Retrospect*, vol. xl. p. 190.

Bateman himself maintained that a perfect cure could seldom be accomplished, and this belief is still only too prevalent. M. Bazin, writing in 1860, says that the arthritic form (couperose arthritique) "est très-ténace et fait le désespoir du malade et du médecin." Yet rosacea is not so unmanageable. In general it is much more curable than acne, and it may be safely said that the difficulty lies rather with the patient than with the complaint. Indeed, I believe there are few severe diseases of the skin in which the progress of treatment can be more accurately calculated, and a favourable prognosis given with greater confidence, than rosacea.

The treatment need not differ from that pointed out for the other varieties, except that in rosacea it is often quite unnecessary to give more than the salines and a short course of steel or alkalies. Arsenic is rarely called for. The external treatment is in every way identical with that of acne.

Suppose, however, the surgeon has tried these means in an obstinate case of acne, and failed, are there any others on which he can rely? I am afraid the question must be answered dubiously. There are, no doubt, remedies enough, but when we scrutinize the proofs on which their reputation is based, we find little to encourage us in the belief that they possess any power of curing the disease superior to that of the measures already mentioned. However, I give a few of those which seem to have the best claim to confidence.

Dr. Burgess mentions a case of obstinate rosacea of three years' standing cured by the internal use of phosphorus, iodine, and sulphur, aided by a wash of bichlorate of soda and glycerine. I have not been able to make out in what form and doses these remedies were given. A very severe and refractory case is said to have yielded to large doses of decoction of the water-dock (*Rumex aquatica*). Bazin has used the chlorate of potass with success in some of these cases; and the tincture of cantharides is reported to have succeeded when other means have failed. My experiments with it were, however, most unsatisfactory. Finally, the waters of Louèche, in Switzerland, and of Baréges and of Aix, in Savoy, seem to have been of use in some rebellious cases. Those of Louèche appear to act like blistering with cantharides and tartar emetic ointment, except that the blistering does not go on to vesication. The patient remains plunged in the bath for five or six hours each day, and at the end of a few days a regular erythematous and pustular

eruption comes out, which materially changes the action of the unhealthy parts. Blistering is a very old, but, as in acne simplex, an impracticable remedy. It was employed by Ambroise Paré, and afterwards advocated by the celebrated Dr. Darwin.

As to the dread some surgeons feel about curing acne, I do not share it; on the contrary, I believe it to be as chimerical as that of curing eczema or ulcer. Dr. Copland says,\* "that the apprehensions entertained by the older writers of producing internal disease by the sudden repulsion of the eruption were founded on observation," and that affections of the stomach, bowels, chest, and head have been thus induced, and have been relieved upon a reappearance of the eruption. The answer to this is that no remedies possess the power of suddenly repelling any variety of acne.

*Diet.*—Many authors have laid it down as a rule, that one great difficulty we have to struggle with in rosacea is some error in diet, but I have not been able to trace more excess among these patients than among those suffering from other chronic skin diseases, and, indeed, many chronic complaints. Both among the sick and the healthy, there are always a certain number of persons who eat and drink erratically and voraciously; and hasty, inordinate eating, especially of large quantities of uncooked vegetables and drinking mixtures of wine, beer, and spirits throughout the day, are spoken of as exciting causes of this disease; possibly in some few instances with a certain amount of truth. There is, no doubt, too much of this kind of thing prevalent. Some people think that so long as they feel no effects from what they eat and drink none are likely to follow, and they take beer in the morning, beer to lunch, sherry before dinner and at dinner, port or beer with the cheese, port after dinner, grog after that, and often beer again. Such work as this, with over free indulgence in pork, goose, curries, ices, and so on, is not suited to rosacea; but my experience is that very few cases can be traced to such causes. They may and do aggravate the disorder, but as an exclusively active or special cause of rosacea I believe they have little influence. Indeed many of those who suffer from this complaint are particularly temperate, and usually live rather low than otherwise. In upwards of sixty cases I found, in answer to very minute inquiries, no reason whatever to believe that there was any irregularity going on as to either eating or drinking.

\* *Dictionary of Practical Medicine*, vol. i. p. 30.

A widely different opinion has, I know, been upheld by some physicians of large experience. Bateman paid great attention to diet, and his instructions on the subject may even now be read with benefit. But I see nothing in what they tell us that does not hold good of every cutaneous disease. The first step is to set right anything that is wrong in the habits of the patient, just as any disorder of the liver or stomach, of the bowels or womb must be corrected. Till this is done, neither steel nor arsenic can be well borne, neither will they do any good. Again, when a patient with any disease of the skin is suffering from overfeeding the diet may, for a short time at any rate, be very beneficially restricted to such things as tea and toast, fish, white meat, boiled milk, farinaceous diet and well-cooked vegetables. But this is only a temporary state, and as such demands exceptional means. During a great part of many, and during the whole course of some diseases of the skin, exhaustion is, more or less, nearly always present, and I continually recommend the use of a moderate amount of wine and spirits with benefit, strongly opposed as I am to the habit of taking them in anything like excess. Rosacea offers no exception to this rule. I had not long ago two sisters under my care for this affection in a pretty severe form. One, who was moderately well off, and took wine every day and hollands at night, was quite well in four months; the other, who had to struggle with great hardships and rarely tasted more than one glass of poor malt liquor daily, was little better at the end of a year.

Beyond avoiding excess, therefore, and interdicting such articles of food as goose, pork, curry, &c., I see no reason for recommending any particular kind of diet. The rules laid down in the chapter on eczema apply to rosacea as well as any I am acquainted with. I have found the Carlowitz sold by the Wine Agency Company, which is far superior to that advertised by some wine-merchants, very useful in this complaint, and I believe it may be safely recommended as one of the most suitable beverages here. Not being a dear wine, it comes within the reach of all except the really poor. A very great deal of the stuff sold under this name is, however, totally unsuited to the case, and in point of fact is, to ~~be~~ thinking, not fit to drink.

Mr. Startin's convictions are decidedly against the use of arsenic in this complaint. He relies upon chalybeates, mineral acids and bitters, mercurial or white precipitate ointment with camphor, and

in what he calls simple inveterate acne, with hyposulphite of soda decomposed by means of alum in the form of lotion.\* In the more aggravated form, or genuine rosy-drop, his local treatment is to blister the spots with strong nitric acid, drying it off immediately with blotting-paper ; some cases he attacks still more energetically, dividing each little trunk that feeds a tubercle with blood, and then inserting a minute piece of nitrate of silver ; a practice not followed by any scar. Dr. Ross punctures the tubercles, and inserts a drop of nitric acid by means of a hair tube. Dr. Burgess speaks very highly of the bicyanide of mercury for this purpose, recommending a solution of two grains to an ounce of distilled water. This is brushed over the spots, and in a few minutes after is washed off with cold water.

Dr. Neligan, in chronic rosacea, recommends the use of iodide of potassium, two grains in two ounces of decoction of fresh elm bark, with the addition of a quarter of a grain of iodine, at bedtime. I am not sufficiently acquainted with the properties of the bark to speak with certainty of its action ; but the iodide, which at one time I gave rather extensively, did not prove of much service in my hands ; nor does Dr. Neligan say that he actually saw benefit arise from using it. Locally, he placed great reliance on the ammoniated mercury ointment, a drachm of glycerine being added to each ounce. Dr. Neligan advises that this should be washed off in the morning with a weak spirit lotion, containing twelve grains of carbonate of soda and half an ounce of glycerine to the pint. A preparation of this kind is, however, apt, if too freely used, to make the skin dry and scurfy, to which many patients strongly object. M. Bazin's treatment of acne is principally local, such as the vapour bath and sulphur douche and bath, and the *huile de cade*.

Mr. Wilson's treatment of rosacea is first a moderately nutritious diet, all stimulants being avoided. His principal internal remedies are laxatives, antacids, and tonics. He directs painful, congested pimples to be punctured and poulticed. Among Mr. Wilson's prescriptions for lotions are one composed of two drachms of sublimed sulphur, a drachm of camphor and four ounces of distilled water, and one containing bichloride of mercury dissolved in emulsion of bitter almonds or eau de Cologne. Mr. Wilson's favourite ointment is, I believe, that of hypochloride of sulphur, for which I give his

\* *Medical Times*, vol. xiv. p. 347.

formula,\* though I prefer my own; he also uses the iodide of sulphur ointment, ten grains of the salt to an ounce of lard, and for allaying irritation, elder-flower ointment or simple cerate.

D. SYCO'SIS (*is, is, fem.*), *σύκωσις*, from *σῦκον*, a fig.

*Definition.*—An eruption of papulæ, chiefly seated on the chin and upper lip. Papules become pustular and are pierced by a hair. Accompanied by a good deal of stiffness and heat in the affected part. Highly contagious; often attended by a distinct parasitic growth. Eruption in advanced stages resembling the inside of a ripe fig.

Such is the definition usually given: it does not accord with my experience. The disease is spoken of by some authors as a pustular disease, by others as a tinea. According to my experience, it is in five cases out of six neither the one nor the other, and I think myself justified in saying that distinct disorders have been grouped together under this name.

These are—1. True pityriasis, sometimes showing a white mealy secretion, generally attacking the moustachè; sometimes appearing as pityriasis rubra, and then not unfrequently spread over great part of the hairy part of the face (*S. erythematosæ*). Either form, but especially the latter, may be irritated by improper applications so as to become developed into a real eczema, and may then be attended by congestion of the hair-follicles forming papules, or by pustules, but I have not seen an instance where these complications played a primary or important part in the disorder. The eyebrows are not unfrequently involved. 2. True eczema of the hairy part of the face, sometimes accompanied by considerable heat, itching, and tingling. I have seen this complicated, in syphilitic patients, by warty growths and papules about the upper lip, chin, and corners of the mouth; but I need scarcely say that the eczema and warty growths were here two distinct affections, occurring accidentally together on the same site.† 3. An exceedingly obstinate form of

\* R. Sulphuris hypochloridi ʒij.  
Potassæ carbonatis gr. x.  
Adipis benzoat. ʒj.  
Olei amygd. essent. m. ij. m.

† Dr. Cheadle has also noticed a "quasi" warty alteration of the skin in the pustular form (impetigo of the face).

lupus erythematosus, beginning generally in the upper part of the whiskers, marked by a low, narrow, erythematous margin, constantly but very slowly spreading ; followed by bleaching and thinning of the skin and more or less destruction of the hair-follicles. I have twice seen this disease in women ; once on both the upper and lower lip, once on the lower lip only. It is distinctly different from ordinary lupus erythematosus. Sometimes in man it is accompanied by small red papules, as also by so much eczema that it might readily be mistaken for this disease. 4. Impetigo of the lower part of the face (impetigo sycosiformis of some writers), in which the skin is often thickly beset with scabs, pustules, and suppurating foci ; not unfrequently accompanied by redness and swelling of the affected part. The sycosis answering to the definition given in the preceding paragraph and tinea sycosis I have not seen, nor have I traced any variety of sycosis to contagion.

*Prognosis.*—All these diseases are obstinate, and if neglected may endure an indefinite time. I had a patient under my care in whom the lupoid form had, when I first saw him, lasted nearly thirteen years, and had in the course of that time destroyed nearly all the hair on his face, only a little on the upper lip being left. Still I believe that with care they may all be cured.

*Treatment.*—The eczematous and impetiginous varieties may be referred to their respective sections. Syphilis I do not propose to treat of here ; in fact, I think such disorders are much better separated from what are generally known as skin diseases. The erythematous form may however very well be examined separately, as also the lupoid.

The principal remedies which have proved of use in my hands for these are—1. Purgatives ; 2. Steel ; 3. Arsenic ; and 4. Eplilation.

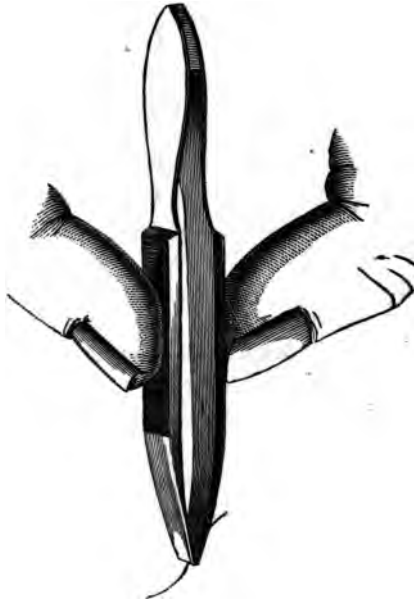
1. I would in every case recommend a course of purgatives. I prefer calomel and magnesia to any I have tried. The former should be given every second night, beginning with grain doses and be followed by the magnesia in the morning. I leave it to the reader to decide in what form he will prescribe the magnesia. What I have said on the subject in the chapter on eczema is applicable here. This treatment is often exceptionally beneficial in the lupoid form.

2. Steel is also useful, especially in slight and recent cases. My observations have been principally confined to the acid solution and the tincture of the sesquichloride, which may be given as in eczema



3. Should the case however prove obstinate, I would recommend immediate recourse to arsenic and use it as for lepra, accompanying it however from time to time by the purgatives. For instance, it may be taken for a month alone, and then for a fortnight in conjunction with calomel and magnesia. The surgeon has only to give this method a fair trial, in order to satisfy himself that it is superior to the use of arsenic uncombined; and indeed the patients, when the purgatives are suspended, constantly ask to have them renewed.

4. Local treatment however plays a very important part, and one of the first things a patient should do is to procure a pair of tweezers. In general, the implements sold under this name are useless, the



nipping edge forming too great an angle with the hair and so breaking it. The ends ought to run nearly parallel with each other, as shown in the accompanying engraving. The patient should pull out a few hairs every day and then rub in a little hypochloride of sulphur ointment. If there be much heat and itching, a bismuth lotion or arrowroot poultice may be applied for a few days; but in general the use of such things means simply wasting so much time and money.

I have now to add a few words on the treatment of sycosis recommended by others, but I must refer my readers to the works of these writers for an explanation of what they mean by sycosis.

The principal remedies seem to be laxatives, steel, mercury, arsenic, and the removal of the hairs. As laxatives Mr. Wilson employs neutral salts like those of Seidlitz and Rochelle. Mr. Hunt speaks of cases cured with arsenic only. The hypochloride and the iodide of sulphur ointment seem to be general favourites. Mr. Wilson, I believe, uses the pharmacopœia ointment diluted with twice its weight of benzoated lard. He also prescribes the sulphur douche, and follows up with the iodide of sulphur ointment. He likewise employs an ointment composed of fifteen grains of the white precipitate of mercury, a drachm of strong mercurial ointment, half a drachm of the solution of diacetate of lead, and six drachms of fresh pure palm oil. This combination makes a cream-like mixture of great utility in sycosis. Dr. Frazer recommends hot poultices of boiled rice. As to rooting out the hairs, opinions are greatly divided: some medical men consider there is no chance of recovery unless this be done, and most thoroughly too. Mr. Startin pulls out every hair; others are not so much impressed with the advantages of this practice. Bazin's treatment of sycosis is pulling out the hairs, applying *huile de cade*, and giving alkalies.

## CHAPTER IX.—FURUNCULI.

*A. Boil. B. Carbuncle. C. Charbon. D. Aleppo Boil.  
E. Delhi Boil.*

A. FURUN'CLUSUS (*us, i, masc.*), from *furo*, to rage. B. CARBUNCLE.

*Definition.*—A deep-seated, limited inflammation of a portion of corium and corresponding subcutaneous cellular tissue ; marked by a deep but restricted hardness and redness, and subsequently a somewhat livid hue of the surface, which becomes thickened and upraised. Slow suppuration, escaping by one orifice. Expulsion of dead corium. Great pain and stiffness of part ; formation of permanent scar. In carbuncle (*carbun'culus, us, i, masc.*, dimin. of *carbo*, burning coal ; also *anthrax, acis, masc.*, from *ἄνθραξ*, a live coal) the process is essentially the same, but surface larger, flatter, and presenting several openings.

*Treatment.*—I know scarcely any common disease, the internal treatment of which is in a more unsatisfactory state than that of boils, and the same may be said of carbuncle. I was once present at a discussion on this subject by the Medical Society of London, and it would have been amusing had it not been rather humiliating to witness the wide discrepancy of opinion as to the value of almost every remedy mentioned. I am afraid matters have not much improved since then. All the speakers agreed in admitting the greater or less insufficiency of all plans of treatment, and some stated candidly enough that they had lost all faith in medicine. One gentleman excited some amazement by saying that he had suffered from these pestilent things, and that he had trusted to port wine rather

than drugs. He took a bottle out with him every day in his carriage when he went his rounds, and had a glass each time he called to see a patient; the result of which was that the bottle always came home empty, and that the surgeon felt much better than if he had taken the best tonics in the world; indeed he reported the effects as something wonderful. I am inclined to think he was right, but the remedy would scarcely answer in hospital practice.

Yeast no doubt does good in boils. Quite a tablespoonful should be taken three times a day. Dr. Hillier says that quinine taken till it affects the head is often useful. I have often found opium in conjunction with morphia and liquor ammoniæ acetatis very serviceable in relieving the pain of both boil and carbuncle. From a grain to a grain and a half of opium, and from a quarter to a third of a grain of muriate of morphia, may be taken in a pill at bedtime, accompanied or not by a draught containing at least half an ounce of an inodorous spirit. Less headache is thus occasioned than when opium alone is trusted to. Chlorate of potass seems to have been useful in some cases.\*

There is one simple remedy which exerts great control over boils and carbuncles, and that is common white lead, laid on as thick as it can be made to lie, and protected from friction by a strip of linen bound over it. Treated in this way boils require neither cutting, medicines, fomentations, lotions, poultices, or any such messes. Patients have sometimes told me that the fluid has eased the pain within two hours; and judging from a fair experience of its effects during several years, I should quite look for a speedy amelioration of the symptoms under its influence. In carbuncle the action of this remedy, especially when mixed with powdered opium, a drachm to the ounce, is almost equally satisfactory.

Mr. French has recorded† some cases in which carbuncles were successfully treated by a very summary process. A small tenotomy knife was introduced and the carbuncle was freely divided under the skin. The relief thus afforded is described as surprising, and boils were treated with equal success. A gentleman, who saw some cases subjected to this treatment, assured me that Mr. French had not in any way overstated the results. As to laying open carbuncles by a

\* *Journal of Cutaneous Medicine*, vol. ii. p. 452.

† *London Medical Review*, Sept. 1862. Mr. O. Fersall long previously advocated a similar plan.

crucial incision I disapprove of it most strongly. Sir James Paget says\* very justly that cutting neither prevents the carbuncle from spreading, relieves the pain of it, nor accelerates its healing. Mr. Collis says† this is because we do not cut deep enough and get through the fascia. Gutzeit uses ‡ for carbuncles an ointment composed of half a drachm of powdered opium and two ounces of white ointment laid thickly on ; he says it relieves the pain in half an hour. I have tried the same and even a larger quantity of opium with spermaceti ointment, and certainly the opium is very useful as an addition, but I do not think that spermaceti ointment is as a vehicle equal to white lead.

Dr. Rigby speaks § highly of tincture of iodine in boils ; he puts on three coats in succession for several nights together. Mr. Gay pierces the boil and injects a drop of the acid permittate of mercury. Dr. Marcet recommends,|| when the carbuncle is rather superficial and is seen in the vesicular stage, that an ignited lucifer match should be held over it till it assumes a dull whitish appearance, owing to the coagulation of the albumen it contains. A red-hot wire, he tells us, may also be used. The pain, he says, is really trifling, while that from the carbuncle ceases in four or five hours, and with the cessation of pain there is an end of the disease. When the carbuncle lies deeper this method does not answer so well. Chlorate of potass seems to have been useful in some cases. Peruvian balsam and basilicon ointment are favourite applications with some practitioners.

Dr. Frazer gives us the valuable information that with arsenic we can check the ulceration and burrowing which sometimes follow anthrax. He recites one most instructive case. The burrowing had been going on for some months, and was arrested in forty-eight hours by the use of this drug. The mineral was then given up and the ulceration at once began again. The arsenic was now resumed, and the destructive process was stopped effectually, the remedy being this time continued till the patient was cured. Though not germane to the subject, I may mention that Dr. Frazer has found arsenic given in this way very rapidly cures onychia.

\* *Journal of Cutaneous Medicine*, vol. iii. p. 211.

† *Dublin Quarterly Journal*, 1859, vol. xxviii. p. 205.

‡ See a paper in the *Med. Zeitung Russlands* quoted in the *British and Foreign Medico-Chirurgical Review*, 1858, p. 271.

§ *Medical Times*, 1858, vol. ii. p. 98.

|| *Lancet*, 1851, vol. i. p. 45.

Professor Laycock has described a contagious furunculoid, which some years ago prevailed rather extensively in Scotland for a considerable period. It began as a vesicle filled with sero-purulent and sometimes sanguinolent fluid, leaving an excoriated surface when broken, followed by a crust. Sometimes it wore the appearance of ecthyma, at others that of carbuncle; phagedænic or even gangrenous action supervened in some cases, or erysipelatous action might be present. Occasionally some of these boils appeared in a cluster. The more common seats were the back of the trunk, buttocks, and thighs; but the lip, eye, tongue, vagina, and scrotum might be attacked. An irritant, such as a blister, sometimes evoked boils in the vicinity of the part it was applied to. Professor Laycock seems disposed to connect the outbreak of this disease with the importation of foreign meat; a view, I think, quite open to question.

There is not much said about the treatment, and what there is cannot be looked upon as reassuring. Painting the incipient boil with tincture of iodine shortened its duration. The tincture of the sesquichloride of iron and the nitrate of silver are said to have been serviceable. When gangrenous the sores were best treated with strong nitric acid. Suppuration and sloughing called for crucial incisions and water-dressings.

### C. CHARBON.

*Definition.*—A severe gangrenous affection of a limited portion of the true skin, marked by rapid, unhealthy-looking vesication, surrounded by erysipelatous redness on which vesicles are sometimes seated; swelling, hardening, and sloughing of the affected surface, accompanied by great prostration, rigors, headache, loss of appetite, and cold sweats. Generally attacks hands or face. Supposed to be communicated by contact with putrescent animal matter. Prognosis grave in bad subjects.

*Treatment.*—I believe all who have seen the disease are agreed that it is absolutely necessary to give stimulants as rapidly and freely as possible. At least ten grains of the chloride of ammonium may be administered every two or three hours, in two ounces of cascarrilla or serpentaria, and this should, if the pain and depression be not relieved, be supplemented by an occasional large dose of morphia and ether. To be of service, however, these drugs must be doled out with no measured hand, as the disease is one which will not

allow of any trifling. As an external application I should be disposed to place more reliance on the acid nitrate of mercury, freely applied to the base of the vesicle, than on anything I know.

#### D. ALEPPO BOIL.

*Definition.*—A small, very slightly raised pustule, of a furunculoid character, destroying the true skin. Matures very slowly ; leaves a permanent mark. Granulation slow. Peculiar to Aleppo and two or three other towns. Attacks the face ; said also, on doubtful authority, to attack the limbs of strangers who reside there.

*Treatment.*—Although I have searched rather widely, and have questioned patients who had suffered from this singular disease, I have not been able to find any trace of a rational or successful plan of treatment ; that adopted in the East, that is to say, when any treatment at all is adopted, being inert. Judging from its lupoid nature, I should be disposed to place as much reliance on acid nitrate of mercury as anything else.

#### E. DELHI BOIL.

*Definition.*—A formation of slowly-growing, minute tumours in the skin and cellular tissue, which ulcerate and spontaneously heal, leaving a peculiar bleaching and puckering of the skin.

According to a paper by Dr. Fleming,\* the morbid growth affects the skin and subcutaneous tissue. I am not quite clear that I have mastered Dr. Fleming's meaning, but I understand him to say that a deposit takes place of a substance "transparent, shiny, and free from inflammation." In this are seen spots, consisting of small, roundish, yellowish bodies, with a glistening capsule. They are just large enough to be seen with the naked eye, and seem to consist of fluid contained in a fibrous envelope of eccentric laminae. Dr. Fleming hazards the conjecture that these may be the ova of some parasitic body. Surgeon-Major Smith holds that the disease is due to the presence of ova, and that these ova come from the water used to wash the affected parts. Mr. Dickinson says† that Delhi

\* *The Delhi Ulcer.* By J. Fleming, M.D. F.R.C.S. *Indian Medical Gazette*, 1869, p. 23.

† *Lancet*, 1870, vol. ii. p. 882.

boil begins with a small, hard, red, shining pimple, which looks much as if the skin had been bitten by a mosquito ; indeed, this phase of the complaint is known as the mosquito stage. This lasts a variable period, during which the only change is a slight increase in size. The tumour at this epoch is hard, round, and circumscribed. On pressure it gives the feeling of a pea or a duck-shot rolling under the finger. About the end of the fourth week it no longer moves under such pressure, and becomes larger. The surrounding skin becomes infiltrated, and the surface of the tumour rough and scaly. The tumour daily grows more prominent and vascular, spreads wider and deeper into the surrounding tissues, and there is a sensation of pricking and shooting in it. Next one or two vesicles form on its apex, which begins to discharge a pale, yellowish, sero-granular fluid. This is followed by ulceration, which spreads till it has destroyed all the tumour except the base. This has, in the mean time, become a "collar of brawn," leaving a deep ulcer, with thickened irregular edges. Then the skin becomes undermined and fungous, and a most intractable sore forms. Ultimately this cicatrizes, leaving a scar of variable colour, which looks much as if a piece of skin had been cut clean out. This, however, was decidedly not the case with some scars which I have seen, as they were bleached, seared-looking, and almost, if not quite, on a level with the surrounding skin, resembling, in fact, very much the marks left by erythematous lupus.

Mr. Dickinson thinks the disease is clearly of miasmatic origin. It occurs most frequently after the autumnal rains, is often preceded by pyrexial symptoms, and accompanied by neuralgic pains. It disappears with change of air. There seems good reason to believe that its existence at Delhi was due to a large quantity of ground being covered with the rubbish of ruined buildings, to want of trees, and to the tanks and watercourses being choked up. In consequence of a valuable suggestion by Lord Mark Kerr, the rubbish was removed, the space planted with trees, and the tanks and watercourses cleaned out. The result of these beneficial changes has been, the troops are now almost free from the disease. It was also found to diminish when men suffering from it were put under canvas near trees.

Dr. Sisson describes\* Delhi boil as a hard, circumscribed, inflammatory tumour, beginning much after the fashion of a simple boil,

\* *Journal of Cutaneous Medicine*, vol. i. p. 338.



250 *Definition of Delhi Boil ; Treatment.*

but larger, and spreading wider and deeper. It does not suppurate, but suppuration sets in around it and destroys all the boil, except the collar of brawn at its base, leaving a deep, ragged, indolent, intractable ulcer. He also thinks its origin may be malarious.

*Treatment.*—The actual cautery is of use when applied freely in the mosquito stage. Black wash seems serviceable when there is fungus, and nitrate of silver is often beneficial. Mr. Dickinson has found benefit from the use of carbolic acid. When the disease has existed for some time, the patient requires quinine or iron. The diet should be light. The patient should live as high above ground as he can, and all the water he uses should be boiled and filtered. Dr. Sisson thinks local treatment all-important. In the boil stage painting with tincture of iodine ; in the ulcer stage “sluicing” with blistering fluid, or painting the edges with it. Immediate change of air is evidently the principal remedy.

CHAPTER X.—TUBERCULÆ.

*A. Lupus. B. Scrofuloderma. C. Leprosy (Elephantiasis Græcorum).  
D. Chelis. E. Epithelioma. F. Rodent Ulcer.*

A. LUPUS (*us, i, masc.*), from *lupus*, a wolf.

*Definition.*—Limited thickening, hardening, and redness of the affected portion of skin, followed by abnormally active perverted absorption, under the influence of which unhealthy matter deposited in the hardening is removed, resulting in the formation of extremely tenacious crusts, followed by bleaching, thinning, and discoloration of the part attacked. Scars permanent. Most frequently attacks the face.

*Divisions.*—1. *L. exedens*, generally attacking the nose, especially inner surface of it, beginning with a papule or fissure, followed by thickness, tenderness, stiffness and sense of weight, and formation of tenacious crusts, under which deep, unhealthy ulceration goes on. May destroy septum and alæ, eyelids and mucous membrane of lips. Occasionally, but rarely, attacks limbs. 2. *L. non-exedens*, the same disease in a milder and slower form. Begins with a pale-coloured papule, or limited erythema, with induration, followed by adherent, dirty greyish or yellowish crusts. Destroys principally upper surface of corium. Little pain present. Cicatrix often traversed by slender blood-vessels. Attacks cheeks, forehead, and scalp; also seen on limbs and trunk. 3. *L. erythematousus*, marked by more redness and less hardness than the previous variety, which it often closely resembles. Begins by a small, reddish, unhealthy-looking, irregularly-shaped spot; often when on nose or ear bearing

some likeness to a chilblain, the margins of which gradually become covered, wholly or in part, by a thin, dry, tenacious crust; attacks cheek, nose, ear, finger, &c. Indurated at margins; followed by permanent bleaching and thinning of the skin. 4. *L. scrofulosorum*, an eruption of soft, flat, red, moist tubercles, spreading very slowly, without suppuration. Cuticle thrown off early, and replaced by viscid secretion, or loose, soft, greenish crusts. Followed by thinning and bleaching of the skin. Cicatrix permanent.

*Pathology.*—The intractable nature of lupus, and the disfigurement which it occasions will, I hope, justify me in devoting considerable space to the subject. A sufferer from this relentless malady is a perfect outcast, the loathsome appearance which it wears in its more destructive forms being enough to inspire the least sensitive with horror. The observations I have to make on this part of the subject are almost purely clinical, or a digest of numerous communications made to me by various medical men, whom I beg to thank for their kindness.

In the spring of 1866 I published a paper\* on this disease, in which were given the particulars of twenty-five cases of it. The letters which I received shortly after on the subject leave little doubt that lupus is looked upon as scarcely, if at all, removed from the range of incurable maladies, and that an immense number of remedies are used for it, to the exclusion of a more simple, if not a more valuable mode of treatment. It therefore seemed highly desirable to go carefully into the question, especially as an opinion has been expressed that some of the cases referred to were not true lupus. Throwing open the question to free discussion is the great remedy for the evils of divided opinion, for if no other good be effected, attention is sometimes thus directed to modes of treatment which might otherwise never be heard of; points of diagnosis, in themselves of the highest importance, are often brought to light, and even the obscure nature of the causes of disease may be made more clear. For instance, the connexion between syphilis and lupus may possibly be thus decided. By discussion, it is true, men do not convince each other, but the conflict of opinion rarely fails to open up chances for such as will avail themselves of them.

Under the head of lupus I propose to review, not only the recognized forms, such as the eating, creeping, and erythematous,

\* *On the Treatment of Lupus.* Robert Hardwicke.

but some other varieties of disease, which, if not true lupus, are more nearly allied to it than to any other disease I am acquainted with; such, for instance, are the strumous lupus already defined, some kinds of lupus of the limbs, and lupoid ulceration from bites.

The strumous form of lupus, though a rare disease compared with the other varieties, may be easily recognized. It is quite distinct from scrofuloderma, but may be seen in the same class of patients. It begins with one or more soft, flat, red and moist tubercles, which spread very slowly, and neither suppurate like the cutaneous abscesses of scrofula, nor ulcerate like those of eating lupus. The cuticle is cast off at an early period, and is not formed again. From the time it is shed the tubercles are always covered with a small amount of unhealthy-looking, viscid secretion, or loose, soft, greenish crusts. Generally as one part encroaches on the sound skin, another heals, or the whole patch may heal from the centre and spread at the edge. In the healing stage the identity of this disease with ordinary lupus is fairly revealed, the process being attended with the same thinning and bleaching of the skin as in lupus erythematodes. Indeed, I have observed the disease after a considerable time take on the characteristics of the creeping form. Dr. Purdon has recognized this affection, of which he has seen\* two cases.

I have already described, under the head of sycosis, a form of disease which I believe to be lupus. This disease again is easily recognized by the small, hard, red tubercles, the erythematous margin and the bleaching and thinning of the skin. I have known it confounded with acne, and I have heard its lupoid nature openly disputed; but the tubercles which surround, or rather envelop, the hair-follicles may be identified with those of lupus both in appearance and growth; they are, it is true, smaller and harder, but in every other feature they are one and the same. When pierced, or laid open by tearing away the crust, they exhibit, in many instances at least, not the characters of a pustule, but a jagged cavity lined with the grey pultaceous or tough whitish, adherent secretion of lupus. The thinning and bleaching are identical with those of lupus. The duration of the disease is almost indefinite.

All forms of lupus invade the limbs, but they rarely assume in this situation features identical with the same disease on the face. Lupus exedens may be seen on the elbow, when it is usually as-

\* *Journal of Cutaneous Medicine*, vol. iii. p. 136.

cribed to a blow, a belief for which there may be some foundation. I have also met with it on the outer side of the right arm and back of the right hand, making terrible ravages and sadly disfiguring the patient, a healthy-looking scotch girl; outer side of the left arm; behind and below the knee, and on the inside of the lower part of the thigh; and Dr. Frazer has seen it perforate the knee-joint, causing death from absorption of pus. I have also met with two cases where it attacked the lower part of the leg; and as I believe the circumstances are unusual, I give the particulars.

The first was that of an elderly man, otherwise in good health, who had formerly been under my care for lupus exedens of the elbow and radial side of the arm, which, taking together the healed and diseased parts, extended from considerably above the elbow to half-way down the arm, and which had lasted then nearly three years. I questioned both him and his wife, but could not make out any history of syphilis. His only child, a daughter, was under my care at the same time for pityriasis rubra, but though I made every search, I never could find out that she had had a single symptom of syphilis from her childhood upwards. The disease in this man yielded to treatment, but a few months later a large patch formed on the lower part and outer side of the right leg, just below the calf, which gradually became covered with a remarkably hard and tenacious crust, under which lay an ulcer with every feature of lupus, and which steadily healed under the influence of iodide of potassium.

The other case was that of a lad who had suffered for years from lupus exedens, which, before I saw him, had destroyed the tip of the nose and both lips. During the time he was under treatment as in-patient at St. John's Hospital, he contracted a severe cold accompanied by bronchitis, and followed by a bad cough and loss of appetite. With these symptoms came a nasty unhealthy abscess, over the lower and front part of the tibia, and near this some papules soon appeared. In the course of a very short time, the abscess, which was very superficial, and really more a large unhealthy bleb than anything else, and the papules, were seen to be involved in one common process of degeneration into lupus. How the case ended I am unable to say, as the boy was soon after removed from under my care.

I am indebted to the kindness of Dr. Frazer for the particulars of two cases of lupus of the limbs and trunk. In one patient, a female of middle age, the disease attacked the right knee; indeed it was a

recurrence of the complaint in the same part where it had appeared several years previously. The ulceration spread deeply, threatening to perforate the joint, but was thoroughly and rapidly checked by the use of chloride of barium in doses of one-eighth of a grain, aided by poulticing, strapping, and a strong solution of nitrate of copper. In the other patient, a man in the prime of life, the disease extended from the anus along the buttocks, healing sometimes, re-opening at other times, but always spreading by the growth of tubercles, which formed in the skin, softened and ulcerated.

Dr. Purdon was kind enough to inform me, that out of nineteen cases of lupus treated at the Belfast Dispensary for Diseases of the Skin, three had the same disease in the limbs. In one, that of a boy thirteen years old, strong and healthy in appearance, tubercular lupus occurred on the back of the left hand. In another case, that of a boy, aged nine years, who also had this disease on his nose; there was a small patch of tubercular lupus about the size of a penny on the inside of his right thigh; and lastly in the case of a girl, twenty-four years of age, suffering under erythematous lupus of the nose and both cheeks, which had existed upwards of eight years, the disease likewise occurred on her left hand and little finger.

I shall possibly be told that most of, if not all these cases, were nothing more nor less than tertiary disease; at least from the tenor of the remarks made to me, I can come to no other conclusion; and as, apart from the question of diagnosis, the existence or non-existence of a venereal taint, is a point of vital importance to the patient, I am anxious to go fully into this part of the matter.

In the majority of cases there was no antecedent history of syphilis: I inquired in every case most carefully into this point, and though some of the patients admitted having had gonorrhœa, often more than once, while others candidly stated that they had exposed themselves freely enough to the risk of infection, yet I could not find out that any of them had had syphilis. There were no histories of eruptions, sore throat, &c., to connect this lupoid disease with a soft sore mistaken for gonorrhœa or hidden behind a contracted prepuce, no cicatrices from tertiary disease, no falling of the hair, no destruction of the hard or soft palate, or signs of previous ulceration of the throat. I should not have thought it necessary to say that the scars left by buboes and chancres are worse than useless as evidence of infection, had I not known that the presence or absence of these scars is daily misinterpreted, and that their existence is con-

sidered by many persons as positive proof of a syphilitic taint. It becomes therefore requisite to observe that a sore on any part of the penis is a most fallacious test ; the chancres which produce the most decided loss of tissue, the phagedænic, are rarely if ever followed by either secondary or tertiary disease, while the most destructive and obstinate forms of constitutional disease may result from very small sores, which may heal up in a few days, leaving little if any mark ; or from the papular form of sore which disappears with scarcely a trace of its site remaining. In like manner the scar of bubo, if its history be superficially examined, only misleads the inquirer. The indolent bubo, which scarcely, if ever, suppurates, is succeeded in a vast majority of cases by general disease, whereas the suppurating bubo, which bursts and leaves a mark, is not followed by anything of the kind. But the patient may have had this form of sore, and also hard sore, with indolent bubo ; so that with or without a scar in the groin he may be thoroughly infected.

Again in many of these cases of lupus of the limbs and trunk the disease was very much slower in its progress than syphilis usually is ; it was far less amenable to control, and was not marked by any of the concomitant symptoms which sooner or later start into life, when the patient is suffering under true tertiary disease. Syphilis will, it is well known, hang about a person for years, but usually this is because the patient does not submit to a proper course of treatment. When thoroughly destructive syphilitic action is set up, it is rarely in the shape of one solitary symptom ; it is usually more rapid in its course, and mostly some unmistakable concomitant, such as pain, falling of the hair, antecedent sore throat, swelling of a bone, osseous pains, or a gum tumour may be traced. In lupus there is nothing of the kind ; in the cases I speak of there was not one of these symptoms ; the disease slowly and steadily pursued its career of destruction for years ; the symptoms were as like those of lupus on the face as two diseases on different parts can be ; there was in some instances the same high health, always the same absence of pain that we see in lupus ; the same bleaching in the centre and spreading from the edge in an irregular ring ; the same pultaceous secretion in the sores when they pierced the skin.

At the risk of appearing tedious, I venture to put some of these points in a more concrete form. One of the patients I speak of, suffering from lupus of the right elbow, attended at the hospital for quite two years, the complaint having existed several years when I

saw him. During all the time he was in attendance I never could detect any signs of syphilis. Another person, a woman, entered as out-patient with lupus of the lower and inner part of the left thigh. It began as a narrow irregular opening of the skin just above the inside of the knee, which gradually spread in all directions, extending slowly in width, burrowing under the skin, and piercing deeply into the cellular tissue. When I first saw her it had existed three years, but it had not in that time reached beyond the size of a five-shilling piece, though near it were some soft, largish patches of thickened and discoloured skin, which had a very suspicious appearance. Here the patient herself was afraid that she suffered from syphilis, as the surgeon under whose care she first placed herself questioned her on this point, though he had, after a long observation of the case, come to the conclusion that the disease was dependent on necrosis, and not venereal. Probing however failed to reach the bone, and no dead bone came away then or afterwards. I had to see this woman occasionally for more than three years, and three years subsequent to her recovery she came to the hospital for another complaint, but during all that time, though I repeatedly inquired, I could never find any signs of syphilis in her or any of her children. Her husband, who died previous to my seeing her, always denied having ever had anything of the kind. Indeed the connexion between syphilis and lupus has still to be made out. Mr. Hunt says that erythematous lupus is not lupus but syphilis, yet it certainly appears in young ladies and women of irreproachable character. Mr. Wilson believes that lupus is due to inherited syphilis, but it most assuredly breaks out in persons who have never shown any other sign of syphilis, and against whose parents it is the only evidence. It is scarcely going too far when I say that this view is totally unsupported by any kind of proof.

Lupus non-exedens will attack the limb. In two cases where I saw it on the arm and leg, the disease was rather a compound of the eating and creeping forms than a good example of either. In one very bad case, the outbreak of the worst symptoms was heralded in by the appearance of several slight but very distinct tubercles on the legs, which only yielded when the more serious symptoms were subdued. In another patient, a woman, whose face at the time she began attendance was frightfully disfigured by this compound affection, there were repeated outbreaks of it on the arms, thighs, and legs, and I was on several occasions able to identify the two



disorders. I have seen the erythematous form of lupus on the fingers and leg, and Dr. Hillier says it has been noticed on the limbs. I had one case, and only one, of strumous lupus on the limb. The patient was a lad with all the unnatural fairness of skin, the blue eyes and tumid upper lip, which are held to be marks of a strumous diathesis. There was only one diseased patch, and that was seated on the upper and front part of the leg, and outer side of the tibia. It was about three inches long and about two wide at the broadest part. It had lasted several years, and where it had healed the characteristic bleaching and wasting of the skin were very marked.

A warty form of lupus (*l. verrucosus*) is described\* by Dr. M'Call Anderson. It begins with small circumscribed, dusky-red or violet patches about the size of a split pea or bean, sometimes isolated, oftener confluent. They may form a group the size of the palm of the hand. They subside, suppurate, or become covered with wart-like excrescences composed of epidermic cells.

I do not know whether I am justified in referring to lupus those cases of peculiar and obstinate ulceration which sometimes follow bites, scratches, &c., but I am certainly disposed to look upon them as a traumatic form of this disease. I had under my care a lad whose hand had been severely bitten by another boy, the worst wound being in the hollow of the knuckles between the first and second fingers. In the course of a few weeks an obstinate, red scaly ring had formed round this spot and gradually increased in size till it reached the wrist, and extended in the opposite direction over great part of the backs of the three first fingers, the skin being stiffened, painful, and apparently disposed to take on a dry ulceration at the edge of the diseased surface. This form of disease is difficult to define; the term ulceration might be objected to, inasmuch as there was no secretion of pus, but neither is there any in lupus, where yet the corium is invaded and permanent scars remain. Neither the patient nor his mother would hear of any painful application being made to the part, and mild measures seemed to have no effect whatever; the disease got steadily worse for several weeks, and then the lad suddenly left off attending. The second case was from the bite of a cat, which fastened its teeth on the finger of a little child near the nail. The wound refused to heal, and the matrix of the nail became

\* *Journal of Cutaneous Medicine*, vol. i. p. 96.

involved. At last the surgeon took off the nail and then the disease healed. The third instance of the kind arose from the bite of a parrot on the lip. The disease very much resembled severe eczema siccum, and extended over a very considerable surface ; it had existed several months when I saw it. I endeavoured to secure the attendance of the patient for the purpose of having a photograph taken, but he failed to come, and was indeed all along very irregular in his visits. In a fourth case, that of a man who entered in 1866 at St. John's Hospital, an ulcer the size of a penny, seated on the back, was stated by the patient, a man fifty-eight years of age, to have lasted from childhood, and to have followed the bite of a mule. In another case \* undoubted lupus seemed to have been developed by a jagged cut from a stone. I was consulted by a lady who had a flat depression on the forehead about the size of a shilling, irregularly circular, having apparently gone through the greater part of the thickness of the corium. There was a narrow red line at the edge. I had begun from a scratch with the finger-nail many years previously. I repeatedly applied nitrate of silver and chloride of zinc to it, but without any permanent benefit. At the present time the disease, which has existed quite nine and twenty years, has somewhat increased in extent. The death of a gentleman at St. Petersburg was mentioned not very long ago, evidently the result of constitutional irritation set up in this way. He had been bitten by a parrot, and morbid action, which nothing would check, was set up. The case was vaguely told, but there seems little doubt as to its nature. Dr. Purdon relates † a case in which the disease seemed to have followed a clean cut. A boil having been lanced on the cheek of a woman thirty-six years old, lupoid action was set up round the cut, and twenty years later, when he saw the patient, there was at the part a cicatricial-looking tissue about three inches in diameter, smooth, glazed and white, except at the margins, which were of a violet hue. The skin was greatly wasted and thinned, and the hair-follicles and mouths of the sebaceous ducts obliterated.

The high state of health which accompanies so many of these cases is extraordinary. True, many of the patients are thin, badly shaped, and strumous. But it is as certain as can possibly be, that on the other hand many are very healthy, ruddy, firm-set people,

\* *On the Treatment of Lupus*, p. 19.

† *American Journal of Syphilography*, vol. i. p. 212.

who, but for this, might have passed, if not for models of health, at any rate for giving promise of constitutions far beyond the average. I know a very contrary view has been asserted, but I have seen so many cases of the latter class that I should feel quite satisfied to put the issue of the question any day on the average of the patients treated at St. John's. Dr. Frazer has also noticed the occurrence of lupus in persons of robust health, but Dr. Purdon finds the majority of persons suffering under this disease to be strumous. Dr. Hillier\* says that in the most severe cases of lupus exedens, when it extends its ravages very deeply, the patients are liable to chronic gastro-enteritis, and often die in a state of low fever with colliquative diarrhœa.

Examinations of the diseased parts have so far only revealed formation of connective tissue in the corium, some injection of the vessels, and transparent blastema. Small white corpuscles, looking like dilated hair-sacks or sebaceous follicles, have also been seen. Wedl states that the connective tissue may extend into the muscles and fat, and even the bones.

*Prognosis.*—Although the prospects held out to us of curing this formidable complaint are still gloomy enough, yet the treatment has been more improved within the last thirty years than men might at first be disposed to admit. At the time I speak of the eating form, then almost the only form recognized, was given up as utterly hopeless; the very name of it, *noli me tangere*, breathed despair, and all means of aid, sharp or mild, only served to exasperate its dreaded inveteracy. In Rayer's time treatment seems to have been utterly powerless; of five cases which he quotes, only one offers anything like a cure. Mr. Liston used to tell his class that he had over and over again seen patients suffering from lupus exedens "who had lost all their features; lips, nose, and eyes; nothing remained but the brain-pan and tongue, and they required to be fed by a funnel, introduced over the base of this organ and into the pharynx." † And when Mr. Hunt began his researches, lupus in all its forms was still looked upon as a malady to be relieved, not to be cured. Even now many writers consider it as removed by a very narrow boundary from incurable diseases. In other parts of the world we now and then find an enthusiastic admirer of Hebra ready to tell us that the disease is manageable enough, and that our failures are due, like all

\* *Op. cit.*, p. 196.

† *Lancet*, 1844, Sept. 21, p. 775.

our mistakes, to our stupid deference for tradition. But here opinions resolve themselves pretty well into two classes—one, that lupus is difficult to cure; the other that it is simply incurable.

I consider circumstances warrant me in saying that lupus is more amenable to treatment than is generally supposed; extended observation having confirmed rather than weakened the views expressed in the pamphlet spoken of. This, however, I could fairly anticipate. I simply wrote down what I saw. The notes were, for the most part, taken in the presence of others; and therefore it was scarcely probable that any serious errors, in what was principally a recital of facts, would go forth. Since that time I have had the pleasure of showing several gentlemen more than one case then considered doubtful, but subsequently cured, to all appearance, or greatly relieved. One case was that of a poor woman, Mary Ann P—, whose face, when she first began to attend, was so covered with crust and sores that not a piece the size of a shilling had escaped the ravages of the ruthless malady. She got quite well, and a considerable time after remained so, as she called at the hospital to show herself. Of three severe cases mentioned\* in the pamphlet, it has been ascertained that long after there had been no relapse. In one, a very bad case, that of Mary Ann C—,† the cure has now remained complete more than seven years; the patient's sister has been several times under my care, and she always gives the same account. In another, that of S. R.,‡ it was found that quite five years after she had left off attending there had been no return of the disease. Another patient, Eliza G—,§ was seen in April, 1871, up to which time she had had no return of the disease. Of the cases cured since then, two have attracted particular attention. One of the patients, an elderly female living at Southgate, is still, at the end of five years, free from any signs of the disorder. Another, a young and good-looking married woman, with lupus erythematosus of the right cheek, which she had suffered from for more than twenty years, had also had only one relapse, and that a very slight and apparently preventable one, at the end of a long period.

Of course all the cases did not go on so well. In a very obstinate and disfiguring attack of lupus erythematosus on the left cheek and nose of a young girl, a teacher, where the disease had lasted for

\* *On the Treatment of Lupus*, pp. 17, 23, and 25.

† *Op. cit.*, p. 23.

‡ *Op. cit.*, p. 17.

§ *Op. cit.*, p. 25.

years, preceded and then accompanied by slow strumous ulceration of the skin beneath and behind the jaw, the effect of treatment was at first rapid and satisfactory, the disease being to all appearance cured. Nothing could induce her after this to observe any precautions, and at a later date the disease broke out again inside the nose and destroyed the septum, before she could be persuaded to attend properly to it. Another patient had nearly got rid of lupus of the nose, when she was attacked, first by lepra and then by bronchitis. During the treatment of these two complaints the lupus relapsed, and, just as she had obtained some relief, she died quite suddenly. There is a woman now attending at St. John's Hospital who has always some excuse for leaving off treatment just as she is beginning to get a little better, and who must have had at least four or five relapses.

There is, I think, good reason to conclude that the disease may always be relieved, and generally, if not always, cured; but this only holds good where treatment really has fair play. If patients will leave off treatment every now and then, if they will try all the remedies which friends suggest, if they object, as they often do, to take any medicine, unless they are assured that it contains no mercury or arsenic, if they will be refractory about diet and will expose themselves to agencies which aggravate the disease, the surgeon may struggle in vain; the only plan is to throw the case up. He will do it no good, and it will do him no credit. It seems a sad and strange thing that persons undergoing such fearful disfigurement cannot be brought to take the most ordinary precautions; but such is the case, and it happens so often, that I have sometimes asked myself whether the peculiar condition of tissues which develops this complaint is not attended with some peculiar disposition of the brain.

I do not speak of cases where patients have got weary of attending in vain for months, or of suffering, equally in vain, the torture caused by caustics; I speak of those where the most frivolous excuses are offered. One girl applied at St. John's with lupus of the face, which had lasted quite two years, and had destroyed a very considerable portion of the surface of the skin; during the whole of this time she had never applied for relief; a woman, half of whose face was covered with lupus non-exedens, refused to go on with treatment of any kind, because a solution of nitrate of silver applied to it blackened the surface; a young man, already fearfully mutilated by lupus exedens,

was sent to the hospital by his master ; at the end of three or four days dislike of the restraint of hospital life so far prevailed over his desire to get well, that it was found necessary to watch him in order to prevent his tampering with the medicines, and thus getting an excuse to be sent home.

*Treatment.*—The first step towards forming trustworthy conclusions as to the power of any remedies over such a disease as lupus must be to separate them ; the second, to examine their action separately. Any knowledge otherwise acquired must ever be to a great extent empirical ; treatment based on such knowledge must remain an affair of individual experience, and teaching based on treatment of this kind is as insecure as anything can be conceived to be. A fabric like this may be increased in bulk and polished by toil, but it is unsound to the very core, and the whole structure may at any moment be sacrificed to the popularity of some new specific.

One of the first results of such a process as that just pointed out would be the simplifying of our pharmacopœia, and certainly a greater boon could not be conferred on medicine ; for what we want is, not the new drugs which are constantly being heralded into notice, but a more complete knowledge of the relative value of the more useful among those which we possess, and the ruthless elimination of a host of useless medicines which, at present, serve only to encumber the druggist's shop and the author's pages, to puzzle the brains of those who have not, and to excite the disgust of those who have, the ill-luck to use them. People who are in the habit of examining the answers to correspondents in some of our medical journals, must have noticed that it is no uncommon thing for a writer to ask what will cure, or what is best for, some particular disease, such as acne or pityriasis for instance, apparently under the impression that specifics are as numerous as maladies. It is seldom that he has to wait long for an answer, but in general he will have to wait a very long time before two persons suggest the same mode of treatment ; indeed it would seem as if every person, who considered himself able to speak on such a subject, must necessarily differ, more or less, from every other person. Till some of this confusion is done away with, no novelties, unless they can be very strongly recommended, are required.

There must be something radically wrong in our modes of observation when men arrive at such opposite conclusions as they constantly do about the curability of diseases and the power of drugs over them. Disease is ever the same and the properties of drugs

can be ascertained with tolerable certainty. Now there are but three elements in the question—the disease, the remedy, and the observation bestowed on the two first. These being, so to speak, constant quantities, error can only take its rise from the third. I trust my readers will pardon me for repeating here with so little variation what I have said in the chapter on eczema. *I do so because I feel how important the matter is, and because I see so little done to check an evil of such magnitude.*

It was not to be expected that lupus should escape the common lot of all obstinate diseases—that of having such a large materia medica as rather to bewilder the brains of any one who attempted to grapple with the subject than to serve as a reliable guide. Indeed it is quite possible that were a student to go carefully through the literature of this disease he would, what with the number of remedies and the discrepancies of opinion as to the value of this or that system of treatment, be less qualified to decide what plan to adopt, or what drug to begin with, than when he commenced his task. Some writers look upon medicines as useless, and caustics as the only things likely to do good; while others rely on medicines and denounce the employment of caustics as wanton and useless cruelty. I need scarcely say that both cannot be right.

It may save some misunderstanding if I admit beforehand that my own researches, though I hope carefully made, are still very far from being what they should be; but it seems to me that the cause of truth will be better served by stating even very imperfect results, than by falling back upon authorities which can be consulted at first hand, or by attempting to lay down general rules which the reader can do equally well for himself. Nor are these observations brought forward with the view of throwing any discredit on the systems adopted by other writers; they are simply offered as a contribution towards a mode of recording facts which, if the writer's view be correct, might in course of time come to be as exact as the records of an observatory, and perhaps as widely separated from the usual method as meteorological records are from the rough-and-ready guess of the shepherd or sailor. The latter may be useful in its way, may up to the present time have led to more valuable results in both fields of observation. That is not the point at issue; the question is which system will in the end yield the most certain deductions.

*Internal Means.*—The internal remedies for lupus may, I think, very safely be divided into three classes: (1) those which possess a certain

amount of value ; (2) those of doubtful value, and (3) those of no value at all.

1. The only remedies which I have observed to exert an undoubted control over lupus, and which will, I believe, in every case do some good, and in a certain proportion of cases effect a cure, are arsenic and calomel in lupus of the face, and iodide of potassium in that of the limbs. Of course there may be, and very probably there are, others—some known, such as chloride of barium, recommended by Dr. Frazer of Dublin, a most careful observer—some yet to be found out. I am limiting myself here to drugs the action of which I have tested, or the accounts of which I have been able to examine with sufficient care.

2. Among the remedies of doubtful value I would put all the salts of antimony, soda, borax, mercury, iodine, and potass, with the exception of those quoted in the foregoing paragraph ; all combinations of salts of these, such as iodide of mercury, Donovan's solution, &c., all the oils, such as cod-liver oil, and all vegetable preparations whatsoever. In ranking these remedies as doubtful, I do not in any way seek to invalidate the statements made by some writers respecting their power over lupus ; the chief obstacle to their value, and the chief argument in favour of the position I take up is, that were any given number of cases of lupus put before a surgeon, he would not be able to say that with these remedies only he could rely upon curing a certain proportion of them, or, perhaps, a single case. The disease is often undoubtedly benefited for a time by some of these remedies, for instance, by iodine and iodide of potassium in lupus of the face, but, in all the cases I have seen, the improvement was very slight, and soon came to a standstill. M. Devergie treated twenty-six cases in this way, aided by the use of Vienna and Canquoin paste, for three months. Not one of them was cured, neither does there seem to have been any very encouraging amount of improvement. Cod-liver oil often effects some amelioration of the health, but, as regards the disease, its action is just as uncertain as that of the others. Its true function, indeed, is that of an auxiliary ; it can rarely, if ever, be relied on to the exclusion of active means.

3. Among remedies of no value, I think we may safely put steel, quinine, mineral acids, bitters, sedatives, alteratives, and sudorifics ; change of air, sea-bathing, baths of every kind, and, possibly, many of the preparations described as of doubtful value. This may seem going too far. I can only say that I see no other conclusion to be



drawn, as I never yet saw a beneficial change produced in lupus by any of these remedies, and I have repeatedly tried them and seen them tried without any good whatever. For instance, I have notes of several cases where iron was prescribed, sometimes by myself, sometimes by others. Among the preparations used were the tincture of the sesquichloride, the magnetic oxide, the iodide, the sulphate, the freshly-prepared carbonate (made by mixing solution of the sulphate with carbonate of potass), and Griffith's mixture. In no one instance did the medicine exert the slightest appreciable influence over the disease. Sometimes the health underwent a certain degree of improvement, but generally there was not much to improve. In the same way when mineral acids, such as the nitric or nitro-muriatic, were given, the appetite became more keen, and the tongue grew cleaner, and possibly were the whole community treated in this way a certain number out of every thousand would exhibit the same results; indeed, it would be folly to dispute the power of such remedies in promoting the health, their value as auxiliaries; but as to their influence over the disease, they are, for anything I could see to the contrary, as capable of producing as of alleviating it.

Some five or six years ago I showed several gentlemen a young woman, an in-patient at St. John's Hospital, suffering from erythematous lupus in a very severe form. She had been afflicted with it quite four years and a half, and had taken an immense quantity of tonics without the least improvement; in fact, the first thing tried when the disease showed itself was a long course of iron. She then took iodine in large doses for a long time, and after that belladonna for some months; yet so soon as she was put on arsenic, purgatives, and a proper diet, she began to improve; and this case is only one of many in which I have pointed out how powerless such remedies are against lupus.

For the purposes of treatment all cases of this disease may, I think, be advantageously divided into two great groups; one embracing lupus of the limbs only, the other lupus of the face and head, complicated or not by affections of the limbs. The arrangement is, I admit, extremely unscientific, but I think it is useful for examining the power of medicines, the varying action of which over the same disease in different structures, and even the same structure in different parts, has not attracted the attention it merits. Some years ago I endeavoured to show that medicines which are valuable

against an inflammation in one part are powerless against it in another ; for instance, opium will often thoroughly check peritonitis, an inflammation of a serous membrane, whereas it will, at the utmost, in many cases only relieve an inflammation in cellular tissue, as in erysipelas, simple bubo, &c., and is quite powerless against one in a mucous membrane, as, for instance, in gonorrhœa. It would lead me much too far out of the way to detail all the observations on which this view is based. I can only point out roughly the general principle, as a point round which future observations may gather, as crystals do round a nucleus, and as affording some excuse for the division now adopted.

The internal remedies then are, as I have said, arsenic, calomel, and iodide of potassium. There is, of course, nothing new in them ; the difference in the treatment now to be described lies in the mode of giving them ; but this difference is just the most important feature in the whole matter, and one to which I was led, not by any desire to introduce a novelty, but by my utter failure with ordinary methods.

So far as I have been able to make out, the most efficient remedy against lupus of the limbs is iodide of potassium. For the most part it only requires to be given in moderate doses, and the necessity which exists in syphilitic cases for constantly raising the amount taken does not obtain here. When it cures the disease, I believe it always acts soon, and the action goes on till the part is healed ; when the improvement comes to a standstill, I am disposed to think that augmenting the dose will have no effect. When this very undesirable result ensues, I would suggest a short course of mercury, as recommended further on for lupus of the face.

The mode of prescribing it may be safely left to the discretion of the surgeon. Perhaps one of the bitter infusions\* will answer for a vehicle as well as anything. One precaution should never be omitted—that of getting the salt from a source where we can rely on having it pure. It is perhaps not so much adulterated as it used to be ; † indeed I have been told on very good authority that the

\* For instance :—

R. Potassii iodid. gr. xxiv.  
Syr. flor. aurant. ꝓiv.  
Tinct. cinnam. c. ꝓij.  
Infus. quassia vel calamb. ad ꝓvj. ℥i

Capiat coch. amp. duo bis quotidie.

† Pereira speaks of the adulteration being carried to the enormous amount of 74, 75, and 77 per cent.—*Elements of Materia Medica.*

adulteration rarely exceeds ten per cent., though, judging from the great difference in the action of prescriptions made up at different places, I should have considered this statement below the mark. Still even an admixture of ten per cent. may make a very material difference.

Should the bowels be confined, a mild pill may be given ; in fact, in this as in any other complaint, all complications should, as far as possible, be got rid of, care being taken at the same time not to interfere with the action of the iodide ; for instance, in giving aperients, the alterative action of mercury should be guarded against. But I should think it was quite unnecessary to enter into details on such a point ; to keep on repeating that when gout is present colchicum combined with salines may be prescribed, and that iron is called for in anæmia ; that impaired digestion and painful menstruation must be relieved ; that we must attend to the general health and improve the secretions ; every surgeon knows, or ought to know, all this.

When we have to deal with lupus of the head or face, I believe the first remedy to be given is arsenic. Unless some disorder of the health, such as loss of appetite, great weakness, or anæmia is present, all preparatory treatment is, I think, wasted ; but when the tongue is coated and marked by the teeth, the breath foul, and the bowels confined, a saline may be given for a few days, followed by nitric acid in bitters.\* The great question is the mode of giving the mineral and the dose suited to the case in hand. I have found De Valangin's solution answer very well ; † it is one of the best preparations ever yet found out, possibly superior to Fowler's solution. Twelve minims may be given at the outset three times a day, or, if the reader prefer it, five minims of the solution of the chloride (Pharm. Brit.). The amount given daily of this or Fowler's solution must gradually be raised to twenty-five or thirty minims, of De Valangin's liquid to quite a drachm, before any good can be hoped

\* For formulæ see pp. 149, 172.

† The formula for De Valangin's solution is—

R. Acidi arseniosi ℥ss.  
Acidi hydrochlorici pond. ℥iiss.  
Aquæ destillatæ Oj.

The hydrochloric acid is to be diluted with an ounce of the water, and the arsenic is dissolved in this. The remaining part of the water is then added. An ounce of this solution contains a grain and a half of arsenic, whereas the same quantity of the Pharmacopœia solution contains four grains.

for. According to my experience, arsenic seldom produces much benefit till it brings on a certain amount of constitutional disturbance. As there are no signs to serve us in determining at the outset whether the patient will or will not bear arsenic well, the requisite knowledge becomes in each case a matter of individual experience. Some persons afflicted with lupus support it badly at first; but this can always be overcome. I had a very healthy-looking woman under my care for this disease, who for a long time could not take more than five minims daily of Fowler's solution, and she only succeeded in retaining this on her stomach by swallowing it last thing at night; yet, with care, she got to take fifteen minims daily. Other persons, by no means more healthy or stronger-looking, seem as if they could swallow almost any amount. The reader may be startled when I say that I have given from three hundred to four hundred minims weekly of the liquor arsenicalis, but I have repeated the observation so often that I feel no fear of the statement being contradicted. It is to Mr. Hunt that we are indebted for most of our real knowledge of the therapeutic effects of arsenic, a debt which the profession seems in no particular hurry to acknowledge, although this gentleman's discoveries are of infinitely more importance than whole chapters on the growth of cells and the development of fungi.

When the tongue is much coated from the action of arsenic, it is well to suspend it occasionally and give a brisk saline, or to prescribe a dose of acid in bitter infusion occasionally before each meal. This is a point of great importance. With the assistance of these remedies it will often be quite easy to persevere in the arsenic, when without their aid the patient would most probably throw it up.

But although arsenic will perhaps always effect some improvement, it cannot, in a certain percentage of cases, be relied on for a radical cure of lupus. It is, as I understand Mr. Hunt, a specific for the eating variety, but I have not found it such. So long as improvement goes on, however slowly, I would not interrupt the action of the medicine, as it will often, single-handed, cure lupus; but so soon as ever the improvement comes to a halt, so soon as ever a sufficient time has elapsed to form a valid reason for believing that the remedy is doing no good, and still more so soon as ever there is even a threatening of relapse, the use of mercury should, I think, at once be resorted to. I know of no internal remedy which so quickly changes the action of lupus as calomel in purgative doses. The fact has been so often noticed by the patients themselves, that when

they have once taken mercury in this way they are often more anxious to continue or resume it than I am to prescribe it. They frequently volunteer the information that they have begun to mend "ever since they took the white powders," and not only do they feel better generally, but the sensation of heat, thickness and heaviness in the part, from which many suffer, begins to abate. One woman under my care for lupus of the nose told me that for two years previous to taking the powders, her nose, especially when she stooped, always felt three or four times as heavy as it did after the calomel had been given. Another patient, a young man who had suffered from lupus exedens for nine years, after taking calomel for rather less than three weeks, reported that the stiffness which he had felt almost from the first, was decidedly better.

But there must be no mistake as to the mode of giving the calomel. Used as an alterative I never saw it do the least good; besides, when so employed it must, sooner or later, and often within a very short time, be abandoned on account of the soreness of mouth it brings on. *It is therefore to be employed as a purgative.* At first a small dose, as a grain for instance, may be given twice a week; if the calomel be good, this will generally suffice for the first week or two. So soon as it begins to lose its effect, the quantity should be increased, and the action of the mercury be hastened by an aperient containing magnesia; half a teaspoonful to a teaspoonful of the heavy, calcined magnesia will generally answer very well, or a dose of saline mixture (p. 37), or one of salts and senna may be prescribed. Some persons are very easily acted on by a moderate dose of calomel; others, some of them persons who cannot bear arsenic, seem almost insensible to its influence. I have had strong men under my care who could not take more than one or two grains. One man who did not suffer the slightest inconvenience from four hundred minims weekly of the arsenical solution never could get beyond two grains of calomel. Yet some delicate persons require from five to ten grains, and one woman who, by mistake, took a scruple weekly for more than a fortnight, not only suffered in no way, but said she felt all the better. Whatever quantity, however, may be necessary to act on the bowels, that quantity must be given. Purgings are absolutely necessary—anything short of it I believe to be a mistake. Whatever incredulity the statement may elicit, I still think facts warrant me in saying that purging is one of the first elements of success. Two, three, or four loose stools should follow each dose.

The calomel may be given in the form of a powder or pill, as may be preferred. If given as a pill, any material likely to diminish the griping it is apt to occasion, such as aromatic or opium confection, may be added. With proper care there ought to be no action on the gums. Should any set in, the mercury must be given up, and only the magnesia or saline be prescribed till this symptom has passed off. To prevent all needless repetition, it may be said here that these directions hold strictly good with respect to giving calomel for lupus of the limbs, except that it is generally less often called for and for a shorter time.

As lemon-juice seems to have succeeded very well in the hands of the late Mr. Weeden Cooke in the eating form of lupus, I would strongly recommend a trial of it, especially as it will not interfere with the action of any of the above-mentioned medicines. In my practice it proved of very little use. Dr. Wardell, of the Tunbridge Wells Infirmary, gave\* the juice of three lemons daily in combination with carbolic acid, the result of which was an immediate improvement in one case and recovery in the other.

*External Means.*—With very few exceptions, the external means recommended in lupus are either useless or impracticable. For instance, soothing or cooling, antiphlogistic or alterative dressings, ointments and lotions I believe to be perfectly useless. Were they continued for a lifetime it is very doubtful if they would ever check the march of the ulceration. Again, all remedies strong enough to give severe pain, such as chloride of zinc, Vienna paste, Canquoin paste, are, and ever must be, inapplicable as a rule, for the simple reason, that however valuable they may be, a very large number of patients will never suffer them to be used; others having once submitted, will not allow a second trial to be made, and a third class will only consent when it is too late to prevent irremediable deformity. As to whether they effect a cure or not when they get fair play, that is beside the question; the difficulty is getting them fair play; and whatever may be said in their favour, I apprehend their use will always be restricted to a small proportion of cases, principally among patients not very susceptible of pain, or unusually resolute in bearing it, and not deterred by failure or relapse, for both will occur; or when one solitary part is invaded by the disease. To a strong, healthy, resolute person it is perhaps not such a very serious matter

\* *Lancet*, 1870, Sept. 3.

to cauterize one or two ulcers, though that is bad enough. But when the disease extends over a large surface, when there are several ulcers, or when the patient is a child or very sensitive to pain, the suffering caused by powerful caustics is perfectly frightful, and must ever limit their use to a very narrow circle; indeed, I have often found that merely painting a small patch with strong solution of nitrate of silver proved too much. When the patient can be placed under chloroform for a considerable time, much of the difficulty is of course done away, but I need scarcely comment on the difficulty of doing this in many instances.

That lupus is occasionally arrested, and in a few rare cases cured by the free use of Vienna paste, chloride of zinc, nitric acid, iodized glycerine, nitrate of mercury, &c., I at once admit, because the fact has been stated on such excellent authority, though for my own part I have never been able to effect a cure with such remedies. I have destroyed all the disease, as I thought, three times in succession with chloride of zinc, and yet it has returned. Still worse, I have seen several cases of relapse after what must have appeared to the surgeon a perfect cure. Lupus is a very common disease, yet we find very few cures by such means recorded.\* When we see such a long list of caustics, and such very vague statements about their real power over the complaint; when an author tells us that chloride of zinc *may* be used, and should it fail then Vienna paste *may* be tried, *or* pâte de Canquoin, *or* sulphate of zinc, &c. &c., it is enough to make one hesitate about taking their remedial power for granted, even in the hands of those accustomed to use them. Such phrases admit of almost any meaning we like to give. Were a writer to say that out of twenty cases of a particular kind of lupus in a certain stage, so many would very likely be cured if a particular caustic were used, we should be dealing with something that approached to tangible results, but many authors do not generally express themselves so precisely as to let us grasp these points. If we attempt to grapple with their views, to extract from them some positive statement, they elude our hold as easily as the shade of Patroclus escaped from the clasp of Achilles.

I believe that the principal value of external applications is restricted to excluding the air, and that these are the best caustics which effect this most certainly and with the least pain. Perhaps

\* See also *Dublin Journal of Medical Science*, Sept. 1840, p. 98.

the nitrates achieve this result more certainly than any other means. When the patient can remain indoors, and does not care about the dark stains caused by it, the nitrate of silver may be used :\* it is an excellent remedy, either solid or in saturated solution. In the lupus of children, however, even a weak solution can hardly be borne, and then it is a good plan to try and deaden sensibility by the use of a solution of sulphate of copper, three or four grains to an ounce of water. Dr. Purdon gives the patient chloroform, and then bores with the nitrate deep below the surface of the ulcer. This treatment seems to be very successful. The nitrate is also a favourite remedy with Hebra, Dr. Alexander Anderson, and others. The yellow nitrate of mercury may also be used in the form of ointment made with the oxygenated lard prepared by Mr. Squire ; it is chiefly adapted to those cases where there is only slight or superficial ulceration and to the lupoid form of sycosis ; it answers with those patients who cannot very well have anything applied which produces a visible mark. When employed in cold weather, it must be thinned down with a little almond or neat's-foot oil.

Dr. Weisse states † that he has tried the acetate of zinc recommended in Dr. Neligan's treatise, and that he has found it a capital remedy in every form of lupus. He considers, that if carefully used it may be relied on to arrest and cure the ulcers without any other treatment, local or general, and he gives the particulars of a case which healed up under its influence after being open for thirteen years. His plan is simply to cleanse the part and apply a crystal of the salt. After reading Dr. Weisse's paper I tried the acetate freely in five cases, but though some temporary amendment took place, I did not effect a single cure ; the patients themselves, one and all, gave the preference to the acid nitrate of mercury. I not only used the crystals themselves, as recommended by Dr. Weisse, but had them rubbed down and made into a thick plasm with glycerine and bound on the part.

When there is a large open surface the liquor plumbi may be used. The fluid should first of all be warmed by placing it over hot water, and so soon as it begins to smoke it should be painted several times over the surface. What is left had better be thrown

\* It was a favourite remedy with Rayer.—*Theoretical and Practical Treatise*, 1835, p. 681.

† *American Journal of Syphilography*, vol. i. p. 316.



away. It ought to be applied at least once daily, all crusts and exudations being previously removed, and if the patient think any relief is obtained from its more frequent use, then let it be used more frequently. I am indebted to some of my correspondents, especially Dr. Hinds of Birmingham, for information about its value, and the trials I have made dispose me to think favourably of it.

As a strong application perhaps scarcely anything excels the acid nitrate of mercury. It should be painted over the surface, previously cleansed, as far as is practicable, from all crusts, with a glass brush. At the outset it may be diluted with an equal bulk of water. When applied, a basin of water should always be at hand, and so soon as pain begins to be felt the surface should be freely washed.

When the use of the acid is restricted to small surfaces and to patches in which the morbid action has been a good deal subdued, or which are healing, but so slowly as to justify a resort to any means which will hasten the process, it is often of great service. With proper care, the pain attending its employment is so trifling as to constitute no valid objection. The application should be repeated daily, both because the crust which is thus formed constitutes an almost impregnable barrier against the impact of the air, and also because the acid acts more painlessly than when only occasionally laid on. How it acts I do not profess to understand—possibly by coagulating the albumen in the epidermis or the blood. Subsequent applications I think superfluous, except in the eating form, when water dressing may be employed: the principal thing is to protect the surface from the air, especially cold raw east winds, under the malignant agency of which lupus will sometimes relapse in a few hours as much as has been gained in a week; indeed, as far as possible I should say the patient ought to be confined to the house. Dr. Gilchrist of Torquay gave me the particulars of a case in which a lupoid ulceration of the nose was cured apparently solely by excluding the air. In ulceration of the septum of the nose Pereira recommends an ointment of the nitrate of bismuth, a drachm to an ounce of lard. Dr. Purdon mentions a case in which a cure was effected by this preparation after nitrate of silver, tannic acid, glycerine, &c., had all failed. I tried it in three cases, one of which I was very anxious to cure, but I cannot say that I observed any particular effect from the remedy.

To my thinking, a lupoid surface should only be washed with very hot water, and the only soap which seems to agree is that made

for St. John's Hospital. It is often very difficult to persuade patients suffering under this complaint to enter a bath of any kind; the only plan is to substitute the free use of very hot water. My experience of cold baths and of river or sea bathing is most unsatisfactory; of the value of exercise too during the cure of lupus I am far from being persuaded. It is quite certain that the disease will hold its course unchecked even when patients are breathing as pure air as can be found in England and taking active daily exercise, and I have been repeatedly struck with the improvement that has followed when a patient has been confined to the house, and by the persistent exasperation of the disease from going out daily even for an hour. One patient was under my care who always had an excellent reason for not doing what was prescribed. Although following a sedentary employment, he could always discover some incontrovertible ground for being out of doors. At last he scalded his foot very badly, and was obliged to lie by for a week or so, during which period his case made more progress than all the rest of the time he was under treatment—some three or four months. The fact is, a lupoid surface bears the action of the air almost as badly as do the walls of an abscess, and though, if one could at the same time cut off the air and yet allow the exercise, the latter would be most desirable, yet as this is almost impossible, the first consideration is, I think, to keep the parts guarded against irritants in whatever form they may come.

Change of air and sea-bathing are often recommended in this complaint, as they would be for the results of overwork, anxiety, and confined air; for mischief beginning in the brain, lingering relics of bronchitis, gout, &c. Yet lupus has nothing in common with any of these. It pursues its relentless course with equal severity on open places and in crowded alleys; among the humid, dripping hills of Cumberland and in the bracing air of the east coast; in the dry, bright climate of France and the perpetual drizzle of Ireland or West Scotland; and often rages with greater severity in the place the patient is sent to than in that which he has just left. Under such circumstances only a very sanguine mind could look for benefit. Amelioration, it is true, sometimes follows change of air, but so does a very decided relapse, and the circumstances which may determine either have not been so far elucidated as to enable us to say more than that it is a hazardous step. Change of air and scene may certainly do away with some of the sameness that always attends

a long and tedious complaint, but it is rarely that this compensates for the arrest of all progress. I therefore do not advise change.

I am well aware that a widely different opinion is held by some writers. Dr. Copland, for instance, looked upon good food, wine, beer, and pure mild air as indispensable. Such things may be very serviceable, not only for the health but for the local disorder, though I have never seen any benefit from them myself, and I am quite at a loss to know where a pure mild dry air is to be found in England, and how patients, especially those at hospitals, are to take advantage of it if it were attainable. Possibly a long sea voyage might be of service in some cases, as Dr. Frazer has remarked that lupus is rare among sailors.

*Diet.*—This ought to be good, and essentially the same as in eczema. Too much meat, strong soup, and, indeed, any kind of high feeding is always injurious, overtaxing the powers of digestion without aiding the nutrition,—a mistake particularly to be guarded against while taking tonics. Malt liquors are to be avoided. Rum-and-milk is a most useful form of stimulant. Young persons may begin with two teaspoonfuls of rum and eight or ten of milk, and the dose may be gradually increased to four times this amount. Grown persons can begin with two tablespoonfuls of rum and eight or ten of milk, gradually increasing the former, but never going beyond half a pint of milk. I often give quite five or six tablespoonfuls of this spirit daily, and in one of the worst cases of lupus I ever saw, where the patient seemed sinking from exhaustion, I prescribed a quarter of a bottle of rum daily, and a capital medicine it proved. Sometimes it causes a little headache at the first, but this soon passes off, and therefore does not constitute a reason for abandoning the medicine.

When we analyze the treatment adopted by the most successful practitioners, we find that mercury, iodine, and arsenic enter more or less into the prescriptions of all. Mr. Hunt has\* almost unbounded faith in the virtues of arsenic against the eating form of lupus (*L. exedens*). He speaks of one case of twenty-four years' standing checked in two months by the use of this mineral, and of another of six years' duration which also yielded. In the creeping form the remedy was less efficacious; out of seven cases not one

\* *Medical Times and Gazette*, 1851, vol. i. p. 120.

was quite cured. Dr. Willshire speaks\* of superficial lupus which had lasted fourteen years, getting rapidly and thoroughly well under the use of arsenic and cod-liver oil, results which I have never seen from such remedies. Mr. Startin relies† on small and long-continued doses of mercury, either in the shape of calomel and opium, or the mercury mixture recommended by him; he also gives cod-liver oil. In the paper describing this treatment an attempt is made to explain the great success of mercury in this complaint, by supposing there may have been a syphilitic taint, a point on which I have already spoken. Dr. Anthony Todd Thompson, who used to be very successful in the treatment of lupus, relied upon iodine, arsenic, and biniodide of mercury, with the occasional use of cod-liver oil and quinine. When he began the treatment, if there was anæmia, he gave the patient cod-liver oil for ten or fourteen days, with iodide of iron; he then ordered an alterative treatment with biniodide of arsenic, and when this could not be borne he gave the liquor potassæ arsenitis. He found conium very useful, and often touched the edges of the ulcers with nitric acid or a solution of nitrate of silver, two or three drachms to the ounce. If pale, unhealthy, fungous granulations shot up, he employed ointment of the iodide of sulphur, or a very weak ointment of the biniodide of arsenic or of either of the iodides of mercury. Four cases of the eating form of lupus are recorded in his work‡ in which the above treatment was adopted with perfect success. Two of these were indeed cured very quickly, one in twenty-eight, the other in thirty-four days; and though only one is reported cured at the end of half a year, yet, as the mean time is only eighty days in each case, the treatment must be regarded as unusually successful; indeed I do not understand lupus being even affected by internal means in four weeks.

These cases afford as strong evidence as I could wish to bring forward of the difficulty there is in getting at exact facts in such matters. Dr. Thompson's practice would naturally afford many instances of lupus; he was a successful practitioner, and an earnest, truthful man; not less so his editor Dr. Parkes; yet all we have to guide us is a brief analysis of four cases, none of them of any great

\* *Lancet*, 1859, vol. ii. p. 186.

† *Medical Times and Gazette*, 1858, vol. ii. p. 237.

‡ *Monthly Journal*, February, 1849. Also Braithwaite's *Retrospect*, vol. xxi. p. 189.

severity or calculated to give any idea of the usual proportion of cures to failures, the only statistical results worth knowing. *Till we have evidence of this kind, men will always be able to draw from our written records almost any meaning they like,* and gloom, hope, or despair will predominate according to the convictions of the reader rather than the facts of the case.

Dr. Copland enumerates\* the oil of Dippel, arsenic, mercury, and iodine, as if they were the remedies to be preferred, and quotes the testimony of Byron, Graves, Carmichael, and others in favour of Donovan's solution, even in cases which had withstood iodine, arsenic, and mercury, when separately or otherwise employed than in the form of an iodide of arsenic and mercury. I believe, however, that some of our most experienced practitioners are agreed that Donovan's solution is not in any way to be relied on; in my hands it quite failed; besides, it contains fixed proportions of the salts of which it is composed, and lastly, Dr. Frazer says that it keeps indifferently and is difficult to make.

The late Mr. Weeden Cooke cured a case † with lemon-juice internally, using at the same time a lotion of the bichloride of mercury, a grain to an ounce of water, and zinc ointment. The ulceration had destroyed the columna nasi and threatened the alæ, it extended up to the inner canthus of both eyes; yet it was effectually checked by the use of an ounce and a half of lemon-juice daily. Mr. Cooke subsequently informed me that the patient remained cured, and that he attributed much of the improvement to the lemon-juice. Since then I have used this remedy in several cases, just as Mr. Cooke prescribed it, getting the lemons fresh every day from Covent Garden, but I regret to say with very little avail; certainly I never was able to cure a case with it. Barium seems to be useful in the creeping form; Bateman saw the muriate very materially amend the complaint, and Dr. Frazer mentions that this salt, given in doses of one-sixteenth of a grain three times a day, produced good results. He kindly sent me the particulars of a case in which the use of it checked the spreading in a bad case of lupus of the knee which threatened to open the joint. The external application used in this case was a strong solution of nitrate of copper. He also thinks a weak coat of carbolic acid to cover the

\* *Dictionary of Practical Medicine*, vol. ii. p. 792.

† *Lancet*, 1859, vol. ii. p. 662.

surface of the ulcer is useful. Simon, of Hamburg, relates\* a bad case which was cured by mercurial inunction.

In the erythematous form we are recommended to paint the part night and morning with liquor plumbi; strong iodide of lead ointment, two parts of the salt to one of lard, has also been favourably spoken of. In the *Boston Medical and Surgical Review* † it was stated that this form of lupus always yields to the application of iod-glycerin in a concentrated form. ‡ The use of iodide of ammonium has also been suggested. The dose is two to three grains twice or thrice a day; for external use a drachm is dissolved in an ounce of glycerine, the solution being brushed over the part night and morning. Another remedy said to be very deserving of notice is the phosphate of lime; it may be given in the form of the syrup of the superphosphate, or it may be obtained by burning bones, such as the ribs of mutton, and then rubbing them down in a mortar; half a drachm or more may be given two or three times a day. §

Mr. Hunt says that the practice of using caustics in lupus is not only barbarous but useless, || and M. Rayer distinctly says that whatever caustic may be used it must always be repeated, often twenty or thirty times. Dr. Parkes, a most able and careful observer, entertains ¶ a very indifferent opinion of their value. It is true that views utterly opposed to these have been held by very good surgeons. Mr. Liston, for instance, thought that local treatment was alone to be depended on, and used the chloride of zinc unsparingly. Mr. Gay, too, \*\* has seen the best results from the use of the pernitrate of mercury. Professor Bennett seems to entertain a similar view. M. Cazenave thinks there is nothing like the biniodide of mercury suspended in oil, but he admits that its action is very painful. Professor Hardy also clings to the biniodide. Dr. Hillier eulogizes the iodide of starch recommended by Mr. Marshall; he says its use is

\* Ricord's *Lehre von der Syphilis*, zweiter Theil, S. 62.

† July 30, 1863.

‡ The formula for this is:—

R. Potass. iodidi,  
Iodinii, aa ʒj.  
Glycerinæ fl. ʒj. ℥

§ *Treatment of Diseases of the Skin*. By Dr. W. Frazer.

|| *A Guide to the Treatment of Diseases of the Skin*. 1857.

¶ *A Practical Treatise on Diseases affecting the Skin*. By the late A. S. Thomson. 1850.

\*\* *British Medical Journal*, 1860, Jan. 18.

almost unaccompanied by pain. Dr. Frazer says that whatever medicine be given, local treatment is still of primary importance. Dr. Purton considers chromic acid, gr. 100 to ℥j. of water, well adapted to lupus, as it penetrates deeply, does not spread, occasions little pain, and brings on only slight reaction. Mr. Lynn, of Westminster Hospital, told me that he had seen the acetate of copper used in ointment with great success. Dr. Hinds of Birmingham, in a communication he was good enough to favour me with, speaks highly of the liquor plumbi nearly undiluted: he insists on the necessity for removing all the crusts and discharge before using it.

Dr. Danzel of Hamburg looks\* on solution of hydrochloride of gold as more powerful and less painful than other remedies: still it is clear, from what he says, that its operation is most severe. He uses a solution of half a scruple to a scruple in a drachm of distilled water, and works it deep into the bed of the ulcer by means of a fish-bone or glass style. Hebra relies † on the solid nitrate of silver, freely applied, and iodized glycerine, the latter being principally employed in the erythematous form. Cod-liver oil is almost his sole internal remedy. Dr. Moriz Kohn recommends emplastrum hydrargyri in erythematous lupus; a piece of lint is spread with it and applied every twenty-four hours. Dr. McCall Anderson finds the acetate of soda, recommended by Drs. Weisse and Satterlee, useful in *L. erodens*, as also in strumous diseases; but he uses it twenty grains to an ounce, and they only advise eight grains. The solution is well sponged on the part. Professor Thiry cures lupus vorax in a month by cauterizing every ten days with acid nitrate of mercury, then rubbing in over the swollen parts mercurial ointment double the usual strength, and covering the whole with a bread poultice. He also gives calomel in grain and half-grain doses freely, following it up with citrate of magnesia.

B. SCROFULODER'MA (*a, atos, neut.*), from *scrofula* (Cels., this again being derived from *scrofa*, an old sow, there being from the earliest times a notion that pigs were subject to scrofula), and *céppa*, a skin, hide.

*Definition.*—Superficial ulceration of the skin occurring in scrofulous subjects. May be complicated with glandular swellings (especially

\* *Dublin Medical Press*, March 21, 1864.

† *Wiener Spital Zeitung*, 1860, No. 6.

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and thus do good for a time ; but, so far as I can judge, they do not cure the disease, for the simple reason that they do not possess any property necessary for effecting such a purpose. Moreover, their control over even such symptoms is more limited here than might be supposed ; quinine and cinchona are very apt to disturb the digestion, produce headache, nausea, and intolerable dislike for them. Again, steel, which is so useful in some forms of common anæmia, seems to have little if any power of increasing the proportion of blood-globules in the scrofulous. Over and over again I have, after a long course of it, seen either no change at all in the anæmia, or a very slight and transitory one ; certainly nothing that I should think atoned for inflicting so much discipline on the child and so much expense on the parents. Strengthening diet in my hands never yielded any result corresponding to the impression the term naturally awakens in the mind ; this was also the case with cod-liver oil *accompanied by tonics*. At one time I gave Lugol's method of employing iodine a very fair trial, but nothing save disappointment came of it.

As scrofulo-derma tends almost certainly to get well of itself sooner or later, it is easy to understand how it happens that it also gets well under treatment of every kind. But if this be the real explanation of the disparity between the results which I have seen and those noticed by others, then a stronger proof in its way of the necessity for reforming our system of observation could hardly have been found ; seeing that *the progress of a disease under the influence of remedies really capable of curing, or even affecting it, is a widely different process from such hit-or-miss work as an occasional coincidence of events*.

The only remedies from which I have ever seen the slightest benefit in this disease are purgatives, and from the use of these I have often witnessed the best results—not that I mean to extol them as a means of cure, but because the judicious employment of them rarely fails to do some good, and in a great many instances brings about a rapid and permanent closing of the ulcerations, with an unmistakable improvement of the health. Several surgeons, who have noticed these facts at St. John's Hospital, have expressed their wonder at the rapidity with which amelioration followed the use of these remedies.

What are the best purgatives I am not prepared to say. The subject requires, to my thinking, far too full and prolonged an

investigation to admit of its being decided out of hand by any one person. I believe that nothing answers better than rhubarb, or jalap, and mercury at night, and a dose of black draught in the morning. The worst of these medicines is that they induce so much repugnance as to make their continuance, especially with children, a very difficult matter. Consequently we have often to take refuge in more tasteless but, perhaps, less efficacious remedies, such as simple grey powder or calomel, followed by effervescent citrate of magnesia, and so on. Along with these the acid solution of iron (p. 37) may be occasionally given once or twice a day during this course of treatment, but not in any way as a substitute for these remedies, unless other reasons should absolutely compel their discontinuance. The purgatives should be given quite twice or thrice a week, and, unless any soreness of the gums set in, should be persevered in steadily. While purgatives are being taken, and especially when the patient is underfed, De Jongh's cod-liver oil may be given; but the reader must not expect even from this valuable preparation the same benefit that might ensue in some other diseases.

The one remedy excepted from the list of those which I have tried is injection under the skin, strongly recommended by Dr. Purdon. I regret to say that I have not as yet been able, after many trials, to induce a single patient to submit to it. Dr. Purdon injects swellings threatening to ulcerate with pepsine or tincture of iodine, four to eight minims, using an ordinary hypo-dermic syringe.

The most valuable topical application that I have seen tried in this disease is the acid nitrate of mercury, applied so as to give the least possible pain. With scarcely an exception, all the ointments, lotions, dressings (such as oiled silk, spongio-piline, &c.) which I have ever used or seen used, are, according to my judgment, worse than useless; inasmuch as, while they do no good, they cause expense, trouble, and filth. The diet cannot be too plain. Plenty of bread made with Chapman's wheat flour, and pure milk, a very moderate amount of light meat not more than once a day, fat ham or bacon daily, well-boiled vegetables, red wine, and a fair amount of fruit, will, unless I have deceived myself, *do all that diet can do*. Such patients should be as much in the open air as possible, without being exposed to more fatigue than necessary. For those who must toil to live, outdoor employment should be selected, however delicate the patient may be. As to bathing, a hot bath once or twice a week for four or five minutes will do all that the most elaborate system

can effect. Bathing in the sea will do good, perhaps, in one case out of ten; iodine baths, both local and general, did not seem to me of any service in the two or three cases where I saw them tried. For general washing only very hot water should be employed. Mineral baths and waters of every variety to which credulity has yet opened its ears, are here, as in only too many other diseases, of no more use than charms and spells. Change of air is occasionally beneficial, though much less so than might be imagined, and seems clearly due to the change, not to the superior quality of the air to which the patient removes. I have seen scrofulo-derma in quite as severe and obstinate a form among the natives of our mountain districts, as, for instance, in many parts of Cumberland, and our sea-coasts, as in the crowded and foetid alleys of London; and I have been informed that it exists to a fearful extent in Guernsey, which is swept by sea air the whole year through; the fact, I suppose, being that where the laws of health, sense, and consanguinity are violated, there we shall find the disease.

C. LEPROSY (*Elephantiasis Græcorum*), *Elephantiasis* (is, fem.),  
ἐλεφαντίασις, from ἐλέφας, an elephant.

*Definition.*—A slow eruption, often preceded by distinct attacks of pyrexia, of large, red tubercles, accompanied by permanent discoloration, also total loss of sensibility in certain parts of the skin, falling of the eyebrows, thickening of the nostrils and ears, hoarseness, wasting of the muscular tissue, and peculiar destruction of certain bones of the extremities; occasionally impaired sense of smell and taste, loss of power of the retina, intolerance of sound and light.

Dr. Newton describes,\* among the characteristic symptoms, pain between the ankles and knees, universal change in the texture of the skin, which becomes thick, harsh, dry, and horny. He totally doubts the fact of interstitial absorption of bone taking place, having in every case detected a cicatrix, through which the carious bone had escaped. Latent pain, elicited only by pressure, in the nose, ears, larynx, and costal cartilages, tendons of wrists and legs, or some of the thoracic or abdominal viscera, is peculiarly characteristic of leprosy.

\* *Anæsthetic Leprosy, with especial reference to its Diagnosis and Treatment in certain Stages.*

*Divisions.*—1. L. anæsthetica, principally marked by gradually increasing, and ultimately total loss of sensibility in the part affected. 2. L. tuberculosa, in which the tendency to form tubercles predominates.

The report on this fearful disease issued by the College of Physicians contains, with the appendix and extracts, pretty nearly all that is known on the subject; and I therefore proceed to give a careful (though brief) digest of this work, which, as regards the practical value of its contents, is an honour to the men who compiled it.

And yet, I suppose this report, bearing so many famous signatures, and issuing from the press of Her Majesty's printers, is the worst-written book in existence. Irrespective of many confused expressions it contains quite two hundred unpardonably bad errors. A singular verb is constantly made to agree with a plural nominative, and, possibly with a view to strict impartiality, a singular nominative is over and over again yoked to a verb in the plural. The verb is sometimes made to agree with the apposition of the nominative instead of with the nominative itself, and is now and then entirely omitted from a sentence, its place being supplied by a present participle. Sometimes an incomplete sentence is made the nominative to the verb; sometimes part of a sentence is clipped off as an incumbrance. Occasionally an adjective belonging to the amputated or forgotten member of a sentence is, by an unnatural operation, made to adhere to the stump. A case is repeatedly spoken of as if it were a human being; definite articles and apostrophes are every now and then omitted without any reason, and the generally admitted dependence of the subjunctive mood upon certain conjunctions is entirely ignored by some of the writers, who possibly esteem it an old-fashioned prejudice.

I do not know who is responsible for such errors as *goiter*, *sclærotic*, *livelihood*, *dysentry*, *effections*, *linament*, *iodide of potassa*, *albinism*, *dependant*, *bleached*, *asseous*, *calaplasms*, *tenably painful*, a *papulæ*, *squam-os-a*, *flexions* for *flexors*, *had* for *add*, *cutaneous* for *simultaneous*, "there incurability," "the Dr. Storell," "being being;" or for passing over such mistakes as classing *strophulus* among the *pustular* and *vesicular affections*, describing a man as the *son of his father*, a town as a *stone wall structure* divided into six rooms, and a disease as *extending outwardly from the small toes*; or for retaining such expressions as *too much of fish*, *healthy offsprings*, *a refractory cells of wood*, &c.; but I do know that such faults are

utterly inexcusable, and that had they appeared in a memoir issuing from a special hospital, we should have heard plenty of abuse of them.

It seems now established beyond challenge that leprosy is always one and the same disease, and that there are two and only two divisions or varieties—the tubercular or superficial, and the anæsthetic or deeper seated, *lepra mutilans*. There may be any grade of severity of either; the morbid appearances may in one person be restricted to a very small surface, and in another invade the whole frame. They may exist separately, or both may assail the same patient. In one case one set of symptoms may take precedence in point of time or severity; in another the order may be reversed; but amidst all complications of this kind the absolute identity of the two forms can be clearly seen. All varieties beyond these two, even comprising the eighteen described by the intelligent native doctor of Jhallawar, spoken of in the report, are either unnecessary subdivisions, or they are diseases which have been confounded with true leprosy, such as *lepra vulgaris*, *lepra nigricans*, syphilis, to which indeed it bears at times a very strong resemblance, struma, boucnemia, Aleppo boil, eczema, and impetigo, one or more of which may be confounded with it. It is not an offspring of yaws, syphilis, or struma, though possibly in some cases the symptoms of leprosy are aggravated by the presence of one of these diseases. The tubercular form of leprosy seems the most common, except in East India, where the anæsthetic variety is thought to be more prevalent; but the relative proportions of the two diseases are differently given by different persons, one gentleman computing the number of anæsthetic cases at one-fourth of the whole, while another merely states that the tubercular variety is the more frequent.

Dr. Carter, who is an authority, speaks in the report\* very briefly of a disease called the white leprosy, which he says is probably a variety of the leuke of the Greeks. I presume, therefore, that it is distinct from true leprosy as well as from *lepra vulgaris*. Possibly the scaly brightness of the skin spoken of in some of the answers may refer to one of these two affections; which it may be I am unable to determine. Dr. Bell says † that white leprosy strongly resembles, not that it is identical with, *lepra vulgaris*. It is very much like the affection described under the name of vitiligo, and yet

\* Page xvi.

† *Ibid.*

bears a strong resemblance to lepra. It is known as "barras," and, as described by Mr. Bose, appears to be identical with the berat lebena of the Arabs; sensibility is not affected in it, neither is it in the dusky lepra (berat cecha of the Arabs). Both these affections may co-exist with either form of leprosy. The general opinion, however, is that in berat cecha the centre of the patch at any rate loses its sensibility, and that in the other form, which is a variety of leuke, the whole patch becomes insensible.

*Nature of Leprosy.*—As to whether leprosy is hereditary or not we find every shade of opinion. Some writers maintain that it is decidedly so. Dr. Day, who seems to have taken great pains with his cases, says in the report, that in twenty-seven cases out of forty-six there was no evidence of hereditary transmission. Dr. Porteous found none in twenty-nine cases out of thirty-one. Another writer sets down the per-centage of hereditary cases at only fourteen; the answer from Loodiana is that out of nineteen cases not one appeared to be hereditary, while Furreedpoor is represented by a third form of conclusion, the numbers being pretty evenly balanced. Out of two hundred and fifty-five patients examined in the Batavia Hospital, Surinam, in 1857, only twenty-four were of leprous parentage. Dr. Davidson, who evidently believed firmly in the hereditary nature of the disease, is yet driven to admit\* that in sixteen cases he could not discover any traces of such a cause. If, however, the question be made to depend on the number of votes, it must be decided in favour of the view that it is hereditary, an opinion to which the majority will incline when the point can be raised at all. It ever has been, and probably ever will be thus. Owing to our defective powers of reasoning and observation, conclusions are adopted rather because they tally with deep-rooted convictions than because they are forced on the mind by a strictly critical examination of the facts of the case. It must be obvious to any one possessed of the power of observing at all, that it suffices to say a disease is hereditary to convince any number of hearers that such is certainly the fact. No evidence is required beyond the statement of the speaker that he has observed it to be so, and is satisfied that the disease is of this nature. In fact, that disease is often hereditary seems, if not an innate idea, one of the forms of thought into which the mind *will* run.

\* *An Account of Tubercular Leprosy in the Island of Madagascar, Edinburgh Medical Journal, 1864, p. 39.*

It is scarcely very reassuring for medicine when we find different observers, with almost the same facts before their eyes, arriving at such different opinions as are contained in this report. But so it is, and probably ever will be. Had the number of answers been multiplied ten or a hundredfold, the proportion of believers in heredity and contagion to that of unbelievers would have remained unaffected; a fact possibly, nay probably, due to the operation of some great unknown law, which regulates the distribution into groups of different forms of physical and, as a necessary result, brain construction. That some law of this kind is in operation we have every reason to believe. If we were to take a hundred or a hundred thousand men, we should find in each a relative proportion who held particular opinions on all matters—religion, politics, medicine, &c., just as surely as we should find a certain number prone to eczema, gout, and consumption, or any other disease.

Leprosy is probably hereditary in so far that a leprous child is sometimes born of parents similarly affected, and that one or other of those parents (themselves perhaps healthy) is again descended from a leper. Such evidence there undoubtedly is, and in the nature of things ever must be, and such proofs will always be triumphantly adduced irrespective of any amount of negative evidence. The facts which establish a theory or strike the imagination are caught at and accepted; somehow they always come to the front; while those which would make shipwreck of the hypothesis are apt, with all possible good faith on the part of the reasoner, to rest in obscurity. But then this is just what happens in ordinary life; a fortune made by a bold stroke fascinates the imagination; the thousand victims of unfortunate speculation sink unheeded. There were votive tablets enough hung up in the temple of Poseidon in memory of those who had been saved from shipwreck, but there was not one to tell of the myriads that had perished.

There is a certain amount of evidence that leprosy is contagious. The number of those, however, who believe in its contagious power is small compared to those who deny it. The report states\* that, out of sixty-six answers, only nine speak of it as contagious, while forty-five represent it as non-contagious, and twelve are silent on the subject. The mode in which it is supposed contagion may be conveyed is a moot point. Some authorities look upon inoculation as

\* P. vii.

an indispensable step. Mr. Macnamara, who published a very able report on leprosy in the *Indian Medical Gazette* (1866), considers it necessary "that the discharge from leprosy sores should enter the blood of the healthy person," a mode of propagating the disease not at all likely to happen among Europeans. The once prevalent belief that leprosy matured and spread through Europe by the medium of contagion derived from the returned crusaders and pilgrims is entirely negatived by facts. Leprosy was known in Ireland as early as the beginning of the sixth century, if not much earlier; \* while in Great Britain a law existed as far back as the tenth century, by virtue of which a woman could obtain a separation from her husband if he were found to be afflicted with this disease.

Yet the arguments of the contagionists have wrought conviction among some observers here. They consider it proved that, though people may with impunity live in the same house with a leper, yet that the discharge has in some cases conveyed the disease. In other cases leprosy appears to have resulted from connexion,† and Dr. Pollard, who looks upon leprosy as contagious in every stage and form, mentions the case of a family who permitted their children to play with a leprosy negro boy, in consequence of which they one and all became infected, and the majority of them fell victims to their fatal indiscretion. A rather strange statement, and certainly in conflict with all other testimony. Were leprosy so direly contagious as this, it would be easy to accumulate irrefragable proofs in support of the doctrine, whereas the evidence proving it to be so is very doubtful, while it is as certain as anything can be that people remain for years exposed to contagion in every form without being affected. Dr. Drogat Landré goes ‡ quite as far as Dr. Pollard; he maintains that the disease is propagated exclusively by contagion.

Leprosy is said to be increasing in the Sandwich Islands, the Windward Islands, the "out-islands" of the Bahamas, Guiana, Jamaica, Demerara, Mitylene, Ceylon, Singapore, Penang, Molucca, Mauritius, and the Bombay Presidency; to be on the decrease in Sweden, Ireland, Italy, Trinidad (some writers, however, think it is

\* "A monastery appears to have been erected here (Swords) as early as the year 512 by the famous saint Columbkil, who appointed St. Finian Lobhair, or the Leper, as its abbot."—*Ireland*. By Mr. and Mrs. S. C. Hall, vol. ii. p. 346.

† *Report*, pp. xlv. and xlv.

‡ *De la Contagion, seule Cause de la Propagation de la Lepra*. Paris, 1869.



stationary here), and Smyrna; and stationary in Norway, New Brunswick, Barbadoes, Tobago, Scio, and the Madras Presidency.

The fading away of this strange malady out of our land, and, indeed, out of great part of central and western Europe, is one of the most mysterious events in the history of medicine. A mortal, hopeless sickness, such a source of terror that bulls were issued and an order of knighthood was founded to stay its ravages,\* which made the face like that of a satyr, and led men to think that the blood of those afflicted with it must be as sluggish and full of corruption as some lethal muddy ditch; which invaded all parts of the frame, and so transformed its victims that men recoiled in horror from them, and gave them up like maniacs to the filth, chains, and horrors of leper-houses, or drove them away like wild beasts to dwell in tombs or caverns, and to lie at the gateways or by the roadsides; the scourge of the most powerful and civilized nations, which on one side projected its fearful and lurid shadow from Syria to the Atlantic and North Sea, and on the other stretched lowering over Asia to the banks of the Ganges and Indus; which raged with equal fury among the sandy plains of Asia Minor or the mud-covered fields of Egypt, amid the smiling fertility of Sicily, and on the desolate coasts of Iceland; has, over a considerable part of our continent, collapsed like the geni when wiled by the fisherman to re-enter the casket, and has become a wonder and a show in the lands where once kings and statesmen legislated for its myriads of victims. Now and then a fellow countryman, who has contracted the disease abroad, comes back to die of it at home, or a colonist sends his child attacked by it to see what english skill can do for it; and occasionally a person who has never been out of England may be seen suffering under either variety, but to a limited extent, and in quite a local form. Thus the anæsthetic kind has been met with in this state in several instances, and even the tubercular form is not unknown. A case is mentioned in Guy's Hospital Reports.† The patient had lived for twenty-four years in Ireland, then came to England, and had never been abroad when attacked by the disease. The symptoms were, however, very slight compared with those generally seen in its favourite haunts. In the third volume of the *Journal of Cutaneous*

\* See a most interesting paper by the Rev. J. F. S. Gordon, *Journal of Cutaneous Medicine*, vol. iv. p. 207.

† Third Series, vol. v. p. 151.

*Medicine*, I reported three cases of *L. mutilans* seen in Germany by Dr. Steudner, of Halle. And traces like these are now pretty well all that we see of the disease in lands once swarming with leper-houses !

*Causes.*—It is, perhaps, rather a waste of time to speculate on the reasons why leprosy has ceased to scourge western Europe, and the real causes of its occurrence at all. Still the accumulation of facts and the suggesting of paths by which investigation might be pursued are always legitimate objects of research, however hopeless the goal may seem. Possibly, then, climate may have had something to do with this great fact ; changes in the electricity, habits, and food may also have had their share of influence. There seems historical proof enough that climate has altered materially over a great part of Europe, owing to the draining of great bogs and small lakes, the felling of forests, and in some places the upheaval of the land ; all over England the rainfall seems decreasing, perhaps owing to the decrease in the evaporating surface. For quite a century the winters here have on an average been getting colder and the summers hotter. A hundred years ago men chronicled a heat of 78° or 80° in the shade as something wonderful ; in 1868 a temperature of 94°, 96°, and 98° in the shade was registered. Prior to the beginning of this century a fall below zero was almost unknown. Within the last twelve years the thermometer sank in one winter to -6°, in another to -10°. Meanwhile the country gets, on the whole, drier and drier. Streams, ponds, and meres disappear to be seen no more ; every river in the kingdom is stationary or shallowing. Droughts, which a quarter of a century ago only occurred very rarely, are now rather the rule than the exception. During the spring of 1870 the rainfall was more than three hundred tons per acre below the average. The want of storage for water has of late years been felt several times in England ; to the best of my knowledge such a want was quite unknown in former years.\* Now, if my information be correct, it is essentially within the time that these changes have been most marked, and progressed most rapidly, that leprosy has finally disappeared. My friend, Dr. Cattell, assures me that in his youth

\* The difference effected by drainage in many parts of England, even within the last three quarters of a century, is, I believe, greater than most men think ; in fact, I doubt if those not familiar with the condition of the country before that time realize what it was. For instance, Mr. Smiles tells us that so late as 1813, the only way of getting along some of the roads in the county of Northampton during rainy weather was by swimming !—*Lives of the Engineers*, vol. i. p. 232.

patients afflicted with this disease used to come to Willoughby Spa to drink the waters of that place. The state of the magnetism, too, and electricity, also in England, has in all probability undergone a considerable change within the time I speak of.\* Clothing has altered very materially; our ancestors wrapped far more warmly than we do, either because they took less exercise, or to counteract the moisture of the air, as is now done in Ireland, where they wear woollen when we wear cotton. Moreover, our fathers eat much less fresh meat than we do, butcher's meat being less easily procured during winter. The introduction of spirituous drinks may have had something to do with the matter. According to Mr. Tovey,† the Jews of Morocco are thought to preserve themselves from elephantiasis by the use of brandy distilled from raisins, pears, figs, and dates.

The testimony of the report is not, however, calculated to make us place much reliance on most of these causes. For instance, diet is constantly spoken of by some writers as a factor, but the evidence is conflicting in the extreme. One gentleman thinks that salt fish, pork, and bad oil promote the development of leprosy. Yet pork is not likely to be a cause of the disease among the Jews and Behemmenas, both of whom abhor it and are subject to the malady.‡ Bad oil was scarcely likely to have been a cause of the disease in Scotland and England. Again, the Chinese in Victoria, who suffer greatly from leprosy, live principally on beef, mutton, and rice. The Chinese prisoners in this colony were at one time allowed for diet maize, bread, fish, meat, potatoes, sugar, and salt; but the disease increased so rapidly under this kind of feeding, that it was thought better to put them on short commons, under the influence of which, it is said, the malady came to a halt. The Somalee tribes, among whom leprosy is very prevalent, never eat fish under any circumstances; and the inhabitants of Furreedpoor, who eat more fish than their neighbours, are not more subject to the complaint. The disease is rare in Burmah compared with the western coast of India, yet fish forms as large an item of diet in the former as in the latter place. Again, the exclusive use of meat for diet is looked on as an aggravating cause at Nevis,§ while Dr. Steventon, of Moulserat,

\* *The Stream of Life on our Globe*, p. 399.

† *Saturday Review*, Aug. 27, 1864.

‡ *Edinburgh Medical Journal*, 1864, p. 40.

§ *Report*, p. 18.

says that the leprous patients of that district confine themselves entirely to a vegetable diet; and Dr. Gardiner tells us \* that leprosy occurs at Santa Lucia, though the diet of the people is mostly vegetable. Finally, the evidence respecting the influence of bad grain, unripe fruits, bad cooking, and the use of spirituous liquors, mentioned as possible causes of leprosy, is not a whit more convincing.

The authors of the report seem clearly of opinion† that the disuse of salted meat and unsound food, and the change from the filthy habits and scarcity of fresh vegetables, which prevailed in England till within quite a recent period, have contributed to the extinction of leprosy here. In addition to these causes, the wearing of linen next the skin, and the giving up of fish diet at Lent, are mentioned. The influence of any or all of these causes may be doubted. Unsound food is only too much used now among the poor. Our police reports tell us constantly of the seizure of tons of meat and fish in a state not fit for human beings to touch. To the disgrace of our age, vast numbers of poor toiling creatures live on diet little better than garbage, while gluttonous, idle servants are permitted to consume each two or three pounds of meat daily. I am afraid, too, that linen is not generally worn next the skin, especially by the working classes and seafaring men. I suspect also that till quite lately our sailors used to eat throughout a great part of their lives quite as much salt meat as ever did their forefathers in the days of the Henries and Edwards. Many of the stricter Catholics in this country still eat fish all through Lent, yet leprosy does not prevail among them. In short, I am rather puzzled to make out what can be the use of bringing forward such evidence, unless it be with the view of warning others against treading in the same path, and being refuted in their turn.

Want of cleanliness is frequently brought forward in the report as a cause of leprosy; but it might be justly urged against such a view, that dirt reigns as supreme in some of the districts which leprosy has quitted as in those which it still haunts, and that it would be difficult to find people filthier than some of the lowest classes in our large towns. Again, leprosy is said to be much more common in the south of India than in the north, though the natives of the latter are far less cleanly than the southern Indians; and the

\* *Report*, pp. 22 and 26.

† *Ibid.*, p. lxxiv.

people of Norway are not dirtier than very many of the poor and degraded of many parts of Europe, where the disease is never seen. Lastly, as a proof how much the views of different observers vary on such subjects, it may be mentioned that one writer thinks a most potent means of cleanliness, the hot bath, develops the complaint by weakening the system.

In some of the answers the unwholesome state of the huts in which the lepers live is adduced as a cause. They are described as ill-ventilated, wretched, dirty, and confined—badly supplied with air and light. But again, if such causes had much influence, leprosy would never have died out in Great Britain. Till quite lately, even the middle classes in towns lived in what we should consider a horrible state of dirt; and as to the present day, hundreds of our foetid courts will parallel anything to be found in the dwellings of the coloured races. Besides, there is evidence enough in the report\* that the disease attacks plenty of people living in clean, comfortable, airy houses, most of whom never entered a hovel in their lives. In some few places the well-to-do and poorer classes suffer equally. Mr. Shaw reports having seen leprosy in Europeans who could command every luxury, and Dr. Nicholson, Dr. Carrington, and Dr. Young give similar testimony. Of course the great majority of victims in this, as in almost every other disease, are found among the poor, miserable, vicious, and degraded; but alas! this is because they form, and, with few exceptions ever have formed, the mass of the community.

And when we come to the question of climate we get no nearer the goal. When leprosy settles in a district its baneful influence is only too apt to spread over every part: town and country, mountain and valley, green field and sea-coast alike feel the weight of the horrible scourge; and it might almost be compared to the great bat-lizard (*pterodactylus*), which, being able to fly, swim, or travel on the land, could always overtake its prey. Thus, while it is so common in marshy districts and ill-drained alluvial soils, by the sea-coast and large rivers, that attempts have been made to refer its origin to miasmata, we find it in the dry, sterile plains of northern Persia, though it is believed by the consul to be unknown in the dampest regions of the same kingdom. It is seen among the Hottentots in one of the finest climates in the world, among the mountaineers

\* Pages 30 and 35.

of Lebanon, and the inhabitants of some of the elevated parts of Hindostan. It occurs frequently at Conjaveram, a town standing about forty miles inland in a flat, dry, sandy soil, while it is rare in Tirhoot (Bengal), where the land is low and marshy, the vegetation luxuriant, and where malaria prevails. It is very prevalent at Banda, where the climate is extremely hot and dry. Spain is more infested with leprosy than most european countries, and in Portugal the chief seat of the disease within recent times has been the hilly district of Lofoes. And if it be more frequent in the vicinity of river-banks and deltas, it is to be remembered that such parts are usually more densely peopled than hilly regions and sterile plains.

To sum up then—unless the dying out of leprosy be due to those obscure geologic and climatic causes which have extinguished so many races of men and animals, I cannot offer even a conjecture as to what has brought it about.

*Age at which Leprosy appears.*—The general opinion seems to be that leprosy is rare in early life. Some of the answers represent it as almost unknown before the tenth year; other writers explain this by saying that the little patients are kept in seclusion, the disease having really been seen in children in arms, and even at the time of birth. Several instances have been recorded of its appearing in the fourth, fifth, and seventh years of life; but there is no resisting the evidence that it rarely occurs before puberty, from which time it may break out at any age, and it has been known to begin as early as the forty-fifth year of life.

*Greater Prevalence among Males.*—Leprosy is certainly more common among males than among females, and although the same explanation has been given as in the case of children of its greater rarity among women, it will not apply in many cases, and is overthrown by stronger opposing evidence in others. The opinion, however, that it attacks some races more than others, even when both are living in the same place, is better supported. Thus there seems every reason to believe that Europeans are less subject to its malignant power than the natives of the districts where it is seen and Jews; in Africa the Hottentots are said to be more liable to it than the negroes, and the negroes more so than the whites. In Mauritius it is said to be more frequent among the asiatic and african than in the european or caucasian races; in Egypt leprosy is chiefly found among the Jews, being rare among the Arabs; whereas in Damascus it is not known to have occurred among the Jews or

negroes, being confined to the lowest classes of the mountain peasantry.

*Pathology.*—There is not much to say on this head. Mr. Macnamara, in five post-mortem examinations, could not, either with the eye or the microscope, detect any lesion of the nerves, brain, or spinal cord; but Dr. Carter, though he observed no uniform morbid appearances in the brain or spinal marrow, found the nerves very frequently diseased, enlargement and diminished opacity at certain selected spots being the chief phenomena. The morbid changes seem to have chiefly affected the funiculi, the tubercles being separated and compressed by the intergrowth of a clear nucleated tissue which in the end destroyed them. Dr. Fiddes has seen the large nerves of the arm increased to the size of the little finger, and in cases of spontaneous cure of leprosy has noticed that this symptom disappears and that the sensibility is restored. Danielssen and Boeck say that this change is owing to infiltration of the cellular tissue of the sheaths surrounding the nerves, and of the nervous fibrillæ, with a viscous glutinous fluid similar to that which is deposited in the skin. According to them the skin is thickened, and on section exudes a viscous fluid. There are also tubercles, consisting of a delicate fibrous network, in the meshes of which are seen numerous adherent whitish granules. The sebaceous follicles are enlarged. With the enlargement of the tubercles the fibres and granules disappear, and oblong cells, larger than exudation corpuscles, are found. Each granule contains a grey nucleus, which almost fills it; this nucleus encloses seven or eight brownish granules. In a patient who died in University College Hospital, numerous granules and round and oval nuclei were found infiltrating the fibrous stroma of the skin.

Dr. Brunelli, who has given \* a very careful account of this disease as it is seen in Candia, found that the venous blood had a deeper hue than natural, but never saw it of an intense black. In every case it was more or less wanting in brightness, or was turbid as if agitated. In the more aggravated cases, and at an advanced stage, it had the appearance of lees of wine mixed with water. When allowed to flow on glass, a fine marbled stain formed in twenty to thirty seconds; under a low magnifying power this was seen to be composed of groups of globules, not in the form of pillars, but in

\* *Annali di Omodei*, Dec. 1866 and Jan. 1867.

clusters of different sizes, separated by spaces, containing isolated granules, more or less colourless. In fifteen per cent. of the cases the serum of the blood was red, in twelve it was milky, and in the rest greenish or yellowish. Brunelli could not trace any constant relation between the buffy cup of the clot and any particular form of leprosy. He does not attribute leprosy to a dyscrasia, but thinks that, besides excess of fibrine, there may be in the blood other morbid principles, each of which may have a special chemical influence on one or other of the different tissues or organs.

Dr. Scheida noticed that the blood was deficient in blood-corpuscles, and one gentleman in the report represents all the tissues as attacked, but principally those which make up the venous system. "In one case," he says, "where death resulted from pneumonia, the crural, femoral, and iliac veins exhibited knobby appearances, and, on being opened, the deposit of a caseous substance resembling tubercular matter." Destruction of the bone is said to be effected by interstitial absorption, but may take place through caries or necrosis.

*Prognosis.*—Unfavourable in the highest degree. There are, however, many cases of cure recorded, some spontaneous, others seemingly due to a happy selection of remedies. Frequently, too, the disease, having reached a certain stage, especially in the mutilating form, remains stationary for a long period; but these are exceptions, and in a vast majority of cases the rule is that the disease proceeds more or less swiftly to a fatal end, the patient often sinking under some slight attack of another malady, such as bronchitis or dysentery. Persons, however, suffering from leprosy may live many years, and even attain an advanced stage. Dr. Hyorth saw \* a leper between seventy and eighty years old whose general health was not much affected.

*Treatment.*—Mercury is generally denounced in this complaint as injurious. Arsenic seems in a few rare instances to have done good service. Dr. Bowerbank saw one case in which it seemed to have kept the disease in check. One answer speaks of decided benefit having ensued in every case where the patient was long enough under the influence of arsenic given internally, and of sulphur baths and frictions to the parts which had lost their sensibility. One writer at Bhutteawa recommends as useful, preparations of arsenic,

\* *Report*, p. 101.



and iodide of potassium with infusion of hemidismus indicus in ounce doses three times a day, or chaoul moogra pills, with chaoul moogra, or bipchee ointment for external applications. The answers in the report from Salonica make mention of two cases in which recovery is said to have taken place under the influence of iodide of potassium, accompanied by cauterization of the ulcers: they were both in the first stage. Two cases are recorded in which a perfect cure ensued under the use of arsenic, iodine and iodide of potassium. One gentleman speaks of a case where a cure was effected in *six weeks* with nitro-muriatic acid, sulphur ointment, sulphur vapour baths, and generous diet. Another tells us of the benefit derived from the administration of dilute nitric acid and chiretta, slightly stimulating applications to the skin, daily bathing, and attention generally to the health. Brunelli saw what he calls the hypertrophic form often materially checked, for a time at least, by antiphlogistic and lowering treatment, followed by the use of iodide of potassium and arsenious acid, entirely excluding wine, which proved injurious.

Daily ablution with cold water is said to have been of use in the treatment of the chinese leprous prisoners in Victoria. The tepid bath twice daily, and inunction with olive oil, thoroughly rubbed into the skin each time after the patient comes out of the bath, are said to be very serviceable.\* One gentleman, writing from Mqnghyr, reports having seen considerable relief from hygienic measures, well-regulated diet, and the use of arsenic, asclepias gigantea and chaoul moogra (or chaoul moojin). Indeed, there is a good deal of valuable evidence as to the influence which this drug exerts over leprosy. It is given in the form of pills, five grains each; poultices are also made from it. Dr. Newton, however, found it so nauseous that he did not insist on its being taken. The Lawsonia inermis, employed in the form of poultices, is also said to have proved useful. Counter-irritation over the spine, too, is stated to have acted beneficially.

Dr. Beauperthuy's treatment is said to have acted beneficially, and I, therefore, give an analysis of it, taken from the *Medical Times*.† It consists in ordering good diet and fresh, dry air, rather difficult things to get at in most cases of leprosy. Salt meat, salt fish and pork are prohibited. Bichloride of mercury, in doses of one-fifteenth of a grain, and quinine are given; the latter only where

\* *Edinburgh Medical Journal*, 1864, p. 42.

† 1870, vol. i. p. 550.

considered necessary. Frictions with cashew oil are also employed, and a strong solution of nitrate of silver and copper is painted over the tubercles. The patient is also rubbed all over with cocoa-nut oil, a bath of soap and water being employed each day previous to the friction. When the feet are much affected, baths of hot cocoa-nut oil are used.

What may be the real success of this treatment I am unable to say, as the author does not give us any positive results, and as I believe Dr. Beauperthuy is dead, I presume we shall never know with exactness how it succeeded in his hands. In mine quinine proved injurious, all the symptoms relapsing under its influence. Bichloride of mercury in any doses whatever was useless or injurious, as was iodide of potassium. I could never heal a single ulcer or remove a single papule with nitrate of silver, either solid or in solution, though I tried it long enough. Frictions with oil have been frequently tried by other observers, and I believe in every instance, where their effect was carefully watched, with only moderate success, acting simply as a palliative.

Dr. Newton's treatment consists in prescribing sound food, fresh air, muscular exercise, and mental occupation. He insists on a short walk every day. He finds a mixture of carbolic and nitric acids\* very useful. To this he adds a cholagogue laxative pill.† When the functions of the liver are much disturbed, five minims of dilute nitro-hydrochloric acid may be added to each dose of the mixture, or one or two grains of quinine may be given with it when the digestion requires improving. He also gives drachm doses two or three times a day of tincture of *lal chitra* (the rhizome of *plumbago rosea*). Externally he employs equal parts of glacial, acetic,

\* R. Acidi carbolicum m. iij.  
 — acetici dil. P. Brit. ℥ss.  
 Spiritus sacchari ℥iij.  
 Syrupi ℥ss.  
 Aquæ ℥iv. ad ℥vj. ℥

To be taken twice a day, directly after a meal.

† R. Resinæ podophylli gr. viijss.  
 Aloes,  
 Ipecacuanhæ,  
 Extracti tarax., aa. gr. xliv.  
 Olei cajeputi vel menth. pip. ℥ss.  
 Liquoris potassæ q. s. ℥ ft. pil. xxx.

I understand Dr. N. to say that he gives one every night.

and carbolic acids as a caustic ; if there be fetid suppuration, bromine and chloride of zinc. After the bath the skin is to be anointed with chaoul moogra, poppy or linseed oil, containing some antiseptic substance, as tar, kerosine, oil of turpentine, or tincture of iodine. For deep-seated pain a blister is useful. This treatment seems to have been very successful ; one case "improved wonderfully." Three patients out of twelve declared themselves well at the end of a month or six weeks ; in two, who were in a most shocking state, the ulcers had all healed, the complexion become fresher and clearer, the pains had ceased, the appetite had improved, and they had gained strength.

Some few years ago M. Baumés reported a case treated successfully, the principal remedies being three hundred baths in one year, diluent and sudorific drinks, and a nutritious unstimulating diet. Drs. Danielssen and Boeck say they have found the iodide of potassium in small doses produce some diminution of the tumours in the tubercular form, but the improvement did not last ; in the anæsthetic form this salt relieved the pain in the bones, as did the chlorate of potass. Taken all in all, these remedies were of service in some cases in the practice of these celebrated observers ; one patient, suffering under both the anæsthetic and tubercular forms, recovering so completely that in four months he was at work again, and another being freed from the tubercles by the same means, powerfully seconded by blistering and counter-irritation. The turkish bath seemed to be very useful in some cases.

Possibly emigration to the United States or Canada might check the spread of leprosy in a patient attacked by it, or at any rate render his condition more comfortable. Dr. Hohnboe, surgeon to the General Hospital at Bergen (Norway), who travelled through Illinois, Iowa, Minnesota, and Wisconsin, and who investigated the state of the disease among the norsk settlers there, came to the conclusion that leprosy when exported to America runs, as a rule, a longer and milder course than in Norway, and shows a stronger tendency to improvement and even recovery.

I now proceed to give the particulars of two cases which were under my care for some months. Both the patients were in St. John's Hospital at the same time, and both their histories were recorded and given to me by the younger of the two, a gentleman, who had been well brought up, but suddenly reduced to very narrow circumstances by the death of his father in India, where the seeds of

this disease were sown in the son ; while the other patient had contracted his malady in Trinidad. They were also both Irishmen, and it was difficult to refrain from moralizing on the strange chain of events which had brought together in a small London hospital, these two men, natives of the same land, and yet so long sojourners at what might be very justly called the extreme ends of the world.

Case 1.—Thomas C., aged 18, was admitted into St. John's Hospital, under the care of Mr. Milton, April 16, 1867, suffering under well-marked symptoms of leprosy. He is of anglo-irish parentage (his mother being of pure irish, his father of mixed english and irish descent), but was born in the Madras Presidency. He has one brother and one sister, neither of whom has shown any traces of the disease. When a child he was sent over to Ireland to be educated. Four years after leaving India, or in May, 1863, the disease first commenced in the shape of a pricking sensation in the right little finger, which was gradually followed by complete insensibility of the part, the insensibility slowly extending along the ulnar side to the wrist. It next attacked the ulnar side of the third finger, and then the same side of the second finger followed, the forefinger being the last affected, and then in a less degree. During the next two years the anæsthesia continued to spread steadily till, on the inside of the arm, it reached almost to the armpit ; on the radial side it extended, however, only as high as the elbow ; indeed on this side it spread altogether more irregularly and slowly. In November, 1865, he first of all noticed a thickening of the skin over the right eyebrow, with some redness ; by Christmas this had completely developed into the form it wears now—that of a tubercle. Another soon formed below the right eye, and by the summer of 1866 his face was pretty well covered with them. In the spring of 1866 several small hard patches, accompanied by tubercles, came out on the posterior and upper parts of both thighs ; they were at the beginning more prominent than they are now, and were from the first devoid of sensation. Anæsthesia now attacked the left leg, all the lower part of which became insensible ; subsequently to this the right leg was affected in the same way. At this time too the left arm likewise became slightly affected ; but for some time previous to his admission the disease seemed to be stationary there, whereas on the legs the stains and tubercles continued to develop themselves. About the time at which they first showed themselves wasting of the muscles of the right thumb began to appear.

His face is now (April, 1867) entirely covered with tubercles of a dusky colour, of every size, from almost imperceptible risings of the skin to the bigness of half a small walnut. They are for the most part smooth, only one here and there bearing a few small scales, and are quite painless. The hairs have not as yet fallen out of any part invaded by them. For some little time past he has suffered a good deal from pain in the right arm, and there seems to be an inflamed lymphatic gland near the elbow; a lymphatic vessel too shows itself in the form of a long reddish streak running in the middle of the arm from below to above the elbow; otherwise he has not suffered anything in the way of pain, and his health is not perceptibly affected. There are several tubercles on the under part of the chin and on the sides of the neck, but nothing of any consequence on the back of it. Nearly the whole of the right arm and hand is covered with brown stains of every shade, but on the left arm there are only some irregular patches of this kind, varying in size from that of a pea to that of a crown piece. In every part where there is a stain sensation is quite lost, and he has, he tells me, frequently amused himself by cutting one of these places with a knife, a performance which caused him no pain. The blood flowed as from a cut in other parts, but he thought it seemed blacker than natural. A specimen, however, which he procured for me in this way seemed quite normal. The stains on the legs have begun to spread very much, but the distribution of them varies considerably on the two limbs. The pulse is 96, soft and moderately full. I subjoin a photograph of him taken very shortly after this date.

The summer before the disease first appeared he suffered from what the medical gentleman who attended him called scarlatina, and in the summer of the following year he was again attacked by a similar affection, which this gentleman pronounced to be a return of the scarlet fever. I am, however, disposed to think it was in both cases an outbreak of that feverishness, general disorder, and erythema, which sometimes precede the appearance or exacerbation of leprosy.

Throughout the progress of the disorder he noticed that it was always worse in winter, at which season indeed its worst symptoms first of all made their appearance, and that the relapses and progress of the complaint invariably took place at this time of the year, whereas in summer it either remained stationary or improved a little.



PHOTOGRAPH OF YOUNGER LEPROSY PATIENT.

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It would be difficult to imagine anything more wretched than the condition of this young gentleman—objectively speaking at any rate. It is no exaggeration to say that he was an utter outcast. His nearest relatives, his mother and sister—the very persons who under other circumstances would have been the first to nurse him, shrank in dread from him ; they not merely feared to touch him, but were in constant dread lest he should touch them or anything belonging to them. The reader may therefore judge what the feelings of others must have been towards him. One surgeon turned quite ill after seeing these two patients, and several who had seen them once refused to do so a second time. One, therefore, ceases to wonder at finding that the leper has from time out of mind been an object of fear and abhorrence, especially among the ignorant and superstitious, and that he has ever been driven out from society, and caged up with his fellow lepers, as though he were some pestiferous and unclean thing upon which God had set the sign of His wrath. Yet this poor fellow himself scarcely seemed to realize his position in the least. He went out but little in the day-time, it is true, but in all other respects he hardly appeared to consider that his state was to be pitied, much less that he was stricken with a hopeless and horrible malady. Though, in answer to all his repeated inquiries, I felt that I could only reply vaguely, and that I never could hold out any hope of being able to do him any good, indeed, I did not consider that I was justified in doing so ; though one system of treatment after another failed to benefit him to any material extent, and the relentless malady continued to progress more or less slowly, he was full of hope up to the very last day that he continued under my care.

I tried a large number of remedies in this case—calomel, bichloride of mercury, grey powder, nitric acid, nitro-muriatic acid, strong decoction of sarsaparilla both hot and cold, quinine, steel, and various purgatives, the Zittman treatment, &c., but without doing any permanent good. Some of the remedies, as quinine for instance, though given in what I considered very moderate doses—one grain in solution two or three times daily—seemed to act injuriously from the very outset, and were therefore very soon given up ; others had a long trial. For a time pretty large doses of calomel, beginning with a grain and gradually increased up to three, and occasionally four grains, given at night, followed by the use of tolerably strong doses of black draught the succeeding morning so



as to produce a very free action of the bowels, seemed to arrest the progress of the fell malady both in this and in the succeeding case ; but having had no previous experience in the treatment, and having been able to find no clue in books to any consistent and feasible system of medication, I gave up this plan so soon as ever the mouth became even very slightly affected. The patients, however, soon felt themselves so much worse for the change that they of their own accord asked me to give them the purgatives again, and I therefore did so, but it was useless now to make the attempt. The medicines seemed to have lost all power of arresting, or even ameliorating, the disease, and I never again recovered the same control over it. The patient, however, took a more hopeful view of matters: he considered that the action of these remedies had been to restore the sensation to a considerable extent in the feet, especially in the outer side of the right foot.

With one short interval the patient remained in St. John's Hospital up to June, 1868. During this period there was, so far as I could see, but very little change, and that little was upon the whole always for the worse. Now and then the disease appeared to be stationary, especially under the influence of the purgatives, but this, as I have said, was of very short duration. The hue of the skin gradually became darker, the tubercles spread a little, a firm scale formed over one elbow, while a large thickish crust appeared occasionally on the outer side of the left nostril ; but with these exceptions there was not any material visible change, nor at the present time does there appear to be any. Except occasional attacks of pain in the right arm, the liver, and diaphragm, of which the patient complained a good deal, he did not appear to suffer much. He was energetic enough, occupying himself busily in writing and reading, and his mental faculties seemed in no way impaired.

At the expiration of four years this patient has again come occasionally under my care. He tells me that he has at intervals taken the purgatives, but never more than once a week, and that he has always found benefit from them ; indeed, he thinks he has greatly improved, the anæsthesia on some of the old surfaces having broken up into small patches, instead of being continuous, and the tubercles having, except one on the forehead, levelled down. The nose has, however, sunk in considerably, and the conjunctivæ are more opaque and pearly. He tried homœopathy for some time,

and then a course of carbolic acid and tonics, but thought he relapsed under both.

It is not in my power to record anything of interest connected with the pathology of the case. I saw nothing but what has been seen before and recorded several times. I made some examinations of the urine, and proceed to give the results, which, however, are not very complete, excessive occupation at the time having prevented me from devoting so much attention to the subject as I could have wished to do. I believe, however, they are substantially correct, and that the reader may fully rely upon them, crude as they are. I have entered them here in detail, so that any inaccuracies may be rectified. The method of analysis followed was that laid down in Dr. Golding Bird's work,\* and the portions examined, both in this and the succeeding case, were, when express mention to the contrary is not made, always parts of the whole bulk of this secretion passed during the twenty-four hours, the patients being strictly enjoined to make water before going to stool.

The urine, I may here say, had almost from the first a most disagreeable faint smell, and was very often of a pale, dirty-green hue. It was for the most part strongly acid, and the sp. gr. generally varied from 1·008 to 1·012.

Some rather hasty observations having shown a remarkable absence of urea, further search was made to see if this view was well founded, as also to discover whether there was any albumen in the urine.

A specimen of the *urina sanguinis* examined June 4th, 1867, showed no trace of albumen. Sp. grav. 1·012; the sp. grav. of another specimen passed June 7th was also 1·012.†

A specimen taken June 16th was intensely foetid, with a fish-like smell; sp. gr. 1·015. An ounce of this urine was evaporated to a fluid drachm, and the capsule containing this set out to cool. When cool the bath was rather more than half filled with cold water, to which three drachms of nitrate of potass and the same quantity of

\* *Urinary Deposits*. Fifth edition, 1857.

† Dr. Newton says, "The urine appears to be always normal. In no case was there any trace of albumen; the reaction was acid in all but one specimen, where it was neutral; the specific gravity alone seemed to be a little lower than the normal average. In every case it presented a healthy colour, was clear and free from sedimentary deposit."—*Anaesthetic Leprosy*.

hydro-chlorate of ammonia were added. This was briskly stirred, and the capsule being replaced over the bath, half a drachm of cold colourless nitric acid was added and the mixture briskly stirred with a glass rod. To my great surprise, this amount of urine only yielded *rather less than a quarter of a grain of nitrate of urea (1)*, and as the average quantity of urine passed by the patient in the twenty-four hours varied, without exception, from twenty-two to thirty ounces, he could scarcely be considered to expel at this time more than about three grains daily of urea.

A third observation was made on the urine passed first thing on rising, June 23rd. The urine was strongly acid. Sp. grav. 1.016. Two ounces treated in the same way gave less than gr. ss of nitrate of urea. Three days later, five ounces were treated in the same way, except that instead of the crystals of nitrate of urea being placed, as before, on thick blotting-paper, and a stream of ice-cold water poured gently over them, this was very gently allowed to cover them, and then the supernatant fluid very carefully removed with a syringe. The capsule was then replaced over the hot-water bath, and a gentle heat applied, which was attended with the formation of orange-coloured crystals. These, when collected and dried, weighed exactly four grains and three-quarters. Calculating this at the proportion of 48 parts of urea in 100 of the nitrate, which is pretty near the mark, we find that the quantity of urea in five ounces was equal to gr. 2.28.

On the 9th of November, 1867, after he had been some time under the influence of purgatives, and had begun to think he was better, an opinion in which I shared at the time, a specimen was again procured of the urine passed first thing on rising. It was entirely free from the dirty-green tinge, and did not smell so offensive. The colour was a fair yellow; sp. grav. 1.020, showing 46.60 grains of solid matter in the 1,000; strongly acid. An ounce of this urine was treated as on former occasions, by evaporation and addition of nitric acid, but the mass, as in every previous instance, did not become nearly solid as it would have done had the normal quantity of urea been present; on the contrary, the solid matter did not appear to form more than one-tenth of the whole. The solid matter was next placed upon a piece of thick white blotting-paper, and a very slender stream of extremely cold water was poured very gently over it. When very nearly dry it yielded nearly six grains of nitrate of urea, in the shape of pale orange-coloured laminæ. The proba-

bility then is that, as the amount of urine passed on the day this specimen was taken amounted to twenty-six ounces, not more than about seventy-five grains of urea were at this rate daily extruded from the system.

In order to test the presence of uric acid, an ounce of the urine, gently warmed, was poured into a glass containing thirty minims of hydrochloric acid, and set aside, after being covered with paper. At the end of twelve hours it was examined, and again at the end of twenty-four hours, but in neither case could anything like a pellicle be detected. A few very minute dark specks were all that could be made out. The urine having been briskly stirred with a glass rod, these specks of uric acid were collected and weighed. They formed a mass hardly bigger than a pin's head, and when placed in a very delicate balance did not at all affect a weight of the tenth part of a grain. Nitric acid and heat showed no albumen, and no white deposit was elicited by heating in a perfectly clean test-tube to boiling point. A thin layer of the urine was poured into a white saucer, and a few drops of nitric acid were allowed to fall into the centre of it, but no play of colours ensued nor was there any loss of transparency; only a very faint tinge of purple took the place of the natural hue. There was accordingly no reason to infer the presence of either bile or blood. Although with such a moderate specific gravity, the search for sugar or excess of nitrate of urea might seem, and probably was, quite superfluous, yet it was diligently made, but none of the tests proved the existence of either.

Dr. Bird recommends that in searching for creatine and creatinine an ounce of urine should be evaporated to a syrupy consistence. It appears to me that it would have been more clear had Dr. Bird stated the exact amount to which this quantity should be reduced. It is difficult for a student to understand how such directions should be carried out, or how urine free from sugar is to be rendered syrupy. I may, therefore, state that the quantity spoken of was evaporated to something less than a fluid drachm, and that after it had been set aside to cool, a piece of chloride of zinc the size of a pea was added to the decanted liquor first warmed in a watch-glass, when the whole became converted into a yellowish-brown, jelly-like mass, in which I could not discover any traces of the crystals of the triple compound of zinc and chlorine with creatine and creatinine. Examination with the microscope failed to show any crystallization.

There was not much deposit of mucus, and what there was seemed almost unaffected by nitric acid. A small quantity put into a test-tube, and agitated with an equal quantity of liquor potassæ, became slightly flocculent and cloudy. There was, therefore, no reason to assume the presence of exudation corpuscles. There were traces of oxalate of lime. An ounce yielded three grains and an eighth of earthy and alkaline salts.

Another specimen was taken for examination on December 10th, 1867. It was of a marly colour, or rather of the hue seen in the darker kind of clay of which ink- or ginger-beer bottles are made. The total quantity passed during the twenty-four hours was  $\text{ʒxxvii}$ . There was no great amount of mucus in it. Sp. grav. 1.026—distinctly acid.

An ounce was evaporated to about a drachm, and this, after being carefully chilled down, was mixed with cold colourless nitric acid, and replaced upon the bath containing the freezing mixture spoken of previously. Ice-cold water was then poured very gently over the crystals, and the supernatant fluid drawn very carefully off with a syphon. The mass was then carefully dried and placed in the balance, when it was found to weigh 23.40 grains, a result which again so much surprised me, that I repeated the observation, but with substantially the same result. An ounce treated exactly as in the previous observations for uric acid gave three-tenths of a grain. The reader will, therefore, observe that there was here also a remarkable change. An ounce was now evaporated, and the residue treated by combustion, yielding 4.9 grains. Triturated with water, and again calcined, this yielded six-tenths of a grain. No traces of albumen were found, but there was a considerable amount of urate of ammonia. There was no excess of bile. Liquor ammoniæ brought out the stellar crystals of phosphate of magnesia and ammonia, but microscopic examination only detected urate of ammonia. I may remark that the patient had been very freely purged in the interval between these two examinations, but that he had lived in the same way as before, being constantly in the hospital, and allowed the same quantity of meat. In respect to fluids, he voluntarily restricted himself to a very moderate amount.

If we now place these two observations in juxtaposition with a table of the normal constituents of urine as given by Becquerel, the reader will see what a very great disparity exists between both of them and the natural state :—

	Bequerel. 1,000 grains of Urine.	T. C.—First Observation, November 9. 1,000 grains of Urine.	T. C.—Second Obser- vation, Dec. 10. 1,000 grains of Urine.
Weight of Urine passed in 24 hours .. .. .	19'516	9.817	12,118
Spec. Grav. .. .. .	1'0189	1'020	1'026
*Solids in 1,000 grains ..	31'1	46'60	60'58
Urea .. .. .	12'8	7'0539	25'685
Uric Acid .. .. .	0'391	A trace.	'686
Earthy Salts .. .. .	7'63	not searched for	1'3714
Alkaline Salts.. .. .	—	" "	9'8386
Extractive Matters (Organic Matters and Vo- latile Saline Combina- tions of Bequerel) ..	9'26	" "	—
		Total, 39'5561	23'009

The next case was that of George H——, aged 38, a native of Ireland, who was admitted May 17th, 1867, labouring under this disease, which he had contracted whilst engaged as an engineer in Trinidad. He was suffering from both anæsthetic and tubercular leprosy in a very aggravated form. The disease commenced more than eight years previously, and, according to the patient's version, the first symptoms, which appeared in the left leg, were called into being by an injury to this part occasioned by a fall while riding down a hill. About a year before this he suffered severely from what he called ringworm, being almost entirely covered from head to foot with patches from an inch to a foot in diameter, and about nine months after the first appearance of this symptom his face became remarkably flushed and puffy. Finding that the symptoms of leprosy got no better, he returned on leave to Ireland, and placed himself under the care of an eminent physician in Dublin. In a few months he had to all appearance recovered, and finding himself so much better he returned to Trinidad, but in a short time the symptoms returned and gained ground rapidly. He now put himself under the treatment of a gentleman in Trinidad, who, he was informed, had been staying there several years for the express purpose of studying this disease. This gentleman put him for several months through a course of arsenic and purgatives, increasing the dose of the former to such an extent that towards the close of the treatment the patient says he took four grains of arsenic daily. Of course this was a complete mistake on his part. He improved, however,

\* According to Dr. Bird's table, calculated from Dr. Christison's formula, the amount of solids in 1,000 grains of urine of sp. grav. 1'018 is 41'94.

so rapidly under this treatment that at one time he thought he was getting quite well, but unfortunately he neglected to take his medicines and another relapse ensued. He then came home again, and once more placed himself under the care of the medical gentleman in Ireland whose treatment had previously been beneficial. But his aid was now of no avail; the patient got worse, and then went to a remote country district and consulted a third practitioner, where however he underwent no change for the better, ulceration of both lips and of the tips of the fingers and of the balls of the toes setting in, among other symptoms. The treatment employed seems to have principally consisted in giving iodide of potassium and purgatives, and applying zinc ointment to the ulcerated surfaces. He stated that these parts often healed up, and that he got better when using the purgatives; indeed he seemed at times so much better that both his medical attendant and he fancied he was really to get well, but I need scarcely add that improvement proved always only temporary. At last, as he grew worse on the whole, he decided to enter at St. John's Hospital, which he did just three years after his return to Ireland.

He was, as may be seen from the accompanying photograph, in a much worse condition than the other patient. His lips were so ulcerated and the tongue so thickened, tender, and fissured that he could scarcely swallow anything. He was utterly unable to dress or wash himself, owing to the excoriated state of the tips of his fingers. His voice was thick and hoarse, the nose sunk in, the muscles of the arms and legs shrunk to the last degree, the hands incurved, and nearly all the skin stained with the characteristic hue of leprosy. The skin of the face was tuberculated and dirt-coloured, and there were several large tenacious crusts on it. The hair of his head looked as if he had been rolling in the dust. From the very first we had the greatest difficulty in getting any nurse to attend on him, even when offered double the usual wages, and one nurse after another left, refusing to continue such an unpleasant task. Towards the close of his stay, indeed, we could not induce any one to undertake the work, and as he was dissatisfied he was removed (January 22nd, 1868) to Middlesex Hospital, where he soon after died (April 14th), sinking quite suddenly. During the latter part of the time he was under my care the stench from him was perfectly awful. The chimney of the ward in which he was placed communicated with that above, in which the secretary and his assistant lived during



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PHOTOGRAPH OF ELDER LEPROSY PATIENT.

*To face page 310.*





the day, and I suppose it was by this path that the stench made its way to them, for it did not appear to go up the stairs. Be that as it may, they were more than once made quite ill by it, and on one occasion it was so overpowering, that after being seized with violent vomiting, they rushed out, declaring they could not stay in the hospital. The patient used to cover himself over with the bed-clothes, in fact quite bury himself in them, when he went to sleep, and it was when he threw them off in the morning that the dreadful smell diffused itself so much. I never smelt anything like it, and am quite at a loss to describe it. There was no particular fœtor such as that about gangrene; it was a faint, yet hot, so to speak, pungent smell. The other leprous patients did not seem to suffer from it.

The same treatment was put in force in this as in the preceding case; there is therefore no occasion to give it in detail. It will suffice to say that it was useless, though the purgatives sometimes appeared to do good, and at one time I really thought he was getting better. The ulcerations of the lips healed up, and those on the fingers were so much better that he could dispense with gloves occasionally, a thing he had not been able to do for months; he could swallow food with more ease, and even sit up in bed to read and write a little. With the elastic spirit of his race he now fancied that all his troubles were over, and that he would be ultimately restored to perfect health. Indeed the matron said that he continued to assert to the last that I could have cured him if I liked, and that if I had only continued the purgatives he would have recovered. But in his exhausted and hopeless state I was afraid to do so, especially as one ingredient in them was a dose of calomel at night (followed by a strong dose of black draught in the morning), and I need scarcely say how strongly the use of mercury to any great extent has been decried in this disease. I therefore suspended the medicines, and shall always regret that I did so, as he relapsed almost immediately; and when at the expiration of a short time I resumed the use of them, they seemed to have lost all hold on the disease. The fact, however, that they did so much good, both in this and the preceding case, and that twice in his previous history the patient had been materially benefited by the administration of them, tends to show that it is in this direction that we must look for aid.

A specimen of this patient's urine was taken for examination, November 15th, 1867. The whole quantity passed during the

twenty-four hours amounted to eighteen fluid ounces. The colour was a good yellow, presenting in this respect a remarkable contrast to that passed by the former patient. Sp. grav. 1.010; acid. An ounce treated in the same way as in the second examination of C—'s urine yielded only gr.  $\frac{4}{5}$ ths of urea, while two careful searches for uric acid produced simply twenty or thirty specks about the size of the point of a pin, the largest not being bigger than the fourth part of a very small pin's head. The accompanying marks  $\therefore$  are quite as large. Treated with an equal weight of nitric acid no crystals were formed at the expiration of several hours, and the nitric acid test after heat did not show any brown deposit. No excess of colouring matter was found. Two ounces treated after heat with chloride of zinc were converted in great part into a gelatinous yellowish mass, almost like pus, in which there was a slight mixture of blood. No sulphur was detected by the silver test. The deposit from this urine seemed to be principally made up of healthy mucus. It was not ropy, opaque, or viscid, and threw down no sediment. An ounce of urine evaporated, calcined, and triturated with water, gave gr.  $1\frac{2}{3}$  of alkaline and gr. ss of earthy salts.

Another specimen was taken December 16th. The patient had, as in the preceding case, been freely purged in the interim. The urine was brown, and very turbid. Sp. grav. 1.020; strongly acid. An ounce yielded gr.  $1\frac{6.5.5}{1000}$  of urea. There was scarcely a trace of uric acid when treated with hydrochloric acid, but the microscope showed crystals of this salt. There was no albumen, but blood discs were seen under the microscope. An ounce yielded gr.  $1\frac{2}{3}$  of alkaline salts and  $\frac{3}{8}$  gr. of earthy salts.

With the view of not occupying the reader's time unnecessarily, I have not tabulated these results. As regards the cause of the results, I have no conjecture to offer. Whether in the widespread changes of tissue taking place in these men urea was being changed into carbonate or cyanate of ammonia, or what was really going on, I cannot even guess at, and therefore leave it to chemists to solve the riddle. Their food cannot be considered as a factor in the departure from the normal state. They had for breakfast a moderate amount of tea, coffee, or cocoa, with a little ham or bacon if they liked; for dinner about  $\frac{1}{2}$  lb. of meat with bread and vegetables, and half a pint or pint of beer; tea and bread and butter, followed by a light plain supper, as bread and cheese, and perhaps half a pint of beer or a glass of port wine. On an average they must have taken

quite three pints of fluid each daily. It is interesting to observe that the relative proportion of the uric acid to urea, about 1 to 30, or 8·1 to 255, was closely preserved. The greenish tint spoken of in the urine of the first patient was totally different to everything I have seen. Though very pale, it was of a decidedly green tint. At the same time the urine differed very considerably in appearance from that of hysteria, in which this hue is said to make its appearance sometimes, and there were no indications of bile, which occasionally lends an apple-green tint to this secretion.

D. CHE'LIS (χέλεις) (*is, is, fem.*), from χηλή, a crab's claw, but more essentially the notch where the claw branches; keloid from the same (or χέλυς, a tortoise), or more properly from χηλή, a scar, as from being branded, and εἶδος, resemblance. The Keloid of Alibert.

*Definition.*—A formation of small, slowly-growing, hard, shining tubercles, almost cylindrical in form at first, but may be roundish or quadrilateral, gradually thinning towards the edges, the whole assuming a pinkish-white colour, subsequently taking on the appearance of a cicatrix. Sometimes attended with itching, shooting, pricking, or dragging sensation; frequently sending out spurs or roots. Skin between these smooth, soft, and permeated by small blood-vessels. Section reveals hypertrophy of the fibrous tissue of the corium and absorption of the papillary layer. Usually attacks front of chest or back of neck.

A very similar disease, spurious or scar-keloid, the Narben-keloid of Dieburg, sometimes forms on scars of burns or wounds from flogging.\* The keloid of Addison may, I think, be advantageously referred to scleriosis.

*Treatment.*—No very reliable remedy seems yet to have been found for this strange complaint. Removal with the knife cannot be said to have answered well; the disease has generally, if not always, re-appeared, and when it has returned the secondary disease has invariably proved more dangerous and active than the first attack. Taking along with this fact that the tumour, if let alone,

\* Section of a tumour in a case of scar-keloid, reported in the *Photographic Review of Medicine and Surgery*, showed it to be principally composed of "connective and elastic tissue." Fat in fine globules was also present.

rarely gives any serious ground for alarm—that, according to Bazin's observations, it does not influence the health at all, the value of excision becomes very doubtful. Caustics seem equally impotent. Alibert mentions two cases in which he succeeded in curing it with nitric acid. Rayet saw some benefit from pressure, and Cazenave and Schedel found the sulphur vapour douche useful in softening the tumour. Mr. Wilson has removed the false chelis, which springs up in the scars of burns and scrofulous ulcers, by the use of three-grain doses of iodide of potassium three times a day, and a Plummer's pill at bedtime. Hardy says that absorbent means (*les fondants*) have sometimes proved efficacious in procuring a diminution of the tumours; he therefore recommends iodide of potassium internally, iodureted pomade, vigo plaster, and blisters.

Dr. Pick mentions\* an instance of what seems to have been cure of chelis. He first saw the case in July, 1866, and by February, 1867, the disease seems certainly to have been effectually checked, the piercing pains having long disappeared, and the artificial scars formed by caustics having contracted a good deal. There was reason to believe that some time after no relapse had occurred. The treatment consisted in first letting the growth alone to see whether or not it was increasing, and then employing iodized glycerine, under the operation of which it was at the end of six weeks decidedly worse. Dr. Pick next applied caustic potass to the tubercles, and renewed the application in fourteen days. After the scab from the second burning fell off, he touched the granulations every second or third day with nitrate of silver. Under this treatment complete cicatrization followed towards the end of November, the offshoots in the meantime growing smoother and paler.

Dr. Pick examined a small piece of the tumour under the microscope. He found very hard connective tissue with elastic fibres embedded in it. The structure of the skin had entirely disappeared, and there was no trace of hair-follicles or sebaceous glands to be seen.

Since reading Dr. Pick's paper I have only had one case of chelis under my care. It was a very well-marked instance. The patient, a strongly-built but highly nervous man, slightly advanced in years, declined to let anything be done, so that I had not an opportunity

\* *Wiener med. Wochenschr.* 1867, Juli 17, 26. See also *Journal of Cutaneous Medicine*, vol. iii. p. 73.

of trying the potass. The disease was seated on the back of the neck.

As an instance of the obscurity which at one time prevailed, and perhaps prevails, about some of the more rare diseases of the skin, I may mention that many years ago I was in the out-patients' room of a London hospital, when an old Irishwoman came in with a peculiar growth on the inside of the calf of her leg, which a hospital surgeon, since dead, at once pronounced to be a cheloid; but the growth here in no way tallied with the descriptions I had read of either cicatricial or genuine chelis, for it was nearly circular, about an inch wide and nearly as thick, and rose abruptly from the skin. It was of a deep yellow colour, and looked more like a gigantic corn than anything else. At my request the patient was placed under my care. The old woman poulticed the growth till it turned soft, and she then picked it off. Beneath where it had grown, the papillæ of the cutis were dilated to large, red, conical bodies, deprived of epidermis. On the under-surface of the tumour were hollows, into which these prominences had been received. The growth was submitted to an eminent histologist, who pronounced it to be a horn.

E. EPITHELIO'MA (*a, atis, neut.*), from *epithelium*, derived from ἐπι, upon, and θηλή, the nipple. Another instance of derivation run riot, as epithelium, used to express the covering of the mucous membranes, really means the skin upon the nipples. Also known as epithelial cancer, or cancrioid epithelioma.

*Definition.*—A slowly-growing, generally nearly circular, low, flat tubercle. Very small at first; seldom elevated much above the skin. Hard, pale, and yellowish, looking like a flat wart. Subsequently covered with a scale, under which the surface cracks and pours out a thinnish ichor, followed by sluggish ulceration; occasionally accompanied by itching, numbness, heaviness, and aching in the part. Generally seated on face, especially cheek, eyelids, or lower lip; may appear on prepuce and in chimneysweeps on scrotum. Possibly originates in the epithelium of the sebaceous follicles, and, when it attacks the coral of the lip, in the connective tissue.

I do not know whether attention has ever been directed to the possible connexion between this disease and horns, and therefore

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place the following case on record. A remarkably healthy-looking, square-built man applied at St. John's Hospital with a very small horn on the lower lip. As well as I could make out the dimensions, it was about five-eighths of an inch in length, and about three in diameter at the base. I had a photograph taken of it, and then, by the repeated application of acid nitrate of mercury, removed the horn, which grew from the median line of the lip. On steeping the horn in liquor potassæ and breaking it up, it was found to consist of conical bundles of filaments. Four years after this man again appeared at the hospital. The horn had not returned, only a diamond-shaped depression being left where it had been, but he had now got distinct epithelioma on the right side of the same lip. Shortly after this he had a fall from a scaffold, and almost immediately the epithelioma began to get rapidly worse. On my proposing an operation, he disappeared, and then went to Middlesex Hospital, where he died.

Hebra communicated to the *Wiener med. Wochenschrift*\* a paper on epithelioma developed on lupoid patches. This paper he subsequently reproduced in the form of a pamphlet. From these two communications the following particulars are extracted.

Weber and Devergie have both related cases of this nature. Hebra's first patient with this malady was a bookseller sixty years of age: the disease was seated on the face. The patient refused to have any operation performed, and soon sank. The second case was in a woman; the lupus was on the left cheek, and the malignant growth sprang up in the very centre of it. This patient also succumbed very shortly, the disease making rapid progress in spite of the most energetic cauterization. The third case was in a man twenty-nine years of age. Here also the disease broke out on the left cheek. The patient sank in less than two years from the time when Hebra first saw him. The fourth case was in a man: the disease had attacked the face. It had penetrated both wide and deep, but the patient was progressing satisfactorily under the application of a paste composed of arsenic, opium, and creosote, when the sudden death of a boy who was undergoing the same treatment made Hebra give it up, though Rokitansky's decided opinion was that the lad died a natural death from œdema of the lungs. The patient left improved, and Hebra heard no more of him. The next

\* 1867, p. 65.

patient was a workman, forty-six years of age, who had suffered from his earliest childhood under lupus of the face, where, at last, the cancrioid disease developed itself, beginning in a potato-like growth on the right cheek, which, at the time of his admission, had reached the size of a child's fist. To this growth Hebra applied Landolf's paste, consisting of equal parts of chloride of zinc and antimony, with just sufficient liquorice-powder to give it a proper consistence. The use of this caused considerable pain, which lasted till the next day; it was, however, repeatedly applied afterwards. Subsequently the epithelioma was treated only with the caustic potass. This completely destroyed the disease, and such rapid granulation then set in, that lapis infernalis had to be employed to check the growth of proud flesh. The disease seemed to be completely cured.

*Treatment.*—Although I have never seen, and never expect to see, epithelioma radically cured, as a rule, because it is one of the diseases patients will very rarely attend to until it has reached such a pitch that a fatal result is inevitable; yet I have observed very considerable benefit from the use of the acid nitrate of mercury, of the superiority of which over chloride of zinc and caustic potass I feel little doubt myself, though I have not seen enough of its action to justify me in asking others to rely on my experience. In some cases the benefit effected by this powerful application is very remarkable. Three or four years ago Mr. Robert Taylor placed under my care a Frenchman, sixty-four years old, suffering from an affection of the lower and left eyelid, which certainly seemed to be epithelioma. It had invaded a considerable part of the lid, and was of some standing. The acid produced an immediate and steady subsidence of all the symptoms, and the lid seemed to be, after a time, quite clear of the disease, the edge of the tarsal cartilage, which had been, at the beginning, quite buried under the morbid growth, showing clear and in its natural outline. Unluckily at this stage, being anxious to give the disease the *coup-de-grâce*, I applied too much acid, which had the effect of bringing on such severe pain that the patient would not allow it to be used again, especially as he persisted in asserting that there was now nothing the matter with his eye, and I saw no more of him. Mr. Gay too has, I believe, been very successful with the acid nitrate in at least one case of epithelioma. Dr. Alphonse Milcent is said\* to have healed epi-

\* *Journal of Cutaneous Medicine*, vol. i. p. 360.



thelioma in a state of ulceration by applying a paste of chlorate of potass, one part of the salt to three of honey or water, laid on with a brush. Dr. Delagarde, of Exeter, says, that if he operates before the absorbents are affected, he expects a lasting cure.

#### F. RODENT ULCER.

*Definition.*—Slow ulceration, beginning with a pimple or warty growth, which falls or is picked off. Ulcer deep and painless. Edges hard, everted, uneven, sinuous, dry, and brownish. Surface glassy, or covered with a darkish crust. Base may be smooth, dull reddish-yellow, not very moist; granulations absent; secretion odourless. Generally seated on upper two-thirds of face, especially below the eye, but may attack the scalp, vulva, lips of the uterus, and margin of the anus. Not surrounded by tubercles as lupus often is. Lymphatic glands in vicinity sometimes matted together. Almost painless. Shows no tendency to heal; usually seen in persons of middle age. May destroy deeply and widely.

Mr. Hulke, in an excellent paper read before the Pathological Society\* asked whether this disease is cancerous or not. The question has been mooted repeatedly, and in my opinion must be answered in the negative. Rodent ulcer, however obstinate and serious it may be,—however like cancer in some of its characteristics, is as distinct in its nature as lupus or scleroderma.

*Treatment.*—The most effectual destruction of the ulcer and the adjoining tissues that can possibly be effected by the most powerful caustics or the red-hot iron should be essayed without the least delay. In some few cases this has been successful, and the chloride of zinc has occasionally been of great service. Internal treatment seems to be of no more use than in cancer.

\* January 3, 1871.

## CHAPTER XI.—PARASITICÆ.

*A. Scabies. B. Phthiriasis.*

A. SCA'BIES (*es, ei, fem.*), from *scabo*, to scratch.

*Definition.*—An eruption of papules, vesicles, and in more severe cases of pustules, accompanied by excoriation, redness, and a scaly condition of patches of the cuticle. Excessive itching, especially when the patient is warm. Papular form most common. The usual haunts of the acarus are, in adults, the skin of the wrists and that between the fingers, the ulnar side of the hand, penis and axilla; in children, the palms of the hands, soles and sides of the feet. Rarely found on scalp, nor often on face, but may occasionally be seen on both. Seldom attacks neck and shoulders; when found on the latter it is principally the spots where the itching from the clothes-louse is observed. The norwegian six-legged acarus is possibly the same insect, but before its final moult.\*

I have notes of so many cases in which the irritation of scabies has developed eczema in a severe form that I feel assured the circumstance is far from uncommon. What is more, this eczema becomes subsequently independent of the scabies. At the onset the same remedies which cure the parasitic disorder remove the other. Later on the most extensive and thorough use of sulphur preparations, accompanied by fumigating the clothes, seems to exert no control over the eczema, and, indeed, often makes it worse. Nor does it in some persons show very particular tendency to go away of itself.

\* *Medical Press*, 1865, June 7th.

*Diagnosis.*—However characteristic the signs of scabies may be thought, I have no hesitation in saying that the diagnosis is often by no means easy. The itching is sometimes slight, and the co-existence of papules, pustules, and vesicles, when it occurs, though strong evidence, is not proof. Besides, this co-existence is too rare to rely on as a general rule. I have seen scabies in a lad twelve years old evoke symptoms which bore every appearance of lepra. In many cases, as I have said, it generates severe eczema. Symptoms analogous to those of prurigo and phthiriasis are often set up by it in elderly persons, and its sequelæ have been mistaken for urticaria by very good judges. Dr. Fagge mentions\* a case in which errors of diet aggravated the itching, such articles as onions and Worcester sauce producing a severe exacerbation, so that urticaria might easily have been suspected. Finally, as I have already mentioned, the detection of the acarus by the ordinary methods is not easy.

Under these circumstances, the test proposed by Dr. Hilton Fagge † acquires the highest value. This gentleman in one case scraped the edges of the burrows, and put the scrapings under the microscope, when he found eggs and a portion of the framework of the acarus. In another case in which scabies was complicated with eczema impetiginodes, he boiled the crust in a solution of caustic soda, ℥ss. to ℥j. of water, and found in the flocculent deposit left after pouring off the clear cooled liquor, the skeleton of an acarus, two young acari, one egg, one egg-shell, and the fore-legs of an adult. Mr. Frederick Durham also succeeded in finding in part of this fluid nine other young acari and three or four eggs.

Scabies is no longer a disease of dirt and poverty, a denizen only of filthy lodging-houses: it has made its way into the comfortable homes of the upper and middle classes. Within a brief period I have seen it in a number of persons in very good position—officers, wealthy clergymen, men of independent property leading a retired life, civil engineers, and young unmarried and married ladies. It is often quite impossible to account for its appearance among the latter; but that they not unfrequently suffer from scabies is beyond all doubt. Possibly it is sometimes conveyed by means of money. I had a collector under my care, in whom this seemed to have been

\* *Lancet*, 1868, vol. v. p. 433.

† *Ibid.*, p. 432.

the case. Sometimes it seems to be communicated by dirty crossing-sweepers opening carriage doors. Mr. Wilson says\* it has been spreading in this direction ever since the Crimean war, and his practice exhibits the startling number of thirty-seven cases of itch out of a thousand cases of all kinds of skin disease. But Dr. Hillier doubts,† as I do, if the Crimean war could have had anything to do with it. He examined the returns, and found that out of 60,399 cases in the hospitals there were only 185 cases of itch. A staff-surgeon in charge of a division saw no scabies during the whole war; another surgeon, in charge of a regiment, did not see one case of the disease, and an assistant-surgeon stated to him that scabies was most uncommon. Hardy tells us (1863) that in Paris it is seen almost exclusively among the poorer classes, so that mere importation from Russian territory cannot be admitted as a cause. Mr. Gay informs me that it is largely on the increase among the middle classes, and if there be any peculiarity in the eruption of the present day, it is that the eruption is more generally diffused over the body, and less noticeable on the fingers.

I really cannot understand on what grounds Mr. Startin has arrived at the conclusion that vaccination can transplant the itch, impetigo, pityriasis versicolor, and syphilis.‡ Those who, like myself, have always considered him a most careful observer, and holding very moderate views, must have been rather surprised to find him advocating such an extreme doctrine as that in patients suffering under these disorders, *the serum of the blood generally, not the secretions of the affected parts be it remembered*, becomes so intensely infectious that even the lymph of the cow-pock vesicle is sufficiently charged with it to convey them. For, unless we suppose an almost incredible degree of negligence or stupidity on the part of the medical men who vaccinated these patients,—unless we imagine them capable of such errors as that of vaccinating patients so covered with scabies that the pustules and vesicles of this complaint were mixed up with the vesicles of the cow-pock vesicle, *there is absolutely no other inference to draw*.

*Treatment.*—Many surgeons consider internal means thrown away

\* *An Inquiry into the Relative Frequency, &c., of Skin Diseases*, 1864, p. 21.

† *Op. cit.*, p. 259.

‡ *On Accidentally Spurious or Impure, and Effete or Imperfect Vaccination*.  
By James Startin, Esq.

in the treatment of this complaint, but this belief is not shared by some of the most experienced practitioners. No doubt in theory the former are right; if we could apply sulphur properly, medicines would be rarely, if ever, called for; but this is just the very thing we cannot always do, and therefore the internal use of sulphur becomes an absolute necessity. Common brimstone and treacle answers very well with children. For adults, I employ a watery infusion of sulphur, made by pouring a gallon of boiling water on an ounce of sulphur; to eight ounces of this an ounce of sulphate of magnesia and two drachms of nitrate of potass are added; two table-spoonfuls are given once or twice a day. Mr. Startin gives an acidulated saline aperient. Hardy frankly admits that the local means used at St. Louis do not always procure immediate relief to the itching, while most severe pain is caused by them.

One of the greatest improvements effected in the treatment of any skin disease was the introduction of the penta-sulphite of calcium for scabies.\* It is cheap, easy of application, cleanly, and painless. For adults the solution may be employed undiluted. Women, too, in whom the skin is coarse, and many young persons, bear it very well of this strength, but generally it requires for them to be mixed with an equal bulk of water, and in very young children it can often only be employed of the strength of one or two drachms to the ounce. When considered advisable, there can be no harm in adding a little scent, such as pure spirit of lavender; or if the surgeon consider it necessary to turn hairdresser and adapt his prescriptions to his new trade, his genius may find vent in choice and combination of scents to any extent. The lotion should be rubbed in with a piece of linen every day on each spot, and every papule, pustule, or vesicle should be torn open with a stout sewing-needle, so that the fluid may penetrate thoroughly. Broken vesications and ulcers may often be advantageously dressed with melted zinc ointment.

Scabies heals rapidly under this treatment, but I may as well state that I have never noticed any of those remarkably quick cures of which we often read. I have not yet seen vesicular scabies removed or even effectually checked in two days or the pustular form in four. I should have thought as many weeks more like the time required for a cure.

Dr. Thomas Cattell was, I believe, the first to advocate this plan,

\* For formula see page 10.

having recommended it extensively to the profession twenty-five years ago. Dr. Frazer has found it highly successful ; he directs one part of quicklime, two of sulphur, and ten of water, to be boiled together. The fluid is rubbed in for half an hour with a sponge, a warm bath being first given ; “a second bath removes the stain left by the friction, and leaves the patient quite cured.” Hebra attributes the discovery to Vlemingx, of Brussels, who however uses a much weaker solution. Hebra entertains a very high opinion of its value, but first of all directs the patient to be rubbed all over with potass soap (Schmierseife), by means of a cloth, for half an hour, then to be left for half an hour in a bath, and then rubbed for the same time with the decoction. Another half-hour is spent in the bath, and the cure is complete. The artificial eczema, which in some cases follows itch, is to be treated with caustic soap and preparations of tar ; excoriations and ecthyma with cold dressings, wet linen, and lukewarm or cold baths ; but it is not disputed that the healing of some of these places is a very troublesome process, and I fancy Hebra would find the cure of the ecthyma materially hastened by the use of nitric acid and quassia internally and benzoated zinc ointment as a dressing.

Dr. McCall Anderson prefers styrax ointment,\* or solution of chloride of lime, as proposed by Dr. Christison. He advises ladies to use a sulphur soap. For large ecthymatous pustules he recommends † warm baths with a couple of handfuls of potato starch put into each bath. Before beginning, the patient should be soaped all over. Dr. Spencer, of Oxford, considers iodide of potassium ointment as trustworthy as that of sulphur. At St. Louis the patient is first rubbed all over with black soap, then plunged for half an hour into a simple bath, and finally rubbed all over with an ointment composed of one part of carbonate of potass, two of sulphur, and twelve of lard. This ointment is kept on till next day, and this serves to disinfect the clothes.‡ M. Bazin prefers camomile to sulphur. He directs fresh camomile-flowers, lard, and olive oil to be heated in a sand bath ; this ointment speedily cures scabies, as it is said do stavesacre, iodide of potassium, &c., but I doubt if any of

\* R. Styracis liquidæ ℥j.  
Adipis ℥ij. Melt and strain.

† *The Parasitic Affections of the Skin*, 1861, p. 141.

‡ *Leçons sur les Maladies de la Peau*. Par le Docteur Hardy. Deuxième partie, 1863, p. 205.

them will supersede sulphur. Benzine is said to effect the destruction of the acarus in a few minutes. Dr. Kempster finds ten grains of carbolic acid to an ounce of ointment or glycerine a very effectual means of destroying the acarus, as also pediculi of every kind. Dr. Schulze uses styrax in the following way: two drachms of rectified spirit, an ounce of liquid styrax, and a drachm of olive oil. This serves for two dressings, and the whole skin is rubbed over, not a fold being suffered to escape.

The clothes should be well fumigated. The best plan I know of is to turn them inside out and hang them across a cord in a room; a little chlorate of potass is then put into an old saucer, an iron one if possible, half a drachm or so of phosphorus is added, and both are covered, except at one spot, with a thick coat of unwashed sulphur. The mixture is now fired by touching the phosphorus and potass with a red-hot iron or match. Every person must of course leave the room, as it quickly becomes filled with sulphurous fumes. As much of the lighter furniture as possible, and everything in the shape of gilding, such as picture-frames, should be previously removed, and the chimneys, windows, and doors closed. Mr. Hooper, of Pall Mall, sells these materials all ready prepared, as also the iron saucer. Some authors advise that the clothes not in use should be sprinkled with sulphur and shut up in a drawer; also that sulphur should be strewed upon the bed. As a good smoking with brimstone does the work so very effectually I strongly recommend it. I understand that the useful system at one time in vogue at some of the public baths of providing for the fumigation of clothes has been discontinued.

B. PHTHIRI'ASIS (*is, is, vel eos, fem.*), from  $\phi\theta\epsilon\iota\rho$ , a louse.

*Definition.*—An irritable, discoloured state of the skin, sometimes accompanied by tubercles, pustules, and wheals, occasioned by the bites of one or more of the different kinds of lice.

In a pamphlet reprinted from the *Wiener medicin. Presse*, Hebra goes at full length into the subject of phthiriasis, and in a spirit of downright heresy avows his settled conviction that there never was such a disease produced by lice depositing their eggs under the human cuticle. Although writers almost without number, from Aristotle down to Alibert, have told of the victims of this mysterious disease, and related how rebels, anti-popes, blasphemers, heretics,

simoniacal bishops, persecutors, and, what seems sadly opposed to our ideas of even-handed justice, even heroes, poets, and painters have been consumed bodily by lice, he clearly does not believe any one of them. He tells the mournful tale of the portuguese nobleman, Tabora, of Lisbon, whose body was so full of lice that two slaves had nothing else to do but fill baskets full of them and carry them to the sea; of that murderous devil Philip the Second, who so swarmed with them that people could scarcely scrape him clean; of the learned man mentioned by Alibert, who was pursued into the very bosom of the Academy, the audacious wretches carrying their aggressions so far as to bear off the pen from his hand (!!); and of M. Laval, spoken of by the same author, who scratched himself for twelve years without stopping (!); but then he treats them all as fables, and scarcely suppresses his contempt for those who retail such legends.

It must be admitted that all this incredulity is very shocking. Nothing is safe if men are to be allowed to go on in this way, and insist that every position taken up, every stage in a supposed pathological process, should be proved before it is admitted. I should not be surprised if some sceptic were one day to treat some of our favourite doctrines in the same way—blood-poisoning, with its intangible process of getting into the blood, and the preposterous absurdity of elimination, with other heresies of the day, and many other days too—all bound for the one dark bourne.

While even such men as Devergie and Gibert have believed in this phantom of a louse disease, Hebra gives the english surgeons, with one exception, the credit of dismissing it to that limbo where dwell in cold night the ghosts of so many fables. The exception is Mr. Bryant, who mentions the case of a governess in Guy's Hospital who could not be freed from the nuisance of these parasites. Some of the german physicians, too, Simon, Siebold, and others, have honourably distinguished themselves by their exact scientific researches on this subject. Mr. Bryant is, however, a careful and most trustworthy observer, and any statement made by him, however it may clash with received views, merits the greatest attention.

The slightest reflection would have satisfied men long ago that these stories could not be true. The louse is an air-breathing animal, and could not live under the skin, as some credulous people believe; it has no apparatus for boring, so that it could not lay its eggs under the skin; such immense numbers as are spoken of could not have



lived on the skin, as there is not sufficient surface for them, each louse seemingly requiring an area for itself; and if there had been space enough on the outside there would not have been blood enough inside the body to feed them. Supposing Tabora's slaves carried daily two basketfuls of lice to the sea, then a very moderate-sized basket would hold a litre. Now computing the size of a louse at that of a small barleycorn, a litre measure would hold quite 10,000. The louse must feed, and judging from the tenuity of its food and the quantity of fluid exuded when one is crushed after sucking, may be safely assumed to consume at least two minims of serum daily. Two litres of lice would therefore require quite 40,000 minims = 83 ounces of serum. Now, I ask if any person believes that the human frame could bear such a strain, or even if it could support for any time the exhaustion and irritation which would inevitably result from withdrawing the tenth part of this amount?

Hebra admits only the usually recognized (three) kinds of lice—that infesting the head (*pediculus capitis*), that in the clothes (*p. vestimentorum*), and that found on the pubes (*phthirus inguinalis*, or *crab*). As none of these are furnished with egg-layers, so none of them can pierce the cuticle and lay their eggs beneath it. They do not breed together, and one species does not invade the domain of the other. He totally denies the existence of the variety which has been thought by some persons to afflict patients in a state of marasmus (*p. tabescentium*).

But if lice cannot produce the once dreaded disease (morbus pedicularis), they can occasion a great deal of misery, being provided with weapons thoroughly adapted for irritating the skin. Underneath the snout lies a pair of brown-coloured mandibles, with which they bite their way into the skin, while the snout serves to pump the serum. When the louse bites, the skin round the puncture swells into a fold, which catches the finger nail when scratching, and consequently the excoriations from this source are disproportionately large. Boils and carbuncular swellings may result from the prolonged scratching thus induced. Certain forms of impetigo (the anchor mucosus and impetigo granulata of Hebra) are very often accompanied by lice, a fact also noticed by Willan. Swelling of the glands of the neck from the itching may proceed to such an extent as to induce suspicion of scrofula. Add to this the rapid increase of these vermin in numbers, for a louse will bring forth 5,000 young in eight weeks, and we have enough real ills resulting from the presence of

these pests, without inventing phthiriasis; such, at least, is Hebra's experience of quite 11,000 patients afflicted with these hateful things.

*Treatment.*—In general, lice are very easily disposed of. When they get into the hair of children, the small-tooth comb is the best remedy, and a weak wash of bichloride of mercury, gr. ss to gr. j., in an ounce of rose-water, will effect the destruction of the nits, or cocculus indicus powder may be blown in with a puff. There can be no doubt that in some children lice are much more difficult to remove than in others. I saw this in the case of two young ladies, sisters, sleeping in the same bed, and nursed by the same person, a most careful and exemplary mother. The elder sister was freed from them in two or three days; in the other, notwithstanding the most devoted care, they were constantly reappearing for many weeks. Stavesacre ointment \* answers very well for the irritation set up by the body-lice in grown and elderly persons. It should be rubbed on every day. In some severe cases no treatment is more serviceable than that for scabies, especially as regards the fumigation of the clothes. Elderly people suffering from this disease are often out of health, and are benefited by steel, nitric acid, bitters, and purgatives. For the pediculus pubis the lotion of bichloride of mercury, just spoken of, answers very well. Dr. Purdon finds oil of santal-wood, suspended by means of glycerine and spirit, a very cleanly and useful remedy in phthiriasis. The sea worm-wood (*absinthium maritimum*), so highly extolled by Linnæus as a "pulcifuge," might be tried.

\* The best formula for stavesacre ointment that I know of is that recommended by Bourignon. It is—

R. *Staphisagriæ* sem. ℥ij.  
Adipis præp. ℥v.

The materials are to be digested in a sand bath at boiling-water heat for twenty-four hours and then strained. It is essential the seeds should be fresh.

## CHAPTER XII.—RELIQUIÆ.

UNDER this head I have ventured to group together, for the sake of convenience, all the remaining forms of cutaneous disease which I propose to notice. I do not seek to defend this arrangement, except on the ground that it saves a great waste of time, which, I submit, would be very ill spent in giving all the reasons for subdividing these disorders into as many groups as there are names. This chapter accordingly embraces—

*A. Warts. B. Corns. C. Molluscum. D. Scleroderma. E. Rank Perspiration. F. Leucopathia. G. Ephelis and Lentigo. H. Chloasma. I. Bronzing of the Skin. J. Silver-staining. K. Nævus. L. Mucous Tubercle.*

A. WARTS—VER'RUCA (*a, æ, fem.*), supposed to be derived from *verrucare*, to change a thing for the better, though what possible connexion there can be between the two ideas, or why warts should more than any other disease be distinguished by a capacity for change for the better, our commentators do not explain.

*Definition.*—Clusters of enlarged papillæ, covered with thickened epidermis, generally nearly circular in form. Fissured. Most frequently met with on the hands. Those on the face usually pointed. Dr. Wilks has described a variety (*verruca necrogenica*), which attacks the knuckles and wrists of those engaged in post-mortem examinations.

Auspitz holds that in horny affections (*keratoses*) such as ichthyosis,

there is either no change in the form and size of the papillæ, or it is due to the presence of the hypertrophied horny layer ; while condylomata, warts, and epithelioma (papillomata) are due to an active neo-plastic process in the rete, which process penetrates more or less deeply into the connective tissue of the corium, this being also hypertrophied. The alterations in size and form of the papillæ are due simply to changes in the epidermis. There is no anatomical difference of any moment between warts, pointed condylomata, and cauliflower excrescences. According to Auspitz, epithelioma shows remarkably how hypertrophy of the epidermis pierces into the connective tissue of the corium. According to my observations, vascularity and nervous action are not unfrequently augmented in these growths.

There is a form of wart so like lepra, or of lepra so like wart, that I am at a loss to know which of the two it is, or if it be a compound of the two disorders, that is to say, a form of growth possessing characters common to both. I have only seen three well-marked cases, and though evidently examples of the same disease, there were yet marked differences between them. In one patient, a girl, I was able to trace the progress of the complaint, which I could not do in the others. She was pale, slightly made, except about the legs, which were extraordinarily thick below the knee, and of low stature. Just below the knee and on the front part of the one leg were six or seven dark-coloured warty-looking growths, varying in size from a sixpence nearly to a halfpenny. On the knee and front part of the same leg there were at least twenty or thirty more coming. They evidently all began as lepra-spots, none of them being at the outset bigger than split peas, and giving to the hand when passed over them a sensation like that of spines. When the hard summit was removed, the surface below was exactly like a lepra patch, red and flat. They soon, however, became conical again. All were for a time covered with bright silvery scales, about the nature of which there could be no mistake. The other leg was similarly affected, but not to so great an extent. This, the mother told me, had always been the case. The girl has two sisters, said by a gentleman who ought to know, to have lepra. There is no history of hereditary disease of any similar kind in the family.

Arsenic seems undoubtedly to have great power over the simple form of warts, especially when seated on the face. Not very long ago I prescribed it with entire success, the growth having been

pretty rapid up to the time of beginning with the medicine, and being quickly stopped by its use. At the end of some weeks all traces of the disease had disappeared. As a local application, I prefer the hot iron as the most efficacious, speedy, and least painful remedy. It is not necessary to burn the skin in the least ; all that is required is to touch the tip of the wart and burn as much each time as the patient can easily bear. Dr. Hillier found five-grain doses of magnesia and a drachm of cod-liver oil useful in a case of warts in a boy. The growths were seated on the arms, hands, and other parts. The girl just spoken of seemed to be very much benefited by the same treatment as that laid down for ichthyosis.

B. CORNS—CLA'VI, *Clavus* (*us, i, masc.*), a nail.

*Definition.*—An elevation and thickening of the cuticle covering a small portion of skin. Generally nearly circular in form ; of a brownish-yellow colour, sensible at its base. Central part composed of harder and more translucent material than the rest. Cells arranged obliquely, forming concentric arched laminæ with the concave side downwards. Thickening, hardening, and increased nervous sensibility of the cutis lying underneath.

*Treatment.*—Corns are a more serious matter than warts ; they may bring on bunions by pressing on bursæ, or make their way into joints, causing ulcers, absorption, and exfoliation of the bones. The first step towards a cure is to have a last made expressly for the foot, with a prominence on it corresponding to each corn and rather larger. I have seen people suffer martyrdom for want of this simple precaution, which insures much greater comfort than a loose boot. If the boot still cause pain, the part over the corn should be steeped in hot water till it is quite soft and then stretched over the last. Amadou plaster should be applied over the corn itself, and every three or four days the corn should be thoroughly softened with very hot water, pared or rasped down, and then painted with strong tincture of iodine or gently rubbed over with solid nitrate of silver. Caustic potass is very useful in refractory cases.

C. MOLLUS'CUM (*um, i, neut.*), from *mollis*, soft.

*Definition.*—Slowly-forming, slightly lobulated, sometimes pedunculated swellings, apparently due to closure of the mouths of the

sebaceous follicles, generally of the natural colour of the skin. Often depressed in the centre of the summit. Chiefly situated on the neck, face, and shoulders.

*Divisions.*—1. *M. contagiosum*, answering to the description given above. Very possibly contagious in some cases. In a form of this, called by some writers *molluscus simplex*, we find growths of the skin, generally pedunculated, varying in size from a pea upwards. Growth of both very slow. Texture soft and flabby to the touch. 2. *M. fibrosum*, a slow growth of peculiar fibrous tumours, in size from a pea to a walnut, or even larger. Painless. Not discoloured. Sometimes sessile; sometimes pedunculated. Often found on skin covering ribs and back.

In the first volume of the *Journal of Cutaneous Medicine*\* there is an extraordinary case of fibroid molluscum by Dr. Izett Anderson. The tumours were scattered all over the frame from head to foot, almost the whole of the trunk, front and back, being studded with them. Dr. Anderson examined two of the smaller tumours. The section of one revealed a dense, pure white surface, like that of a raw turnip or bacon fat. The microscope showed that it consisted principally of fibrous tissue, the fibres arranged in large thick bundles, inclosing loculi full of plastic matter, apparently being developed into cells. When squeezed, a drop or two of glairy fluid exuded, containing granules and cells, many of the latter assuming a fusiform condition. There was no appearance of a capsule in the tumours, and the skin seemed to be quite incorporated with the morbid tissue. In some parts the fibrous tissue of the derma had softened and degenerated.

Dr. Hilton Fagge, in a very able paper † on the anatomy of this disease, has arrived at the following conclusions: Each tumour is developed round a hair-follicle and its sebaceous gland. The smaller tumours consist of a central glandular body surrounding a hair, and a quantity of very fine connective tissue with numerous minute oval nuclei. These two elements, the glandular body and the connective tissue, are present even in the smallest tumours. The glandular body itself is a sebaceous gland, enlarged by the sacculi separating from each other. Very possibly the sacculi are also increased in size and multiplied. Dr. Fagge thinks the connective tissue is

\* Page 60.

† *Anatomy of a Case of Molluscum fibrosum*, *Med. Chir. Trans.*, vol. liii.

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developed from the outer layer of the dermal coat of the hair-follicle and sebaceous gland. Some of the tumours in the case he is describing were embedded in the cutis, others lay almost entirely in the subcutaneous tissue. The hair-sacs were visible in the form of greyish dots, and the tumours seemed to consist nearly all of soft reddish material.

*Treatment.*—In the two first forms (*M. contagiosum* and *simplex*) removal with the scissors and the application of any mild escharotic to the base are generally all that can be considered requisite. In children I have seen the use of steel wine, and saccharated carbonate of iron produce falling of the tumours. In one case, that of a child, the growths began to drop off rapidly in five or six weeks after the steel had been begun with. In another the saccharated carbonate of iron produced much the same effect in about the same time. Bateman saw arsenic produce a general diminution in the tumours, and the experience of other surgeons has confirmed his statement. I have found it impossible to persuade grown persons suffering from this complaint to attend regularly, so that I could not judge properly of the power of arsenic. With one exception, I have only seen the contagious form in adults in suckling women, and here it is necessary to give arsenic with care. In the fibrous form I should not expect any benefit from medicine. I have had only one opportunity of fairly trying it, and in that case I gave iodide of potassium and liquor potassæ for months without producing any effect.

D. SCLERODER'MA (*a, atos, neut.*), from *σκληρός*, hard, and *δέρμα*, skin, hide.

*Definition.*—A slowly-growing hardening of the skin, starting from one particular point, usually on the upper part of the body, and gradually but irregularly spreading in all directions; often with bands of dense tissue, almost like the cicatrices of a burn in point of hardness, radiating from it. Colour and sensibility of the part not affected at the beginning. May, however, be preceded by erythema or aching in the skin, and sense of burning. When attacking the face, sometimes causes such contraction and stiffness as to require the removal of some of the teeth to allow food to be taken. Tongue may participate in the disease. Often ascribed to a chill or getting wet.

It seems quite certain that at least four forms of this disorder must be recognized. 1. Diffused scleroderma (*scleriosis*), corresponding to the description just given, and generally recognized as the disease. 2. Local scleroderma, the keloid of Addison, where the induration takes place in the form of roundish white patches from two lines up to two inches in diameter, surrounded by a zone of redness with a horny spot in the centre. 3. An inflammatory and fatal form described by Rasmussen. 4. Rhino-sclerma, described by Hebra.

Dr. Hilton Fagge showed the Pathological Society\* a case of the first-mentioned form (diffused scleriosis he calls it), in a woman sixty-five years of age. The disease began in the neck and extended over the cheek, arms, back, and chest. The sensation was not impaired. In front of each elbow there was a band of dense tissue, which when stretched, looked like a cicatrix (the morphea of Addison). This gentleman also gives two cases in *Guy's Hospital Reports*.† In one of these, when one of the bands was scraped with a knife, the effect was very peculiar; the surface creaked beneath the blade, and the epidermis brought away looked more like moist, dirty sand than anything else. No change in the epidermis was detected by the microscope; some of the cells floating free in the liquid had an unnaturally glassy appearance.

A very severe case of diffused scleroderma is related by Mr. Startin in his lectures in the *Medical Times*.‡ He calls it ichthyosis cornea; but with all due deference to Mr. Startin's opinion, I think it clearly belongs to the disorder I have just attempted to describe. The patient was a young lady, and the affection is supposed to have had its origin in venæsection, followed by a severe chill. Numerous small pustules formed, emptied themselves and healed, leaving a horny point or scale at each place. The disease had gone on for years, the limbs, body, hands, face, and scalp being affected with intense rigidity, in which even the tongue was involved.

Hebra, in the *Wiener medicin. Wochenschrift*,§ describes a form of this affection, which he calls rhino-sclerma, and which is, I believe, quite unknown in England. He has only seen nine cases,—four in men, five in women. It is generally seen only on the nose and upper lip, but may attack also the cheek and forehead. It consists

\* *Lancet*, 1869, vol. ii. p. 842.

† Third Series, vol. xv. p. 298.

‡ Vol. xiii. p. 371.

§ Jan. 1870. Translated by Edward Fraukel, *American Journal of Syphilography*, vol. i. p. 146.



of flat, hard swellings, projecting as much as a line and a half in some parts, with a sharp border and steep edges. The colour varies from that of the skin to a deep reddish-brown; the upper surface is smooth but rarely shining. The swellings feel as hard as ivory. The growth of the tubercles is exceedingly slow, and they neither degenerate, ulcerate, soften, nor do they become absorbed. The nose is always implicated, and in one patient the swellings extended from the upper lip to the inner canthus, not only filling up the sulcus between the nose and the cheek, but overlapping with their edges the zygomatic arch on each side. An examination by Dr. Moriz Kohn showed the epidermis and Malpighian layer normal, the papillæ larger than usual, conical or knobby, their external connective tissue wasted, that of the body of the papillæ being merely a network of slender fibres, their blood-vessels few and much diminished in size, as were the fibres of the connective tissue of the vascular stratum. These parts (the network of the vascular layer and papillæ) were crowded with small cells, which in places extended down into the corium. These cells possessed small, little refractive, finely-granulated nuclei. They were very slightly attached, being easily displaced. The corium was only superficially attacked, the deeper parts being free. No sudoriparous or sebaceous glands were found in the affected parts examined. Treatment seemed to be of no avail, arsenic, iodine, and mercury continued for years, having failed to produce any effect.

In one of Dr. Fagge's cases of the diffused variety\* considerable improvement took place under the influence of quinine and cod-liver oil. Dr. McDonnell, who had previously described this disease, speaks of its tendency to spontaneous resolution. A case is related in the *Medical Press and Circular*,† in which great benefit resulted from the use of grey powder and Dover's powder, chlorate of potass with bark, and frictions with mercurial liniment. Warm baths every other day, first of simple and then of sea water, with syrup of the iodide of iron in half-drachm doses, were clearly useful in a case treated in the Hamburg Hospital, and reported in the third volume of the *Journal of Cutaneous Medicine*. In one case under the care of Dr. Addison, Dr. Fagge ascertained that spontaneous disappearance of the hardness had taken place. Mr. Sedgwick brought before the

\* *Guy's Hospital Reports*, Third Series, vol. xv. p. 298.

† For 1869.

Pathological Society\* another case. The patient was a child, who had thrown off the disease. As cod-liver oil had been given, this might have had some influence. The child sprang from an unhealthy, delicate, strumous family. The disease consisted in the formation of sclerous patches of skin, which first grew pale, and then of a light brown or dirty straw-colour, with a horny plate in the centre. They formed below the right jaw, on the front of the body, on the neck, behind the right ear, at the outer angle of the right lower eyelid, &c. There was also a very well-marked patch on the tongue. At a subsequent date the skin had almost recovered its healthy appearance.

E. RANK PERSPIRATION.—Derivation and definition omitted as superfluous.

This is such an offensive affection that it ought to be got rid of at any cost. Not the least painful feature of the case is the fact that some of those suffering from it are not aware of their infirmity. Cleanliness inside as well as outside is one of the first necessities. It has been well observed that many people who would be shocked at the idea of having a dirty skin, never think how dirty the inside is, or how much depends on their own exertions for keeping it clean. The great highway of life is left to purify itself.

Arsenic has always appeared to me the most effectual remedy. Purgatives given two or three times a week and tonics often do a great deal of good, and the same may be said of cod-liver oil and a properly-regulated diet, but still a course of arsenic is essential. The clothing, stockings, boots, &c., should be of the lightest description. Many of those patients bring on or develop their complaint by a chronic dread of catching cold. When the armpits are affected; the hair should be cut short or pulled out; the latter is by far the most efficacious. The armpits, folds of the groin, and feet should be washed every day with hot water and soap, and then dusted, after well drying, with rice-powder. If any smell linger after this, free use should be made of chloride of zinc or permanganate of potass in the form of a lotion, or occasional brushing with tincture of iodine may be tried. In a case accompanied by offensive breath, Dr. Kempster, of Utica, gave two drachms three times a day for two days of a solution of carbolic acid, a grain to an ounce; accompanying this by the

\* *Transactions of the Pathological Society*, vol. xii. p. 234.

use of a lotion of the same salt, five grains to an ounce, and effectually checked the symptoms.\*

Hebra, in the form affecting the feet, recommends † light shoes and dusting the skin with lycopodium, alum, or common flour, or covering every part with an ointment of equal parts of diachylon plaster and olive oil spread on linen. At the end of twelve hours this is taken off, the skin is again dusted, and the ointment reapplied. The feet are not washed till the old brown epidermis has come away. Mr. Stanislas Martin says the smell may be removed by wearing a false sole inside, made of gum-arabic and charcoal, fifteen parts of the former to forty of the latter. This is moistened, made into a paste, and spread on felting or flannel felt. After being covered with paper it is smoothed with the hand, squeezed for an hour to get out the water, and then cut to the shape of the foot.

For excessive perspiration, Dr. Druitt, in an excellent practical paper, ‡ recommends sponging with *hot* water. When the skin is greasy this remedy should also be tried; active exercise, sleeping with the windows open, tonics and aperients, and avoidance of malt liquors are often very useful. Astringent lotions of bichloride of mercury and washing with juniper tar soap have also been recommended. When, on the other hand, the skin is preternaturally dry, it should be stimulated by free rubbing and sponging. Iodide of potassium has here more than once proved useful.

F. LEUCOPATH'IA (*a, as, fem.*), (or *Leuce*, properly *Leuke*), from λευκός, white, and πάθη, a disease.

*Definition.*—Oblong, oval, or circular patches of bleaching of the skin, unattended by loss of sensibility or any perceptible change in the health. Rare.

*Treatment.*—I have very little to say on this part of the subject, having only had a chance for a short time of trying medicines. Most patients will, I fancy, never submit to what they think a series of experiments for a disease which is, after all, only an inconvenience or an eyesore. In one case where the stains were seated on the backs of the hands, I gave steel and arsenic for between two and three months; the patient, who was a highly nervous, rather delicate,

\* *Journal of Cutaneous Medicine*, vol. ii. p. 449.

† *Medical Times and Gazette*, 1865, vol. ii. p. 265.

‡ *Ibid.*, vol. i. p. 222.

sparely-built man, then went into the country. His health improved under the treatment, but no alteration took place in the patches. There seems little doubt that in a rare case or two the natural hue of the skin has been restored by means of tonics, shower-baths, and stimulating liniments to the affected parts. M. Biett says that blisters and the active use of sulphur externally, in the form of ointment and douches, are of service.

The following case may, I think, be considered as an instance of acute leuce arrested or cured.

Annie C—, aged 18, living at St. Alban's, entered as out-patient September 8th, 1871, with leuce affecting both feet. She had hitherto enjoyed very fair health, and to all appearance was exceedingly healthy, being, though short, very compactly made, with plenty of colour and a bright clear complexion. She menstruated pretty regularly, but rather too often, and with some degree of pain. She looked then, and appeared all through her attendance, one of the last persons to be nervous or fanciful. Her account was, that in June of the same year she began to feel the left foot sore in the daytime and heated at night. She was thus led to examine it, and found, under the ball of the great toe, a whitish spot about the size of a shilling. This gradually increased in diameter, and shortly before she commenced attendance a similar spot formed on the heel of the same foot. Subsequently the same appearance made itself visible all along the edges and under-sides of the toes and between them, and then by patches on their upper surfaces, principally, however, over the great toe. Very soon after a similar whiteness began to attack the right foot, which had also become very sore, starting from the plantar surface of the toes, then creeping towards the hollow of the foot, and after that stretching more rapidly than before from the hollow of the foot to the heel. Next it invaded the insides of the toes, and then spread over their distal surfaces for about an inch backwards, reckoning from the tips. The progress of the disorder had throughout been accompanied by great pain in the affected parts. The sensation strongly resembled that of a scald, and was so severe that she could scarcely ever stand with comfort, and at times could not remain upright at all.

When I first saw her, September 29th, the skin of the affected parts was in a perfectly blanched condition. Except that it was not wrinkled, but, on the contrary, firm, plump, and smooth, it looked exactly as I have seen the fingers of washerwomen do after a hard

day's work. The edges of the patches were sharply defined, and the contrast between the blanched and the healthy portions of skin was very striking.

For two or three years previously she had noticed that the hollow of the foot perspired rather freely, but since the bleaching of the skin had set in, the perspiration from the affected parts, especially from the plantar surface, had been so excessive that she was frequently compelled to change her stockings three times a day. There was no unpleasant smell connected with the perspiration. She has at times felt rather weak since the disorder began, but on the whole there does not seem to be any reason for thinking that this has much to do with the local complaint.

From the 8th to the 29th of September she was attended by my colleague, Mr. Bowden, who prescribed her salines and ordered her to put her feet in salt-and-water. On the 29th she came under my care. Not knowing what to do with such a case, I prescribed tolerably full doses of arsenic in the form of the solution of de Valangin, but, according to her account, the pain and soreness increased both rapidly and decidedly under the influence of this treatment, and it was therefore exchanged for the saturated solution of iron in strong hydrochloric acid ; of this she took three drachms weekly up to the 26th of January.

Owing to her living at such a distance I only saw her at rather long intervals, and did not keep any notes of the case at this time, but she tells me that during October and November there was little improvement as regards the colour, although the pain had a good deal abated. The diminution in the latter symptom was, however, fitful, and at times the morbid sensation returned almost as bad as ever. When seen, however, on the 20th of December, there was an alteration in the colour for which I was not prepared, and she told me that the natural hue had been returning steadily for the last three weeks. At her next visit, on the 5th of January, 1872, there was scarcely any discoloration, and when she again called, January 26th, I was unable to distinguish a single vestige of the disease, and a surgeon who was present at the examination was not more fortunate than myself in finding any traces of it. She was therefore, at her own request, discharged cured. She stated that there was now scarcely any abnormal sensation, and that the perspiration had diminished in proportion as the bleaching had passed off. She had continued the salt-and-water up to the present time.

It seems only a fair conclusion that the remedies had some share in bringing about the result. I do not however take any credit to myself on this score ; for, as I said before, I was quite at sea as to the treatment, and I merely seek to place the facts of the case on record without venturing to draw anything beyond a very guarded inference from them.

G. EPHELIS and LENTIGO.—EPHE'LIS (*is, idos, fem.*), from ἐπι, on account of, and ἥλιος, the sun. LENTI'GO (*o, iginis, fem.*), from *lens*, a lentil.

*Definition.*—A deposit of minute patches of brown pigment, possibly containing an excess of oxydized iron, in the lower surface of the epidermis, seen principally on the face and backs of the hands. Lentigo might, I think, very well be omitted, and all varieties of the affection embraced under the name of ephelis or freckle.

*Treatment.*—The perchloride of mercury in almond emulsion, one to two grains in four ounces, will, I fancy, remove every case that can be cured by treatment.

H. CHLOAS'MA (*a, atos, neut.*), from χλόα, *as*, green herbage, grass.

*Definition.*—Deposition of very slowly-forming patches, streaks, &c., of yellowish-brown pigment under the surface or in the lower side of the epidermis. Often seen on the face, especially the forehead, unaccompanied by brawny desquamation. \*

The reader will see that by chloasma I mean a distinct disease from pityriasis versicolor. The disorder, which is much rarer than what is usually called chloasma, is not unfrequently seen in married women, the patches growing darker with each successive pregnancy. I consider Mr. Wilson has committed a grave error in confounding two affections between which there is such a clear line of demarcation.

In the first volume of the *Journal of Cutaneous Medicine* there is a digest, written by myself, of a paper by Hebra on this subject,\* of which I now give a very brief abstract. Hebra divides chloasmata into idiopathic and symptomatic, and the idiopathic into artificial and coincident. The symptomatic are a result of sexual, mostly

\* Page 77.

uterine, disorder, of cancerous diseases, and other general morbid conditions. The artificial result from long-continued pressure, as of garters, braces, from scratching, as in prurigo, from vesicants, from heat and great exposure to light. The brown stains seen on the forehead are often due to uterine disturbance and pregnancy. These latter may assume the shape of spots and stripes; they often follow the arch of the eyebrow, or may assail the skin of the upper or under eyelid. The skin of the concha of the ear, the chin, and the under part of the neck always escapes. They disappear with the cessation of the functions of the uterus. Malària frequently engenders a dark brown or yellow chloasma. His treatment is to brush the part with tincture of iodine three or four times a day for four days following. After the browned epidermis has fallen off, the new scarf skin appears of a normal hue. He also recommends bichloride of mercury lotion, five grains to an ounce, used as a compress, and white precipitate and magistèry of bismuth in the form of ointment. I never saw distinct benefit from anything that I tried.

I. BRONZING OF THE SKIN (*Morbus Addisonii*). Derivation and definition omitted as superfluous.

Dr. Greenhow's views, which may be accepted as the most advanced and accurate on the pathology of this disease, are as follows:—1. Constitutional symptoms invariably co-exist with a peculiar degeneration of the capsules, allied to tuberculosis. 2. A darkened condition of the skin is almost constantly associated with constitutional symptoms. 3. A stained condition of skin may accompany several forms of non-specific disease of the capsules independently of constitutional symptoms. Thus there are three factors,—the affection of the capsules, the constitutional symptoms, and the staining. To constitute true Addison's disease the two first must be present, and they are generally accompanied by the third.

With regard to this somewhat rare complaint, I have little to say. Respecting the pathology of it I must refer the reader to the writings of Addison, Greenhow, and others. Professor Oppolzer says\* that Virchow was the first to show that this affection may accompany

\* *Wiener med. Wochenschrift*, 1866; also *Journal of Cutaneous Medicine*, vol. i. p. 432.

cancerous disease as well as tubercular degeneration; he now inclines to Addison's view. The capsules are liable to nearly all forms of disease which assail glandular organs. The staining takes place on the under surface of the rete Malpighii, and in many places penetrates the superficial part of the cutis. It appears in the form of reddish-brown pigment-granules, partly scattered in an irregular manner, partly deposited in individual cells; even the brain and outer layer of the venous walls may become the seat of this change. Buhl found great loss of fibrine in the blood and increase of the white corpuscles. Oppolzer thinks there is considerable anæmia of the nervous centres, and that dyspepsia is more common than vomiting. The cases in which the staining corresponded with some disease of the capsules are very much more numerous than those in which these bodies were sound. Still several of these have been noticed, as by Peacock, Simpson, May, Hutchinson, and Greenhow. On the other hand, several instances of disease of the capsules without staining have been recorded; Max Doderlein has alone related four, Ogle and Manneret have each contributed one.

*Treatment.*—It is very doubtful whether any medicines possess influence over this disease, and whether the few instances of recovery or arrest are not purely spontaneous. The prognosis is consequently unfavourable in the highest degree. Still I think it only fitting to bring forward a few particulars tending, I hope, to throw some light on the subject.

In addition to the case mentioned by Mr. Hutchinson, Professor Seitz mentions\* one in which the patient, a working man, seemed to be benefited by the employment of iodide of potassium and Heilbronn waters; he left the hospital relieved, and did not return. Another patient also derived some good from the use of the iodide, but the improvement was of short duration. Dr. Greenhow says,† “Treatment directed toward quieting the gastric irritation and improving the patient's powers of taking and digesting food, together with care in securing the avoidance of fatigue and of all other causes of depression may, and I believe will in many cases, if employed early enough, tend to prolong life and to ward off the fatal asthma even after the organic disease is confirmed.” He has found the compound mixture of iron and cod-liver oil useful, also nitro-muriatic acid with vegetable

\* *Deutsche Klinik*, 1866. Also *Journal of Cutaneous Medicine*, vol. i. p. 433.

† *On Addison's Disease*. By E. M. Greenhow, M.D. 1866, p. 22.



bitters, alternated with citrate of iron in the effervescing form. Chloric ether, brandy, and beef tea have produced temporary rallying.

In the second volume of the *Journal of Cutaneous Medicine* I gave the history of a case in which, after a course of arsenic, a very decided decline in the staining took place. The patient was a girl twenty years of age. When I first saw her the skin of the face, neck, and front of the chest almost down to the waist, looked of a dirty clay-colour with a substratum of a pale dirty green, the tint at the sides of the waist being much darker. From the waist to about nine inches above the knees the colour was, according to her account, for I did not examine this part, lighter than anywhere else, but from above the knees to the foot the colour was again much darker, the staining occurring in the form of patches, which looked like pale raw bacon. These patches shaded off into the hue of the surrounding skin, which itself was again darker than that on the chest and abdomen. The skin of the arms was darker than it ought to be, especially at the bend of the elbow; the colour, however, was far lighter than on the legs. Her feet were stiff and painful, but with the exception of this and an occasional headache she had nothing to complain of; there were a few small patches of lepra on the feet and legs. Her tongue was quite clean, and menstruation, which began at an early age, was regular in all respects and free from severe pain. Bowels open. She stated that she had perspired little or none for two years, and thought, though not quite sure, that previous to this time she did so. When quite young she suffered from what she was told was a sluggish liver, but thought she had quite thrown this off. I never saw any symptom of such an affection, and I may here mention that the conjunctiva was perfectly clear. At one time a gnawing pain in the upper part of the left thighbone gave her a good deal of uneasiness, but this too had left her. She never suffered to any extent from pain in the region of the kidneys or loins. Her mother said that when born the patient was of a very dark colour, almost black, but that in a few days she became light and always remained so. There was no history of any mixture of race in the family. Her occupation was not laborious and did not confine her to the house.

The treatment consisted of five-minim doses of liquor arsenicalis thrice daily, gradually increased till she took two hundred minims weekly, and, with the exception of about a month when it was suspended on account of disorder of the stomach, maintained with great regularity from the 9th of November, 1865, up to June, 1866.

At first the colour darkened, till, on the back of the neck, the front and upper part of the bosom, and on the front of the knees and feet, it had, at the end of about two months, assumed a dark olive hue in some parts and the colour of raw bacon in others. The patient remarked that she was turning "bronze-black." The pain and stiffness in the feet grew worse. The symptoms then remained stationary for a few weeks, and finally began to decline. When I last saw her, in the summer of 1868, I found the skin of the face, though still very decidedly pale and dark, much brighter and clearer. The neck, bosom, and upper part of the back were of a light yellowish brown, almost like that seen in some dead leaves. She told me that down to a little below the bend of the thigh the colour was much lighter, but from considerably above the knee to the foot, the old bacon tinge, though very much faded, was still distinctly seen. However, even this had become much lighter during the last few months. Some of the lepra patches had left slightly reddish stains. She represented herself as being in very good health.\*

The following case is the only one of golden staining of the skin that I have seen.

The patient, a physician, otherwise healthy, but of a most excitable temperament, began to suffer about seven years ago from what he at first thought was lumbago, but which he subsequently took to be neuralgia of the loins. For this he repeatedly used hypodermic injections of morphia and took large quantities of medicine. Three years later he fancied he had caught gonorrhoea, but there was no discharge beyond a little muco-purulent matter and no history of infection. I endeavoured to dissuade him from doing anything for it, but instead of that he injected four times in rapid succession, within a few hours, a strong solution of nitrate of silver, injecting as far as the neck of the bladder. This naturally enough set up violent pain in the urethra and bladder, from which he was, according to his own account, never again entirely free, and he consequently resorted to subcutaneous injections of morphia to relieve it.

Next, the patient fancied he had contracted syphilis; but here again there was no history of infection, nor could I make out any-

\* The address of this patient was, with her free assent, given in the journal spoken of, in order that any one who felt so disposed might inquire further into the matter.

thing like chancre. He now consulted at least twenty medical men for this complaint, and finding they would not support his view of the case, became his own medical adviser, and took an extraordinary quantity of mercury for it. I have every reason to believe that he often dosed himself seven or eight times a day. On one occasion he made his mouth so sore that, according to his own account, he could not take any food at all for some days. At last he began to fancy he was wrong, and then resorted to sulphur-fume baths, to neutralize the effects of the mercury.

About two years before his death bright golden spots began to appear on different parts of his body and limbs, and increased in number till there were several hundreds of them. They varied in size from a small split pea to a half-sovereign. It must be understood that I never measured any, but certainly my impression was that some of the largest reached the size mentioned. They were mostly of an extraordinarily bright colour; indeed almost like sections of gold leaf, or small coins of this metal, such as the american gold dollar, laid upon the skin; some resembled patches of gamboge. I do not mean to say that the colour was as deep and bright as gold, neither was it uniform all over the patch as gold would be; I confine myself to stating that the appearance of the spots suggested the comparison. This appearance alarmed him seriously, and though, after a little while, he threw off his apprehensions and continued for the most part to enjoy excellent spirits, they returned at intervals. So strong indeed was this feeling that he repeatedly assured his family he could not live till the next day, made all arrangements for his funeral, and filled up his own certificate of death. With all this he showed no particular sign of ill-health. Except after the occasional attacks of pain in the loins and bladder, when he always seemed unwell—partly perhaps owing to the inordinate quantities of medicine he continued to swallow for every symptom—he was in high spirits and extremely active. Though I repeatedly questioned him, he assured me that he never suffered from loss of strength, breathlessness, palpitation, weight over the loins, feverishness, or night sweats. Nor was there any coldness beginning at the loins, pulsation of the abdominal aorta, tendency to sleep, electric-like sensation or action in any part of the frame, sickness or anasarca. He was nervous and irritable in the highest degree; beyond that there was nothing particular to report.

He was, when the spots seemed at their height, ordered citrate of

quinine and iron, solution of chloride of arsenic, and cod-liver oil. His own impression was that these medicines did him a great deal of good ; certainly the colour of the spots faded while taking them, and unless my observations deceived me, the spots themselves visibly contracted in size. He felt so much better that he contemplated going for a long voyage, when he returned home one day (in April, 1872) feeling much as usual (but looking so much worse that his family sent, unknown to him, for medical aid) and died quite suddenly the next day, being, when near death, so little conscious of his approaching end, that he had only an hour previously given directions about his dinner, and had refused to let any one be called in to see him. He had just completed his sixty-fourth year.

At the post-mortem examination the first thing noticed was an extensive discoloration extending from the loins, over the nates, and to about three or four inches down the outer part of the thighs. It stretched forwards at its most anterior part over about a third of the crest of the ilium ; great part of its surface was more of a mauve hue than anything else, the proportion of dark-coloured ecchymosis being unusually small. A little higher up than the highest point of the crest of the left ilium there was an effusion of blood into the adipose tissue ; possibly the results of some recent injection, as there were marks of punctures near. The organs of the chest were healthy, as were those of the abdomen, except the kidneys, which were unusually congested. The fat surrounding them was extremely hard, and great part of it, on section, presented a glandular appearance. There was a tolerably well limited effusion of blood, almost free enough to be spoken of as a clot, about an inch in diameter, in the fatty tissue enveloping the right kidney. It lay over the anterior surface. Although a very careful search was made by the two gentlemen who performed the *post mortem* and myself, we did not discover the supra-renal capsules. After several incisions in quest of them, I cut away all the fat and cellular tissue lying on the upper end and inner border of the kidneys, and sent it to a gentleman perfectly qualified to give an opinion on the subject. His report was that the capsules were not there. As these bodies are so easily found, it becomes a question as to whether they had undergone absorption in the present instance, or if, as was suggested by one gentleman, they had expanded into the glandular-looking masses incorporated with the fat. In this case the outer part of the capsule must have been thinned out to an extraordinary extent, as no distinct traces of it were

visible. The head was not examined. The spots had faded much since I last saw them, about thirty-three days previously, and seemed to have diminished in diameter; changes which may have been in great measure owing to dissolution, but which I think had clearly been going on for some time previously.

#### J. SILVER STAINING.

I need scarcely say that a slaty discoloration of the skin from the internal use of *nitrate* of silver has been repeatedly described. In the second volume of the *Journal of Cutaneous Medicine*, however, I narrated a case of this result from the use of the *oxide* of silver, a preparation considered by many practitioners to be quite innocuous in this respect.

The patient was the wife of a medical man since dead. Fifteen years before, after suffering much from a distressing irritability of the stomach and bowels, accompanied by a fearful pain in the colon, which generally began at the left end of the transverse portion, she was induced to take the iodo-bromine baths at Woodhall, in Lincolnshire. These had at first the effect of making her look as if she were sunburnt; by the time she had taken eighteen baths this tint had deepened to that of mahogany. Previously she had been very fair. The change of colour never passed off, even after many years. About six years before I reported the case, the oxide of silver was prescribed for the attacks spoken of, and gave very decided relief; but, at the lapse of every eight or ten weeks, she was always compelled by a return of the pain to resort again to this medicine, which was consequently taken at intervals for about four years and a half. By the time, however, that she had used it three years she began to notice a peculiar discoloration of the skin, which at first looked as if it were dirty, and gradually deepened, till now it shows, when seen in one light, of a purplish slate-colour, and in another like a mingling of french grey and plum-colour, with a lurid tinge intermixed. The neck and ears are also to a great extent discoloured in the same way. The skin of the top and front part of the head seems to me also similarly affected, but not to any great extent. Her hands are much darker than the natural hue of the skin, but still several stages lighter than the face and neck. Up to the time of taking the first notes of the case the hue seemed to be steadily deepening, but for the last three or four years it has appeared

stationary. The skin is not discoloured in any other part. The patient's pulse is usually under sixty, and always weak.

K. NÆVUS (*us, i, masc.*), from "*genere*, to beget, as in *gnavus*."

*Definition*.—An enlarged plexus of vessels, varying in size from a few slender threads to a patch covering a large surface. In more severe cases texture of vessels becomes spongy, and skin is irregularly uplifted. Often congenital.

*Treatment*.—The most valuable addition to the therapeutics of this complaint made of late years is, supposing always that the experience of others should confirm it, that by Mr. Hunt. He considers the nævus araneus to be constitutional, treats it with arsenic as he would lepra, and cures it. As it is always desirable to avoid an operation, Mr. Hunt's system should receive a fair trial. Should it fail, as I fear it will do, I would suggest gentle applications of the acid nitrate of mercury, washing off the acid with plenty of water so soon as it is evidently causing pain; or the plan advocated by Dr. Behrend, of Berlin. He applies strong acetic acid to the nævus, and after this employs compresses soaked in vinegar. "Under this treatment," we are told, "the blood is made to coagulate in the vessels, the nævus becomes hard and clear, and is thrown off in the form of a parchment-like layer by a process of exfoliation." Vaccination seems to have answered very well in some cases, the inflammation induced by it ending in a very firm cicatrix.

I have on more than one occasion tried a long course of arsenic for nævus, but cannot say that I have noticed any particular benefit from it. At the present time, however, there are two girls attending at St. John's Hospital, who have now taken this medicine,—one for upwards of two years, the other for about a year,—and in whom there is a sensible though slight change in the hue. The acid nitrate of mercury has been at the same time employed, so that I am uncertain to which agent the benefit, supposing it due to treatment at all, should be ascribed. The mother of the patient who has been longest under my care says there is a very decided improvement. Injecting should be practised with care, as death has followed.

Virchow recommends that every nævus showing any tendency to increase in size should be operated on at once; superficial ones of moderate size, seated on face and neck, to be extirpated; deep-

spreading ones, or those which are diffuse, and lie near large blood-vessels, to be treated with the needle or galvano-caustic apparatus.

#### L. MUCOUS TUBERCLE.

*Definition.*—A slowly-forming elevation of the mucous membrane. Small, conical; edges sloping off to the ordinary level of the membrane. Apparently encysted. Exuding a greyish mucus on puncture. Painless. Rare.

*Treatment.*—I have only had two cases of this affection under my care. In both the tumour was seated on the lower lip and on the upper part of its inner surface. In both cases, too, it was exactly in the centre. In the first instance, which I saw some years ago, I was rather puzzled as to the nature of the complaint. Subsequently I felt quite convinced that the opinion given by Mr. Wilson, that it was mucous tubercle, was correct. The patient was a young man of twenty-five. Before I saw him the tumour had been punctured and cauterized by two surgeons in succession without any diminution of it being effected. Mr. Wilson suggested caustic potass, but as, after a fair trial, no change took place in the swelling, I persuaded the patient to let me use the actual cautery, which he at once did. A skewer was bent about an inch from the point to a right angle, made red-hot, and then very gently applied. In a very short time the tumour began to shrink, and in the end levelled quite down. This was in 1868, and up to the present time I believe he has had no return. Two years later I learned that he had remained quite free. The other patient was a woman about forty years of age. I could neither induce her to let me apply the cautery nor to do it herself, and, after coming three or four times, she left dissatisfied on my telling her that medicines would never cure her.

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