probably lead to a rapid cure. In the third case, a middle-aged man suffers from dry, scaly, and very irritable patches about the flexor sides of the limbs. This is still eczema; but we learn that he has had similar patches on several previous occasions, and that he has had gout more than once. We know then that we have to treat chronic eczema in a gouty man, and we adapt our remedies to meet the case. In all these three instances, then, the name of the eruption is identical. In all three, we have to deal with eczema, but eczema of different kinds, and produced in very different ways. Merely, then, to pronounce a skin-affection to be eczema is, I maintain, but a *very imperfect diagnosis of the disease*. We are so apt to be deceived by a mere name! The diagnosis of any malady is only valuable in as far as it leads to correct treatment and prognosis, and any method that stops short of this is a very imperfect one. In other words, the etiology of a disease is in many cases inseparable from the diagnosis.

From what I have said, it will be inferred that I use the expression "history of a case" in a comprehensive sense, and include the following points, which all bear more or less on a full and complete diagnosis: (1) Age and sex of the patient; (2) Occupation or mode of life of the patient; (3) Past history; (4) Present condition.

With regard to (1) the age and sex of the patient, I would only remind you that certain skin-affections, like the diseases of other organs, are almost unknown at particular periods of life, and that some diseases are exclusively confined to one sex. For example, acne is not met with in babies, or syphilis in women. Tinea tonsurans of the scalp is an affection of children, and pityriasis versicolor of adults. True ichthyosis is a congenital affection, and therefore may be excluded when we have to deal with a disease making its first appearance in adult life. (2) With regard to occupation and mode of life, it will be sufficient to indicate that certain skin-affections are produced by particular occupations, and that others are common only amongst certain classes. (3) The past history includes both that of the *patient* and of the *eruptive* attack. The past history of the *attack* must be in many instances of primary importance. Thus, for example, we may have to deal with cases of urticaria, in which the visible effects on the skin are the same, but which spring from very different causes. One may be due to poisoning by shell-fish, another to a continued course of copaiba, a third to the irritation of pediculi, and a fourth may be purely an affection of the nerves. To be satisfied, then, with the mere name (urticaria) would be as unreasonable as it would be to treat all four cases in the same way. In order to arrive at the past history of the patient, it will often be advisable to draw our conclusions from indirect questions and observations. Thus, in investigating a suspected syphilitic eruption in a woman, the indirect method is almost always preferable. Often the nature or even the existence of the primary inoculation is unknown to the patient, while she is well aware of having suffered from ulcerated sore-throat, or nocturnal pains, or of having miscarried. But we are not always dependent on the statements of our patients in arriving at conclusions as to their past history. Scars are often left on the skin or about the fauces which are silently eloquent of former disease.

In stating that the general condition of health is inseparable from a comprehensive diagnosis of skin-affections, nothing more is intended than that diseases of the skin, like the diseases of other excreting organs (for example, the kidneys), are often associated with certain constitutional states or diatheses, and sometimes with special diseases of other organs; in other words, that the skin-affection, in many instances, cannot be regarded simply as an uncomplicated local malady. These remarks apply especially to such diseases as small-pox, chicken-pox, syphilis, and elephantiasis Græcorum, where the skin-affection is only a small part of the malady; but also in a less degree to such affections as eczema and psoriasis, which are so often associated with either a gouty or scrofulous diathesis. But, further, we often find skin-affections influenced by disease of particular organs. For example, not long ago, I had under my care in the Middlesex Hospital two severe cases of the pityriasis rubra of Hebra, associated with chronic albuminuria, and we remarked in both cases that when the condition of the skin improved for a time the albumen diminished, and *vice versa*; this occurred so many times that it would be impossible to regard it as an accidental coincidence. It is immaterial for the purpose of my illustration whether the temporary improvement in the action of the kidneys produced a change in the skin, or *vice versa*. The fact that some skin-diseases, such as scabies, are purely local, does not in any way disprove the truth of my proposition, that we must regard a pathological condition of the skin just as we should regard a pathological condition of any other organ of the body, and that without this our *diagnosis is incomplete*.

To sum up the foregoing remarks, we may lay down the following brief rules for our guidance in the examination of diseases of the skin.

1. Examine all parts of the body in which an eruption is present; 2.

Take a general view of the eruption regarded as a whole; 3. Separate it into its component parts, and distinguish what is the essence of the disease from what has been superadded; 4. Notice the tissues involved, and the presence or absence of infiltration, inflammation, etc.; 5. Notice the form or shape of the patches of eruption; 6. Observe the locality affected; 7. Investigate the subjective sensations of itching; 8. Ascertain the past and present history and general condition of the patient.

ON THE ACTION OF MEDICINES, OLD AND NEW.

By JOHN KENT SPENDER, M.D.Lond.,
Surgeon to the Mineral Water Hospital, Bath.

IV.

Succus Conii.—Towards the close of my last paper (BRITISH MEDICAL JOURNAL, July 24th, 1875), I directed attention to some preparations in the *Additions to the British Pharmacopœia* of 1867, and I spoke of the value of the juices, or *succi*, that had been lately introduced. It is remarkable how slowly some things win official acceptance. In 1864, Dr. Garrod wrote that these preparations (the *succi*) had been for some time in medical use; for the first time three were then made official, and two more were added in the Appendix. Five juices are the rather meagre resource which pharmacy has offered us in this department of the *Pharmacopœia*. Of more importance, however, than the penury of pharmaceutical skill is the official dosage, which in this case is certainly misleading. What sort of value, asked the late Dr. Anstie, can be attached to the statement that the *succus conii* may be given in doses of from thirty to sixty minims? It had been recognised for some years past that four or five drachms may be often given without the production of any marked physiological phenomenon; and even ounce-doses of this juice (prepared by a first-rate manufacturing druggist) have been administered without producing any recognisable effect whatever.

Conceding the possibility of a substance having important therapeutic powers and yet causing little physiological disturbance in the healthy human body, it is at least very unlikely that a fluid drachm-dose of any drug will be of much use if an ounce-dose can be taken with impunity. Now, it has been asserted that no poison, except prussic acid, excels conia in the subtlety and rapidity of its operation; and, when introduced into a vein, the fatal effect is almost instantaneous. Hence we can draw an approximative conclusion of the comparative inertness of the official preparations of conium. Dr. Stillé relates of Dr. Pliny Earle, that he took experimental doses of extract of conium in order to discover how much he could bear. Beginning with a grain three times a day, he gradually augmented the quantity until, on the fifteenth day, he took at each dose twenty-five grains. The effect was "such a fullness in the head as might be caused by a ligature around the neck, together with some vertigo". Forty-five grains on the following day caused a repetition of the same sensations, "with the addition of weakness and weariness of the knees and a vacillating gait". And John Hunter records that, in a case of phagedænic ulcer resulting from bubo, he administered extract of hemlock in doses gradually increased to two ounces and a half a day. Dr. Stillé justly remarks that the enormous doses of conium required to produce the effects described in Dr. Earle's experiments, render it certain that the preparation used by him was very feeble. In an early number of the *American Journal of Medical Science*, Dr. Fountain tells us of very different and even dangerous results from taking twelve grains of an extract prepared from the seeds at a temperature below the boiling-point.

It was Dr. Nelinan who first used or praised the *succus conii*; and, when the average dose recommended by so high an authority was only thirty minims, there may be an apology for the official standard being misleading. In my last paper, I gave the outlines of a case of violent "hysterical chorea", occurring in a married lady of forty-six or forty-seven years of age, so turbulent and exhausting as to induce some fears of the possible issue. Three ounces of hemlock-juice were consumed daily for several days with a very happy therapeutic effect; and I am now able to add that since this illness (in 1874) there has not been the slightest return of the malady. I may remark here that in the *United States Dispensatory* there are two preparations, called respectively the alcoholic extract of hemlock and the fluid extract of hemlock.

Hyoscyamia.—Considering that *hyoscyamia* has been lately proposed as a remedy for acute mania, it is rather remarkable that both Hippocrates and Dioscorides speak of large doses of henbane as capable of exciting delirium, which was compared to the delirium of drunkenness. The more valuable of the modern researches on the action of hyoscyamia begin with a contribution by Dr. Oulmont in the *Practi-*

tioner (January 1873); and in the same journal for July 1876 there is a paper by Dr. Robert Lawson on the therapeutic actions of the same alkaloid, discussing chiefly its effects in mental diseases. More recently still, Dr. Ringer has recorded an instance of acute mania treated with hyoscyamia, and its results compared with those of atropia and daturine; the conclusion being that, so far as the production of sleep is concerned, atropia and daturine do nearly as well as hyoscyamia. In my early days of practice (1853), I had under my care a case of acute mania in the person of a dissenting minister, above sixty years of age; his brain had been wrecked by a combination of worry and work. The noisy misery of this poor man is even now vividly before my eyes and ears; and to show the helplessness of therapeutic doctrine in those days, two of the best men I could get in consultation had nothing to propose but the administration of comparatively large and frequent doses of tartar emetic, with the object, I imagine, of forcibly beating down the rebellious nervous system. And very soon quenched in death that nervous system was. The blessings of recent therapeutic inquiry are shown in the new management of these fearful overthrows of brain-function; and to the practitioner of the present day delirium has lost half its terrors. Thirty years ago, delirium tremens was treated with opium, and sometimes more alcohol; and it was not very unusual for the patient to die suddenly in a state of poisoned collapse.

Eczema.—There is a tradition, not yet quite demolished, that grave neurotic and other maladies may be caused by the "retrocession" of certain diseases of the skin, principally of the eczematous group. For instance, a child who is suffering from rather severe eczema of the face and limbs has a feverish attack, and it is found that the eruption partially disappears from the skin; the moisture has dried and the irritation has subsided. When the fever leaves, the cutaneous symptoms recur; and it is possibly inferred that there has been a metastasis to internal organs. Hebra ridicules the theory in his own way, and points out that the abatement of the disease of the skin is caused by the anæmia of the integument which is the result of the febrile attack. Hebra adds that he only wishes that he could cure an eczema so suddenly and so easily! That there is an occasional neurotic element in eczema, as in other vesicular diseases of the skin, may be fairly conceded; for instances are on record in which a neuralgia and an eczema were interchangeable. But there seems no ground for the notion with which some medical men console their patients, that they had better bear their eczema in order to avert some serious internal disease.

In private and dispensary practice, I have seen during the last twenty years a vast deal of eczema, especially as it is seated on the lower limbs. Observation of one disease for so long a time brings to light some little points of pathology and treatment which cannot be learnt from books, even from the interesting monograph of Dr. McCall Anderson—*E libri nemo evasit artifex*. The principal text-books of diseases of the skin are silent about hygrometric conditions of the atmosphere, and their influence upon dermatotherapeutics. Yet this influence is not only most real, but is one of the keys to a prompt cure of our patients. Moist warm weather is adverse to the use of ointments, and often compels the application of lotions; while in cold dry weather ointments seldom disagree. But there are some skins, endowed with a special susceptibility, to which all greasy substances, however fresh and pure, are quasi-irritant poisons. However, here is the *crux* in the management of angry vesicular eruptions, that we cannot always tell beforehand what class of remedies will do most good, and most control abnormal tissue-growth. During the four hottest months, anything approaching to *eczema rubrum* ought to be treated with the assiduous application of the common black wash (*lotio hydrargyri nigra*), mixed with a tenth part by measure of glycerine. The application should be renewed three times in the course of twenty-four hours, and the dressing (lint or linen rag) soaked every time with warm water before removal. I discovered by chance the great utility of this method more than sixteen years ago; but I am not aware that it is recognised in any manual of cutaneous diseases. The late Dr. Hughes Bennett gave the very bad advice that wet applications to the skin should be covered with an impervious coat of gutta-percha or oiled silk; forgetting that the pent-up secretions would themselves be sufficient to cause an artificial eczema, and so the original malady might be perpetuated.

As a rule, the drier forms of eczema are quickly cured by the use of a lead ointment. There are several ointments of lead in the *Pharmacopæia*, and the *unguentum plumbi subacetatis compositum* is unquestionably the best. Mr. Balmanno Squire has devised an ingenious glycerole of subacetate of lead, based on the physiological action of glycerine on diseased epidermis. Mr. Wathen of Fishguard recommends strongly an ointment made with the liquor of subacetate of lead, some glycerine being rubbed into the lard before the liquor is added; and as much liquor should be added until the lard becomes

saturated and will not receive any more. In two or three cases, I have found Mr. Wathen's ointment very soothing, but I could not complete the cure with it. There seems, however, to be an entire freedom of risk from lead-poisoning. When the face is the seat of eczema, and there is much swelling around it, the inflammatory oedema should be first reduced by a lotion of oxide of zinc and calamine and lime-water, and then the so-called Kirkland's neutral cerate applied freely at night. A good formula for this cerate is to be found in Mr. Spencer Watson's work on *Diseases of the Nose and its Accessory Cavities*. I have found that the rather objectionable *puttiness* of this ointment may be got rid of by admixture of a little ointment of benzoated zinc. Both in Dr. Tilbury Fox's well-known work and in Dr. Liveing's *Treatment of Skin-Diseases* are some good prescriptions for lead ointment (see especially Dr. Liveing's Formula 83, *unguentum hydrargyri cum plumbo*).

I must not prolong my remarks on eczema; but I may add that it needs a practised eye to recognise the exact shade of this disease which is likely to be benefited by tar, and the strength of the ointment which should be used. As a rule, the drier the eczema the greater the probability that a successful treatment may be based upon tar externally and arsenic internally; for the quality of *dryness* means that all *exudation-process* has ceased, and that we have to deal with an *exudation-product*.

Mercury.—The ointment of mercury, or the old "blue ointment", has most undeservedly passed out of general use, except for the purpose of inunction. But, from twenty to twenty-three years ago, it was employed in some of the Irish hospitals as a local remedy for erysipelas, and was strongly recommended by Dr. James Hughes in the *Dublin Hospital Gazette* for May 15th, 1854. Without considerable caution, salivation may easily occur; but it is remarkable that a rapid improvement of local symptoms has been seen to follow salivation. I have notes of a case of erysipelas which happened in my practice in 1855. The wife of a tradesman, rather beyond middle age, of temperate habits, had general erysipelas of the face and scalp, with much fever. As the disease threatened to extend, I surrounded the neck with a collar (two inches wide) of mercurial ointment, and the application was kept up for quite two days. No redness or swelling appeared on the cardiac side of this boundary-line, and no mercurial intoxication marred the speedy cure of the patient. Dr. Hughes rather rashly covered the whole erysipelatous surface with the ointment, but flexile collodion (mixed with glycerine) is both more convenient and much less dangerous.

What a loss it is that popular, and even some professional, prejudice hinders the full rational employment of mercury. Trousseau describes a rheumatic inflammation now and then limited to a single joint; but there is a single arthritis of a severe kind in which there is no rheumatic pyrexia, and which is treated in a rapidly beneficial way by the administration of mercury in small and frequent doses. Take a case which has occurred to me within the last few days. The cook in a gentleman's family was seized at four o'clock one morning with a most agonising pain in the shoulder-joint, accompanied by some swelling. I saw the patient a few hours afterwards, and found all the local symptoms highly developed; the pulse was slightly quickened, but the thermometer was raised only half a degree. Iodide and acetate of potassium were given in a mixture, and two grains of blue pill with a little Dover's powder every two hours. After eight pills, a slight fetor was smelt in the breath, and they were at once suspended; but the relief of pain was very striking. The other medicines were continued for a short time longer, and the healthy mobility of the joint was quite restored within a week.

A mild "course" of mercury is often of great use in certain forms of chronic bronchitis in elderly people. There is just enough secretion to impede the free passage of air; there is a slight dusky hue of skin; a teasing cough; and often disturbed nights. Putting out of sight the remoter dangers of this state of things, it is clear that an embarrassed pulmonary circulation means delay in the general circulation, limited excretion, and imperfect tissue-change. Ultimately, therefore, bronchorrhœa not only impedes air reaching the blood, but impedes blood getting to the air. An occasional brisk aperient is most useful in counteracting this condition; but three grains of blue pill every night (with perhaps a little powdered digitalis and squill) go to the root of the mischief, and should be continued until the gums are in the slightest degree sore. Constitutional weakness or diathesis may, of course, forbid this treatment; and after the age of threescore and ten it is not to be thought of. Again, during the middle period of life, repeated catarrh in the chest may engender a spasmodic state of air-tubes, a quasi-asthma not very unlike the real disease, and sometimes leading up to it. It is very necessary to arrest this chronic inflammation before the *habit* of spasm is definitely fixed; and to this end no remedial plan

contributes so much as mercury administered carefully for a short time, provided that all other hygienic measures are steadily carried out. These points of practice were illustrated about twenty years ago by Dr. Theophilus Thompson, and more lately by Dr. Thorowgood.

The slightest suspicion of a "tubercular predisposition" would negative the propriety of any mercury being given internally. But I remember as a student the curiosity and wonder excited by Dr. Graves' mercurial treatment of acute miliary tubercle of the lungs, as related in his clinical lectures. Few disciples were so daring as the master; and it may be admitted that Dr. Graves' cases might have been grouped now under the head of syphilitic phthisis.*

Another grand therapeutic use of mercury is in the management of some superficial diseases of the skin. All itching papular eruptions may be beneficially treated with perchloride of mercury; arsenic is poison to them. Some varieties of lichen are more controllable by perchloride of mercury than by any other medicine; and the same drug often drives away chronic forms of urticaria. There are few therapeutic combinations more valuable than perchloride of mercury and colchicum, especially in that chronic eczema in which the neurotic element of irritation causes trouble; and, in relapsing pemphigus, arsenic and perchloride of mercury together will sometimes succeed when the former alone has failed.

I conclude this paper with the expression of a wish that some means could be found of disguising mercury as it appears in prescriptions. The fatal abbreviation *hydr.* tells its own tale. There seems no valid reason why the letter *h.*, or the chemical symbol *Hg.*, might not do medical duty, and prevent practitioners from being embarrassed by the inquisitiveness of their patients. An eclectic therapeutics will learn the true doctrine of all powerful medicines, when to give them and when to refrain; and the right use of mercury, as of venesection, is probably one of the severest tests of therapeutic skill.

BATH THERMAL MINERAL WATERS: THEIR USES AND ABUSES.

By A. B. BRABAZON, M.D.,
Physician to the Bath Mineral Water Hospital.

II.

Gout.—I now come to the consideration of the therapeutical powers of these mineral waters as regards gout. In considering the subject, I beg to be understood to refer to gout, only in its subacute or chronic form. Cases of acute gout rarely present themselves for treatment of this kind, though I have heard of *very* unfortunate consequences resulting to patients who, when suffering from acute gout, had been so foolish as to plunge into the thermal baths without previously asking or taking any proper advice. I also include in the category of gout cases of so-called "rheumatic gout".

The number of cases of gout submitted during the year ending May 1877 is comparatively small as compared with rheumatism. There were really ninety-seven cases discharged. For the sake of round numbers, I have taken eighty cases in the order of date of discharge. This number is made up of sixty-six males and fourteen females. The statistical tables are arranged in a similar manner to that adopted in rheumatism; and I will beg my readers to refer to these tables to enable them fully to understand any observations I may have to make. The total percentage of "cured" is not by any means so high in gout as in rheumatism, being in the proportion of 12.5 in the former to 22.1 in the latter. The highest average of "cured" is that among males between 20 and 40, being 24.2; but there is a remarkable diminution of percentage between 40 and 60, amounting then only to 3.2; thus showing the probabilities of cure, as far as immunity from pain and other symptoms may be called a cure, to be about eight times as great in the earlier double decade as in the later. Of females, there is but one discharged as cured, and that one over 60; but, as only two were discharged altogether over 60, we cannot strike a fair average. The total number of cases discharged as "much better" was fifty-eight: fifty-one males and seven females. I will here remark that the difference between the relative terms "cured" and "much better" is much less than is to be understood by the same terms as applied to rheumatism. I mean that, in gout, the "cured" may, in some instances, more probably be considered as "much better"; while, in rheumatism, the terms are much more absolutely distinct and appreciable. We find that twenty-five males were discharged "much better" between 20 and 40, and a similar

number between 40 and 60; this gives a percentage on the total discharged at these periods of 75.7 and 80.6 respectively. Why there should be a more favourable percentage at the later period of life, I cannot explain; but I will vouch for the fact. The percentage of results of treatment as regards females within the periods of life above mentioned is founded on a numerically small proportion of cases; but, taking into account the relative disproportion between the numbers of males and females treated—viz., sixty-six to fourteen—I think we may safely admit the percentages at these periods as equivalent to 66.6 and 44.4 respectively, showing a decided inferiority as to results of treatment as compared with those of the male sex. Under the head of "better", we find no males discharged under 40. From 40 to 60, inclusive, four males were discharged, giving a percentage of 12.9 on the total number of males discharged within this period; viz., thirty-one. On looking into the female statistics as regards the period between 20 and 40, we find one discharged "better" out of three cases; the percentage is 33.3; but I fear that the numbers are almost too low to enable us to draw perfectly reliable conclusions. Between 40 and 60, we may, I think, arrive at satisfactory results on sufficient ground, numerically speaking, and the percentage is 22.2. Thus it appears, regarding the period of life between 40 and 60, females apparently have considerably the advantage, in the proportion of 22.2 to 12.9. This statistical fact may be accounted for in one of two ways: either that really gout is more amenable to treatment in females than in males at this period of life: a fact which, I think, is controverted by the relative percentages under the term of "much better", or that the much larger number of males than females discharged under the heads of "cured" and "much better" leaves a comparatively small number to be accounted for under the terms "better" and "no better", and causes a small percentage accordingly. I myself incline to the latter opinion.

Finally, we arrive at those cases discharged "no better". We have but five cases to deal with—two males and three females—out of a total of eighty; making an average per cent. of 3.03 for males and 21.4 for females, the collective average being 6.2. Comparing this with the collective average per cent. of cases discharged "cured" and "much better"—viz., 12.5 and 72.5 respectively—there cannot be much room for doubt or scepticism as to the effect of the Bath mineral waters in gout, under proper conditions and under favourable circumstances.

It would be an act of presumption on my part to point out the well known complications and consequences of gout; their name is legion. I will venture so far as to say that much which I have said as to the conditions existing in rheumatism is equally applicable to its congener gout; but it should be remembered, in advising thermal baths, that the organic complications and consequences in the latter are, particularly as age advances, more serious than in the former: one is more likely to meet with arterial degeneration and consequent cerebral disease, or with fatty degeneration of the cardiac muscular tissue, or, again, with renal disease, all of which affections, according to degree, more or less affect the probabilities of improvement or the propriety of attempting treatment by thermal baths; but it should also be remembered that many cases in which hot baths might be injurious, or even dangerous, will be materially benefited by the internal administration of the "waters".

My own experience leads me fully to endorse the opinion recorded by Dr. Garrod, that mineral baths should be avoided where there is much structural disease of the heart or kidneys, or when an acute attack of gout is impending; and I think this remark is equally applicable to an impending subacute attack.

I will conclude these few observations by expressing my individual opinion that, as a general rule, the Bath mineral waters will be found more beneficial in cases of atonic gout, or where there is a somewhat debilitated habit of constitution, than in those of the sthenic or acute kind; though I do not mean to say that, under proper conditions, cases of either description will not derive benefit from their careful administration.

The influence of the baths upon the local conditions arising in gout depends, of course, on the degree and kind of these conditions. Thus joints which have been the objects of attack for the first or second time, in which perfect mobility may have been partially and temporarily interfered with, and in which all acute local symptoms have subsided, will, I have no doubt, regain their normal condition under such treatment. But, again, I do not believe that this or any other treatment will restore mobility to joints which have been the seat of disease for a lengthened time, and in which cartilages, synovial membrane, ligamentous structure, and the sheaths of the tendons around these joints, have become the seat of gouty deposits in the concrete form of urate of soda; but, even in these unhappy conditions, the element of pain is to be taken into account, and great relief may be expected from the use of the waters. Between the extreme cases which I have attempted

* A recent monograph by Dr. Charteris affords a clue to the more hopeful treatment of "acute phthisis".