THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXXIII.   THURSDAY, NOVEMBER 16, 1865.

No. 16.

PSORIASIS.

[Read before the Boston Society for Medical Observation, and communicated for the Boston Medical and Surgical Journal.]

BY JAMES C. WHITE, M.D.

THIS is a disease characterized by such marked peculiarities that it seems hardly possible that confusion should ever have arisen with regard to it, and yet we find that in consequence of the tendency which has prevailed among writers of all nations upon cutaneous diseases, both ancient and modern, to study their superficial appearances alone, without regard to their pathology, it has been not only confounded with other affections, but described as two distinct diseases, even down to the present day. Hippocrates and Galen seem to have used the term Psoriasis, in common with Lepra, Alphos and Lichen, to designate any squamous disease, although the Arabian physicians applied the former term to a much more serious affection. By Celsus it was called Impetigo. In the middle ages, and down to the days of Willan, it was customary to describe any particularly obstinate and extensive disease of the skin as a species of Lepra. That author, however, first recognized and described the real nature of the disease we are considering, although he committed the unfortunate error of dividing it into two separate affections, calling that form characterized by circular spots Lepra (in deference to the opinion of Paul of Ægina), and the other, in which the patches are of irregular shape, Psoriasis, to distinguish it from Scabies, to which the term Psora was also attached. It is evident, however, that under this last-named title he also included certain morbid conditions of the skin, which, although scaly, were in no way connected with the disease in question, such as the so-called Pityriasis rubra and chronic Eczema, and this mistake has led to endless confusion among nearly all dermatologists to this day. Among the French, Bielt, Rayer, Cazenave, Gibert, and Devergie have accepted his nomenclature and treated of Psoriasis under two heads, although Alibert, and lately Hardy and Bazin, have maintained that the two diseases are one and the same, and that the word Lepra should be reserved for the frightful disease it first represented. In England, also, even in Willan's day, objection

VOL. LXXIII.—No. 16

was made to this arbitrary and unwarranted division, although the later writers, with few exceptions, have followed the same unphilosophical course. Wilson has hitherto adopted a similar classification, using the word *Lepra* to signify the pathological processes we are considering, and attaching a very indefinite meaning to the term *Psoriasis*, but still continuing to use it in this sense, although apparently convinced of the impropriety of so doing. In the preface to his last edition, however, which was evidently written after the volume was in press, and after he had fallen under the powerful personal influence of one who has always endeavored to simplify both the classification and treatment of skin diseases, and to whose teachings, also, I am largely indebted for the history and description of this affection, we find the following in relation to this subject, which is entirely at variance with the opinions expressed in the book itself:—

“Those who have honored me by perusing my writings and following my inquiries, may not have noted the difficulty which I have experienced in dealing with the word ‘psoriasis.’ To clear away, therefore, the confusion occasioned by the misuse of this term, I recommended its abolition, or, at the least, its application solely to the chronic eczema above noted. But it may very properly be asked, Why call eczema by any other name than its own? I can only answer, that I have done so heretofore in deference to authority, and to a widely-spread custom. Perhaps the moment has come, and I hope it has, when a better, and possibly the proper use of the term may be recognized.

“To return to *Hebra*. The term *Lepra—der Aussatz* in German—signifies the eruption, the great eruption. It is synonymous with Leprosy, the leprosy, the ancient leprosy, that which has since been called elephantiasis. Therefore let us bestow the term *lepra* where it rightfully belongs, or reject it altogether. The trivial affection which we at present call *lepra* has no single point of comparison with leprosy. We cannot but admit the truth of this argument, and we cannot, also, but recognize in an instant the monstrous absurdity of calling a comparatively insignificant disease by so portentous a name.

“Now, *Hebra* cuts the Gordian knot. Eczema he calls eczema; *lepra*, *lepra*; and that very common affection which we at present term *lepra*, he calls *psoriasis*. The change is simple, the reasons for it important. We cannot do better than adopt it. Moreover, it suits the spirit of the British bull-dog to call things by their proper names, and we are too noble in our nature not to recognize and value the intellect of our foreign brethren. The great International Exhibition of 1862 will not have existed in vain, if it have accomplished no more than to enable us to give the proper name to a very common and troublesome disease.”

Within a few months, however, he has published a new work on skin diseases, called the “Student’s Book of Cutaneous Medicine,” in which he retains the name *Psoriasis* for a form of chronic Eczema, but calls *Psoriasis*, his former *Lepra*, *Alphos*.

The modern German dermatologists, as Fuchs, Simon and Bärensprung, have always insisted upon the unity of the forms described

as Psoriasis and Lepra, and Hebra, as early as 1841, explained the way in which the circular form, supposed to be characteristic of Lepra, was developed in the course of Psoriasis, simply by the peculiar grouping and retrogression of the eruption upon certain portions of the body.

Description and Course.—The characteristic appearances of Psoriasis are briefly these:—Isolated conglomerations of dry, silvery-white, imbricated scales, mostly round or in the form of curves or sections of circles, varying in size from a minute point to a silver dollar, or larger, and situated upon slightly elevated bases of the same form and of a deep red or coppery hue, resembling that considered to be peculiar to syphilitic eruptions. The scales, though adherent, are readily removed by the nails, and leave surfaces exposed, which bleed easily from minute points. The skin between the points or patches of eruption is in every way normal. Such are the appearances which meet our eye at first sight in all cases of Psoriasis, and in no other cutaneous affection is there the same uniformity of course and history, although if we were to take into consideration the many varieties or species which are described by certain authors, a student might indeed consider it difficult of recognition.

We cannot too strongly insist upon the folly of this fashion of dividing one simple disease into many varieties, according to the particular form it may assume at various stages of its progress. It is the chief cause of the imaginary difficulties which surround the study of this important branch of medicine, and only gives rise to confusion. Each new writer seems to think it his duty to invent new names for new varieties, instead of directing his efforts, where they are most needed, towards advance in etiology and treatment, apparently ignorant of the great truth that perfection in all classification is simplicity. Under this disease, for instance, we hear of Psoriasis punctata, guttata, alphoides, nummularis, scutellata, orbicularis, annulata, circinata, vulgaris, gyrata, circumscripta, diffusa, confluens, discoidea, centrifuga, imbricata, figurata, inveterata, and so on indefinitely. Now it would be quite as sensible to take a photographic picture of every individual case and label it according to the surname of the patient as a distinct variety, as to make use of the above system of nomenclature. There were never two cases of Psoriasis exactly alike, and in every case we may find several of the appearances present at the same time, which have been described as separate varieties, or else succeeding each other, so that we neither know which of the names is the most appropriate, nor but that our choice to-day may be a misnomer to-morrow.

In the beginning we notice minute points, isolated, slightly elevated above the surface of the skin, of a dull red, coppery or brick color, generally situated about the hair-follicles, or little prominences tipped with a shining white cap, which are epithelial cells, and which,

if removed, exhibit hyperæmic bases. They may be distributed over every part of the body, spreading from several points as centres, and appear in rapid succession. The eruption looks very like drops of candle-grease stiffened upon the skin, or as if the patient had been spattered with mortar or plaster. We have now before us the stage called by authors *P. punctata* or *guttata*, according to the size of the individual spots. The disease, however, does not stop here. Fresh points appear continually and increase in size, as do those which preceded them. If, however, this process went on unchecked, it is apparent we should have the whole surface of the skin completely hidden in time, either by the peripheral growth of the older or by the occurrence of new eruptions, so that the disease could eventually increase only in thickness. Such a state, however, is never seen; there always remain interspaces of healthy skin. After attaining a size varying from that of a dime to that of a half-dollar, their growth often ceases, and they may remain in this condition weeks or months unchanged, if left to themselves. (*P. circumscripta*, *nummularis*.) The first retrogressive step shows itself at the point where the disease is oldest, that is at the centre of the patch. There the white epithelial scales become thinner and fall off, leaving the skin of a reddish tinge. The scales, however, still remain upon the raised periphery, which presents bold and prominent edges. (*P. scutellata*.) If the disease continue to yield, the redness finally disappears from the centre, and we then have healthy skin covered with circles of greater or less circumference of elevated scales. (*P. vulgaris*, *annulata*, *orbicularis* of Wilson and Willan.) Then the rings begin to break away at some point, or by spreading peripherally run into contiguous patches, which are undergoing the same metamorphosis, and disappear at such points of contact according to a general law in such cases. In this way we may have all sorts of shapes pictured out on the skin, circles and their segments, tortuous, geographical and astronomical outlines of endless variety. These also increase in size peripherally, and remind one of the sweeping and ever-changing march of the ignited carbon on the chimney-wall. (This is *P. gyrata*, *figurata*, and so forth.) Finally, they may become smaller day by day, and disappear entirely. In other cases, however, the efflorescences continue to increase peripherally without fading in the centre, and melt into each other, giving rise to large patches of diseased skin of very irregular shape and size, almost covering large portions of the body. When existing for a long time, the cutis beneath the patches undergoes changes, which in time produce new appearances. The papillæ become enlarged by infiltration, and generate scales of great toughness with surprising rapidity. The skin becomes dry, harsh, thickened and fissured with cracks, so that at times the motion of the joints is very painful. When scratched off the scales are rapidly formed again, and the operation is always followed by excoriations and bleeding. (*P. diffusa*, *inveterata*.)

At times the fresh eruption of Psoriasis has the appearance of true vesicles, so that some authorities state that it is sometimes a vesicular disease. The quantity of fluid, however, collected beneath the epidermis is very slight, too little, in fact, to deserve the name. With this exception, the eruption of Psoriasis is as we have described it in all its stages. We never see any formation of crusts, of pus, of scars, or of pigment deposit, nor the pustules and ulceration which accompany those forms of syphilis that resemble it somewhat in other respects.

Psoriasis is, unfortunately, a true chronic disease, lasting for months, years, or a whole life-time. Under proper treatment it may be made to disappear and leave no trace behind, and the patient may remain free from it for months, or two, three or even ten years, but it is sure to return, and generally with increased vitality. Whatever means we may employ, or however rapid and perfect the temporary cure, it seldom fails to repeat itself at irregular intervals through a life-time, however long.

Anatomy.—Minute anatomy throws but little light upon the pathology of psoriasis. If we examine a perpendicular section of one of the efflorescences, we find merely laminated masses of epithelial cells, and below them the papillary structure of the cutis, upon which they rest, in its normal condition. The red color and elevation of their base vanish completely after death, leaving nothing but scarcely noticeable collections of dry scales; and all we know of its real nature is what we have learned by external observation, viz., that Psoriasis is a circumscribed, excessive formation and collection of epidermal cells situated upon hyperæmic papillæ.

Seat.—Although in the majority of cases this disease first shows itself by a general sprinkling of the peculiar points of eruption over the whole body, yet in other cases it not only begins at certain points, but manifests itself nowhere else. These favorite and long-cherished positions are the elbows and knees. It likewise finds a convenient lurking place upon the head, not confining itself, however, to the hairy portions of the scalp, but revealing its presence by an ugly red border upon the forehead, ears and neck. In these cases the hairs generally remain unaffected, both in color and moisture, although they occasionally fall. It is rare, however, that the disease confines itself to this or any locality, although several varieties are described according to the particular portion of the body affected. There is, in fact, but one part of the external surface which is entirely exempt from its manifestations, and that is the lips, although Willan mentions a *P. labiorum*. Upon the palms of the hands and soles of the feet also it very rarely shows itself, whereas these localities are peculiarly the seat of syphilitic eruptions, which from their anatomical nature exhibit appearances so like Psoriasis as to be called *P. palmaris syphilitica*. When confined to these parts alone, we may be almost sure that we have syphilis and not Psoriasis be-

VOL. LXXIII.—No. 16*

fore us. When we consider the intimate anatomical relations between the epidermis and the tissue of the nails, we should expect them to share in the changes which the former undergoes in this affection, and we find, accordingly, that upon some of the fingers and toes they become thick, lustreless, uneven, yellow or brown, and jagged at their free extremities. In some instances, even before the nail is affected, and while still transparent, we notice the well-known points of efflorescence forming beneath it, upon the matrix itself, that occur upon other portions of the skin. Some authors state that the eruption affects the extensor in preference to the flexor faces of the limbs, but careful observations directed to this point in a very numerous series of cases would seem to show no foundation for this common belief.

The *subjective* symptoms which accompany the external manifestations hitherto described are not of much importance. It has often been said that Psoriasis gives rise to no itching, but this is not the case. Compared with that which accompanies Eczema, Prurigo and other cutaneous affections, it is indeed slight, but every case is attended by a greater or less degree of it, generally in proportion to the amount of fresh efflorescence, and sometimes, in the beginning of the disease, of sufficient severity to deprive the patient of sleep. In these cases we often find in place of, or mingled with the silvery-white scales, brown or black crusts of dried blood produced by scratching, but in the non-progressive or retrogressive stages this symptom is scarcely at all troublesome. It not unfrequently happens, moreover, that some degree of inflexibility of the limbs arises in consequence of the stiffness of the skin around the elbows and knees, or that the motions of the hands and feet are interfered with from the same cause, although the great majority of so-called cases of Psoriasis of the hands are simply chronic Eczema. An occasional complication, also, is a slight degree of neuralgia in the fingers and toes, and in old cases of indigestion, but as a rule Psoriasis affects persons in sound health, and may remain by them through life without interfering with any functions of the body.

Etiology.—We know almost nothing of the causes of Psoriasis. It attacks persons of the most robust health and best constitution, and accompanies them through life, with intermissions, uninfluenced by the many changes of their outward circumstances. Should they, however, undergo any long or serious illness, the affection disappears, like a false friend, for the time, returning as soon as health and strength are restored. It is seldom seen upon individuals affected with any other chronic disease. Prof. Hebra has known of but one instance of its occurrence with tuberculosis. It rarely appears before the age of six, and in the majority of cases first shows itself between the ages of 15 and 30. Sex, station, mode of life and temperament are alike without influence over it, and it is found all over the world. As far back as medical history goes, we read accounts

of it, and it formed one of the kinds of Leprosy mentioned in the Bible. The time of the year is also powerless over the changes it assumes, and the same may be said of the use of alcoholic drink upon its production, for, as we have seen, it is as common in the female as in the male sex. It is not contagious, but is in the majority of instances hereditary, not unfrequently jumping one generation and appearing in the following. So many and varied are the causes, however, which have been assigned for its production by dermatologists, that the mere cataloguing of them renders the whole list a necessary absurdity. Among these the only ones which from the reputation of their authors deserve any consideration, are those of Hardy and Bazin, of Paris, and Wilson, of London. The former, like the French school in general, start with the preconceived and entirely arbitrary view, that there can be no pathological process without a diathesis, which is Greek for the old "humoral" theory. Accordingly they recognize, among others, a diathesis dartreuse or herpetic, which manifests itself upon the skin, they say, by lesions differing in their elements, not contagious, often hereditary, reproducing themselves in a nearly constant manner, accompanied by itching as their principal symptom, disposed to spread, chronic in their course, and healing without scars, though sometimes attended by ulceration. In this class they include Lichen, Eczema, Psoriasis and Pityriasis. Eczema is a moist dartre, Psoriasis is a dry dartre. Now it is perfectly proper to invent a general name in an artificial system of classification, and to group under it as many affections as their common appearances will allow, but it should always be remembered that such systems are founded upon resemblances and not upon affinity in anatomy or pathology. Such systems may perhaps be excusable on the ground of convenience, however unscientific, but they should never be allowed to influence us in our consideration of the real nature of the diseases included under them. We have no evidence of the existence of any such so-called vice of the economy as the dartreuso. We might invent twenty imaginary diatheses, and no one could prove their impossibility, but it is entirely unphilosophical to apply an arbitrary name to a group of distinct pathological manifestations, and then explain their occurrence by the very ideal cause of our own creation. Bazin goes still farther, and to the scrofulous, syphilitic and dartreuse he adds a hypothetical *arthritic* diathesis, which with him plays an equally important rôle with the dartreuse in the production of cutaneous affections, so that instead of one Eczema and one Psoriasis we now find well-marked forms of each described under separate divisions in his recent work. Processes such as rheumatism and gout being well known, we may attach some meaning to the so-called arthritic diathesis, although there is no possible connection between them and Psoriasis, but we are not the fortunate possessor of a physical sense which recognizes the existence of a Dartre. As to the opinion expressed by Mr.

Wilson that the leprous poison is in its essence and origin syphilitic, modified by transmission through several generations, we hardly know what to say, except that not a shadow of proof exists for such a statement, which might not be as well applied to every affection to which our flesh is heir. Indeed, we could hardly select a disease to which this unphilosophical style of reasoning would be less appropriate than to Psoriasis, for not only does it by preference affect those in the most robust health, and first manifest itself at an age far more advanced than that in which hereditary syphilitic forms of all descriptions show themselves, but it is entirely unaffected by such remedies as are found to be most effectual against the spread of the latter, and may exist for years without producing the slightest degree of cachexia. Nor should it be forgotten that both the so-called primary and secondary forms of syphilis may run their course at the same time with Psoriasis without affecting the development of the latter in the least.

Prognosis.—We have already seen that the appearances presented by the disease change from day to day as the old patches run their course, and as new eruptions come out and imitate their example. These changes are of value in forming our prognosis, and should be watched accordingly. When upon an individual suffering from Psoriasis we find the large and irregular patches merely without any minute and fresh points of eruption, we may be sure that he will soon be free from his trouble. If, however, we see signs of recent activity, even when mixed with the old forms, such as *P. gyrata* or *figurata*, we may surely predict a longer continuance of his difficulty. Therefore when we have a case to treat, and find the larger patches rapidly disappearing under our efforts, we shall deceive both ourselves and patient with false hopes if we prophesy a speedy cure, unless the fresh eruption disappears in the same degree, and is prevented from showing itself anew. It can never be predicted, however, when a relapse will occur, how long it will continue, or how long after its disappearance the patient will remain free from its attacks. Cases of general Psoriasis, when the efflorescences are separated by minute portions only of healthy skin, are often very obstinate, if not incurable. It should be remembered, also, that cases of apparently mild character may all at once assume great activity and change into the worst known forms.

Treatment.—The innumerable host of remedies recommended in the treatment of Psoriasis from ages past down to the present time, illustrates better than anything its obstinacy and incurability. For us it will be enough to consider here only those which are most in use at the present day, and which are advised by the highest authorities. They may be divided into the internal and local, but before considering these in detail, we wish to say a few words in relation to the old and generally-received opinion regarding the absolute necessity of some kind of internal treatment in all diseases of the skin.

This no doubt originated in the humoral pathology of former days, which still finds expression in the popular belief that such diseases should not be "driven in" or allowed to "strike in." Without intending to deny that many constitutional diseases may exhibit themselves in some manner by sympathetic cutaneous symptoms, we maintain that the skin in itself is a great and complex organ, and is as liable as the lungs, liver and kidneys to individual diseases, and moreover that the results of *local* treatment prove that it is a fallacy to believe that skin diseases are merely indications of some deeper-seated malady or blood-change, requiring accordingly constitutional remedies. We believe that it is in rare instances only that the ordinary chronic affections of the skin stand in any relation to the general health that we can distinctly recognize. In this connection we would introduce an extract from the latter part of the preface of the last edition of Wilson, a writer who has always insisted upon the necessity of constitutional treatment:—

"That certain diseases obviously proceed from a local cause, and are in their essence local diseases, and independent of constitutional influence, is a truth which has been strongly impressed upon us by the celebrated dermatologist of Vienna, HEBRA. Many cutaneous diseases which in this country, and with our humoral tendencies, we should be led to treat by constitutional as well as by local means, Professor Hebra would treat by local means alone, and the great success of his treatment leads us to inquire at what point between the two extremes the truth lies concealed. I believe that our lesson will be best learned by devoting more attention than heretofore to local treatment; and not less to constitutional treatment. The great excellence of the treatment of disease in England depends upon the proper appreciation of its almost universal constitutional origin. During his late stay in London, Professor Hebra honored me with his presence in my consulting-room on several occasions, and has left on my mind an ineffaceable impression of his rapid and sound diagnosis, and his extraordinary tact in the local management of cutaneous diseases. He is too sound a physician to reject constitutional means; but he declares that they are much less needful than is believed by us, and that a very considerable number of diseases are local in their nature, and may be perfectly cured by local remedies."

We should remember, moreover, that in the same degree with which the skin is disposed to the reception of contagions and virus of various kinds, with the same facility will it admit the entrance into the general economy of remedies. The celerity of the inunction cure in syphilis, the black stools and urine after the general application of tar compounds, and the easy chemical recognition of iodine in the secretions after its external use, are familiar examples of this truth. Local treatment also enables us to bring in direct contact with the diseased tissues the substances we wish to employ, and to study directly the changes they effect, while it leaves the stomach and intestinal canal to perform their important functions in peace.

Among the *internal* remedies, arsenic enjoys the highest reputation in this, as well as in most other chronic diseases of the skin. It possesses the power of causing the eruption to disappear in the majority of cases, although a long period of time is generally necessary to effect this. The objections to its use are this slowness of action and the specific toxicological symptoms which sometimes follow its most carefully watched employment. It should be administered upon a full stomach, and rather during the meal itself than before or after it. The preparations which are employed are Fowler's solution (arsenite of potash), Pearson's solution (arsenite of soda), Donovan's solution (containing arsenic, mercury and iodine), and the Asiatic pills (arsenious acid and pepper). The first of these, which contains about one grain in seventy drops, is used by Prof. Hebra in the following manner: six drops are given before meals and increased by one drop every second day, unless counter-indicated, until twelve drops are reached. This will generally produce some action upon the eruption. The quantity of scales upon the patches are diminished, the red color of the spots becomes paler or is changed to brown, and the itching subsides. In case no improvement is noticed, the dose must be increased at intervals of four days until twenty drops are reached, or, if this is insufficient, even up to thirty drops (one third of a grain of arsenic). At whatever point improvement is noticed, we should continue at that dose until the red spots have either entirely disappeared or have become brown, or until all fresh appearances have ceased. After this the dose may be gradually diminished to the quantity started with. Prof. Hebra has employed it thus for many months, often exceeding two thousand drops, without seeing any evil results follow. Pearson's solution is given in doses of fifteen drops, and has the advantage of a simple composition, and of being very easily borne. The Asiatic pills, containing .08 of a grain, are also a convenient form of administering arsenic. Generally three during the day are sufficient, but in obstinate cases Hebra has increased this number to twelve, or 0.9 of a grain, and has continued their use till 2000 have been taken, a number which represents 160 grains of arsenious acid. The largest experience teaches that whichever of these forms is employed the same results are obtained, namely: the probable disappearance after an indefinite time of the efflorescences, but with all of them, even when administered in their largest doses, new patches may appear at the very time the older ones are vanishing. However completely the disease may appear to yield to them, it will return.

Formerly tincture of cantharides was much used, and is even now recommended by Hardy. It is to be given in increasing doses until its specific effect is produced upon the kidneys. If as many as thirty drops are given daily, strangury is produced, and the urine becomes albuminous and bloody. In the thorough trial given to this

remedy in the Vienna clinic, these were the only results obtained. It had no effect whatever upon the Psoriasis. In no case did it act as an aphrodisiac.

Antimony, iodine, lead, mercury, baryta, tar, copaiba and many other substances have been tried and found useless. The continued use of laxative medicine will cause the eruption to disappear for a time, as it will that of many cutaneous affections, including the syphilitic, and it is on this account that the mineral waters are advised in this disease. The cure, however, is but temporary, lasting only as long as the exhibition of the saline cathartics is continued.

External.—We have seen, then, that we may not cure Psoriasis by any form of internal treatment whatever; we may only banish it for an uncertain period, at the end of which it returns with all its old vigor. We have seen, too, that arsenic is the only internal remedy capable of accomplishing even thus much. Let us now see what and how much we may effect by the use of topical applications. Starting with the theory that the disease is an abnormal development of the epidermis, we would naturally call to our assistance such substances as hasten the separation of the old and the formation of new and healthy epidermal cells; the same set of remedies, in fact, that we find so useful for similar purposes in other chronic affections, as Eczema, Prurigo, &c. These are water, alkaline soaps, tar and sulphur preparations.

Baths of all kinds *help* us on a little in conjunction with the applications about to be mentioned, but they must be used thoroughly. It makes but little difference about their temperature or chemical nature, if we avoid those which excite an eczematous condition of the skin. In Louèche, Switzerland, there are natural baths, which persons with Psoriasis frequent. At the end of the season, after having spent two hours of every day in their waters, they go home with fair skins, but the relief is temporary, and spring generally finds them spotted once more and waiting for the opening of the fountains. Prof. Hebra has recently invented a so-called continual bath for the treatment of extensive burns of the skin, and patients with this disease were kept in the same for more than one hundred days, and with very little effect upon it.

The well-known action of alkalies upon the skin would naturally suggest the use of soap in Psoriasis for the purpose of washing off the collection of effete epidermal cells, and we find that very good results may be obtained if we make use of the proper kinds. Those made of soda are almost inert, but those in which potash is used as a base exert a very powerful solvent action upon the epidermis. It is on this account that *sapo viridis*, or *schmier seife*, is used so commonly in Germany in this affection. This substance is made in various parts of that country, and its formula may be approximately expressed by caustic potash, solution of s. g. 1.33, one part, whale oil two parts. Good specimens are not always obtainable, nor is it

easy to manufacture it properly in the laboratory. It is somewhat thicker than honey, of an olive-green or brown color, of uniform consistence, and sharply alkaline, though not caustic taste, without solid ingredients when rubbed between the fingers, has no rancid odor, and is entirely dissolved by alcohol. In cases where the disease is confined to certain portions of the body, it will be enough to rub such twice a day with the soap, and, if necessary, to make cold-water applications subsequently to prevent excoriations. In cases where it is of long standing and affects the whole body, it is better not to wash away the soap, but, after applying it thoroughly, to put the patient to bed wrapped in blankets. It may be applied also as a fomentation, by spreading it thickly upon a piece of flannel, and binding this upon the affected parts. In this way we may treat a patient who desires to continue about his business, or who is unwilling to remain in bed. The cloths should be freshly smeared every night, and then bound on again. After twelve applications morning and evening, or after the bandages have been worn six days, we give the patient a day of grace for the purpose of healing any excoriations that may arise in consequence of the treatment, and to see if a healthy epidermis will take the place of the former scales. Some persons will not endure so long a course as this, and certain portions of the body should always be avoided by the bandages, on account of the eczema and stiffening produced by the undue application of the soap to such parts. The patient, therefore, should be carefully watched from day to day, and when this is impossible Prof. Hebra advises that the diseased patches should be rubbed with the soap morning and evening, or to make use of the bandages freshly smeared on the first three days of the week, and to leave them unchanged during the last three. If at the end of our six days' labor we have not fully accomplished our object, we must repeat the process on the following week. *Schmier seife* is particularly valuable in this disease, however, for the removal of the masses of epidermal cells which protect the tissues at fault preparatory to the employment of other remedies, or in conjunction with them. It is more efficacious in Psoriasis of the scalp than in any other form, and generally will cause its disappearance in a short time. A more convenient way of applying it is to make a strong solution in alcohol, two parts of the soap to one of spirit, to which a perfume may be added if desired, and which is an extremely useful agent in many cutaneous affections.

The use of tar in cutaneous diseases was known in the days of Pliny and Theophrastus, but was forgotten for centuries, to be resumed in our time as one of the most valuable remedies in the treatment of these affections. It is, as is well known, an empyreumatic oil obtained by dry distillation from various woods, of which the following forms are those principally used in medicine:—*Ol. cadinum*, from *juniperus oxycedrus* of Southern Europe, *ol. fagi* from

the white and red beech, *ol. rusci* or *ol. betulæ* from the bark of the birch, and the common tar of the Southern pine. They all possess nearly the same penetrating odor and dark color, and their action upon the skin is likewise uniform. The *ol. rusci*, however, possesses the advantage of a more agreeable odor than the others, it being the source of the pleasant smell of Russia leather. They may all be used alone or in combination with lard, glycerine, soap or alcohol. Although these preparations may be generally used upon limited portions of the skin with no unpleasant effect, patients are occasionally met with in whom a single application produces a redness and swelling, which terminates in true erysipelas. Again, there are those who bear the application well for a time, but upon whom an inflammation of the hair-follicles, a specific tar acne, is finally developed. Should large portions of the body, however, be rubbed simultaneously with them, quite a different series of symptoms is produced. In a space varying from half an hour to three or six hours, vomiting of a black fluid ensues, or black fæces and urine, nearly the color of ink, are passed, which have a strong tarry odor, and leave no doubt that these substances have entered the circulation. Accompanying these appearances other symptoms, such as fever, nausea, constriction of the head, appear, but they are not of long duration, and never cause serious trouble. When used in this affection, they should be applied with a small brush every evening to the parts diseased for several days, and then omitted for a few, till the crust formed by their application falls off, when they are to be resumed. Better progress will be made, however, if we combine *schmier seife* with the tar. First give the patient a warm bath, then rub the skin with the soap, and after its removal apply the oil of cade. We may in some cases mix the two substances with advantage, as in the following recipe:—*Sapon. virid., ol. cadini, aa* ʒ i.; alcohol, ʒ ij. M. This is to be applied after a bath every evening. The tar which accumulates upon the skin should be removed every few days by the means of oil and soap.

In cases where we cannot make use of either of the above remedies, an ointment of either proto- or deut-iodide of mercury, of the first a scruple, of the second ten grains to the ounce of fat, may be employed. It may under certain circumstances be desirable to remove the diseased patches, from the face, for instance, without delay. This may be done by applying a solution of corrosive sublimate, five grains to the ounce of alcohol, by which the epidermis is rapidly removed, leaving the skin fair beneath the blistered surface. The effect, however, lasts but a short time, and the operation is a painful one.

Vlemineckx Solution.—Lately a new remedy has been introduced in the treatment of Psoriasis, which is far more valuable than any of those hitherto mentioned: namely, the so-called Vlemineckx solution. It is prepared by boiling two parts flowers of sulphur with

VOL. LXXIII.—No. 16A

one part caustic lime in twenty parts water down to twelve parts, when it is filtered, and we have a bright orange-colored, bad-smelling liquid. Its only disadvantage is its nauseous odor, which can be effectually hidden by the addition of a little oil of bergamot, but its curative action is so evident that the most delicate lady does not object to its use. Every portion of the skin affected is to be rubbed energetically with a flannel wetted with the preparation till the masses of epidermis are removed, and a slight bleeding shows that the deepest portions of the cuticle are reached, and the papillæ laid bare. The patient is then to be placed in a warm bath, where he remains an hour. The skin is then to be washed with simple cold water to remove the sulphur, and to be rubbed with some fatty substance or a weak tincture of cadc, by which all unpleasant symptoms and sensations are prevented. This is to be repeated every night until the disease is removed.

We may conclude, therefore, that Psoriasis is a disease which we are entirely unable to cure radically, either by internal or external treatment. We may by the long-continued use of arsenic drive it away. We may produce the same effect by local applications in a short time. The cure is the same in both; is as permanent in the one case as in the other. It may perhaps be advantageous to combine both methods in some particularly obstinate cases, but as a rule the local measures may be considered far superior to arsenic in point of rapidity of action, and never produce any injurious effects.

SEWERS AND THEIR EVILS.

THE immense extent of the London system of sewerage probably converts the sewers into one enormous cess-pool. It was, of course, the decomposition of the animal excrements which gave rise to the dangerous vapors issuing from the cess-pools. Now, if these excrements are allowed, in consequence of the length of the sewers through which they now have to pass, to decompose, as they decomposed in the ancient cess-pools, why should not the vapors and gases arising from the decomposition in the sewers produce as noxious effects as they produced when they escaped from the cess-pools? We some years ago suggested this question, Whether our present system of sewage would not become one enormous cess-pool; and whether some special provision ought not to be made for the escape, by high shafts, or neutralization of the products of decomposition. If it be true that the contents of our sewers in London undergo decomposition just as they underwent decomposition in the old cess-pools, surely it was something akin to madness to set loose all the products of the decomposition at our very doors and under our very noses. But all this matter requires investigation; and interesting would it be, if we could get some sure information as to the ordina-