

**A treatise on the cutaneous diseases incidental to childhood :
comprehending their origin, nature, treatment, and prevention / by Walter
C. Dendy.**

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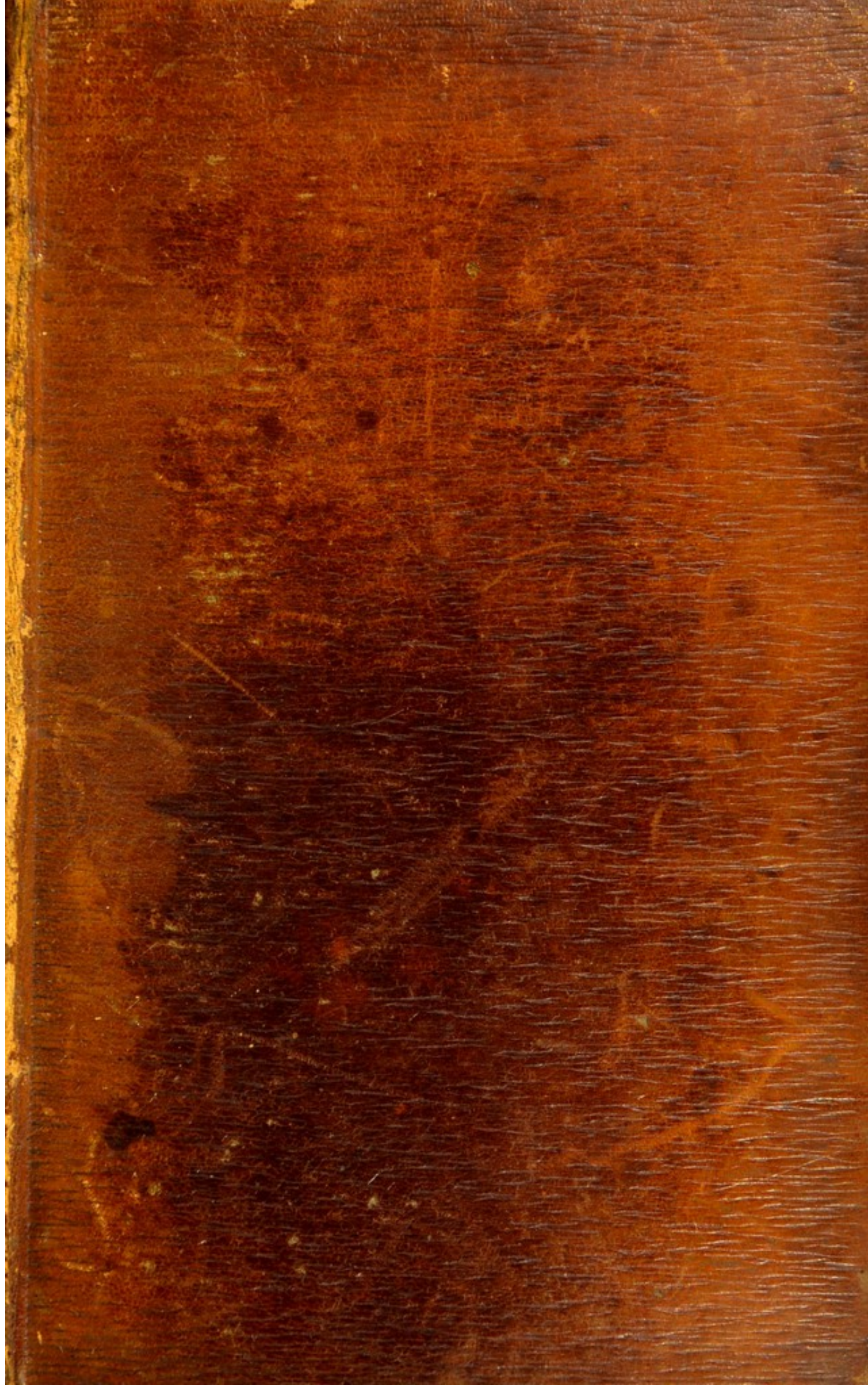
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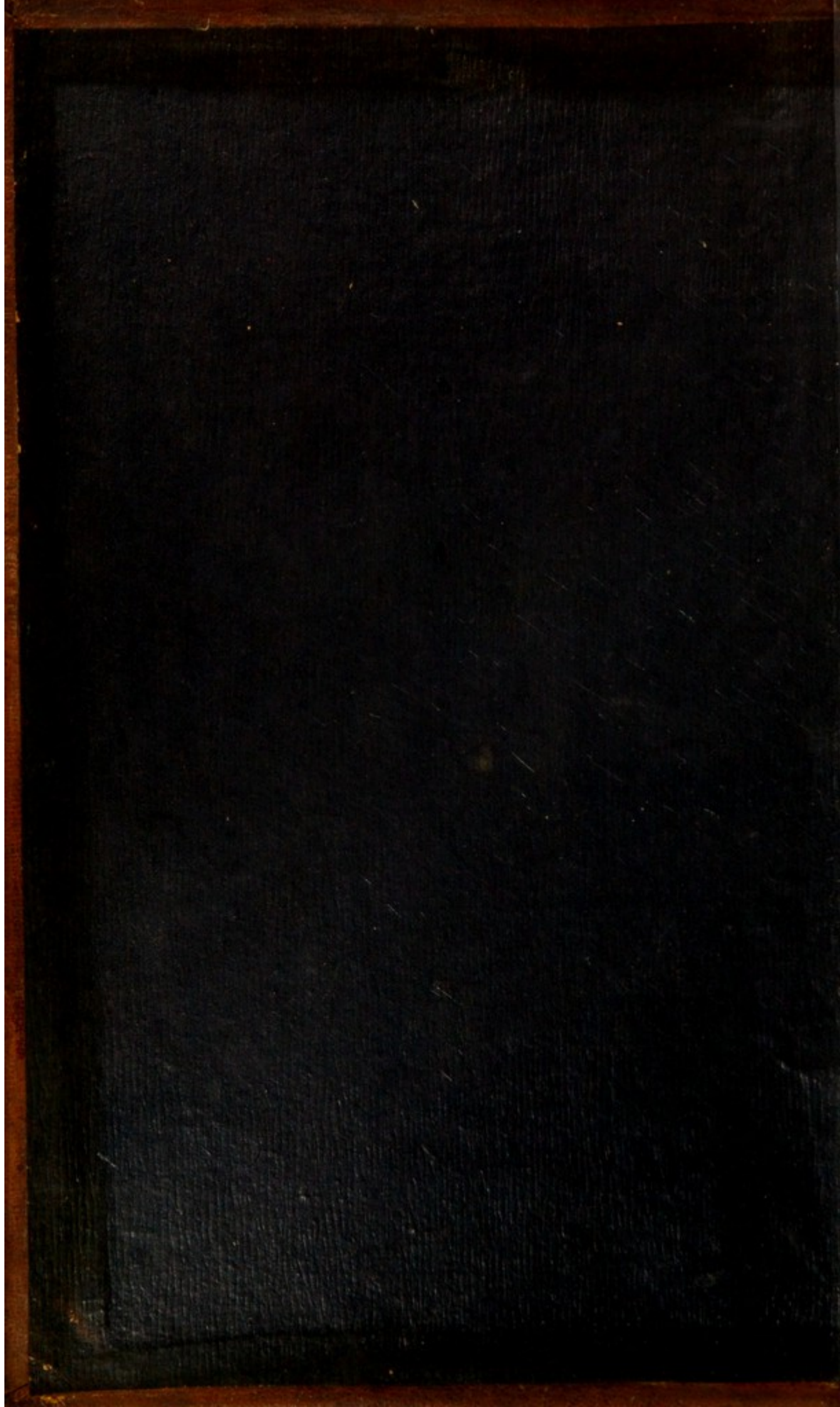
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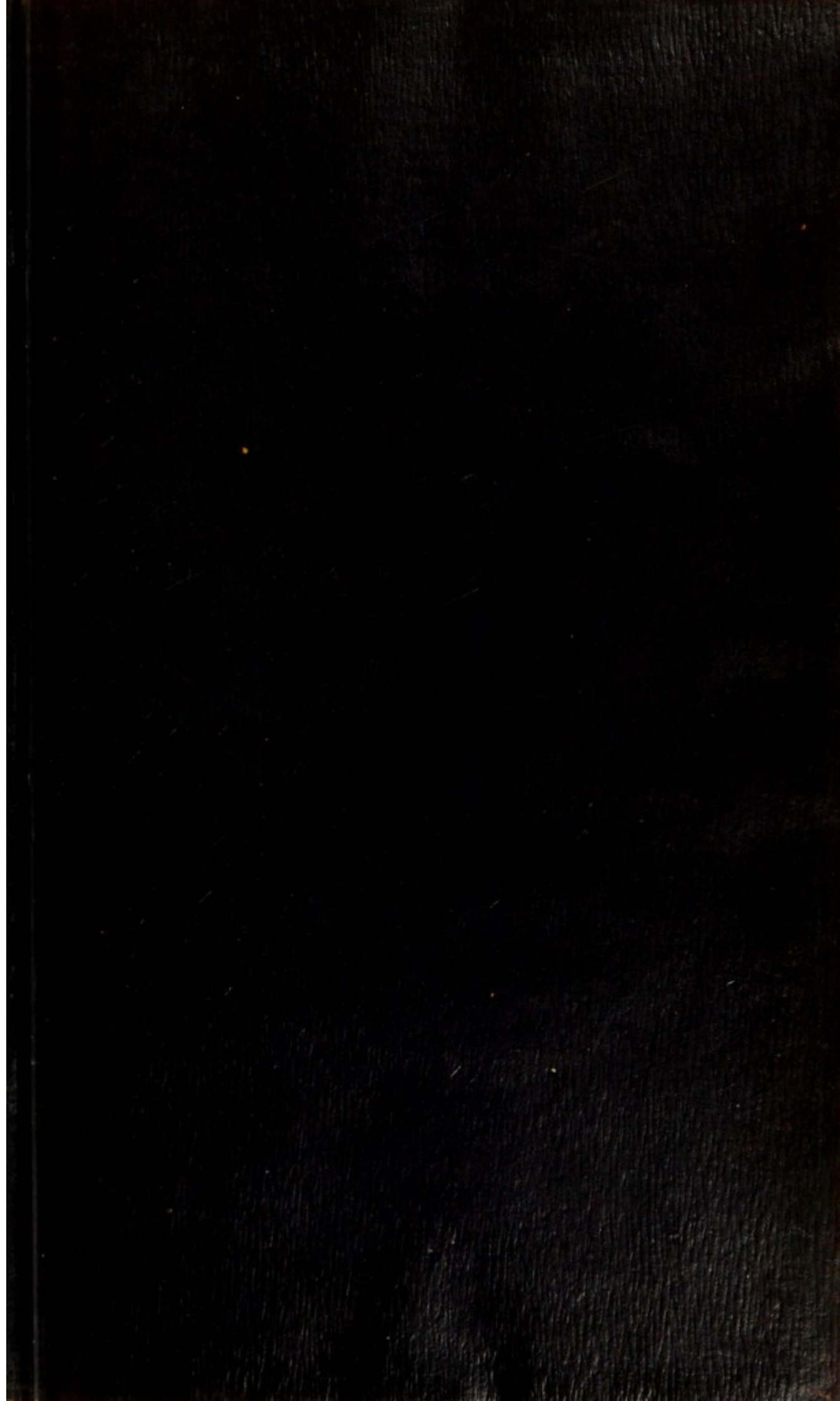
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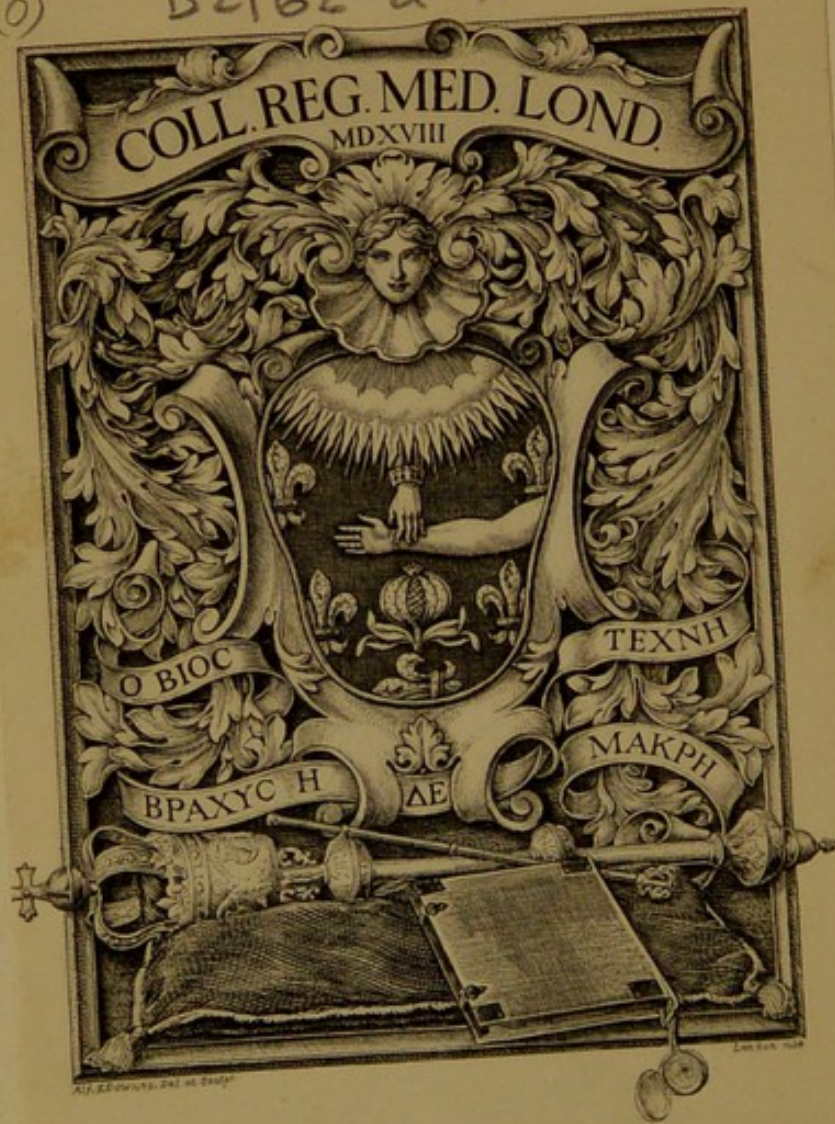


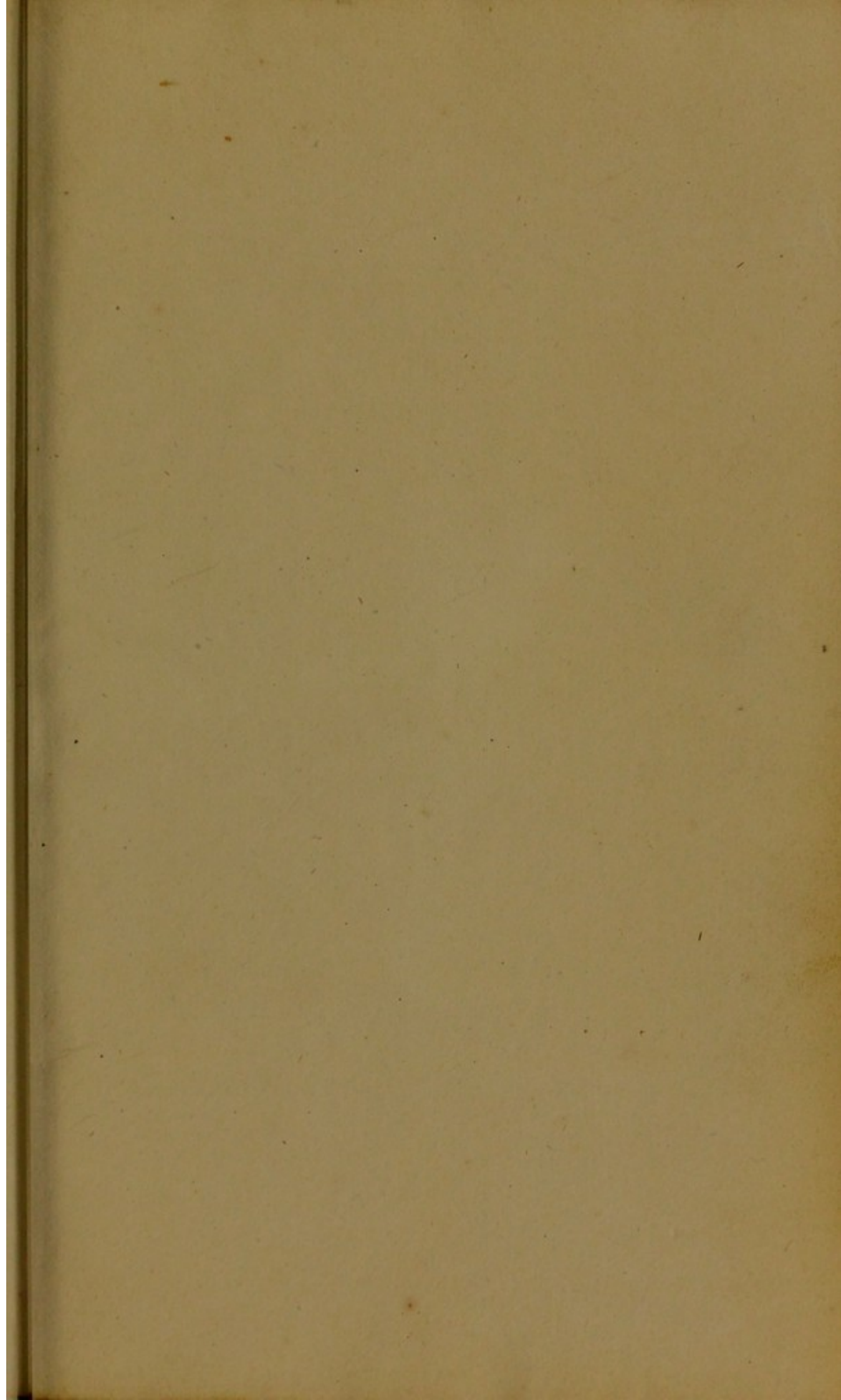


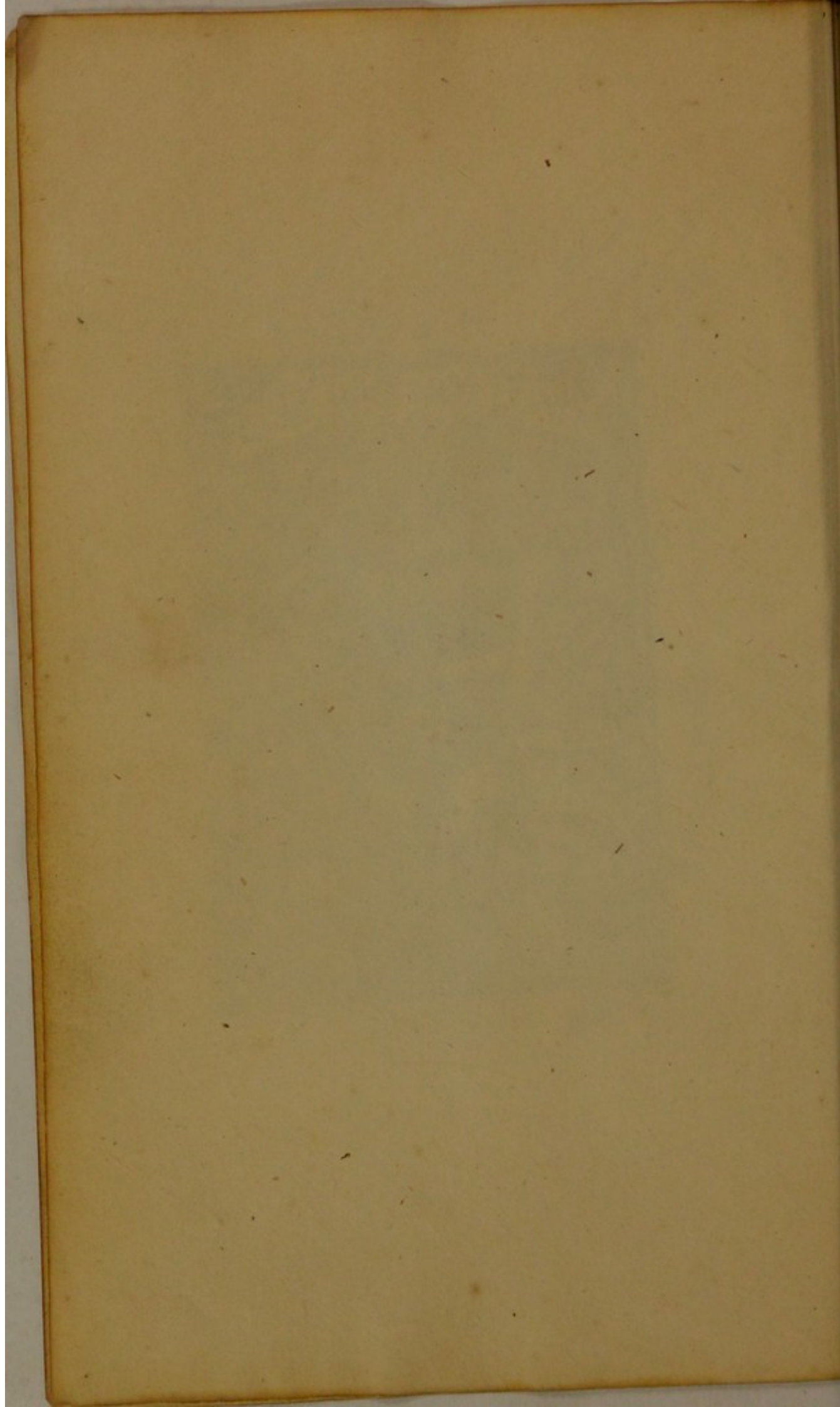


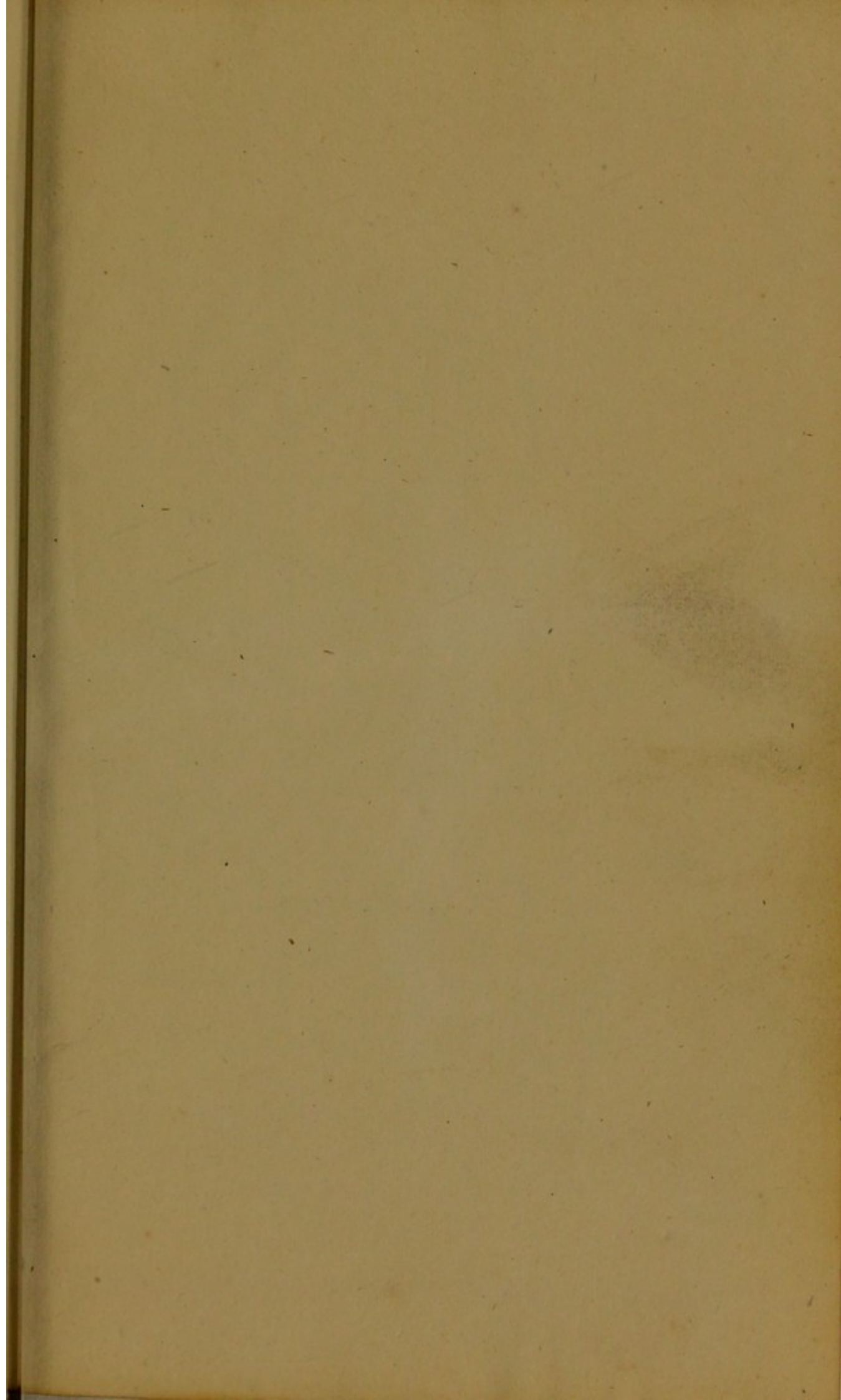
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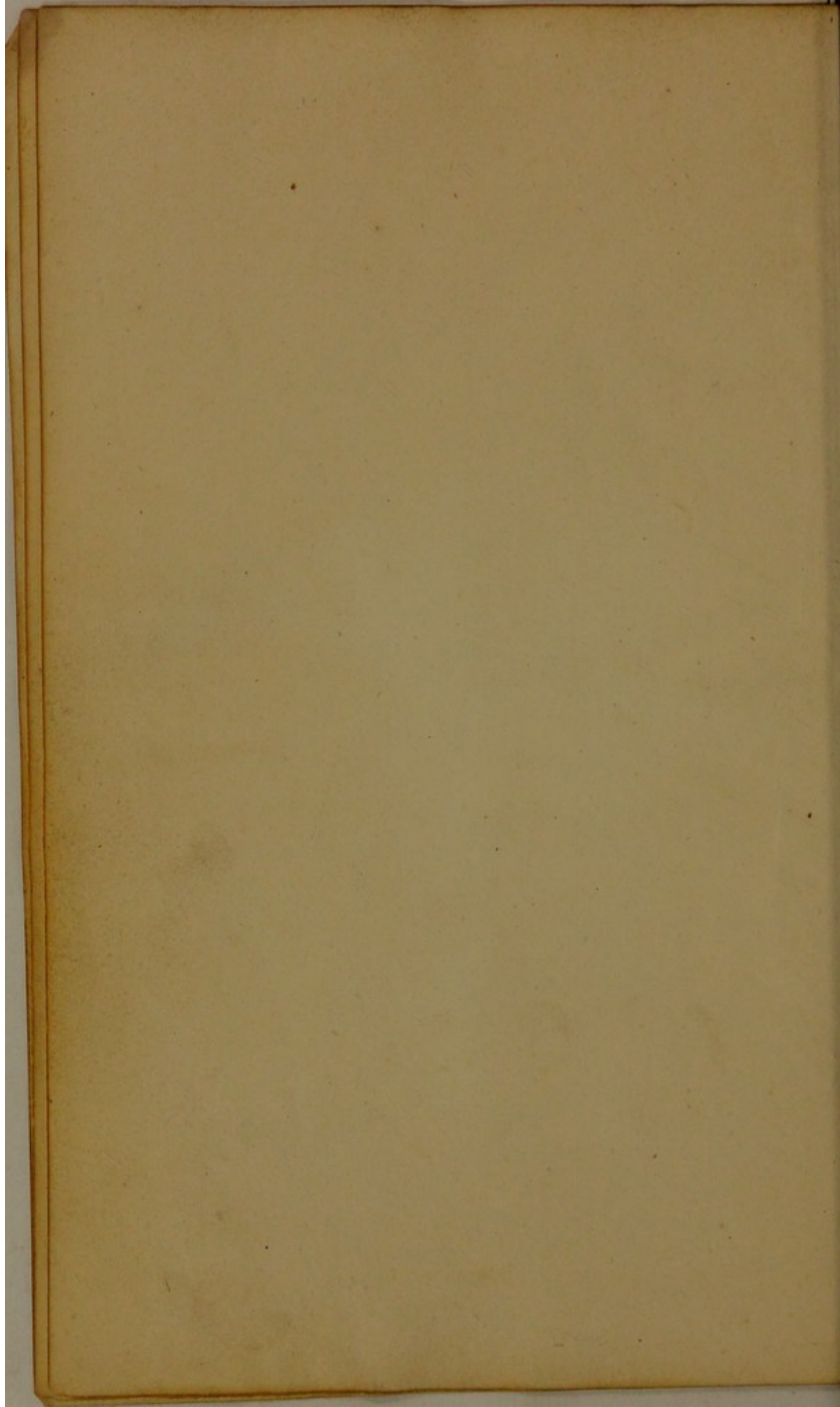
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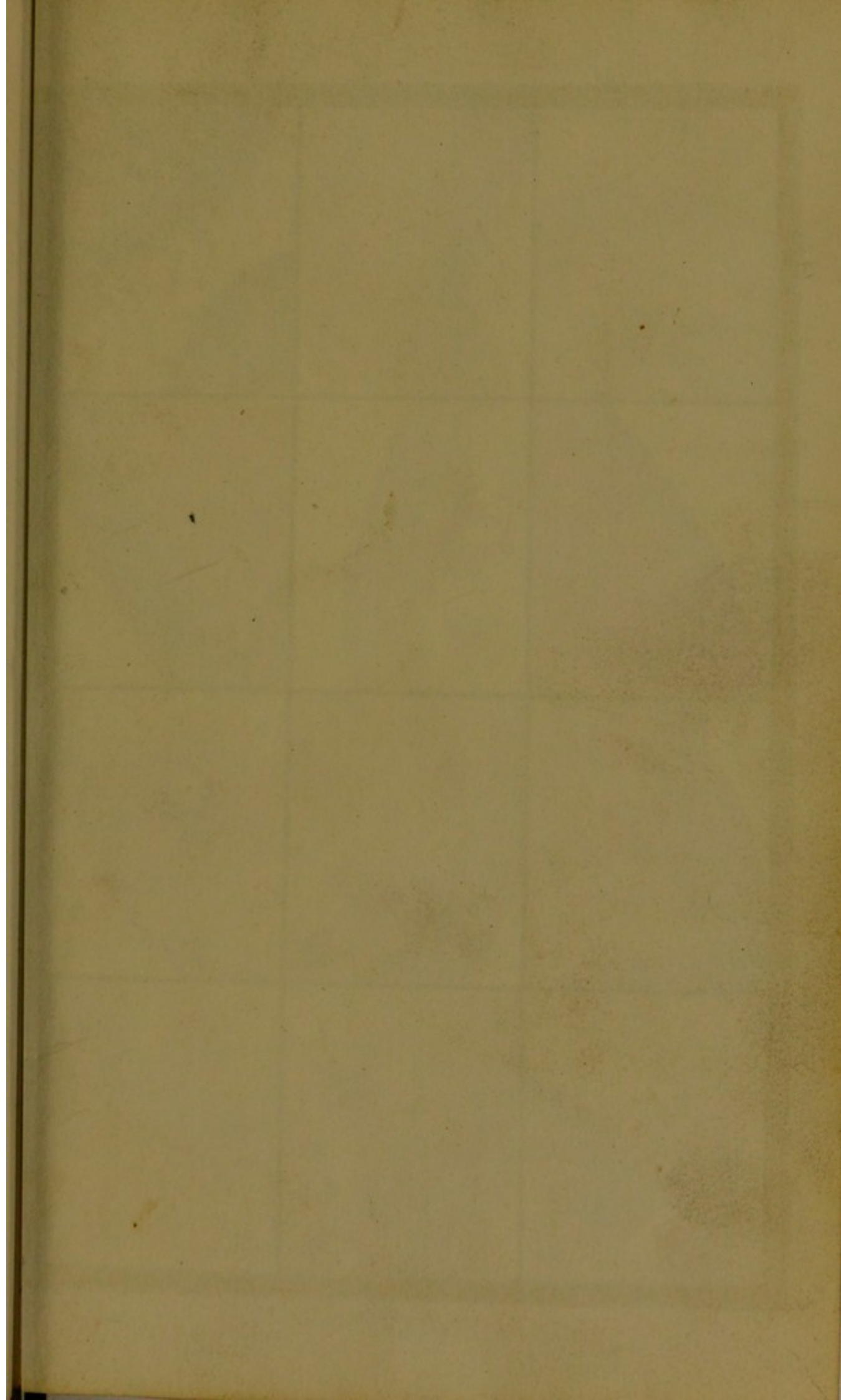


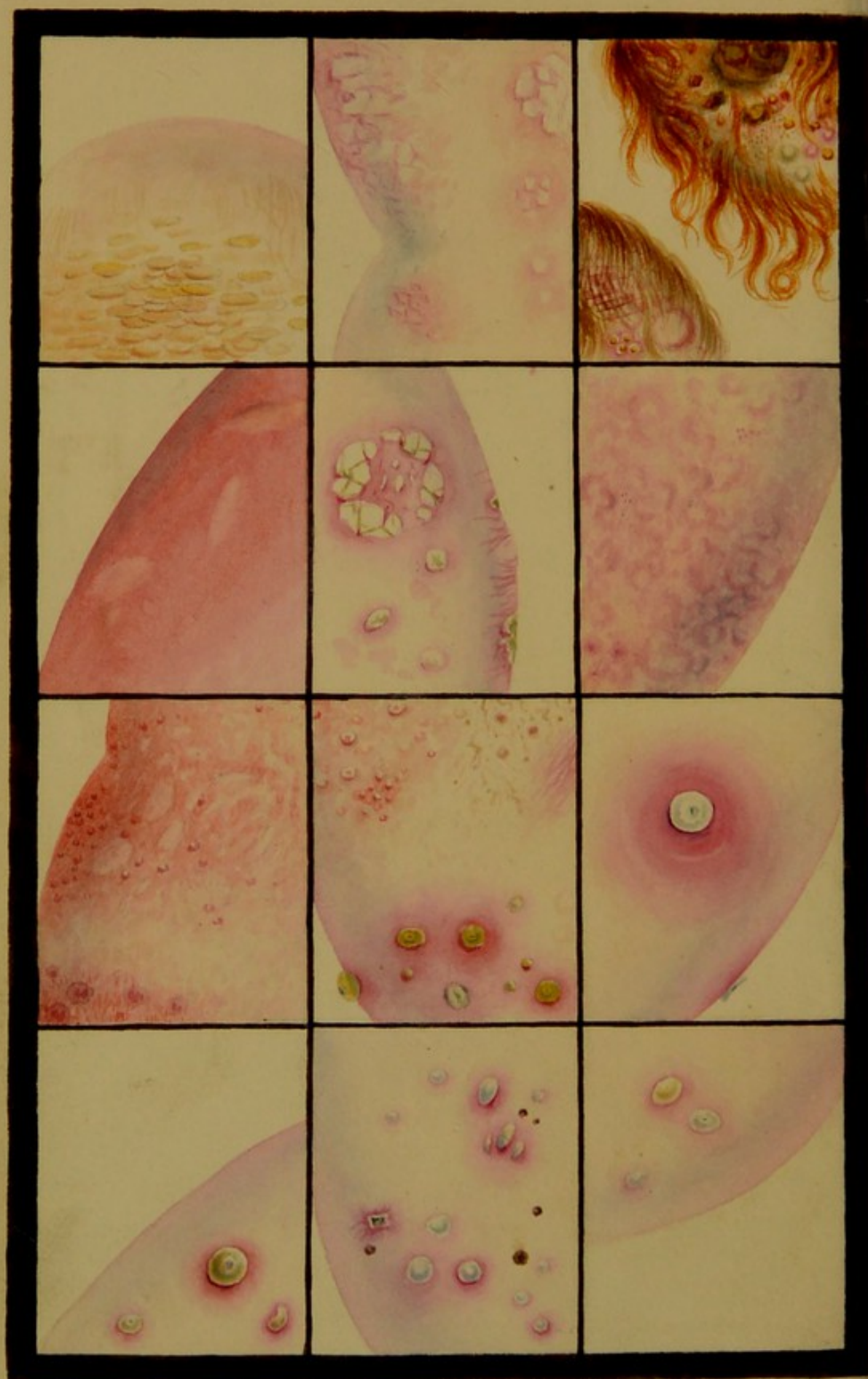


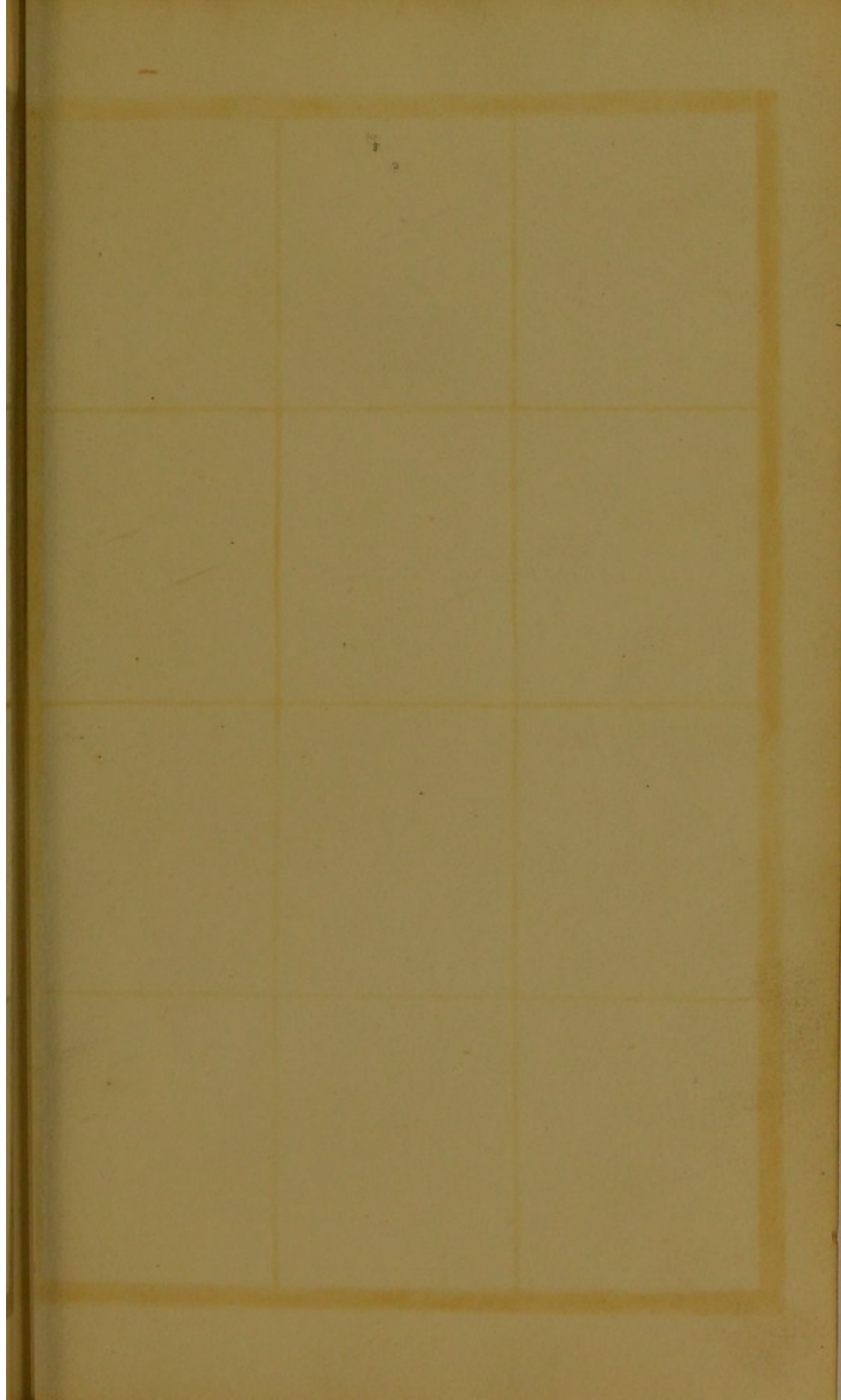


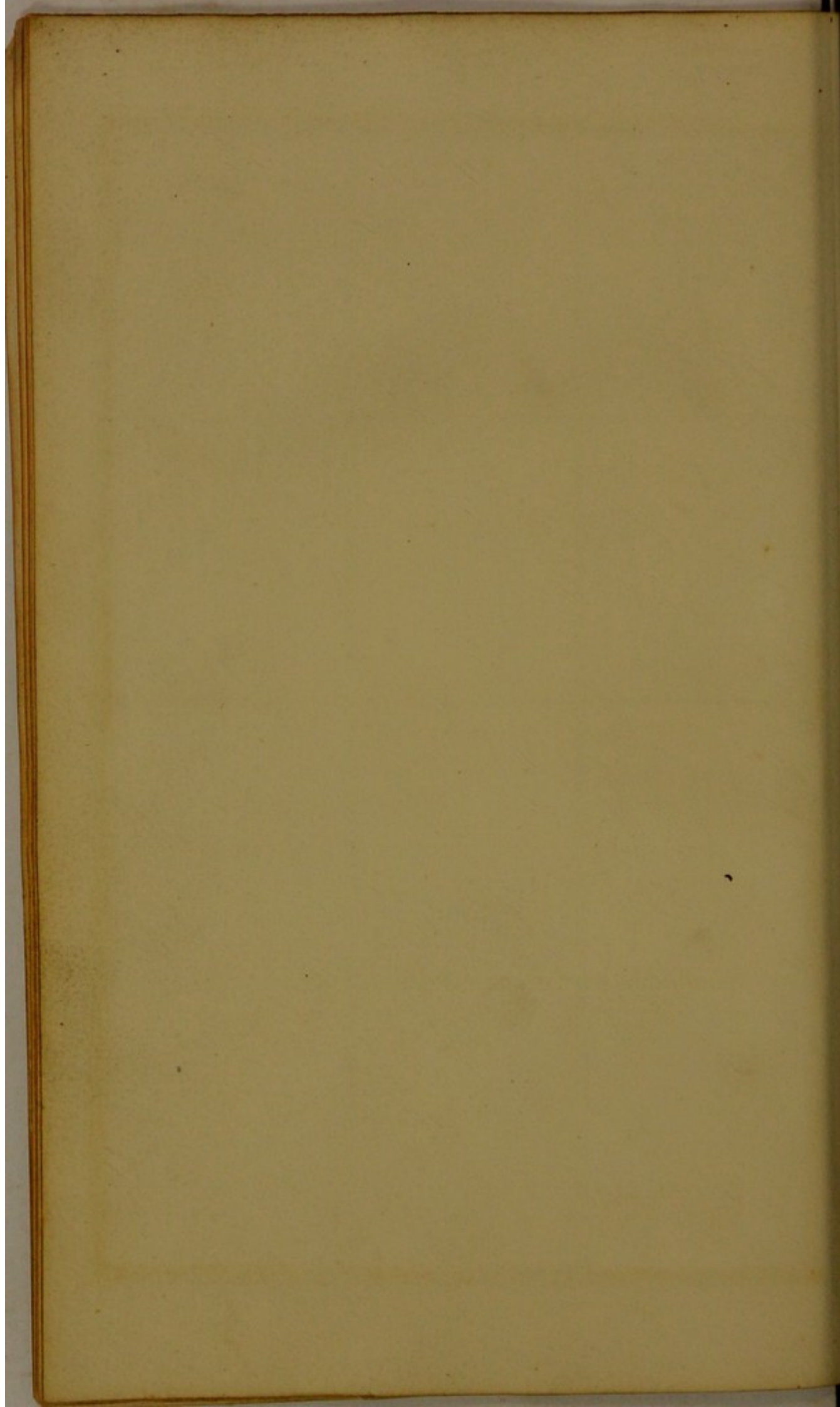


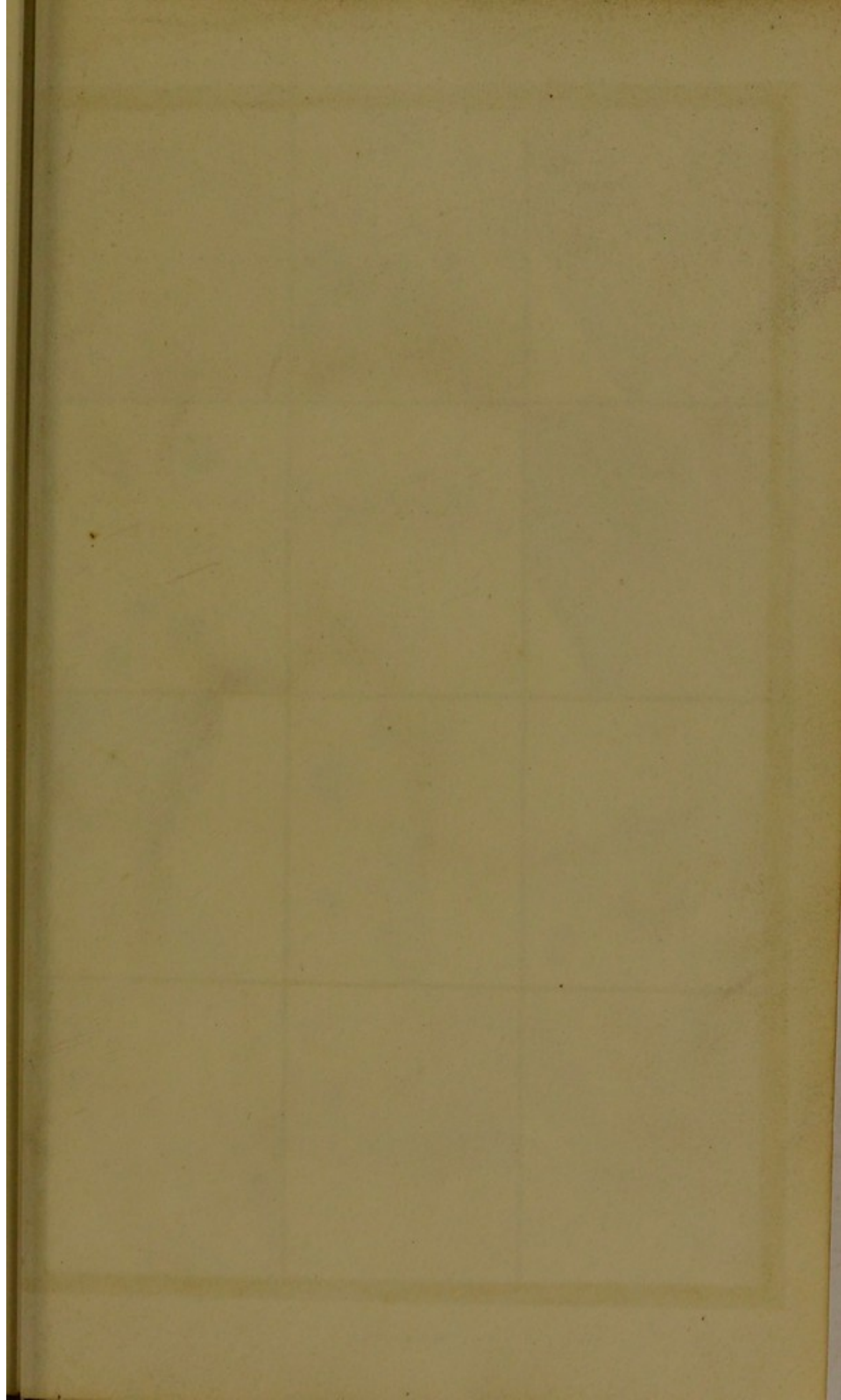


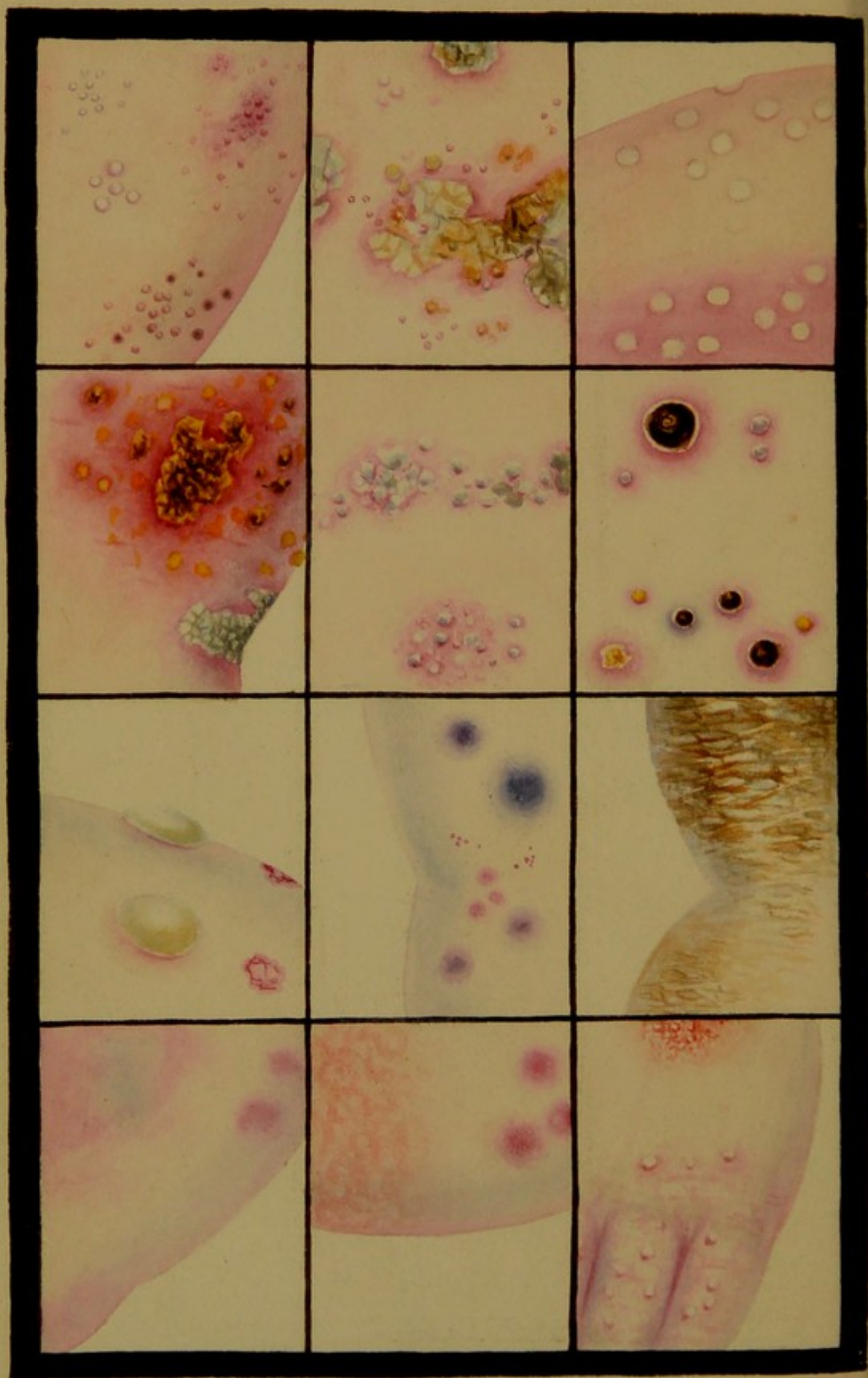


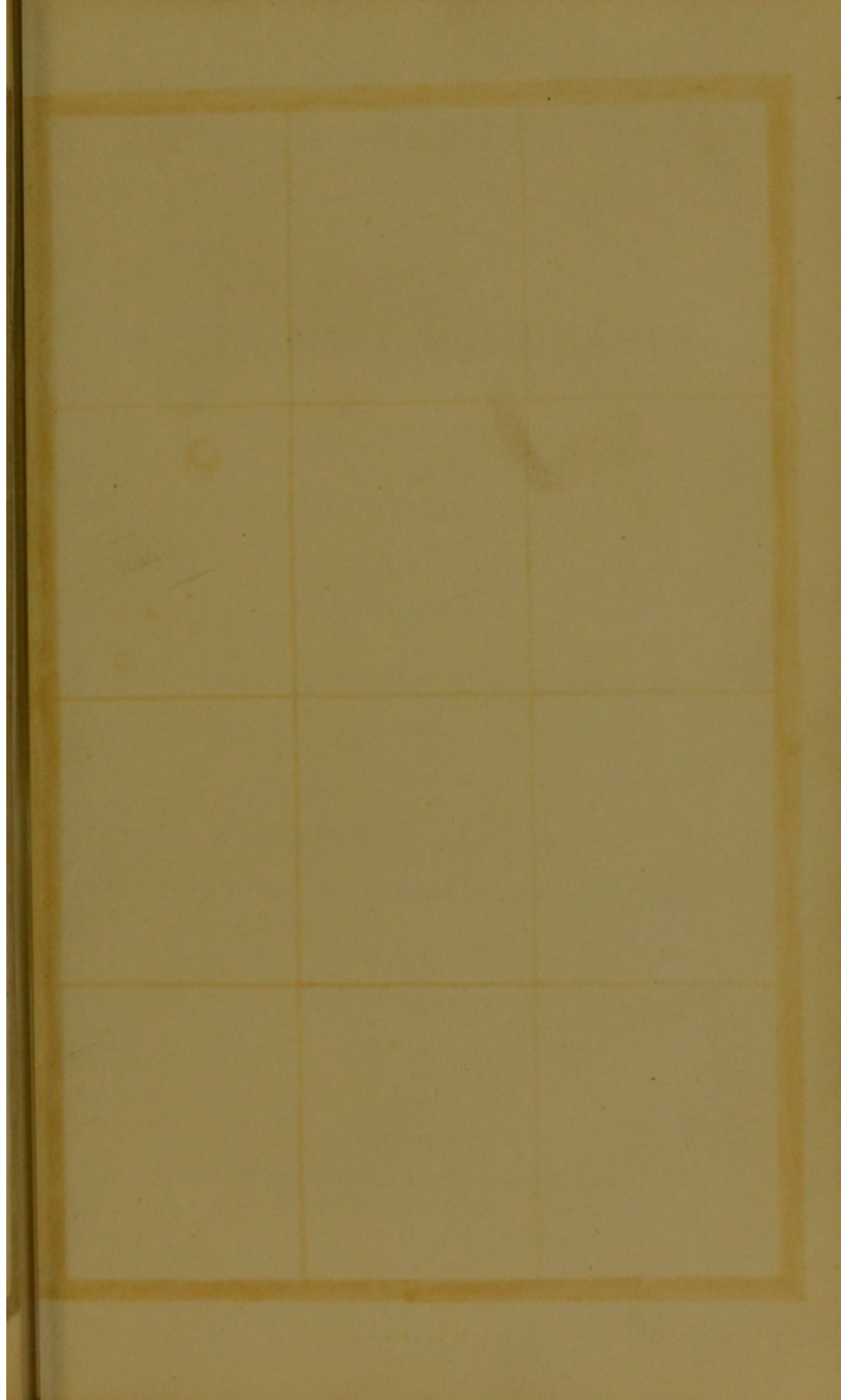












A TREATISE

OF THE

CUTANEOUS DISEASES

PRELIMINARY TO

CHILDHOOD

COMPREHENDING THEIR

ORIGIN, NATURE, TREATMENT, AND PREVENTION

BY

WALTER C. DENDY,

PHYSICIAN TO THE ROYAL HOSPITAL FOR CHILDREN, &c.

LONDON

JOHN CHURCHILL, LANCETER SQUARE

1827

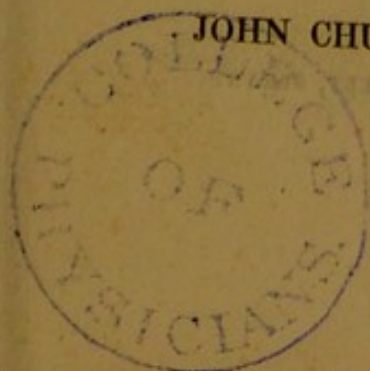
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A TREATISE

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OF ANATOMY AND SURGERY TO THE ROYAL COLLEGE OF
SURGEONS, SURGEON TO ST THOMAS'S HOSPITAL, &c.

THIS TREATISE

IS INSCRIBED

AS A TESTIMONY OF RESPECT FOR HIS PROFESSIONAL
AND PHILOSOPHICAL ATTAINMENTS

AND OF GRATITUDE FOR THE INSTRUCTION

IMPARTED BY HIM DURING THE EARLY

STUDIES OF

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LECTURER TO THE ROYAL INSTITUTE FOR CHILDREN, &c.

Upper Stamford Street

Oct 1857

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SURGEONS; SURGEON TO ST. THOMAS'S HOSPITAL, &c.

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8. Purpura.
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21. Vaccinia.
22. Variola.
23. Varicella.
24. Varioloidea.

REFERENCES TO THE PLATE

DEFINITIONS

Papule.—A small, circumscribed elevation of the cuticle (from increased action in the vessels of the papillae) with a base more or less inflamed; seldom containing an extravasated fluid; very seldom suppurating; terminating usually in scurf.

Spume.—An indurated, opaque, whitish, or yellowish mass of cuticle (produced usually by inflammation of the subjacent cutis).

Erysipelas.—A superficial diffused redness of various degrees; with or without intersticed papules or vesicles; with a loss of natural colour, terminating in exfoliation of cuticle.

Bulla.—A portion of cuticle separated from the cutis by the inclusion of a transparent, serous fluid, secreted by a crust, or sometimes superficial exfoliation.

Pustule.—An elevation of the cuticle, with an inflamed base containing pus. The varieties of pustules are:

1. **Phlegmonous.** A pustule of considerable size, surrounded by a hard circular base of a vivid red colour, succeeded by a thick dark incrustation.

2. **Purulent.** A smaller pustule, but slightly elevated, surrounded by a pinkish effluence; its base often irregular, and but faintly marked; often confluent, terminating in a thick laminated circular incrustation.

3. **Chole.** A small circumscribed pustule, filled with a brownish foetid glutinous fluid, surrounded by an irregular redness, but marked between it and the base by a more faint redness; usually confluent, terminating in a thin light brown irregular crust.

DEFINITIONS.

Papulæ. Pimples—A small acuminate elevation of the cuticle, (from increased action in the vessels of the papillæ,) with a base more or less inflamed: seldom containing an extravasated fluid: very seldom suppurating: terminating usually in scurf.

Squamæ. Scales—An indurated, opaque, whitish, or yellowish lamina of cuticle, (produced usually by inflammation of the subjacent cutis.)

Exanthemata. Rashes—Superficial diffused redness of varied degrees; with or without interspersed papulæ or vesiculæ, with interstices of natural colour, terminating in exfoliation of cuticle.

Bullæ. Blebs—A portion of cuticle separated from the cutis by the introfusion of a transparent aqueous fluid, succeeded by a crust, or sometimes superficial ulceration.

Pustulæ. Pustules.—An elevation of the cuticle, with an inflamed base containing pus. The varieties of pustules are:

1. *Phlyzaciūm*. A pustule of considerable size, surrounded by a hard circular base of a vivid red colour, succeeded by a thick dark incrustation.
2. *Psyracium*. A smaller pustule, but slightly elevated, surrounded by a pink efflorescence: its base often irregular, and but faintly marked; often confluent, terminating in a thick laminated circular incrustation.
3. *Achor*. A small acuminate pustule, filled with straw-coloured gelatinous fluid, surrounded by an irregular efflorescence, but marked between it and its base by a more faint interspace; usually confluent, terminating in a thin light brown irregular crust.

4. *Favus*. An irregular, scarcely elevated pustule of a large size, containing a more viscid straw-coloured fluid, surrounded by a light rose-coloured base, terminating in a yellow, semitransparent, and sometimes cellular crust; or, although rarely, by superficial ulceration.

Vesiculæ. Vesicles.—A semiglobular elevation of the cuticle, containing either a transparent or a pearl-coloured lymph: terminating in a laminated exfoliation or a brown crust.

Tubercula. Tubercles.—A superficial, circumscribed, indurated tumor, with or without an inflamed or discoloured base, permanent, or partially suppurating.

Macula. Spots.—A discoloration of cuticle, with permanent change of texture, or simple vascular turgescence.

A TREATISE

ON CUTANEOUS DISEASES, &c.

“ Neque potest scire quomodo morbos curare conveniat qui unde hi
sint ignoret.”

CELSUS.

IN attempting to trace the maladies of the human race to their source, we cannot but be painfully sensible of the doubt and inconclusiveness of our pathological demonstrations. It is but too rarely that we are enabled to develop clearly the true seat of disease, to ascertain the exact condition of the part, the morbid change which has taken place, or, as it is styled, the proximate cause of the disease.

It is this obscurity which forms the limits to the patient investigation of the morbid anatomist; by which he is taught, that hitherto he shall go, and no further; and his inquiring mind is compelled to recoil, as it were, upon itself, and to rest satisfied with an hypothesis, when the imperfection of human capacity has failed to demonstrate a logical truth.

The illustrious Sydenham has observed:—
“ A disease is no more than a vigorous effort of nature to throw off the morbid matter, and thus recover the patient.” The seat and nature of this morbid matter may still remain undiscovered, even in those diseases where we believe it to exist; and while, in the words of Sydenham, we cut the gordian knot of this mystery, we turn to the contemplation and study of that effect, which is more clearly evinced to us by symptoms, or rendered palpable by some substantial change. Without entering into the question, as to the propriety of accepting this aphoristic opinion as a *general* definition, we cannot deny its correctness within certain limits; and we must, consequently, be sensible of the great importance of those emunctories of the body, that form the channels through which the efforts of this *vis medicatrix naturæ* are directed; or, as Blumenbach has observed, “ by which foreign and injurious matters are eliminated from the mass of fluids.”

The healthy function of secretion, the separation of alkaline fluids from the blood, is one so essential to the welfare of an animal body, that the slightest obstruction to the ducts of glands is productive of a train of morbid symptoms, varying in intensity, according to the degree or duration of their cause, and the re-

lative importance of the secretion itself to the animal economy.

Among the acid fluids, the true excretions of the body, the evacuation of which from the system is of such immediate necessity, we may consider the fluid of perspiration, the Perspirabile Sanctorianum, as not the least important, especially when we reflect on the immense load of which the circulating mass is relieved by it, and its constant transudation in a state of health. Dr. W. Philip has very judiciously insisted on the importance of the cuticular secretion in influencing the functions of the stomach, or in supporting or relieving dyspepsia; an opinion which has not, I think, been sufficiently honoured in the treatment of that disorder.

This important secretion cannot be properly carried on without the integrity of those tissues which effect it, and through which it transudes, the cutis and the cuticle. The anatomy and physiology of which structures form the subject of consideration at the close of these observations.

The suppression or obstruction of the perspiration, a mere functional deficiency, is productive, oftentimes, of dangerous visceral engorgement; and we may easily anticipate the evils direct and indirect, arising from some of those more permanent alterations of structure, the Diseases of the Skin.

It would be useless to enter here into a complete history of those authors who have selected the diseases of the cutaneous tissue for their peculiar study; to waft the attention of the student across the Mediterranean, to Arabia, or to Egypt, or even to dwell long on the ancient authors of climes and æras more nearly approaching our own. By this digression we should merely institute an invidious comparison between ancient and modern theories and practice. That there is a decided superiority among the moderns, it would be affectation to deny; still it is our duty not to dilate wantonly on the errors of our predecessors, but to take example from their failings, and to institute those modes of practice in which we are directed by the more perfect light of accurate physiology and pathology. I offer, however, a very brief preface on those states of comparative knowledge.

If then we turn the sail of our investigation up the stream of time, we shall discover, that the pathologists of antiquity were not wholly ignorant of the appearances of morbid cutaneous changes; but it will be evident, that, for the most part, their knowledge of the seat, the nature, and above all, the *causes* of such morbid effects, was superficial to a degree, and, consequently, the practice founded on their hypotheses was empirical and replete with danger. Thus, Dr. Bateman informs us, Hippocrates

classes the leichenæ with prurigo, psora, lepra, and alphas, without particularizing their forms; and the Latin translators of the Arabian authors misapplied the term lepra, a squamous disease, to the tubercular elephantiasis of the Greeks, and referred the pustular scabies and impetigo, to the scaly division of Greek nosologists. Even "the terms rubeola, rubeoli, roseola, rossalia, rossania, &c. had been applied with little discrimination to measles, scarlet-fever, eczema, &c. until Sauvages fixed the acceptance of the first of them." It must be obvious, that such a confusion of classification must obscure that valuable light, which a knowledge of the seat and causes of disease will shed on the views of the rational pathologist.

These are some of the errors of antiquity. The writers of more modern days have presented us with many elaborate systems, which, considered separately, may excite feelings of admiration at their ingenuity, and will impart much real improvement by many of their opinions and their precepts.

Passing over the works of Mercuriali, Turner, Chiarugi, of Wilson, Plenck, and Gomez, we may observe some attempt at rendering the subject one of a practical nature, in the Essays of Lorry in 1777, of Jacques Derien in 1804, and of Franck in 1821. The former instituted a division of skin diseases into those resulting

from internal or from external causes; and the two latter commented on a distinction between morbid affections of an *essential*, and of a *symptomatic* nature. Now, although it is certain that the same diseases have not unfrequently a different origin, it will appear, I think, that during the infantile period especially, a classification somewhat resembling these may be adopted.

I may be allowed to observe, that the arrangement of Mr. Plumbe, as well as the classification lately presented to us by M. Rayer, may be considered as very correct elucidations of the character of cutaneous diseases; but as the nosological arrangement should, in my opinion, present an epitome, as it were, of the treatise, I think the combination, for example, of all cutaneous inflammations, whether acute or chronic, essential or symptomatic, in one chapter, by M. Rayer, must occasion some confusion with regard to the modes of treatment; while, in Mr. Plumbe's arrangement, certain diseases are unnecessarily disjointed.

Again, when we peruse the nosological arrangements of Cullen, of Sauvages, and of Vogel, together with the mass of cutaneous pathology which has subsequently issued forth, we must be convinced, that as the observations of these authors, in reference to the same dis-

ease, are of varied import, so must their modes of treatment be dubious, perhaps detrimental.

It is evident that something of this diversity and perplexity of system is derived from an imperfect pathology; for where an erroneous opinion exists, it is a natural consequence, that an unscientific phraseology should be employed. The advance of science and the perspicuity of scientific nomenclature must be mutually dependent. As true science is promulgated, its language will generally be marked by simplicity and precision; of which the labours of Lavoisier, and the discoveries of the French chemists, have given us a proof. But if the ideas of a system be incorrect, and founded on mere hypothesis, the language which is adopted for its explanation must be confused and unscientific.

If research is prosecuted with ardour, and at the same time with judgment, we might hope that pathologists would arrive at the same conclusion, and that their systems would be marked by some generic likeness; but the mind is naturally prone to be influenced by any new discovery, and to expatiate on new ideas, till it is misled into inextricable error by the *ignis fatuus* of imagination. It is a just observation of Sydenham, that "hypotheses owe their origin to ostentatious vanity and idle curiosity; whence 'tis easy to conceive

how much they must needs obstruct the improvement of physic, which is a science that depends chiefly upon well-conducted experiments, and close and faithful observation; whereas hypotheses are always built, in great part, upon feigned, precarious, and often very obscure principles, so that they may aptly enough be styled the unshapely production of a lively and wanton imagination."

The causes of this error in medical literature have been very ably referred to by the late erudite author of *Medical Technology*, Dr. Mason Good.

In the foremost rank of writers on cutaneous diseases, stands M. Alibert, whose fame is undoubtedly splendid as his publication. This brilliant work, however, is a sort of meteor light, which for a time dazzles the imagination, but which must moult some feather of its value, when we reflect that it yet possesses faults in its classification. The opportunities of M. Alibert, as physician to the Hôpital St. Louis, where thirty thousand patients are annually presented with skin diseases, must have been of infinite advantage in exhibiting these complaints in almost endless variety. But perhaps a perfect system of arrangement might not have been deemed of so much value, as the graphic delineation, in an establishment where, with the exception of

arsenic, sulphur, in its various modes of administration, forms the principal, nay, almost the only remedy.

The name of Willan too must ever stand conspicuous among the contributors to this department of pathology. The classification of this laborious author is the most comprehensive system that has yet appeared ; and, as an elementary work, must ever prove of high value, indeed, indispensable to the student. But it must be confessed, although I have often freely adopted Dr. Willan's opinions, that, in a practical point of view, it does not possess the same degree of perfection. This impression, it is but just to add, was anticipated by his learned and philosophical commentator, whose reasoning on this deficiency is so just, and withal so ably written, that I take the liberty of transcribing it as an illustration, and an apology for the peculiarities of my own views on this important subject.

“ The various genera of cutaneous disease, as characterized by their external appearances, do not differ in the same essential degree in which the diseases of organs of various structure differ from each other. The same exciting cause will produce different kinds of cutaneous disorder in different individuals : thus, certain substances which suddenly derange the organs of digestion, sometimes produce urticaria,

sometimes erythema and roseola, and sometimes even lepra and psoriasis; yet each of these shall retain its specific character, and follow its peculiar course.* Thus also certain external irritants will, in one case, excite the pustules of impetigo, and in another the vesicles of eczema.† Again, the diseases which commence with one generic character, are liable occasionally to assume another in the course of their progress; thus, some of the papular eruptions become scaly, and still more frequently pustular, if their duration be long protracted; the lichen, simplex and circumscriptus, for instance, sometimes pass into psoriasis; the lichen, ægrius, and prurigo for-

* With regard to local excitement too, it has been asserted, that the peculiar secretions of various cutaneous diseases are similar in their nature; the variety of external character depending on the idiosyncrasy of the patient. Without instituting any chemical analysis, I may safely affirm, that the varieties of contagious porrigo, for example, may be produced, in different individuals, by the contact of a secretion from the pustules of one species only.

† Where stimulating applications have been prematurely employed in cases where active inflammation exists, a more copious and rank eruption has often been the result, and even where acrid lotions or ointments have been too profusely applied, i. e. on parts not apparently diseased, they have excited the very same disease in those portions of integument, which they were intended to remedy in another—a proof of predisposition to peculiar disease.

micans, are occasionally converted into impetigo, and the prurigo mitis is changed to scabies. Moreover, it frequently happens that the characteristic forms of eruptive diseases are not pure and unmixed, but with the more predominant appearance there is combined a partial eruption of another character: thus, with the papular strophulus, with the rashes of measles and scarlet-fever, and with the pustular impetigo and scabies, there is occasionally an intermixture of lymphatic vesicles. And, lastly, the natural progress of many eruptions is to assume a considerable variety of aspect; so that it is only at some particular period of their course that their character is to be unequivocally decided. Thus, in the commencement of scabies papuliformis and lymphatica, the eruption is of a vesicular character, although its final tendency is to the pustular form; and, on the contrary, in all the varieties of herpes, the general character of the eruption is purely vesicular; yet, as it advances in its progress, the enclosed lymph of the vesicles acquires a considerable degree of opacity, and might be deemed pustular by cursory observers. In like manner, the original pustular character of some of the forms of porrigo is frequently lost in the accumulating crust, the confluent ulcerations, and the furfuraceous exfoliations which ensue, and which conceal its true nature from

those who have not seen, and are unacquainted with the whole course of its advancement.

“These circumstances constitute a series of natural impediments to every attempt of a methodical arrangement of cutaneous diseases. But it is more philosophical, as well as practically useful, to compromise these difficulties, by retaining in the same station the different appearance of disease, in its different stages and circumstances, where our knowledge of the causes and remedies, as well as of the natural progress and termination of it, is sufficient to establish its identity, than to separate the varying symptoms of the same disorder.”

In addition to these rational deductions, we may observe that the varieties of affections arranged as genera of one order by Dr. Willan, although recognized and named at a glance by the observing student, are yet often depending on causes of a diametrically opposite nature, and assuming characters which disunite them still more effectually, both in a pathological and practical point of view. We may adduce familiar examples of the exanthemata, rubeola, and urticaria: the first, a specific and contagious disease, occurring but once during life, and productive of effects replete with danger; the other, a purely symptomatic disease of frequent occurrence in individuals of peculiar idiosyncrasy, of a nature salutary to

the system, and which, unless in its febrile form, rarely requires the interference of the practitioner. By Dr. Willan's classification, we are indeed led to study the external characters of disease, and to investigate the nature of morbid changes. But even when we are satisfied on this point, we are often still dubious with regard to the modes of treatment—often perplexed as to the propriety of attempting the removal of the local affection. When we have established the nature of disease, it may be observed, that one general principle may be adopted for the purpose of guiding us in our treatment, viz. that symptomatic diseases should be treated by constitutional remedies, and the simply local affections by topical applications. A little reflection on this important truth, will indicate the necessity of that mode of study which shall aim at the knowledge of exciting causes—which shall point out some distinction of these affections into the symptomatic, (the appearance of which may be deducible from constitutional or remote excitement,) and those which are merely of local origin, the essential or idiopathic.

With reference to symptomatic diseases, we must not altogether overlook the broad principle of treating them according to the habit, as it is termed, of the patient: thus we cannot

too much interdict stimulants and tonics in the plethoric child, nor must we administer too freely laxatives to those who are debilitated or emaciated. But to deplete the sanguineous, and restore tone to the debilitated system, may, I think, form a precept even in the treatment of cutaneous diseases.

In adopting the general term symptomatic, I have not studied to avoid the acceptance of the word sympathy, which has indeed been the source of much hypercriticism, as to its being a mental or a physical action. But the term sympathy may be almost disused on the present occasion.

It must be granted, that mental excitement re-acting on the circulating fluid through the medium of the nerve, may produce certain alterations in the appearance of the skin, as the crimson blush of shame, and the pallid hue of fear; but these are merely transitory effects, disappear in a few seconds, and can be productive of little permanent disorder. *Continued* nervous influence may, it is true, act secondarily in the production of a protracted or permanent change on the skin, by its power of morbidly affecting some particular and important organ, of which disease the cutaneous affection itself is symptomatic. Thus anxiety will be the remote cause of

hepatic derangement, of which the indications on the surface of the body are daily witnessed.

The most philosophical mode would be to confine the term *sympathetic* to those effects resulting from the influence of mind on the sources and fibrillæ of the nervous system, and the term *symptomatic*, as expressive of morbid actions resulting from a remote physical excitement, as the papulæ of strophulus from the irritation of dentition. If, however, the adopted language of physiology may at any time claim the employment of the term sympathy, it must still be to designate a train of successive or simultaneous physical actions.

The classification of Willan, (to the phraseology of which I shall almost implicitly adhere,) is the most easily recognized by the student in illustrating the character of disease. Its system may be considered in the light of an alphabet or text-book, which it is essential to learn, before the more difficult part of the study, the pathology. Granting then that we possess a nomenclature by which we can faithfully impart our definitions of disease, and we add to this the result of our investigation into its seat and remote causes, and the *ratio medendi* founded on experience and on general principles, we approach perhaps as nearly to perfect

knowledge as the fallacy of human reason will allow us to do.

It must be acknowledged, that the exact condition of morbid parts cannot be conclusively ascertained without the aid of the microscopic lens, and that too when employed on the living solid and fluid. Every morbid anatomist must have sometimes concluded the most patient and delicate of his pathological researches, without having formed a conclusive opinion on the nature and seat of the disease, and must have felt the humiliating disappointment of the non-demonstration of some confident prognostication, or some favourite and laboured hypothesis. But when we consider the dissimilarity between the condition of living and dead matter, we can readily appreciate the cause of this failure. In syncope partially, and in death almost completely, blood leaves the surface of the body, and accumulates in the larger cavities. We have witnessed the striking change that takes place, from this law, in the elevation and colour of variolous pustules, when the powers of life are sinking under the disease; when the inflammatory action set up in the brain has been the result of irritation, and not preceded by a recession of the pock; and we might hence anticipate how much this change would be in-

creased by the actual cessation of the vital function. To draw an illustration from analogy, I would presume to offer an opinion, that a fatal apoplectic fit has often occurred, which could not however be demonstrated by the most accurate dissection: of course I do not adduce those cases where extravasation has ensued; for even supposing that the state of adynamia accompanying cerebral pressure did not incapacitate the absorbent vessels, still their most active power is not adequate to so speedy a removal of extravasated fluid. I reason on pressure from accumulation within the vessel. The blood then obeys the same physiological law, which it does in a state of healthy circulation, and having performed its circuit, returns to the right side of the heart; but the nervous energy which has been suspended by this pressure, not having been restored, death is the result; an effect which may, perhaps, more assimilate the symptoms of concussion than those of more permanent compression. Post mortem examination is resorted to, but no cause of the fatal disease is demonstrated. How often have excessive cases of cholera occurred, marked by extreme abdominal tenderness—high pulse, and other indications of active inflammation, which the most acute pathologists have pronounced to be such, yet the membranes have been

found on inspection even paler than in their usual state. These remarks must prove the futility of our investigations into the actual seat of cutaneous diseases after death, and it must be evident that our opportunities of observing those under the cuticle during life, must be very limited indeed. It has been proposed by Dr. Baker to divide cutaneous diseases into two classes: the one comprehending squamæ, vesiculæ, and bullæ, (epidermal diseases,) the other papulæ, tuberculæ and pustulæ, (diseases of the cutis.) This arrangement, however, possesses no practical advantages, even if its propriety was proved; for until a more minute injection of the skin has ascertained the exact relative dependence of the cuticle on the cutis, and the microscope has demonstrated to us enlarged views of the minute disease of living structure, this very division must, I think, be still held in the light of an assumption.

The deformity, the uneasiness, the pain, and the dangerous results of cutaneous diseases, of themselves indicate the necessity of minutely studying this class of morbid changes; more especially when we reflect on the melancholy effects of empiricism, or what is equally reprehensible, domestic medicine and management, particularly in those diseases indicative of internal derangement. In the simple case of inter-

trigo, and in some other slight *local* affections, the ablutions, and unguents of the judicious nurse may be strictly appropriate; but such is the similarity in appearance of certain opposite affections, that the formation of a diagnosis is often a subject of some difficulty even with the skilful pathologist; and in such a case it cannot be expected that the nurse can arrive at a correct decision, can

——“decide when doctors disagree.”

The classification of the vulgar is, indeed, as we might expect, limited in the extreme; papulæ, squamæ, pustulæ, vesiculæ, and tuberculæ, being often designated by the general and inexpressive terms, scurvy and king's evil. It will be obvious how blind and how replete with danger must be the practice grounded on this sweeping diagnostic rule.

The practice of self-experiment is unfortunately prevalent, especially among females of elevated rank, who willingly exchange the inestimable enjoyment of health, for the proud triumph of being adorned by a skin, by a degree more soft and whiter than that of an envied rival. This is one only of the numerous penalties that vanity has inflicted on the devotees of fashion. To this effect, the most essential adornments of the boudoir are composed of the delicate porcelain, or brilliant

crystal, enclosing the charm-fraught caustic milk of almonds, the irresistible kalydor, or the delightful bloom of Ninon, which, for heightening the lustre of beauty, hold almost an equally important rank with the casket of diamonds itself.

It may be argued, that it must surely be safe to effect the cure of a merely local disorder, by topical applications, and generally it will be so; but cases are on record, where one severe disease has been produced by the means of cure adopted for another of milder degree. Where a simple local disease has existed for a long period, it becomes, as it were, essential to the constitution, and the outlet, it may be, of any thing noxious to the system. Of this nature we may consider ulcers of long standing—natural issues as they may be termed. On the sudden healing of these sores, (even spontaneously,) constitutional derangement will usually take place, which as usually disappears on the reproduction of the ulcer, or the establishment of an artificial fontanel.

As a proof that the system avails itself of these drains, for the excretion of what might prove deleterious by its retention, I may mention that condition of ulcer which has been termed the menstrual sore, bearing the character of a common ulcer, secreting pus, except at the customary periods of the catamenial

flow, when its secretion becomes sanguineous, or tinged with the dark red colour of the menses, and, on their cessation, again assumes its former purulent appearance.

It is probable, that the rationale of this fact may be, that on the establishment of these drains, some of the natural and healthy secretions may be gradually diminished in quantity. The glands which perform the function of these secretions having been long accustomed to a relaxation from their full duty, may not be in a capacity suddenly to exert an increase of power equivalent to the necessity, and thus the system may become oppressed by some retention, and disease may ensue.

We often observe the rapidity with which congestions will take place, from the prevention of perspiration by exposure to cold, and how successfully an organ will be relieved from this accumulation of blood, by the action of a sudorific, or a diuretic, or a purgative. As all acute diseases and sudden changes are more cognisable by our senses than those of slower progress, so is this fact rendered more evident; but it is precisely analogous to those morbid effects resulting from the repulsion of eruptions, and which are perhaps most important and dangerous, as they are more insidious in their progress.

More than once have I regretted the *local*

success of my applications to the crusts of porrigo, the removal of which has been speedily followed by acute ophthalmia, which, without great care, would have proceeded to the rapid disorganization of the globe; and we may often trace the still more important disease of meningitis, and its frequent consequence the effusion of serum into the cerebral cavities, to the merely local treatment of porriginous or impetiginous crusts. Many cases of phrenitis have been produced by a cold lotion to erysipelatous affections of the face. Dr. Merriman relates a case of stupor, ending in death; and Dr. Morton has alluded to several cases of meningitis arising from the spontaneous recession of porrigo; indeed I have seen the two diseases alternating as it were.

Dr. Darwin has presented us with two cases of chorea, and one of hepatic disease immediately succeeding the cure of scabies. Indeed there seems to be something peculiar in this disease, as regards repulsion, when it has existed for a length of time. It is stated, that paralysis and mania have resulted from its sudden cure, which have subsequently yielded to the re-inoculation of scabies. Mr. Wilson cites a case where melancholia appeared during the progressive disappearance of this disease; which symptoms of depression were removed by an issue; and also a case of hydrometra

following the repulsion of eruptions on the face, which at length proved fatal. Many pathologists, however, still consider it as a simple local affection. Among these is Mons. Delpech, who informs us that he has found friction with olive oil as efficacious as any other application. The cure of his cases, however, occupied seventeen days at least; and the most protracted cases he attended were those in which sulphuretted ointment was used. Now as many other eruptions in certain stages assimilate scabies in appearance, and among these especially prurigo, which is aggravated by sulphur, I conclude but few of these cases were real scabies. From the recession of the specific exanthemata, as rubeola and scarlatina we may usually anticipate an aggravation of the febrile symptoms, and often some dangerous congestion or inflammation of a vital organ, of the membranes of the intestines, the lungs, or of the brain; a fact which must, it is true, be referred to the principle of metastasis or the alternation of disease, where one organ shall become affected, after the restoration to healthy function of another previously deranged. I may not, therefore, confidently adduce these cases as direct illustrations of the argument, as the legitimate meaning of the term metastasis is the removal of the *same* disease to a remote part, which implies a cer-

tain state of constitution favourable to its developement.

If this argument has any force, when employed in reference to diseases of a local character, it must surely be conclusive with regard to symptomatic affections, which we may generally consider with Sydenham, a vigorous effort of nature to throw off the morbid matter; or as Hippocrates writes, ἔξω γὰρ τρέπεται τὸ νόσημά. The paroxysm of gout is so often dependent on derangement of the digestive organs that we may consider it as a symptomatic affection. During the severity of acute diseases occurring in important organs, the physician will hail the accession of gouty inflammation in the extremities as a most happy omen; and perhaps we may learn a valuable lesson from this natural effort, in our treatment of internal diseases occurring in patients of a gouty diathesis; indeed the production of gout by a blister, or other local stimulant, has often been resorted to with the most beneficial effect. It must be observed, however, that these internal inflammatory actions have been judged to be of a gouty character, and that there is simply a metastasis of the same specific action from one remote point to another. This assertion, (if it be valid,) but more strongly shows the intimate relation which the viscera and the integuments bear to

each other, and forcibly points out a necessity for the greatest caution in the external treatment of those disorders, which rarely become dangerous but by repulsion. The doctrine of metastasis, however, has been somewhat misunderstood; as when M. Alibert, in reasoning on a case of anasarca following the recession of pruriginous papulæ, evidently implies that this effusion is merely the consequence of prurigo affecting the lymphatics. The pathologist has indeed weakened his opinion in the minds of others, by discovering no papular appearance in three of these anasarcous cases which he examined after death.

It cannot be correct pathology to assert, that when a symptomatic disease is removed from one part of the body, and immediate morbid symptoms supervene in a remote organ or structure, such a disease must necessarily partake of the nature of that which had previously yielded to remedy, or disappeared spontaneously. The symptomatic disease on the skin may be considered the salutary effort of the system to relieve itself; but if this effort be impeded, it will exert its privilege in another quarter; and hence we may have inflammatory or other morbid actions set up in some important structure, contiguous to, or remote from, the seat of irritation, or the primary excitement may be

productive of more confirmed disease in the part itself. The various affections then produced are, indeed, effects of the same cause, but there the relationship may cease; the notion of metastasis being destroyed by the varying symptoms and character of the several diseases.

I feel conscious that these arguments are not merely hypothetical; they have been too frequently proved by melancholy and, indeed, fatal consequences. These cases must be familiar to the members of the medical profession, and a valuable deduction may be drawn from the knowledge of the results of such erroneous practice, and one which I am most anxious to establish, that the administration of internal remedies is almost universally essential in the treatment of cutaneous diseases; indeed, I may say, indispensable in those of children.

It is truly a very rational argument, that we should regard and generally oppose all the various symptoms which present themselves; but if this reasoning be tenable it is so only with reference to the mere symptomatic disorder; and it must be recollected, that in the affections we are considering, there is actual primary disease, a morbid change of structure, which has been, comparatively speaking, of gradual formation, requiring modes of treatment as gradual for its removal. It is here, as indeed

in many analogous cases, an erroneous precept in medicine to advocate the "*bis dat qui dat cito.*"

The observations I have presumed to offer are subject, of course, to those exceptions which are, in fact, the probation of every rule. There are many instances of the sudden recession or repulsion of symptomatic diseases without the *consequence* of evil; and to prove how little the most accurate pathologist can calculate with mathematical precision on physical laws, instances have occurred where even a salutary effect has resulted from the recession of a disease when, *a priori*, danger might have been prognosticated. It must be stated likewise, that even symptomatic diseases will sometimes react on the system after their establishment on the integuments, producing by their excitement much constitutional irritation. In such cases it may be essential to remove the source of this excitement, by curing the cutaneous affection; but even this must be done cautiously, and with due regard to the first cause, if such can be fairly traced, to which the local disease was but secondary. But we may recollect, that unlike the viscera, the skin is not a *vital organ*, and its diseases have the effect of preserving more essential parts from morbid changes; and, as internal derangement is often the source of se-

vere organic lesions, we may readily allow the propriety and the judgment of delaying local modes of treatment at least, until the exciting cause has been impressed or removed.

It is hence that there is really much truth in the notion of the Germans, that skin diseases are real prophylactics.

It will be evident that the danger of this external treatment will be lessened when we have previously removed the exciting cause, the internal irritation, whatever it may be. Indeed, in many instances, the cure of the primary and symptomatic diseases may be with safety simultaneously effected.

If these cautions are necessary in the treatment of adult disease, of how much more value must they be in reference to the morbid affections of the *infantile period*, when the constitution becomes first exposed to the influence of the various external agents, as the vicissitudes of temperature and atmosphere; and when the alimentary canal has imposed on it the office of assimilating the ingesta for the nutrition and growth of the body. It cannot be supposed that it can undergo these new influential actions with impunity; but above all, that the digestive power should be equal to the immediate assumption of its high office, or that the various aliments should, although judiciously

prepared and administered, on their first introduction prove perfectly congenial. Even the maternal milk itself, the legitimate nutritious fluid of the infant, from various causes, may prove a fertile source of mischief; and the excessive glandular secretion of the mucous linings, may, by its accumulation become the cause of severe disease. When we add to these the irritation of the distended gum during dentition, we shall have enumerated the most important causes of those diseases of early life, not depending on specific contagion; a fact favouring the opinion of Dr. Underwood: "that there is a greater uniformity in the causes of the several disorders even of older children, than there is in those of adults."

It was the opinion of Dr. Goelis, that the majority of infantile diseases bear an inflammatory character; and it is a fact which I have often noticed, that in addition to the unhealthy condition of the intestinal evacuations, pain is evinced on pressure upon the abdomen of the child. This sensation is an indication of some chronic inflammatory state, which may assume the acute character on the recession of the cutaneous eruption.

Now as this affection of the skin may depend solely on this chronic inflammation of the mucous membrane of the bowels, the applica-

tion of leeches to the abdomen will often effect more than even the mercurials or tonics we may have been previously employing, and they will have the additional efficacy of preventing the dangers of recession.

It may be admitted as an axiom, that no disease can be produced in a system, where no predisposition to such disease exists. In the early condition of life there is this predisposition in an eminent degree. The excessive irritability of the nervous system renders the body readily susceptible of the impression of excitement. “Non quod ætas per se sit causa illius morbi, est enim res naturalis et temporis determinatio, sed quia disponit ad morbos quosdam facilius suscipiendos, si causæ eorum accesserint.” Happily, as there is this susceptibility to disease, so also is the scientific treatment of infantile disease satisfactory and successful. “Facillimè inquam in morbos dilabuntur infantes, et nisi aut serius aut imperitius tractentur, facillimè in sanitatem restituntur.”

The rallying power of the system is very efficient in childhood. A healthy body is in a constant state of renovation and increase; and the constitutional energy in disease will often seem to effect a miracle, that of reanimation. It is on this reason, emphatically true, that

on the mere removal of the exciting cause of infantile disease, a condition of health is speedily produced.

In the study of the internal diseases of children, the physician must certainly adopt other modes of investigation than those which relate to the maladies of the adult, who is capable of expressing sensations by words; but perhaps these expressions, owing to the imperfection of language, are not always so decisive and illustrative as we have imagined. The instructive language of complaint during pain, however, if skilfully interpreted, must be a far less fallible guide. It would lead me into wide digression, were I to prosecute this most interesting subject further, but to this expression must be attached the highest value in the investigation of infantile disease. Of equal importance is a minute observation of the expression of feature, and the attitude and action of the limbs. These are the expressions of nature herself; they are the modes of instinct, which can never impart erroneous ideas were not human comprehension defective in the power of correct interpretation. But in this, as in some other instances, the resources of the rational animal are far inferior to the brute, where the undeviating law of instinct is established by creative wisdom as some compensation for the want of peculiar reasoning. To obtain any

degree of perfection in this study, a patient attention is requisite: it is not to be learned in books, nor imparted by the lips—it is the *visus eruditus*, which becomes the exclusive property of the observant student; who notwithstanding, in announcing his opinion with the firmness of positive conviction, can yet seldom satisfactorily answer the natural interrogatory—*Quare?*

How often do we hear the unskilled or unreflecting nurse express delight at those contortions of the lips, which she denominates laughing. But this is often a real spasmodic action, and may be witnessed during the severity of the convulsive fit. This fallacious smile has too often lulled, with false hope, the anxious mind of the mother, who has unfortunately not sufficient skill to discriminate between this insidious expression, and that true indication of health and delight which Catullus has thus beautifully expressed:

“ Parvulus

Matris e gremio suæ,

Porrigenz teneras manus

Dulce rideat ad Patrem,

Semihiente labello.”—EPITHAL.

I have been anxious to dwell thus much on the subject of infantile expression, as infantile disease has been too much consigned to the

often superstitious and bigotted priestess of the nursery, from an absurd idea that it was useless to attempt to investigate disease, where words were wanting to develope the sufferings of the patient.

I am aware that these remarks are most applicable to those derangements of function and of circulation which belong more properly to the province of the physician; yet, as I have asserted the secondary effect of many of these derangements to be the production of cutaneous disease, it will be obvious that they are almost as important in the investigation of the causes of the latter, on the knowledge of which alone can our practice elude the stigma of empiricism.

On perusing those remarks in the numerous essays on this subject, which relate to the treatment of cutaneous diseases, it will be evident that the eulogy bestowed on a remedy by one author, is often clouded by the account of its repeated failure in the practice of another. It is the common curse of physic. When, however, we consider the endless variety of circumstances under which our patients are placed, the peculiar idiosyncrasy, the *specific irritability*, as physiologists have termed it, of the individual, and the nature of the exciting causes which may yet be exerting their

influence, and actually effecting a continual reproduction of the disease; and above all, when we reflect on the different and even opposite effects of the same remedy on different constitutions, we shall cease to wonder at this humiliating variety of opinions. Another principal source of error must be the ascribing virtues and efficacy to a certain medicine which it perhaps never possessed, and eulogizing it as the cause of that change which was effected by another.

It is wonderful how readily we mould our arguments on such an error, and how cheerfully and confidently we adopt the almost promiscuous employment of such an agent on the faith of an effect, which might have been a simple coincidence, forgetful of the fallacy of that sophism which would argue—"Quia post hoc, ergo propter hoc."

It is not therefore without diffidence that we can at any time offer any positive promise of the beneficial effect of our own favourite remedies; but I have thought, that with a more limited pharmacopœia, and a more attentive consideration of constitution, and the *cause* of disease, we shall effect much more than by a superficial and confined view, even with the whole *materia medica* at our disposal. If therefore this essay is not completed by the

decided advocacy of a host of new remedies, and if the frequent failure of those which have been highly extolled, even as specifics, should be proved, it will inculcate that proper degree of caution with which the results of individual practice should be offered as an illustration of theoretical principles.

ON THE
PREVENTION OF INFANTINE ERUPTIONS.

“ Qui sanitatem vult restituere decenter, debet investigare —
res *nonnaturales*.”

GALEN.

ON the assumption that the majority of infantine eruptions are symptomatic of constitutional or intestinal disease, it will not be irrelevant to offer some remarks on the establishment of that healthy condition of functions, which may be considered as constituting the *prevention* of cutaneous diseases.

Setting aside the absurdity of the term *non-natural*, we must all acknowledge the value of this injunction. It is not, however, more valuable with reference to the cure than to the prevention of disease. In the relation of predisposing and exciting causes, the injudicious employment of the gifts and propensities of nature hold a prominent situation. By exposure or by excess, the system is reduced to a state of morbid sensibility, which increases its susceptibility of the influence of contagion; and diseased actions may be generated in it *de novo*, by unwholesome food or excessive repletion. They are the bane or anti-

dote of life, as they are employed with or without judgment and caution. It is true, indeed, that with the greatest caution the simple act of respiration may be the means of introducing disease. Thus Hippocrates has written :

“ *Mortalibus aer tum vitæ tum morborum causa est.*”

It would be wandering from my subject were I to advocate the precepts of Sanctorius and Cornaro, or to dilate otherwise on these points, however influential, either primarily or secondarily, some of them, and especially air, may be in the excitement of cutaneous diseases during the period of childhood. In speaking, then, of these preventives, it may be sufficient chiefly to direct our attention to the condition and regulation of the functions of two most important secreting membranes of the body ; the epithelium, which is reflected from the cuticle to line the alimentary canal, and of the skin itself ; a derangement of their peculiar functions being the most frequent exciting cause of cutaneous disease.

The secretions of the mucous membrane of the chilopoietic viscera, so important in the accomplishment of nutrition, and the healthy condition of those membranes through which so large a proportion of the superfluous fluid of the body is eliminated, are subjects replete with interest.

As these tissues must be regarded almost as one continuous membrane, so is there an intimate and mutual relation between them—the *continuous sympathy* of Mr. Hunter, which, in regard to diseased action, we may consider in the light of cause and effect.

The *sympathy of organic sensibility* of Bichat would, however, in a great measure, contradict this by denying the necessity of continuity of surface. The fact of some remote analogous instances, render it by no means certain that no such relation exists. Thus the editor of Blumenbach has alluded to “the sympathy along the blood-vessels, strikingly instanced between the internal mammary and epigastric arteries, especially in advanced pregnancy: that along the lymphatic vessels, also most remarkable during pregnancy and suckling; and again, that dependent on analogy of structure and function, v. c. the sympathy of the lungs with the surface and intestines.” To these may be added the tumefaction of the lips from the irritation of ascarides in the rectum.

Granting, then, the existence of this important connexion, whether it consist in continuous or remote sympathy, or merely as one phenomenon of the common function of the skin as a general emunctory, we may proceed to offer some remarks on the subject of

ALIMENT.

Nature has imparted to the milk of the mother, for some days after the birth of her child, a peculiar property which exerts an influence on the action for the evacuation of the meconium; an influence, however, which is not always sufficient without the aid of some mild laxative. Indeed, its administration is generally resorted to on the knowledge of the ill effect resulting from the retention of this viscid matter. Hippocrates, Celsus, and, indeed, most of the eminent writers, entertained this opinion; and Dr. Underwood has written—"I have long suspected that a foundation is laid for them, (infantile complaints,) from not duly attending to an early expulsion of the meconium, which will sometimes firmly adhere to the coats of the bowels, and remain for many days." Whatever may be the use of the meconium in the foetus, it speedily exerts a baneful influence after the child is born, if not speedily evacuated, becoming acrid and stimulating, (an effect, it has been asserted, of the mixture of air,) altering the nutritious property of the milk itself. From this result gripings, fever, convulsions, and even death itself. It is not, therefore, until its complete evacuation, that the mucous surface of the alimentary canal is adapted for the perfect assimilation of food.

As natural instinct has attracted the infant to its mother's breast, so may she, in re-applying it to the nipple, be guided by its dictates, as indicated by the child showing signs of hunger, and the corresponding criterion of the turgescency of the breasts. This nutritive fluid of the mother is so congenial to the infant's stomach, as to have become the basis of a proverb, "Like mother's milk." Indeed, in Greenland and the Esquimaux district, it is considered the only food for the infant; for so little do they think their fat and coarse food fit for it, that the infant is generally buried with the suckling mother.

Unless from the milk's being secreted in an insufficient quantity, from malformation, or even a cracked and heated condition of the nipple, from peculiar delicacy of constitution, or from actual disease in the mother, this fluid may constitute the only sustenance of the child for three, four, or five months, being far more nutritious than more solid food: a truth which, indeed, forms an illustration of this aphorism of Hippocrates—

Ρᾶον α πληροῦσθαι ποτοῦ ἢ σιτίου.—L. II. Aph. xi.

It is so natural a process, that under favourable circumstances, the health of mother and of offspring must by it be reciprocally benefited.

It is to be regretted that the slavery of fashion should have so strangely inculcated that apostacy to the law of nature which exiles the infant from its mother's bosom to be nurtured on that of a stranger. It is wonderful, that this unnatural error should have so long deluded the fairest portion of creation, for it even incurred the censure of Tacitus. Yet thus it is; and we must feel disappointment when we reflect on the inefficient force of that high example, when

“ ——— Late with angel grace along the plain,
Illustrious Devon led Britannia's train;
And whilst by frigid Fashion unreprest,
She to chaste transports open'd all her breast,
Joyed her lov'd babe its playful hands to twine,
Round her fair neck, or midst her locks divine;
And from the fount with ev'ry grace imbued,
Drank heav'nly nectar———”

It is thus by this neglect the proud possessor of Reason wanders from the paths of simplicity, tearing asunder those delicate bonds of natural affection which creative power has cast over the progressive periods of the nurture of offspring.

In regard to the act of suckling, it may be well to inculcate the benefit of removing the child's mouth frequently from the breast for a minute or two minutes, to avoid too rapid a distention, the common cause of acidity.

With respect to the results of bringing up infants by the hand, we may all bear testimony to its danger. The mortality resulting from its practice is rated, by Dr. Merriman, as high as seven in eight infants in London: this proportion is somewhat diminished in the country. Contrasted with this is the infrequency of infantine death in northern climates, where, as also on the shores of the Mediterranean, the practice of suckling for a year or more is so general. When we consider, then, the moral obligation of the act of suckling, and the destructive physical consequences of its neglect, we must feel it a paramount duty to advocate its necessity, wherever fashion or the sensation of merely temporary pain has prompted the mother thus to disobey the dictates of nature.

But there are causes which deteriorate the milk even in the earlier months; among which the influence of maternal solicitude during the illness of a child. If the milk is secreted in the usual quantity, the mother continues her office of nurse, unmindful, or perhaps unconscious, of the change in the mammary secretion from nervous influence, and thus she is actually hastening that catastrophe which she is momentarily anxious to avert. It cannot be too forcibly inculcated, that in many instances of prurigo, crusta lactea, &c. the substitution of pure and healthy breast-milk is itself an inva-

luable remedy, and will sometimes effect, almost instantaneously, a most beneficial change: it may indeed be affirmed, that in such a case aliment and medicine are synonymous.

After the sixth or seventh month, it may be adviseable to combine some portion of artificial aliment with the maternal supply, both to accustom the digestive process to a less limited office, as well as to diminish, in some degree, the too great exhaustion of the maternal system.

This caution is of the most essential importance, but it is one, unfortunately, too much neglected. The effect of maternal exhaustion is not confined to the mother; it is a succession of evils. It may be truly said, that the infantine disease excited by milk of a deleterious or simply impoverished quality, "grows by what it feeds on;" and we shall witness the internal debility and the infantine disorder running their course together. *Tabes* is the natural consequence of this error: but its effect is evinced by the occurrence of other disorders. A defective degree of nutrition, as I have elsewhere stated, predisposes the system to become influenced by comparatively slight excitement; and thus, in addition to the direct excitement of disease, it becomes indirectly its predisposing cause. Under its influence the serous and mucous membranes

become readily the seat of inflammatory action.*

In administering this diet to children, we should delicately apportion its quantity to the powers of the stomach, offering such as contain the greatest portion of nutriment in the smallest substance; recollecting that nature, consistent and wise in all her institutes, never designed other than liquid or mucilaginous food for an infant whom she had not supplied with teeth fit for mastication.

The first food recommended by Dr. Young is cow's milk, with a little hartshorn jelly to correct the ascendency of the milk of animals, which feed solely on vegetables.

The consequences of over-feeding, especially with solid matter, (for it scarcely deserves the name of aliment when administered in this excess,) are woefully destructive of the tone and functions of that laboratory whence all the supplies of the body are drawn—the stomach: distention, flatulency, griping, tabes, with their characteristic convulsions, are among the immediate effects of this common error; added to which, is the entailment of a host of

* Since I have written the above paragraph, Dr. Morton has published (in the Medical and Physical Journal) some remarks on the prevalence of meningitis from protracted suckling. They are ingenious, and worthy of being followed up by other pathologists.

subsequent diseases, which may comprehend the majority of the chronic division of our catalogue. It is therefore of vital importance to regulate the ingesta of the stomach, a caution which may be enforced by a poetical inculcation, addressed certainly to a set of votaries widely different from the helpless subjects under consideration :

“ Sumite materiem vestris——
Equam viribus.”

But even if the power of the stomach renders this excess of feeding an excess of nutrition, it is an error no less flagrant ; and we must at the same time wonder at and deprecate the pride of that mother, who shall appreciate her child as she would her capon or her pig, by the mass of matter which composes it.

About the eighth, ninth, or tenth month, if the child is in good health, the process of weaning may be resorted to ; a process, it must be confessed, of much importance, as its results are often unfavourable to the child. It is a renouncement of its earliest habits, and is frequently marked by disordered functions and derangement of general health, the result of mere change of food. It has been observed, that diarrhœa and atrophïa ablactatorum is most frequent in summer and autumn, and that too in the male more than in the female infant.

It is at this time especially essential to administer the food sparingly and cautiously, particularly if the stomach is now for the first time subjected to it. It may be wise to observe the caution of confining the food as much as possible to one or two substances, unless an entire alteration is indicated; and on this account—it is probable that various articles of diet require certain and different periods for the accomplishment of their assimilation. Their stimulus, on admission into the stomach, promotes such secretion of the gastric juice as shall be adequate to the conversion of certain portions of this mass into chyme; but this secretion may be checked before the essential property shall have so disposed of the residue of this mass, which will thus become a burden to the stomach itself, and a source of much mischief to the body. It ought to be a rule, therefore, to administer food which is proved to be speedily and easily assimilated, and not to endanger accumulation by its too frequent repetition. Very often have I been able to trace an attack of diarrhoea mucosa, simply to small quantities of pudding, milk, or broth, given to the child at very frequent intervals. It must be confessed, that no positive rule can be laid down as to the separate articles of diet most appropriate for children: it must often be the result of experiment; but as a general selec-

tion, we may confidently recommend biscuit-powder boiled in water, and mixed with milk, panada, prepared wheat, rice gruel, baked apple, boiled turnip, with once or twice in a day the wing of chicken grated, or the gravy of beef or mutton diluted with water.

It may be anticipated that subsequent to weaning, the child will become thin—a change of condition which may not be essentially morbid, especially when unconnected with symptoms of an unfavourable nature. It may be, in fact, a natural and healthy change, dependent on more solid nutriment—effected perhaps by some increase of muscular growth and power, and a diminution of the deposition into the adipose membrane.

But if fever or irritation be present, if the child be languid, fretful, and restless, it is undoubtedly in a state of disease; the principal criterion perhaps may be, the condition of the muscular fibre of the body. If with this attenuation we have a flabby state of muscle, and a folding or bagging of the skin, together with a pallid hue, it is a case of emaciation from disease, and must require immediate attention.

The temperature of the food is a point not sufficiently regarded. It should be invariably tepid or lukewarm. If too hot, it may subsequently debilitate the tone of the gastric ves-

sels ; if too cold, it may repel their action and check secretion.

About the second year, when the nervous and muscular systems become more developed, when the process of dentition assumes a more important character, by the cutting of the canine and some of the molar teeth, it is most essential to observe a judicious domestic management: to be especially cautious that repletion is not too speedily effected. The system is in a state of extreme irritability: a condition which predisposes the child to the supervention of inflammatory action. The diet should at this time be light, and laxatives often given.

Subsequently to this period, the essential epochs of the infantine life are passed, and a strict regulation is not so indispensable. It will at all times however be wise to obey the precept which Hoffman has given us in his sixth rule of health—" *Mensuram semper quære inter alimenta et motum corporis.*"

With regard to the swallowing of fluids during a meal, it would be well to restrict such fluid to a very small quantity, as an excess of it would perhaps too much dilute the gastric juice, and prevent the contraction of the stomach on its contents—of course this argument does not apply, where fluids only are admitted. The precept of Sanctorius, however, has strongly opposed this advice, at least when

referring to the adult—"a man's common diluting drink at meals should be double the quantity of the solid food he eats."

If this precept was restricted to the imbibition of fluids at the period when the conversion of the food into chyme was approaching its completion, there could be no objection offered to its propriety.

The antipathies of children should not be disregarded altogether, as it is evident that the stomach may loathe certain articles, and possess a peculiar inability of digesting others.

With regard to the relative capacity of various alimentary substances for conversion into good chyme, analogous reasoning would lead us into error. Experiments on brute animals, it must be evident, are extremely fallacious; and even in the human stomach, the aliment most congenial to one may prove highly detrimental to another. The opinions on this subject have been almost as various as their authors—and marked by complete contrast. Sanctorius, for example, strongly recommends the flesh of young animals, while others decry its employment. It would therefore be futile to pursue this subject further, individual experience being the safest guide.

It may be observed that there are certain articles of food which indicate their specific influence by morbid affections of the skin, in

constitutions where peculiar predisposition exists, the consideration of which must be deferred until those diseases are under discussion.

OF LAXATIVES.

OBJECTIONS have been repeatedly offered by a large class of medical authors, especially those of the continent, to the employment of purgatives, but it appears to me that they are unwisely and too exclusively entertained. By some, on the contrary, they have been eulogised as almost the only medicines necessary for the cure of disease. We shall in our practice do well to avoid these extremes—"Medio tutissimus ibis."

It is perfectly essential that in our administration of laxatives, the relative periods of repletion and evacuation should be duly regarded. Immediately, or soon after a meal, it is most injudicious certainly to swallow purgatives. It is impossible that nutrition can take place under such circumstances, the muscular action of the stomach being excited to the detrusion of its contents through the pylorus, ere the formation of chyme is completed. For although it be true that the healthy pyloric contraction may refuse the transmission of all

save its peculiar stimulus, the chyme, yet it can scarcely resist the muscular force prematurely even excited by the purgative. It may be termed, indeed, an artificially induced diseased action, since in its healthy state the stomach will not extrude its digestible contents, ere they are reduced to a pultaceous mass. When moreover the chyme is detruded from the stomach, there is still to be effected the most important process of absorption.

In Sir A. Cooper's experiments, it was proved that the digested aliment adhered most firmly to the sides of the intestines, effected, he believed, by a property of self-coagulation. During this state of coagulation, the juices of the villous coat are directly applied to this chyme, with an admixture of the pancreatic liquor and the bile,* converting it into chyle, the proper stimulus for the lacteals. The principal part of this formation and absorption of chyle being effected before the mass reaches the ilium.

It is with reference to this abuse of purgatives that we apply the aphoristic remark of Hippocrates—

Εν τῇσι φαρμακείῃσι τοι αὐτὰ ἄγειν ἐκ τοῦ σώματος ὀκοῖα καὶ ἀντόματα ἴοντα χρήσιμα ἵα δὲ ἐναντίως ἴοντα, παύει.

* Experiments, however, prove that the bile is not essential to nutrition, as that is effected in jaundice, and where the ductus choledochus has been tied.

It is essential then not to employ the laxative within two or three hours previous, or subsequent to the reception of food. The effects of constipation in children are most dangerous, but it is with reference to the removal of depraved secretions, and the amelioration of the condition of their membranes, that I am most anxious to enjoin the free use of laxatives. As the mucous membrane of the alimentary canal is restored to healthy function, the simple cutaneous diseases will often suddenly disappear, as it were, from the direct influence of the *continuous sympathy*. In those diseases, characterised by cachexia, the removal of a morbid coating which sometimes accumulates to an excessive degree over the lacteal orifices, allows a more copious absorption of nutrition, and thus by invigorating the system, indirectly removes the disease.

It may appear paradoxical to assert that it is often requisite to render the laxative dose more powerful even than that for certain adults: yet such necessity may exist, and can be readily explained, by the copious mucous secretion which is poured out in the intestines of the infant, in which a laxative powder may become even imbedded, and in that state evacuated.

The quality of the evacuations will indicate the species of laxative which should be em-

ployed—the alkaline, the saline, the bitter, the emollient, or the mercurial.

With regard to the administration of the submuriate of mercury, it may be safely affirmed that no positive precept can be advanced. Its action is so modified by peculiarity of system. The illustrations of this assertion, which might be drawn from practice on the adult, are very numerous, and prove that we cannot *à priori* ever employ it with certainty. It will suffice, however, briefly to refer to two cases under my own care at the Royal Infirmary for Children. In a child five years old, with an acute attack of ophthalmia, ptyalism was produced by half a grain of the subm. hydr. administered on two evenings only: while in a boy of twelve years of age, who was my patient at the same time for an obstinate epilepsy, I gave two grains of the submuriate every night for four months without producing any sensible effect either on the intestinal or on the salivary secretions.

On the subject of evacuations in the treatment of skin diseases, Mr. John Wilson, in his Essay, has thus reprehended the general neglect of the due evacuation of the vesical secretion. “When the urinary matter is reabsorbed, it may readily be conceived what injury a diseased skin may sustain. Loaded with acrid salts, the excretory refuse of the system again pervading every pore, surely we may anticipate

some aggravation of superficial disorder. That the secretion of urine bears the same sympathetic analogy with the skin as the functions of the bowels, I could prove by an abundance of well-attested facts." There is, I think, some ground for this imputation in the occupied adult, and perhaps during youth. In the earlier periods of life, this secretion is evacuated at the desire of nature.

ABLUTION, &c.

"Summam cutem relaxari, evocarique corruptum humorem, et habitum corporis mutari."—*Celsus, De Sudore.*

THESE are not the least important advantages which Celsus has attached to the employment of the bath. Its use has, indeed, been resorted to in all climates and by all classes, both as a luxury and a benefit. Among the ancient inhabitants of Greece and Rome, it was deemed so indispensable, that the higher classes seldom sat down to supper, their most fashionable meal, without previously entering the bath.

Among the Athletæ it was a constant custom, for the purpose of strengthening muscular fibre,

and perhaps of preventing obesity—according with the precept in the *Medicina Salernitana*.

“ Qui vero gracilis esse cupit, jejunos ac famelicus balneandus est.”

Among the oriental nations it formed one of the most essential duties of the toilet, exemplified in the beautiful romances of Arabia and Persia, whose pages teem with descriptions of the splendour of their baths, those temples so essential in the preparatory ceremonies of love and of devotion. It was indeed indispensable in the devout Mussulman previous to his offering of homage to the prophet.

If we may credit the delightful description of the bagnos of more modern Byzantium, presented to us by Lady Wortley Montague, where the beautiful forms of the Turkish women were gliding or reclining in a state of naked loveliness, its observance was then, at least, highly honoured in Turkey.

When we reflect on these relations, and on the constant practice of the bath, even in the cold regions of Russia, of Lapland, and other northern climates, we cannot but wonder at its comparative neglect among ourselves: so little do we seem to attain the insurance,

————— “ that full and free,
Th’ evaporation thro’ the soften’d skin
May bear proportion to the swelling blood.”

Among the females of Spain, indeed, there is a degrading want of cleanliness; and it is the custom among some of the fair of Britain to *dry-rub* the face, as a preventive of eruptions.

In some constitutions, where sweating is defective, it is absolutely necessary, as we learn from Galen, in the case of Primigines of Mitylene.

If we reflect on the physiology of the skin, indeed, it will require no further argument to establish the benefit of ablution. For if its secretion be checked, it must cease to be an outlet for those morbid excretions which the efforts of the system have removed as far as the subcuticular tissue. If it be by obstruction here arrested, we may anticipate the ill effects of the retention and reabsorption of that—

“ Quicquid in corpore vel fuliginosum vel fumidum fuit.”
Sch. Sal.

These ablutions should be general. A partial lavation of the head and hands, although salutary in a degree, cannot accomplish the object which is desired. We have, however, these limited ablutions extolled thus in the records of the Schola Salernitana—

“ Ne superfluitates—in capite retineantur.”

And this more laconic precept—

“ Si fore vis sanus, ablue sæpe manus.”

In the infantine period, when direct exercise is impossible, ablution becomes essentially requisite: for the purpose of removing secretion, modifying temperature, promoting perspiration, and strengthening fibre.

With reference to cold ablution, Virgil has informed us, that it was a practice in ancient Italy to plunge the newly-born infant into cold rivers—

“Durum a stirpe genus. Natos ad flumina primum,
Deferimus, sævoque gelu duramus et undis.”

Æn. l. 9. line 603.

Sir W. Penn, in his History of the Cold Bath, Part II. p. 291, writes thus—“I am assured that the American Indians wash their young infants in cold streams as soon as born.” And in the last poem of the Laureate—the Tale of Paraguay—a beautiful picture is presented of the submersion of both mother and child almost immediately after birth.

In alluding to the advantages of cold bathing, we must still offer our remarks with some caution, and with the addition of certain provisos, as by submitting a weakly child to this direct repellant, we may both induce dangerous internal congestions, and indeed promote, rather than obviate, cutaneous disease. These effects depend on a relaxed tone of the vascular system—a defective power in overcoming the

external repulsion—a failure of the production of reaction.

For the purpose of appreciating the employment of cold ablution, it is essential that we should notice the state of the child after it has been plunged into cold water. If it appears lively, and if there is a diffused redness and warmth breaking forth over the body as it is rubbed dry, then undoubtedly the bath has been beneficial, and a repetition is indicated. But if, on the contrary, there is a chilliness and pallor over the skin, if there is an absence of lively action, if the countenance is anxious, the limbs rigid and benumbed, and should these symptoms, moreover, continue after the child is dry and dressed, then will it be highly dangerous to resort again to cold bathing. Water, of a modified temperature, must be employed: and the temperature of this water may be progressively diminished, so long as there shall be an absence of the symptoms alluded to.

I am aware that in the majority of infants, the limitations I have advanced may be unnecessary; yet am I certain, from continual observation, that the cold-bath is too indiscriminately employed. This injudicious adoption is the source of visceral congestion, with all its secondary effects of convulsion, of acute inflammation, of chronic glandular obstruction,

of marasmus, and of cutaneous diseases. Thus is it a bane or antidote, as judgment or ignorance direct its employment.

In those constitutions, then, where the powers of life are evidently not adequate to the production of reaction, the tepid bath is the more salutary. It is a vulgar error to believe that the tepid bath, (where the temperature shall not exceed 95° ,) is productive of relaxation. Experience will prove that from it is resulting the most animating vigour. The effect of cleansing the impure skin is more complete, as the warmth seems to exert some solvent power on the unctuous secretion with which some skins are imbued.

But perhaps the most valuable property of warm bathing is, that it may be employed even during the existence of internal inflammation; it will indeed be a salutary adoption, and will assist the other antiphlogistic or depleting measures for its reduction.

In writing on the subject of cleanliness, it may be remarked that it may, in most instances, be effected without the aid of soap, which is often endued with so irritating a property, as to induce the scales of pityriasis, and even a pustular eruption on the scalp. These effects, thus produced, I have seen altogether cease, on the mere discontinuance of this irritating

substance, and substituting simple tepid ablu-
tion.

Although the employment of water naturally or artificially impregnated with salutary properties, may more properly be considered as a remedial than a preventive process, yet in those constitutions where an hereditary or peculiar tendency to certain cutaneous affections exists, their use in the latter capacity may often become essential.

With regard to bathing in salt water, although some degree of efficacy cannot be denied to it, yet I am disposed to believe, that too much eulogy has been bestowed on the simple act of immersion in the sea. We are to consider that there are many collateral advantages attached to the marine resort. The inhalation of a salubrious atmosphere, a gaiety of scene, and a constant pedestrian or equestrian exercise. These delights, when contrasted with the confinement and deteriorated atmosphere of the metropolis and large towns, must not be held in light estimation, even in the consideration of skin-diseases.

I was led first to entertain this opinion, by witnessing in London the constant failure of the application of sea-water, in those cases where *à priori* I had been led to prognosticate certain success: and I do not doubt that a marine

residence, even independent of constant bathing, would be usually accompanied by effects, almost as salutary, as when this immersion is regularly adopted. Still it is by no means intended to undervalue its occasional use.

The celebrity which the employment of vapour, impregnated by the essential virtues of herbs and minerals, has attained, at the present day, render any special account of them superfluous. It is certain, however, that in the employment of them as preventives, we may adopt very successfully in this mode, any peculiar medicinal properties: always avoiding exclusive empiricism.

The advantages of fumigation in this sense over bathing are certainly very considerable. Its greater elasticity will penetrate the skin, combining with its diseased secretions. It may even insinuate its impregnated virtues into the air cells of the lungs. It more speedily produces perspiration, especially if the head be immersed in the vapour. The ingenious Essays of Mr. Wallace, on the Sulphureous and Chlorine Fumigation, have offered to us an invaluable remedy in some of the most inveterate cutaneous diseases. The use of the nitro-muriatic acid bath also has been eulogised by Mr. Coyne, as an efficient remedy in many diseases of the skin.

The custom of ablution implies as its conse-

quence the employment of moderate friction, the effect of which must additionally tend to promote a freedom in the capillary circulation. It was the practice of the ancients to put their patients into a stove, and rub them with a dry coarse cloth.

On the subject of friction, Galen has been most voluminous, yet I think his custom of rubbing infants with salt—"quo cutis ejus densior solidiorque reddatur," must be altogether reprobated.

With respect to air and exercise, their advantages are generally appreciated in theory, but often neglected in practice. The buoyancy of youth, it is true, will prompt the child to run and play: and it is ever judicious in parents to encourage this disposition, in the healthy exercise of the skipping rope, the ball, and other salutary games. Our modern gymnasia are founded on this principle. A revival, indeed, of customs of the ancients, especially the Romans, who inculcated free exercise during the whole course of life; for Martial has informed us of the adoption of the hand-ball by youth and age.

"Folle decet pueros ludere, folle senes."

Lib. 14. Ep. 43.

ON THE ANATOMY AND PHYSIOLOGY OF
THE SKIN.

It would be superfluous to enter deeply into an investigation of the anatomy and physiology of the skin; but it is perhaps essential that I should briefly notice those peculiarities of its structure and economy, which may seem to bear a reference to the nature of its diseases: taking leave to combine, or simply transcribe the observations which have been presented to us by anatomists.

The skin, or common integument, has been stated to consist of three membranes—the corium, or cutis vera, internally: the cuticle, or scarf skin, externally; and the reticulum malpighianum, or rete mucosum, the bond of union, as it were, between the other two.

Monsieur Andral, Jun. has, however, in his dissection of a case of elephantiasis, satisfactorily developed three distinct layers between the cutis and cuticle, which MM. Gaultier and Dutrochet had affirmed. Thus it may be said that the reticulum consists of three layers, two external white layers, and the intervening tissue, or the seat of colour.

The cuticulum is a semitransparent and

lamellated membrane—it is but little organised, being destitute of nerves and blood vessels, and insensible. It is the common covering of all animals, and in some is periodically separated from the subjacent tissue, and cast off intire as in the skins of serpents; a process bearing some analogy to the falling off of the outer bark of the plane-tree, from the alburnum. The cuticle has been known to peel off like a glove in erysipelas, and it may be easily separated from the cutis and reticulum by morbid bullæ, or by artificial vesication. After death, this effect may be produced speedily by boiling water, and slowly by putrefaction. It is of unequal density, being thickest in the palms and soles, even in the fœtus in utero. It suffers the contact of the atmosphere with impunity, and therefore is essential on the surface of the body, and is reflected or continued, for this reason, over “the internal cavities, and the canals which communicate with the surface, for the purpose of admitting air, especially the respiratory passages, and the whole of the alimentary canal, the tongue, the inside of the cheeks, the fauces, and the organ of smell,” in the form of “a fine epithelium originating from the epidermis:”^{*} and in some parts, indeed, where the cutis itself has not been discovered. It resists, for

^{*} Blumenbach, Cut. Persp.

a long time, the various causes of decay, (a fact also observed in the vegetable kingdom.) It is easily reproduced. It is formed as early as the third month from conception at latest. It has been thought to be an indurated cutis, but the constant washing of the liquor amnii would tend to disprove such supposition. Its origin has been referred by some to a condensation of the mucous tela, by others to a deposition at the extremities of the excretory vessels. It appears to be nourished by vessels from the cutis, and cannot be said to possess vitality of its own. In the cuticle, Mr. Hatchet has discovered gelatine, and Sir H. Davy silex. It is continually peeling off in minute scales. Mr. Chevalier, even by the aid of a lens magnifying 140 times, could not demonstrate any pores in cuticle, except where hairs had penetrated it, or in the situation of the sebaceous glands. But he discovered what he terms *velamina*, very minute, and of very great tenuity, of a follicular appearance, separated from each other by rather thicker bands. These *velamina* seem to transmit fluids as through bibulous paper, or like the physiology of the air-cells of the lungs, or perhaps as the fat is supposed to transude through its vesicular membrane. Vesications on hairy parts, however, do send a fluid through the foramina for the transmission of the hair. The accurate

Lewenhoeck, it is true, asserts the existence of pores, but Blumenbach has denied this position, and the experiments of Mr. Chevalier have further proved the latter assertion. This transmission through the velamina of perspiration, may perhaps be considered as a species of vital action distinct from transudation, or at any rate depending on its attachment to the reticulum, for when vesication has been produced, this contained fluid does not escape by transudation : nor are minute injections ever forced through these velamina.

The perfect integrity and *tension* of the cuticle is essential to its sensibility and function : a fact illustrated by the numbness which is felt, when by the loss of the nail, its attachment and tension is destroyed, and by such numbness being removed by the reproduction of the nail.

The nails themselves may be considered almost as a part of the cuticle, as they come off with it after maceration, and as their chemical analysis bears the same results. The nails are fixed at their roots to a semilunar fold of the cutis, and are covered by a reflection of the cuticle. Their nourishment is effected by the vessels of the cutis, not of the osseous fabric ; if the bone be lost, however, they may become curved. They are also sometimes converted into horn. The reticulum is not

continued under them. A morbid growth beneath them is productive of great pain, owing to their unyielding structure pressing on the diseased mass; analogous to the pressure of the tooth on its inflamed membrane.

The nature of the *reticulum malpighianum* is, according to Blumenbach, mucous; other anatomists, on the contrary, have denied that it is either reticulated or mucous. It is, however, soluble by maceration. It is the seat of the characteristic colour of nations, and of the stains of *chloasma* and *cyanosis*. It is a bad conductor of heat; a circumstance which powerfully operates as a defence of the negro against the action of the sun. The cause of colour seems to depend on the proportion of carbon, excreted with hydrogen from the corium. In the negro, the *reticulum* can be readily separated from the corium and the cuticle. It requires a suppurative process for its reparation and reproduction. It appears to form a sort of nidus for the vessels and nerves of the cutis.

Subsequently to ulceration, as excited by the vaccine vesicle, or a fontanel, it is probable that the rete is either not produced, or that it does not regain its character, for we find, that on the superficial cicatrix from those lesions, the peculiar dark tinge arising from the continued use of *argenti nitras* is not ob-

served ; it may, indeed, be said to be as contrasted amid the dark leaden hue surrounding it, “ as pearls upon an Æthiop’s arm.”

The cutis has been divided by Mr. Chevalier into two membranes, the cutis vera, and its protector the corium. It will be sufficient, however, still to retain the general term cutis as implying at least their intimate connexion.

The cutis invests the whole body, is strong and elastic, “ of different degrees of thickness, every where closely united, and, as it were, interwoven with the mucous tela, especially externally, but more loosely on its internal surface, in which, excepting in certain parts, we generally discover fat. Besides nerves and absorbents, innumerable blood vessels penetrate to its external surface, upon which they are shown, by minute injection, to form very close and delicate net-works. A vast number of sebaceous follicles also are dispersed throughout it, which diffuse over the skin an oil, thin, limpid, and not easily drying, altogether distinct from the common sweat, and from that which possesses an odour resembling the odour of goats, and is peculiar to certain parts only. Lastly, almost every part of the corium is beset with various kinds of hairs.”*

Its vascular surface is minutely penecillated

* Blumenbach, p. 110.

or villous, the villi terminating in the velamina of the cuticle. The papillæ may be more erect or sensitive, or blunt and insensible from contraction.

What are called the pores, which are numerous in the corium, are the residences of the bulbs of the hair, or of the down or capilluli, and the sebaceous glands, and the transits of vessels. The corium is the seat of those marks effected by tattooing, and of the morbid secretion of ephelis.

The vessels of the cutis supply the papillæ, the sebaceous glands, the hairs and the cellular membrane. On the subject of these membranes, I take leave to transcribe the recapitulation of Mr. Chevalier. "The cutaneous vessels, from their trunks to the tela cellulosa, ramify, supply the tela and the adipose secretion, pass through the corium at acute angles, and anastomose. From this reticular arrangement proceed the villous projections which combine the perspiratory and absorbent tubes. Here they are intimately connected with the papillæ: these push their delicate points into the interior epidermis. Here they lodge in safety, where perspiration is secreted. In their course they nourish the capillary bulbs, and the sets of sebaceous glands, send out noxious particles, and take up congenial ones."

The hairs, according to Fyfe, are bundles of

small filaments, with canals between them for containing their medulla, adhering by a bulb to corium, which bulb is not, however, the source of its nourishment.

Blumenbach says, "the hairs are almost incorruptible, and always anointed by an oily halitus. Of all parts they appear most truly electrical; they are very easily nourished, and even reproduced, unless where the skin is diseased."

The sebaceous glands consist of two sets. One seated in the corium, the other under the epidermis; the first have been called miliary glands. Mr. Chevalier calls them ceraceous from the peculiarity of their secretion, which is formed for the lubrication of the skin.

As the cellular membrane, although not peculiar to the integuments, is so intimately connected with some cutaneous diseases, I will take the liberty of describing it in the words of Blumenbach.

"In all the structures, whether fibrous or parenchymatous, there is interwoven a general mucous web, commonly but improperly styled cellular, because it rather is continuous, equal, tenacious, ductile, subpellucid, and glutinous. It forms a connexion between all parts of the system, however different from each other in nature, or remote in situation; a circumstance worthy of attention, as putting an end

to the verbal disputes respecting the continuation of membranes, and affording an explanation of many morbid phenomena. It is destined for the reception of several kinds of fluids. Its chief use in this respect is to receive that serous halitus which moistens and lubricates every part. This when formed by the blood-vessels, it imbibes like a sponge, and delivers over to the lymphatics, thus constituting the grand connexion between these two systems of vessels."

Bullets have been traced through it in a tortuous course, and needles have been known to permeate its structure in directions contrary to gravity.

Haller places the cellular web among the *elementa corporis*. It is formed from fibrine; it has little or no sensibility, can be cut or punctured without yielding pain. It is the seat of many diseases, of morbid structures of spontaneous growth. The cellular membrane in herpetic ulceration, is usually found to be destroyed much more extensively than the superjacent skin, owing to its deficient vitality.

The *membrana adiposa* is composed of small vesicles or cells, which Mr. Chevalier, as well as John Hunter, considers as a separate gland. Blumenbach, however, says: "The glands which some celebrated characters have contended to secrete the fat, are, at present, ima-

ginary. The fat," he adds, "lubricates the solids, and facilitates their movements, prevents excessive sensibility."—

During health it contributes little or nothing to nourishment. The modern opinion has more probability, "that it affords a receptacle for the superfluous hydrogen, which could not otherwise be easily evacuated."

ON THE FUNCTIONS OF THE SKIN.

IN remarking on the functions which bear a reference to its morbid changes, it will be sufficient merely to mention the sense of touch, and the power of the corium in regulating animal temperature, which some have attributed to it, and to consider it as the organ of perspiration, and as one of inhalation, performing an important part in the absorbent system.

With regard to this absorbent power, there can be little doubt, although many able physiologists have denied this quality. Among others, Dr. Currie, Dr. Gerard, and Seguin; but their arguments are by no means conclusive. In Dr. Elliotson's edition of Blumenbach's Institutions, that commentator has adduced facts illustrative and affirmative of this faculty. It

is there stated :—" A boy at Newmarket, who had been greatly reduced before a race, was found to have gained thirty ounces in weight during an hour, in which time he had half a glass only of wine. Dr. Home, after being fatigued and going to bed supperless, gained two ounces in weight before seven in the morning. In three diabetic patients of Dr. Bardsley, the amount of the urine exceeded that of the ingesta, and the body even increased in weight, and in one of the instances as much as seventeen pounds." Dr. Currie allows, that in his patient, " the egesta exceeded the ingesta, in a proportion much greater than the waste of his body will explain."

It is evident that water must be sometimes absorbed by the skin, in cases of dropsy, as in the instance of the dropsical woman in Vienna, who discharged large quantities of urine, and took at the same time little or no drink.

It has been asserted too that a degree of sustenance has been obtained by dipping clothes in the sea, and wearing them in a state of saturation. Kiels' body attracted eighteen ounces of moisture in one night; and Dr. Jones, in speaking of the resorbent veins, asserts, that the insensible inspiration exceeds the insensible perspiration. Boerhaave considers them nearly equal. Among the modern physiologists who have denied the absorbing power of the skin,

is Dr. Robertson. In a paper published in the Medical and Physical Journal for August 1827, he argues, that before the internal effects of cantharides are produced, the cuticle is rendered porous by irritation; that mercury is admitted into the system during friction, by "the respiration of mercurial vapour, occasioned by the friction and the heat, whereby the mercury is, in a certain degree, volatilized." I cannot presume to contradict these opinions, although I consider them far from being proved; but it must be granted that the removal of the cuticle will materially facilitate the *endermic method* of administering medicine, as morphine belladonna, &c. as proposed and adopted by Mons. Bally of La Pitié.

As an organ of perspiration, the skin must be regarded as a most important structure. Among its functions, Blumenbach observes, "must be enumerated its excretory power, by which foreign and injurious matters are eliminated from the mass of fluids."

This is exemplified in the miasmata of exanthematic diseases, in the smell of the skin after eating garlick, musk, &c. in sweat, and similar phenomena.

What is most worthy our attention, is the transpiration of an aeriform fluid, denominated, after the very acute philosopher who first applied himself professedly to investigate its im-

portance, the *perspirabile sanctorianum*, which is similar to what is expired from the lungs. It likewise is composed of various proportions of carbon, nitrogen, and hydrogen,* precipitates lime from its solution and is unfit to support either flame or respiration.

The sweat, which seldom occurs spontaneously during health and rest, unless in a high temperature, appears to arise from the perspirable matter of Sanctorius being too much increased in quantity by the excited action of the cutaneous vessels, and from its hydrogen uniting with the oxygen of the atmosphere, and assuming the liquid form.

The quantity of matter perspired from the integuments, which, in a well grown adult, are equal to fifteen square feet, cannot be accurately estimated, but is probably about two pounds in twenty-four hours. This secretion has formed the basis of salutary prognosis with almost all physicians. Sydenham has affirmed that those patients recover, who, towards the crisis of a disease, have a viscid sweat for twenty-four hours. And Boerhaave asserts, that sweat following venomous bites is most salutary.

* According to the experiments of M. Collard de Martigny, the healthy exhalation of the skin consists of carbonic acid and azote, in proportion varying perhaps from influence of diet, &c.

Sanctorius found the perspiration by the pores and breath, larger than all the sensible evacuations, that drastic purges invariably lessen it, and that there is more perspiration, by far, in youth than age; and he further observes, "cold air checks perspiration, but this matter is not unhealthy;" moist air on the contrary produces a bad effect; that strong people perspire most in summer days and winter nights; that the body perspires little while the stomach is too feeble or empty; that healthy people often perspire fifty ounces in sound sleep, or double the quantity they lose when awake.

With regard to the resistance to this discharge, it is proved that the body may be so accustomed to heat, that some persons will not perspire when others, under the same temperature, will do so profusely. Sanctorius has even asserted, that sudden surprise or delight has proved fatal by inducing too profuse an evacuation of sweat; illustrating his opinion by the account of the Dutch girl, who, on a visit to her brother in Asia, was dazzled by the gorgeous display of his gold and jewels suddenly presented to her; and of the woman of Lucæna, who was suddenly struck by the approach of her son, whom she had considered dead, adorned with the honours of victory.

Mr. Parkinson says, the sweat changes

blue vegetable juices red, owing probably to the presence of phosphoric acid.

With respect to the effects of checked perspiration in inducing congestions, and inflammation, and other morbid changes in the viscera, it would be nugatory to dilate upon circumstances so continually under the observance of the pathologist.

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It is not necessary to dwell upon the

various morbid changes which may be

induced in the skin by checked perspiration.

It is sufficient to say that they are

very numerous and of various kinds.

Among the earliest cutaneous affections, we

may class the first and third genera of the or-

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error in their treatment.

ON
 DISEASES SYMPTOMATIC OF DISORDER
 IN THE
 ALIMENTARY VISCERA.

STROPHULUS.

Red Gum, White Gum, Milk-spots, Tooth-rash, &c.

AMONG the earliest cutaneous affections we may class the first and third genera of the order papulæ, according to Dr. Willan, strophulus and prurigo. These diseases, which are purely symptomatic, have been considered so unimportant, that in the medical reports of public practice, they have been simply noticed under their ordinal term, *papulæ*; and, indeed, in the works of former authors have been merely generalized as *eruptiones varicæ*. It is, however, essential, that their character should be distinctly defined and understood, as their close resemblance to some other morbid changes in the skin, of a contagious or specific nature, may lead to incorrect diagnosis, and to error in their treatment.

The character itself of the papulæ, it is true, is often materially modified by the peculiarity of constitution and mode of living; indeed, by these causes, and by neglect, it may be totally changed from its first simple form to one even of contagious nature. From this source arise the peculiarly aggravated cases of eruption among the children of the indigent, in whom the simple strophulus will sometimes degenerate into the contagious scabies.

The varieties of the genus strophulus, are entirely confined to the period of infancy, and may be considered merely as degrees of the same affection, which may either depend on a cause more or less severe, or, although resulting from one source of irritation, may so vary according to some constitutional peculiarity.

Strophulus intertinctus, the mild red gum, is an eruption of bright red papulæ interspersed with minute stigmata, and with large red circular patches. Their duration is variable; they will sometimes disappear in eight or ten days; in other cases not until the end of a fortnight.

The stigmata will sometimes coalesce, and where the vascularity and irritability of the skin are in excess, will form circular patches of a deeper red colour, and more elevated than those of simple *intertinctus*, with distinct pa-

papulæ scattered over them. There is sometimes a disposition in this form of strophulus to produce superficial ulceration, especially if it be rubbed or scratched; usually, however, its colour fades, and it exfoliates in three or four weeks. There is one peculiarity in this state of papulæ, that it appears to be subject to a sort of metastasis; portions of the integuments, at a distance from each other, becoming successively its seat. For this reason, Dr. Willan has applied to it the term *volaticus*.

Among these papulæ, minute vesicles sometimes appear, which occasionally are filled with a straw-coloured fluid, exhibiting, on superficial inspection, the character of a pustule. Vogelius has applied to them the term *achores*.

The fluid of these vesicles is often removed by the absorbents; but if the cuticle become abraded, ulceration may ensue, and the disease may change its character to one of more aggravated form.

Strophulus albidus, or white gum, consists in minute opaque pearl-coloured spots, and is sometimes interspersed among the other varieties of strophulus. It may, perhaps, consist in an increased propulsion of lymphatic globules into the papillary vessels, which becoming somewhat inspissated, the papulæ possess a firmer feel than the red spots.

The name of rank red gum, or tooth-rash,

has been applied to those cases where the papulæ are distributed over a more extensive surface. In infants, when the process of dentition commences early, the cheeks will often be nearly covered with minute papulæ, themselves of a pink colour, and surrounded by a diffused erythematous blush, which closely assimilates in appearance some varieties of the exanthemata. These papulæ disappear gradually in about a fortnight or three weeks.

Among the sequelæ of some infantine acute diseases, as pneumonia, &c. we may sometimes observe a few large white papulæ, with very slightly inflamed bases, to which the term *strophulus candidus* has been applied. They are not of very frequent occurrence, but may always be hailed as a salutary determination; as the natural prevention, indeed, of those chronic derangements of function, or those organic changes, which often succeed an acute disease, and especially those cases where an active mode of treatment has not been adopted.

The varieties of infantine papulæ may often resemble and be mistaken for each other; an error which can prove of little practical importance. There are, however, other and totally dissimilar diseases, between which and the papulæ it is necessary that we should form a strict discrimination, although words must, of themselves, fail to describe the characteristics

of cutaneous diseases; and it will be essential, that the delineations be studied, and the symptoms of the diseases themselves carefully ascertained in order to form a correct diagnosis.

Irritation in the *primæ viæ*, or the process of dentition, are the usual exciting causes of strophulus. The mildest forms may be said, indeed, to be of almost universal occurrence during infancy; even when the derangement of the alimentary viscera may be so slight, as not to be evinced by any unhealthy appearance of the evacuations. The eruption may be considered a natural effort to determine, as it were, the acrimony of the alimentary passages to the extreme surface. From such a morbid state of the bowels, excitement of the vascular system, must be established in some or other part. I have little hesitation in affirming, that an attack of meningitis has often been averted by the salutary eruption of strophulus. On this principle we have been advised to imitate and assist these efforts, by encouraging the eruption. It will be more judicious, however, to adopt a negative course, employing that mode of palliative treatment which shall prevent the external disease becoming itself a source of irritation, or degenerating into a more formidable affection. To this end, tepid ablution thrice in the day should be enjoined. The clothing should be light, so that the surface be

neither exposed to the repellent cold air, nor the temperature raised so high as to aggravate, by external heat, the existing eruption. I would not strictly forbid the use of the cold bath in strong healthy children, where re-action is invariably induced; but if the papulæ in the slightest degree disappear on its employment, it must be immediately discontinued; and if the child appears uneasy, a few drops of spt. ammon. c. may be administered, and the child immersed in a bath of 95°.

On the supervention of convulsion from the recession of strophulus, a slight stimulating liniment may be rubbed on the sternum, or a sinapism applied for three or four minutes to the soles of the feet.

It is important that the food of the child should be cautiously administered; and that the milk of the nurse should possess bland and nutritive properties; that it be clear, and of a blueish colour.

It has been stated, that carious teeth in the suckling mother, or the nurse, are productive of derangement in the digestive functions of the infant, and, consequently, in the general health. From this excitement strophulus is arising; and it is added, that the first teeth of the infant will even be speedily affected by caries. If it be so, it is most essential that the mouth be relieved from these irritating fangs.

These eruptions must ever indicate the administration of laxatives, for the removal of acrid secretions from the intestines. In slight cases, a mild aperient taken every second or third day by the nurse herself, would be serviceable and sufficient. Or to the infant may be given two or three grains of *magnesiae carbonas* and *P. Rhæi*, *Omni mane*.

Independently of unwholesome food, the functions of the bowels may be indirectly deranged by the process of dentition. This may be ascertained by the infant frequently carrying its hand to its mouth; by its *drivelling*, and by a characteristic shrill cry, and the distension, redness, or shining appearance of the gum. Free incisions of the gum, even to the crown of the tooth itself, will often remove the primary and secondary symptoms in two or three days. These remarks apply to *strophulus intertinctus*, *albidus*, and *confertus*. When, however, the *papulæ* are frequently recurring, even during attentive treatment, it will be judicious to change the nurse, even though there may be nothing apparently faulty, either in her general health or in her milk.

I have often witnessed, not without surprise, the almost immediately salutary effect of this change; the *papulæ* beginning gradually to disappear, and the aspect of the child to improve. Not always, however, will this effect

succeed. By constant irritation the general health of the child may have more materially suffered: the papulæ will be marked by a darker hue. Papular clusters will arise in different parts of the body, and terminate in brown exfoliations: the progress of the disease being marked by febrile symptoms. This variety is evidently indicative of debility, and may, if neglected, induce fatal marasmus. The medicines in such a case should be, a gentle laxative every second day, Sodæ carbonas with calumba, or cascarilla, or the aqueous solution of the tartrate of iron, in small quantities, and frequently repeated.

PRURIGO.—*Psoris Papulosa.*

THE papulæ of prurigo are not of frequent occurrence in children; I have very seldom seen them in infants under one year.

We may define prurigo, as it first appears, an eruption of very faint pink papulæ, with a very slightly inflamed base, accompanied by intense itching. The first and second varieties of this genus, which we may consider as degrees of the same species, (formication being an aggravated symptom,) occur in childhood. The papulæ are often almost indistinct, and have been indeed altogether overlooked by

some writers who have spoken of itching without eruption. The varieties of pruritus, the local "pruriges pediculosi" of Alibert; the prurigo preputii, pubis, &c., are confined to adults. It is probable that, if pruriginous papulæ were suffered to be free from friction and abrasion, they might exfoliate like those of strophulus; but the intense itching which accompanies them, and which is always much increased by extremes of temperature, invariably prompts the child to allay the itching by scratching. From this lesion there is an exudation of watery sanies, which concreting on the surface, forms thin crusts of an umber or black colour. This is the most favourable termination of the papulæ: but where there is a gross habit, friction will often produce either superficial ulceration, or a true pustule. The secretions in such cases seem to encrease the irritation of the primary papulæ, extending often over a large surface of integument, and being still accompanied by the distressing pruritus. In the most aggravated form, (prurigo formicans,) the intensity of sensation is most painfully increased, itching is incessant, combined with the feeling of insects crawling over and stinging, or of heated sharp points piercing the skin. The heat of a fire or a bed increases all the sensations, and evanescent erythematous patches, white wheals, and dark brown crusts

cover the body, the effects of abrasion of the papulæ. This form is most unyielding to medicine, and lasts for many months.

The true papular exudation is not contagious, but the disease may be imparted from the mother to the sucking infant, a fact which I have several times witnessed. The appearance and sensations of prurigo render it however liable to be mistaken for the contagious papuliform scabies.

Prurigo has been stated to occur chiefly in the vernal season, but I have often seen it in the frosts of January.

M. Alibert has noticed, in the "*Nouvelle Bibliothèque Médicale*," a defined swelling and hardening of the muscles of the extremities, occasioning an incapacity of motion. These effects I have never witnessed in childhood.

He also asserts, that children who have not had mucous exudation of the scalp, which are true depurations of nature, are most liable to prurigo. It may be, that any cutaneous obstruction from sordes or neglect of washing will produce this disease; but we must be cautious in receiving this somewhat indefinite term, 'mucous exudation,' which is indeed a depuration of nature, but must generally be considered as indicative of internal disease. If due caution be observed with regard to the ali-

ment and general nurture of the infant, it is most improbable either that mucous exudation to any extent, or that prurigo itself shall occur. If the child shall become diseased, I cannot hesitate to affirm that genuine porrigo, a mucous exudation, and a true depuration, may exist on the hairy scalp, and a pruriginous papula on a remote part of the integuments.

The most frequent cause of infantine prurigo is disorder of the alimentary canal. In some cases there will be a precursory cephalalgia and gastrodynia, indicative of some gradual derangement of the alimentary functions. In others, (the most common form of its accession,) it will appear very shortly after the swallowing of any peculiar liquid or solid, or an excess even of common food. A copious draught of cold water during the heat of summer is not an uncommon cause of these papulæ, an effect to which the vulgar term surfeit has been sometimes applied. It is also produced by eating fish when out of season, and in some persons by the swallowing of fluids which have undergone the acetous fermentation.

In the milder cases, the use of the warm bath, or merely tepid ablution with the internal administration of sulphate of potass, $\mathfrak{Dss}$ ad $\mathfrak{3ss}$, or lac. sulphuris $\mathfrak{3j}$ ad $\mathfrak{3j}$ twice in a day will effectually remove the cutaneous irritation. In

the more aggravated form, the first indication will still be to amend the gastric secretions, and remove external irritation which react on each other. The diet should be light and nutritious, as melted jelly, or asses milk, &c. A laxative should be given every second morning, and any of the following medicines: combinations of sulphur, soda, and calumba, twice in a day; or the arsenical solution, gtt. ij ad vj. thrice in a day. I may add, that Mr. Wilkinson has found the greatest benefit in prurigo and many other diseases of the skin from this mode of treatment:

Pil. Hyd. sub. c. o. n.—Sol. min. ter die.

Aromatic vinegar applied on a probe to the most prominent papulæ, and afterwards the following ointment:

Rj. sulph. sublim.—picis liq.—axung. a oz. 2.

Cretæ, oz. $\frac{1}{2}$.—Ammon. hydrosulph. gr. xv. M.

This is to be applied daily; every second day the papulæ are to be again touched with the vinegar, the ointment being previously washed off. In my own practice I have usually found ointments very prejudicial.

These applications must however be used with caution in children: and Dr. Willan distrusts the efficacy of all stimulating ointments, and forbids drastic purgatives, but recommends

in some cases, liq. am. ac. dilut. as a wash, and also the oxygenated muriatic acid 3tt. xij. ad xx twice in a day. Benefit has been sometimes derived from xx or xxx gtt. of vin. colchici thrice in a day for two or three weeks. It is not necessary that a drastic purgative effect be produced, which indeed the limited dose will prove. In every case where there is no inflammatory action, the sulphureous fumigation may be employed; and it has been found that the lower the temperature of the vapours, as low indeed as the sulphureous gas can be disengaged, the more efficacious will it be: the usual temperature 110° or 120° employed in fumigation, producing too much excitement.

In many cases much benefit has been derived from the Belladonna lotion. It is essential that during all this time, the sordes should be carefully removed from the skin: a neglect of this will occasion a frequent degeneration of the disease into the contagious papular scabies, or sometimes into impetigo, and occasionally into ecthyma, in some of those cases where pustules have been formed from the pruriginous papulæ.

CRUSTA LACTEA.

Lactumen.—Porrigo Lactea.—Porrigo Larvalis.—Teigne
Muqueuse.

THE incipient papulæ or vesicles of this disease, the non-contagious quality of its fluid, and the facility of its removal, will indicate the propriety of separating it from the varieties of the pustular and contagious porrigo.

The appearance of vesicles among the papulæ of strophulus have been already noticed, and the almost universal occurrence of some form of strophulus during infancy may lead us to believe that they may bear a relation to each other. Indeed, Dr. Underwood has described crusta lactea as one of the infantile rashes; and Dr. Armstrong has also designated this disease "tooth-rash." It is for this cause that I adopt that more simple definitive term to designate an incrustation peculiar to infancy, and especially that portion of it, the period of lactation. The vesicles accompanying strophulus may usually desiccate without breaking; where, however, the irritation of deteriorated milk is still morbidly affecting the alimentary canal, and especially if there be superadded to this the irritation of dentition, the fluid in the vesicles will assume a straw-coloured tinge, will often coalesce, and become surrounded by an

erythematous blush. These changes I have seen very suddenly produced. On the bursting of the vesicles, a viscid fluid of a mucous character is discharged from them, which, becoming inspissated, forms a concretion of a whitish light yellow, or greenish tinge. The crusts lie in laminæ, some overlapping others, or intersected by narrow pinkish or olive-coloured fissures. This process of incrustation may continue to extend until the whole face, with the exception of the edges of the supercilia, and the apex of the nose, are reduced to one encrusted mass, from which the term larvalis or mask-like has been derived. But the disease will sometimes spread even to the side of the neck and to the shoulder, a proof of the fallacy of such fanciful epithets. It may sometimes be observed also on more remote portions of the skin. There will often be a variation in the character of the disease—the discharge will be lessened, the incrustations will separate, and the inflamed margins and surfaces beneath the crusts will become paler, and a more thin and discoloured cuticle will appear. This may be a remission only of its more severe form, the effect of more salutary aliment, or of the employment of laxatives, or it may be the commencement of cure; and if attended by no indisposition, indicative of the continuance of the same mode of treatment.

The discharge, on the removal of the crusts, has no offensive odour. However closely the fluid may creep towards the tarsal edges, it does not appear that *tinea ciliaris*, the incipient stage of *lippitudo* is often the consequence. The occurrence of *epiphora*, however, is frequent; a lachrymal overflow, which is rather caused by the irritation promoting a more copious secretion, than by any thickening of, or obstruction in the membranes around the orifices of the puncta.

In the majority of cases, the parotid, submaxillary, or cervical glands, remain free from induration; but as the consequence of neglect of treatment in children of languid constitution, or on the supervention of debilitating disease, glandular inflammation will ensue.

Dr. Bateman has narrated a train of symptoms: diarrhoea, mesenteric obstruction and fatal marasmus, as the consequence of the irritation of *porrigo larvalis*. I have never witnessed the accession of these symptoms as distinctly referrible to this superficial irritation, unless the incrustation shall have existed for a long time; as I have stated, the disease shall be so much aggravated by neglect as to vitiate the general health of the child; for, it may be added, *crusta lactea* is generally occurring in children of healthy appearance, and who have been, at least, not deficiently fed.

Professor Strack has remarked, that the urine possessing an odour like that of cats, is a prelude to the spontaneous disappearance of crusta lactea. I have not myself been able to make this observation, but had not the term *spontaneous* been used, we might suspect that under the constant employment of the viola tricolor in decoction by Dr. Strack, the juices of this flower might have imparted this peculiar odour, and we might not expect it to be present on the successful effect of other remedies.

In the mild form of crusta lactea, it is merely essential that we should remove the morbid alimentary secretions already formed, and obviate their return by more wholesome aliment—a change of breast-milk, especially if the quality of that already employed shall be unhealthy. The mildest laxatives, as hyd. sub. gr. ss. pulv. rhæi. gr. 2. pot. sulph. gr. iv. ; or ol. ricini coch. 1 ad 3 parv., succeeded by an alterative of hyd. cum creta, gr. ij. ad v. magnes. carbon. gr. ij. o. n.,—or sodæ carb. gr. iij., l. sulph. gr. iv,—may be continued for four or five days, and after a recession of three or four days may be renewed. If the abdomen be tumid, or the evacuations continue unhealthy, the laxative should be repeated every second day, or a decided purgative administered. If from long continued irritation the general health shall have

suffered, and debility ensue, the cascarilla and carbonate of iron should be administered.

The local application in the commencement should be tepid water, or thin gruel, the ungt. plumbi, or lotio plumbi being applied to the excoriated edges. When the disease has yielded its inflammatory character, the ungt. hydr. nitr. mit. or ungt. zinci, or equal parts of ungt. ceruss. acet. and u. hyd. nitr. mit. may be employed. If the crusts be very dry, a little cream, or ol. amygdalæ, with a few drops of liq. potassæ will be useful, and if they be extremely moist, lac. sulphuris and common hair-powder mixt, may be slightly strewed over them. The internal remedies should be employed during the existence of the disease.

There is no permanent mark left even by the severe forms of this disease.

FOLLICULAR TUMORS.

Crinones.—Follicular Wart.—Acne Simplex.—Acne Punctata.—
Sycosis Capillitii.

THE sebaceous glands even of infants are liable to an obstruction and consequent inspissation and accumulation of their sebaceous secretion, by which, in most instances, inflam-

mation is induced. This may be the result of negligence in cleansing the skin from an accumulation of dirt, or of that eruption from the sudorific pores, which has been denominated hydroa, or sudamina. In the great majority of cases, however, some derangement in the digestive organs will be the cause of this accumulation in children so predisposed, in whom the skin is endued with much excitability. The idea of an hereditary tendency to this disease does not appear to be substantiated, but it is evident that follicular tumefaction will often arise in a very short time from internal irritation merely.

CRINONES.

The earliest disease in the sebaceous follicle is that which has been denominated crinones, or grubs, from a vulgar supposition of parasitical vermes being the cause of the tumefaction. The sebaceous matter in this instance is, although in excess, of its natural consistence, and is retained from a deficiency of action in the follicular vessel. The back of the sucking infant is sometimes thickly studded with them, in the form of whitish elevations: they occur sometimes in the arms and legs. They are productive of very little irritation, and merely require to be rubbed

with a coarse cloth dipped in warm water, by the fire, night and morning, with the administration of a gentle laxative.

FOLLICULAR WART.

The follicles, however, are subject to a tumefaction which requires a more peculiar treatment. It usually occurs in children from about the age of two to six years, and may be termed a follicular wart. The appearance of the tumor is different from the acne, being whiter, more elevated, seldom occurring in groups, although sometimes two will coalesce. They resemble in their form the semiglobular tubercle, molluscum, which occurs in adults, and are disposed to inflammation or suppuration from errors in diet. They are usually situated on the cheeks, temples, or forehead. They may remain stationary for some time, but are often increased by sudden and rapid growth. If the child shall have partaken of aliment which shall have deranged the digestive organs, the previously quiescent tumor will become enlarged, of a pale pink colour, a severe erythema being often spread around it. A suppurative process will then commence in the cyst, and the sebaceous matter is sometimes thus dislodged, or it may continue to increase, attaining even to the size of a walnut, or a drain of purulent matter may

continue for some time, with or without small fragments of the sebaceous substance. This purulent discharge will often produce superficial ulceration, and concretions will form, resembling porriginous crusts. With regard to the treatment of these tubercles, no external application will effect the absorption of this excess or retention. The regulation of the alimentary functions will often check their increase, but the most judicious treatment is to extirpate them in their incipient stage. The tumor should be held by a pair of dissecting forceps, and excised by thin scissors, or the follicular cyst may be pulled out by the forceps; the mere expression of the contents being usually succeeded by fresh accretion. This simple mode is the preventive of those consequences alluded to, which sometimes produce permanent scars, and may by contiguous excitement produce a dangerous and destructive ophthalmia. I have seen examples of this disease in girls about the age of ten or twelve, of pallid countenance and delicate constitution, in whom it appeared to bear some relation to the uterine system. In such cases it would be well to administer the *mistura ferri, c.* and as the constitution becomes invigorated, the local diseases will usually be suspended at least, still however requiring extirpation for the cure. I may add, that obstructed

catamenia will often prove an excitement to tubercles previously quiescent.

ACNE SIMPLEX.—ACNE PUNCTATA.

Although acne can scarcely be considered a disease of childhood, inasmuch as we seldom witness it, except on the approach of puberty, yet we sometimes observe it at an age, which from the mere number of years would be designated childhood, had not premature sexual development occurred. The two species of acne may be considered as almost synonymous; the black point of the punctata, being caused by the apex of the cyst being exposed to the air by the expansion of the follicular orifice. They are slight circular elevations of the cuticle, termed by some authors *vari*, appearing singly, or in clusters, and sometimes surrounded by a dusky discoloration. They sometimes disappear spontaneously, succeeded by slight exfoliation, or transient fissures of the skin. They may, however, become inflamed, some of the tubercles subsiding within a fortnight, a violet coloured mark remaining on the part for a short time; the inflammation in others will proceed to suppuration, a yellow speck of matter appearing on their point about the seventh or eighth day; this is discharged, and is succeeded by a thinner matter, which concretes into a small yellow scab, which

after two or three days is detached by the growth of new cuticle beneath it. To this disorder, in common with many others, the indefinite term scorbutic, or scurvy has been applied.

Where the skin is predisposed to this affection, a variety of primary causes may produce it; excessive cutaneous action, produced by violent exercise, especially if cold fluids have been at that time swallowed; excess in fermented liquors, or indigestible food. Dr. Bateman states, that a critical eruption of vari, accompanied by papulæ, will sometimes occur on severe indigestion, which has immediately yielded. Such proofs of the symptomatic or relative nature of these tubercles, will indicate caution in the employment of any repellent applications, which will increase the gastric derangement, and cause severe head-ache. But if there be much surrounding inflammation, we may employ a lotion of liq. plumb. aq. Rosæ and pura. They are, however, generally seen more in an irritable than an inflamed state. To remove this condition some slightly stimulating application will be the most useful, as

Oxymur. hydr. gr. ß. spt. rectificat. ʒi. or,

Ac. muriat. ʒi. aq. ros. ʒvi. or,

Sulphur. precip. ʒi. aq. ℥ij.

but a simple bread poultice will often give equal relief. With these applications must be conjoined laxatives, mild mercurials, decoct. sarsæ; or in females, the mist. or pilul. ferri. c.

The black points of the punctata may be removed by simply pressing with the nail on the tumor.

SYCOSIS CAPILLITII.

This consists in an obstruction of the follicles on the hairy scalp in children. The incipient tubercles differ in appearance from acne, occurring in clusters, surrounded by a light vermillion blush, and being softer than those of the latter affection. They are seldom terminating in spontaneous resolution, but usually suppurate in eight or ten days. The ulcerated surface then assumes a very irregular, granular fungoid appearance, often resembling the pulp of a fig, (whence its name,) discharging an ichor of a rancid odour. This mass is often spongy, overlapping the edges of the surrounding cuticle, and bleeding on a touch. There is sometimes a very thin incrustation, its tenuity depending on the nature of the ichorous discharge. In the incipient stage the inspissated matter may be expressed from the follicles as in the other tumors, and some diluted spirituous lotion applied. When the surrounding inflammation is high, we

should employ liq. plumb. subac. dilut. and a bread poultice : on suppuration and ulceration the poultice only : and when the inflammatory action has ceased, ungt. hyd. nitr. dilut. or lotio flava to the fungus. The internal remedies should consist of acid. muriatic. or sulphuric. with the cascarilla and laxatives.

The character which Celsus presents us of *συνωσις* is almost descriptive of the contagious frambœsia or yaws of the West Indies: the full-grown yaw exactly resembling the pulp of the fig. The peculiar circumstances, however, of this disease, its infectious nature, and the facility of its inoculation, its not being confined to the hair, its occurring but once during life, and its frequent consequence, the gummatous tumors about the joints, which have been termed elephantiasis, prove their dissimilarity, however their external characters may assimilate.

PHLEGMONOUS TUMORS.

Furunculus.—Epinyctis.—Terminthus.—Phyma.—Phygethlon.—
Bubo benignus.—Parotis.—Orgeolet.—Clou.

ALTHOUGH the swellings which have been described under these terms do not present the same external characters, and are not all seated in the same tissues, yet as they may be considered principally as outward indications

of internal irritation, their practical consideration will allow them to be thus combined. These terms have suffered a perversion in common with many other names of diseases; they have been applied by ancient writers especially with so much variety, so little discrimination, that their definition by the moderns must have occasioned some confusion and obscurity. It is therefore essential to draw some description of their form and seat, that they may without confusion be recognised.

FURUNCULUS.

A circumscribed phlegmonous tumor, hard, and attended by very acute pain, usually of the size of a crow's or a pigeon's egg, commonly suppurating partially: being of a conical shape, its base deeply seated, having generally on its apex a transparent point, containing pus of a whitish, or purple hue, to which the causation of pain is chiefly referred. The consistence of the fluid in the cavity of the abscess is somewhat dependent on the duration or progress of the tumor. If the inflammation be acute, and the suppurative process rapid, (the acute boil, of Mr. Pearson,) it will consist of healthy pus mixed with streaks of red blood; if the progress of the swelling be more languid and protracted, and the symptoms of a milder character, (the chronic boil,) the contained

fluid will be a thin sanies, often containing flakes of sloughed cellular membrane: the cavity of its ulcer being deeper usually than that of the acute form, and as Celsus has written, “*apparet pars carnis in pus versa—pars corrupta, subalbida, subrubra.*”

PHYMA

Has been described by Celsus as a broad extensive phlegmonous tumor, its symptoms not being so acute as in the lesser furunculus—suppurating throughout its whole extent. “*Omnis corrupta caro in pus vertitur.*” By Wiseman, however, the term *phyma* is indiscriminately applied both to inflammatory tumefaction of the submaxillary and sublingual glands, and also to a “hot tumor without the verge of the anus.” It is seldom, however, that the true phlegmonous abscess occurs on this part in children; in adults it is the common cause of fistula.

EPINYCTIS.—TERMINTHUS.

A small tumor of the size of a pea, of a pale livid colour, or dusky red, attended by acute pain, and containing a sanious fluid.

PHYGETHLON.

An inflammatory glandular tumor. The term is employed by Celsus to designate indiscri-

minately every species of simple glandular enlargement: "Fit maxumè aut in cervice, aut in alis aut in inguinibus."—Thus including

BUBO BENIGNUS,

which is a common phlegmonous enlargement of the inguinal glands, unconnected with syphilitic influence, or strumous diathesis: and

PAROTIS,

a phlegmonous tumor of the parotid gland. With the exception of those enlargements of the inguinal or axillary glands, which arise from the absorption of syphilitic or other poison, or from the excitement of punctured wounds on the hands or feet, and of tumors of the other glands, arising from contusion or straining, I consider the phlegmonous swellings I have enumerated, as real indications of some internal or constitutional disturbance, or as critical abscesses occurring on the decline or termination of some acute disease. Hence the consideration of their treatment may be briefly comprehended. The conviction that their appearance is the result of a salutary effort of the system, will induce us to aid such effort by promoting the process of suppuration. When, however, the swelling is seated in the *immediate* vicinity of an important organ, as the eye, it would be injudicious to employ stimulants, or

even hot poultices to this effect : we may rather attempt the resolution of such a tumor by the application of leeches and tepid poultices, depending chiefly on the beneficial effect of laxatives and alteratives. In parotis and bubo benignus the same caution may be necessary. Cool applications or repellents, however, must be altogether inadmissible, as the adjacent textures, especially those organs possessing the greater sensibility, may thus become themselves the seat of increased vascular action, and may ultimately be destroyed. For the purpose of promoting the suppurative process, the steam of hot water, fomentations, or the bread or linseed poultice, applied every two hours, will be usually sufficient—the high action itself, of the very acute form, speedily terminating in this secretion. In the more languid cases, these lenient measures will not always be effectual. Hot vapour, or the application of resinous or terebinthinate poultices must be resorted to. Empl. Galbani.C.—Emp. picis—Ol. Terebinth. applied warm, or even the Lytta. On the perception of distinct fluctuation, an incision should be made. On the evacuation of pus, the poultice should be continued, and the Ungt. Resinæ or Hyd. nitr. rub. applied over the wound, especially in the deep seated abscess of the chronic form : where the cellular membrane has been implicated, and has sloughed, the linseed poul-

tice may be continued. If these cellular membranous flakes be retained under the skin, they often produce considerable irritation, and hence in many children we may have a succession of boils, or some organic affection.

As the sequelæ of constitutional diseases, as variola or rubeola, critical abscesses will continue to appear in succession. In these cases, in addition to the internal remedies, the formation of a caustic fontanel in the neck, or on the arm of the child, will be beneficial.

The internal remedies must have reference to the exciting cause. In the majority of cases, irritation in the alimentary canal constituting this cause, mild laxatives, with the Hydr. cum Cret. or P. Sod. cum Rhæo. will be efficacious in the prevention of fresh tumors. If the depraved quality of the milk of the nurse be the cause, a more healthy breast must be obtained.

If the tumors appear on the decline of acute constitutional diseases, they will scarcely influence the mode of general treatment we might otherwise adopt, for the purpose of invigorating the debilitated system. The infusion of the vegetable tonics as calumbo, cascarilla, or cinchona, with minute doses of the mineral acids, or the tartrate of iron, with P. Sodæ cum Rhæo. and Hyd. cum Cret. if there remain any tumefaction about the liver, will comprehend the class of medicines which are appropriate. The ad-

vantages of country air and sea-bathing, if in the summer, will amend both the constitutional and local affections. It may be added, that if much irritation should prevent the sleep of the child, during suppuration, very minute doses of opium may be administered. The various concomitant symptoms during convalescence, depending on continued organic derangement, or the suspension of that balance of circulation or function, so essential to perfect health, must be combated by appropriate remedies.

There appears in many children a peculiar predisposition to the formation of phlegmonous tumors from various exciting causes. Such children should take the cinchona, in the form of Sulph. Quininæ, or the tartrate of iron, and above all, should be submitted to sea air and bathing.

URTICARIA.

Nettle Rash.

THIS eruption consists in white circular elevations of the cuticle, with an occasional intermixture of longitudinal white thick lines, an appearance which has been denominated wheals. The white spots are surrounded by the very faintest pink or rose-coloured margin, or scattered, as in the febrile variety, on an inflamed superficies of rose colour or crimson.

The most severe form of the disease, *urticaria febrilis*, is of more frequent occurrence during the heat of summer. It is preceded by symptoms of considerable severity. The child will often be affected by cephalalgia, gastrodynia, languor and depression, for a week even previously to the appearance of the rash, the two last days of the premonitory symptoms being marked by synocha; which usually varies in degree according to the extent or brightness of the efflorescence: the disease being commonly most severe in the primary attack. The eruption is accompanied by a sensation of itching and tingling like that produced by the nettle, which is aggravated by friction or by heat. It often observes a sort of periodical remission, the efflorescence fading, and the wheals partially subsiding during the day. The duration of *urticaria febrilis* is usually about six or ten days, when the cuticle slightly exfoliates: this period however must necessarily vary, as the exciting cause shall be more or less permanent. When any peculiar food obnoxious to the stomach is productive of sudden disorder, the symptomatic eruption will be more transitory, especially if proper internal remedies are resorted to. The deleterious effect of these various substances, depends chiefly on a peculiar susceptibility, or idiosyncrasy of the individual, for we have instances where vinegar,

mushrooms, honey, the rind of cucumber, and strawberries cannot be swallowed with impunity. In other cases, on the contrary, the effect must be referred to a deleterious quality in the food itself, as in those cases where a whole family has been seized with nausea, vomiting, diarrhœa, and other severe symptoms, after having partaken of certain kinds of shell-fish, especially muscles. These latter cases are the most usually fatal, the appearance of the eruption in the former instances being almost invariably followed by an amelioration of symptoms, which are also aggravated by any sudden recession. It is not incipient putridity, as it has been stated, wherein consists this noxious quality, for the pernicious effects have often been observed when the fish has been eaten within an hour after being caught. On the contrary, the common food of inhabitants of arctic regions, consists of fish actually in a state of putridity, which they partake of in early life without excitement being produced on the skin. In children, however, the rash depends usually on a more gradual disorder of the stomach and bowels: the effect of crude aliment, or of breast-milk of pernicious quality, from age, from ill health, or from irregular habits of the nurse. The urticaria of infants is often preceded by the more severe form of strophulus; which eruption, indeed,

should always direct our attention to the removal of morbid secretions from the alimentary canal, by which we may and do often ward off some of the more severe diseases of childhood.

The indications of cure will be to remove the exciting cause. The administration of a mild emetic should precede the employment of other remedies: the secretions of the bowels also should be evacuated by a laxative; after which small doses of the pulv. Sodæ cum Rhæo, or of the Potassæ Sulphas. The various secretions should be increased, except diaphoresis, sudorifics being found usually to aggravate the eruption. The child must be fed on cooling diet.

In cases which occur during the process of dentition, especially where there may be a suspicion from the failure of change of food and laxatives in removing the disease, that this irritation is the cause of the eruption, the gums should be divided and suffered to bleed freely; and it may be sometimes necessary to apply leeches, especially if there be symptoms of meningitis, or any other organic inflammation. In these cases, especially, the irritation will often be excessive, and we may have frequent convulsive startings. During these symptoms five or ten drops of the T. asafoetida should be given, and warm pediluvium employed. A variety of remedies have been advised in cases of

poisoning by fish. It is seldom, however, that any other than these simple remedies are requisite, even in the febrile urticaria of children, from whatever source it may arise. All external applications should be avoided. If debility be the result of continued irritation, the acid. muriat. in small doses will be beneficial.

The milder forms of urticaria appear usually when the temperature is moderate or cool—in children of less inflammatory diathesis, of debilitated constitution, or where the irritability of the skin is not very great. This eruption will also vary according to its exciting cause. Its duration may sometimes be limited to a few minutes, or even seconds of time: the predisposition only existing in the skin, or the disease being indistinctly subcuticular, which the excitement of friction renders apparent: in others the eruption will be more permanent. In the most evanescent variety (*evanida*) the tingling is very slight; in the more continued form (*perstans*) it is more severe.

In some cases we observe wheals, somewhat irregular in form, which after two or three days are succeeded by very irritable papulæ, accompanied by intense itching, especially when the skin is warm, (“*lichen urticatus*” of Dr. Willan.) If this distressing pruritus continues, it has indeed sometimes been followed by great severity of symptoms, and even marasmus.

In the milder forms, gentle laxatives,—P. Sodæ cum. cascarilla, change of diet, and milk, will be usually all that may be necessary, and sudorifics may be administered with advantage.

In the urticaria papulata, the skin should be kept moderately cool. Laxatives, Sulphur. precipit. Hyd. oxyd. nigr. and muriatic acid, if there be debility, will be found efficient.

IMPETIGO.

Pustular, or Humid Tetter.

This is a non-contagious disease in this country, although according to the statements of Dr. Dancer, it is otherwise in tropical climates, proving more obstinate than the itch. It consists in an incrustation of the purulent discharge from those pustules which have been denominated psydracia. It has been divided into several varieties, but as the first two of these, the figurata and sparsa, may be considered as similar in kind, though different in degree; and the fourth species, scabida, being an aggravation chiefly resulting from neglect or error in treatment, they may be treated of as one undivided subject. The incipient psydracia of impetigo, appear either distinctly or irregularly scattered over an extended inflamed surface, or in clusters, with a defined inflammatory blush surrounding them. They are

accompanied by heat and smarting, the burning sensation being the most severe in the first species. The pustules are slightly elevated. In two or three days the purulent secretion bursts the cuticle: the part then becomes red and shining, and exhibits often a cribriform appearance, the pus being evacuated through several minute orifices. If the pustules have arisen in clusters, the discharge speedily becomes inspissated into thin brownish, deep yellow, or olive-coloured crusts, from under which an ichorous fluid is constantly oozing. The period of the separation of these crusts varies: they will continue for three or four weeks, if left to themselves, but tepid ablutions will expedite their detachment. The psydracia will often appear about the edges of the crusts, but if the disease has begun to yield to the treatment adopted, they will be, as it were, resolved, and the process of concretion is prevented. The healing process usually commences in the centre, and *radiates*, as it were, towards the circumference. If they are suffered however to run their course, we observe a succession of concretions, which may extend the disease, until the entire surface of a limb may be encased in one rugous covering. This crust is usually of a greyish brown colour, somewhat resembling the exfoliation of necrosis, and is surrounded by a margin of a

dark lake colour. This form of the disease is attended by considerable itching and heat; motion of the limb is impeded, or indeed may be altogether prevented. After some weeks duration, this coating is permeated by deep fissures, through which the matter continues to exude, adding layers of incrustation on the previous coat: it will thus extend to the extremities, producing an ulceration around the matrix of the nails, which often drop off, and are succeeded by others of a misshapen form, the consequences of the diseased function of their gland. When the psydracia are diffused irregularly over an inflamed surface, the same process of incrustation takes place, marked sometimes by a degree of symptomatic fever.

The psydracia are not unfrequently accompanied by patches of papulæ, and sometimes by vesicles, in which combination, Dr. Bateman observes, we have extreme irritation, heat, and itching, and the disease is more difficult of cure. This form indeed may be considered almost synonymous with the eczema impetiginodes of Dr. Willan, where the vesicular disease may overpower the pustular, preventing its characteristic incrustation. Impetigo is usually occurring on the arms and legs, but circular patches frequently appear about the mouth and nose of children, from engorgement or the irritation of worms.

The opinion of pathologists have been varied, and indeed contrasted with regard to this disease. Some writers having contended that it is a local affection: and others that it is very seldom, if ever, such. Among children, indeed, internal remedies, under my observation, have produced so marked and beneficial an effect, that I have not hesitated to class it among diseases of a symptomatic nature. In the adult, incrusted eruptions may be produced by sudden mental emotion, as in the case of the female cited before the Chamber of Peers, in Louvel's trial, in whom it is stated, darts made its appearance in one night, accompanied by a complete change of the colour of the hair from dark to white.

It is of some moment that we should distinguish the peculiar character of incipient pustules: two genera of the order being contagious—the varieties of scabies and porrigo. This distinction must be learned by reference to delineations or to real disease. With regard to the crusts those of impetigo are thinner and browner than those of porrigo, occurring chiefly too on the extremities. Porrigo usually appearing on the head and face; the fluid of porrigo being altogether purulent and glutinous; that of impetigo, after the formation of the crust, generally ichorous. The appearance of vesicles in impetigo cause it to resemble

lymphatic scabies ; but, as Dr. Bateman observes, “ the copious exudation of ichor, the rough, reddened, and fissured cuticle, the magnitude and slow progress of the vesicles, and the heat and smarting which accompany the itching in impetigo, will be generally sufficient to determine the disease.”

It is seldom we are consulted so early in the disease, as to prevent the maturation of the psydracia. With the recollection that these pustules in children are an indication of internal derangement, we may yet venture, if the amendment of this deranged function be premised or consentaneously effected, to prevent the maturation. For this purpose, the pustule may be touched lightly with liq. plumbi, or spt. rectific., or a drop of acet. aromat. on lint., or what is still better, solut. arg. nitrat.

In commencing our treatment of this, as indeed of all other cutaneous diseases, we must immediately interdict the use of stimulant food, instituting the very lightest aliment. In the incipient or inflammatory stage, antiphlogistic unguents and lotions have been eulogised ; but I may venture to affirm, that the most efficacious and soothing antiphlogistic lotion we possess, is tepid water, or a mild decoction of poppies, or a very thin bread poultice. These applications, combined with an efficient purgative, and a mild laxative every morning, with

eight or ten grains of potass. sulphas, or sulph. precip. grains ten, twice in a day, will usually be followed by a diminution of the inflammatory action. The diseased secretions must be carefully removed. In some cases, the inflammatory action will be so acute as to indicate the propriety of abstracting blood. Leeches may be applied around the margin of the disease, or bleeding from the arm may be resorted to with advantage: indeed, where the patient possesses what is termed the phlogistic diathesis, and a firm muscular fibre, even though there may not be a very extensive local blush, the abstraction of blood will often prove a valuable prelude to the efficiency of other measures. On the subsidence of the inflammatory blush, we may often see so favourable a progress during this simple treatment, that we may not be inclined speedily to alter our plan: if, however, in ten or twenty days, the disease should appear stationary, the cicatrization not proceeding, the irritability being at the same time removed, some more astringent application may be used, and the exhibition of alteratives or of tonics commenced. The lotions in this case may be, solut. argenti nitrat., or lotio zinci, or lotio flava. It is in this condition, as well especially as when the disease is of a chronic nature, and has existed for a long time, that sulphureous fumigation is so serviceable.

In the more acute stage, however, the use of fumigation has been often productive of an aggravation of the eruption, especially when vesicles are present. From the effects often observed during sulphur fumigation, we may infer that its efficacy is mainly imputable to its producing a new inflammatory action, since fumigators frequently observe pustules and vesicles of varied character and duration, but usually of speedy maturation and disappearance, during the cure of diseases of morbid concretions. Whether these vesicles be the characteristics of the remedy or the visible excitement of the latent diseased action, its employment must ever be prohibited during an inflammatory condition. A lotion composed of—

Acid hydr. cyanic.	ʒiij.
Alcohol	ʒss.
Aq. distillat.	ʒviss.

has been extolled by Dr. Thomson. Such an application, however, must be used cautiously, not applied to a very large surface, and internal remedies strenuously exhibited. Sea-bathing or the Harrowgate water, which has often proved very salutary, may be employed with less restriction. A lotion of potass. sulph. ʒvj. aq. ros. vel. distillat. lbss. will sometimes allay the irritation in a few hours, although at first it causes pain. This should be combined with

the administration of pil. hydr. gr. j or ij. at night, & decoct. sarsæ ʒss. or potass. sulphuret. ʒss twice in a day. In cases of extreme debility we should add decoct. dulcamaræ—the vegetable and mineral acids, cascarilla and calumbo. It will be essential to cover the encrusted parts with oiled silk, to protect them from heat, cold, or friction, as well as to keep the parts moist and to soften the incrustations.

HERPES.

Shingles.

I consider it essential to refer this disease to two divisions only: the first comprehending the phlyctænodes—zoster, or zona—labialis—preputialis of Willan—(the genitalis of later writers)—and iris; the second consisting of the more simple disease, the circinnatus; the first four varieties being distinguished chiefly by their seat or their extent; the fifth the more rare, herpes iris, by its peculiar form and variety of tints.

Herpes phlyctænodes consists of an eruption of transparent vesicles of varied size, from that of a millet-seed to that of a pea. It is usually preceded for two or three days by some local tingling and a pink blush, accompanied by febrile symptoms, rigors, cephalalgia, nausea, which symptoms do not wholly subside until

the opake change in the vesicle is produced : these premonitory symptoms are not however essential. The smaller vesicles appear in defined clusters, the larger often separate. There is no portion of the surface of the body to which herpes is confined, but it will spread in all directions indiscriminately. It may be supposed, and indeed appears probable, that the abdominal and dorsal integuments are peculiarly predisposed to the eruption of the larger vesicles of the zona ; the constitutional symptoms being, indeed, somewhat varying in this form. The vesicles of the zona will often completely encircle the body, an event which was dreaded by the ancients as the prognostic of fatality—“ *Enecat si cinxerit.*” (Pliny.) The lymph will assume an opake appearance in ten or twelve hours. The surrounding inflammation fades in three or four days ; the vesicle becomes flattened, or is burst ; its effused fluid concreting into yellowish or dusky crusts, which in five or six days desiccate, and are separated from the subjacent, newly formed, and irritable surface. The process is not always single, a succession of vesicles often continuing to run their course for three or four weeks. The vesicles sometimes occur about the edges of the lips and angle of the mouth, often forming a circle round the mouth. In this variety (*labialis*) the tonsils and uvula will often be found

covered by the herpetic vesicles, accompanied by symptoms of cynanche. The vesicles are sometimes occurring on various parts of the genital organs (*genitalis*,) on the internal and external surface of the prepuce, on the glans and the scrotum, and on the labia in females. These latter localities indicate a necessity of the greatest caution in our discrimination between the disease and the syphilitic eruptions or ulcers. Herpes is not often seated on these parts in children. The succession of vesicles in the zona observe great regularity in their appearance: the cingulum or girdle being defined often with almost mathematical exactness. They become confluent, and for several days a serous fluid exudes, concreting into thin crusts, which are separated about the twelfth, sixteenth, or twentieth day from the appearance of the vesicles. Where the disease has been extensive, and the inflamed base has spread, permanent cicatrices are left. The disease has sometimes appeared interspersed among the tubercles of elephantiasis.

The occurrence of herpes has been referred by various authors to the effect of cold and exposure, but I think this cause very inefficient for its production. The very circumstance of a premonitory symptom being almost a refutation of this argument. In the majority of cases in children, the disease appears in those who

are much subject to symptomatic, or what may be termed gastric cephalalgia; and Dr. Bateman observes, " Sometimes it has appeared critical, when supervening to bowel complaints, or to chronic pains of the chest, remaining after acute pulmonary affections." These remarks apply to the herpes labialis especially, which are often symptomatic, and even critical of bilious, or even intermittent fevers. I admit, that herpes will be more frequent in the heats of summer than in the colder seasons, but the same argument will be tenable in other diseases confessedly constitutional. We must be convinced that the sudden check to perspiration, and the frequent swallowing of cold fluid during summer, may be productive of considerable derangement in the alimentary viscera; and thus the more frequent appearance of herpes during summer may be explained.

Notwithstanding this limitation of the exciting causes of herpes, I may readily assert that the comparative danger of local curatives and even of repellants, is not here so great as in many other symptomatic diseases: it is probable, however, that refrigerent applications have not much effect in this disease, which usually observes a regular course. It may appear somewhat inconsistent to advocate the use of external remedies in symptomatic herpes, but in young subjects the mere irritation of the

vesicles themselves may excite a secondary or rather a ternary disease in the system, producing convulsions and other morbid actions. Under this conviction I can see no cause to object to the preventive treatment of cauterization of the vesicles, which so well succeeded in the practice of Geoffroy and Lisfranc. On the establishment of the disease, mild laxatives and diaphoretics should be freely administered. A powder of hydr. subm. gr. to v. with potass. tartr. or effervescent draughts of subcarb. potass. and ac. citr. a warm atmosphere, and light diet, will comprehend the internal treatment necessary; but if the irritation is very distressing to the child, two drops of the liq. sedativus, or T. valer. vol., or spt. ætheris, comp. should be given in the food, or tepid sweetened water.

The local treatment is also very simple. Mild tepid ablutions lightly applied to remove the morbid secretions, or ungt. cetacei on burnt rag being usually all which is required. It is essential to defend the part from the irritation of the clothes, for even dry lint and stimulating unguents invariably aggravate the disease; in some constitutions indeed, it may render the superficial sore a deep ulceration, constituting the commencement of a more severe form of disease, which has been termed *herpes*

exedens, and by the French, "Dartres rougeantes scrophulouses." For this severe degree of herpes the alkaline chlorurets are often very useful. The favourite remedy of Bietts is a solution of arseniate of ammonia in distilled water, increased from very diminutive doses to 1-8th of a grain daily, if the stomach will sustain it. I have seen great benefit derived from the acid: muriat. quinini. sulph. and sol. sedativ. in small doses, combined with the use of the carrot poultice. When the disease occurs on the internal surface of the prepuce, or is suspected on an undenuded glans, tepid water should be injected twice or thrice in a day. Any irritating substance, as dry lint, will convert the sore into one of a dubious character, which, from its situation, might be mistaken for chancre. As a preventive in habits predisposed to herpes, Dr. Underwood recommends the use of the flesh-brush, but I cannot speak of its efficacy. The rare and beautiful herpes iris, which Dr. Bateman says has been observed only in young people, I have never yet had an opportunity of seeing. It requires the most simple treatment.

HERPES CIRCINNATUS.

Vesicular Ringworm,

Is of longer duration than others, and is almost peculiar to children. Dr. Bateman's account of it is as follows:—

“It appears in small circular patches, in which the vesicles rise only round the circumference: these are small, with moderately red bases, and contain a transparent fluid which is discharged in three or four days, when little prominent dark scabs form over them. The central area in each vesicular ring is at first free from any eruption; but the surface becomes somewhat rough, and of a dull red colour, and throws off an exfoliation as the vesicular eruption declines, which terminates in about a week, with the falling off of the scabs, leaving the cuticle red for a short time.”

There is a sensation of tingling in the part, but it is preceded by no febrile symptoms. It has been said to be contagious, but this fact is not proved, nor can it be decidedly negatived. Although there may be doubt as to the exciting cause of this form, I have not wished to separate it from the varieties of herpes. The treatment of herpes circinnatus differs wholly from that of the other species. The lotio

aluminosa, or decoct. gallæ, or the solutions of metallic oxides being fully adequate to its removal in a few weeks. The state of the bowels should not be neglected.

The phlyctænoid herpes and the zona may be distinguished from erysipelas or pompholyx by the smaller size of its vesicles, and from eczema by the absence of surrounding inflammation and fever in the latter.

DISEASES, SYMPTOMATIC

CHIEFLY OF

DERANGED CHYLOPOIETIC FUNCTIONS, USUALLY
MARKED BY DEBILITY.

APTHÆ.

Thrush.

APTHA may be termed a disease of the epithelium, composing the mucous surface of the fauces and alimentary canal, rather than an eruption on the external skin. When we consider, however, that the former delicate membrane is a perfect continuation of the cuticle, its character being chiefly modified by its continual contact with various secreted fluids, we may readily admit this disease in our catalogue. This constant lubrication so alters its pathological changes, that it is not, I think, decisive that apthæ are confined strictly to the internal membrane; and I have been led to consider that the minute vesicular white points with which the skin of weakly children is often thickly studded, may be the external form of aptha. The symptoms accompanying the milary rash also are very similar to those of aptha,

but as I have not investigated these diseases closely enough to presume to argue on their identity, I may consider aptha, as it is usually designated, an eruption of minute pearly vesicles on the mucous membranes, extending from the lips to the anus; terminating in thin white pellicles.

The most frequent form of aptha occurs during the period of lactation, *Apthæ lactantium*, a disease usually of a much milder character than that appearing in older children; but the peculiar constitution of the child, and the state of the atmosphere which it is inhaling, will ever modify the symptoms and external character. Aphthous vesicles are occurring in the mouth of the infant within a few days after birth, on the lips, tongue, &c., accompanied by simple erethism. The eruption is however often so mild, and the febrile disturbance so slight, that the first intimation the nurse has of its existence, is heat and excoriation on the nipple, from its contact with the vesiculæ. The mucous membrane on which the vesicles are seated, assumes a dull crimson colour, and the tongue and lips become tumefied, the papillæ of the tongue resembling the erect form, and crimson hue, as during scarlatina maligna. In a day or two slight superficial ulceration takes place, the vesicles either remaining separate or becoming confluent:

small opaque flocculi form on the surface, and become detached at various periods, the subjacent skin being of a pink hue. This process is often repeated, if the exciting cause be still efficient. The vesicles will, not unfrequently, under these circumstances extend, by what is termed continuous sympathy, throughout the whole alimentary canal, appearing at the verge of the anus. During this course we shall observe various characteristic symptoms according to the locality of the vesicles: as nausea, when they affect the lower portion of the œsophagus or stomach, and tenesmus, when the large intestines are attacked. The mucous lining of the trachæa and nares are seldom much affected.

In the mild form of apthæ, the regulation of the alimentary functions, the acidity of which is the invariable cause of the eruption, will most generally cure the disease. In the case of the sucking infant, it will usually be essential to change the breast-milk; or if the child has been spoon-fed, and the food be prejudicial, a healthy wet-nurse should be procured for it. A mild emetic will be useful, to unload the stomach of its morbid secretions, succeeded by a few grains of Hyd. cum Cret. or the carbonate of magnesia with rhubarb, and a $\frac{1}{4}$ of a gr. of calomel; the p. contrayervæ c. gr. iv. ad x. may be given twice in the day. The mel bo-

racis or syrup. mori should be applied to the tongue, lips, and velum, with a camel's-hair pencil. If diarrhœa has been violent, and the child appears languid, and there be loss of appetite, the infusions of chamomile or orange-peel, with a few drops of ac. sulph. d. should be given thrice in a day, and small quantities of melted jelly or sago.

The more severe form of apthæ is the result of protracted disorder of the alimentary functions or the sequela of some acute inflammatory disorder, especially occurring during the wet equinoctial periods. The slight forms of apthæ lactantium will however sometimes terminate in the malignant, inducing an aggravation of the primary gastric derangement, and fatal marasmus, by the flocculent detached membrane being swallowed, together with the unhealthy secretions of the glands about the fauces. After the period of lactation, the apthous vesicles are usually attended by a more severe inflammatory affection of the fauces, the velum, the pharynx, and the tonsils, assuming a bright crimson hue, with considerable tumefaction and difficulty of deglutition; in some cases inducing symptoms of cynanche trachealis. The vesicles on the tongue and fauces coalesce and terminate in superficial ulceration, the papillæ of the tongue being prominent and scarlet. It is not often

that these eruptions terminate in sloughing, but occasionally the crimson hue will become livid, and deep sloughs will form, the *black thrush* of Armstrong. In some cases, purple and spongy ulcerations of the gums will occur, which denude the necks of the teeth, and are attended with an excessive hæmorrhagic tendency. This affection sometimes extends in emaciated children to the destruction of the lips and cheeks, to the falling out of the teeth, to the exfoliation of the alveolar processes, and even the jaw itself.

Dr. Hamilton relates cases of sore throat which appear somewhat analogous to such a state, where small white spots form on the tonsils, enlarge, and produce a slough, accompanied by febrile symptoms. He says, these cases usually prove fatal. The degree of danger in apthæ depends mainly on the state of the system at the time of their appearance, and on their remote cause. If the vesicles are merely the indication of internal derangement, the danger will be but slight in incipient stages: it will be much increased, however, in the protracted and neglected disease, and especially if it be the sequela of inflammatory acute disorders, being an evidence of a state of extreme debility from high excitement. In such cases, especially if sloughing occur, it is indispensable that tonics should be given with

gentle laxatives and alteratives, and light nutritious diet. The cinchona or calombo, with the muriatic acid, will be the most efficacious. In ulceration of the throat, the mel boracis, or the yolk of an egg beaten with cream may be used; and where the membrane assumes a livid hue, and sloughing takes place, the acid muriat. dilut. with mel boracis, and a few drops of vin. opii may be applied by a brush to the part. The child should take asses milk every morning.

RUPIA—ECTHYMA.

THE incipient form of rupia is a broad flattish vesicle; that of ecthyma, the phlyzacious pustule, both terminating in circular imbedded incrustations. They are invariably indicative of a debilitated state of the system; indeed, this clonic condition seems to have the power of changing other eruptions into the vesicle and pustule, which is to terminate in these incrustations. Thus, I have seen the papulæ of strophulus, when seated on the skin of a weakly infant, or where some acute disease has reduced the system, assume both the vesicular and pustular form in the same child, terminating in deep brown crusts. The character of the crusts of ecthyma and rupia are different

in appearance, according to the degree of debility under which the child may suffer. Thus where the circulation and strength are not much reduced, and the atrophica has not proceeded long, we shall observe the mildest forms of the diseases, *ecthyma vulgare* and *rupia simplex*: where *marasmus* is established, or the child has been materially reduced by protracted disease, or continued deficiency of nutrition, *ecthyma cachecticum*, and *rupia escharotica* of Dr. Willan.

Ecthyma and *rupia* occur on all parts of the body indiscriminately, most frequently about the abdomen and thighs. The vesicles of *rupia* usually become slightly purulent before they burst, and the discharge is of a sanious character. The phlyzacia of *ecthyma* are fully formed in about four days from their commencement: the surrounding inflammation increases, and a thick pus, and subsequently a thinner ichor is discharged, which concreting forms the scab.

The simplest forms of the diseases occur in infants during the period of lactation, from deficiency of nutrition, or healthy properties in the milk: hence the remedy is plainly indicated. The more severe cases are those which occur in children in warm weather from excessive fatigue, or unwholesome food,

or as the sequelæ of severe disease, as measles, small pox, or scarlatina: or those produced by actual organic diseases of some of the assimilating organs, or obstruction or obliteration of the lacteal ducts. In these latter cases we observe progressive marasmus, and on dissection, an obliteration of the cells of the mesenteric glands. It has been asserted, however, that obliteration, or even obstruction were not necessary to induce marasmus, but that (as according to Dr. Ogilvie) there may be a derangement in the secretion of the 'succus proprius glandarum,' which is essential to complete the perfect formation of chyle and new blood.

In some of the more severe cases we observe often gangrenous eschars and deep sloughing ulcers, similar to those of erysipelas infantilis: cases which invariably occur among the most indigent, and the prognosis in which is decidedly unfavourable.

The discoloration of the new skin on the healing of the ulceration or separation of the crust, is most distinct in the vesicular disease. The process of healing in weakly children will often present an evidence of deficient constructive power in the system. A thin filmy cicatrization will be formed, marked by a peculiar puckering of the surrounding skin,

which is easily abraded; it is frequently reproduced ere a healthy cuticle is formed. From the variety of appearance which the secondary symptoms of syphilis present, the livid blotches and scabs of cachectic eruptions are very liable to be mistaken for it: indeed it is only by a careful review of symptoms, and the elicitation of truth from the parents, that we can sometimes decide on the cachectic or syphilitic nature of ecthyma or of rupia.

In the case of mild ecthyma lactantium, the change of milk with a laxative, will be usually sufficient. In older children, a more nutritive aliment should be given, with laxatives, and if there be much debility, the following draught twice or thrice in a day: $\mathcal{R}$ j T. cascarill. gtt. xij. T. ferri. m. gtt. iv. aq. aurant. flor. ʒiij. The local application should be of the simplest kind; gruel, or ungt. cetacei, indeed, a mere defence from friction being often sufficient. In the superficial ulceration from acrimonious discharge with itching, the ungt. opiat. dilut. will be found very serviceable. In the ecthyma cachecticum and rupia escharotica, the tonic plan must be more decidedly employed, and the patient should be sent into the country, or to the seaside. In addition to the tonics usually recommended, the pyroligneous acid will be found

conducive to the restoration of the tone of the stomach. It may be given as follows,

Rij. aq. flor. aur. $\bar{3}$ ij. ac. pyrolig. $\bar{3}$ j. syr. $\bar{3}$ j.
Coch. j. parv. ter die.

I have derived great advantage from the chloruret of potass, gr. iv. ter die, in the case of a child one year old, which had been affected with ecthyma cachectic. for seven weeks. Chlorine, indeed, in all its forms, appears to exert a peculiar action on the skin, which has been called the chlorine rash. The balsam of Peru in small doses will usually be beneficial. If there be much irritation, minute opiates may be given, and the warm bath with poppy infusion externally applied. The topical application of chlorine will often be speedily beneficial in those cases in which a profuse discharge of sanies is continuing. During the tonic course, the ulcerations will gradually heal, and the crusts drop off.

If mesenteric disease be present, and faulty secretions produced, mild mercurial alteratives should be given. This condition of the secretions must be judged by inspection, as the state of the tongue in children is often deceptive, possessing a healthy appearance even during severe disease.

PEMPHIGUS.

THIS disease, as it has appeared in England, has been solitary and not epidemic : affecting children between the ages of three and seven usually, and its fatal termination bearing the character of that of œdematous or gangrenous erysipelas. It commences with shivering, accompanied by pain in the bowels and head, succeeded by the hot paroxysm of fever for four or five days, at which period the pulse sinks, becoming more frequent and irritable, and pulsating one hundred in the minute, the child becoming extremely languid. Soon after this change of type, clear vesicles begin to appear, without much surrounding inflammation : as these vesicles enlarge and become bullæ, the fluid in them is changed to a straw colour, the pulse usually sinks lower, the child becomes extremely exhausted, and the fever assumes the type of typhus mitior, with white tongue, hot skin, and continual thirst. These symptoms continue nearly the same, if remedies fail, and the child dies in five or six days from the vesicular eruption. The vesicles on the thighs and arms will sometimes extend to the length of three or four inches, (an unfavourable sign,) and around these ve-

sicles, previously to their abrasion, or spontaneous limiting, there is a slight inflammatory blush; the subjacent cutis appearing livid, or of a dark crimson colour, fissured, and often divided into flocculi. There is no phagedenic ulceration, but a slight line of demarcation usually about the edges of the sore; but when seated on the hands, these ulcerations have been known to cause carious exfoliation of the phalanges if they be of long continuance.

The causes of pemphigus are obscure. It may occur in previously healthy children, and is usually ushered in by inflammatory symptoms of high type. There is certainly a peculiar tendency in the skin, but whether excited into action by internal irritants, or by exposure, is somewhat doubtful: the cases which I have seen, appeared to be symptomatic of febris gastrica.

A judicious treatment of the premonitory symptoms will most likely prevent the disease, and perhaps this prevention may often thus have been effected, as we have cut short typhus fever by venæsection, emetics, and laxatives. On the first appearance of the vesicles it is best to puncture them, and afterwards apply a lotion of plumb. superac, or a weak solution of arg. nitrat. and the child may be immersed in the warm bath. The medicines employed should be hyd. cum. Cret. or quinin. sulph. or

cascarilla with the muriatic acid, or the tartrate of iron.

I have not yet had an opportunity of examining a child in whom pemphigus has proved fatal.

The existence of a contagious fever, accompanied by vesications, appearing without erysipelatous inflammation, has been doubted by most pathologists. We have certainly been led thus to doubt in England, but the facts recorded relating to the epidemic occurring at Prague, and the opinion of Mons. Petit on the subject, prompt us to allow that such *might* have been the case.

PURPURA

CONSISTS of minute red points, termed *stigmata*, of small purple spots, or petechiæ, formed by the coalescence of the stigmata, or of larger patches of a dark crimson, or purple colour, ecchymoses or vibices: the proximate cause being a subcuticular extravasation of blood.

PURPURA SIMPLEX.

The most common form of purpura occurring in children, is the appearance of small, circu-

lar, light crimson, or purple petechiæ, so nearly resembling flea-bites, as often to be mistaken for them, until a closer examination discovers the minute dark point in the centre of the latter. The effused blood speedily coagulates, not exuding through the velamina. It is usually unattended by fever, but is invariably characterized by varied degrees of debility. Although commonly occurring in children of languid system, it does not altogether depend on positive predisposition, except so far as the deficiency of aliment shall have induced a state of general langour, of which the yielding of the capillaries to the impetus of the blood is one symptom.

The exciting cause of the disease then, is an imperfect assimilation of the food, whether arising from its unwholesome quality, deficiency, or excess. It is evident, therefore, that to correct this inefficient chylication, thereby restoring a healthy condition to the blood, is to cure the disease. When the breast-milk is deficient in nutrient properties, the nurse should be changed, or a light nutritious diet should be given. A mild laxative may be administered every second day, until the evacuations become more healthy, and the child appear lively, its complexion assuming a more florid hue. Tonics are not always necessary, but if a diarrhœa shall have considerably re-

duced the child, a few drops of dilute muriatic acid may be given in the food, with minute doses of the Hyd. cum. Cret. every night: and the child should be sent into the country.

PURPURA HÆMORRHAGICA,

Bloody Small Pox of the Antients,—Hæmorrhœa Petechialis,—
Petechial Fever,

Consists of ecchymoses, dark crimson, or purple patches of a circular, or irregular, and often of a longitudinal form: sometimes interspersed with wheals, (*purpura urticans*). It is usually dependent on that debilitated and deranged state of system, which is termed the scorbutic diathesis. Pathologists have widely differed in their view of this form of purpura: some have referred the ecchymosis, to increased vascular action, which they have termed the hæmorrhagic effort; constituting the sthenic form of purpura as it has been termed, in which the pulse is quick and hard, and which is almost invariably accompanied by pains in the arms, or hands, or about the chest. But from the absense of acute fever, the condition of the pulse, and the languid state of the system, inducing often syncope on exertion, occurring, however, without previous excitement, it may be termed a disease of debility, depending on a want of the elastic property of vascular coats, allowing the blood

to break through the capillaries : a doctrine in opposition to the opinion of Dr. Parry, who asserted its inflammatory nature. In what is designated petechial fever, however, which I have never seen in children, the vascular action may be much increased. On the first effusion of the blood, it is often of a florid hue, but it speedily becomes purple, assuming a brownish tinge as it is about to be removed by absorption. The cuticle above the spots is slightly elevated and smooth ; sometimes, however, it is raised in vesicles filled with purple blood. In *purpura hæmorrhagica* as well as *scorbutus*, the mucous surfaces are often more affected than the external skin, the danger being then materially increased, as the delicate epithelium is easily burst by the extravasated blood, and thus we have hæmorrhages from the gums, the throat, &c. which have given the specific name to this form. Internal hæmorrhage may thus take place, which sometimes prove fatal. It is rare that hæmorrhage takes place on the surface of the body, but in some cases the slightest pressure will produce ecchymosis, and firm compression will break the cuticle, and the blood will flow from the lesion. I have seen children evince this petechial tendency, being spotted black by the slightest bruises. The extravasation in very extreme cases will some-

times occur from the mere muscular action of a limb. Blood will sometimes flow from the eyes, nose, and mouth of children, at the same time that they expectorate bloody mucus, and pass bloody stools resembling *melæna*, consisting only of sanious coagula mixed with intestinal mucus. These appearances usually occur in children about the fourth or fifth year. In protracted cases, where internal hæmorrhage has not speedily proved fatal, we see the blood gradually become paler, until at last the hæmorrhage will scarcely stain the linen on which it drops: the echymosed spots being subject to the same faded change; the circulating fluid appearing to assume almost the character of serum. The cases which generally prove rapidly fatal, are those in which hæmatemesis, hæmaturia, or hæmoptoe occur, the effusion being both obscure, and out of the reach of any mechanical pressure. In similar cases the heart and liver have been found very pale in their internal fibrous or parenchymatous structure, a livid colour appearing under their internal membrane.

It cannot, I think, be doubted, that the exciting cause of purpura is a defective state of chylification, resulting often from a congested condition of the hepatic system, or mesenteric disease; not, however, acting mechanically.

It is certainly possible that local abdominal congestion of the hepatic system especially has, by thus impeding the return of blood through the cava and portal vein, determined the force of circulation to the capillaries, which have yielded to this impetus, owing, it may be, as Mr. Plumbe says, to a weakness in the vasa vasorum; but in children particularly, this very congestion will, I think, be usually found to depend on a general debility of the system, induced, as I have observed, by a gradual diminution of vital power from defective nutrition; an effect which, of course, may co-exist with excessive appetite and engorgement.

The proximate cause of this extravasation, however, cannot be altogether referred to a depraved state of the blood, as we often find the spots, and the blood itself, of a bright scarlet hue: more generally, however, the tinge of the blood is purple, agreeing with Dr. Beddoe's theory of scurvy—a deficiency of oxygene. In a very few cases the surface of the blood has been covered by a pink semi-transparent film, differing from the sizzly or buffy coats of blood drawn during medullary or membranous inflammation.

Passing by the symptomatic purpura of malignant fevers, we may observe that, on

the assumption that the primary exciting cause consists in imperfection of chyfication, the first indication of cure will be to expel the already formed unhealthy secretion from the bowels, especially in the vicinity of the orifices of the biliary and pancreatic ducts. Without the exhibition of laxatives it will be of little avail to abstract blood for the relief of congestion, or to attempt to invigorate the system by tonics. Indeed, the laxative which removes obstructions to the absorption of nutriment, may lay fair claim to the term tonic—it is the pioneer, as it were, which clears the way for the nutrition which is to follow. For this purpose, the first and second cathartic should contain the submuriate of mercury for the purpose of acting on the hepatic system.

Mercury, however, should not be continued long in purpura, as it has usually a tendency to depress power, although some physicians recommend it even to ptyalism. The most efficacious laxative and alterative will be sod. subcarbon. with P. Rhæi. When the bowels have acted freely, if there be any dull fixed pain, indicative of local congestion, diaphoretics and diuretics should be administered, to promote the natural secretions. We must be cautious of abstracting blood, recollecting that

this congestion is the effect of depression of nervous power. If it be resorted to, it must be in minute quantity. In children I have seldom seen it beneficial. On the removal of this local pain, the tonic plan may be commenced. But even this must be combined with occasional laxatives, and we should be careful to avoid the use of direct stimuli, as, notwithstanding the hæmorrhagic tendency, acute inflammatory action is very likely to follow their administration.

In some cases even of the asthenic form of purpura, very minute bleedings have appeared to act beneficially even during the tonic plan. They must, however, be really considered in the light of experiment.

The most efficacious tonic medicines will be *infus. rosæ*, acidulated with the mineral acids which possess an antiseptic quality. The infusions of orange-peel, of calombo, and of cinchona, are equally efficacious, with the addition of citric acid as common drink. In the most severe cases and latter stages of purpura, where blood is oozing from the gums, &c. the *oleum terebinthinæ* appears to be eminently successful, administered in doses which shall not always prove purgative, but may be absorbed into the system. It may be given by the mouth, or in the form of enema. In addi-

tion to my own observation, numerous cases are on record of its efficacy. The most eligible modes of administering it are with yolk of egg and sugar, or syrup of mulberries, with cinnamon water. The dose from twenty to sixty drops of the oil every two or four hours. On convalescence, it may be given with castor oil as a purgative, combined with calumbo and the mineral acids. The nurse's milk should be changed if deficient. The diet should, of course, be light and nutritious, (if the child be weaned,) as sago, with a little mountain wine, jelly, infusion of malt, and asses milk. Country air should be recommended.

ICTHYOSIS.

Fish-skin disease.

THE result of a chronic inflammation of the cutaneous vessels, from a languid and relaxed condition, by which a peculiar deposition of diseased cuticle is effected. The morbid laminæ in this disease are not deciduous like the other squamæ, being more firmly attached to the subjacent skin. In its incipient stage the disease has the appearance of simple disco-

loration or cloudiness, a circumstance which is usually disregarded, as it is attended by no sudden or marked constitutional disturbance, a degree of languor and debility having existed previous to the morbid deposit, and continuing gradually to increase. As the disease advances, the morbid laminæ appear elevated above the surface of the healthy cuticle, assuming a dirty yellow or dusky hue. In children the disease seldom or never becomes of a horny or tubercular character, but consists of dusky or greyish flat laminæ, with fissures of a darker colour, imparting the sensation produced by a coarse dull file. There are, however, a few tubercular lumps about the elbows and knees, where the cuticle is thick. There is no inflammatory blush extending round the scales, the cuticle beneath them appearing but slightly redder than in the healthy state. The disease occurs in children usually about the arms and legs, extending round the limb, and spreading likewise over a large surface of the body. The bends of the joints, however, are free from the affection, and it does not attack the cicatrices consequent to the vaccine vesicle, or other cuticular lesion. Under this condition, the velamina are of course obstructed, and the skin is imperspirable. I have observed something like an hereditary predisposition to this

disease. Indeed, it is sometimes occurring so early in infancy, as to excite suspicion of its having been congenital. When once established, the laminæ are difficult of permanent removal, as a fresh deposit takes place usually soon after they may have been torn away, unless the modes of treatment superadded have begun to exert a salutary influence. When the discoloration is incipient, even though there may exist some roughness of the cuticle, we may succeed in arresting its progress by the employment of moderate friction, which restores the languid circulation of the cutaneous vessels, and promotes perspiratory secretion: this lesson we may have learned from the simple fact of the freedom from disease of the flexures, where attrition and copious secretion are most continual. In the subsequent stages of the disease, the removal of the squamæ may be effected, as Dr. Willan recommends, by picking them away, and the constant use of the warm bath, which will be often successful in preventing the scales from reaccumulating, an effect which is more decided, if sulphureous fumigation be added: or the nitro-muriatic bath, which would also exert some chemical action on the scales, rendering their detachment more easily effected. The Bath-water is sometimes efficacious. I have seen two or

three instances where, with the assistance of alteratives, it has effectually restored the healthy state of the skin.

It is essential that we should always administer internal remedies, either sudorifics, to determine to the skin for the purpose of correcting the dryness of the diseased cuticle, or tonics to impart energy to the languid cutaneous vessels. If the system be much debilitated, especially after cleansing the bowels with laxatives, the arsenical solution, by inducing that action, has proved beneficial. The *pilula picis* has been more extolled by Dr. Bateman, who observes—"The only good effect that I have witnessed from internal medicines, has been from the use of pitch, which has occasioned the rough cuticle to crack and fall off, without the aid of external means, and left a sound skin underneath." This good effect is not so decided in children thus diseased.

In commencing our treatment, our prognosis must be made with caution: a confident hope excited in the mind of speedy recovery will usually prove fallacious. The general principle on which we should act will be to remove the laminae mechanically, and to prevent reaccumulation, by imparting tone to the system.

CHLOASMA.

Ephelis.—Maculæ hepaticæ.—Ephelide hepatiche.—Leberflectete.

THIS symptomatic discoloration, the ephelis of Willan, which often assimilates so nearly to the local stain lentigines or sun spots, is situated distinctly in the corium, according to the experiments of Mr. Chevalier. It appears chiefly about the breast and arms, interspersed with portions of skin of a natural hue. The deep colour of chloasma will sometimes, after a period, become considerably lighter, yet often it will remain permanent, as the marks of the Indian tattoo, or the starry pictures on the abdomen and breast of the ancient Briton. It differs from lentigines or freckles, in its margin being more irregular and indented, in its wide extent of surface, and its occurring in parts defended from the action of the sun's rays. In some instances, however, the discoloration will be almost universal over the body, imparting to a previously fair skin, the characteristic hue of the Creole. It is sometimes accompanied by a sensation of pricking and tingling. Celsus appears to have considered every stain of ephelis lenticula, as entirely local and superficial. Mr. Wilson, in his

“Familiar Treatise,” has noticed this extensive stain or cloud, and refers it to the same layer of skin as the freckle is deposited on. He considers it the consequence of a long-continued mercurial course: an opinion founded on its appearance in persons who had been the subjects of syphilis. There is, however, little foundation for this suspicion; and with regard to the action of mercury, it is very doubtful if the stain be not an indirect or secondary effect of its employment, arising from its increasing the hepatic secretion. Indeed, the peculiar characteristic complexion of those who are afflicted with diseased structure, or decayed function in this important gland, has been the theme even of the poet. A tawny or sallow discoloration of the skin may, however, be produced by functional disease of the stomach only, or of other portions of the alimentary canal, which indeed was the opinion of Dr. M. Hall. “This state of the cutaneous surface is frequently the effect of a loaded condition, and impaired function of the alimentary canal; and it is, in various instances, an affection of each of the cutaneous textures, or of the cutaneous circulation, altogether independent of any tinge of bile.”*

* Com. on Dis. of Fem. p. 8.

cholia and hypochondriasis. In the case of icterus, where there may be an obstruction or obliteration of the biliary ducts, whatever may be the mode in which the circulating fluid becomes tinged or impregnated with bile, we observe the golden tinge on the skin, and we may readily allow that this mixture of blood and bile may take place where the latter fluid is secreted in such excess, that the capacity of the ductus hepaticus is inadequate to its perfect passage into the duodenum. It is probable that the tawny secretions are effected by the vessels of the cutis; and by protracted hepatic derangement, these more permanent stains of chloasma are deposited.

Celsus, in conformity with his opinion of the local nature of these discolorations, advises no internal medicine in their treatment. It is not probable, however, that any local application will be efficient in removing this stain so deeply seated. The remedies most likely to be efficacious are saline purgatives, when the discoloration is recent; and the exhibition of the mineral and vegetable acids, with tonics, when it has existed for any considerable space of time. With this mode, however, might be combined some stimulant lotion, as acetum acetosum, for the purpose of inducing increased action in the absorbents; but I do not write

practically on this subject, as the disease is not frequently observed in children.

Sennertus supposed, that this was the *melas* or dark variety of vitiligo described by Celsus.

NOMÈ.

Noma.—Gangrenous Erosion or Ulceration.—Phagadenic Ulcer, Spreading Canker of the *Mouth*, or Scurvy of the Gum.

ALTHOUGH the progress of this not common disease closely resembles that of erysipelas gangrenosum, yet its incipient stage is so dissimilar, being marked by no diffused inflammatory blush, that it would be erroneous to consider them as identical. Like that form of erysipelas, however, it is always occurring in children, of a pale, yellow, or livid skin, who have been deficiently or injudiciously fed, or who have been previously reduced by disease. It usually occurs about the angles of the lips, near the edge of their red portion, although it is not exclusively confined to this spot. It may be here remarked, that the integuments,

about the parts where the cuticle sends off its epithelium to line mucous cavities, is peculiarly prone, in emaciated children especially, to take on a gangrenous character. The disease usually commences in a small indurated, slightly painful, tumor, the surrounding skin not being marked by efflorescence. The class of patients in whom it is occurring, are not subjects in which active inflammatory action can be anticipated; it being this peculiar depression of vital action in them, that characterises this disease; and it is probable that from the same excitement, whatever it be, in the sanguine temperament, a perfect phlegmonous abscess would occur; whereas in the emaciated child we are presented with phagadenic erosion. The skin speedily becomes discolored, of a slightly livid hue, and sloughing of the integuments and cellular membrane as quickly supervenes. This sloughing rapidly extends, assuming at this stage, the exact appearance of erysipelas gangrenosum; especially that form which has been so ably described by Mr. Kinder Wood. If occurring about the lips, the gums soon partake of the disease, and the teeth, losing such support, become loosened and fall from their sockets. The restlessness of the child is now increased, and it is continually moaning; the countenance assuming an ex-

pression of great suffering. Convulsions often occur, and the child rapidly sinks.

The prognosis is of course unfavourable, especially if the disease occurs at the decline of protracted fever. It is seldom too that we see the patient early enough to avert the progress of the disease, the phagadæna outrunning, as it were, the influence of remedy.

As the disease depends mainly on the state of constitution, it is totally useless to trust merely to local applications. If we see the disease early, an attention to the state of the alimentary canal will usually avert its progress. If it has proceeded far, tonics must be freely administered, with nitric or muriatic acid, cinchona, opium, hyoscyamus; and Port wine should be as freely employed. The balsam of Peru should be repeatedly applied on lint, warm, to the ulcerated surface, the pledgets being constantly changed. If the erosion shall be checked by the plan of treatment, it will be correct to diminish rather than increase the doses of tonic or anodyne, care being taken that constipation shall not long continue; the bowels are usually, however, rather in a state of diarrhœa. It is needless to add, that light nutritious diet should be constantly offered.

I have not added the terms *Lupus* or *noli me tangere* and *carcinoma* to the synonymes of

the epithet *nomè*, which I have chosen, having never witnessed those peculiar diseases in children. There is, however, an affection (extremely rare in children) occurring about the eyelids and superior parts of the face, which is of a *slow* phagadenic character, thus differing from *nomè*, which is marked by rapid progress. It is distinguished from true carcinoma of adults, by the absence of acute lancinating pain, of fætor, of hæmorrhage from slough, and of glandular tumefaction; from lupus, by its edges being but *very slightly* inflamed, and not bordered by furfuraceous laminæ. Slow though it be in its progress, (the ulcer remaining usually comparatively clean,) it is nevertheless extremely unyielding to applications, gradually spreading to the orbit and face. It appears to be of a malignant nature, and as it is so irresistible, it would be adviseable to have recourse to extirpation in its early stage. The chloruret of lime should, however, first be tried, which is so eminently successful in some analogous cases. I regret that my observations on this rare disease have been, at present, inconclusive. I may add, that Dr. Jacob of Dublin has published an account of the ulcer as occurring in the adult, in the Dublin Hospital Reports for 1827.

ŒDEMA CELLULARIS.

Skin-bound.

Indurcissement du tissu cellulaire.

THE peculiar condition to which this term has been applied is very rarely observed. It is, indeed, rather a disease of cellular membrane than the integuments themselves; but as there is also an alteration of the cutaneous structure, it may be admitted here. It is, however, probable, that it may have sometimes existed in infants, who have survived but a few days, without its nature having been discovered.

I transcribe the pathognomonic symptoms of this disease from Dr. Underwood's Treatise.

“ I. The skin is always of a yellowish white colour, giving the idea of soft wax.

“ II. The feel of the skin and the flesh is hard and resisting, but not œdematose.

“ III. The cellular membrane is fixed in such a manner that the skin will not slide over the subjacent muscles; not even on the back of the hands, where it is usually very loose and pliable.

“ IV. This stricture often extends over the whole body, but the skin is peculiarly rigid in the parts about the face, and on the extremities.

“ V. The child is always cold.

“ VI. The infant makes a peculiar kind of moaning noise, which is often very feeble; and never cries like other children.

“ VII. Whatever number of days such children may survive, they always have the appearance of being dying.”

The serum of these children contains a substance which coagulates spontaneously. It usually appears soon after birth, principally in children who have suffered from severe diarrhœa; and, where a predisposition exists, to have been epidemic, especially in the crowded air of hospitals. It is sometimes accompanied by trismus. On exposure of the little patient to the fire, it appears to become warm as wood does, but quickly cools again on being taken away. The sensibility of the skin is not entirely destroyed. In the case related by Scuringius, the skin was like flesh hardened in smoke.

On cutting through the skin, “ the serous extravasation is constantly met with; it is of a deep yellow colour and fluid, but coagulates with heat; the fat is peculiarly solid; the glands and lymphatics, especially those of the mesentery are found stuffed, and the liver uncommonly large, with a great quantity of deep-coloured bile in the gall-bladder; and the lungs are said to be loaded with blood, as well as to contain an unusual quantity of air.”

There is much difficulty of swallowing in these infants. With regard to the nature of this disease, it appears very similar to the œdema of adults, arising from obstruction in the great channels of circulation; the excessive hardness of the skin resulting from its unyielding state in children. Icterus is a common accompaniment of this disease; in the majority of cases, however, the liver has not been organically diseased, but there is usually more or less morbid change in the digestive canal. In all cases which Mr. Billard examined, there was a remarkable general congestion chiefly of venous dark blood, which flowed freely on dissection, arising, not from local obstruction, but from superabundance in the system. The memoir of Professor Palletta, in the *Annali Universali* for July and August 1825, tends to establish this fact. The excessive dryness of the skin, however, indicates a defective capillary circulation, producing internal engorgement and consequent effusion. The most efficient mode of removing this œdematous condition, will be the warm bath, warm flannels, and stimulant friction, or pressure, with the abstraction of blood. The mode of treatment adopted by Dr. Denman was strict attention to the bowels, with the administration of spt. ammon. c. every four or six hours. Dr. Underwood recommends

carminative enemata, and a grain of calomel previous to immersing the infant in the warm bath; and, after free evacuations of the bowels, "volatile and cordial remedies," with decoct. salviæ. Blisters have been applied with benefit in France, and in the successful case of the Neapolitan girl, Patrizia Galiera, milk-and-water baths, and vapour-baths, with pure mercury, were used, with the internal exhibition of decoction of the woods. Incision of the infiltrated limbs will be serviceable, as there is always a copious flow of serum, and the skin usually loses all its hardness.

DISEASES USUALLY SYMPTOMATIC,

ARISING ALSO FROM

EXTRANEOUS EXCITEMENT: DEPENDING PROBABLY
ON PECULIAR IDIOSYNCRACY.

ROSEOLA.

Rose-Rash.

AN efflorescence of a rose, or bright crimson colour, symptomatic of derangement in the visceral functions, or of dentition, or accompanying acute febrile diseases.

R. *infantis* is a bright rose-coloured eruption, occurring in infancy, diffused, or disposed in patches, on a surface of a lighter blush colour: assuming, (like rubeola,) the semilunar or serpentine form, from which, however, it is distinguished by its brighter colour, and from scarlatina simplex, by the febrile symptoms seldom

exceeding the degree of erethism. It is often transitory, disappearing after a few hours' continuance. The chief exciting cause is the irritation of dentition, of which the rose-rash is usually an alleviation, but yet not always a prevention of inflammatory action in some important organ from this cause, during which the roseola may either fade and disappear, or still continue. The febrile action is so far independent of the rash. The treatment of roseola infantilis is extremely simple. The exhibition of a laxative every, or every second morning, and of alteratives. If the gums be swollen or painful, they should instantly be freely divided, and allowed to bleed: this simple incision will often relieve the child in a few hours. If acute inflammation be present, it must of course be treated accordingly.

In the hotter months, we have the forms of roseola æstiva, and autumnalis—the first, a rash so closely resembling the appearance of rubeola sine catarrho, that it is impossible to distinguish them, except by a review of the period and manner of occurrence.

Roseola æstiva is not of very frequent occurrence in children: in hot months, however, the swallowing of cold liquids by a child heated with exercise, will sometimes produce serpentine and circular patches of a dull crimson colour on the skin, preceded by erethism, a

degree of languor, and headache, and sometimes by sore throat, symptoms which are somewhat abated by the eruption.

Roseola autumnalis is not strictly limited to the late equinoctial season. It is arising from the same exciting causes as the last species, though assuming a different character, appearing in circular or oval spots of a lake-colour of different shades. A mild emetic, laxatives, sudorifics, and light food, constitute the treatment essential for these eruptions. Dr. Bateman has advised the internal use of the sulphuric acid in *roseola autumnalis*, but I have never found it essential.

The consideration of *roseola vaccinia*, and *R. variolosa*, is referred to their respective primary diseases.

ERYTHEMA.

A DIFFUSED redness of the skin, marked by, or accompanying, varied degrees of excitement.

E. simplex consists of dull crimson patches, irregularly spread over the surface of the skin: usually on the face, breast, and arms. It is commonly evanescent when arising from derangement in the *primæ viæ*, appearing at irre-

gular intervals. It occurs sometimes in cases of slight diarrhœa, and a transient erythematous blush will appear in some children, even after feeding, especially with certain food, as arrow-root, &c. or from the accession of pain during dentition. (*Erythema fugax*.) In other cases the efflorescence is more durable, extending over a whole limb, and, in weakly children, is sometimes accompanied by œdematous swelling. (*Erythema leve*.) This form sometimes occurs during the progress of chronic dysentery, and other relaxing disorders. It is likewise indicative of deep-seated inflammation under the fascia. Occasionally we observe the efflorescence interspersed with distinct papulæ, attended by greater depression, quick small pulse, and pain in the limbs, assuming a livid hue on its decline. (*Erythema papulatum*.) Gentle laxatives, and mild tonics, as *Inf. Aurant.* &c. will usually be all that is essential. We must, however, recollect that any decided disease which may have been its cause, is to be treated by the appropriate remedies.

E. nodosum is a complaint of rare occurrence in children, appearing commonly in young females from nine to fifteen, and very rarely occurring in boys. It consists of large rose-coloured oval patches, on the fore part of the leg, attended with acute pain. It is preceded by erethism of many days' continuance. The efflorescence

fades, and becomes dusky in about a week. In girls of ten or twelve years old, it is sometimes connected with the approach of menstruation, in which cases the uterine system should be attended to. In children positive rest, light food, and laxatives are all that will be required. Sometimes the disease consists of rose-coloured tubercular lumps, thickly scattered over the leg or arm, with surrounding efflorescence. The cases which I have seen appear to have been salutary, the general health of the child being amended by their appearance. I have thought their speedy disappearance usually unfavourable. In one case pneumonia very suddenly supervened on the recession of the disease.

ECZEMA.

AN eruption of small pearl-coloured or brownish vesicles, usually closely crowded, with very little surrounding inflammation, and marked by no febrile symptoms. It is non-contagious, and is excited by various causes on a predisposed or irritable skin. In children, eczema is almost entirely confined to that appearance which has been termed by Dr. Willan,

eczema solare, a designation evidently too limited. In some children the predisposition is certainly made evident by the intense action of the rays of the sun, especially if the child be heated by exercise, in which case the epithet solare is strictly proper, as well as the vulgar term heat-spots. In other instances it will be produced by the application of acrid or stimulant substances, as the lytta, tartarised antimony, cachew oil, or mercury. In some children internal irritation will frequently produce the eczematous vesicle; but the most common cause is draughts of cold water, or acids, or subacid fruit, especially if they be swallowed in the heat of summer. The disease is then termed a surfeit.

Eczema is preceded by a sense of heat and tingling, without languor or acceleration of pulse, which circumstance distinguishes it from miliaria, which is always accompanied by, or the result of fever. In the course of a few hours, the vesicles make their appearance, interspersed with light pink papulæ, and from the irritation of the very tender skin by friction, with small pink lines. When it is situated between the fingers, especially if friction or scratching shall have rendered the part moist by abrasion, and the fingers are tumefied, it may be mistaken for scabies: but the more pointed vesicles of eczema, their more limited extent, the sensa-

tion of smarting rather than of intense itching, and the absence of inflammation, will sufficiently distinguish them.

Eczema is often of very short duration, and will sometimes disappear without any evident desquamation—the lymph becoming opake, and subsequently absorbed: in other cases, especially when the cuticle is abraded, a small brownish scab will form, similar to that of prurigo, which on dropping off, leaves the skin in a rugous state, marked by pink lines into spaces of a somewhat quadrangular form. In some peculiar habits, especially where remedies are disregarded, eczematous vesicles will continue to arise for many months, the disease becoming, if neglected, one vermillion patch interspersed with the vesicles. (Eczema rubrum.) In other cases we shall have superficial ulceration, which will continue to spread from acrid lymph flowing from the open vesicles, which in some instances will become concreted into thin crusts. Under this state febrile symptoms will often be excited, and the health of the child will severely, and perhaps permanently suffer.

The treatment is very simple, consisting of gentle laxatives, with the infus. cascarill. or calumbæ and ac. sulph. dilut. or any other vegetable tonic. It is in this eruption, evidently, that Dr. Underwood recommends the juice of

sium aquaticum coch. j. ad v. to be taken in new milk.

The local applications must be merely to moisten and to soothe the part, and prevent concretion; tepid water, mild bread-poultice, or well strained gruel. If there be much ulceration, however, the u. plumbi dil. or ungt. cetacei, with a very small proportion of pulv. opii, may be used. Friction should be prevented, and the linen repeatedly changed.

On the disappearance of the eruption, some degree of languor will usually remain. The child should then take a few drops of the dilute mineral acids in water twice or thrice in a day, and should be allowed to breathe country air.

PITYRIASIS.

PITYRIASIS is a non-contagious disease, the consequence of chronic inflammation affecting the cuticle. It consists of progressive laminæ of thin scales, which exfoliate, and are unattended by discharge of fluid.

Pityriasis capitis, or dandriff, is a very common affection of the scalp in infants. The squamæ are most numerous and largest about the occiput, but thickest on the vertex.

Simple ablution is the only requisite for their

removal. In some children, if the disease be neglected, the laminæ do not separate, but become one hardened crustaceous mass, which may be termed pityriasis scabida. This, however, is not difficult of cure; requiring the removal of the hair closely by the scissors after the crust has been softened by tepid ablution, or warm poultices, with the administration of a cathartic. If this neglect be continued, however, pustules will form around the hardened edges, and the contagious porrigo will be produced.

Over the breast of boys and girls of the ages of ten or twelve, are sometimes scattered light brown scales, attended by itching. I have never seen it in infants. This variety has been termed versicolor by Dr. Willan, in consequence of the variegated discoloration.

It is a more simple disease than that of adults, the laminæ in some cases being scarcely perceptible, and the disease somewhat resembles the ephelide hepaticque. It is indeed remarked, that even after the cuticular exfoliation, the sallow colour remained often on the skin and Rete mucosum.

The laminal formation may be checked by the alkaline liniment composed of liq. potassæ ʒij. aq. rosæ lbss. If the disease be attended by debility, decoct. sarsæ with sulphuric acid should be given. Dr. Willan has noticed a

black discoloration, with furfuraceous exfoliations, affecting children who have been brought from India to England. It is probable there may be some peculiarity producing this modified disease, or the vicissitude from warmer to colder temperature. That form occurring in children of a cachectic tendency, will sometimes assume an aspect similar to this. For these varieties the antiseptic acids will be appropriate : the cases of pityriasis, however, occurring in debilitated habits, are not so numerous as to render it essential to class the disease among those necessarily allied to debility.

PSORIASIS.

Scaly Tetter.

THE distinction between psoriasis and lepra is not of very high practical importance. It is, however, essential to divide them, as psoriasis, in addition to some variety of character, is usually attended by higher vascular action, and is a disease of more acute form. I have considered psoriasis guttata as a variety of lepra alphoides ; and, as the psoriasis gyrata is of very rare occurrence, and the inveterata, I believe, never seen in children ; and as the terms labialis, ophthalmica, &c. are merely derived from

locality, I shall consider the specific distinction (*diffusa*) unnecessary.

Psoriasis is non-contagious: it is the effect of acuto-chronic inflammation of the vessels of the cutis, depending on some peculiar action or hereditary predisposition.

The scaly patches of psoriasis are of various sizes, but usually irregularly circumscribed, of a red or brownish colour, interspersed with fissures. It is accompanied by intense itching and heat, which are much increased by elevation of temperature or friction, which sometimes produces deepened ulceration, from which a purulent fluid is secreted: this concreting with the small furfuraceous laminae, which are detached from the scales, produce a more elevated crust. The disease will often extend over the surface of a limb. Around these patches there is usually a blush of deep rose colour, which is heightened by any increased exertion or excess in diet. Beneath the scales, the skin is also extremely red, and peculiarly irritable. The disease is usually preceded by general excitement, and gastrodynia. The exciting causes of psoriasis, where predisposition exists, are both internal and external:—the juice of acescent fruit and vegetables, or peculiar articles of diet—the sudden repulsion of cutaneous action by cold ablution—or excessive heat from exercise. It may be

produced too by the neglect of papular eruptions; and Dr. Bateman affirms, that it is "sometimes connected with arthritic complaints." The most severe case I have seen was the sequela of confluent variola. Psoriasis will often continue for several months, and is sometimes subject to periodical returns about the equinoctial seasons.

In the early stage of psoriasis, it is essential that the bowels should be freely opened; that the patient should adopt the very lightest form of diet; that the diseased skin should be but lightly covered, and, above all, preserved from mechanical irritants, and rest enjoined. If the constitutional irritation should be considerable, the child should take a draught of mist. camph. and spt. æth. nitric. twice a day, and a small quantity of extract. hyoscyami at night, from gr. $\frac{1}{4}$ to ii. In psoriasis of a dry description, the child will be benefited much by v, x, or xij drops of ac. sulph. dil. twice a day, with sago and broths.

The most appropriate application in the incipient stage is tepid water, or a very light and moist bread poultice, frequently applied, or warm vapour. Even the liq. plumb. subac. dilutus will often aggravate the disease; but I have seen much benefit derived from cream or oil of almonds. I cannot agree with Dr. Bateman, that bleeding and purging are

injuriously. A laxative should invariably be given every second day, and the application of leeches around the edges of the scales is usually productive of relief; or if the pulse be very full, even bleeding from the arm. For the relief of the local irritation, fomentations of belladonna have been recommended. We must, however, be very watchful of its effects, as coma, delirium, and inflammation of the fauces, of a dark purple colour, have been the result of this application. It is very doubtful whether anodynes locally employed are productive of relief. On the subsidence of the inflammatory symptoms, sulphur fumigations may be employed; but even then we may expect, at first, that fresh patches will appear as the former subside. With the sulphur-bath, may be combined the arsenical solution; and Mr. Blacket has advised the following medicine: Rj. sulph. precip. 3ss. potass. supertartr. 3j. P. jalap. 3ss. f. pulv. 18. cap. j. bis indies—aq. picis lbss. x. omni mane. To these cinchona may be added, if there be much debility: solutions of the alkaline sulphurets have been found efficacious; and the decoct. dulcamaræ, combined with alterative pills and change of air, has been successful in removing a disease of two years' duration. According to Dr. Bateman, the internal use of mercury is often prejudicial, but I have seen much benefit derived from the pil. hyd. sub. c.

The lotio flava is often very beneficial in the second stage of the disease; when the scales have been detached by the liquor potassæ or acid. muriat. In this state, and when the skin looks pale, the most useful application will be the ungt. hyd. nitr. mit. The part should always be gently washed before the application of the fresh ointment.

The psoriasis affecting the lips, especially that tumid and fissured state of the lower lip, is always indicative of chronic inflammation or irritation in the viscera. Depletion by leeches on the abdomen will often effect the removal of this form, even after the failure of various local remedies, and a persevering course of laxatives.

PORRIGO,

A contagious pustular disease terminating in incrustation.

PORRIGO FAVOSA.

Tinea capitis.—Tinea favosa.—Scabies capitis favosa.—Teigne faveuse.
Scald Head.

THIS species of porrigo is marked by the eruption of favi; large flat light yellow pustules

occurring on all parts of the skin, usually, however, about the ears, the occiput, the mouth, and forehead, accompanied by considerable irritation, but giving rise to no febrile action. The favi, in a very short time from their appearance, usually become confluent, burst spontaneously, or become abraded, when a very glutinous purulent secretion is poured out, which speedily concretes, forming yellow, olive-coloured, or brown crusts. The surrounding skin is very irritable, and thus the disease is aggravated, reproduced, and extended, by the child's scratching this irritable surface, or pulling off the newly-formed crusts. By this continual excitement, and new secretions, the incrustations appear cellular, divided sometimes into deep compartments resembling honeycomb. The odour exhaling from these crusted sores is often very fetid, although it rarely possesses that peculiar smell of leek, from whence its generic term is derived.

When the disease is stubborn or neglected, the chain of lymphatic glands, situated nearest to the eruption, becomes affected with induration, terminating often in suppurative inflammation. When the disease on the scalp is neglected, the hair becomes matted, and pediculi will often be generated in great numbers. When occurring in the upper part of the cheeks, ophthalmia, often of an acute character,

will arise, even from the effluvia of the sores, but especially if the acrid matter be suffered to come in contact with the conjunctiva. It is very rare, that the ciliary glands escape; *tinea ciliaris* and its consequence, *lippitudo*, are often produced; the inflammation extends to the puncta; the membranes about their orifices become thickened, and from their obstruction *epiphora* is occasioned, and the conjunctiva being morbidly thickened, is everted beyond the external skin, forming the disease termed *ectropium*. These are the effects of contact; but it must be observed, that we often see *ophthalmia* produced by the sudden healing or spontaneous disappearance of the disease, the effect of a remote sympathy. Parts opposed to the diseased skin will also be agglutinated by the discharge, as the breast to the chin, and the lobe of the ear to the angle of the jaw, &c. The contagious nature of the secretion of *porrigo* is very active. This, however, is not always its source; it may be generated *de novo*, by neglect, accumulation of dirt, &c.; and it appears, that there may exist a certain predisposition to this disease, *porriginous* pustules and scabs being often produced around the edge of blisters and other superficial irritants. Eruptions of a more simple character, also, will be converted, by neglect, into the contagious *porrigo*. A very common cause of the disease is an accumula-

tion of depraved secretions in the alimentary canal; and indeed I have thought, that in those cases, where superficial excitement, as blisters, blows, &c. have produced porrigo; the internal derangement has been the remote cause. I have sometimes seen, on the contrary, pruriginous crusts prove the excitement of herpetic vesicles, which have been intermixed with the pustules for some days together, but in the end they themselves become pustular.

Mr. Morris, a chemist at Rouën, has analysed the matter of porrigo, and this is the result of his analysis: 1st. superacetate of ammonia; 2d. osmazome; 3d. gelatine; 4th. a small quantity of albuminous fluid; 5th. concrete albumen; 6th. a fatty substance; 7th. chlorate of soda; 8th. traces of phosphate and sulphate of lime.

The treatment of porrigo favosa, even in those cases which arise from actual inoculation, should be chiefly internal. In the mild cases, even though a crust be formed, a purgative, followed by a mild laxative every morning, together with the essential removal of the concrete secretion, by sponging with tepid water, or a soft poultice, will often speedily cure the disease.

The use of laxatives is especially beneficial, and I have frequently seen the pustules effectually checked in their progress, and a fresh

crop obviated. This effect is aided by the addition of alteratives as hyd. em. soda: hyd. oxyd. nigr. in children of a gross habit; and in those of strumous diathesis by the mineral acids, the solution of the tartrate of iron, the muriate of baryte, or the alkaline chlorurets, especially the chloruret of soda.

On the subsidence of inflammatory action in the sores, and if they are not progressively healing, it will be right to employ some more powerful local application. The most efficacious will be: ungt. picis p. j. ungt. sulph. p. 2. The French, in addition to antiphlogistics, recommend cataplasms and blisters to the arm.

In some very stubborn cases I have found equal parts of nitric acid, oil, and water, very efficacious. The lotions of the alkaline chlorurets are often prejudicial and seldom beneficial. It will be essential to defend the parts from friction, and to change the local applications often, to remove the secretion, and to ensure the specific virtue of the remedy. On the occurrence of severe symptoms from too sudden a cure, a blister or an issue should be applied in the vicinity of the former disease.

PORRIGO SCUTULATA,

Ringworm of the Scalp,—Pustular Ringworm,

Consists of patches of yellow aches, detached, and often remote from each other, situated chiefly on the hairy scalp, or on parts of the skin covered by capilluli.

Dr. Underwood, as well as Mr. Plumbe, and other authors, have almost set aside its connexion with any constitutional derangement. Celsus, however, does not argue so decidedly,—“*neque sine aliquo corporis vitio nascitur*,” an opinion which must at least make us pause in the indiscriminate use of local remedies.

Dr. Bateman has referred its spontaneous appearance principally to “children of a feeble or flabby habit, or in a state approaching to marasmus, who are ill fed, uncleanly, and not sufficiently exercised.” It seems to be Mr. Plumbe’s opinion, that excessive inflammation of the skin, as in scarlatina, draws the nourishment from the bulb, and the hair becomes loose, and irritates the skin, producing porrigo; the pustules generally not joining till the hair is loosened. On this idea is founded the principle of local treatment he has adopted. Now there can be no doubt of its double origin, and we must therefore be guided in

our practice by the mode of its commencement, and the constitution in which it is produced, considering the proximate cause as an eruption from peculiar inflammation of the bulb of the hair, or the parts close to it, the detached hair then becoming an extraneous body, increasing, though not having primarily produced the discharge.

On the abrasion of the small pustules, thin brownish incrustations are formed. The pustules, as well as the concretion, assume a different character on the scalp and other parts. Among the hair, the incrustation is marked by distinct lines somewhat resembling Mosaic, or Roman tessalæ: sometimes becoming of an olive hue. On other parts of the skin, it is almost invariably of milder character, the aches being very minute, the incrustation very slight, resembling a circular or oval ring, of a brownish pink colour, and the discharge being very small in quantity. These rings, if neglected, will extend to a very wide circumference, the centre often becoming dry and exfoliating at the same time. On the scalp, the crusts become much thickened and confluent, and the hair matted by the discharge. When it has been loosened by the disease in its bulb, its colour fades, and it becomes thin and brittle. The skin beneath these crusts is red and glossy, and its surface marked by

purulent points. The red circle will sometimes fade and spontaneously disappear on the downy skin, a slight exfoliation taking place. On the head, however, the confluent concretion will continue to extend until it is covered by one encrusted mass. The matter will sometimes concrete into distinct circular indented depositions of a whitish chalky appearance, (the *porrigo lupinosa* of Dr. Willan.) *Porrigo scutulata* and *favosa* may sometimes be seen on the skin of the same patient; some proof, I think, of the constitutional origin of the disease, which has been, in my opinion, strengthened by the efficacy of laxatives and alteratives in the incipient forms of the disease.

The same constitutional treatment may then be adopted as I have recommended in the *favosa*; the local applications must be somewhat different, and they may be employed certainly with less limited freedom. It will be well to commence with tepid ablution and poultices to dissolve the crust, and to loosen the attachments of the destroyed hairs, which should be gently drawn out; the poultice should still be continued for two or three days, until the inflammatory action shall have totally subsided. The contents of fresh pustules should be pressed out. Recourse should now be had to more astringent applications. The sulphate of copper in solution, or in powder,

washing off the latter after rubbing it in, as recommended by Mr. Plumbe. The infusion of galls, the solution of chloruret of soda, or the deuto-ioduret of mercury with æther, may be applied externally, or the lotio arg. nitrat. The calx hydrarg. alb. may be applied cautiously to destroy the diseased glands. The ointment which is found most efficacious in Paris, is the following, ('Formulaire Pratique des Hôpitaux Civils de Paris;')

Rj. sod. alicant. ʒiij.

Potass. sulph. ʒiij.

Lard ʒiij. M.

to be applied daily after the employment of poultices. As a contrast to this, the decoct. tabacæ has been found very successful after the failure of other modes; a remedy, however, highly dangerous, death having occurred from its incautious use.

In the practice of Professor Hamilton, during the very early stages of porrigo sc. the application of warm vinegar every night, followed by friction with u. hyd. nitr. mit. generally proved perfectly successful.

When the scabs are very dry, and in the form of porrigo lupinosa, the liq. potassæ or dilute nitric acid should be applied to soften them, after which a poultice to dislodge them, and subsequently the inf. gallæ to restore

healthy action to the part. For the purpose of detruding the dead hairs, pulv. ellebori. alb. may be applied three or four times, and ungt. picis made lukewarm: the head being then covered with an oil-skin cap, the loose hairs may, after their applications, be easily drawn out. The pitch-cap, as it has been called, is extremely painful. On the indurated and thickened skin which remains sometimes after this disease, ungt. hydr. and sulph. precip. p. æq. may be rubbed in, or the part washed with spirit of wine twice or thrice in a day.

The second variety of porrigo, the furfurans of Dr. Willan, I have rarely seen in the child.

PARONYCHIA.

Onychia.—Panaritium.—Whitlow.—Felon.

THE paronychia is an inflammatory tumor, seated at the extremity of the finger or thumb, and sometimes of the toes. The degree of the symptomatic affection accompanying this

disease, depends chiefly on its situation ; although the inflammatory diathesis will, of course, tend to aggravate the character even of the most superficial swelling. Paronychia may therefore be divided into three species—the mild, the severe, and the malignant.

P. mitis the benign of Sergeant Wiseman, and the cutaneous and benign of Pearson, is seated usually about the root of the nail, frequently involving the whole apex of a finger. It commences with heat, pain, tension, and redness, like common phlegmon, attended by slight erythismus. The suppurative process is speedily completed, producing an almost transparent elevation of the cuticle. On the evacuation of its purulent contents, the ulcerated surface usually very quickly heals. If the inflammatory action commences more deeply, the symptomatic affection is more severe, the pain more acute, and the simple erythism is increased to a perfect febrile state of the system: the supuration is more slowly effected, and the pus will often burrow laterally, and beneath the nail.

P. severa is marked in its commencement by intense pain, deeply seated in the finger. The inflammatory blush is not so evidently defined as in the superficial, but the deep inflammation often extends to the forearm, distinct red lines being traceable in the course

of the lymphatic vessels, even to the axilla. The febrile symptoms are very severe, spasmodic affections often supervening, especially in sanguineous children. The disease will sometimes be marked by delirium, and has not unfrequently terminated fatally. The cause of this severity is the unyielding nature of the parts in which the whitlow is seated, the theca tendinosa, or the periosteum of the phalanges: beneath or within which tissues, the pus will remain long enough, if not evacuated by the lancet, to produce extensive sinusses along the finger, thickening and loss of motion in the joint, and even to effect a carious disease in the subjacent bone. Paronychia may result from external injuries, as contusion or puncture; from the retention of minute extraneous substances; or from the superficial and transitory touch of acrid stimuli. It is, however, often a symptom of gastric derangement in children, and sometimes may be termed a critical abscess at the decline of fever.

On the commencement of paronychia from local injuries, we should endeavour to establish a preventive of its development, by the removal of the exciting cause. An extraneous body should be extracted. If the disease should have resulted from contusion, or the contact of acrid substances, antiphlogistic lotions, and even the topical abstraction of blood, should be

resorted to. If the disease be symptomatic, it may become a question whether it is judicious to check it. I believe that we should often retard convalescence by our success in such a mode: yet in some cases, the finger may be dipped in hot water for a few seconds, as an attempt at resolution, laxative medicine being at the same time administered. In those cases which we consider symptomatic of deranged digestion, we should at least attend strictly to the removal of the remote cause, and if this be speedily effected by laxatives and alteratives, the progress of the local disease will be checked. We may at the same time use local remedies. In those cases occurring at the crisis of, or on convalescence from febrile complaints, it will be the safer mode to allow them to be fully developed, guarding the system from re-excitement. Their progress may be hastened by warm poultices.

The treatment of the mild form consists in simple excision, cutting away the dead cuticle, and applying ungt. cetacei to the ulcer. In the deeper seated form, the incision should be freely made: the theca or the periosteum being extensively divided. If the matter has burrowed under the nail, a portion of it should be excised or elevated, to allow the escape of the pus. Poultices should be applied for a day or two, afterwards lotions of sulphate of

zinc, or yellow wash. If the system should be excited, and the child get no sleep, small doses of opium may be administered, or syrupus papaveris; and if the child be debilitated by fever, tonics should be given.

There are milder cases, however, which occur in some young persons repeatedly during the year, where there is little or no constitutional disorder; in which it will be perfectly safe to employ prophylactics. On the first sensation of pain, the following lotion may be applied :

Rj. Spt. rectific. $\mathfrak{z}$ ijj.

Liq. plumb. subac. $\mathfrak{z}$ ij.

T. Opii, $\mathfrak{z}$ ij. M.

When suppuration is established, the evacuation of the pus should be effected immediately. Paronychia will sometimes apparently heal, but a tumefaction and heat will remain, or a fistulous sore may exist, which is often unyielding to leeches, poultices, &c. In such cases the argent. nitr. rubbed on the sore and inflamed parts, will be productive of great benefit. In the practice of Mr. Wardrop especially, cases are related peculiarly illustrative of its extraordinary efficacy.

ONYCHIA MALIGNA.

It is essential to describe this disease separately, as the appropriate mode of treatment

differs essentially from that we have just noticed. This species consists in an ulceration of the matrix of the nail, and is described by Mr. Wardrop as "a peculiar inflammation of the soft parts at the root of the nail, and probably those connected with the formation of that organ." The commencement of this disease is marked by a degree of swelling, of a deep red colour, of the soft parts at the root of the nail. An oozing of a thin ichor afterwards takes place, at the cleft formed between the root of the nail and soft parts, and at last the soft parts begin to ulcerate. The ulcer appears on the circular edge of the soft parts at the root of the nail: it is accompanied with much swelling, and the skin, particularly that adjacent to the ulcer, is of a deep purple colour. The appearance of the ulcer is very unhealthy, the edges being thin and acute, and its surface covered with a dull yellow, or brown-coloured lymph, and attended with an ichorous and very fetid discharge. The growth of the nail is interrupted, it loses its natural colour, and at some places appears to have little connexion with the soft parts. In this state I have seen the disease continue for several years, so that the toe or finger became a deformed bulbous mass. I have seen a disease of this nature at the root of every finger nail—in some children, whom I should

term cachectic, but where no suspicion of venereal taint existed.

In the incipient state, that of inflammation, the application of leeches, of mild poultices, or of antiphlogistic lotions, should be adopted: this plan, combined with purgatives, usually effects the removal of the inflammatory action, and the suppurative process is prevented. When the disease has proceeded to the ulcerated state, Dupuytren has recourse to complete excision of the nail. He makes a deep semicircular incision three lines beyond its root, then raises and separates it from all its attachments: simple dressings are then applied, and rest enjoined: if granulations are exuberant, caustic is applied. For this peculiar ulceration, Mr. Wardrop still follows the precept, "*suaviter in modo.*" His treatment consists in the exhibition of mercury in small doses, increased so as sensibly to affect the gums. The mercury is continued cautiously until the sores are healed, employing, at the latter stage, a weak solution of muriate of mercury, and mild escharotics, for the purpose of cleansing the wound. It is still a question whether these be venereal, and, consequently, mercury may act as an antisymphilitic.

In Sir A. Cooper's opinion, disease of the ungual gland may always be referred to constitutional causes. His plan of treatment is to

give P. opii and hyd. sub. a gr. i. o. nocte, and to apply the lotio nigra (hyd. sub. 3j. liq. calcis 3iv.) on lint, which is covered with oil silk. If the sore does not heal, a blister is applied for the removal of the nail, or the secreting surface producing the nail is dissected away.

FUNGOUS EXCRESCENCE.

Fleshy Caruncle.—Pterygion.

This fungus about the root of the nail may be the result of the cellular membranous whitlow: commencing from the bottom of the abscess, soon after the evacuation of the pus. Wiseman has applied the term pterygion to this morbid growth, and Mr. Wardrop writes on it as the consequence of inflammation and suppuration in the soft parts contiguous to the nail. It has also engaged the particular attention of Dupuytren, and is vulgarly termed "growth of the nail into the flesh." The nail, however, is seldom or never altered in its form or size, but as the fungus sprouts around it, its contact tends to increase the morbid mass by irritation.

In conformity with the idea that the nail was the primary exciting cause, Dupuytren introduces the sharp point of scissors under the nail, and having cut beyond the root,

reflects the nail, and detaches it from its adhesions: the actual cautery is then applied to the granular surface. The plan proposed by Mr. Wardrop, and illustrated by the cases he has recorded, is so simple, and productive of so little pain, that it must ever be judicious to resort to it previous to the employment of more severe measures. This plan is simply to apply the arg. nitras to the morbid growth, enjoining rest, and taking off all mechanical pressure. In one of these cases, however, a triangular piece of the nail was excised from the centre, for the purpose of more effectually removing pressure, by allowing the edges of the cleft to approach each other: this is however seldom necessary. The caustic should be applied every second, third, or fourth day, until a healthy state is produced. To prevent a recurrence of this excrescence, the nails of the child should be carefully cut, especially about the corners, which should be left rounded off as they naturally are formed. Large shoes should be worn.

The mode adopted by Mr. Durlachre, however, is that which I would recommend, if the caustic treatment fails. It consists in cautiously cutting through the nail, with a very small knife, and without dividing or wounding the cuticle interposed between its under surface, and the sensitive structure beneath it; then

with a minute pair of forceps, raising and detaching the nail. The operation is productive of little or no pain, and is eminently successful.

ERYSIPELAS.

Ignis Sacer.—St. Anthony's Fire.

ERYSIPELAS is a diffused and irregularly circumscribed inflammation, of a somewhat shining appearance, frequently characterised by vesication. It is accompanied by symptomatic fever. The tumefaction is compressible, and though of increased temperature, is not accompanied by throbbing or acute pain. To wave the opinions of the ancients on this subject, it may be remarked, that erysipelas has been by various modern pathologists subjected to a variety of divisions and classifications. It has been termed a bulla by some; by others an exanthema. Mons. Rayer in considering the variations as accidental, has thought erysipelas a transition between the exanthemata and bullæ. It has been referred to common inflammation modified by the peculiar structure it is seated on; by others it is termed an inflammation of a specific and even contagious nature. By Mr. Earle and others

it is affirmed to occur on particular structures as the skin, only. It has been noticed as a disease of increased action with diminished power. In its division into species, one form has been termed *phlegmonoid*, a name adopted by Dr. Hutchinson. Some physiologists, on the contrary, among whom was Mr. Pearson, assert that its peculiar phenomena and termination render this epithet paradoxical. Other authors are inclined, with Mr. Arnot, to confine the term erysipelas to that inflammation of the integuments of the face, which is almost invariably combined with inflammation of the fauces. It was the opinion of Dr. Bateman that the disease was not epidemic, but cases have certainly been related, where it assumed this character, and in which the fauces were invariably affected with inflammation.

I have mentioned these discrepancies to exhibit the difficulty even of experienced pathologists in reasoning on similar, if not identical facts. It will be sufficient, I think, to limit the consideration within a narrower sphere, defining the disease according to the atonic or acute form it may assume in infancy and childhood.

ERYSIPELAS ATONICUM.

E. gangrenosum.

Erysipelas may be termed, perhaps, the earliest cutaneous disease with which the infant is affected; indeed, from some obscure intra-uterine cause, from deficient maternal communication of vital action or nutrition, or from compression, diseased appearances are produced on the fœtus, which warrant us in considering them erysipelas. The disease may not only be termed congenital, but the appearance of livid spots on the skin, and even of vesication and sphacelus, prove that it must have existed for some time. The chemical decomposition of the substance of a fœtus dead within the womb, will produce these appearances, but where we have a *live* child expelled, with *partial* gangrene, we may reasonably refer such effect to previous erysipelatous affection. Dr Wedemeyer of Hanover, has related a case of this description in vol. ix, of Grafe's Journal. From dissections, I am disposed to believe, that the gangrenous erysipelas is seated usually in the cellular membrane, a tissue not endued with a very high degree of vitality, and recovering its healthy action with much difficulty. The disease usually occurs within a few days after birth;

a dull crimson blush first appearing about the umbilicus, or on the labia, or penis, which extends rapidly, assuming a purple or livid hue, and becoming indurated in some parts; in others, covered with vesications likewise of a livid colour, which speedily burst, and are marked by the character of sphacelus. During this period the infant lies in an almost inanimate state, moaning, and at times convulsively starting.

On post mortem examination, Dr. Underwood writes, "The contents of the belly have frequently been found glued together, and their surface covered with inflammatory exudation, exactly similar to that found in women who have died of puerperal fever. In males the tuniæ vaginales have been sometimes filled with matter, which has evidently made its way from the cavity of the abdomen, and accounts for the appearances of the organs of generation just now described. In females, the labia pudendi are affected in like manner, the pus having forced a passage through the abdominal rings."

In older children the atonic form of erysipelas is not of unfrequent occurrence. In some cases it may be the result of maltreatment of the acute form, but, as in the infant, it is sometimes appearing almost instantaneously, being immediately marked by symptoms

of depression. It is sometimes occurring on the face and neck, but its usual seat is on the abdomen or on the genital parts. It is marked by a weak thready pulse, great prostration of strength, brown tongue, and delirium, followed by coma. The vesications sometimes assume the appearance of phlyctænæ, if the disease is superficial. At others, when it is seated deep in the cellular membrane, that of large bullæ, which, were it not for the crimson efflorescence, might be mistaken for those of pemphigus.

If suppuration occurs at this period, it is usually a favourable sign, indicating the efficiency of remedies, or a rallying of the powers of nature. We usually see, however, sinuses formed, sloughs of cellular membrane, and even of tendon separated; or the gangrenous hue continues to extend, the coma is more decided, and the child dies in convulsion.

Mr. Wood of Oldham has offered some judicious remarks, and presented cases (in the seventh volume of the Med. Chir. Transactions) of a fatal affection of the pudenda of female children, which he appears to consider of a peculiar and distinct character. The symptoms which he enumerates are, however, sufficiently characteristic of erysipelas, to allow us to refer the disease to that genus: and, as several cases of this form in the male child have

been presented to my notice, I venture to consider them of the same nature. Where it occurs in the male, about the pubes and abdomen, the scrotum speedily becomes of a livid colour, and more tense than natural. The penis is swollen, and the cellular membrane of the prepuce so much distended, as to induce a state of phymosis. It then becomes spotted with dark crimson or livid patches, especially about the attachment of the crura penis. It is here that there is usually visible a white line of demarcation, which is often prevented from proceeding to complete sloughing or separation by the death of the patient. The gangrenous holes occurring on the abdomen are often very deep, extending to the muscular structure. In one case under my care, which, however, terminated favourably, a deep cavity formed immediately above the pubes, which I at one time thought would have denuded the peritoneum itself, so deeply and rapidly did its phagadenic course proceed.

The symptoms and appearances are similar in the female child, the labia becoming speedily of a livid hue, and covered by numerous ulcerated holes. The cases which I have seen have been most severe in the female, and the spreading of the inflammation over the abdomen peculiarly rapid.

ERYSIPELAS ACUTUM.

This form of erysipelas is usually occurring in children of a sanguine character. The inflammatory blush is of a bright scarlet hue and shining. There is a tingling sensation and heat complained of, and the febrile symptoms are those of synocha. In about two days from the febrile accession, the redness and heat occur. The pulse, even in this form, is never full and hard as in phlegmon, but weak and irritable.

In the milder forms of this species, the severity of the symptoms will decline about the third or fourth day; the skin becoming of a yellow shade, the cuticle desquamating in furfuraceous laminae. The disease does not always terminate thus. Sometimes small vesicles will form about the period of exfoliation, which may become purulent, bearing the character of phlyzacia. On the third or fourth day, frequently, vesications of an oval form are visible. In about two days the cuticle either bursts and discharges an acrid fluid, or becomes flaccid, the same yellow tinge of the skin supervening; exfoliation takes place, and a new cuticle is formed. This is the progress of the acute erysipelas, when it is seated superficially or in the cutaneous tissue. When it commences deep in the cellular membrane, we are presented with a more protracted and formidable train of

symptoms. The tumefaction of the part will be greater and less defined, we shall have an œdematous enlargement superadded, and the patient will be often seized with rigor. We seldom see any formation of healthy pus, but in its stead, a thin, ill-conditioned matter is formed, which burrows among the sheaths of tendons, and under the fascia, even to the entire extent of a limb, forming a striking contrast to the circumscribed abscess in a cell of condensed membrane, which occurs in phlegmon. Dissection of this stage of the disease, shows to us, that the elasticity and extensibility of the cellular membrane are lost; dark grumous blood is found in the centre of inflamed membrane, and an appearance of incipient sphacelus. Hence incisions made at this period during life, will not be followed by fluid discharge, but by clots of thin coagulated blood; sometimes there is an opake serum evacuated, very seldom pure pus. Indeed, some pathologists deny altogether the existence of pus in this disease, and assert that its deficiency is diagnostic between erysipelas and phlegmon; an assumed principle on which Baron Larrey has founded a peculiar mode of treatment. Something like a predisposition to erysipelas has appeared in certain children, not so decided, however, as to substantiate the opinion, that the disease may be

produced by the atmospheric changes of the equinoctial seasons, without some more efficient exciting cause. Where there is this cutaneous tendency, the derangement of the visceral functions, or unwholesome food, will produce the disease.

Assuming then that erysipelas is usually depending on a certain constitutional peculiarity, I would place great importance to the employment of internal remedies, even in the erysipelas traumatica, which it is not essential to consider separately. In this constitutional treatment we should be guided by the degree of the affection, or its peculiar atonic or acute form, not disregarding the nature of the exciting cause; and, in local applications, by the nature and situation of the tissue which is diseased.

TREATMENT OF THE ATONIC FORM.

It is in the erysipelas infantilis, that the tonic or cordial plan is especially indicated; the rapidity of its progress admits not of delay. Although purgatives are contraindicated, a gentle laxative should be immediately given; and a draught composed of

T. cinchon. c. gtt. xij. ad xx.

Ammon. carb. gr. j. ad iii.

T. opii. gtt. ij. ad v.

Aq. anethi ʒij. ad ʒʒ.

Syr. ʒʒ.

should be given every four or six hours. A powder of

P. conii gr. $\frac{1}{8}$ ad $\frac{1}{4}$. P. ant. gr. j. ad iii.

every night and morning. The child should have small quantities of Port wine and water, or even a spoonful of brandy and water given to it frequently. Melted jelly, sago, or arrow root, may be also offered to it. The breast-milk of a young nurse, within the first two months of suckling, will, however, be the most congenial food. The local applications should consist of camphorated spirit, applied on linen rag, frequently. The prognosis in erysipelas infantilis must be invariably unfavourable.

When erysipelas gangrenosum occurs in a child of a twelvemonth, we may usually refer it to a defect of nutrition from gastric derangement or glandular obstruction, or to some previous acute or protracted disease. In either case it will be essential that tonic remedies should be administered, of which the sulphate of quinine, muriatic acid, serpentaria, carbonate of ammonia, and T. opii will be according to circumstances the most eligible. If symptoms of meningitis supervene, the inf. serpentariæ may be given with liq. am. acet. the T. opii being altogether abstained from. Depletion is inadmissible beyond the administration of a mild aperient; even the application of the lyttæ will produce a superficial slough very speedily.

The most proper plan under this perplexing condition will be to envelope the head in linen rags dipped in evaporating spirit lotions, and let the patient be submitted to cool atmosphere. In the absence of such cerebral symptoms, Port wine may be freely given. With regard to the local treatment, the indications will be to promote an equable or healthy circulation in the part; to obviate the effects of distension, to allay irritation, and to prevent sphacelus. For this purpose the part may be fomented by chamomile or poppy infusion, liquor calcis and olive oil, or this lotion of Dr. Peart: Rj. ammon. subcarb. plumb. superac. ā. ʒj. aq. ros. oj. or the cataplasma cerevisiæ; or a poultice of beer-grounds. The local application of the balsam of Peru, will often be proved very efficacious in this form, especially where gangrenous erosion appears: six, eight, or ten drops may be given on sugar, or in syrup twice in a day.

The chloride of lime will, in some cases, speedily effect a beneficial change, especially in spreading phagadema.

The common domestic practice of milk lotions, or the sprinkling of irritating powder, should be prohibited. In the case of constipation at this period, the most beneficial effect is often produced by a combination of ol. terebinth. and ol. ricini, which at the time it has

procured a copious evacuation, has also seemed actually to support a healthy stimulus to the system. When the disease is seated deeply, it will be desirable to promote the discharge of matter there formed; and I think, although severe modes should be avoided, that incision for this purpose must occasion less mischief than the deep burrowing of the matter itself; indeed, from some cases which I have seen, and read, especially one which occurred in the Bridgwater Infirmary, where immediate benefit was derived from a free incision from the trochanter to the angle, I should not hesitate to adopt such a mode. If the burrowing continues, we have little hope. The liberation of this deleterious secretion, will often speedily produce ease and sleep, after opium has failed to do so. If the gangrenous sores are rapidly spreading, the carrot-poultice should be applied, and the edges may be touched with pure nitric acid.

THE TREATMENT OF THE ACUTE FORM.

It must in some measure depend on the nature of the exciting cause. In the milder cases, from simple internal irritation, our treatment should be also internal, and, as it were, negative. Mild laxatives, light diet, cool air, subacid drink, and saline diaphoretics. Repellent applications should be avoided, as erysipe-

las is liable to what is termed metastasis. If the inflammatory blush be bright, the pulse not very small or feeble, and there be symptoms of cerebral or pulmonary congestion, a small local bleeding by cupping or leeches may be employed; but be it remembered, that in populous towns or cities, bleeding must ever be resorted to with caution.

The erysipelatous inflammation may sometimes be arrested, as it were, on its march: for this purpose, a blister may be applied at the edge of the inflammation: but Mr. Higginbotham has recommended a plan which I think preferable. The *arg. nitrat.* applied so as to produce an inch eschar on each side of the inflammatory boundary. He has recommended, that "if the erysipelas be attended by vesication, the vesicles should be broken; and if vesications arise from the caustic, they may be allowed to remain undisturbed."

It is in the acute form of erysipelas, when deeply seated, that the plan recommended by Dr. Hutchinson has proved so successful. This should be done early, more with a view of preventing the formation of matter, than of evacuating it when formed; for when vascular connexion is thus in a degree destroyed, the effect is seldom complete. The incisions should be made through the integuments to the muscles.

This cut combines the advantages of topical bleeding, of relieving distension, and of evacuating serum or pus. After the incisions, fomentations and thin poultices should be applied. The large lymphatics and veins should be avoided in the operation.

In the erysipelas arising from external causes, there is not the same danger of repulsion. Antiphlogistic lotions may be safely applied, combined with laxatives and positive rest. In erysipelas traumaticum, on the presumption that the peculiar inflammation depends on the suppression of purulent secretion, Baron Larrey applies the actual cautery to its margin: this, he thinks, restores the suppurative process, and cures the erysipelas.

The erysipelas arising from a puncture in a membranous expansion, is often extending rapidly. It is usually essential also in such a case, that a free incision should be effected, otherwise we may find it difficult to check the inflammation.

In all these forms, saline draughts, cooling diluents and laxatives should be administered. On the decline of the disease, the *inf. calumbæ* and *cascarill.* with the mineral acid, should be given; and if there exist much irritation, with watchfulness, minute doses of opium and camphor may be combined. Change of air is indispensable.

In the erratic form, (which is rare in children,) where parts are successively attacked, tonics are especially beneficial.

LEPRA.

Leprosy.

THE Arabian authors and their translators have involved this term in much obscurity; and even Serjeant Wiseman, in 1676, considers it as "the highest degree of the itch." Its definition is a deposition of dusky or whitish scales, usually assuming in *lepra vulgaris*, nearly a circular form. These circles are marked by fissures of a light olive-colour, and are surrounding a central space, which, as well as the external margin, is of a rose-coloured inflammatory blush. The edges of these squamæ are slightly elevated, the circle being seldom complete, but broken by one or two wide red fissures. In its commencement, small whitish papular elevations of the skin appear, resembling strophulus candidus, which are soon covered by thin white laminæ, which sometimes extend their circumference rapidly, becoming one entire mass, or forming around a central space. Interspersed with these we sometimes observe oval patches of a greenish hue, with small hemispherical or tubercular scales. The *lepra vulgaris* is not peculiar to

any part of the skin, though usually it is seated below the knee, about the elbows, the ham, or on the eyebrows. When the scales are situated about the flexure of the limb, progression is impeded, motion producing numerous red fissures. The nails are often incurvated. The disease is attended by no constitutional derangement, but variation of temperature is marked by a tingling sensation; and it was a remark of Hippocrates, that lepra itched before rain.

LEPRA ALPHOIDES

is usually occurring on the limbs. It is a disease of much milder character, the scales being smaller, thinner, and of a more pearly hue; seldom assuming an annular form, and surrounded by little or no inflamed circle. It usually spreads longitudinally. Sometimes small solitary laminae, or a congeries of white scales will appear on a circular discoloured surface—the psoriasis guttata of Dr. Willan. These two latter varieties are the most common in children.

The exciting cause of lepra is confessedly involved in obscurity. It has been referred by Dr. Willan to neglect of the condition of the skin, or external irritants among children; it may be usually considered symptomatic of in-

ternal irritation, occurring in a predisposed system. This peculiar idiosyncrasy may render the simplest substances, as oatmeal, cream, &c. the exciting cause of lepra, as of many other cutaneous affections.

In the incipient stage of lepra we should enjoin a regulation of diet, and should act on the bowels by laxatives. If the eruption occurs during lactation, the wet-nurse should herself have recourse to laxatives and alteratives, or the child should be removed from her care. If the scales render the skin stiff and inflamed, they may be washed with cream or bran and water, or the warm bath may be freely used. If the scales still continue firmly attached to the subjacent skin, diluted alcohol or muriatic acid, or liq. potassæ may be applied for the purpose of detaching them; at the same time giving internally decoct. dulcamar. and potassæ sulphas. in very free doses. On their exfoliation the ungt. hydr. nitrat. may be applied.

On the subsidence of inflammation in the lepra vulgaris, and during the whole course of the milder varieties, the sulphur fumigation may be freely employed, or lotions of dilute sulphuric acid. To aid in the restoration of tone to the relaxed vessels, the decoct. dulcamar. the sol. min. or ferri. tartr, or dec. sarsæ will be serviceable. The artificial Harrowgate water

will often prove a valuable lotion or bath : it may be thus formed :

Rj. sod. muriat. ℥ij.

Magnes. sulph. ℥iij.

Potass. sulphuret. ℥j.

Aq. cong. 34. bull. ad 98°.

The child may be immersed in this for the space of twenty minutes, thrice in a week.

In stubborn cases, a regular mercurial course should be adopted. This was the advice of Sergeant Wiseman and other pathologists ; and many illustrative cases are recorded, among which, one occurring under the care of Mr. Lawrence, in a girl of ten years of age, in whom ptyalism from mercury effected a complete cure, after the failure of a variety of medicines, internal and external.

MILIARIA.

Suette Miliare.

AN eruption of minute pearl-coloured vesicles, surrounded by a very faint pink margin, and sometimes by a rose-coloured efflorescence—(roseola miliaris.) It is attended by a perspiration, possessing a peculiar acidity of odour. It is symptomatic of febrile excitement, induced by repletion, especially of stimulating food, or by crowded situation and atmosphere

of a high temperature. In children, however, it is a rare disease.

The peculiar acid property of the suette, which is probably depending on a certain deranged function of the capillaries, is tending rather to aggravate the febrile symptoms by its excitement than proving salutary; it is judicious, therefore, to employ a decidedly cooling, and even a repellant plan of treatment; adapting at the same time those internal antiphlogistic remedies which may be suitable to the peculiar type of fever with which the eruption may be concomitant.

POMPHOLYX.

THE appearance of transparent bullæ without surrounding inflammation or fever, is not unfrequent in children, but in them it is a comparatively transient disease, when contrasted with the pompholyx diutinus of adults. On mere inspection it may be easily mistaken for the incipient bleb from external pressure. The disease consists of transparent bladders from the size of a swan-shot to that of a filbert. They commence with small papulæ, which speedily become whitish like the wheals of urticaria, and are subsequently filled with a transparent fluid, which imparts to them a

cerulean hue. In two or three days this fluid is tinged with yellow, when it is speedily discharged, and the cuticle heals spontaneously if preserved from friction. Pruriginous papulæ are often interspersed among the bullæ (pomph. pruriginosus.) These bullæ usually occur in infants during dentition, and it is also one of those numerous external cutaneous evidences of the temporary derangement of the stomach, from the swallowing of cold water in the heat of summer, from mercurial medicines, or from any other deleterious substance. They may also arise from exposure to the sun's rays during the summer months.

Laxatives, with the application of light poultices to the ulcerations, of fomentations with liq. plumbi, if there be any inflammatory affection; of the vin. opii dilutum, if the prurigo is productive of much irritation, or if the disease assumes a cachectic appearance, constitute the treatment.

DISEASES

CONSEQUENT TO SPECIFIC INFECTION.

RUBEOLA.

Rugeole—Morbilli—Measles.

A FEBRILE contagious disease, (occurring but once during life,) accompanied by a characteristic efflorescence, occasioned by increased determination of blood to the cutaneous vessels. The primary symptoms, which commence from ten to fourteen days, from exposure to contagion, probably in the form of vapour, are redness and tumefaction of the eyes, with epiphora, languor, sneezing, cephalalgia, intolerantia lucis, and frequent dry cough with synocha. On the fourth or fifth day the skin appears covered with small red spots, very slightly raised. These coalesce, forming red patches of various shapes; some being circular and annular, others resembling extensive papulæ, but

the majority assuming a crescentic form. Among the crimson patches we may discover others of a darker or modena red hue; and in the wrinkles of the skin there are often very minute pink stigmata in defined clusters. From the high vascular action, slight extravasation under the cuticle will sometimes occur. And from the same yielding of the capillary vessels of the delicate schneiderian membrane, epistaxis not unfrequently occurs. On the seventh or eighth day the redness fades, the febrile symptoms subside, and the efflorescence terminates in exfoliation of furfuraceous scales. The eruption of patches of a dull lake colour sometimes occurs in children, without any concomitant febrile or catarrhal symptom—*Rubeola sine catarrho*. It is important to allude to it under this title, from its possessing, as we might expect, no prophylaxis against an attack of febrile rubeola. The similarity of character which it possesses with roseola æstiva and infantilis, would render it more appropriate to refer it to that genus, were it only to obviate the erroneous confidence which is often imparted by its appearance, that the child is permanently secured from rubeola.

Dr. Willan has presented us with a form of measles which he terms rubeola nigra, consisting of broad dark patches, the intermediate skin being tinged of a yellowish hue, a variety

depending perhaps on some coincident hepatic derangement.

There is probably an universal predisposition to measles in children, the most sanguineous or irritable being deemed the most susceptible. This predisposition may also depend on the influence of season, the disease being more prevalent in spring and summer. But the cases occurring during the months of June, July, August, and September, were yet proved at the Asylum at Chelsea to be of the milder description.

It was the opinion of Dr. Watt, that measles have been more prevalent since the diminution of small-pox by vaccination. Whatever may be the relation between these two eruptive diseases, or whatever the controlling influence of variola over rubeola, I have never seen occasion to assent to this assertion of Dr. Watt. It is curious, however, that Dr. Underwood has appeared to consider the two eruptions as diseases of the same degree, if not of the same kind, by combining them in one section. Measles have appeared on the skin during the existence of elephantiasis.

Rubeola may be distinguished from scarlatina, by its more crimson hue, by the more defined character of the patches, and by the peculiar type of fever. From roseola by the darker hue, more sudden appearance of the

eruption, and the greater severity of symptoms. The experiment has been often tried of inoculating for measles, but it is, I think, decided in the negative. With respect to this inoculation, I have not myself made any experiments; but it has been advocated by some pathologists; and in the *Bibliotheca Italiana* the following proof of its possibility is related: "The inoculation of measles, which has been already practised with success by Horne and Horst, was repeated by Professor Speranza during an epidemic which reigned at Mantua in 1822. He inoculated six children as well as himself, and the measles in each case appeared in a mild and regular form. A slight incision was made in the best looking measle, and in the blood which flowed from the scratch, the point of a lancet was dipped, which was then inserted into the arm."

A Mr. Fortual has stated in a German Journal, that all the children to whom he administered sulphur, were protected from measles, at a time when this disease was epidemic. How far this was coinciding, or there was really a prophylactic effect in the sulphur, I cannot determine. This formula was:

R. Sulph. $\mathfrak{z}\text{ss}$. sacch. a. $\mathfrak{z}\text{j}$.

Coch. nim. $\mathfrak{ss}$. bis terve indies.

The treatment of measles must be regulated by the degree of inflammatory action, by its

duration, and the accession of peculiar local symptoms during its progress; a neglect of attention to these concomitants, which are indicative of some glandular or visceral affection, being the frequent cause of those severe, and often fatal sequelæ, which constitute the indirect but principal danger of this disease. The indications, then, will be to reduce the high febrile action by moderate bleeding in the jugular vein, by a mild emetic, gentle laxatives, the lightest diet, subacid diluents, and by moderately cool temperature, but not amounting to an exposure of the patient to cold. To prevent or check increased determination to the brain, the lungs, or the abdominal viscera, (which may be marked by local pain, and distinct symptomatic fever,) by venesection, leeches, blisters, and by diaphoretics, of which the most efficacious is, *vin. ipecac. gtt. iv. ad x 2dis horis.*

On the recession of eruption in children of robust frame, this determination may be with propriety obviated, by sponging the body quickly with vinegar and water, or even by cold affusion. Where the system, however, is much reduced, the shock would be too severe for the vascular system to react on. In these cases, especially where the lungs are affected, *digitalis*, and even opium in small doses will be efficacious, with a permanent blister or seton,

or a caustic issue above the organ which is affected.

It is essential to observe the same caution in the treatment of the mucous diarrhœa, which often occurs at this period. The premature checking of this discharge by opiates or astringents, is replete with danger; on the contrary, depletion by bleeding is strongly indicated, as it is dependent on a morbillous inflammatory action. Where, however, great exhaustion is its cause, with weak thready pulse, the pulv. e cretâ cum. opio, in small doses may be employed. This form, however, does not occur on the recession of the eruption, but comes on afterwards. Should the disease assume a typhoid type, with symptoms of putrescency, as livid petechiæ, stupor, delirium, and great prostration of strength, it will, of course, be essential to administer tonics and antiseptics, as cascarilla, cusparia, or cinchona, with the vegetable and mineral acids, or wine. On convalescence, the child should be sent into country air, and should be fed on nourishing diet, taking asses milk every morning.

SCARLATINA.

Scarlet Fever.

A SPECIFICALLY contagious, sometimes epidemic disease, occurring but once during life, marked by febrile excitement. It consists of a diffused efflorescence of a bright pink or scarlet hue, preceded by erethism or pyrexia for a day or two.

SCARLATINA SIMPLEX, OR SCARLET RASH,

Appears on the neck and face in the form of pink spots, which speedily coalesce, becoming in two or three days one diffuse efflorescence, not assuming, however, the crescentic form, or light crimson hue of measles. It is often interspersed with papulæ, and sometimes with vesicles; the papillæ of the skin being sometimes erected, imparting a rough sensation to the touch. The papillæ of the tongue are also morbidly red and prominent, and the fauces and tonsils, are usually slightly inflamed, and the lips and eyelids often tumefied. The cerebral functions are but slightly impaired, although a degree of delirium sometimes appears. The rash terminates in exfoliation of cuticle in about a week.

Cool temperature, mild laxatives, and the very lightest diet, are all the treatment required

SCARLATINA ANGINOSA

Usually commences with high febrile excitement, the pulse quick but wiry; there is nausea, head-ache, and a tendency to delirium; the eyes are suffused and the face flushed; the jaw is stiff and painful; the respiration quick and laborious; deglutition impeded; the fauces are inflamed and covered with white or ash-coloured sloughs, which occasionally degenerate into deep gangrenous ulcers, a fetid sanies often issuing from them over the lips; the papillæ of the tongue are elevated, and of a deep crimson colour, and the teeth even are sometimes morbidly red; the parotid and submaxillary glands are often enlarged; and there is purulent otirrhœa, and deafness. Between the second and fourth days, the skin assumes a vivid scarlet hue, the efflorescence rapidly extending; in the severer cases, interspersed with dark crimson or livid spots, or petechiæ (*scarlatina maligna*), in which state there is a dark brown crust on the tongue, with sloughing of the membrane of the fauces, attended with high delirium.

Under favourable circumstances, in about five or seven days, the colour of the rash fades, and the cuticle exfoliates often in large flakes. The convalescent child is usually affected with

anasarcous swellings, or effusion in the serous cavities.

Children between the ages of ablactation and puberty, are usually the subjects of this disease, at which period the tendency to the infection is most prevalent.

The indications of cure will be to moderate the general febrile action with as little loss of power as possible; by removing morbid alluvia from the alimentary canal by emetics and purgatives—the ipecacuanha, and calomel with the ol. ricini; by moderately cool temperature; by cold affusion or ablution; by diaphoretics and tepid diluents; by diminishing the morbid irritability of the heart and arteries to the stimulus of blood by digitalis, or hyoscyamus; and if there be congestion or local inflammation, by bleeding.

In the latter stages it will be requisite to support the power of the system by light nutritious diet, and by the vegetable tonics; as, cusparia, calumbo, combined with contrajerva, serpentaria, and with æther, capsicum, or ammonia; and to correct the septic tendency by the mineral acids, the oxygynated muriatic acid especially; and astringent gargles may be employed.

The occurrence of local inflammatory symptoms must be guarded against, or relieved by warm bath fomentations, leeches, and blisters.

The action of the lyttæ, be it remembered,

should be narrowly watched, as they have a tendency to produce sloughing in a debilitated system; it will be well to remove blisters at the end of four, six, or eight hours, to obviate extensive or deep vesication, and to reapply them in the vicinity in the course of ten or twelve hours for the same period.

It is essential also to endeavour to obviate the frequent sequelæ of scarlatina on the decline of the disease; effects, which when established, are extremely dangerous, and difficult to remove.

For the convalescent child, the advantage of country air should be obtained.

VARICELLA.

Variola pusillæ.—Bastard-Pock.—Glass-Pock.—Swine-Pock.—
Chicken-Pock.

THE vesicle of a specific and slightly contagious disease, occurring but once during life; communicable, according to Dr. Heberden, by inoculation—the contrary being affirmed by Dr. Bateman and most other pathologists. It is preceded for three or four days by slight synocha. Varicella has been distinguished by Dr Willan into three varieties, designated,

from the peculiar form of the vesicle,—conoidal, lenticular, and globate: of which the common appellations are chicken-pock, swine-pock, and hives.

The first species, the conoid, is the mild chicken-pock; its premonitory fever rarely exceeding the degree of erethism or febricula. The vesicles are scattered, having a very faint pink hue around them.

In the lenticular and globate forms, the vesicles are of a different shape, of a larger size, sometimes a quarter of an inch in diameter, the febrile excitement being very severe; successive crops of vesicles sometimes appearing, and even becoming confluent, each crop being preceded by a distinct accession of fever. In these forms there is usually inflammation extending to the fauces, with difficulty of deglutition, and hoarseness: the symptoms sometimes, indeed, exceeding those of real variola. There have not yet been any well-proved instances of fatality occurring from varicella in children, except by the irritation of the vesicles inducing convulsions. The diagnosis between these severe forms and variola, is often very indecisive: in my own practice I have in several instances been unable to form a decisive opinion until the change in the vesicles on the fourth or fifth day, in consequence of the more speedy process of maturation. In the second

stage it may easily be distinguished, independently of these variations, by the absence of bloody urine, and of salivation in varicella, while in the last stage, it is marked by no secondary fever. With the severe and confluent form of varicella, the peculiar modified eruption, which has been termed the varioloid epidemic, has been frequently identified.

The eruption of varicella generally appears first on the breast: on the day following the appearance of the small incipient papula, it assumes a distinct vesicular character in its centre: these vesicles enlarge, and sometimes become filled with a yellow purulent fluid about the fourth day; at which time they begin to subside, becoming flaccid at the edge; and on the fifth day, brownish yellow crusts are formed. These incrustations are produced earlier if the vesicular cuticle be abraded. On the dropping off of these crusts, small mahogany-coloured spots are seen, which are not permanent. The cicatrices of the mild and purely vesicular varicella, produce no permanent marks, while the more severe, and especially the confluent forms, are followed by deep pits on the skin, often as distinct as those of genuine variola.

The treatment of the conoidal, or mild varicella, will be extremely simple—a laxative, and the lightest diet being all which is neces-

sary. In the more severe forms, the similarity of the symptoms to those of variola equal in degree, will indicate a somewhat similar treatment in the stages preceding the maturation and decline of the vesicles, soon after which period, the state of convalescence commences.

VACCINIA.

Vacciola.—Cow Pock.—Pap Pock.—Kine Pock.—Vaccine Disease.

THE vesicle of a specific disease, of a pale bluish white colour, gradually enlarging, and spreading, surrounded by a pink or rose-coloured areola. The progress of this vesicle, when the lymph is successfully inserted, is marked by nearly uniform stages. In about forty or fifty hours, a small red spot makes its appearance, on the site of the puncture. About the fifth day, the papula having continued to increase, a small pearly vesicle is perceptible. On the seventh or eighth day, a slight depression is visible on it, the vesicle beginning to assume a more characteristic annular form, and the pink or rose-coloured ring is apparent. A distinct elevated border is formed at the edge of the vesicle, consisting of a number of small vesiculæ, usually in distinct cells. On the ninth day the rosy blush has spread, which

attains its acme on the tenth, when hardness of the axilla is felt, and there is a symptomatic erethism, or a decided attack of fever. About the twelfth day an eschar is forming in the centre of the vesicle, ultimately becoming a dark brown concave crust, leaving, on its falling off, a whitish mark on the skin, which mark should be a cicatrix permanent in the cutis vera, of a nearly circular form, indented, and, as it were, radiated. The disease is communicable with certainty, only by the insertion of the peculiar virus from a perfect vesicle. The human subject should ever be preferred for the medium of communication, the fluid from the vesicle on the brute animal being very uncertain in its effect. With regard to its origin, the opinion of its primary inoculation from the grease of the horse's hoof is at least indecisive, but of its production from the vesicles on the teat of the cow, there can be little doubt. There have been, however, instances which tend to prove that it may originate *de novo*, on the human skin, the most decided of which has been published by Mr. King, in the Medical Repository for August 1816, which asserts the spontaneous appearance of a vaccine vesicle on the wrist of a coachman in Paris, from which inoculation, performed under the direction of the central committee of vaccination in Paris, proved perfectly successful. It is not, how-

ever, here essential that the consideration of the question, or the history of the disease, should be continued. It must, of course, be almost unnecessary even to advert to the absurd notions and publications respecting the *facies bovillæ*, and other chimeras, started by the bigotted opponents of vaccination. Some sceptics, however, there have been, who have argued the simple local nature of the disease; its prophylactic virtue, however, sufficiently disproves this supposition, but we have recorded many interesting cases which tend more palpably to afford a conviction of its constitutional nature, and its diffusion through the system. Of these I may adduce the following.

A boy, twelve years of age, was vaccinated in the left arm. It happened on the same day, six hours subsequent to the inoculation, an incised wound was inflicted on his right knee, which for two or three days promised union by the first intention. On the fourth or fifth day, however, an increase of pain was felt in the knee, with throbbing and heat about the edges of the wound, and on inspection, some slight papulæ, to the number of ten, or twelve were observed surrounding it. On the eighth day their peculiar and regular form imparted an opinion that they were true vaccine vesicles,

which they proved to be by their progress and maturation.

Experience, it must be confessed, has rendered us sensible of the failure of vaccinia, in fulfilling all the promises which its patriotic and enlightened discoverer, and his immediate followers, held out; and the philanthropist has undoubtedly cause to deplore, that under the most favourable and promising circumstances, it has forfeited its claim to the title bestowed on it in its infancy—"a complete preservation from the variolous contagion." From this source has mainly emanated that scepticism, which, added to the interested efforts of mercenary variolists, has contracted the limits of that sphere, to which its actual merits entitled it to extend. It is true, indeed, that deaths have ensued from a dependence on the process of vaccination, but these cases are infinitely fewer than those where death has been the consequence of variolous inoculation, even under the most favourable condition, and the most judicious treatment. It is surely then giving the patient a chance of escaping that disease, which, if it do then occur, is to an excessive degree milder in its form than the small pox communicated by inoculation, without previous vaccination, and, in fact, marked by little, if any, more severity, than small pox communi-

cated by inoculation subsequent to vaccination. But, to offer examples of the converse of this, we have many instances of secondary small pox: and Dr. Bateman relates a case of a mother who had secondary small pox communicated from an infant who died, while two children, who had been *vaccinated*, were continually in the same room, and escaped.

Among the causes of this occasional failure of prophylaxis, we may rank an ignorant dependence on the spurious pustule, which is ragged, brownish, flat, or sometimes acuminate, and as Dr. Jenner states, resembling “a common festering produced by a thorn, or any other small extraneous body sticking in the skin.”

The failure to produce the genuine vesicle is either from the employment of dry lymph, an hasty or injudicious mode of puncture, or a disturbance of the regular progress of the vesicle in its early stages. There may exist also predisposing causes of failure, ill health of the child, or diseased action of another character already set up in the part, and indisposing it to receive the influence of vacciola, on the principle of Mr. Hunter's axiom. It has been proved too, that particular portions of the skin may be indisposed to the infection. In the report of vaccination in France for 1815, we read:—“Un praticien avoit déjà remarqué

que quelques enfans des campagnes, vaccinés aux bras, sans succès, avoient ensuite contracté la vaccine par l'inoculation qui leur en avoit été pratiquée aux cuisses;" and Dr. Jenner observes, "The skin, although apparently sound at the point of insertion, is sometimes found to be so influenced by the disease, as to baffle all our efforts to produce a pustule (vesicle) sufficiently perfect to secure the constitution from the contagion of the small-pox." The present state of our knowledge will not allow us to assert in contradiction to Mr. Hunter, that there can occur a distinct hybrid pustule, from the *admixture* of two kinds of lymph, the vaccine and herpetic for instance; but we may believe that the vaccine fluid may be introduced even into the herpetic vesicle itself, and thus by dilution or change it may become inefficacious in the production of its kind. But indeed, the simple puncture may by irritation, produce an aggravation of a cutaneous disease already existing, which may have been regarded as a species of spurious pustule. I have sometimes observed that the progress of a vaccine vesicle has been impeded by another cutaneous disease existing on the same arm, while the lymph inserted into the opposite arm has been productive of a perfect vesicle.

In the case of pityriasis, a spurious pustule is sometimes produced, containing an opaque

straw-coloured fluid, which will excite another similar pustule by inoculation. The vaccine lymph will sometimes destroy the character of another disease coexistent in its vicinity, but in effecting this change it is itself undergoing an alteration. Thus will it run a race as it were with variola, modifying its pustular character and mitigating its symptoms.

A Mons. Grillon, a surgeon in the district of St. Pol de Leon, has asserted, that he has proved the *identity* of the vaccine and variolous fluids, an illustration (if the fact be established) of the firm opinion of Dr. Jenner himself. During an epidemic small pox, he inoculated, (from deficiency of vaccine lymph,) with the *varioloid* matter, and *vaccine* vesicles were the result; these again producing the genuine vaccine vesicles, which moreover appeared to have been of a more energetic and prophylactic character than any vesicles he had before noticed. This solitary assertion is of course very indecisive.

It is now, I think, an undisputed fact, that the susceptibility of receiving infection will recur at certain periods, subsequent even to perfect vaccination—that the vaccine influence is as it were worn out. This period is however, somewhat indefinite, but it may be judicious to revaccinate at the end of every fifth year at furthest, and at the end

even of two or three, if the small pox be prevalent. With regard to the mode of insertion, the rule is simple : to receive pure lymph not earlier than the sixth, or later than the ninth day, on a clean lancet, and to insert it under the cuticle, *obliquely*, without producing hæmorrhage : and it will be well to insert the lymph by two punctures on each arm. According to the report of Mr. Daglish of Newcastle, summer is the most favourable period for the process of vaccination, when the thermometer of Far. is varying from 60 to 65. It is then that the vesicles contain the greater quantity of active lymph ; in winter, a species of *procrastination* is evident in their progress. To insure a favourable inoculation, it may be right to administer gentle laxatives previous to the insertion, which will tend to ameliorate the child's health, and promote susceptibility : this is a practical truth.

A caution has been issued against the insertion of vaccine lymph into children affected by chronic hydrocephalus or epilepsy. A fatal result occurred in an hydrocephalic patient at Vienna, on the ninth day of vaccination ; and at Dresden an epileptic child died on the tenth day. The fatal result of these cases is cited as dependent on the inoculation, but I consider them as a mere coincidence.

Although the febrile action symptomatic of

vaccinia seldom exceeds the degree of erythema, yet in some cases a rose-coloured, or light-crimson blush will surround the vesicle about the sixth day, accompanied by considerable fever, which is termed *erythema*, or *roseola vaccinia*. This unpleasant effect may arise from extreme irritability of the child's skin, from a hasty rough mode of puncturing the vesicle for lymph, or as Mr. Pearson has thought, of too deep an incision in the corium. If this error be discovered early, Mr. Pearson recommends, liq. plumbi dilut. and a little rectified spirit to be applied about the ninth day, and cinchona freely administered. On the supervention of symptoms of irritation, he foment the part with hot port wine, and administers cinchona and aromatics every three hours. If pain prevents the child's sleep, he recommends opium. The practice of Dr. Jenner consisted in the application of mercurial ointment, a plan which invariably subdued the complaint, or if the inflammation ran high, and the axillary tumor was very painful, he applied liq. plumbi to the vesicle, and warm water cloths to the efflorescence. Another plan has been the escharotic. In Dr. Marshall's practice, the sulphuric acid was used. A minute drop was applied on the head of a probe to the vesicle for about forty seconds, and then washed off with sponge and water.

Mr. Fosbrooke used equal parts of quick lime and soap for six hours, with perfect success. These plans, however, destroy, of course, the vesicle, and even if adopted at a late stage, they will, by weakening the faith of friends, cause a necessity of repetition. In a case related by Dr. Lucas of Hatfield, liq. ammon. a. spt. rect. and water, were employed on the second appearance of the efflorescence about the thirteenth day. It however extended over the abdomen, and the child died on the eighteenth day, apparently from gangrene. The most severe effect from the puncture I have ever witnessed, was in a child, who, in the fourth month, was vaccinated by an experienced inoculator. So early as the second day, a large bulla, of the size of a nut, formed on the punctured spot, which speedily burst and discharged an acrid lymph, and excoriated the part surrounding the ulcer. There was not much inflammatory blush surrounding it, but the ulceration continued to spread, and appeared about the seventh day phagadenic. At this time I was first summoned to the child in consequence of acute pneumonia, the effect it appeared of the local irritation. The case proved fatal, the ulcer continuing to spread until death took place. To what peculiar circumstance this spurious pustule could be referred I know not. It will be judicious to in-

terfere with the vesicle as little as possible, as roseola may arise from its being roughly punctured. It is probable however, that on the seventh day the constitutional effect is fully produced.

It has been stated, that in children vaccinated during the existence of pertussis, such disease has been materially mitigated in its form by the inoculation. If this be the fact, it is truly a very valuable palliative of a dangerous spasmodic disease: but it must then be considered that there may be a counteraction of the real prophylactic efficacy of vaccinia by this sort of opposition, and the inoculation should be again resorted to at a future period, as a preventive of small-pox.

The usual modes of conveying the vaccine virus are on points, between glasses, or on threads; but Dr. Erdmann of Dresden has proved that the infecting properties existing in *the crusts or scabs*, properly formed on the vesicles, will be efficacious after the lapse of many months. He preserved these crusts in paper, and after having reduced one to powder, he rubbed some of it into transverse scratches which he had inflicted in a child's arm. The true vesicle rose, and from it other children were vaccinated.*

* Hufeland's Journal, March 1827.

VARIOLA.

La petite verole—Small-pox.

THE characteristic pustule (imbedded in the cutis) of a peculiar contagious fever, usually occurring but once during life.

The febrile affection commences with languor, drowsiness, pain in the head and loins, gastrodynia on pressure, vomiting, and sometimes bilious diarrhœa. In children there is but little tendency to diaphoresis; but during this primary fever, epileptic fits will not unfrequently occur, attended by flushing of the eyes, and sneezing. The symptoms continue to increase until the third, or morning of the fourth day, when small papular spots appear, on the face first, and subsequently on the breast, &c. On the appearance of these spots, the febrile symptoms remit, and usually subside on the fifth or sixth day. At this period the papula vesicates, and becomes slightly depressed in the centre, a light red margin is seen around it, and a fainter blush more extensively spread. On the eighth day the face is tumefied, the eyelids are swelled, there is an inflammation of the fauces, and often a flow of viscid saliva; the eruption becomes decidedly pustular, and the patient usually passes bloody urine. On the tenth day, the disease may be termed at its

acme. On the eleventh or twelfth, the tumefaction of the face, and the ptyalism begin to subside, when swelling of the hands and feet sometimes occurs. Most of the pustules spontaneously burst, the purulent matter being concreted into a dark brown circular or oval crust. At this period there is a supervention of febrile symptoms, termed the secondary fever. About the fifteenth or sixteenth days, the incrustations of those pustules, which have not been absorbed, drop off and leave the subjacent skin of a crimson hue; the permanent impressions or marks of small-pox depending chiefly on the severity or extent of the disease. In the milder cases the skin is often perfectly sound.

The disease has been divided into the mild and the malignant, which may generally be termed distinct and confluent. Of the milder form, nosologists have enumerated several varieties, as: *variola discreta siliquosa*, *v. discreta crystallina*, *v. d. vesicularis*, and *variola verrucosa*, definitions of little practical importance. The severe or malignant form has also been subdivided into *variola confluens nigra*, *variola sanguinea*, *var. confluens corymbosa*, and *variola petechialis*; terms which sufficiently designate the peculiarity of appearance. The confluent form of *variola* is marked by more violent and typhoid pyrexia, generally with coma and delirium; followed by an earlier

eruption, often with erysipelatose appearance, of numerous small flaccid pustules running together, and containing a thin serous fluid or brownish ichor, attended by more severe ptyalism and affection of the fauces, and in infants by profuse diarrhœa.

Variola has also been described as tonic and atonic.

It has been observed, that in the confluent cases, the period of maturation is most to be dreaded; the febrile symptoms and delirium being in excess. In the semiconfluent cases, which run through their courses regularly, the period of desquamation is said to be most alarming. I have not been able to establish, in my own mind, this opinion.

It is necessary to the production of this disease, that there be a seminium, susceptibility, or predisposition. Into a system so constituted, the introduction of the specific virus, either in the purulent form, or in a state of vapour, will prove its exciting cause. The question of its arising spontaneously in the system, has been agitated, but not determined. The practice of inoculation, like many other innovations, was at first received with distrust and dread. It was rejected by the Turks, from a devotion to the dogma of the Koran, when it was carried to Constantinople from Georgia and Circassia. Such was the scepticism on the subject in

England, that notwithstanding the noble example of Lady W. Montague, whose son was ingrafted in the Turkish capital, and her infant daughter in her native land, yet it was even made the condition of pardon to condemned criminals. After this experiment the public confidence became established.

Small-pox is sometimes occurring locally about the nipples of nurses, from contact of the lips of an infected infant; this effect may be repeatedly produced. It may be communicated by the mother to the child during gestation, even without external signs on the mother, if we may credit the account of the two cases of Dr. Jenner, and that related by Dr. Mead, of a dead child expelled, covered with varicellous pustules, the mother having been merely nursing her husband with small-pox.

As vaccinia is not a decided preventive of small-pox, so neither is variola itself; although characterized by *singleness of attack*, yet we have not a few cases of secondary small-pox; and with reference to the comparative prophylactic power of the two diseases, we have evidence in the comments of Dr. Bateman, of the cow-pock having effected a security, which variola had failed to do.

The real nature of the secondary diseases, occurring under certain modifications have opened a very fertile field of discussion. Some

pathologists of distinction, among whom is Professor Thomson, have strongly argued the identity of what has been termed the varioloid epidemic, or the modified small-pox with varicella. Now it is a curious fact, which has been asserted by some authors, that varicella now appears with more of a varioloid character than formerly; an effect which has been deemed the consequence of previous vaccination. If then this fact be admitted, and the converse allowed, that vaccination modifies and mitigates the variolous disease, and the assertion of Mr. Jackson be added, that inoculation with the matter of these varioloid pustules failed to produce effect, there may, indeed, be some ground for Dr. Thomson's opinion; especially as it has been found that neither vaccination or variolous inoculation prevents the varioloid epidemic.

It may be asserted, that the character and symptoms of certain diseases may be modified by the prevailing epidemic. Thus, during the prevalence of variola, the local character and the symptoms of varicella may so closely resemble those of variola, that the greatest difficulty may exist in the diagnosis. Indeed, this epidemic influence may impart a predisposition, rendering the susceptibility for varicella more intense, and thus this disease shall become prevalent. In the hives or swine-pock the

vesicle assumes often a purulent form; and, on the contrary, the fluid of small-pox may be limpid. *Variola crystallina* has been described by Dr. Adams under the term pearl-pock, a neutral between small-pox and vaccinia, which is cited as a preservative against variolous contagion. *Variola* and *varicella*, both pit and mark. With this variety of character we cannot wonder at varied impressions having been made on the minds of pathologists. The further consideration, however, of this controversy is unnecessary; and merging the question of the identity of the varioloid disease and severe *varicella* in the truth of their intimate symptomatic resemblance, we may consider the same mode of treatment as applicable to both.

Variolous pustules and vaccine vesicles will run their course together when simultaneously inserted, being mutually altered in their character.

Variolous pustules penetrating deeply by ulceration, or sloughing, sometimes destroy the capillary and sebaceous pores of the conium, deranging the cutaneous circulation, and the functions of the glands. There is a membranous appearance sometimes found in small-pox, called Baynham's membrane, consisting of a gluing together of the capillaries. An erythema, or *roseola varioloidea*, will sometimes occur around the inoculated pustule. Its causes re-

semble those of the roseola vaccina, and the modified treatment may be similar.

A roseolous blush will often precede the variolous eruption, whether natural or inoculated. Dr. Bateman, says: "It appears in one case in fifteen, in the inoculated disease, on the second day of the eruptive fever; which is generally the ninth or tenth after inoculation. It continues about three days; on the second or last of which the variolous pustules may be distinguished."

The post mortem examinations of fatal cases of variola, have generally discovered increased vascularity of the cerebral vessels, and traces of inflammation in the membranes of the thoracic and abdominal cavities. In Mr. Jackson's dissections he usually found effusion of serum in the ventricles, and opake membrane; this internal congestion probably arising from obstructed cuticular action. It is stated by Bally, and other continental pathologists, that "the inspection of the bodies has shown marks of death from true asphyxia, congestion of the brain and its membranes, and considerable pulmonary engorgement. In some there were marks of pneumonitis, the larynx and trachæa coloured of a reddish brown, and studded with variolous pustules, the eruption scarcely ever passing the bifurcation. The disease is generally less severe in children than adults; the

phlethoric and scrophulous child usually suffering most. The danger is usually in proportion to the quantity of eruption, its confluence, and the degree of symptomatic fever—and, in the vesiculated form, is arising from the absence of suppuration. The unfavourable signs are, the fever continuing high after the eruption is complete, especially if marked by coma and delirium; the pustules ceasing to fill or flattening; their having a pale or livid disc; intermediate roseola or erysipelas or petechiæ; sudden subsiding of the ptyalism and swelling of the face, without consequent tumefaction of the hands and feet, hæmorrhage from the nose, intestines, &c.

TREATMENT.

The treatment of variola will depend mainly on the tonic or atonic form the disease may assume, on the changes during the successive stages of primary fever, eruption, maturation, and secondary fever, and in the accession of peculiar phenomena during the disease.

It was the judicious remark of Dr. Cullen, “that the measures taken for moderating the eruptive fever and inflammatory state of the skin, afford the greatest improvement that has been made in the practice of inoculation. On this principle was founded the adoption of the cooling or refrigerant mode of treatment, instead

of the cordial or stimulating plan, founded on an erroneous opinion, that the more copious the eruption, the less severe would be the type of fever. We are, therefore, indebted to the learned Sydenham for adopting this salutary mode; the beneficial effects of which had been so long appreciated in Hindostan, and had been proved by the practice of Rhazes in Bagdad in the tenth century. It is superfluous in the present day to advocate a measure so universally adopted. If we can ascertain the nature of the premonitory symptoms in children, who have been subject to variolous contagion, cold affusion, or sponging the body with vinegar and water, will tend, in most instances, to afford very great relief; and Dr. Monro was of opinion, that the warm bath was productive of a more copious eruption than would otherwise have occurred.

In children, however, we should not carry this antiphlogistic mode so far as in the adult; there being much truth in this remark of Celsus: "*Ex toto non sic pueri ut viri curari debent.*" The evacuation of the stomach and bowels by a gentle emetic of ipecacuanha, and a laxative early in the disease, will mitigate the force of the primary fever. In the milder forms of variola discreta, where no local inflammatory affection exists, and where the constitutional excitement is moderate, the admission of cool

air, the administering of subacid fluids, with thin arrow-root, or mashed turnip, will be the best domestic management. But in this form we have often superadded to the cutaneous affection, (which constitute what has been termed the tonic form,) congestion or acute inflammation of some important organs, as the brain, lungs, &c. accompanied by synocha. These symptoms must be treated actively, as those of idiopathic acute inflammation. In the case of stupor, which often occurs in children about the second day of the eruption, I have found a blister on the nuchæ very serviceable. It will be usually necessary to employ some slightly acidulated gargle to the fauces.

On the supervention of secondary fever, at the period of the completion of the suppurative process, the treatment must be decidedly antiphlogistic, and the chamber should be darkened. For the purpose of cutting off the source of irritation, by destroying its specific character, the continental surgeons have resorted to the plan of cauterizing the variolous pustules early. M. Velpeau states, that if the solution of argenti nitrati be applied to the pustule on the first or second day, or the arg. nitr. in substance after the top of the pustule is removed, the eruption will not proceed; even if resorted to later, the general character and progress of the disease is favour-

ably influenced, and there are no marks of cicatrization after desquamation. M. Bretonneau of Tours first employed this escharotic plan: he "pierces the pustule, and takes off the top with a gold needle dipped in a solution of argent. nitrat."

In the confluent or atonic form our treatment must necessarily vary; but even here the stimulant mode must be employed with caution: the principal indications being to support the power of the system, and prevent or correct a septic tendency. For this purpose the vegetable tonics and mineral acids should be given, or the sulphate of quinine given in the food. But if the skin become cold and pallid; when the pustules become flattened or flaccid; when the difficulty of deglutition and breathing (symptoms of internal congestion) increase—it becomes indispensable to produce determination to the skin by diaphoretics and warm fomentations, or the tepid bath: moderate cutaneous friction may even be resorted to, and the application of blisters. If these modes succeed, it will happily obviate the necessity of stimulants, as mace, opium, camphor, and wine, which, although in extreme cases strictly admissible, should be employed only as a dernier resort: the excitement of vascular action being replete with danger. In this state we have usually convulsions

occurring in children, which are removed by a few drops of Tr. asafoet. in camphor mixture, and by sinapisms to the feet. In the malignant form of variola, it was the practice of Sydenham to administer opiates: they are however not essential, except in acute pain, or in flatulence with spasmodic action of the intestines.

In the several forms of variola, diarrhœa is a frequent symptom, especially if the perspiratory secretion be defective. We have diarrhœa especially on the collapse of the pustules. This flux, except it be attended with pain, may be considered, I think, as salutary, depending on increased secretion of the mucous membrane: we should, therefore, be cautious in our endeavours to check it, although we may not completely assent to the aphorism of Sydenham:

“*Multa infantum millia letho dedit.*”

In the malignant form of variola, carbonic acid enemata have been recommended.

On the cicatrization of the pustules, it will be adviseable to give the child a mercurial cathartic with senna. On the subsidence of this primary specific disease, there are frequently local inflammatory actions set up, especially if the state of the bowels be neglected, or if the child be injudiciously exposed

to cold air. These sequelæ are often formidable and fatal diseases.* In other cases, marasmus may be the result. These effects may notwithstanding be usually obviated by caution, when merely functional or internal derangement might produce them; but if the disease shall have been confluent and extensive, there will be a material change of structure in the skin, to which we may refer some of the most formidable sequelæ of variola. I have before alluded to the importance of the functions of the skin as preservative of health. It must be obvious how much the integrity of the cutaneous tissue, its transpirable property, and its circulation, must be impaired by the tension consequent to extensive cicatrization, and above all, the obliteration of the excretory duct, which, according to the experiments of the late Mr. Chevalier, is effected by the "foveæ or pits."

To mitigate the contagious influence in the chamber and passages, the nitrous fumigation should be constantly employed, by sprinkling sulphuric acid on the nitrate of potass.

* Dr. Jacob, in writing on a peculiar chronic ulceration about the eyelids and face, says: "One arose in an old cicatrix of confluent small-pox."

PESTIS.

Plague.

AN inflammatory, malignant, and highly contagious fever, accompanied by glandular suppuration, and by vesicles which terminate in gangrenous abscess or carbuncle. It is not essential that the symptoms of this formidable disease should be described, for the discussion of the question as to its contagious nature (which has been considered by some sceptics as a popish trick of Paul the Third to remove the Council of Trent to Bologna,) would of itself occupy a volume. The cutaneous marks, however, ought not to be altogether omitted, as the incipient vesicle bears a striking resemblance to the vaccine, and especially, as in the opinion of some pathologists, the evacuation of the abscess in the early stage has been followed by very favourable results, and indeed has, of itself, been deemed in many cases curative. The incipient vesicle assumes a nearly circular, somewhat irregular form, of a faint dull yellow tinge, with a light bluish circle in its centre. It is often accompanied by very small vesiculæ about its margin, and is surrounded immediately at its base by a deep red efflorescence, sometimes approaching to purple, a

more faint blush extending to a considerable distance around it. This vesicle makes its appearance soon after the accession of the febrile symptoms, or indeed the exposure to the contagion; the several stages of the vesicle rapidly succeed each other, and it terminates in a deep sloughing abscess of a livid hue, surrounded by an inflammatory halo of a deep rose colour. From this abscess cellular membranous sloughs are usually hanging; of course in this stage the disease is hopeless.

It is happily unnecessary to discuss the various opinions on the mode of treatment, a question indeed most difficult, and purely hypothetical; or on the preventive plans, as receiving substances through vinegar, and the experiments of inoculation instituted by Dr. Valli in Turkey, with the pestilential virus combined with variolous matter, or the gastric juice of frogs or oil.

SYPHILITIC ERUPTIONS.

Secondary Symptoms.

IN alluding to the resemblance between syphilitic eruptions and those chronic affections which do not arise from a specific cause, I confine myself to what are termed secondary symptoms. The primary sore or chancre

is not always seen in the child, which is the subject of these eruptions; but it sometimes happens that a straw-coloured purulent discharge immediately precedes the eruption, or accompanies it (from the vagina.) In some instances, where the mother has had gonorrhœa at the time of the child's birth, such child may, within a day or two, become the subject of purulent ophthalmia, which shall yield to treatment, and yet a month or two subsequently, vaginal discharge and eruptions shall supervene. I attribute this, however, rather to the continued communication with the mother, by sucking, or perhaps by actual contact of the syphilitic or gonorrhœal fluid. The disease, both in mother and child, usually manifests the same local character. I have alluded in the course of these observations to an assumed predisposition of the skin to take on certain forms of disease, on the application of certain exciting causes, common and specific. To this circumstance we may, perhaps, refer the variety of external indications of the presence of syphilitic virus in the system. These varieties of secondary symptoms are most numerous in the adult, assimilating some species of almost every genus. In the cases of syphilis which I have decidedly ascertained in the child, the most common incipient form has been a papular erythema or a favous pus-

tule, and occasionally small tubercles. The termination of these several eruptions is commonly in the dark, livid, circular incrustation, which Dr. Willan has very appropriately termed "*ecthyma syphilitica*;" except when the papulæ or pustules appear about the verge of the anus, in which case, the continual moisture and muscular action of the part prevent the formation of a crust, an indurated tubercular swelling being produced, which may be termed "*condyloma syphilitica*." In all these varied forms there is commonly a livid hue and an orange-coloured centre, almost characteristic of a syphilitic nature, the *ecthyma cachecticum* being a dark brown or blackish scab, with a purple or livid colour surrounding it. There is usually, however, a tumefaction of the nostrils, with a discharge of yellow viscid matter, which speedily becomes inspissated: this has been considered by Mr. Lawrence as a diagnostic mark, invariably present.

In infantine syphilis we must be guided in our diagnosis by investigating the condition of parents, especially where suspicion is excited by the resistance of the eruption to common remedies.

In older children, the pain which is generally complained of in the cylindrical bones, will contribute to our decision. It sometimes

happens that children are born of low parents with copper-coloured blotches on the skin. I have sometimes seen these spots spontaneously disappear; and as the argument on the impregnation of the fœtus in utero with syphilitic poison would lead into too wide a digression, I will not pursue the subject.

The treatment of the disease in infancy, if the child be still sucking, may be chiefly confined to the influence on it through the medium of the mother. It is however the safest plan to obtain another nurse: and a half grain of calomel or three grs. of Hyd. cum Cret. may be put on the child's tongue, or rubbed on the gums night and morning. It must be carefully watched and cautiously used, as the salivary glands will sometimes remain uninfluenced, until an absorbent action is set up in the bones, exfoliation of the jaw or alveolar process being the consequence. In older children, it is requisite to adopt a modification of the treatment in the adult.

Without altogether denying the possibility of contamination through the medium of the maternal circulating system, I may add my belief, that in the majority of cases at least, the disease is communicated by the contact of virus, and that usually during the passage of the child through the vagina.

LOCAL DISEASES,

USUALLY ACCOMPANIED BY LITTLE OR NO CONSTITUTIONAL DERANGEMENT.

SCABIES.

Psora.—Le Gale.—Itch.

SCABIES is a contagious disease marked by subacute inflammatory action: it is one illustration of the law, that the same specific virus may excite cutaneous affections, assuming dissimilarity of external character. Yet, although one peculiar form of the disease may be predominant, there is usually an intermixture of the other varieties, proving the identity of their nature; of their intimate relation in the practical view of the disease. The chief utility of this division is to obviate an error in the diagnosis of scabies, as its varied forms so closely assimilate the character of other less severe, or more simple cutaneous diseases.

As the varieties of scabies assume a papular, vesicular, or pustular form, so have they been designated from these ordinal characters. Dr. Willan has added a fourth variety, the cachectic: this, however, assumes no peculiar external character, except that of a more livid tinge, which indeed is the universal characteristic of the perfect as well as the diseased skin of children of debilitated constitutions, to whom this form is exclusively confined. This variety cannot, of course, materially vary its *contagious* quality; but in almost all the instances which I have seen, the disease has been generated *de novo*, from constitutional debility resulting from protracted illness, or deficient nutrition.

SCABIES PAPULIFORMIS.

Sc. Porcina.—Pimply, or rank Itch.

An eruption of minute papuliform vesicles, attended by itching, which precedes even the incipient papulæ, becoming more intense as the character of the vesicle is developed, and especially aggravated by elevation of temperature. It usually appears first in the flexures of the joints, or on the breast. Among these minute vesiculæ, are often interspersed both vesicles of a larger size, and even phlyzacious pustules. The skin is sprinkled with small blackish spots,

the result of abrasion of the top of the vesicle, and the frequent scratching often produces numerous red parallel lines in clusters. The diagnosis between prurigo and this form of scabies, is equally difficult and important, although the two diseases may arise from the same remote cause, and by neglect, the former may degenerate into the latter. If carefully examined, however, the true vesicular form of scabies may usually be recognized; in which, also, there is always a dirty or discoloured character, while in prurigo, the papulæ are pale, and the surrounding skin appears of its natural colour: the papulæ, too, are much flatter than the acuminate vesicles of scabies. The red lines produced by scratching are also fainter, and more evanescent. On its contagious effect being ascertained, the distinction is, of course, determined.

SCABIES LYMPHATICA.

Watery Itch.

An eruption of large transparent vesicles, with little surrounding inflammation, occurring almost exclusively about the flexures of the joints, attended by severe itching. Many of the vesicles soon burst, a small brown crust forming on the spot. Others assume the pustular form, are surrounded by a more extensive

and deeper blush, soon terminating in ulceration, and a corresponding incrustation.

The lymphatic scabies closely resembles the phlyctenoid herpes, and eczema solare: the latter, however, very rarely occurs in children. It is non-contagious: it appears suddenly during hot weather, and is attended by a peculiar *tingling* sensation, rather than itching. This confusion occasioned the erroneous idea in France in 1818, that scabies was epidemic, but Biett decidedly proved the prevalent eruption to be eczema. Herpes may be distinguished from it by its occurring chiefly on open portions of the skin, by the distribution of the vesicles in defined clusters, and its non-contagious nature.

SCABIES PURULENTA,

Pocky Itch,

Consists of large circular lemon-coloured pustules, usually occurring on the back of the hand, between the fore-finger and thumb, on the feet, on the arms and legs, and in neglected cases, extending even to the fossa of the nates. They are marked by an extensive inflammatory blush. The pustules sometimes coalesce, ulcerate, and become covered by a firmly adhering dark-brown scab. Scabious pustules are sometimes produced by contact of the matter of the canine distemper. There is a

peculiar globular form in the scabious pustule, which distinguishes it from the psydracia of impetigo, or the favi of porrigo, and the subsequent incrustations of these two diseases sufficiently characterize them in the latter stages from the smaller crusts of scabies. The absence of itching also, will decide the phlyzacia of ecthyma, which are marked, too, by a hard crimson or livid base.

The causes of scabies are both external and internal. A specific contagious virus, or a debilitated and cachectic state of the constitution. It is from these general resemblances, apparent combinations, and varied causes, that scabies has been thought in Germany to be the cause of almost all diseases under heaven. When originating gradually from neglect, or from cachexia, the disease will usually appear in the papular form, assuming what has been vulgarly termed the rank character, and it will moreover reappear at distant intervals, even though apparently locally cured, unless the state of the constitution be permanently amended. Of this nature is probably the courap, the scabies indica of Sauvages, a most inveterate disease, marked by a livid hue, both in the vesicle and the surrounding skin.

It has been generally asserted by a host of pathologists and microscopiscians, that the

presence of a peculiar pediculus under the cuticle was the common exciting cause of scabies. Dr. Bateman has enumerated most of these learned authorities; in addition to which Redi, an Italian, in 1685, — Morgagni, and Dr. Gales, formerly apothecary to the Hôpital St. Louis, have discovered them. From this latter authority especially in the “Dictionnaire des Sciences Médicales” of Paris, we see delineations of this *acarus scabiei*, thus dignified with a peculiar order and genus. M. Rayer has also alluded to this parasite in the third section of his Tableau, under the term “*pediculus humanus*.” Dr. Bateman, however, never discovered them. Now, after the enumeration of all these authorities, it would be arrogance to assert, that this appearance was deceptive, but we may very rationally assent to one of these ideas: that it is either a *pediculus external* to the pustule, generated by neglect, or that it is a coincidence—an occasional appearance of an insect in the vesicles or pustules of scabies, but non-essential, whence Sauvages may have consistently adopted a separate species of the disease, *scabies vermicularis*.

In the treatment of scabies a multitude of vegetable and mineral preparations have been eulogized by their respective advocates; but of all these remedies, that which has proved most

generally efficacious is sulphur; the basis indeed of the majority of formulæ.

In the milder cases, especially of the scabies lymphatica, the internal exhibition of sulph. precipitat. will often be perfectly curative.

In the more severe form it will be essential to combine the local application of ointment of lotion or of fumigation impregnated with this mineral. I will present a few of these formulæ, premising, that I consider the first, that of M. Alibert, the most congenial to all the forms of scabies, and the most successful.

R. Potass. sulphuret. $\mathfrak{z}\text{j}$ vel $\mathfrak{z}\text{ij}$.

Aq. fluv. $\mathfrak{lb}\text{j}$.—M.

R. Acid. muriat. $\mathfrak{z}\text{j}$ vel $\mathfrak{z}\text{ij}$.

Aq. distill. $\mathfrak{lb}\text{j}$.—M.

Misce $\mathfrak{z}\text{j}$. sing. lotionis aq. font. $\mathfrak{z}\text{iv}$. & lave spongia.

R. Sulph. sublim. p. 2.

Potass. subcarbon. p. j.

Adip. suillæ p. 8.—M.

Ima. die utere $\mathfrak{z}\text{j}$.—2da. terties indies.—3tia. balneum tepidum.*

R. Potass. sulph. $\mathfrak{z}\text{iv}$. Aq. dist. $\mathfrak{lb}\text{j}$.

Acid. sulph. $\mathfrak{z}\text{iv}$.—M. Bis indies pro diebus 6.†

* Alibert.

† Dupreytren.

The soapy sulphureous ointment at St. Louis.

R. Flor. sulph. ʒv.
Ol. Olivæ ʒiv.—Aq. ʒj.
Pot. subcarb. ʒij.
Solve Potass. aq. tepid.—adde ol. deinde sulph.
Adde camphor ʒij. ad libitum.*

R. Sapon. alb.—Sulph. prec. p. æq. solve.

R. Sulph. sublim. p. 2.
Potass. purif. p. 1.
Axung. p. 8.—ter die utend cum balneo sulph.

R. Potass. subcarb. ʒß.
Aq. ros. ʒj.
Hyd. sulph. rubr. ʒj.
Ol. ess. bergamot. ʒß.
Sulph. sublim.
Adipis suill. a ʒix.—M.†

R. Zinci sulph. lact. sulph.
Baccæ lauri a p. æq.—Ol. 2. s. ut f. unguent.

R. Hyd. oxyd. alb. ʒj.
Axung. ʒiv.—M.

R. Hyd. muriat. ʒß.
Axung. ʒiij.—M.‡

These last two ointments I have found very efficacious, combined with the sulphur fumiga-

* Mr. Lugot.

† At St. Louis.

‡ Jasser.

tion in the moderate forms of scabies porcina. In the pustular form, on the contrary, where there is much inflammation, these stimuli are inadmissible, and it will sometimes be requisite to apply for a day or two tepid fomentations, and to give purgatives previous to the employment of more active modes. In the debilitated and cachectic child it will, of course, be necessary to administer tonics, and it is in this state that the combined employment of mild laxatives, of the sulphur fumigation, and of tonics, will be especially efficacious.

PERNIO.

Chilblain.

THE chilblain is marked by a tumefaction of a deep crimson or leaden tinge, accompanied by intense itching, usually occurring on the toes, or the fingers, or the heel or outside of the foot, when they have been called kibes. They are seldom seen in other parts in children. The adjacent parts are often œdematous to some extent.

The exciting cause of chilblain is the influence of intense cold, on parts remote from the centre of circulation, a marked predisposition to the disease existing in many children. The immediate effect of a diminution of temperature is a pallid state of skin; but a congestive condition of the superficial vessels speedily

succeeds, and the reaction excited for the purpose of removing the capillary congestion, failing to effect this removal, produces inflammatory action. When the congestion is slight, however, this vis medicatrix will often effect its resolution, especially if aided by gentle friction; but if the turgescence be considerable, or if the part be injudiciously exposed to the action of heat, vesication, and ulceration will ensue.

The knowledge of the exciting cause renders the mode of prevention extremely simple. For this purpose the extremities should be defended, by wash-leather gloves or socks of oiled silk, from the atmosphere, and the linim. camphoræ, during severe weather, should be rubbed in every night, to impart tone to the vessels, or the cuticle may be hardened by alcohol. Sudden transitions from cold to heat should be avoided. In peculiar constitutions, not marked by an inflammatory diathesis, the chilblain will often remain in a chronic state during the prevalence of severe weather, the tumefaction and pain subsiding on the approach of summer. In other persons, however, and especially in children, the chilblain, if it be not carefully treated, will very speedily assume the vesicated form, and eventually terminate in an irregular ulceration, which sometimes spreads rapidly, exposing a considerable sur-

face; often penetrating to the tendon, and sometimes even to the bone.

In the treatment of simple pernio, as in that of burns, both sedatives and stimulants have been promiscuously recommended. In the milder cases friction only will be usually perfectly successful, removing mechanically, as it were, the venous turgescence, and gently exciting the capillary arterial action. Warm sea-water and a host of stimulating embrocations have been recommended. The favourite application of Dr. Underwood in this state was ceratum album applied on thick doubled lint, immediately on the commencement of the itching. The lotion which I have generally seen most successful is

Rj. Tr. lyttæ $\bar{z}$ ss.

Lin. saponis $\bar{z}$ ij.

Sp. camphor. $\bar{z}$ ss.

When the pruritus has been most severe, disturbing the rest of the child, I have added vin. opii $\bar{z}$ ss. M. Lisfranc has strongly advised the application of the chloride of soda or lime, both in the simple and the ulcerated form indiscriminately. He covers the chilblain with cerate on linen over this lint, wetted with the chloride: this is kept continually moist.

On the occurrence of vesication, an emol-

lient poultice should be applied, and the cuticle opened by a lancet, the poultice being repeated for a day or two, four or five times in a day: the cuticle should then be removed by the scissors. The secretion from this ulcer is usually an ill-conditioned sordes, arising from the languid, unhealthy state of the vessels. If there be much surrounding inflammation, the poultice should be still continued; but on its subsidence some slightly stimulant application should be made to the bed of the ulcer, ungt. calaminæ, or ungt. hyd. nitr. mit. The Tr. Lyttæ is usually beneficial even after the rupture of the vesicle; if it proves irritating, or increases the inflammation, the liq. plumbi may be applied, and the ointment still continued if the surface of the sore be *glassy*, and its edges ragged. The lotio arg. nitr. may be applied to the edges. In very stubborn and protracted ulcerations, especially of the feet, advantage will be derived from the following lotion:

Rj. coct. ulmi campest. int. rad. $\bar{3}$.

aq. $\bar{3}$ xii. bull. ad $\bar{3}$ viii.

adde plumbi acet. $\mathfrak{O}$ j. ad $\bar{3}$ ss.

A laxative should be given every other day, its action invariably benefiting the local sore. If the child be much irritated, it should take p. Ip. c. and p. antim. nocte manèque.

CLAVUS.

Corn.

THE corn is an indurated and laminated condition of the cuticle produced by external pressure. Its base is commonly superficial, having an apex or conical point extending inwards towards the cutis, producing a corresponding depression in that membrane, and often reaching the tendons themselves. From this *nail-like* form its name is derived. The centre is the most indurated part, which being often somewhat discoloured, has been termed in some districts the bird's eye. They are not confined to the feet in adults: the lips of trumpeters, the ears of ladies from pressure of the ring, and the fingers of harpers being also subject to them. In children they are almost invariably caused by pressure of the shoe. An inflammatory action is sometimes the consequence of this irritation, but rarely terminates in suppuration; the corn occurring between the toes is of softer consistence, from the moisture of the part.

The treatment of corns is of course simple, and in the growing child, the removal of the exciting cause, pressure, is often the only mode necessary, or immersing the foot in warm water, and rubbing the corn gently with the

file, applying over it a mild diachylon plaster. The most effectual mode, however, in the more stubborn corn, is to pare off the indurated laminae with a scalpel, and the part having been immersed in warm water, to rub the argenti nitras on the part for five or ten minutes, a plaster of diachylon being then applied. On the separation of the eschar, the process may be repeated until the disease be completely removed. Two, three, or four applications will usually suffice. A saturated solution of the muriate of ammonia in rectified spirit has also been successfully applied in the same manner. The excision of the corn must be carefully performed, as instances of fatality resulting from wounded tendons have been recorded; a precaution especially necessary, when the corn is seated close to a joint. Even the cutting through of a small capillary vessel will sometimes be productive of considerable inflammation and pain. Celsus, however appears to think that the corn is thus destroyed, and not the patient: "At si sanguis quoque aliquid emissum est sæpe emoritur." The presence of humidity in the atmosphere exerts some peculiar influence on the sensibility of corns, so that there is often a correct prognostic of rain formed from this single source.

VERRUCA.

Wart.

THE wart is an irregular tumor, caused by chronic inflammatory action of the vessels of the cutis, in which tissue its base is usually seated. The wart, however, is not always conical, being sometimes enlarged laterally, and divided by deep fissures. It is sometimes perfectly smooth. Warts are usually troublesome only from their deformity: they will however sometimes excite an erysipelatous blush around them, and occasionally suppurate, which process is indeed an attempt at a natural cure. Their removal is sometimes effected by some obscure absorbent action, or by the gradual process of exfoliation, and a cessation of morbid deposition. It is erroneously supposed that the blood circulating in a wart is capable of multiplying these tumors by inoculation: if, however, this be partially correct, which may indeed be doubted, the effect seldom takes place.

With regard to the treatment of warts, excision, the ligature, caustic, or the blister, may be resorted to as circumstances indicate their eligibility. If there be a narrow peduncle, excision or the ligature may be employed, and on the detachment, caustic should be applied to the root. If however it be seated

close to an important part, as the cavity of a joint, this must be done with caution. If the base is large, the caustic only should be employed, or a blister may be confined for forty or fifty hours to the part so as to produce its action deeply around the radix of the wart. Astringents, as preparations of iron, alum, and muriate of ammonia have been recommended, but they are seldom very efficacious. The chloride of zinc will frequently prove successful.

The curative charm for the dispersion of warts is extensively believed. It is not without some foundation, but whatever the obscure mental impression may be which works this apparent witchcraft, it is impossible to determine.

ENCAUSIS.

Burns and Scalds.

A SOLUTION of continuity from the contact of actual heat, in solid or fluid substances, in melted solid, or fluid in a state of vapour. The effect of heated fluid being usually erythema or vesication: that of heated solid, ul-

ceration or sphacelus. In our prognosis or estimate of danger, we must in a great measure be guided by the peculiar idiosyncrasy of the patient, and the nature and properties, or the importance of the part on which the lesion is situated : but it is essential also that we should form a division of these injuries from the visible effects produced on the integuments, into three degrees :

1. *Superficial.*
2. *Ulcerated.*
3. *Sphacelated.*

SUPERFICIAL

May consist in simple erythema, or in slight vesication; injuries which are attended by very slight and transient degrees of febrile action. The first indication will be to subdue or prevent inflammatory action by the application of sedatives, as cold water, liq. plumbi subac. dilut. or spirit. rectific. dilut. if there be a vesication. This spirituous lotion with ol. amygdal. will be serviceable in preventing a disposition to contractility in the part. Cooling laxatives, and diaphoretics should be administered, and the lightest diet taken.

ULCERATED:

Abrasion of the vesicated cuticle; usually attended by rigor, and often by a collapse of the system, with a congestive state of the circulation. In such a state it is essential that stimulants should be administered soon after the reception of the injury, or the child may sink under the impression. For this purpose minute quantities of brandy and ammonia should be given until reaction be produced; at this period the stimuli should be discontinued, and a laxative administered; the application of liq. calcis, and ol. amygd. or ol. lini to the part being at the same time employed. If the reaction should proceed to high febrile excitement, febrifuge medicines should be employed; and at the same time there should be great depression, three or four drops of muriatic acid in water may be given every six or eight hours. If there should be much integument removed, it will be right to administer the sulphate of quinine, and the mineral acid to support the system in its process of reparation. If there is acute pain disturbing the rest of the child, a few drops of T. opii or 3j of Syr. papav. may be given at bed-time. The profuse application of preparations of lead should be avoided, as obstinate constipation, and even partial paralysis have occurred from absorption

of this mineral from an abraded surface ; much benefit will, however, be derived from its limited use in the following formula :

Brandy j.

liq. calcis ℥j.

Liq. plumb. sac. ij.

SPHACELATED.

An eschar formed and the parts deeply burned. This injury is often most severe, the collapse of the system being excessive. The same stimulant plan must be here adopted under similar restrictions, and the ol. terebinth. applied warm immediately on the reception of the accident. This is effecting a salutary stimulus, and is the most efficacious in promoting the detachment of the eschar which is now become an extraneous body. It was Heister's opinion, that if burnt to the bone, amputation should be had recourse to directly, but it would usually be best to await, for some time, the process of exfoliation ; and the dilute nitric acid may be applied, with the carrot-poultice night and morning. The vegetable tonics and mineral acids must be sedulously employed, as the system is commonly much debilitated by the extensive process of sloughing ; but laxatives should not yet be omitted.

On the removal of the dead portions, granulation should be promoted, to which end

the liq. calcis cum. hyd. submur. or a weak solution of arg. nitrat. should be employed. If the granulations are exuberant, the arg. nitras. may be applied in substance, or adhesive plaster strapped on the sore, surrounding the limb, if on the extremities. It will be well to leave the portion of strapping immediately over the wound free from the plaster itself. On the glassy sore, with deficient vascularity, the sulphate of zinc in water may be applied. If the healing process be still languid, with morbid granulations, bleeding on slight pressure, the best plan is to paint the edges with liq. plumb. subac. and then to form an artificial crust with chalk, flour, or any absorbent powder.

Notwithstanding all our care, contractions will occur, and often some time subsequent to cicatrization, the consequence of the transmission of less blood to the part after the healing process is complete. The plan adopted by Mr. Earle should here be resorted to, of dissecting off the cuticle, and applying splints or compression until it be again formed.

LENTIGO.

Lenticula.—Ephelis.—Freckles.

THESE discolorations, which appear either in extensive patches of tawny colour, or in small brownish spots, are the consequence of direct exposure to the sun's rays. They are confined principally to those parts which are usually uncovered, and are almost peculiar to fair or florid complexions, and where the hair is yellow, sandy, or auburn. They are seated in the cuticle.

Celsus, although he has ridiculed our attempt to remove these sun-spots, is very decisive in his curative precepts: "Lenticulam tollit galbanum, et nitrum etc." "Ephelidem tollit resina cui tertia pars salis fossilis et paulum mellis adjectum est."

The juice of the house-leek, vulgarly called sun-green, is employed by rustics, and possesses some efficacy in removing this stain. In the "Marrow of Physic," printed in 1640, the blood of a hare warm is highly extolled as an application. The boldest practice, however, was that of Mr. John Wilson, who applied blisters even over the faces of delicate females for the removal of the discoloration; a mode which can never be justified.

The most efficacious and least irritating remedies are spirit. rect. in aqua rosæ, or liq. potass. ʒj. aq. rosæ ʒij. or the dilute mineral and vegetable acids.

CYANOSIS.

THERE are two peculiar cuticular discolorations of a dark, dusky, indigo, or leaden hue, which, although entirely different in cause, are often very similar in appearance; the one congenital, the other seldom occurring in the child. The peculiar leaden colour which is seen in the blue children, as they are termed, depending on defective organization of the heart, by which the arterial and venous currents are in a degree blended, is of course irremediable. Although it is possible that where communication is minute, and the proportion of venous blood admitted into the aortic trunk but inconsiderable, life may continue to an indefinite period, under the unavoidable penalty of lassitude, general debility, and a peculiar coldness of the solids of the body.

The other discoloration is that effected in the reticulum, by the protracted use of argentum nitratum: a circumstance first noticed by Fontana, in his "*Médecine Eclairée par les*

Sciences Physiques." This tinge is, on its first appearance, cærulean or bluish, and as it gradually becomes darker, it may, in its progress, assume the leaden hue usually diagnostic of the pervious fissure in the septum cordis. In about a year, when it appears to attain its maximum, it will become a deep violet, or dingy purple, or almost black, which intensity is permanent. It is marked, even at this period, by no constitutional derangement. The change of colour usually appears about the face, and in those portions of skin exposed to the light. The sclerotica will be often tinged. In the case related by Dr. Roget, in the Med. Chir. Trans., the young lady who was the subject of it, "observed that the tongue, and fauces had acquired a very dark colour, as if stained with ink." This commenced "some time after the remedy had been totally discontinued." It has appeared to observe certain and sudden changes in degree, sometimes in the course of one day. Although, in one case related by Dr. Albers of Bremen, it is stated, that "whenever the patient holds her arms in an erect posture, the blue colour is considerably lessened; yet as no peculiar change is observed in the blood when drawn at this time, I think it is reasonable to refer it to some change in the reticulum; the fact of its sudden variation does not militate against this notion,

as the absorbents effect changes as suddenly. The discoloration does not depend on the exact periods, or the magnitude of the doses of this mineral. It has occurred in a quarter of a year, one year and a quarter, one year and a half, two years and a half, and three years and a half, the dose being about the same proportion of 3iv to 3vj in the course of the year.

I am not aware of any remedy for this stain. It is probable that the stimulant applications recommended in chloasma may be of some service, and the nitric acid may be given twice a day to the child.

ATHRICA.

Porrigo decalvans.—Area.—Alopecia.—Ophiasis.—Depilatio.—
Baldness.

WE cannot but wonder that any accurate observer should class this effect, a simple deficiency of vascular action in the secerning gland of the hair, among the contagious porrigines, and should venture to surmise, in despite of the negative evidence of his magnifying lens, “that there *may be* an eruption of minute aches about the roots of the hair,” &c.

The disease consists in patches of complete baldness, the surrounding hair growing thickly

close to their margin : the individual hair, however, being often found of a conical shape, its summit being pointed, and sometimes bifurcated. The bald spot is ever of the natural colour. If neglected, these patches will proceed even to the denudation of the whole head of hair. The disease is completely local, and as it occurs in children of every variety of constitution and appearance, we cannot decide that debility of system can be its cause.

The permanent baldness of age is almost unlimited, it may commence at the thirtieth year, and on the contrary, we see some sexagenarians with locks white with age, it is true, but flowing over the shoulders in profusion,

“ Like a meteor to the troubled air.”

To some analogous process or defect we may refer the falling off of the hair in childhood : and as the oil of Macassar, or the fat of the bear, will sometimes effect its reproduction in the adult, so will the perseverance in the use of local stimulants eventually accomplish its restoration in the child. It is essential, however, that the head should be repeatedly and closely shaved. The remedies which have been recommended are oil of mace ʒij , alcohol ʒiv , or preparations of camphor, of turpentine, or diluted oil of rosemary, or bear's grease. Pencilling of the bald parts with arg. nitr.

will often promote the speedy reproduction of the hair.

In a case of spontaneous depilation related by Mr. Carson, the nails of the patient appeared shrunk and withered from deficiency of nourishment. I have seen some appearance of this sort in children, though not to so great an extent.

NÆVI.

Marks.

It would be entirely irrelevant to enter into a discussion on those maculæ which have been termed nævi materni, and indeed the consideration of most of them must be merely a subject of curiosity, tending to no practical utility. The existence of the mole, or brown nævus, is usually borne with resignation, and in some instances, indeed, is considered a perfect beauty-spot. The pendulous nævus, which is very rarely occurring, will be treated as any other tumor attached by a narrow peduncle. It is only essential then briefly to notice the vascular nævus, a congeries of blood-vessels assuming various forms and appearances according to their distribution: and depending on a debility, or want of muscular coat in the

vessel itself. In some cases the capillary vessels spread widely, and tortuously, forming the "nævus araneus;" in others, accumulating into a congeries, and forming a defined red tumor.

When these vascular swellings are diminutive, and are not seen to increase, it will scarcely be necessary to interfere with them, as they often spontaneously disappear by absorption as the child grows. But if they increase rapidly, if they are seated on parts subject to pressure or contusion, or where they obstruct material actions of parts, it will be most judicious to treat them while yet in an incipient state; a principle which must ever have weight, when we consider in how great a ratio the tumor becomes additionally dangerous with reference to its size; a principle, indeed, to which there is an analogy in every case of medicine and of surgery—the wisdom of destroying disease in the bud. The different modes of treatment consist in cold astringent lotions, pressure, extirpation, or a ligature on the nutrient vessel, and the mode with caustic; it may be added, that accidental irritation of the nævus will sometimes cause it to become inflamed and to ulcerate; and it is disappearing also from spontaneous ulceration, a process which is attended with considerable pain.

When the nævus is seated on a conspicuous

part, where a scar would be deemed a deformity, we may endeavour to promote the diminution of the vessels by *constant* application of cold spring water with liq. plumbi, on linen several times folded, and bound rather firmly on the tumor. If the nævus be very diminutive, a small piece of sheet-lead bound firmly on it, will often effect its disappearance. The practice of extirpation is often a mode of considerable danger, especially where the nævus is of large size and composed of arterial branches in the vicinity of their trunk, as the arteria temporalis, &c.

In the smaller nævi, however, the knife may be resorted to with safety. The vascular tissue should be completely dissected out, and afterwards pressure carefully applied; ligatures are generally useless, in consequence of the minuteness and number of the vascular orifices. The argentum nitratum, or the nitric acid, lightly applied, or the actual cautery, should be used to suppress hæmorrhage. Where the base of the tumor is not very extensive, the most judicious plan will be to pass a needle, armed with a double ligature, beneath the centre of the nævus, the two portions of silk being then drawn tight around the two halves of the tumor; considerable pain is felt, and constitutional irritation usually supervenes, and often convulsions occur. If this affection be ex-

cessive, the ligature should be removed at any period; * if, however, it shall have remained for fifty hours, the sloughing process will occur, and the disease will be cured.

The practice of a ligature on an arterial trunk, is chiefly resorted to in those cases termed by Mr. Bell "aneurism by anastamosis."

Mr. Hodgson, I believe, has proposed a novel and curious treatment in nævi; vaccination in the morbid tissue. The probable effect of this specific inflammation is the destruction of the vascular mass, by absorption or sloughs, or by the obliteration of its cells consequent to adhesive inflammation. It is not sufficient that one vesicle only be formed on an extensive nævus; the whole surface must be so studded with them, that a *coalescence* of the adhesive inflammation, consequent to each vesicle, may completely obliterate the nævous tissue.

The mode with caustic should be resorted to with caution, and the escharotic effect restrained within proper limits, as the result of opening a vessel of much size would probably be fatal. I should say, that the caustic is inadmissible, if the nævus shall have attained a size larger than a shilling. In the more di-

* In a case treated by Mr. Lawrence, it appeared that a removal of the bulk of the mass strangulated by the ligatures, produced a mitigation of unfavourable symptoms on the fourth day.

minutive nævus, a piece of adhesive plaster should be applied over it with a small orifice, not quite extending to its circumference. The kali purum should then be lightly rubbed on until some discoloration appears. Plaster should then be applied over the orifice. An eschar will be thus formed, and the subjacent vascular tissue destroyed by the process of ulceration.

It is, however, advisable that these should be considered ulterior measures, and should not be resorted to until the milder plans have failed, or the disease is rapidly increasing.

Professor Hanke, of Breslau, extols the application of the chloride of zinc to nævi.

CONDYLOMA.

AN indurated flattish tumefaction of the skin about the verge of the anus, secreting an ichorous fluid. It arises from the contact of acrid secretions of the alimentary canal passing over a surface tender and irritable; an aggravated form, indeed, of intertrigo. In emaciated children also, where ecthymatous sores are appearing about the anus, these ulcerations assume the tubercular form of condyloma, from the constant irritation of the

alvine discharge. In several instances of this form of disease I have seen the umbilicus become a deep ecthymatous ulcer, in infants where many weeks have not elapsed since the separation of the funis. It is in such cases that external applications are of little avail, until the system shall have been amended. In adults, excrescences are sometimes forming within and at the verge of the anus, assuming various shapes, to which terms have been applied expressive of such variety, as *ficus*, *crista*, *thymus*. In children, the disease seldom assumes any other form than that of a nearly circular induration, almost external to the sphincter. Where the disease, however, has been of long continuance, the tumor will be intersected by rhagades or fissures, which bleed on the relaxation of the sphincter.

For the removal of this disease, in addition to frequent tepid ablution, the sulphate and carbonate of magnesia, or minute doses of calomel with castor oil, should be administered every morning: but the bitter purgative should especially be avoided, the disease being aggravated by their stimulant effect on the rectum. If, after the mucous secretions are amended, the ulceration should continue, or induration remains, the *lotio flava*, or *lotio arg. nitr.* should be carefully applied, twice in a day.

RHAGADES.

Chap.

THE skin of children is often marked by bleeding fissures, arising from cold, and cold water in winter: a purely local effect, but depending on peculiarity of skin. The cure will be effected by uniform warmth, wash-leather gloves, or the application of *pix liquida* with a few drops of *ol. terebinth.* often renewed; or by honey with *aq. rosæ*, *cold cream*, or *diachylon* plaster, confining the perspiration by oiled silk gloves.

INTERTRIGO.

THE excoriation and chaffing occurring in the cutaneous folds and about the perineum, seem in some degree dependent on a peculiar irritable state of the skin; for, although neglect in removing the excretions of the intestines and kidneys, or the mere contact of these, will be productive of this effect, yet their occurring at the same time in other parts, subject to simple friction, proves a susceptibility in the whole cutaneous tissue. It is not always

easy to remove this predisposition, but the employment of a laxative of manna and carbonate of magnesia every morning, and the application of elder-flower water, or of liquor plumbi subac. dil. on a soft rag, will always keep the disease in check. It is a prevalent custom to load the fissures of the intertrigo in the folds with fuller's-earth or starch, which must ever add to the irritation. This maltreatment, as well as actual neglect of cleanliness, will sometimes change the character of this simple disease to one of a far more formidable nature: even the ear has sometimes been separated from the head. It is essential, on the healing of these ulcerations, that the opposing abraded surfaces should be kept separated, otherwise a firm union may be effected between them: this adhesion has not unfrequently been formed between the pinna or lobus of the ear, and the integuments behind them.

MORBUS PILARIS.

Malum Pilare.

A disease has been related by Parey and other pathologists, which is occasioned by capilluli on the backs of infants being loosened from

the bulb, but not expelled from the cuticle. These extraneous hairs are attended by constant itching, and irritable papulæ are often arising. It is merely requisite to apply warm fomentations or bread-poultices to relax and soften the cuticle, and afterwards to extract the capilluli by forceps. This disease must be distinguished from the lichen pilaris affecting adults, an eruption usually symptomatic of deranged functions of the stomach, the hair being still attached by its bulb.

THE END.

MORBUS PILARIS.

Malign Tumor.

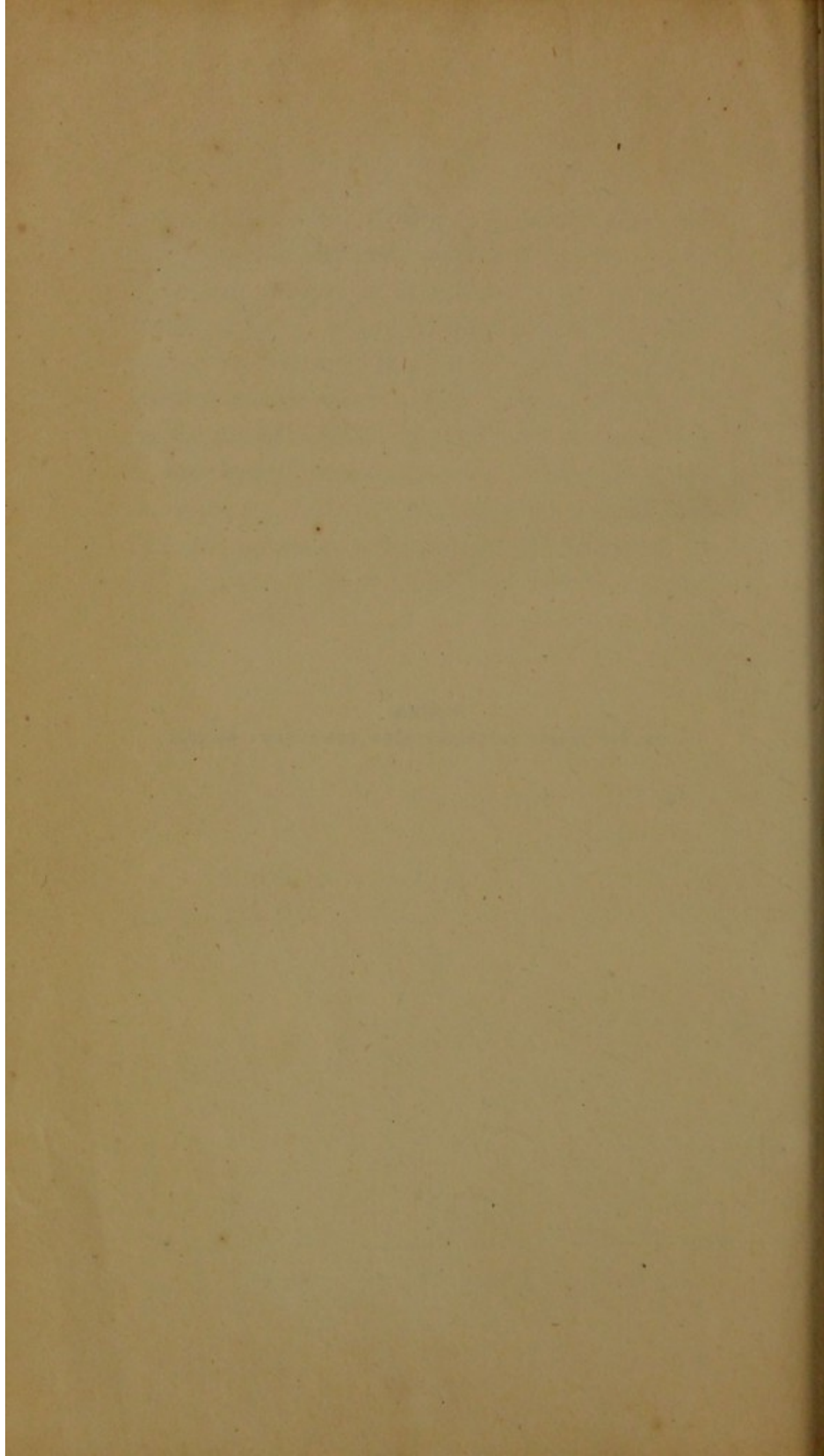
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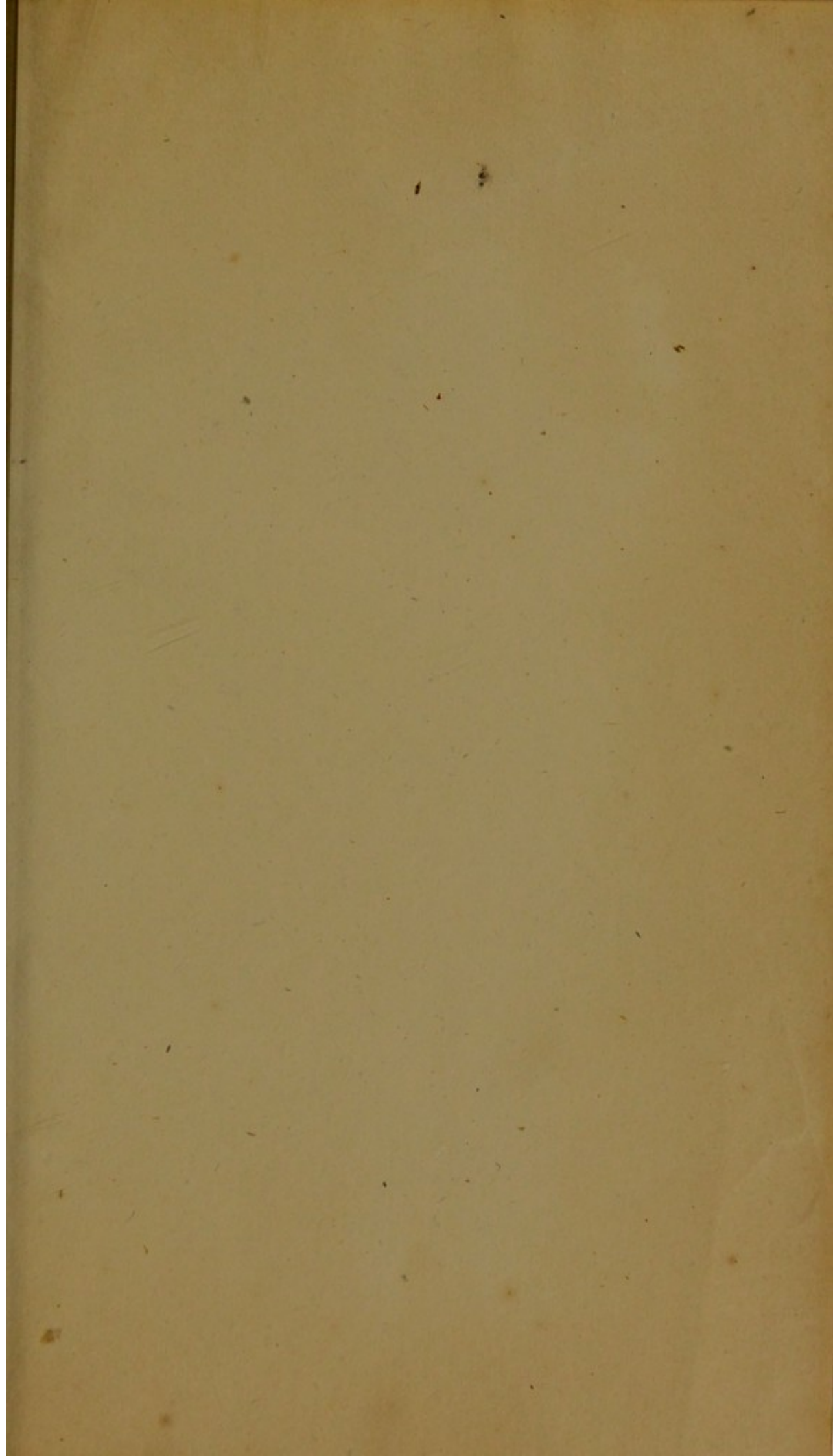
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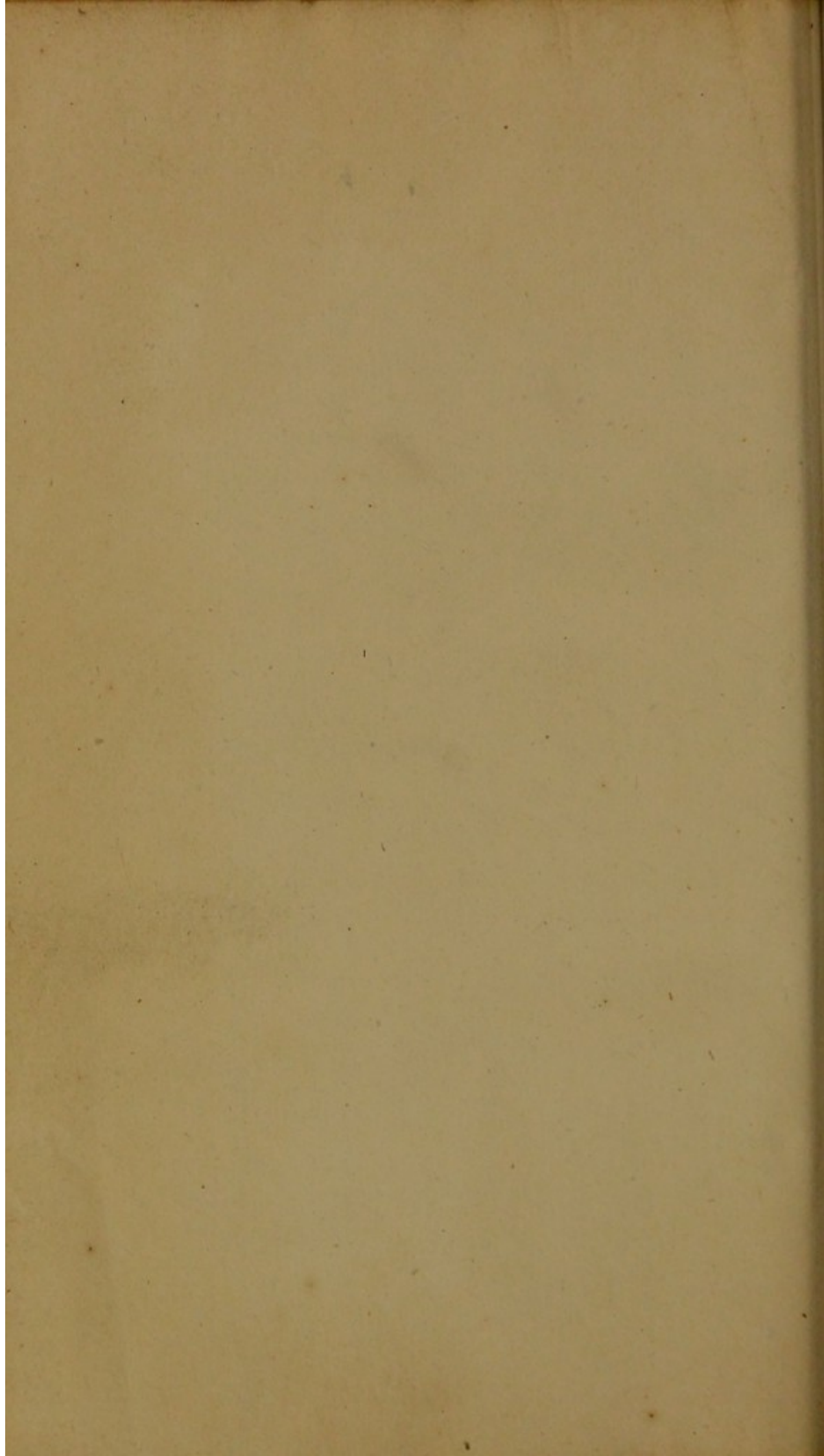
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