1858

On
The
Parasitic Diseases
of the Scalp
by
Robert Farganason

1858
Of all the difficulties and impediments which have at the path of medical learning, few have been more universally dreaded by the student than the diseases of the skin. Their natural complexity, added to the confusion which has too often been impressed upon them by tedium's descriptions and poorly executed plates, excites a sensation of fatigue in his jaded mind, worn as it is with the toils of classes and technical study. But when placed face to face with his tormentors, he is taught to recognize the clinical points and peculiarities of the various cutaneous papules and other cutaneous affections to which our suffering flesh is heir. He is gradually led to confess that he had perhaps overrated with their difficulty and exaggerated the complexity of their form. But after all, can we reproach him with having been wrong in so doing? Can we blame him for dreading the diagnosis of diseases of which his knowledge is derived from books and not from the bed side of the sick—books which in the vast majority of affectories can give us so clear and concise a picture of their characteristic peculiarities, are here completely at fault for without conjoined
Let it not be thought that I especially allude to Edin in the following remarks; for our school is more favoured in this respect than many others in their country.
clinical study, they do little better than confuse.
Of all the indications that come under our notice, those
of the skin above all, demand a serious study.
Upon the living subject, a careful examination
of the senses is of the last importance. The various
phases of various forms of disease, the difference
between separate varieties—pustules, papules, or
scales, so little apparent or important to the
uneducated eye, which no consumptive midnight
oil alone would ever teach us to recognize, must
be carefully observed & learnt, so that they may
thenceforth be familiar to us, as the face of old
friends. But what opportunities have we for this
in our country, what chance have we of seeing
these important affections, upon the large scale
necessary to impress our minds with the character
which they present, the changes which they
undergo. Cases I admit are usually to be met
with in the wards of our hospitals, & if there is
done every justice by our physicians in the way
of clinical instruction, but nothing under special
hospitals, at least extended special wards,
would be sufficient to meet the requirements of
students in this respect. What then is the
result of this? Medical men are sent out from
our schools, learned in botany & chemistry, precision & conjecture, able to diagnose a Bronchitis from a pneumonia or a dysentery from a typhoid fever, but surprisingly inefficient in the detection of diseases of the skin. Their knowledge of these may be somewhat improved by the diligent perusal of works especially devoted to the subject, but these excellent as they often are, are absolutely necessary in connection with clinical observation; leave but little impression on the mind when studied alone. It is when placed actually in contact with disease, that we fully admire & appreciate the able classifications of Willan & Bennett, the excellent descriptions of Bazin, Cazenave & Devezie. In this state of affairs, therefore, if the student does not wish to remain either in ignorance or at least with a very superficial idea of the subject, it is almost necessary for him to spend a few months in Paris or some German university town, to supply his deficiencies. This it doubt is one of the points which always renders a period of foreign study, a species of almost necessary supplement to our own home curriculum.
Such an omission in our hospital education.

Diseases are confounded one with another, confusion in diagnosis brings worse than confusion in treatment; the period for checking important affections is lost, Harris fall never to return, beauty is destroyed, health & comfort impaired, affections become chronic & as it were incorporated with the very constitution of the unfortunate sufferer, the public confidence in our medical art is shaken or falls. They crack then when called in, can do no worse & is in consequence considered to possess an equal if not superior knowledge, of the subject under consideration.

Questions of contagion are now overlooked, important affections are permitted to spread, & commit their ravages in schools & families unchecked by judicious therapeutics means. This description may perhaps be somewhat highly colored & peremptorily exaggerated, but from what has come under my own observation, limited as that necessarily has been, I cannot but think that it has many points of resemblance to the truth.

Such then being the state of affairs, can we wonder that the principal advances in the pathology & treatment of these affections, should
usually have been made by Continental

observers. And how indeed could it well be otherwise?

Devoting their whole lives and energies to this one
pursuit, physicians to special hospitals, where
the opportunities of observation might cause even
the most elugage to enthusiasm, the dermatologists
of France and Germany have ever been noted for the
successful midship of their research.

But can we doubt that if the physicians of
this country were permitted the same glorious
field of investigation, that their results would
come up to their usual standard of intellectual
superiority. But without the same opportunities
they can never of course hope to compete
with their foreign brethren.

Whatever objections may be raised to the division
of labour in medical as in other pursuits, there
can be no doubt, that it has ever been by
specialists that special topics, have been
elucidated and advanced, for few like the uninitiated
Hunter can hope to shine in every department
of our science. By the particular investigation
of individual subjects, we ensure that a certain
amount of first rate intellect shall be devoted
to their elucidation, their topics, thought over.
at every point, raised in every light, and discussed at every difficulty, must yield something at last. Then one isolated idea constantly occupies the mind, it is wonderful how soon it becomes exercised as it were with the results of the continued reflection, how it arranges itself in new forms of combination quite unforeseen by the mere varied thinker.

And although all the speculations & opinions gained by it may not be of equal value, some must in all probability be correct, & the very discussion & revivification of the subject must in itself be productive of important consequences. But leaving the wider domain embraced by our introductory observations, let us approach the more special subject of our present remarks, that is, the parasitic diseases of the scalp.

The almost despair of being able to render within a moderate compass anything like justice to this important but difficult topic, which has been so much discussed & mystified since dermatology began. So many ideas have been put forth, regarding their nature, scientific classification & above all, treatment, that volumes would scarcely suffice for a complete.
elucidation of the whole. But such an investigation, though doubtless of the highest interest to the medical historian, would hardly be co edifying to the practical man, although certain points in their history will be referred to, as proving the advances of modern medicine, we shall endeavour not to fatigue by the introduction of too many wearisome details. In this clafs of affections, our remarks concerning the difficul but importance of diagnostic skill, more especially refer, as indicating in a great measure the proper treatment to be pursued. Writers oncutaneous affections are apt to fall into the extremely natural error of describing the differential diagnosis of fa unos, for example, as much easier than in reality it is. Of course to their well practised eye, the various symptoms stand out in broad relief from one another cannot be mistaken, but to the comparatively uneducated observer, serious difficulties are liable to arise. If this were not the ease, whence come the egregious and mortifying errors, which are omitted every day in practice. various classifications have been proposed for the sacrament diseases of the scalp, but all of which
for previous to the discovery of their parasite origin, were not less vague than unsatisfactory. A core puzzle must they indeed have been to the bacteriologists, and difficult must have been their task of assigning them to any one section of their anthracosed arrangement. That they were placed among the peritrichs, is a fact well known to all, and little resemblance they bear to this class of diseases, must also generally have been observed. But it was necessary to place them somewhere, they were perhaps alike peritrichs as anything else, so peritrichs they were for many years, taking their place in the ranks with arcic and inverteg. Frequently confounded no doubt with them. But the discovery by Belin of the peculiar fungus constituting the disease known as faus, stirred up the stagnating waters, and after a little confirmation by research, dermatologists were forced to abandon their periticular theory and rank these affections in a class of their own. Some few of the older factious men still adhere to the errors of their youth, but have fortunately not thus been enabled to arrest in any measure the progress of their science.
In the following remarks we will consider the following varieties of parasitic diseases.

I. "Favaus Pongo" - Fissica favosa. 
   "Fissica favosa.

II. "Pingo worm" - Fissica capitis Pongo. 

III. "Pingo de la rana" - Fissica ranae. 

The shall begin our remarks with Favaus, as being the most common and consequently the most important of the 3 varieties. Its epidemiology, pathology, natural history have been fully illustrated both in this country and abroad. Its treatment, merely has much scope been left for the labour of subsequent observers.

This affection known from a comparatively early period of medical history, has always been regarded with a well grounded aversion & disgust. Its medicinal regimen, obsolete course, the permanent baldness which is the too frequent result, not less than the inefficacy of most known modes of cure, combined to lessen this, the most universally treated of all the maladies of the skin.

In this as in so many other affections, a
a period of incubation, varying in length, may occasionally be observed. But seldom if ever, is the opportunity afforded to the physician, observing these introductory phenomena, to arrest advanced is the disease generally before it comes under medical care. An itching of variable amount has sometimes been described by authors, as one of these initiating signs, but that may be caused by so many other agencies, as seldom to alarm the patient into seeking professional advice. An erythematous redness of the scalp has been also mentioned, but is of course almost entirely covered by the hair, as well as by the hypersecretion of epidemics which we are assured is now known to be by the disturbed glands. A change is also stated to come over the hair, so they assume in a higher degree that faded and deteminated aspect which is so characteristic of the disease in its later stages. But so many difficulties, so many sources of fallacy, must arise to impeach our correct appreciation of these phenomena, that we must admit their practical importance to be but small. I have no reason to suppose that our means of cure would be much more successful, if employed at this early period.
Let us then proceed to the consideration of one of its more peculiar phases. Hitherto the disease has been growing in the deeper recesses of the cuticle, but insinuating its roots, it now displays itself on the surface of the body. A minute yellow point is perceived; they on close examination may be seen to have a central depression, in many instances to surround the base of a hair. Gradually it increases, insidiously. They spread over the surface of the thin skin, till at least a considerable portion of the scalp may come to be covered with these dry cup-like masses. But increasing in number they likewise extend in size from a minute skin head-like point, they grow to form & to be twice their original magnitude. This they effect by addition to the outer layer of the crust; and as it is done in a regular systematic manner the shape of the body is in no wise altered by its increase in dimensions. We can best appreciate this mode of increase by a careful inspection of the parietal crusts, when we will find that the circumjacent portions are of a much deeper shade of yellow, than the centre, which in consequence probably of greater age & longer exposure is blanched to a dirty white. But when their
Growth continues rapidly to increase; they approach one another, form large coherent masses in which the original cup-like formations are flattened and distorted by mutual pressure. On attempting to remove a furfuraceous crust, we will find it a matter of some difficulty, in consequence of its being stuck, or as it were let into the skin, so that merely the upper portion reaches the external surface. Pain will be experienced during the operation, and a small quantity of blood will probably be lost by the patient. Their colour usually described as a pale sulphur yellow, is seldom to be met with of this exact hue, but ranges from a dirty buff, to near approximations to its typical tint. But at this period of later in the disease the continued scratching engendered by the painful feeling of itching which still continues, causes the escape of blood staining the crust of a reddish or deep brown hue. If the pus contained in the pustules usually excited by the irritation of the disease the treatment adopted for its relief, tends its change towards the change of colours. Here there is a source of fallacy for which the physician must be prepared, not excluding the idea of pains because the usually characteristic colour is
+ See Leçon Théorique et Clinique sur les Affections cutanées Parasitaires -

proposées par Le Docteur Bagieu 1868

page 122
availing. But of all the signs of disease, that appreciated by the nasal organ is perhaps the most unequivocal. On approaching the nose towards the seat of disease, we perceive a strong peculiar disagreeable odour, resembling according to different observers, the urine of cats or mice, the smell of mice, but rather the latter according to my experience, with occasionally a more pungent or somewhat peppery odour. In difficult cases I should consider this sign to be of the very highest diagnostic importance, though Dr. Bage's seems to think that olfactory impressions are not much to be depended upon in medicine. I confess I cannot see upon principle that objections are founded. The stimuli conveyed to the nose are surely as vivid and dependable as those to the eye or ear. I cannot see why it should be denied a less importance than those, in this perhaps the only case, where its sole existence would be sufficient to establish the diagnosis. The alteration impressed upon the hairs by the disease is also a trustworthy character. By degrees they become still whitened, looking they appear lighter than their normal colors, frequently affect a twilit, undulating in their underring aspect which is
very characteristic of the disease. They appear in
fact, to be greatly deteriorated in health, their
nurse firm hold of the scalp being weakened a
very slight force suffices for that amputation. The
appearance of the few short hairs growing from a
large coherent mass of pustic crust is curious as if
the supernatant portions had been destroyed by fire,
the stump completely dried up & almost shorn
by the heat. These effects on the hair are probably
curred by the pressure of the pustic within the
lytes, interfering with their true nutrition as well
as (as Bojan suggests) the arrest of the sebaceous
matter ordinarily lubricating their hair's shaft.
One of the best signs of the departure of the disease
is the improved aspect of the hair, the great
fineness of their hold to the skin. But the 3rd
lact period now rapidly approaches - the hairs
frequently that & as often reproduced how fall
never to return, the portions greatly once occupied
by these epidermal appendages assume a dark
repress, almost cicatricial aspect. The baldness
spreads the whole head, except perhaps a set
group round its base & forehead, which is
generally spared by the disease, may be turned
its hair. Can he wonder then, that on the
strength of this distressing consequence the disease now under consideration should be so universally dreaded. The general health is also frequently affected in long-continued cases, cachexia producing mental incoherency, fever, death, having been referred to this cause by authors. In what these deleterious effects depend it would perhaps be difficult to explain, though probably the interruption to the functions of the body, as some have suggested, may be in part the cause. But I think the fact, so much insisted upon by some authors, that fever always occurs in connection with a deteriorated constitution, has been greatly overdrawn, for it may often be observed upon the heads of children, apparently in the most robust health. Several varieties of the disease may be mentioned as described by authors, though possessing but little practical interest, nevertheless may come the subject of a few remarks. The first, the most important certainly, the most characteristic form, is the simple urceiae, the long continuous paroxysms of pain and fever of the older authors, the topic urceiae of the treatise. This variety is that which corresponds exactly to the description of the disease in general.
+ Bezié \( y = 5 \) \( \beta = 90 \)
above, has been again divided into the dimensions, when the crusts are separate districts. The coalescence when they unite to form one large scale. It is a strange fact noticed by Bozarth that this is the only species of spruce capable of growing on the body so that we may always expect to find the cup chipped in fact, when the disease affects other regions than the head. It is unable to live without the presence of hairs, but as nearly the whole body is thus clothed to a greater or less extent, its range is by no means circumscribed. In Lebert on detecting a similar case, afforded to Bozarth the opportunity of proving, that a minute almost microscopic hair did exist, growing from the centre of the cup. 2. Epic Phyllolata a scent ferris forking one of the varieties of the remarkable wing worm. It is preceded by acanthodes of the scale, but more characteristic by an immense hypersecretion of epidermis, forming in many instances, a sort of shining sheath around the base of the hair. Before appearing on the surface, the skin, the cup has already come in contact, lost their natural appearance from mutual pressures. This early pressure has a different effect.
in their shape, from that which they sustain in later life, forming the coherent pearls.

The pearls present themselves under the form of rounded masses coming in contact as to form one large lob, covering perhaps a considerable portion of the head, darkened perhaps by dried blood mixed with the remnants of hair. The French have described a fluid variety, which however appears an almost unnecessary refinement of picturesque. In this form the crests are not so regularly rounded as in the former kind, a few their surface presents aspect somewhat raised appearance. In Europe has compared them to the junction of a raised map representing mountains.

In all these respects it seems to resemble the seat of the disease. Seated first in the deeper layers of the epidermis, it makes its way gradually outwards and upwards, reaching the surface of the skin on the one hand, & insinuating itself into the hair follicles; & bulbs on the other, thus explaining the alteration in the appearance of the hair. & not contact with this, it is to be met with, even in the interior of the hair shaft. Going further down in its destructive action, it soon weakens the vitality of the secreting papilla, which consequently
See Comptes Rendus June 1871.

See on parasitic vegetable structures found growing in living annuals. Edin Philos Soc Trans 1871. 127.
as it were, now ceases no more. The rain falls, for even the epidermal canal closes, the cryptogam being of course deprived of its means of instrument, follows the example of its victim by dying. For is the disease uncommon in the nails, whereas in its early stages it is conveyed by scratching, where after producing at first thickening with tubercular looking enlargement of their substance, it seems to manifest tendency to spread outwards by penetrating the substance twice of the nail.

Nature of Disease—The crusts which were formerly supposed to owe their formation to some minute but not were shown by Bichat to depend on a distinct vegetable parasite easily discovered on microscopic examination. Here there was great advance in our knowledge of this disease, accordingly this is one of the greatest practical examples of the microscopic one well qualified to show the effects of this wonder working instrument. Since then the fact has been abundantly confirmed by Stanley Bennett Robin and other experienced micrographers. The vegetable nature of this disease is now doubted by few. An section of the pustule shows a mere examination of a little of the dry looking crust.
+ See his account of the skin p. 64

+ 'Ib. Monthly Journal' p. 54.
from its interior, we will find the structure to consist of numerous tubular tubes, 'springing off branches dichotomously which in turn terminate in round or oval capsules.' If injured by some what oral spider, the will also often find the hair affected by a coiled up and invadet in its structure by the presence of this foreign element.

But despite this seeming clear connection of favor to the vegetable kingdom, objections are not wanting, who consider that the disease depends upon a modification of one of the natural structures of the body, a sort of degeneration in that, among the finest of these is an Epacnum Toccan, who regards it to be a transformation of normal epithelial scales. Ewing is wonting to go over all his ideas & arguments which after all is not much to be regretted as Ewing he stands pretty much alone as regards his opinions, which are further disproved in the fact pointed out by Dr. Pinetti, that "cellulose formed from a plant tissue always advances according to cause originally impressed upon them. Consequently epidemic cells, though they may be transposed into hair, bone, or other epidemic structure, cannot be changed into true cells as the one hand a into those resembling vegetable growths on the other.
Cayenane, also rejecting the vegetable theory, considers the disease to depend upon some peculiar secretion from the tobacco glands. But if any other proof were desired, that these derived proofs chemical tests are not wanting. Alcohol, ether,
a chloroform saline tobacco matter, but not the crust of tars. Ammonia decides, blanches
& renders saltmarsh fire, but merely blanches
for a little, while tars act upon all other
fungi the same as upon that of tars.
Its contagious nature seems another argument,
in favour of the generally accepted idea. But
then this doctrine of contagion has been lately
contested by many, & coincide in similary,
believing diseases have been regarded by them
as sufficient explanation of the examples of the
contagious. But facts are seldom things & the
weight of evidence & observation have been
difficult to convince most medical men of the
contagious nature of the affection. Doubtless its
infectious powers have been exaggerated from time
to time, & thus a reaction produced in favour of
scepticism, but the abuse of an idea, should
not thus make us fly wildly, into the opposite
extreme, that want of belief. Rather should it
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make us examine more carefully the grounds of your convictions, endeavour to place our facts on a more firm and substantial footing.

Usually an interrogatory of a fever patient we will discover some history of contagion; it is likely for example to run through different members of one family, meaning of a fever case or sleeping in the bed formerly occupied by one affected with the disease, thus often addressed as causes.

Doubtless a deplorable state of health, with a deficiency of due hygienic influences, nourishment or exercise must be powerful predisposing causes, by tainting the system more open to specific agencies. According to Prof. Bennett a previous aluminous or rather tubercular condition is necessary as a miasma for the subsequent deposition of the cryptogamus. But unless we suppose the parasite to have inherent powers of causing this infiltration, cases of inoculation in a previously healthy subject must be strong arguments against this idea.

As regards inoculation, though it has not been made the subject of much experiment, probably from the dictates that people have to acquire so disagreeable a disease, still enough facts have been...
Bennett: loc.cit. p. 49
Bennett: loc.cit. p. 114

+ Bennett: loc.cit. p.
adduced for scientific purposes. Remak succeeded in his attempt, as did Bennett on the arm of one of his chaps. In Peru as quoted by Bajin, has been most successful. All, having attained his object, on two consecutive occasions. The great difficulty of obtaining a characteristic crust by inoculation appears to be as pointed out by Bajin, that in order to produce the disease in its well-marked form, it would be necessary to introduce its seeds into the capsule of the hair, which is of course a proceed practised only by chance. Even though most common to the human race, has also been met with on the lower animals, Mr. Bennett & Dr. Pox observed in the body of a mouse, a young American physician in a communication to the outcome of Bajin, assured him that he had met with several well-marked case[s] of the disease on the same animals. One of these mice are being given to the cat produced on its nose. The cat like crusts of the disease, not content to stop there, the disease was afterwards communicated to one by the children who were in the habit of playing with the affected cat. What will the anti-contagionists make out of this series of events.

Treatment of fear us
Trachea, gekühlt, p. 447.

* See Sir Pratæcle's treatise on diseases gekühlt p. 350.

Bennett loc. cit., p. 55.
The treatment of dandruff has long been very obscure. Lotion and satisfaction, but as usually happens, a more enlightened pathology, has paved the way to a more enlightened treatment of the disease. One will not admit your going into all the different methods which have been adopted for its relief, but a glance over some of the more important may not be out of place.

 наиболее

 After removing the crusty layer by means of oil and soap-water, apply an ointment of cod-liver oil or the citrine ointment until the internal administration of corrosive begun. He does not approve of using the head.

 Inflammation, after poultices and all manner of wet dressing, the head is washed with a strong carbonate of potash, cod-liver ointment laid on it and covered by an oil skin cap. When the crusts have entirely disappeared, he has recourse to an ointment containing the iodide of lead. Along with this he gives carefully watched doses of the tonics of rhenia and cod-liver oil in the marked serpulous cases. Prof. Bennett orders by poulticing away the crusts, then shaving the head, he then applies cod-liver oil to the scalp, which is enveloped in an oil skin cap, the same
See medical Times & Gazette for August 1833.

Dictionary of Practical Medicine p.1074.

Bazin loc. cit. - p.126.
medicines administered internally.

Dr. Jenner has employed in the treatment of
a solution of sulphurous acid, and the subsequent
use of a 10% lime ointment. Dr. Eyland has
advised the frequent application of the scalp, with
tar water, solutions of cresol, or lindaninate
cresols. But the treatment, which appears to
have been the most uniformly successful is
that recently devised by Dr. E. Begin, and named
by him at the St. Louis Hospital, Paris. It goes
upon the principle of first extracting the hair
with applying paraflin & applications, on the
very first principle, that as the cysts form is
usually situated in the hair follicles, as well
as at the surface of the skin, we must remove
the hairs before we can attack the cysts in its
strong hold. Emulsion of the karis has always
been much practiced in France, for the cure of
this & other allied affections, but has too frequently
been employed with an unwholesome admixture
gum sarsaparilla & tar water. The calotis for example,
is much used by irregular amateur practitioners
in France, which consists in the application to
the head, then adhesive plaster, which is afterward
tone off, in company with most of the
Hair, is most painful to certify, having been sometimes been applied to the head of the unhappy victims to suffer without producing any effect on the disease. This practice is now very pretty abandoned by all reputable men of the slightest skill or learning. The treatment of the Brothers B…… has long been known as the most successful known for the disease in question, consisting in covering the hair with a coagulant powder or their remaining them with the fingers. But all such means exist in treating too much to the more mechanical abstraction of the hair, not employing a true combination of principal Kitty remedies. Such a combination is well seen in the method of the B…… which we will endeavor to furnish a short sketch, the particulars of which we have extracted from his recent work on the subject. In first coming the case he cuts the hair short, applies cataplasms & washes to dry the crusts, which are then removed by a comb. The hair is then washed carefully with soap water, afterwards painted over with the "Bile de Cade," which appears to preserve the property of setting the hair brittle, so as to render them more easily their painfully removed, the invisibility
of the skin being covered by the same application. In Bagin's cases the urine is said to have a stronger
than any of the so-called depilatory agents, all of
which he has carefully tried with but little
effect. The preliminary operation being finished,
the patient is put into the epilator's hands, who
begins by laying the head between his knees, proceeds to
extract all the affected hairs, by means of a pair
of forceps. The operation is undoubtedly rather
painful at first, but is done very well borne
by the patient. The epilator attains admirable
results in their art, but it is a most interesting
spectacle to see them at work at the St. Louis
hospital, where in Bagin treats all his cases
there. General tones during the operation, the
favourite paracentric ligation of Bagin, contains
cocaine, with which a jelly is freely rubbed over the
affected parts. General settings are necessary
to denude the part effectively of hair, so that
the operation extends over several days. The hair
are then permitted to grow, if on their reappearing
they present their normal aspect, retaining their
naturally firm hold of the skin they are permitted
to remain but frequently a second epilation is
necessary for the due completion of the cure.
After each injection between the intervals of the operation, a conjunctivite containing carmine solution is applied to the eye. If demanded by the state of health, supp of include of toin, quinine or other tonics may be administered. The mode of operation in particular is not claimed as a novelty in Japan as it has been in use before, having among other instances been used by Dr. Remette in use at Vienna in 1841. The instrument employed at St. Louis is similar to an anterior pair of scissors with handles & much broader points.

Such is this excellent mode of treatment which has never been known to fail even in the most advanced case of the parasite existe, at least in the hands of the surgeon. The only objection to be made to it is the difficulty of procuring the parasite sufficiently stripped to undertake the successful extraction of the lice. But with a very little care & attention, any one would soon learn to perform this little manipulation with ample success. I am sure that the more this treatment is tried the more will it gain ground & prove itself to be the very certain & effectual remedy, for one of the most distressing complaints with which we have to deal.
Let us now proceed to the consideration of the 2nd parasitic disease of the scalp, but with the intention of making any elongated tedious remarks, but principally for the purpose of introducing the important original ideas of Dr. Bazin upon the subject.

The literature of the subject is sufficient, but the condition of the scalp has been long known as a parasitic disease in this country under the generic term 'ringworm'. It has long been chronic as an obstinate infectious disease, but it was not till the labour of the

For instance, that we were aware that depended like

Such was the progress in our knowledge of the disease, but in 1852 Dr. Bazin, following what he calls 'Physiosis', following each other in the above-mentioned order. Previously to this in

Finally, had detected a cryptogenic ringworm, which is regarded as a different form from that previous to his time in the former stage of the disease, according to Bazin; however, this is the same vegetable growth as exists in the 2 former stages.
merely altered ability to the want of time.

In Baginix certainly due the eradiating has first
receiving the thieophyton in the Banks Divination
in pointing out the intimate connection existing
between these I formerly considered distinct theories.

The will endeavor as briefly as we can to state
the ideas of In Bagin on this subject as laid
down in his recent work, According to him then
the same parasite thieophyton is found in the
3 stages, three stages are necessary for each
other during dependence proceeding unchecked
from the first to the last in regular succession.

One of the most first symptoms of the affection is
a tenderness itching which distresses the patient
much more than that experienced in the

Symptoms:

one of the very first symptoms of the affection is
a tenderness itching which distresses the patient
much more than that experienced in the

Commencement of pain. It is generally best during
the night, or after meals, and attended
by burning or heat most annoying in its intensity.

The external manifestations now begin to consist
of a circle rose or leso completely formed,

varying in size, accompanied by a slight

circles

dilation or redness of the skin. When situated
as it often is on the face neck or arm the rose

is easily recognized, but when placed on the head
it is very apt to be overlooked, in consequence of the
of the masking influence of the hairs the general tendency is to appear less deeply colored on the head. Frequently because the eczema appears with lesions & even pustules have been observed among the scalp phenomena. The hairs now begin to exhibit signs of alteration, they become reddish yellow, dry & excessively feeble, breaking easily at a short distance from the skin. But the second period is now at hand, let us see in what it consists. The parasite, without being concealed beneath the epidermal layer, now appears externally in the form of little white threads surrounding frequently concealing the broken hairs, which are readily cured as if were at the distance of a few lines from their root. The skin assuming a peculiar scratchy tincture resembles greatly the tumescence on the scales of bipedal prides. From this striking phenomenon the recognition of the disease at this its second stage becomes a matter of the greatest ease & certainty. There is usually a great hypersecretion of sebum. The hair follicles filled with the parasite matter assume a prominent & projecting aspect, which has been well compared to the condition commonly known as scurvy's skin.

3rd or Pustular stage. The tumescence can become seared...
Sprinkled with punctura, forming both pure & faint
brownish or yellow crusts & as the disease advances,
it is accompanied by a more disintegrated texture of
looking bodies, taking the place of the punctura. These
phenomena are well seen in the common case of a
Vaccinia. The observer sees the skin of the upper lip of a reddish
or almost purple or bluish tint, covered with an
occasional punctura, containing several hard indurated
nodules, as if some hard body had been set into the
cellular substance. Those are hairs & since they can be
exposed to the power of burn little force & without
occasioning any pain to our patient. This condition,
the hair serves an excellent diagnostic sign between
this affection & pimples, or explicit eruption differing
these parts which emulate it pretty exactly. In such
a differential investigation, the microscope will afford us
little assistance, for as Dr. Bage has pointed out, the
pustules, seems to have the property of destroying
the cryptogama, so that it can no longer be met with
on the hair. But notwithstanding this, in the common place
occurrence the disease still remains. There is reason to
believe that the mere presence of the hair causes
sufficient irritation to keep it from subsiding.
We have seen that the 3 stages of this affection are
all caused by the presence of one species of parasites,
See Epstein's dictionary of medicine.
vigor the trophocytes. This forms a vegetable growth
is almost exclusively caused by the presence fo
formed spores, but according to Bajin, the tubes
are more common at an early period of its existence; In the
second stage, it forms the glibby, growing the surrounding
brain, which are best separated from the epithelial scales
by the action of Ammonia which dissolves the center.
(For in the further stages the cryptosomes is
detected with more difficulty, but when subjected to
microscopic examination, it shoule to display the effects
of age, in the small eye gets across the greater number
of its tubes. Thus we may explain the error of Stenly who
considered it a parasite distinct from the other, an error
which Bajin has erected by clinical & microscopic
research. In Charles Robin on the other hand does not
regard it as a parasite at all, but nearly the epithelium
rolled up in the young tubes, & I need hardly that
Leroux Wilson also denies its vegetable nature.
The results of our experiments, all concern with
those of microscopic examination, to show that the
acetic in the 3 stages, is the same. We can occasionally
observe the 3 stages in progress at once on the same elevat
frequently have invasion of the cornea circumvicia from
the second form of the disease. This is an excellent
example at the hôpital St. Louis, Paris, & in Constantin
with the spitting in Bazin, I learnt that they have
frequently caught the shapes circularis in the hands from
operations on the heads of children in the early stages
of the disease.

Treatment. If the disease affects any part of the body
properly supplied with hair, it easily goes beyond the first
degree, & may be efficiently treated with the simple calamine
cotion. But when seated on the head, chin, or upper ey
or cheeks, epilation is demanded, before our cotion
will produce their due effect. (But in consequence of the
remarkably brittle consistence of the hair, the skill of the
epilator is tried to the utmost, as many attempts are required
before the affected surface can be properly cleared.

This the treatment of the disease is centered to a
indeed it is generally regarded, as much more difficult
to cure than scars, which formerly had a superior
reputation for obtrusiveness. In the 3d stage, however, as
before mentioned, the hairs may be extracted with the
greatest ease.

A third lesion is mentioned by In Bazin & is founded on
a disease of the scalp, long known in British practice under
the term of alopecia.

It is characterized by the presence of a thin variety of hair
growth, described by In-Bazin, & called by him incipient
hair. In Bazin's mind, this affection has been distinguished
as a
vances. 1. Siqüe decalvans. 2. Siqüe achromatæns.

In the first of these, we have usually a thin, dry, discolored aspect of the hair, which falls spontaneously, leaving a surface somewhat white than ordinary, on which careful inspection may detect small soft hairs. In the second form (Siqüe achromatæns), the hairs previously to falling, assume a white color, while the affected scalp parts, of this blanched aspect. In this affection the epidermis is met with chiefly in the interior of the hair, where it forms little swellings or nodules. Its appearance is much similar to those of the allied affections, but its effects have been observed to be more deep and intense than in them, while the tinctures are present in greater abundance.

Treatment. As according to the usual principles, the annular hairs being carefully extracted, the denuded surface washed with the ordinary unguent. If these precautions be neglected, an irremediable condition will probably be the sad result.

Our task is now ended. We content to a close. The case endeavors to the utmost of our capacity, to draw a sketch of the some of the most important affections of the skin, & feasible, deformed & unsatisfactory as this sketch certainly has been, yet we trust that we have given a correct idea of the
of our subject, according to the present state of science. He cannot pretend to have advanced any new ideas concerning but have at least introduced theories in Brazil, which if known have not yet been published in this country, but which from their great interest and intrinsic value, deserve the earnest attention of the medical world. They opened up new fields in the pathology of parasitic affections, and brought their treatment, once so tedious and unsatisfactory, within the range of safe and reliable means. Such has been the important step recently made, for which in Brazil deserves the grateful thanks both of patient and medical men. Let not his merit be allowed rashly accepted or blindly named, but let due investigation confirm the accuracy of his statements, or prove the error by which he has been led astray. Such is the true spirit in which to lend the decisions of our modern science, and by thus proceeding, may we trust to place medicine on a firm and established footing, towards which it is now advancing, day by day.