CHAPTER II.

MY OWN IDEAS OF THE NATURE OF SCROFULA.

In enunciating my own ideas on the nature of Scrofula, I may be exposed, perhaps fairly, to comments, such as those I have applied to the theories we have passed under our review. In "interogating nature," I may have misinterpreted her answers; but whatever may be the defects of the present work, it will, I trust, be found that whilst opinions are pronounced with caution, the facts from which they are deduced have been collected with an earnest desire to discover truth.

I conceive, then, that Scrofula is a disease of the constitution, and that it is most clearly manifested by certain external signs, of which swelling of the subcutaneous lymphatic ganglia is the most conclusive. But *tumid glands*, however, wherever they may be situated, are not always a proof that a constitution is scrofulous; they may be the result of local irritation, in an apparently untainted constitution. The glands in the groin may swell, from a sore on the foot; a mesenteric gland may swell under the influence of an ulcer in the intestine; a cervical gland may enlarge under the irritation of teething, or of scalp disease. A *tumid gland*, even *in the neck*, is then no proof that the constitution of the individual in whom it is found is scrofulous. But supposing one, or several cervical glands to become tumid, in the apparent absence of any obvious local iritation, this would constitute a strong ground for suspicion, that the constitution was suffering under the taint of Scrofula. It would not, however, amount to more than suspicion, and the suspicion could scarcely receive absolute confirmation, unless we have the opportunity of observing the contents of the tumor itself. Unless the swelling of the gland be accompani d by the deposit of a product, hereafter to be described, known as *scrofulous*

matter, the proof of a scrofulous constitution is, in my judgment, wanting.

In so far then as the local manifestation is concerned, the question, "What is Scrofula?" admits of a tolerably satisfactory solution: but as I regard the local affection, wherever seated, as clear evidence of constitutional disease, it is most important to inquire what that state of the constitution is which causes the local affection; and whether in the absence of the local affection, there be any certain means of determining whether a constitution be scrofulous or not. Because it may be, that the means at our disposal may be powerless to remove the matter when once deposited.

It may be objected to this view of the case, that there are scrofulous diseases in which no scrofulous matter can be demonstrated; "scrofulous opthalmia," for instance. Supposing such an objection to be made, my answer is this; that the ophthalmia in these cases is a simple catarrhal inflammation set up in a scrofulous constitution, and acquiring its particular characters, not in virtue of any thing specific in its nature, but in consequence of the state of the constitution upon which it is grafted. The particular character to which I allude, is a peculiar irritability, which is a prominent feature in inflammation set up in debilitated constitutions, and there is certainly nothing uncommon in such inflammation in persons whose health has been broken by other causes than scrofulous disease. At the time I visited the Whitechapel Workhouse, "scrofulous ophthalmia was epidemic among the girls; of eighty-nine present, seventy were suffering from the disease; but of the eighty-nine, only fourteen exibited any of the ordinary marks of Scrofula; and the proportion of girls who presented marks of Scrofula, found among those suffering from ophthalmia, was not greater than among those who were free from it.

I believe that diseases regarded as scrofulous, but in which no scrofulous matter is present, are not scrofulous at all, but simply the result of such low inflammatory action as is often set up in a debilitated state of the constitution.

I know no certain sign by which the state of the constitution which precedes the deposit of scrofulous matter can be recognized, but many persons entertain an opinion that a particular character of the body is sufficiently constant in such cases to warrant the belief that

it fairly represents the existence of Scrofula. It is said that persons who possess the scrofulous constitution exhibit "a dull white, but exquisitely delicate skin, a rounded graceful, and not strongly marked outline of face; an extreme development of cellular tissue, by which the mascular markings are effaced, and by which a roundness is given to the limbs which may be mistaken for strength; a fulness of the face, a delicacy of feature, and a rosy colour uniformly spread over the cheeks, which contrasts agreeably with the surrounding pallor; that the hair is usually blond, or auburn, hardly ever presenting the black or dark brown color which distinguishes those of billious or melancholic temperament; that the eyes are large, projecting, humid and blue, that the pupils are habitually dilated; that such persons are remarkable for the development of the head, the tumidity of the alæ nasi and of the upper lip; the large development of the lower jaw; the long and rounded neck, and the milk white teeth, which easily scale and split, becoming black and carious before their time. That the breath is habitually sour and fetid; that the chest is narrow and flat, the shoulders high, the abdomen large and prominent, the limbs thin, and that their flesh, wanting in elasticity, is extremely soft and flabby. That women born with the scrofulous diathesis are in general very pretty, possess much spirit and sensibility; that their nervous system is as largely developed as the lymphatic; that in men with this muscular debility, we frequently observe a want of mental elasticity, which is no doubt owing to a consciousness of physical inferiority. It is said that in youth scrofulous persons possess great cerebral activity, that they are impatient, passionate; that their intellectual system is largely developed; that even in their tender years we admire their good sense, their intelligence, their prodigious memory, the justness and gravity of their reasoning and their manner; that in youth they have more imagination than judgment, though we may occasionally see some who are capable of sustained mental efforts."

Such are the appearances which it is alleged mark the scrofulous constitution, or, as some would call it diathesis; or in other words, "the internal condition, or disposition, which, with or without the application of exciting causes, gives rise to all those diseases which are denominated scrofulous." I am not disposed to deny that the description which I have quoted may aptly enough repre-

sent many cases in which the body is tainted with Scrofula; but sure I am, that in a very large proportion of cases, the actual appearances will not correspond with that description. In many instances, most of these alleged characteristics of the scrofulous constitution may distinctly exist, whilst no strumous deposit takes place, and in others, diseases ascribed to the strumous habit, may take place in persons in whom the marks alluded to cannot be recognised.

The result of my own observation of persons whose constitutions are tainted with Scrofula, has satisfied me that there is the utmost possible variety in the external characters of those who present undoubted scrofulous taint. When the taint is made evident by scrofulous deposits, we find in one case the hair and complexion are dark, in another light; in one the cheeks are rosy, in another pale; in one the alæ nasi are expanded and the upper lip is tumid, in another both of those features present opposite characters. So that it becomes a matter of great difficulty to determine whether the presence or absence of those signs, is most characteristic of a scrofulous constitution.

But it is incumbent on me to endeavour to point out the qualities which are most commonly met with in those who are tainted with Scrofula.

In the form of the body there is usually observable a want of muscular development, but even this is often absent. There is often an appearance of plumpness or roundness, which is the result not not of muscular development, but simply of an hypertrophied, or infiltrated condition of the cellular tissue, and which rapidly disappears under fatiguing exercise, privation, or disease. Commonly, there is a general paleness and coldness of the surface of the body, which is owing to a feeble circulating apparatus; but in a large number of cases, about one fifth of the whole, that paleness does not extend to the face. The colour of the hair is very variable, but for the most part it inclines to a dark tint. Of nearly nine thousand scrofulous children, I have myself examined, a little over 32 per cent. had light hair and eyes. The alæ nasi may be broad, but for the most part they are not so; the upper lip, or even both may be tumid, but

in a majority of cases they are not so. There is not, as some persons have supposed, any thing constant in the shape of the lower jaw, or in the appearance of the teeth. The abdomen is commonly tumid. The whole of the mucous surfaces are especially liable to derangement; discharges from the nose, the eye, and the ear, are common. The digestive mucous membrane affords early indications of suffering; the tongue has commonly a dirty whitish coating, the tonsils are usually enlarged, and they are often so tumid as to impress a disagreeable and frequently husky character upon the voice, and to cause snoring when the patient is asleep. A still more deleterious influence is exercised by these tumid bodies; they lessen so much the channel for the passage of the air in respiration that the sufficient development of the chest may be interfered with. The stomach and bowels are frequently disordered, and digestion is ill performed; acrid eructations are common, flatulence is often very troublesome, and the action of the bowels is very irregular, sometimes relaxed, at others constipated; sometimes the evacuations are clay colored, very offensive, and of varying consistency; at others, having a redundancy of bile. Similar evidences of derangement are observed in the air passages, commencing at the nose, (which exhibits increased secretions upon the occurrence of very slight variations in temperature), and passing through their whole length. Similar phenomena are observed in the mucous tissue of the genito-urinary system; the bladder often shows an impatience of the presence of the urine, and the desire to void it is often frequent. The skin, though often dry and hard, is sometimes the seat of a considerable greasy exhalation; sometimes it is found to be fetid and sour. The acidity of the exhalation may be so decided as to determine a reaction upon litmus paper; in many of the cases observed by Mr. Kaye on the Mediteranean coast it was so. The scalp and other parts of the cutaneous integuments are often the seat of eruptive affections. The absence of vascular and muscular energy often causes the child to lie and sit about much, and indisposes him to enter into the energetic games of his playfellows. As to the intellectual development claimed for scrofulous persons, I am bound to say that it is usually wanting. That many scrofulous children present that character is quite true; but the result of very careful observation

has convinced me, that the overwhelming majority are without those superior intellectual qualities which have been pointed out as their ordinary character. Among the better classes, the feebleness of a scrofulous child attaches to him an interest which, without it, he might not have enjoyed. To compensate for his physical inferiority, the anxious parent seeks to make him mentally superior to his bodily stronger fellows, and frequently succeeds; but often the limit of healthy action is passed, the nervous and intellectual systems have the vital action concentrated on them too intensely; the sufferer loses flesh, the general health languishes, and the intellectual faculties may give way, destroyed by an opposite, but not less sure method than that which breaks down the poor man's child.

Where we find persons tainted with Scrofula living under less favoured circumstances, the picture to be drawn of their physical and intellectual characters is widely different. In the cottages of the poor we find the child with the scrofulous diathesis often pallid, puffy, insensible, listless, and filthy—the skin dry, harsh, and too commonly covered with eruptions—the mucous surfaces deranged, the attention not easily fixed nor even excited—the senses obtuse, the mind greatly wanting in intelligence, unimpressionable and almost incapable of action. The fact is, that those children who are surrounded with comforts and discreetly treated, and whose condition makes them objects of interest to those around them, present very different features of the disease from those which mark the scrofulous child of the poor. By the poor such a child is regarded as a calamity; while the other children are at work or play, he languishes in the corner of a solitary home; and if he be not altogether deprived of force and energy, what remains is soon wasted by taxing him beyond his powers.

In a constitution favourable for the deposit of scrofulous matter, I believe there are no features, in the absence of the tumor, so constant and so conclusive as to justify a reliance upon them, in pronouncing an opinion whether a constitution be scrofulous or not. It is certain that the ordinary tests are fallacious; I know that the major part of them may be observed, again and again, without any other evidence that the constitution is tainted with Scrofula. We may even have enlarged glands, while no product such as that which I have alluded to, is deposited; although, in the absence of

any source of iritation, enlarged subcutaneous glands constitute grounds for grave suspicion that the constitution is scrofulous. Thus, whatever may be the constitutional peculiarity, however marked may be the general physiognomy by what is called the scrofulous diathesis, we have no certain sign of the existence of the disease until sufficient evidence can be obtained that the deposit has taken place. The constitution may suffer long before such deposit is made, and the glands themselves may be swelled without presenting in their substance a scrofulous deposit; indeed the deterioration of the system proceeds so slowly, that although the tendency be directly onwards from the period when the gland is simply enlarged, to that when the deposit would ordinarily occur—in that interval favourable or unfavorable circumstances may be experienced, and no deposit may take place;—on the one hand, the constitution may improve and the glandular swelling may subside; on the other, the ailing child's life may be cut short by other diseases before the proof of Scrofula is complete.

In childhood, the time necessary for the perfect development of the disease is, I believe, very long; so long as to build up the whole body with bad materials. In adult life, the time is still more considerable; so that although in each case the causes of the disease may be efficient, their influence may not be continued long enough to bring about such a change in the constitution as fits it for the development of Scrofula; and if they be not so continued, the swelled glands may subside, and the person may escape the deposit, or the causes of ill health becoming more intense, he may die of some more acute disease.

It is, therefore, important to keep in mind that what is known as a diathesis, or a particular character of the body, does not necessarily imply that the person bearing the particular impress, is, or must become, the victim of the disease, which according to the term diathesis, is supposed to impend over him. It is true that the term is frequently employed in a vague and indeterminate sense. Too often it is applied to a state of the system upon which the particular disease has already set its seal; it is then, however, no longer a disposition, but a reality. It already pervades the constitution, but waits for something to determine it upon a particular organ. One woman gets a blow upon the breast, a tumor follows,

and never subsides, it is cancer; ninety-nine others are similarly struck, a tumor follows, but quickly subsides under treatment. There was in the first case a peculiar diathesis—a disposition which it may be very difficult to describe—which may not be manifest to our senses in the present state of our knowledge, and yet the disposition was present. A boy may present a feeble frame, a scrofulous diathesis, but no local sign of Scrofula is manifest; he knocks his knee, inflammatory action comes on, and it assumes the characters of white swelling, or "scrofulous" inflammation of the joint. Twenty other boys may receive similar injuries, inflammitory action comes on, but subsides under ordinary treatment. In the first case the disposition existed; which might, or it might not, have been called into action and which under favourable circumstances would have passed away.

Although, to my mind, it seems at present impossible to point out any train of appearances in the absense of the deposit, which will certainly apply to all those who possess a constitution tainted with Scrofula, I am quite aware that both in the solids and in the fluids—in the structure and the functions of parts, there is, before the deposit occurs, a wide divergence from the state of health.

There is commonly a general want of tone and energy in the solids, which incapacitates the sufferer for proper exercise; the mascular system is quickly exhausted, and incapable of sustained exertion—this is a consequence of impaired nutrition. That splendid-looking crops of Duch Grenardies, which constituted, when on parade, so distinguished an ornament of Napoleon's army, and which was said to be greatly tainted with Scrofula, suffered more from fatigue, cold, and hunger, during the disastrous retreat from Moscow, than any other portion of the French army; few of them, indeed, survived the retreat. It is matter of remark in the army, that fair, lymphatic-looking men, apparently enjoying brilliant health, frequently present a dragged, broken-down appearance, after two or three days' severe marching.

It will be seen hereafter, that the impaired condition of the solids is probably owing to a divergence from the state of health, which is demonstrable in the fluids; the blood is watery, the proportion of globules is much lessened, the chyle is two poor, in its proper ele-

ments, to reanimate the blood, and as may be supposed, all the elements of reparation derived from the blood are of bad quality also; the excrementitial secretions show equal variations from the standard of health. The digestive mucous membrane often acquires that condition so well described by the late Dr. Todd as occurring in "strumous dyspepsia." He described it as the cause of Scrofula; I regard it as the result of an already contaminated constituton, in many cases, only tending to the deposit.

He says, "I am anxious to draw the attention of the profession to the form of dyspepsia which belongs to the scrofulous constitution, for in our opinion it presents a more characteristic feature of this habit of body than any physiognomical portrait which has yet been drawn of it. Upon whatever temperament the disordered habit, which we call Scrofula, may engraft itself, we venture to say that this form of dyspepsia will also there be found. In the offspring of scrofulous and also of dyspeptic, hypochondriacal, or cachectic parents, in the children of old men, in children who have been badly nursed, or who, brought up by hand, have been improperly fed, or reared in the impure air of crowded towns, symptoms of disorder of the function of digestion early manifest themselves, generally between the first and tenth years, often commencing with the first dentition, which is commonly painful and difficult. Though the child from time to time loses its appetite, it is generally morbidly craving or ravenous, even soon after a plentiful meal requiring fresh food, so that the nurse remarks, 'there is no satisfying such children.' The complexion loses its colour, the skin its tone, ceasing to compress the flesh; the flesh becomes soft and flabby, the appearance is languid, the belly is generally tumid, and there is a want of the usual disposition to play or to use the exercise common to that period of life. The little patient is soon tired, complains of aching of the legs and knees, desires frequently to be taken up, his temper is fretful, he is easily set crying, and his intellect is either precocious, or unusually dull. His sleep is seldom calm and composed; he moans, talks, or grinds his teeth, sometimes screams and raves. His bowels are generally confined, and his evacuations are of a light grey colour, like pale brown paper, sometimes curdled with streaks of mucus; or they are of a greenish colour, frequently yeasty, of a sour and highly offensive smell and very often the food is passed unchanged. Diarrhœa occasionally occurs, consisting usually of light-coloured or slimy stools, and the patient frequently complains of pain in the bowels or uneasiness of the stomach. The urine often deposits a whitish sediment, the breath is fœtid or heated; there is some slight thirst, slight heat of the skin, except on the extremities, which are colder than natural; the skin is harsh and dry, except during sleep, when there are frequently heavy but partial sweats. The tongue is redder than natural, and on its anterior part spotted with small points of a darker and brighter red colour than the general surface; it is seldom much furred being either covered with a thin, mucous fur, through which the red spots appear, or with a slimy, brownish coat, or the fur is distributed in small circular white spots, more or less confluent, presenting altogether a dappled appearance. When irritation of the stomach supervenes, the tongue is dry and of a brownish red colour."

In time, other symptoms are manifested, such as redness of the fauces and enlarged tonsils, and certain affections of the skin. All these symptoms are referred to a congestive state of the hepatic system.

This state of the digestive system is very commonly observed in scrofulous children; but so it is in many sickly children who have no other sign of the disease; whilst in many cases of tuberculous or scrofulous disease, no appearance of strumous dyspepsia is present. In a majority of cases the digestive mucous membrane no doubt suffers, and in some cases, very intensely, but it is certain that this state of the system bears no direct relation to Scrofula. In many cases, where the evidence of the existence of Scrofula is most conclusive, no "strumous dyspepsia" is present; in many more, that affection exists without any conclusive proof of Scrofula. In all, I regard it only as a link—not the first, not a necessary one—in the chain of circumstances leading to the complete development of the disease.

That condition of the economy, then, which is favourable to the formation of scrofulous matter is not Scrofula, but a diathesis, or disposition; it may exist long, it may cause the tumefaction of many glands, but, under favorable circumstances, it may disappear without the deposit of a single particle of that product whose

presence in the glandular structures is, I conceive, necessary to constitute Scrofula. Again, I say, the conditon of the system favorable to this deposit is marked by *no certain* external signs, up to the moment when the glands become tumid. The child may be fair or dark, pallid or ruddy, well fed, clad, and lodged, or all these may be the worst possible; he may be the child of wealth or of poverty; he may live in town or country; he may be the child of old or young, of healthy or sickly parents; he may be born and live within the tropics, or in the artic circle; under all these circumstances, as we shall see hereafter, Scrofula may be developed. What circumstances tend most to its production, we shall endeavor to shew when we come to the study of causes.

At the same time, we are bound to admit that the condition of the system which we have described as indicating the predisposition to Scrofula, is one which favors the deposit of the particular product in many parts of the body; in one case, in one organ; another, in another. If, for experiment, two animals be submitted to the influence of exactly the same causes of evil, the results of that influence will probably be very different. In one instance a particular organ is the principal sufferer; in another. the same organ has escaped comparatively free from disease; and it is often difficult to assign any explanation why these results should differ so widely from each other. But it is certain that most morbid deposites are the result of perverted nutrition; and when the condition is developed which is favorable to their production, particular circumstances will determine them upon one organ or another.

CHAPTER III.

THE SCROFULOUS DEPOSIT—ITS PHYSICAL CHARACTERS.

We have spoken at sufficient length of that state of the constitution which is supposed to favour the deposit of scrofulous matter, and we will proceed to inquire what are the characters of that product itself.

It is believed that scrofulous matter may be deposited in many of the structures of the body, and supposing that opinion to be correct, it is pretty certain that it will vary in appearance with the varieties of the structure of the organs in which it may be deposited; but as we define Scrofula to be a disease, manifested by a peculiar deposit in the subcutaneous lymphatic glands, it is in them that we should first examine the product in question.

When a gland is about to become the receptacle of such matter, it undergoes a change in structure, dependent on increased action alone, and certainly irrespective of the character of the deposit. In the glands so changed, the matter is deposited, it may be, at several points; those points enlarge, and may ultimately coalesce, and the intermediate tissue of the gland may disappear. At an early period, it sometimes happens, in lymphatic ganglia, but this is very unfrequent, that the matter presents an appearance not unlike that of the grey, translucent, tubercle-like matter found in the lungs. The common rule observed in lymphatic ganglia, however, is to present no intermediate stage between the development of simple enlargement and induration, accompanied by increased vascularity in the gland, and the occurrence of the deposit of opaque scrofulous matter. To the naked eye, this matter is presented in the form of an amorphous, greyish, buffish, or yellowish mass, irregularly granular, and not unlike moist old cheese.

The microscopcial characters of scrofulous matter are thus described by Albers: "The tubercle presents, under the micro-