

fula appears to him to be found, and that very soon we shall cure Scrofula with Iodine, as we cure Ague with Bark, or Syphilis with Mercury." And yet, at that time, his conviction was founded apparently, on the exhibition of that medicine in 109 cases, of which only 35 were "discharged cured." Now it must be observed, that those cases were admitted into a Hospital, and that all appropriate hygienic means were associated with the Iodine, and yet less than a third of the cases so treated were discharged cured; and it is upon such a result, that the claim is made by Lugol, for a specific virtue in Iodine over Scrofula. We make bold to say, that of 109 average cases admitted under treatment, no other means than good food, good air, good clothing, and good exercise, being employed, and the season being favourable, as many as 35 would be discharged cured.

But, food, air, clothing, and exercise, which are very rarely neglected, seem to be regarded by the advocates of specific virtues in particular medicines, as mere make-weights, to be used always, but never to enjoy any credit. Thus Guersant and Blache say, "Employed discreetly, modified according to circumstances, aided especially by proper regimen, by exercise in the open air, baths, &c., the preparations of Iodine appear to us one of the most powerful means we possess against Scrofula."

Baudelocque's experience of the curative powers of Iodine over Scrofula, when properly administered, was expressed as follows: In 1831, "67 scrofulous girls, between four and fifteen, were treated for a sufficient length of time to enable me to appreciate the influence of the medicine; of those, 15 were entirely cured of the apparent symptoms of the disease; 14 were much relieved; in 13, the amelioration was trifling; the other 25 were little, if at all, relieved. Of the 67 cases, 17 had only enlarged glands; of these, in 4 cases only were the swellings almost or altogether dissipated, although subjected to the external and internal administration of the medicine. In 16 cases, there was abscess; of these, 8 were cured; in the other cases, scarcely any improvement was observed, although under treatment for many months. The cases of Caries, which he published, amounted to "more than 30," but he possessed only a small number of examples of cure—4 cases. In 12 more, there was much improvement; and in most of them, the

treatment had been continued for at least six months. In 1832, he treated a considerable number of boys, and the result was even less satisfactory.\* In 1833, the results of his experience of Iodine were similar to the foregoing.

This is the experience of an enlightened practitioner, thoroughly desirous of fairly testing the remedy; and he concludes with the opinion, that he knew no substance which, in the space of six months, would have produced an equal number of cures. At the same time, he admits, that the foregoing facts demonstrate, that we are not so near as has been imagined to the moment when we shall cure Scrofula by Iodine, as we do Ague with Bark, or Syphilis with Mercury.

In my own practice, I have exhibited every form of Iodine extensively in cases of Scrofula, and supposing the patient to remain exposed to the influence of the same conditions in which the disease was at first manifested, and the period of the year to be that which has not been found favourable for the cure of the disease under other modes of treatment, I cannot say that I have had reason to estimate the curative powers of Iodine so highly as many others have done. I know that among the out-patients of hospitals, whose circumstances remain unchanged, and who apply at the latter end of autumn, or the beginning of winter, we may often exhibit Iodine in every form for weeks or months, without producing any sensible amelioration in the patient's condition. I know also that at the beginning of summer, a patient similarly affected and similarly treated, will, often in a few weeks, exhibit a marked improvement—but how much of this should be referred to Iodine? How much to Season?

I by no means wish to express the opinion that Iodine has no curative influence in Scrofula; and although I believe that it is not, ordinarily, strong enough to make head against the disease in an unfavourable season of the year, yet I think I have known some cases in which decided benefit has seemed to result from its use, even when the season and other circumstances have not been favourable, and when no change in those circumstances has occurred, beyond the exhibition of Iodine; and yet, even then, I refer the



good to a general alterative action upon the economy, and not to any specific action; the general health has improved under the employment of the medicine, and the local disease has abated. Such cases have, however, formed a small minority of those in which Iodine has been administered by me, and I have endeavoured, though not satisfactorily, to account for these exceptional cases, by some change, some effort made by the system itself.

What the exact influence of Iodine is in Scrofula, it is difficult to determine—I mean when not administered in combination with other substances than Potass. I am satisfied, however, that in many cases under the influence of Iodine, the tongue will become much cleaner, the appetite will improve, and the secretions will acquire a healthier character. And the impression left on my mind is, that the good which may be experienced from the use of this medicine, is not owing to any specific influence which it exerts over Scrofula, but to its occasional power of modifying the mucous surfaces, so as to enable them to assist in producing healthy nutrition.

Whatever good may be derived from Iodine when uncombined, I think that when associated with particular substances, with Iron, for instance, its power over the disease may be increased; but it would be difficult to prove that there are not other forms of Iron which act as favourably as the Iodide in cases of Scrofula. If that impression be correct, as much, if not more, of the benefit may be owing to the Iron as to the Iodine. However this may be, I have found the Iodide of Iron an useful tonic in such cases; and I always give it in the form of Syrup, never exceeding four grains of the medicine in twenty-four hours. Whatever form of the medicine may be used, I doubt the prudence of exhibiting it beyond a fortnight or three weeks at a time; at the end of that time, the preparation should be set aside, aperient medicines should be employed, and its use should be resumed with the same precautions. In this way, any virtues which the medicine possesses are more surely brought out, and the inconveniences sometimes experienced from its administration will be, as nearly as possible, avoided.

Iodine, like Mercury, may be introduced into the system by external applications, by means of lotions, ointments, or baths, and

thus employed, the medicine may be detected in the urine;—a proof that it can, in this way, be introduced into the system; but unless there be anything to contra-indicate the internal employment of the medicine, I think the effects we desire to produce, are more unequivocally induced by internal exhibition. The simple tincture I never use internally, it is so quickly decomposed when poured into water, (the metal being thus reduced,) that it is less easily borne by the stomach than other forms. The compound tincture mixes readily with water, and is therefore a more convenient form of employing the medicine; but this form is not so easily tolerated as the Iodide of Potash, which, from its solubility, and from its being better borne by the stomach, is the most extensively used of all the preparations of Iodine. But in many cases, where the debility and irritability are great, it may be more prudent to give the medicine associated with Iron, rather than with Potash.

I know that opinions are divided as to the general effects of Iodine; that competent authorities regard it as a general stimulant, but, my own experience has induced me to hesitate in the administration of uncombined Iodine, or even the Iodide of Potash, in cases where a general irritability of the system has resulted from debility. In such cases, the sedative effects of the Iodide of Iron, by improving the tone of the system, are often very decided. But any specific powers which it has been assumed that Iodine or its compounds possess over Scrofula, are certainly not proved.

The truth is, that in estimating the virtue of Iodine, as well as that of many other medicines, in curing disease, much that is important is lost sight of. Many diseases tend to get well in a given time, many are influenced by season, many by place. No regard has usually been had to these circumstances; it is sufficient that a disease existed, that a medicine was administered, and that the disease got well; from thenceforward, that medicine has been considered as a specific, all associated agents being disregarded: this remark, however, does not apply to the cases of Baudelocque. Many people regard ink, or lunar caustic, as the natural remedy for Herpes Circinnatus; it is true, this disease does get well under either, but usually, it would get well sooner without them. Shingles, Syphilis, and many other diseases, have a tolerably well-defined course; and whatever the means employed, unless it be



something clearly contra-indicated, they will often get well in a moderate time. The cure of Scrofula is, no doubt, different; it does not get well in a few months; it is greatly affected by season; winter and spring exercise upon all scrofulous affections a very injurious influence; and the plan of treatment under which a case of Scrofula undergoes much amelioration in summer, will be utterly powerless over the disease in winter.

Although we now see with tolerable distinctness, what is the tendency in cases of Scrofula, although we can form an estimate of the value of food, of air, of exercise, and of season, as curative agents, it is still obvious, that in the attempt to determine the exact influence of a particular medicine, we are still surrounded with many difficulties.

These observations apply very strictly to the case of Iodine in Scrofula. A child, suffering from Scrofula, is taken to a hospital; and three things are accomplished by this step, the air is changed, the food may be improved, the exercise may be appropriate, and you give Iodine; the child gets better, and the credit of the improvement is referred to the Iodine, the other circumstances being lost sight of. Or he is sent down to the sea-side, under similar circumstances, and Iodine, or Cod-liver Oil, is administered; an improvement takes place, and the Cod-liver Oil, or the Iodine, or the sea gets the credit; but who can assign to each its proper influence, or determine what has been the effect of Season?

#### BARIUM.

In 1789, Dr. Adair Crawford published a Treatise on "The Medical Properties of the Muriated Baryta," having for its object, to make known the anti-scrofulous virtues of this medicine. Hufeland followed very soon in the train of Dr. Crawford, and the "*Vollständige Darstellung der Kräfte und Anwendung des Salzsäuren Schwererde in Krankheiten*," contains an exposition of his views on the subject. He conceived that the use of Barium was specially indicated in cases of swelled glands; "in such cases the virtues of this medicine does not yield either to Mercury or Antimony; it is less debilitating to the digestive organs, and it can

therefore be used for a longer time;" but he did not think that this medicine entirely destroyed the scrofulous disposition, unless it was associated with Bitters.

Hufeland's form of administration was a solution of half a dram of the medicine to an ounce of distilled water; of this he gave from ten to fifty drops, according to the age.

In England, the medicine was much extolled by Pearson, in Germany by many eminent men, including Bucholtz, Westrumb, Hufeland; in France by Verdié, Poutington, Pinel, and Mollet. But the subsequently recorded experience of Chapman, Portal, Jadelot, and Guersant, has not sustained the reputation which the medicine had previously acquired. And whatever may be its power, we are told that its use is not free from inconvenience; and that the disturbance of the digestive mucous surface which it excited, was occasionally so great as to cause it to be laid aside for many years. In 1834, Pirondi revived the employment of Barium, and he was accustomed to give it in larger doses than any of his predecessors. He began with six grains, and increased the dose up to two drachms, in four ounces of water, and his success was said to be great. Of this plan of treatment we cannot properly judge, unless the remedy be employed in the mode of Pirondi. Of a solution of six grains of the medicine to four ounces of water, he gave a tablespoonful every hour, except one hour before, and two hours after each meal. The patient was required to abstain from wine and meat; he subsisted on water and vegetable diet. Unless anything occurs to prevent it, the dose is daily increased by six grains; and Pirondi says, although it might be expected that under this regimen, the patients would lose flesh, experience has demonstrated the contrary, for they frequently gain flesh. He admits that it sometimes occasions pain in the stomach at first, but he says, that the pain does not continue. If vomiting comes on, the medicine must be laid aside for a time.

In my own experience no such doses could be tolerated as those administered by Pirondi; but it is said by him that a much larger dose was borne in Italy and at Marseilles then at Paris. Whether or not our climate is opposed to such doses, it is certain that our people are.



Crawford thought its use contra-indicated when the arterial action was excited. Hufeland thought it was less advantageous where there was great debility, than where there was much power in the patient. Baumes, who tried Barium largely, thought it did not succeed well where there was much irritability. But both views are reconcilable. Baumes and Hufeland referred to cases where the irritability was the result of debility, and in such cases Crawford would not have scrupled to recommend the medicine; he only interdicted its use where vascular action was unduly powerful.

Baudelocque tried the medicine fairly at the Hôpital des Enfants, and did not experience the inconveniences which had been felt by others. He did not give it in larger quantity than three grains in the twenty-four hours. And he entertains a very favourable opinion of its efficacy. Some persons having maintained that its action was sedative, others that it was an energetic irritant, he expected to observe conclusive effects in support of one view of the case. He did not, however, experience from its use either heart-burn or nausea, nasal hemorrhage, or deafness, which were charged against it by Hébreard;—superpurgation, intestinal pain, rigors, shiverings, cold sweats, or pain in the chest, imputed to it by Lepelletier; indeed, all the inconvenience he observed, was a slight diarrhœa in a few cases.

It would seem that the anti-scorfulous powers of this medicine were assumed at a time when it was conceived that great virtues belonged to Bitters; and the more intense they were, the more were they to be desired. But the virtues claimed for the medicine, are not conceded to it by many persons in the present day. I am of opinion, however, that it has a better claim to maintain a place in the *Materia Medica* than many medicines which have a firmer hold. And in my own experience the injurious effects have not been observed, to which some authors have referred.

I do not mean to say that my experience of its power over Scrofula is such as to bear out the opinions of its efficacy so confidently expressed by Dr. Adair Crawford. But sure I am, that its power as a discutient, over scrofulous glandular tumors, and over the scrofulous constitution, are little, if at all, inferior to those of Iodine. Its field of usefulness is, however, more limited than

that of Iodine; because we have the advantage of a choice of many different combinations of that medicine. Barium yields only one preparation which has been much employed as a medicine; the meconate and nitrate are very rarely used. Barium, however, seems to be a more certain stimulant than Iodine, or rather, we might say, irritant; and, in my judgment, its use is clearly contra-indicated where there is much free inflammatory excitability of the system; but in those cases where the tallow-like complexion, the pale tongue, and the languid circulation, accompanied by irritability of the mucous surfaces, are present, the virtues of the Barium are often very remarkably demonstrated. I usually give it in solution, a grain to an ounce of distilled water, with ten drops of Compound Tincture of Gentian. Of this solution, I commence with half an ounce twice a day, and on no occasion have I exceeded three grains in the day, and up to this moment I have not experienced any check in the administration of the medicine.

Of the external employment of the medicine I think less favourably. My experience of its efficacy when mixed with lard and used as an ointment, has been less satisfactory than that of Baudelocque. He believed that it favoured the resolution of glandular tumors without occasioning redness, heat, or pain, when used in the proportion of a drachm to an ounce. I concur with him, as to the absence of any annoyance from its use when so employed; but I am not satisfied that it possesses any energetic discutient power, when applied to the surface.

## HYDROCHLORATE OF LIME.

Hufeland conceded to the Muriate of Lime similar properties, in relation to Scrofula, with those possessed by the Chloride of Barium, "Except that it was more irritating, and therefore required to be used with more precaution." Fourcroy\* and the Dutch physicians had much confidence in its power over Scrofula. Bielt for many years, made much use of this medicine in the treatment of the numerous scrofulous patients at Saint Louis, without observing those inconveniences which are frequently attendant upon the use of Baryta in full doses. It is the base of the anti-scorfulous

\* Histoire de la Société de Médecine de Paris, p. 268—274.



nostrum of Niemann. I have frequently used it in the following form; a drachm to twenty drachms of distilled water, of which a teaspoonful was taken in milk two or three times a day. I have carried the dose up to two teaspoonsful, but I have not exceeded that dose.

I am not satisfied that it has any very evident action upon scrofulous glands. I cannot say that I have ever seen a case in which, in the absence of other influences, the discutient power of this medicine has been clearly manifested. But I am convinced that when given in moderate doses, it is more generally tolerated than the Chloride of Barium, and I therefore conclude that the inconveniences to which Hufeland was exposed, resulted from the mode in which he administered this medicine.

## ALKALIES.

The treatment by Alkalies has very long enjoyed considerable popularity in scrofulous diseases. Indeed the anti-scrofulous elixir of Peyrilhé, containing seven grains of Carbonate of Potash to the ounce, was for half a century regarded as a cure for many, if not most, of the diseases in which a deposit of an abnormal product in any of the tissues of the body was a marked characteristic. It was believed by Abildgaard, Wetz, Farnesi, and others, that the action of Potash was to dissolve the morbid product, which was then brought under the dominion of the absorbents, and removed. Although we have no proof that Potash exercises any such action upon scrofulous matter, it is still much used in the treatment of Scrofula, and there are few medical men who will not admit that they have found it useful in glandular complaints.

For a time, indeed, and even during the present century, Potash recovered in this country more than its former credit; but it has since been eclipsed by the alleged superior efficacy of Iodine. In 1811, Brandish made known his opinions of the virtues of Caustic Potash in Scrofula, and his preparation soon became the popular remedy for the disease. He says, "Many ingenious theories have been started, and many details of practice have been

published by those who have attempted its cure. But no satisfactory method has hitherto, I believe, been pointed out."

The dose of the medicine ordered by Brandish was large; to children from four to six years old, a drachm by measure; from six to eight,  $1\frac{1}{2}$  drachms; from eight to fifteen, 2 drachms; from fifteen to eighteen,  $2\frac{1}{2}$  drachms; to grown up people, 3, or even 4 drachms were given, twice a day, in small beer, barley water or gruel. The dose was to be taken between breakfast and dinner, and at night on going to bed. The treatment was usually continued from April to October, or longer if the weather continued tolerably warm, and the plan was followed often for three or four years. Associated with it, however, was the following regimen, "which is necessary to be observed by persons afflicted with Scrofula." "At breakfast, coffee or tea, with a sparing use of butter; at dinner, plain roast or boiled meat, with some good fresh porter or ale, or according to a person's custom, a little wine at or after dinner; for supper, a little cold meat, or bread and cheese, with some fresh porter or ale.

"Here it may not be improper to observe, that several patients who have been for a length of time under my care, and have gone directly from me to a boarding-school, have broke out again; and this I have no doubt was entirely owing to their having changed their regimen for one less good."\*

No one has made a larger trial of the Alkali than Brandish, and I think his statements with reference to it bear upon their face the marks of truth; and what is the result? That Caustic Potash in large doses, continued for many months of several years and associated with good food, good air, and proper exercise, has seemed to cure many bad cases of Scrofula. Would they not have got well, and probably as soon without the Alkali? I believe in many instances they would.

I have tried the medicine extensively, but not in such large doses as Brandish used, and I have found the bitter ale a very convenient vehicle for its administration, and my experience is very similar to his. My conclusions drawn from that experience are, however, unlike those of Brandish. I have known many cases in

\* Brandish, Observations on the Use of the Caustic Alkali, p. 37.



which under this treatment the glandular tumors seemed to subside rather sooner than they would probably have done without it; but I have known many more in which it did not exercise any sensible effect. I am satisfied, however, that in many instances, it did exercise a salutary influence, and those were mostly cases in which much acidity pervaded the secretions, and acted upon the general economy. How then are we to explain the difference between Brandish and myself? Simply by referring to the influence of general treatment, what he refers exclusively to the Potash; and I think that is the reasonable explanation of the difference between us.

## BURN'T SPONGE.

The virtues of Burnt Sponge have been too strongly expressed to justify us in passing them by without a passing observation; though it must be admitted, that the remedy has somewhat outlived the reputation which it acquired in the hands of Arnault de Villeneuve. In Germany, the commendations of Hufeland caused it to be much employed for some years; but even there, its reputation has ceased. He conceived that it exercised a special action on the lymphatic system, but whether in virtue of its alkaline or empyreumatic qualities, he could not determine. After the discovery of Iodine, those who maintained that Sponge had anti-scorfulous powers, conceived that it was owing to the prevalence of that substance in it; but when it was ascertained, that in some specimens of Burnt Sponge scarcely a trace of Iodine could be detected, and that in all, the proportion was very minute, a new view of the case was obtained, and Weisse and others maintained that its power over Scrofula was owing, not to Iodine, but to Animal Charcoal.

It is not necessary to inquire to which of the two substances its pretended virtues are owing, because we have never discovered that it really had any virtues; and in all the cases, and there are many, in which I had an opportunity of observing the effects of the medicine, I have never seen anything to satisfy me that it possesses any power over scrofulous swellings, or the scrofulous constitution.

## COD-LIVER OIL.

One of the newest remedies for Scrofula is Cod-liver Oil (*Oleum Jecoris Aselli*), that is to say, its virtues have only been widely spread within a few years. Indeed, until the observations of Brefeld, in 1835, and those of Taufflied were published in 1837, its use in Western Europe was restrained to a very few localities; and even when employed, its virtues were conceived to be rather anti-rheumatic than anti-scorfulous. But on the shores of the Baltic, from time out of mind, it appears to have been employed in various diseases, and particularly in Scrofula.

The proper Oil, as it is conceived to be, is, or ought to be, obtained from the *Gadus Morrhua*, and it used to be largely extracted at Berg, in Norway; but there is every reason to think that many other varieties of fish are used; some in which the Liver took little part, and yet its virtues seemed little lessened by that circumstance. Certainly, in this country, within my own recollection, common Train Oil was employed, but oftener in the treatment of Rheumatism than of Scrofula, and a most filthy medicine it was, but it was said to be efficacious, and was swallowed by some people by the tumblerfull. Quite as good a case is made out for the efficacy of Cod-liver Oil as was made for Iodine by Lugol. Thus, Schmidt, says,\* two-thirds of the cases he had treated were either cured or in full convalescence, at the time he wrote, and the remainder much improved. Brefeld, in 1835, had given it in more than 1000 cases, but I do not regard the details he published of the cases treated, as making out so strong a case for the efficacy of the remedy as is made out by many others.

Among ourselves, I know no one who has given the medicine a more ample, or a fairer trial than Mr. Chalk. The cases he published were not pure cases of Scrofula, and the impression they leave on my mind, is one of considerable doubt, whether any sensible curative agency were exercised at all by the medicine; and if there were, whether it might not fairly be referred to improved nutrition and change of air.

In the course of the last six years, I have employed it pretty extensively myself, and my estimate of its virtues, as a remedial

\* Rust's Journal.



agent in Scrofula, is much less favourable than that of many others who have given it a trial. There is, however, scarcely any form of Scrofula which I have not seen to improve under it; enlarged glands, sinuses, ulcers, lupus-like Scrofula of the face, Caries, all these I have known to get better under its employment; but generally, one of two things happened, either the stomach or the patience failed before the remedy had been carried far enough to produce any considerable amelioration. Indeed, either my own patience or that of my patients, has usually given way long before they have consumed 100 lbs. or even 36 lbs. of the remedy; or have continued to take it for six months, or as many years, as some patients have done.

The virtues of this medicine, it was conceived, could not reside in a simple oily principle, and a search was made for some more potent agent; and after many analyses, some traces of Iodine and Bromine were discovered. Now the fact, that in some specimens, indications of their presence were discovered, was enough to stamp upon Iodine any value which might be attributed to Cod-liver Oil; and if that be really so, why continue to give Iodine associated with such a disagreeable menstruum. But the truth is, that where Iodine exists at all in the Oil, the quantity is so small, according to Falker,  $\frac{1}{40,000}$ th part, according to Wackenroder, 0.162 per cent., and the specimens are so many in which no traces of the existence of Iodine can be demonstrated, that I am forced to the conclusion, that whatever virtues it possesses, they are independent of Iodine and Bromine. The conviction on my mind is, that when good is derived from it, it is to be referred to the effect of the Animal Oil in improving digestion and nutrition, rather than to the presence of Iodine; and if Popkins' impression be correct, that he has observed quite as much good to follow the daily use of fried bacon in such cases, and if it be further true, which I by no means admit, that butchers, oil-men, tallow-chandlers, tanners, and other persons who are continually coming in contact with fatty matter, are particularly robust and well nourished, and are known to be remarkably free from Scrofula, then the case in favour of the oily principle is so much the stronger. If the impression be correct, that cases are occasionally presented in which the good effects of Cod-liver Oil are remarkably apparent, and if the amelioration

seem to concur with a much improved condition as to nutrition, I conceive myself justified in assuming that the one is the consequence of the other, without being required to frame a theory why Animal Oil improves nutrition.

## SEA-WATER.

The internal use of sea-water in the treatment of Scrofula, advocated by Pliny,\* Celsus,† Oribasius, and others, among the older authorities, much employed by Russell and Speed in England, by Doberan and Vogel in Germany, by Lepecq de la Cloture and others in France, has, so far as I know, never been tried on so large a scale, as to enable us to come to any definite conclusion as to its alleged virtues. It has unquestionably been frequently employed, but almost always in conjunction with other most important agents, so that I think it probable, that under the circumstances in which it has been commonly administered, the amelioration would have been equally striking, even if the ingestion of Sea-water had not taken place at all.

The unaided effect of Sea-water taken internally, it is difficult to estimate; even Russell associated with this remedy so many other things, that people have hesitated to admit, that to Sea-water alone should be referred the credit of the effects he described. Russell's plan was to administer it, in the first place, internally, and its action as a purgative was frequently very efficacious; but at present, it is rarely employed in this way; and it has given place to the waters of Pullna, Marienbad, and others.

I have had opportunities of observing the internal employment of Sea-water, but not on a large scale, nor unassociated with residence on the coast. I have known it to be taken to the extent of a pint before breakfast, and to be attended with discomfort to the patient, from the profuseness of its purgative action; and when its daily use has been persisted in, the depressing effects which have resulted, have been injurious. But used daily, to the extent of a small tumbler, with an equal quantity of milk, and taken

\* Lib. ii, et xxxi.

† Lib. iiii.