

Observations on the remarkable effects of iodine, in bronchocele and scrophula : being a translation of three memoirs / originally published in the Bibliothèque Universelle ; by J. R. Coindet.

Contributors

Coindet, Jean François, 1774-1834.
University of Glasgow. Library

Publication/Creation

London : [Printed for Longman, Hurst, Rees, Orme, Brown, and Green], 1824.

Persistent URL

<https://wellcomecollection.org/works/rmr2xdaw>

Provider

University of Glasgow

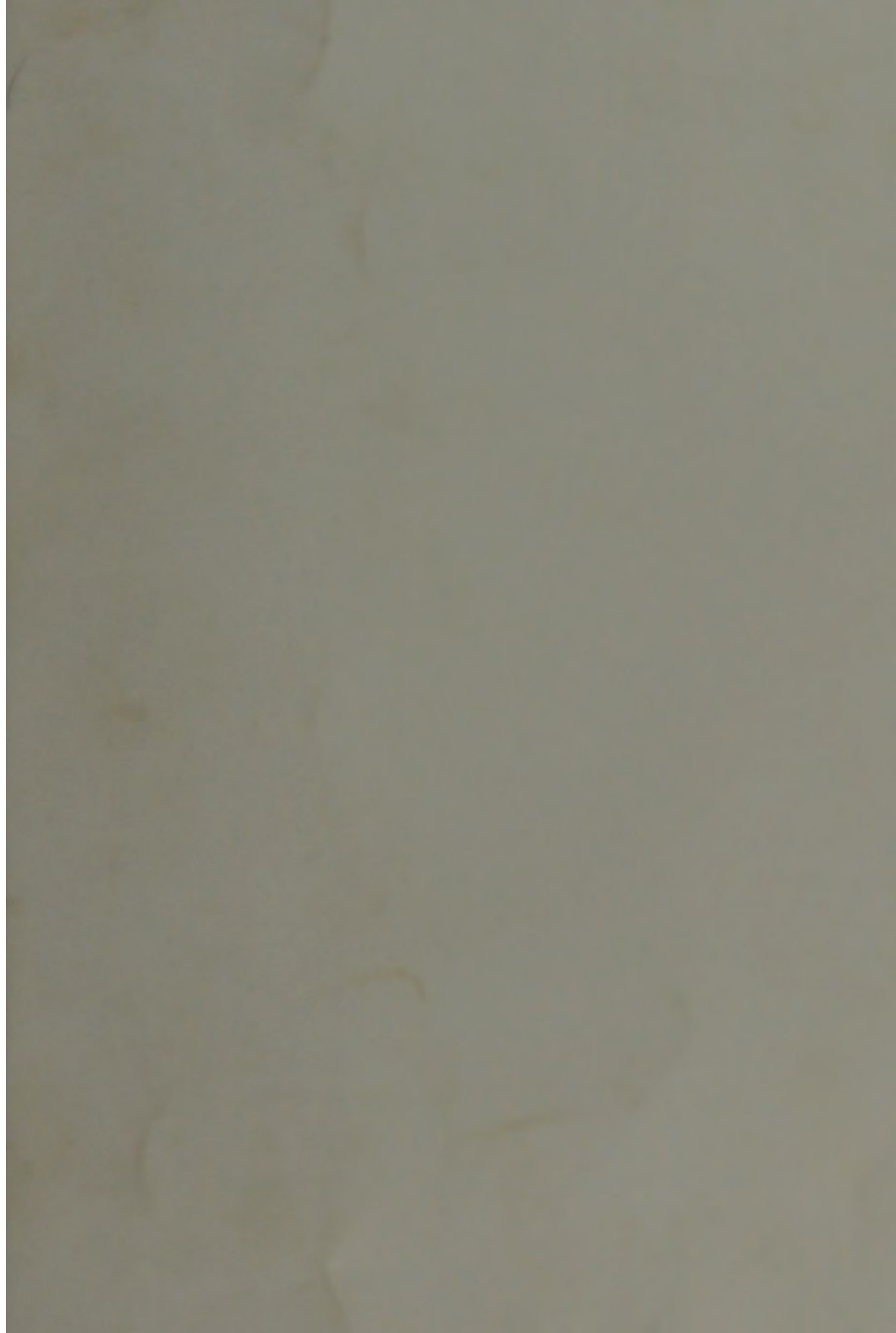
License and attribution

This material has been provided by This material has been provided by The University of Glasgow Library. The original may be consulted at The University of Glasgow Library. where the originals may be consulted. This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>





8

OBSERVATIONS
ON THE REMARKABLE EFFECTS OF
IODINE,
IN
BRONCHOCELE AND SCROPHULA,

BEING
A TRANSLATION OF THREE MEMOIRS
ORIGINALLY PUBLISHED IN THE BIBLIOTHEQUE UNIVERSELLE.

By J. R. COINDET, M.D.
(OF GENEVA.)

SECOND EDITION:
WITH
CASES FROM THE MEDICAL JOURNALS AND OTHER SOURCES
FURTHER ILLUSTRATIVE OF ITS EFFICACY.

LONDON:
PRINTED FOR
LONGMAN, HURST, REES, ORME, BROWN, AND GREEN,
PATERNOSTER-ROW.

1824.

Printed by A. & R. Spottiswoode, 25, Abchurch Lane, London, E.C. 4.

LONDON:

LONDON:

Printed by A. & R. Spottiswoode,
New-Street-Square.

*Extracts from the Edinburgh Medical and Surgical Journal,
and Medico-Chirurgical Review.*

“Of the great powers of iodine in the cure of bronchocele, we think we cannot, from the evidence before us (the observations of Brera and Coindet), legitimately doubt; and the establishment of this single fact is sufficient, in our minds, to entitle the remedy to the greatest consideration. So rarely, indeed, are we presented, in the practice of medicine, with agents of specific powers, on whose efficacy, in the removal of disease, we can calculate with any thing like certainty, that it invigorates, at once, our confidence in medicine, and our zeal in the practice of it, when we fall upon a remedy on which we can pretty confidently rely, even although the sphere of its operation be confined to a single form of disease. If, then, it be true that *iodine*, whether in the form of burnt sponge, or kelp, or under a more scientific aspect, is capable of removing a considerable proportion of goitrous humours, even of many years’ standing, we shall be willing to give it a high place in the *Materia Medica*, even if its powers should be entirely confined to this class of affections.”

— *Medico-Chirurgical Review for March 1823.*

“The physicians and surgeons of France, of Italy, Germany, and of England, have, since the publication of Dr. Coindet’s *Memoirs*, in 1820 and 1821, been zealously occupied, in hospital or in private practice, in ascertaining the powers of iodine, and observing its effects; and though, perhaps, in some respects, it has been misapplied, and in others its virtues have been overrated, it cannot be doubted, that it possesses strong claims to the attention of the bold and judicious practitioner. Among a considerable number of writings which have appeared chiefly on its merits, and on its mode of administration in various forms, the three monographical treatises of Dr. Coindet, Professor Brera, and Dr. Gairdner, may be supposed to communicate very just views of the real merits of iodine and its preparations. Dr. Coindet’s short treatise, as translated by Dr. Johnson, of Bristol, consists of three memoirs, in which the history of its introduction, its several pharmaceutical preparations, its effects in the cure of goitre, and its influence on the economy in general, are clearly and correctly related. It is the most original, and, perhaps, the fairest and most perspicuous statement of the virtues of the remedy.” — *Edinburgh Medical and Surgical Journal for July 1824.*

"Of the great powers of iodine in the cure of bronchitis, we think we cannot doubt from the evidence before us (the observations of Hirsch and Gubler), especially double; and the establishment of the single fact is sufficient in our minds to enable the remedy to the greatest consideration. So much, indeed, is the practice of medicine with agents of specific power, or whose efficacy in the removal of disease we can calculate with any thing like certainty, that it is impossible at once, our confidence in medicine, and our skill in the practice of it, were we left upon a remedy to which we can never confidently rely, even although the power of its operation be confined to a single form of disease. It is true that iodine, whether in the form of tincture, or of any other more scientific preparation, is capable of removing a considerable proportion of goitrous humours, even in many cases; and though we shall be willing to give it a high place in the list of remedies, even if its power should be entirely confined to this class of affection."

The physician and surgeon of Berlin, Ger-
many, and of England, have, since the publication of Dr. Comber's Memoirs, in 1820 and 1821, been zealously occupied, in hospital or in private practice, in ascertaining the powers of iodine, and observing its effects; and though, perhaps, in some respects, it has been misapplied, and in others its virtues have been overrated, it cannot be doubted, that it possesses strong claims to the attention of the bold and judicious practitioner. Almost a considerable number of writings which have appeared chiefly on its merits and on its mode of administration in various forms, the three monographs of the Comber, Professor Brown, and Dr. Gubler, may be supposed to contain the very latest views of the real merits of iodine and its preparations. The Comber's short treatise, as translated by Dr. Johnson, of Edinburgh, consists of three memoirs, in which the history of its introduction, its several pharmaceutical preparations, its effects in the cure of goitre, and its influence on the economy in general, are clearly and correctly related. It is the most original, and perhaps, the finest and most perspicuous statement of the virtues of the remedy. — Edinburgh Medical and Surgical Journal for July 1821.

P R E F A C E.

AN opinion having prevailed of late, among certain medical practitioners, rather unfavourable to the employment of iodine, arising, I conceive, from their not having employed it in the manner, and under the restrictions laid down by Dr. Coindet, I have been induced to republish this gentleman's Observations; and, with the view of still more deeply fixing the public attention upon a remedy, which, if not a specific for the diseases in which it has been recommended, may be yet advantageously and beneficially employed, I have judged it expedient to annex a few cases from the Medical Journals and other sources, fully and satisfactorily attesting its efficacy.

Various have been the opinions from time to time entertained respecting the merits of this new remedy; by some, it is contended that it is inefficient and inert; by others, that its use is attended with danger. The history Dr. Gairdner has given us in his recently published "Essay on the Effects of Iodine, &c." in which the several untoward symptoms arising from its employment are minutely detailed, would be sufficient to awaken the fears of the boldest and most experienced practitioner, were we not also informed, that these several symptoms proceeded from the mal-

administration, and *mal-administration only*, of this very powerful and active agent. "The remedy," the Doctor remarks, "succeeded as usual in greatly diminishing the tumour, and for some time no bad effects were apparent. A *small hard knot* only remained, in the situation which had been occupied by a *considerable swelling* before." Had the iodine been at this period discontinued, this case, I am firmly persuaded, would have been brought forward as one highly in proof of its efficacy; but, "the desire to get rid of this *little tumour* was the cause of the remedy being pushed too far."* It may not be out of place here to remark, that a thickening of the integuments, or some small remains of the tumours have existed, even after the cure had been considered effected. Had the iodine in such cases been continued with a view to their complete and total eradi-

* Dr. Gairdner, after remarking that this young lady "was a miserable monument of the effect of iodine," observes, "I heard of her a few weeks ago; she was then much better, had in a great degree recovered her looks, and was able to leave off the use of opium almost entirely. Her stomach, however, still remained very weak, and obliged her to be very careful of her diet. The bronchocele *had not returned*; but the small hard swelling mentioned above, remained still very sensible to the touch, but *not evident to the eye*." Here, then, we have in *this very report* a striking proof of the efficacy of iodine in removing bronchocele; all the ill effects that followed are entirely attributable to its improvident and unguarded use. "These," continues the Doctor, "are the outlines of a very severe case. I trust that such a one is not likely to occur soon again. But if practice so daring as I have more than once witnessed, in London, be repeated, we may very soon see even worse accidents than the above." I have been the more particular in alluding to this case, because I am sensible those who feel disinclined to employ the iodine bring it forward, rather triumphantly, to prove the disastrous effects attending the administration of this powerful remedy.

cation, I question not but a train of symptoms would have occurred equally appalling.

In regard to this powerful medicine, Dr. Gairdner observes, "If used with due discretion, and properly watched, I have no hesitation in affirming, that it may be employed with *as much safety* as any of the powerful remedies which are daily in the hands of the least skilful members of the profession. I have used it *myself* in a *great number* of cases, and I have never yet, in my own practice, had occasion to regret the occurrence of any of the violent symptoms I have described."

Dr. De Carro, of Vienna, remarks, "That neither failures nor accidents *of any kind* have happened, to his knowledge, in about one hundred cases which have been treated with iodine."

Dr. H. S. Roots observes, "Much has been said of the alarming symptoms occasionally consequent on the administration of iodine. On reference to my note book, I find, that I have prescribed its various preparations in somewhat more than three hundred cases, but *in no one instance* have I witnessed any of these alarming effects."

Dr. Baron says, "I know no remedy possessed of equal power that is *so manageable*, and which may be rendered productive of so much benefit, with so little injury to the constitution."

Mr. Austin remarks, "When experience had taught me the necessity of watching closely the effects of this medicine, and *of discontinuing its use for a time on the appearance of any thing unpleasant*, I must say I have found it *very manageable* and *its effects nearly certain*."

In the opinion, therefore, of these gentlemen, and others who have had the most extensive opportu-

nities of trying the powers of this new remedy, there is no more reason to apprehend danger from the employment of *iodine, if judiciously administered*, than from any other equally active medicinal agent.

On account of the very great excitement that iodine is known to produce upon the general system, giving rise, according to Dr. Coindet, to a strange peculiar disease, from its too great action upon the absorbent vessels; he now, we are informed, seldom administers it internally, contenting himself with simply prescribing the ointment of the hydriodate of potass. Dr. Baron, however, is of opinion, and here he is supported by professor Brera, that "mere friction or inunction will not in many cases be successful, without also giving it internally;" observing, that from its internal administration, he has scarcely found any of those inconveniencies to arise, mentioned by Dr. Coindet.

A circumstance to which I would particularly direct attention, is, the necessity of ascertaining, previous to its employment, the *purity* of its various preparations. What Dr. Paris has stated, in reference to the croton oil, will be found equally applicable to the present medicine; that, "from being an expensive article, it is frequently adulterated; a circumstance which will, of necessity, prevent the general use of the article, and occasion very different reports with respect to its value and activity."

From idiosyncrasy or other causes it will occasionally happen, that iodine, notwithstanding every care in its preparation, proves totally inert. Magendie once took a quantity of the tincture, containing nearly a scruple of iodine, without its producing any ill effects, and Dr. Kennedy in one case administered it from two to, at length, eighteen grains

daily, exhibiting in the whole nine hundred and fifty-three grains, without any advantage. In these instances it cannot be supposed that the iodine was improperly prepared or even adulterated; the former gentleman is too well known for his experimental investigations to admit any such supposition, and the iodine employed by the latter was procured from Dr. Ure of Glasgow. If, however, from its inertness in these cases, any discredit is to attend this remedy, we may, if so inclined, adduce parallel instances of inefficiency, in respect to some of the most valuable and active articles of the *Materia Medica*.

It is from this uncertainty, as well as the ill effects *occasionally* attending its administration, that Dr. Coindet takes so frequent an occasion of impressing upon the medical practitioner, the necessity of acting with extreme caution and wariness during its exhibition; he recommends him never to prescribe it unless he can see his patient from day to day, to give it in moderate doses, suspend it in proper time, avoid that injurious state denominated *Iodization*, and forbid its use in all those cases wherein it is likely to prove unavailing or injurious; in this way, he adds, the fault of the individual will not be cast on the remedy itself.

I may here observe, that so far is Dr. Coindet from regarding the iodine as a specific for bronchocele, or any other disease in which he has urged its employment, that he frequently mentions the local treatment to be pursued during its use. The following extracts from his *Memoirs* are sufficiently conclusive.

“Iodine ought never to be immediately or indiscriminately administered in every case of goitre, for there are some cases in which there exists a true

local inflammatory state, evidenced by tension, acute pains, &c. &c. In such cases, previously to the employment of iodine, leeches and emollient fomentations should be applied to the goitre, and a few antispasmodics taken, or rather those remedies which re-establish the state of the stomach, without which the action of iodine can scarcely be supported." P. 18.

" I have frequently known iodine produce no sensible effect upon the goitre, when a few applications of leeches have effected a complete and rapid cure." P. 25.

" It is not sufficient, then, to prescribe iodine in goitre, scrophula, or any other such state of the lymphatic system; there are other indications to fulfil previous to our obtaining the full success of this valuable remedy." *Ibid.*

From the intimation recently given me of the iodine fast sinking into disrepute, it may seem rather extraordinary that I should again put these Observations to press, with but few cases in its support, and with not even one that has fallen under my own notice. My ill state of health, hitherto preventing me from resuming my professional duties, is my only apology, and the slight probability of a second Edition being ever required, held out little or no inducement to collect additional cases.

I am willing to admit that the paucity of cases hitherto recorded (two or three of the most interesting of which will be found in the Appendix,) by no means warrants us in the belief of the iodine being that valuable remedy it has been represented. Still I must be excused in supporting the opinion, that it has not yet obtained in this country a free and

impartial trial.* Granting, however, that it may have been employed *in this country* extensively and generally, and as it would seem, without much advantage, still I cannot admit this as any drawback upon its merits, unless it should have been administered with those precautions so frequently alluded to by Dr. Coindet, and which form so essential a part of that gentleman's practice.

In the medical institutions of this city, the iodine, as far as it has been employed, has not, I am informed, been productive of any very decided or lasting benefit. It has also been tried here in private practice, but with no great advantage. This circumstance would be sufficiently discouraging, were I convinced of its having been prescribed with impartiality, and without prejudice.

If not to this, to what cause are we then to attribute it, that iodine should have been attended with

* In the reviews of the three several publications on iodine, the present memoir, the work of Professor Brera, and that of Dr. Gairdner, it is asserted that this is the case; and in remarks on the latter publication in the *London Medical and Physical Journal* for *April* 1824, it is stated, "We have heard of iodine being given—nay, we have *even* prescribed it ourselves; but, in the former case, the accounts were vague and contradictory, and in the latter, the practice was timid, and perhaps on that account unavailing." But what is more in point, Dr. Gairdner himself, after remarking that it had been employed by several eminent practitioners of London, who, finding it quite inert, had laid it aside as useless, observes, "But I know also, that it has been hastily rejected, *and without trial*, by some persons grown old in the practice of physic, who have made their interests decidedly to consist in defending all that is old, and repudiating all that is new. Such persons expose themselves to ridicule when we see them reject a remedy so active as iodine, and continue to trust, for the cure of the severest diseases to which the human frame is liable, to medicines allowed on all hands, and *ven by themselves*, to be absolutely useless."

so little benefit, generally speaking, in this country, whilst in Germany, France, and Italy, it should still maintain, especially in the cure of bronchocele, its first reputation?*

Whether the iodine will or will not ultimately maintain its ground, or be received into the *Materia Medica*, can only be determined by future practice and observation. Of this I am well assured, that it comes before us with at least as strong a claim to notice as any new remedy brought forward within the last ten years, although it may be doomed to experience the like fate of many of its predecessors, and be known hereafter by scarcely any thing more than its name.

In conclusion, I would advise those who may be desirous of employing the iodine;

1. To take it up *unprejudiced*, giving it a full, free, and impartial trial.

2. To be assured of the *purity* of its several preparations.

3. To see that it be *carefully* and *regularly* administered, noticing its effects from day to day.

4. To suspend it from time to time as occasion may require.

5. To forbid its use in all those cases wherein it is likely to prove injurious or unavailing. And,

6. Not to condemn or convey a sweeping censure upon a remedy, because it does not in *every instance* prove successful.

* "Since the publication of Dr. Coindet's Memoirs, iodine has been employed by many practitioners of eminence, as for instance, by Dr. Decarro of Vienna, Formey of Berlin, Magendie and Gimelle of Paris, Sacco and Omodei of Milan, Fenolio of Turin, and lastly, by Professor Brera of Padua; in the hands of all these it has been most successful in the cure of bronchocele, and has been considered, by some of them, as a valuable medicine in other diseases." — *Medico-Chirurgical Review*.

By a steady pursuance of this plan, the merits of iodine would, in a short time, be duly and accurately determined.

Three very interesting letters, from J. B. Austin, Esq., of Farnham, Surrey, Dr. H. S. Roots of London, and Dr. Baron of Gloucester, to whom I feel greatly indebted for their prompt and obliging replies, will be found in the Appendix. The statements therein given, together with the valuable cases extracted from the late publication of Dr. Baron, "Illustrations of the Enquiry respecting Tuberculous Diseases," will, it is to be hoped, have their due weight with those who are *at present* sceptical as to the virtues of iodine, and induce others who, for various reasons, might have abandoned its employment, to give it *once more* a full and impartial trial. If it receive this trial, to which in common justice it is fairly entitled, we shall soon be enabled to determine, whether it is deserving of that high encomium bestowed upon it in the ensuing pages; or of that moment, as to entitle it to a place among the leading articles of the *Materia Medica*.

J. R. JOHNSON, M. D.

Bristol, Sept. 10th, 1824.

By a steady persistence of this plan, the merits of
 iodine would, in a short time, be duly and accurately
 determined. These very interesting letters, from W. H. Adams,
 Esq. of Lantham, Surrey, Dr. H. S. Rogers, & J. G. Col-
 don, and Dr. Watson of Gloucester, to whom I feel
 greatly indebted for their prompt and obliging re-
 plies, which are found in the Appendix. The state-
 ments given, together with the valuable cases
 extracted from the same, published by Dr. Watson,
 a History of the Economy respecting Iodine, and
 Diseases, will, it is to be hoped, have the same
 weight with those who are at present sceptical as to
 the virtues of iodine, and induce others who, for
 various reasons, might have abandoned the employ-
 ment to give it a more full and impartial trial.
 It is reserved this trial, to which no common justice
 it is fairly entitled. We shall soon be enabled to de-
 termine, whether it is deserving of that high en-
 comium bestowed upon it in the ensuing pages; or
 of that moment as to entitle it to a place among the
 leading articles of the Medical Art.

J. R. JOHNSON, M.D.

Printed by J. R. Johnson, 1824

In Demy Octavo, Price 8s. boards, (with two illustrative Engravings)

A TREATISE ON THE MEDICINAL LEECH, including its medical and natural history; with an account of its very singular anatomical structure. By JAMES RAWLINS JOHNSON, M. D. (of the University of Edinburgh.)

"THE utility of the leech in the practice of the healing art, especially in the country, where cupping is not commonly successfully performed, renders every thing connected with its history interesting. We must refer to the volume before us for what regards the medical, natural, and anatomical history of the leech, where the reader will find much information and some novelty."—*Edinburgh Medical and Surgical Journal*.

"Notwithstanding the importance of the leech in a medical point of view, and the employment of it for the abstraction of blood since very early periods, yet it is remarkable that so little had been done to investigate its natural history. Dr. Johnson has endeavoured to fill up this blank, and has executed the task in a very satisfactory manner."—*London Medical Repository*.

"The faculty will be much obliged to Dr. Johnson, for supplying a desideratum, which, if we may judge by our own feelings, has long existed. Animals so perpetually in our view, and even in use, the scarcity of which has been so severely felt, claim an interest which it is by no means creditable to have so long overlooked. The interest we have felt in this work has induced us to protract our account longer than such an article might seem to admit. To recommend it would be superfluous, since the medical practitioner will find an interest in every part."—*London Medical and Physical Journal*.

Printed for Messrs. Longman, Hurst, Rees, Orme, Brown, and Green.

OF WHOM MAY ALSO BE HAD,

In 12mo. 9s. boards, with Illustrative Engravings,

RESEARCHES INTO THE NATURAL HISTORY OF ANTS, By M. P. HUBER, Member of the Physical and Natural History Society, Geneva, and Corresponding Member of the Natural History Society of Tarne and Garonne, &c. — Translated from the French, with additional notes, by J. R. JOHNSON, M. D. &c.

"AMONG the modern authors who have paid attention to the history of ants, may be enumerated, Leeuwenhoeck, Swammerdam, Linné, Bonnet, and the illustrious Swedish entomologist, De Geer. Gould, also, who though no systematical naturalist, was a man of

sense and observation, has thrown great light upon the history of ants, and anticipated several of what are accounted the discoveries of more modern writers on this subject. Latreillé's *Natural History of Ants* is likewise extremely valuable, not only as giving a systematic arrangement and description of the species, but as concentrating the accounts of preceding authors, and adding several interesting facts *ex proprio penu*. The great historiographer of ants, however, is M. P. Huber, who has lately published a most admirable and interesting work upon them, in which he has far outstripped all his predecessors."—*Introduction to Entomology, by Kirby and Spence*, vol. ii. p. 48.

"On the concluding chapter, which presents us with some general considerations respecting the talents and characters of insects, as they are affected by social or solitary habits, we forbear to touch, both because we have already allotted so much room to the more immediate objects of this captivating volume, and because we prefer the author's statements of matters of fact to the reasonings which he would deduce from them. We cannot, however, close our report without warmly recommending the perusal of his work to the old and the young, to the serious and the gay; nor without expressing our most ardent desire, that M. Huber may be long enabled to persevere in that line of observation for which he is so conspicuously qualified."—*Appendix to Monthly Review*.

ing a desideratum, which, if we may judge by our own feelings, has long existed. Animals so peculiarly in our view, and even in use, the scarcity of which has been so severely felt, claim an interest which it is by no means creditable to have so long overlooked. The interest we have felt in this work has induced us to protect our account longer than such an article might seem to merit. To recommend it would be superfluous, since the medical practitioner will find an interest in every part."—*London Medical and Physical Journal*.

Printed for Messrs. Longman, Hurst, Rees, Orme, Brown, and Green.

OF WHOM MAY ALSO BE HAD,

In 12mo. 1s. boards, with illustrative Engravings.

RESEARCHES into the NATURAL HISTORY of ANTS.
By M. P. Huber, Member of the Physical and Natural History Society of Geneva, and Corresponding Member of the Natural History Society of Paris and Göttinge, &c. — Translated from the French, with additional notes, by J. H. Johnson, M. D. &c.

"Among the modern authors who have paid attention to the history of ants, may be enumerated, Latreillé, Stenmark, Linné, Bonnet, and the illustrious Swedish entomologist, Dr. Götting. Gould also, who though no systematical naturalist, was a man of

OBSERVATIONS ON IODINE,

&c. &c.

MEMOIR I.

DISCOVERY OF A NEW REMEDY FOR BRONCHOCELE; COMMUNICATED TO THE HELVETIAN SOCIETY OF NATURAL SCIENCES ASSEMBLED AT GENEVA, JULY 25. 1820.

ABOUT a year since, whilst seeking a formula in the work of *Cadet de Gassincourt*, I found that Russell had recommended for bronchocele the *fucus vesiculosus*, under the name of *Æthiop's vegetabilis*.

Ignorant at that time what relation could exist between this plant and sponge, I suspected, from analogy, that iodine was the active principle in both these marine productions; I therefore tried it, and the astonishing success obtained from its use, induced me to continue my researches, which were the more useful, as they tended to the discovery of what we had to expect, from a medicine as yet unknown, in a disease, which, when it occurs in advanced life, or when the tumours which constitute it have acquired a certain degree of bulk and hardness, is so difficult of cure.

The bronchocele, or goitre, is, for the most part, an indolent tumour, formed by the development of the thyroid gland, — occupying its centre, either of its lobes, or even its entire substance. It often happens that several lobules are developed upon a lobe already augmented in volume, which form prominencies that may ultimately become the seat of some organic affection.

Goitres are known to acquire an extensive size, and weigh several pounds. It is of rare occurrence, if, under these circumstances, we do not meet with deep organic lesions, or find the centre of these tumours, cartilaginous, cretaceous, or osseous; should they ulcerate, the ulcers are neither phagedenic nor painful, differing in this respect to what happens with lymphatic ganglions.

It not unfrequently happens, that, independent of these organic changes, the centre of these tumours consists of distinct sacs, containing different fluids, sanguine, purulent, gelatinous, aqueous, &c., similar in all these appearances to the cysts of the ovaries.

The organic alterations of the goitre probably depend upon acute, or even dull or obscure pains, or may arise from spasms, contractions, or swellings, which the patients experience, particularly about spring, on the change of season, or the approach of critical periods, symptoms too often despised or neglected, but which, to obviate their effects, would, in a great number of cases, demand a peculiar mode of treatment.

Medical practitioners have been greatly deceived by the false denomination of thyroid gland. It is not, perhaps, a gland; (and this will afford an explanation why the goitre is an affection essentially distinct from scrophula)—it is an organ whose use is unknown. It differs in size according to age and sex; it is larger in the infant than in the adult, in women than in men; it varies in the colour of its tissue; we are unacquainted with its intimate nature; it has no particular coat, nor any excretory duct; it possesses nerves, and blood-vessels, which are proper to it. These last acquire, in their development, a considerable bulk, and thereby render the excision of the goitre frequently impossible, and almost always dangerous.

One of the forms of goitre, not uncommon, is what we vulgarly name *goitre en dedans*, in which the development of one or both lobes takes place in the

interior. It embraces the tracheal artery, which it compresses and flattens to a certain extent. The voice becomes affected — the respiration considerably embarrassed, particularly if the patient has taken exercise or walked much. It projects but little externally.

Such cases, which are, fortunately, of rare occurrence, were so much the more distressing, as, until the present period, all assistance from art had been unavailing. By the use of iodine, I have known a patient at first relieved, and shortly after cured, when nearly suffocated.

The immediate cause of this singular disease, which we should not confound with cretinism and scrophula, is still unknown; it has only given birth to erroneous hypotheses, or to conjectures, sanctioned by the names of illustrious individuals, who have considered it more like philosophers than physicians, and who have given credit to some general observations, or popular prejudices, which will not bear the slightest examination, since the goitre is endemical in those countries in which the causes, these authors think contribute to its formation, do not exist; and we find certain districts where this disease is scarcely known, in the neighbourhood of other districts, where nearly the whole of the inhabitants are affected with it, although they are both apparently submitted to the same influences of air, water, winds, mode of life, &c.

Two different causes have, in my opinion, produced the goitre at Geneva; the first, which is occasioned by the use of hard waters, or the pump-water of the lower streets in the city, brings on the goitre very speedily. Thus the soldiers of the garrison, composed especially of young persons, strangers to the canton, who drank these waters, were affected with it in a very remarkable and rapid manner. This form of the disease, rarely of any moment, passes readily away on changing the drink: distilled water hinders its increase, and even contributes to its

diminution. I have had occasion to remark, that this cause often leaves behind a trace of the goitre, which, at an after-period, becomes developed.

The second is connected with causes, some of which may be considered as mechanical and local — others, as physiological; the former are produced by the effect of laborious parturition, vomiting, coughing, crying, anger, or by the custom of the women in this place bearing heavy burthens upon their heads; they affect, more especially, the lower class of society. The latter operate, more particularly, upon the female sex, and seem attributable to that sympathy which exists between the neck and generative organs. Hence it is that the goitre takes place more frequently during a first pregnancy, becoming larger each succeeding one; this also happens even during the period of suckling.

In many cases it is developed on the approach of the critical age; chagrin, nervous attacks, moral affections, also contribute to its formation. These different circumstances explain, why in the adult age the goitre is much more frequent among women than men.

The thyroid gland is susceptible of becoming considerably inflated, almost instantaneously, during a certain period, and of afterwards recovering its former condition. A goitre becomes particularly developed during the first pregnancy of a young woman; twelve hours after delivery it has entirely disappeared.

Calcined sponge has hitherto formed the basis of all those remedies which have had any success in goitre. We are indebted to *Arnoldus Villanovanus* for its introduction. It has been given under the form of wine, troches, powder, &c. almost always combined with tonic medicines, to destroy its unpleasant action upon the stomach; but whatever corrective we employ, it occasions spasms of this organ, which, continuing long after the remedy has been

discontinued, produce in some instances, a chronic malady difficult of cure.

These unpleasant symptoms occur more particularly when the goitre is of great magnitude, and the patients far advanced in life:—the preparations of sponge seldom produce those effects upon infants where it is of little size, and more recent. The spasms have been attributed to the disappearance of the goitre, but they probably depend on some peculiar unknown combination in calcined sponge, since iodine produces nothing like it, whilst it removes goitres of a larger size, and much more rapidly than sponge, or any of its preparations.

What, then, is that peculiar substance in sponge which acts in so specific a manner in goitre? It appeared to me probable that it was iodine, and this opinion was confirmed, on my learning that Mr. Fyfe, of Edinburgh, had discovered iodine in sponge towards the close of 1819, when I had already witnessed for six months its surprising effects in this malady.

Iodine exists in so small a quantity in sponge that it is impossible to determine the relative proportion in any given quantity; what I employed was obtained from the mother-liquor of the several *Fuci*.

Iodine, thus called from the fine violet colour it assumes in the state of gas, does not appear to form one of the constituent parts of marine productions; it would seem to be only of accidental occurrence, since it does not exist in those alkalies that are prepared in Sicily, Spain, and the Roman states. Sponge washed and macerated previous to its analysis, yields a much less quantity.

A peculiarity of this substance but little known, is, that of its forming an acid when combined with either oxygen or hydrogen. The salts produced by its combination with oxygen being little soluble in water, I have not employed them. I prefer those obtained from hydrogen, for which iodine has so great an affinity, that it seizes upon it, wherever found, forming an acid known under the name of

hydriodic acid. It saturates the several bases, and forms neutral salts. From these I have selected for medical use, the *hydriodate of potass*. I have also employed with equal success the *hydriodate of soda*. The *hydriodate of potass* is a deliquescent salt, forty-eight grains of which represent very nearly thirty-six grains of iodine. This quantity, dissolved in an ounce of water, is what I most frequently employ.

The solution of this salt, in a sufficient quantity of water, may take up still more iodine, and thus form an *ioduretted hydriodate of potass*, a peculiarity of which I have availed myself to increase the power of the remedy in those cases where a goitre of hard consistence, great bulk, or long duration, would seem to resist the action of the simple saline solution; in this way I have often obtained the most remarkable cures.

Iodine will dissolve in a certain proportion in ether and spirits of wine. Gay Lussac found that water dissolves 1-7,000th its weight.

One ounce of spirits of wine at 35° of concentration, 852 density, dissolves at 15° of Reaumur, (67° Fahrenheit) and under the ordinary pressure, 60 grains of iodine, or about one-ninth part of its weight; at 40° of concentration, and under the same condition, it dissolves 84 grains, or about one-sixth, from whence it appears that spirit of wine dissolves more or less according to its strength.

To avoid all error in the dose in this third preparation, which I employ under the name of tincture of iodine, I am in the habit of prescribing 48 grains of iodine, to one ounce of spirits of wine at 35°.

This preparation I have employed more frequently than the preceding, (perhaps with greater success) on account of its being easily prepared in places where we cannot always find apothecaries sufficiently instructed to obtain pure saline *hydriodates*, deeming it the principal object of my researches, to be assured of the effect of a remedy I am anxious may pass into into general use.

The tincture should not be prepared long before its use, since it gives place to a crystalline deposit of iodine; besides, from the great quantity of hydrogen the alcohol contains, and its great affinity for iodine, it is speedily converted into *ioduretted hydriodic acid*.

This is doubtless an exceedingly active remedy, but as there are, in certain cases, reasons for preferring one of the three preparations before mentioned, they should each be *duly prepared*, to render the treatment more effectual, and to allow of our drawing a just inference.

I prescribe for adults ten drops of either of these preparations in half a glass of capillaire-syrup and water, taken fasting, at an early hour in the morning; a second dose at ten o'clock, and a third in the evening, or at bed-time.

Towards the end of the first week, I prescribe fifteen drops in place of ten, thrice a day; a few days after, when the iodine produces a sensible effect upon the tumours, the dose is increased even to twenty drops, to keep up its action; twenty drops contain about one grain of iodine.

I seldom exceed this dose, which I find sufficient to dissipate goitres of the greatest bulk, provided they are only an excessive developement of the thyroid gland, without any other organic affection.

After about eight days' treatment in this way, the skin becomes less tense, and seems a little thickened; the tumour, previously to its diminution, softens, which is readily perceptible to the touch; a few days later this softening is much more evident; the goitres, (or goitrous tumours, if several exist), become more distinct and separate, and in many instances soften and dissolve gradually.

The nucleus which forms them, or to speak more correctly, the parts organically diseased, become yarder, lessen in size, and then separate; some of these tumours become moveable, in proportion as those surrounding them are dissolved by the iodine;

hence arises an incalculable advantage of this powerful remedy in those serious cases where an operation is indispensable, for in diminishing the volume of the goitre, and permitting, in consequence, at the end of a certain period, the arteries and veins, which have been considerably dilated, to recover their natural condition, the operation becomes less difficult and dangerous.

Some of those tumours that appear goitrous resist the action of this remedy under whatever form I prescribe it, and however long its use is continued. I have, however, reason to believe that these are not real goitres, or at least that their entire substance has undergone some organic change.

The cellular tissue which surrounds the tumour, remains in some cases swollen, and imparts to the touch the sensation of an empty cyst.

A goitre is often dissipated incompletely, yet sufficiently so as to occasion neither inconvenience nor deformity.

In a vast number of cases it is removed in from six to ten weeks, and in such a way as to leave no trace of its existence. To obtain the full and isolated effect of this remedy, and that it should be free from every foreign combination, I have avoided making use of any local applications — such as *sachets*, *colliers*, &c. which by the compression they produce, as well as from the saline or resolute substances that enter into their composition, are not wholly inefficacious.

Iodine is a stimulant; it gives tone to the stomach and excites appetite; it neither acts upon the bowels nor kidneys; produces no perspiration, but exercises its action upon the generative system, especially the uterus. If given in a certain dose and continued for some time, it is one of the most active emenagogues with which I am acquainted; it is perhaps from this sympathetic action, that it so frequently cures the goitre.

I have employed it with complete success in one

of those cases of *chlorosis*, where I should have otherwise prescribed myrrh, preparations of iron, &c. had I not suspected this peculiar action.

This substance again merits, even under this new point of view, the attention of medical practitioners, and I make no doubt of its becoming, under skilful hands, one of the most powerful remedies with which modern chemistry has enriched the *Materia Medica*.

MEMOIR II.

FURTHER RESEARCHES UPON THE EFFECTS OF IODINE, WITH THE PRECAUTIONS NECESSARY TO BE OBSERVED IN THE TREATMENT OF GOITRE BY THIS NEW REMEDY.

AT the time I communicated to the Helvetian Society of natural sciences, assembled at Geneva, my discovery of a new remedy for the cure of bronchocele, I had assured myself, during the space of a year, of a sufficient number of facts, fully confirming the effects of this powerful specific, and at the same time proving it to be in no-wise injurious. *

Since that period I have been informed of the distressing and unpleasant symptoms peculiar to iodine, which have manifested themselves in persons, who from their rank and talents have excited public

* I was well aware of the pecuniary advantage I might derive from my discovery, had I wished to have kept it a secret remedy; but, independently of such speculation being beneath the dignity or respect that a physician owes to the honourable profession he exercises, I experienced such delight in thinking, that, as a Swiss practitioner, I had discovered a remedy adapted to a complaint of such frequent occurrence, and almost endemical in my native country, that I hastened to render public the fruit of my researches.

attention in this city. The employment of this remedy has been therefore strongly decried, such terror excited, and such strong opposition shown, that I can only compare it to the clamours raised against antimony, and inoculation for the small and cow-pox.

I ought, however, to render homage to truth, by observing that those of my brother-practitioners, as well Genevese as strangers, who have administered the iodine, do not decry it; but on the contrary, think it a powerful remedy, still but little known, and which should consequently be employed with discrimination and prudence.

The welfare of the public requires, that I should shew how far these reproaches and fears are well-founded, and that I should endeavour to trace their true cause.

As among 150 patients to whom I have administered iodine, or its different preparations, not one who has regularly and strictly followed my advice has been exposed (at least in any great degree) to the disastrous effects attributed to it; I have, but not without considerable chagrin, been made acquainted with what has happened to three or four persons, not one of whom was ever entrusted to my care. *

* Mr. Colladon, apothecary, has shown me a letter from Mr. Irminger, of Zurich, from which I transcribe the following passages relative to iodine: — “I have treated,” says this able practitioner, “seventy individuals of both sexes and dissimilar ages with the tincture of iodine, according to the formula and dose indicated by Dr. Coindet: two ounces of this tincture are generally sufficient to dissipate very voluminous and long-standing goitres; sometimes even a third ounce has been necessary to effect a complete cure. In some cases, the iodine has altogether failed in removing the goitre, but I have never observed it to produce any injurious effects. Children from five to ten years of age have taken this remedy in smaller doses than adults, without the least disadvantage, on the contrary, with the best possible effect.

“I prefer the tincture to the *hydriodates of soda* or *of potass*, because this preparation is more simple and less costly.

“Of the seventy individuals submitted to this treatment, none have experienced any unpleasant effects when they followed my

Confident in such success, and to render it still more striking, I begged of the faculties of medicine, chemistry, and pharmacy, assembled the 13th of January 1821, at the town-hall, under the presidency of a syndic, that if any of its members had knowledge of any alarming case, among those persons that had been committed to my care, they would have the kindness to mention it, stating I should regard such a declaration as a mark of friendship on the part of the individual who should relate it; but as no unfortunate accident had occurred, none could be cited.

One of my patients for whom I had prescribed iodine, laboured under a goitre, of the size of an ordinary apple, (*pomme-reinette*,) which was entirely removed without the least accident in the space of six weeks. I could not reflect on the astonishing activity of this remedy, to which, in this respect, no other can be compared, without immediately considering that iodine must prove a dangerous remedy if injudiciously administered; that is to say, if either prescribed in too large doses, or continued too long without any intermission, or more particularly, if given to feeble and delicate subjects, or those affected with any other disease.

I had no reason to doubt that iodine, if injudiciously administered, would produce some distressing symptoms; I have therefore refused, and I still refuse prescribing it for those with whom I suppose it will disagree, or be absolutely injurious. Selecting none but persons in other respects exceedingly

advice; so far otherwise, two-thirds have been freed from their goitres, and the rest have suffered considerable diminution; indeed there are few who have used it that have not received some benefit." This success, at which I am not surprised, looking to the acknowledged talents of Mr. Irminger, confirms the opinions I advance in this Memoir, and this we may reasonably expect from its use, when placed in the hands of able and prudent practitioners.

healthy, and observing them with much attention, I soon discovered the deviations from the state of ordinary health, and have been thus enabled to appreciate, in a very exact manner, the symptoms peculiar to this remedy. On the occurrence of any of these symptoms, I immediately suspend the iodine, and fulfil the different indications that present themselves, when the patient soon regains his accustomed health; I am then a fit judge whether I should resume, or altogether abandon its employment. With some individuals, I have considered it my duty to interdict its use after a few days' trial.

In reflecting upon the difficulty under which I have laboured, in the proper administration of iodine, and noticing those cases in which it was prudent to prescribe or suspend it, I was soon convinced, that it would be better to invite apothecaries not to sell any to the public but when ordered by a surgeon or physician, or in other words, not to sell this remedy but to those who were under the immediate care of one of the faculty; and this I should certainly have done had not a sentiment of delicacy restrained me, and a fear lest such a proceeding should be ill interpreted.

I cannot too warmly applaud the proceedings of the Council of Health, in the canton of Vaud, who took measures to regulate the sale of this remedy; and cannot but express my surprise, that physicians, who enjoy the just esteem of their brother-practitioners as men of science, and great confidence as medical practitioners, resting probably upon the experiments of Orfila, should have pronounced this remedy a corrosive poison.

But these experiments, I may remark, have no reference whatever to the manner in which I prescribe the iodine. There is no person but is well aware that certain medicines, such as the concentrated mineral acids, corrosive sublimate, arsenic, &c. have two different modes of action. When given at once, in a certain quantity, the stomach is instantly cor-

roded, but introduced daily into the stomach in doses sufficiently small not to offend it, they produce at length, in the animal economy, actions peculiar to each; and it is upon this second mode of action that the employment of these substances in medicine is founded. If, then, the Council of Health, in the canton of Vaud, or any physiologist, had wished to form an opinion upon facts, it surely should not be from those experiments, in which dogs have taken all at once inordinate quantities of iodine, such as would never be prescribed, for instance, more than two drachms, but rather from those experiments, where, in giving every day to these animals, a proportionate quantity, we should ultimately produce the symptoms peculiar to this singular substance.

It will not be useless, if I here mention the quantity of iodine employed at Geneva, in order to know in what degree it has obtained the sanction of experience.

By the reports the apothecaries have made me, there has been a sale of 140 ounces. This, at forty grains to one ounce of vehicle, supposing the mean to be two ounces for each person, proves that more than 1000 persons have been treated with it, from the time of my discovery, until the present day.

Admitting that one half of these have been treated in this city, we shall see, that not one of the heroical remedies, which physicians are in the habit of prescribing every day, such as the preparations of mercury, antimony, arsenic, opium, &c. occasions, in the same proportion, so small a number of unfortunate occurrences.

I have thought it fit to remark, that the different preparations of iodine produce an action and symptoms peculiar to each; thus calcined sponge produces very different effects from the spirituous tincture of iodine, which acts more especially upon the stomach, is of more difficult management, and produces more readily the symptoms which I term *idi-*

odic, than the *hydriodates*; of all the preparations the *ioduretted hydriodate of potass* has appeared to me the most easy to manage, and that which occasions the fewest accidents; it is on this account, I use it almost exclusively. I dissolve thirty-six grains of this salt, and ten grains of iodine, in an ounce of distilled water. I prescribe it at first in doses of from six to ten drops, in half a glass of water, sweetened with sugar, thrice a day, increasing or diminishing the dose according to its effects.

I regret not having yet employed the *hydriodic acid* alone, uncombined.

To prepare the *hydriodate of potass*, or of *soda*, the base, or its carbonate, is saturated with *hydriodic acid*. This acid may be procured by the following process:—Iodine suspended in water, or what is better, an alcoholic solution of this substance, is submitted to a current of sulphuretted hydrogen gas; the sulphur is precipitated, and the iodine unites with the hydrogen. This liquor is afterwards filtered and heated to remove the excess of sulphuretted hydrogen and alcohol; the *hydriodic acid* then remains pure.

The difference in the action of iodine, according to its preparation, is not peculiar to this substance. We find it particularly the case in mercury, to which iodine bears the greatest affinity in regard to its mode of operating; thus the grey oxyde of mercury, calomel, and sublimate, are three preparations, identical as to their base, and all employed in the disease for which this metal is the specific, but they are each prescribed according to the form of the disease, state of the patient's health, season, &c.; differing greatly in their effects.

From this consideration, I am induced to hope, that by the combined exertions of physicians, surgeons, and chemists, we shall, sooner or later, be made acquainted with other preparations, more sure, and of easier administration than those I have been hitherto accustomed to use, and sufficiently in har-

mony with the animal economy, not to be at the same time *useful and pernicious*, dependent upon the *sagacity* of those who may prescribe them.

In observing the action of iodine, a phenomenon occurred that induced me to modify my treatment ; that is, it appeared to me to saturate the animal economy, and in some cases develop the idiopathic symptoms more or less suddenly, much after the manner in which the mercurial symptoms manifest themselves ; but on examining attentively what passes, it will be found they never appear so suddenly but that the action of iodine has been previously established by a softening or diminution of the goitre, by frequency of the pulse, or by some other symptoms peculiar to it. And as it seems that all further action is not only useless, but even injurious ; for as the iodine is continued, the body is further saturated, — *it ought to be immediately suspended*. This forms an essential part of my practice, to which I attribute more particularly the success accompanying its use. I think it necessary to watch the moment when the iodine is about to manifest its action, in order to suspend it immediately, and to resume it in eight or ten days after ; that is to say, at the precise period in which the action of that previously given has ceased, to abandon it again, resume, and again suspend it, observing merely the same rules in this respect, which every prudent physician observes in the administration of mercury, a rule which I by no means think has been complied with by all those who have employed iodine, the omission of which has necessarily injured the success of the remedy.

I cannot too much press upon the attention of medical men this part of my treatment. I impose upon all my patients the express condition of calling upon me at least every five or six days, and I think it owing to the negligence of this precaution, that some have been more or less affected by iodine.

There are some individuals, who, without consulting any physician, have taken the remedy them-

selves, and continued its use until they were saturated with it; others observing, that after having used it fifteen days in the dose of ten drops thrice in the twenty-four hours, the goitre had diminished, for example, half an inch, without experiencing any unpleasant symptom, have believed that by doubling the dose they would be cured in half the ordinary time; but each have suffered from their imprudence, and my opinion has been requested when the unpleasant idiodic symptoms had manifested themselves.

Among those who have been strongly affected by iodine, I have observed the following symptoms: great acceleration of pulse, palpitation, frequent dry cough, insomnia, great loss of strength, and wasting away, swelling or tremours of the lower extremities, painful hardness in the goitre, diminution of the breasts, remarkable and sustained augmentation of appetite, and in almost all those I have seen, to the number of five or six, a very rapid diminution or disappearance, more or less complete, of a hard, bulky and ancient goitre, during the continuance of the above symptoms.

In these cases I suspended the iodine, and prescribed milk, especially ass's milk, warm bathing, valerian, kina, carbonate of ammonia, preparations of opium, and other antispasmodics. To remove the painful indurescence of the goitre, I ordered leeches and emollient fomentations. In a woman of advanced age, who laboured under tremours and palpitations, the prussic acid produced a remarkable relief, sudden but transient.

The above treatment allays these symptoms more readily than I could have imagined, but some individuals remain affected for a very considerable period with marasmus, muscular debility, and paleness.

The rapid disappearance of a goitre, either from the treatment being carried too far, or the patient being too susceptible of the action of iodine, demands the closest attention of medical practitioners,

since it proves that these severe symptoms are only the effect of too great a saturation, and points out the necessity of keeping up an action, more slow it is true, but exempt from danger.

The general duration of the treatment has appeared to me to be from eight to ten weeks.

I once witnessed a very violent action from iodine ; it is remarkable from the light it throws upon the manner in which this remedy acts. I observed it in the following case : —

A man, fifty years of age, had been affected for several years with an enormous goitre in both lobes of the thyroid gland. It was still increasing—very hard to the touch, but not painful. He complained of a sense of strangling and oppression when he walked, more especially when he ascended or descended a stair-case ; in other respects he enjoyed good health. I prescribed thirty drops a day of the solution of the *ioduretted hydriodate of potass*. On the fifth day he complained of an increase in the size of the goitre, of hardness, aphony, sharp pricking pains ; his pulse was hard and frequent. The following morning these symptoms were aggravated, accompanied with fixed acute pains in the centre of the trachea—all which he attributed to the iodine.

From the rapid manner in which he had been attacked, I was of a different opinion, and imagined he had taken cold. I suspended the iodine, and directed ten leeches to be applied to the goitre, particularly upon the trachea, an emollient cataplasm, with proper diet, confinement to bed, &c. I found on the following morning the leeches had only produced temporary relief ; return of the pains and hardness in the goitre ; further application of leeches ; repetition of cataplasm, &c. By this treatment, the patient, in about fifteen days, recovered his usual state of health, with the exception of his voice, which still remained hoarse. On examining the goitre I was not a little surprised to find it considerably diminished and softened. I now entertained

the same opinion as my patient, and considered the iodine to have been more active than I had previously supposed.

In about a month after, the patient, who was engaged in business, and had enjoyed tolerable health since the diminution of the goitre, was desirous of making a second trial of it; to which I acceded the more willingly, as the action excited by the iodine was altogether new to me, and had occasioned some doubts. I saw him every day; on the fourth, precisely the like symptoms re-appeared with equal degree of violence when the same treatment had the same success. In about fifteen days, the goitre, without being removed, was so far diminished as no longer to incommode him.

This case, interesting in more respects than one, serves to confirm me in the opinion, that nothing is more uncertain than the mean dose (*que la dose moyenne*) of iodine in the treatment of these affections, and that there are some individuals, upon whom iodine almost immediately exercises its effects, whilst with others, even after its continued use for several weeks, it excites no apparent action.

This proves how highly important it is, that a physician should *closely attend to the action of iodine*, for had this person taken the remedy unadvised, or practised the *rule of three* which has produced such unpleasant symptoms upon several who have taken it of their own accord, or had even a physician prescribed it without distrusting its effects, and not immediately discontinued it, I doubt not but this patient would have experienced the most severe and dangerous symptoms.

Iodine ought never to be immediately or indiscriminately administered in every case of goitre, for there are some cases in which there exists a true local inflammatory state, evidently shown by tension, acute pains, or a nervous state connected with contractions of the neck, or a sense of strangling, accompanied with obstruction in the respiration, and fre-

quently with a bilious habit of body. In such cases, previously to the employment of iodine, leeches and emollient fomentations should be applied to the goitre, and a few anti-spasmodics taken, or rather those remedies which re-establish the state of the stomach, without which the action of iodine can be scarcely supported.

These different symptoms occur also during the treatment, and require the same remedies. It is not sufficient to give the iodine alone to a person affected with goitre; there are other indications to fulfil, the omission of which renders the cure more or less successful.

From the manner in which iodine acts upon the animal economy, we can readily conceive there are cases in which it ought never to be employed; such, for instance, as pregnancy, tendency to *menorrhagia*, incipient diseases of the chest, a state of marasmus, or slow fever, whatever be their cause. It should also be forbidden to nervous individuals, or those of too delicate or feeble a constitution.

This remedy has been attended with considerable success in those, who laboured under no other inconvenience than the goitre, especially if they had passed the adult age, or were greatly advanced in years.

A woman seventy-five years of age, consulted me last autumn for an affection of the head, great tendency to drowsiness, debility and numbness in the right arm, so that she believed she could touch objects only as with a glove. These symptoms increased in proportion as an extensive goitre manifested itself in the right lobe of the thyroid gland, in a manner rather severe, from the rapidity of its increase, for although it had commenced thirty years before, it had enlarged in the space of three months to nearly the size of the fist. It evidently interrupted the circulation in the brain, and compressed the brachial plexus. She had drank a great quantity of water during the summer.

This woman was alarmed at what she had heard respecting my remedy for the goitre. But, as I was acquainted with no other method that could prove equally successful, or even arrest the progress of her disease, I thought it my duty to prescribe iodine.

I attended her with all the interest the severity of her case required. In about fifteen days the disease was arrested; at the end of a month the goitre was diminished; there was less affection of the brain, and the touch became more sensible; she now perceived her amended state, and thanked me for my treatment. In a month from this period, the goitre was entirely dissipated, and the paralytic symptoms and embarrassment of the brain ceased. She enjoys, at present, perfect health.

In my former memoir, I judged from analogy, that iodine, or its preparations would be serviceable in *amenorrhea*, and I doubt not, when this remedy is more studied, and consequently better known, that it will prove useful, under skilful management, in some chronic diseases of the uterus.

On observing that, in a small number of cases, iodine appeared to have a marked action upon the mammary glands, I have been led to employ it with success in that indolent enlargement of the lymphatic glands of the breast consequent upon delivery.

Its powerful action upon the absorbent system, has induced me to employ it in scrophula, uncombined with fever, and where the enlarged glands of the neck were indolent. In such cases, I have obtained from it the most satisfactory results. This very circumstance, which gives additional importance to my discovery, has been confirmed by one of the most distinguished physicians of this city.

I regard, then, the iodine as a remedy which ought to rank among the most useful we possess: and whatever be the attacks directed against its employment, and the prejudices with which, in this place, they would wish to surround it, it must undergo the fate of all active remedies on their first discovery.

We must doubtless study it a long time before we are thoroughly acquainted with its power.

I dissuade every person from employing it without consulting his medical attendant, and I recommend medical practitioners never to prescribe it, but for those whom they can see from day to day; to give it in moderate doses, suspend it in proper time, avoid that injurious state which I have denominated saturation, and especially forbid its use among those who are in either of the states I have mentioned: in this way the faults of the individual who may employ it will not be cast on the remedy itself.

MEMOIR III.

ON THE ADMINISTRATION OF IODINE BY FRICTION, AND ON THE APPLICATION OF THIS MEDICINE IN SCROPHULA, AND DISEASES OF THE LYMPHATIC SYSTEM.

IN a former Memoir, upon the employment of iodine in medicine, I expressed a wish that, from the joint exertions of chemists and physicians, we might be made acquainted with a preparation, more in harmony with the animal economy than any at present known, and which would not be at the same time *useful and pernicious*, dependent upon the *sagacity* of him who might prescribe it.

The intention of the present Memoir is, to point out, not a new preparation, but a new mode of employing this substance, that will do away those reproaches cast upon its internal use, and one, moreover, of simple and easy application, possessing this advantage, that in the majority of cases the same active vigilance will not be required on the part of the medical attendant, and it will be scarcely possible for patients to exceed in the dose.

I hope, in the course of this Memoir, to excite and fix in a particular manner, the attention of my brother-practitioners upon the employment of iodine in scrophula, for if the success I have obtained from its use be confirmed, this medicine will become the more valuable, as this disease is of general occurrence, the remedies hitherto prescribed uncertain, and its cure always exceedingly slow, and at times even impossible.

It would appear that several of the unpleasant symptoms, arising from iodine, are attributable, either to the action of this substance upon the mucous membrane of the stomach, (which has occurred in a few individuals, who, by a sort of idiosyncrasy, perhaps momentary, cannot well support this remedy, if prescribed without intermission, or if its dose be indiscreetly increased) or to its peculiar action upon the lymphatic system.

The symptoms differ essentially in each of these instances, but they may be combined or occur separately.

To avoid these actions, and particularly the first, for it is upon the second, but moderated and directed by a prudent and skilful hand, that the success of this remedy in diseases of the lymphatic system is founded, I thought that if iodine could be introduced into the animal economy by any other way than that of the stomach, all its efficacy might be preserved, and the untoward symptoms occasioned by its action upon the mucous membrane of the stomach, altogether avoided.

I prepared, in consequence an ointment, composed of half a drachm of the *hydriodate of potass*, and one ounce and a half of lard, directing about the size of a hazel-nut to be rubbed upon the goitre itself; the enlarged glands in scrophula, those of the breast, &c.; and also, in the course of the lymphatics, night and morning, until it was completely absorbed.

A woman, twenty-eight years of age, had been affected for a considerable time with a voluminous goitre in the right lobe, but still more so in the left lobe of the thyroid gland. It enlarged considerably three years back during her pregnancy. I imagined it to be only an increase of volume without any other organic affection. It affected her voice, and impeded respiration. After eight days' friction, the tumours became sensibly softer, and the skin thicker and more lax; in fifteen days, the diminution was still more considerable: the goitre was divided into several small distinct lobes. At the end of a month it had entirely disappeared; the voice and respiration became natural, and the patient experienced no other sensible effect from the action of this remedy.

Encouraged by such success, I treated by this new plan twenty-two patients, of different ages and sexes, each affected with a goitre, more or less voluminous. More than one half were cured in from four to six weeks, and the remainder more or less completely.

Iodine introduced in this way directly into the absorbent system, presents then results similar to those obtained when it is prescribed internally. The duration of the treatment, the thickening and relaxation of the skin, the softening of the goitre, its diminution, its separation into several cysts, tumours, or lobules, the cessation of embarrassment in the respiration and change of voice, follow exactly the same progress.

This new method seems to be equally as active as when iodine is exhibited internally, when it refers to a disease of the lymphatic system without organic lesion.

I consider this to be the completion of my discovery, since it presents a sure and easy mode of employing this powerful remedy, exempt from those objections made to its internal exhibition.

In the majority of cases, it will be of itself sufficient to effect a perfect cure; and in those instances, where it fails in accomplishing this object, we are

enabled to complete it by the least quantity of iodine administered internally.

I ought here to mention, that a lady had taken five ounces of the solution of the *ioduretted hydriodate of potass*, without receiving any other advantage than a diminution of one of the largest and hardest goitres I ever saw. She had discontinued the remedy about six months. By this new mode, the rest of the tumour was, in the space of six weeks, entirely removed, proving that, in certain cases, these two methods may be powerful auxiliaries.

In three patients, the tumours, cysts, or nuclei, which I was unable to dissipate, continued to dissolve entirely, after several days' suspension of the frictions.

Although I have not perceived any of those unpleasant symptoms, attributed to iodine, follow this new process, yet I have observed the same prudence and distrust as when I exhibited it internally, suspending the frictions as soon as the action upon the goitre was duly established, and resuming it eight days after, when it began to get soft, ignorant in what degree the too sudden disappearance of tumours, often voluminous and of long standing, might prove prejudicial, and desirous, moreover, of avoiding those unpleasant symptoms which I imagined to proceed from a species of saturation, or from too violent an action upon the lymphatics.

I have, in reference to these patients, as well as those for whom I have prescribed iodine internally, placed the greatest importance in the local treatment of the goitre, either before prescribing this remedy, or during its employment.

This local treatment very essentially promotes the cure; it consists, more particularly, in the application of leeches; sometimes of emollient fomentations, which seem in many cases to favour the action of iodine. I have, however, met with some instances where the goitre, so far from softening, became hard and slightly painful, when there necessarily happened

oppression about the neck. This local irritation, peculiar to iodine, was soon allayed by leeches ; and what throws some light upon its mode of action, the goitre was afterwards very readily cured. I have also frequently known iodine produce no sensible effect upon the goitre, when a few applications of leeches have effected a complete and rapid cure.

It is not sufficient then to prescribe iodine, indiscriminately, in goitre, scrophula, or any other such state of the lymphatic system ; there are other indications to fulfil, previous to our obtaining the full success of so valuable a remedy.

The powerful action of iodine upon the absorbent system, has induced me to employ it in those cases of scrophula uncombined with fever, that is to say, in those instances of indolent enlargements of the glands of the neck which produce such desolation in families. And the success I have in such cases obtained from it, has exceeded my most sanguine expectation.

I have given it in solution in the smallest dose, and with the same precaution as in goitre ; but as in these cases, there was that kind of debility usually attendant upon scrophula, I have been obliged to combine it with bitters, and some aromatic syrup. The progress of the cure is exactly the same as in goitre. The tumours become detached, more moveable, smaller and softer, but the enlargement of the cellular tissue, imparting to the touch the sensation of an empty cyst, continues a long time before its entire removal. From a few cases, I select the two following :

A young girl, seventeen years of age, had been affected for the last fifteen months, with several scrophulous glands, situated under the angle of the jaw, and running across the neck, the lowest of which was ulcerated. A variety of remedies having been tried, but to no purpose, I prescribed the solution of the *ioduretted hydriodate of potass*. In the course of six weeks she was perfectly cured, with the excep-

tion of that gland which was ulcerated, and this, from a fistulous aperture occupying its centre, required surgical treatment.

Another young girl of fourteen had been troubled for six months with several enlarged glands situated along the neck. The several remedies, general and local, indicated in such cases, had been, but unsuccessfully, resorted to. By taking the solution of the *ioduretted hydriodate of potass*, she was, in about a month, perfectly cured.

There are, however, some cases where I have failed of obtaining any effect from its use, beneficial or otherwise, and where I am unable to assign any cause for so great a difference: the same also takes place in respect of the goitre.

I am acquainted with several cases, in which preparations of iodine taken internally, have been attended with the greatest success, as in certain scrophulous affections, such as ophthalmia, &c.

I have employed, in scrophula, my new mode by friction, with a success nearly equalling that obtained from the saline solution. I however give the preference to the latter, since in small doses it proves eminently tonic.*

May not a medicine which manifests so powerful an action upon the lymphatic system, be particularly serviceable, should its use be alternated with that of mercury, or should the iodine combined with this metal under the form of *iodure* or *hydriodate of mercury* be administered in cases of syphilis combined with scrophula, a combination, unhappily but too frequent, among the lower classes in great cities, where debauchery is generally connected with the most abject misery? Mercury ceases, in these cases,

* I applied upon two persons, the one affected with a scrophulous enlargement, the other with a goitre, a plaster, composed of a few grains of the *hydriodate of potass*, mixed with the plaster *de vigo et de mercure*, which producing a pustular eruption similar to that occasioned by the *pommade d'authenrieth*, compelled me to abandon its use.

to be the specific for a degenerated complaint, and the treatment is that alone of the symptoms, no remedy being able to reach the seat of the disease.

May not this combination of iodine with mercury, thus become one of the most efficacious preparations in those cases, where, according to the learned author upon the diseases of the skin, the syphilitic virus from one of the parents may develop scrophula in their children?*

There exists an analogy, particularly striking from the practical results that may be deduced from it, between the organic affections of the ovaries, and the thyroid gland. In both instances, one common envelope encloses cysts, differing greatly as to their contents; such as osseous or cartilaginous concretions, gelatinous effusions, some sanguine, others purely lymphatic, or serous; these last frequently attain a considerable size.

Having, among the great number of goitres that have fallen under my care, observed some which appeared to me to be evidently serous cysts, which, notwithstanding, were cured, and calculating therefrom the astonishing action of this remedy upon the absorbent system, I have reason to hope, that iodine will be one day beneficially employed in some one of those cases of dropsy, general or encysted, where the principal indication is to quicken absorption.

Let no one, however, believe, that I wish to make the iodine an universal panacea; the experience of two years upon more than two hundred patients has proved to me, that this remedy is one of the most energetic stimulants, with which we are acquainted, of the lymphatic system; and the variety of diseases for which I have prescribed it, (such as goitre, scrophula, enlarged glands of the breast, or other parts, in some instances degenerating; combinations of the venereal disease, certain affections of the uterus, some cases of dropsy, general or encysted, &c.) is only

* Vid. Alibert. *Descript. des Maladies de la Peau*, fol. 226.

apparent, since the whole of these diseases are but lesions of the same system.

Here then, every thing is new upon this subject — the medicine, the choice of the preparation, the best manner of employing it, its mode of action, the peculiar circumstances of the system which neutralise its effects, or render them so active, and those in which its use is contraindicated. A wide field is thus opened to the researches of physiology and practical medicine; I cannot, however, too frequently repeat this well-known axiom of Boerhaave, "*At prudenter a prudente medico, si methodum nescis, abstine.*"

APPENDIX.

PREPARATIONS OF IODINE RECOMMENDED IN THE FOREGOING PAGES.

Tincture of Iodine.

Take of Alcohol - - - 1 oz.
Iodine - - - 40 gr. Dissolve.

Dose.— Ten drops, gradually increasing it to fifteen and even to twenty, three times a day.*

Solution of the Ioduretted Hydriodate of Potass.

Take of Distilled water - - 1 oz.
Hydriodate of potass - 30 gr.
Iodine - - - 8 gr. Dissolve.

Dose.— From six to ten drops thrice a day, — increasing or diminishing it according to its effects.

Ointment of the Hydriodate of Potass.

Take of the Hydriodate of Potass - $\frac{1}{2}$ dr.
Lard - - - 1 $\frac{1}{2}$ oz.
White wax - - - 3 dr.
Liquor. potassæ caust. - - 2 drops. Mix.†

About the size of a hazel nut to be rubbed twice a day on the part affected; to be continued eight days — suspended a similar period — again renewed and again suspended, &c. — Dr. Coindet observes, that the occasional application of leeches will greatly promote the effects of the ointment.

* As the Poids de Marc ounce, which is used in Geneva, contains 576 grains; and the Troy ounce, which is used in almost all other countries, contains only 480, 48 Genevese grains are equivalent to 40 Troy, or in other words, one-twelfth of iodine by weight, and not one-tenth is to be dissolved in the ounce of spirit of 852 density. The tincture should not be prepared long before use, since it gives place to a crystalline deposit of iodine.

† The two last articles have been recently added by Dr. Coindet.

CASES

ILLUSTRATIVE OF THE EFFICACY OF IODINE.

CASE

By J. B. Austin, Esq., of Farnham, (late of Haslemere,) Surrey.

(From the London Medical and Physical Journal.)

I lately had two patients brought to me, sisters, — the elder about fourteen, the younger between eleven and twelve years of age; the tumours of both had been gradually increasing from childhood, and were now very prominent. In the elder, both lobes of the gland were nearly equally enlarged; the right lobe of the younger was the part most affected; in both, they were hard and unyielding to pressure. Wishing to try the comparative efficacy of iodine and the sponge lozenges, I furnished the elder with a concentrated tincture of iodine, and desired her to take ten drops twice a day in water, and to increase it gradually to twenty drops. The younger I supplied with the lozenges of burnt sponge, as prepared by Shepherd, of Fleet-street, directing her to allow one gradually to dissolve under the tongue, night and morning; and I was assured of the perseverance of both by the superintendence of a careful mother. The elder girl bore an increase of the tincture to fifteen or sixteen drops without inconvenience, but on reaching twenty, she was obliged to desist a while, on account of sickness, vertigo, and some disturbance of the bowels; all which, however, soon went off without the assistance of medicine, and after about a week she recommenced upon a dose of twelve drops, which she increased to fifteen, eighteen, and eventually to twenty, without much disorder, though occasionally obliged to desist a day or two. After having taken it about three weeks, the tumour was softer and its measure less, and at the expiration of two months it had nearly disappeared. She was desired to persevere another month; and now not any remains of it are perceptible, and her health is excellent. The younger sister took the lozenges daily, and in less than a month her tumour

was evidently less, but afterwards it did not decrease so rapidly as that of her elder sister; and even now, three months from her commencing the lozenges, there is still left a little tumefaction, and a small indurated portion about the size of a hazel-nut.

I have been in the habit of recommending the sponge-lozenges very confidently, from observing their efficacy, if not as entirely removing the tumours, at least in rendering them much softer, and materially lessening them; and in most cases, when bronchocele *first* appears in young females, the use of them for a fortnight only will cause its total disappearance. The cases related above were of some years' standing, and within the last three had increased very rapidly.

Letter from J. B. Austin, Esq. to the Translator.

SIR,

Farnham, 13th August, 1824.

Having some time since removed from Haslemere to this place, your favour of 2d instant was near a week before it reached me, and having been much engaged, must be my apology for not taking earlier notice of it.

Since the publication of the two cases to which you allude, I have used the iodine (in preference to the spong. ust.) in every case of bronchocele that has been presented to me — and they have not been few — and I must say with much success; in some, the tumours rapidly dispersing under a very short use of it, especially in young subjects; in these, owing to the small quantity required, I have not known one case in which any unpleasant symptoms have followed its use. Not so however with adults, whose tumours, from being of long standing, have required much perseverance in the remedy, females of weak habits, and women, who, at the ages of forty or forty-five, have had their constitutions broken down by frequent child-bearing; these I have found to be more readily the subjects of great debility, emaciation, tremors, and serious derangements of the nervous system. In one case, — of a poor spare woman, with an enormous tumour, which pressed so greatly on the trachea that you might hear her inspirations at several yards' distance, and who had not taken half an ounce of the tincture before the swelling gave way, being reduced to less than half its size, — emaciation came so suddenly, that I despaired of checking it: she did, however, regain her health and strength by the use of tonics, combined at first with ammonia. When experience had

taught me the necessity of watching closely the effects of this medicine, and of discontinuing its use, for a time, on the appearance of any thing unpleasant, I must say, I have found it very manageable, and its effects nearly certain — I say nearly so, because I find many cases, in which a *small hard lump* continues after the tumour has disappeared, — and I am inclined to think with Dr. Gardner, that the desire to get rid of this, may have been the cause, in many instances, of the remedy being pushed too far. When the bronchocele has disappeared, leaving only this *little lump* — often not so large as a small walnut — I am accustomed to use a little strongly camphorated mercurial ointment.

I shall close this short and hurried account, by just stating the very curious case of a female, about thirty years of age, unmarried, of a strong robust habit, who applied to me, now three years since, before I had made much trial of the iodine, with a very large and hard tumour, which first made its appearance about the age of puberty — a time to which I have traced the origin of many. I commenced by giving her the sponge in ʒi doses twice a day, for about two months, without any apparent effect. As she was determined “*to be cured of it*” if possible, she was willing to try any thing for any length of time. I then put her upon the iodine, exhibiting fifteen drops at first twice a day; then twenty, and afterwards twenty-five, three times a day. She persevered upwards of two months more without any visible alteration of the tumour, or any other effect *bad or good*, so that we gave it up in despair as a case that iodine would not reach. Above two years afterwards, I one day met her brother accidentally, who accosted me with “O sir, you performed a *fine cure* upon my sister — her swelling is quite gone.” Upon minute enquiry, I found, that about eight months after discontinuing the tincture, her tumour began to lessen, and in the course of two months it had entirely disappeared. I have lately seen this person, who lived at some distance from me, — and the only sign of her having had bronchocele is the *little hard lump* still left. She told me her health continued as good as ever, and she never experienced any other effect from the medicine, than its having caused the disappearance of the swelling about three quarters of a year after discontinuing its use.

I will only observe further, that I have never used any other preparation of iodine than the tincture, which I always prepare myself, — iodine forty grains, alcohol one ounce, — and an ointment containing one drachm to one ounce of

simple cerate, of which I have used occasionally, but not often, about one scruple, rubbed into the tumour night and morning.

I have not had much experience of the good effects of iodine in other diseases. I tried it once, in a case of tuberculous pthisis, but without success. I have also used it in the glandular swellings of the necks of three or four scrophulous children, and thought it effectual; but they recurred; and I did not think it prudent in either to persevere in its use.

If this short account, which I have never before communicated, except in casual conversation, will be of any service in your intended republication of Dr. Coindet's Observations, I shall be very happy in having had it in my power to assist you; and am,

Sir,

Your most obedient servant,

J. B. AUSTIN.

CASE,

By Henry Shuckburgh Roots, M.D. Physician to the Carey Street Public Dispensary, and to the St. Pancras Infirmary.

From the "Medico-Chirurgical Transactions."

I AM induced to offer the following case to the notice of the Medical and Chirurgical Society, in the hope that it may not prove altogether unworthy of their attention, illustrating, as it does, the advantage to be obtained from the use of iodine, as a remedy in the cure of bronchocele.

In the summer of the year 1820, being resident, during a few weeks, in the country, I was consulted by the friends of a young lady, relative to a tumour in her neck, of which the following are the particulars:

Miss ———, ætat. nineteen, tall of stature, with light blue eyes, fair hair, and transparent skin, and inheriting from her father a disposition to scrofula, has had, for the last two years, an enlargement of the thyroid gland, which, within the last three or four months, has increased considerably, and at

times occasions her a good deal of uneasiness, particularly when bending the chin towards the sternum, or in singing and laughing, or upon using any considerable exertion. Both lobes of the gland are enlarged, the left rather more than the right, and upon the whole the size of the tumour may be compared to that of a moderate orange flattened.

I directed eight leeches to be applied to the tumour twice a week, and prescribed fifteen grains of the carbonate of soda, to be taken three times a day; my patient persisted in the application of the leeches, and in the use of the soda, for three months, without any material alteration in the size of the tumour. At this time I again saw her, and finding her unwilling to persevere in so frequent an use of the leeches, I directed her to take a drachm of the burnt sponge three times a day, and to apply the leeches once in a fortnight. This she adhered to also for about three months, and upon my visiting her at that period, I found the tumour exactly the same in size as when I first saw it. Wishing then to try the effects of friction, I ordered her some of the *linimentum saponis*, and directed a small quantity to be rubbed gently into the tumour, for a quarter of an hour at each time, night and morning, and at the same time to continue the use of the burnt sponge. This plan she readily submitted to, and it was steadily adopted for three or four months, but without at all diminishing the size of the tumour.

My patient now began to be tired of attempting any remedy, and I advised her to do nothing more than once in three or four weeks apply eight or ten leeches, hinting at the same time, that if it should at any time show a disposition to increase materially, she might have recourse to the passing of a seton through the tumour, as recommended by Dr. Quaid; though under the present circumstances of her case, I did not feel myself warranted in advising her then to undergo the operation.

Having been present at a meeting of this society last winter, when Dr. Roget read a letter from Dr. Coindet, relative to the cure of some cases of bronchocele, by the use of iodine, I determined to try it on the above patient; and in the latter part of the month of January, of the present year, the tumour being somewhat increased in size, she began the use of it in the following proportions: *Potassæ hydriodat.* gr. xxxiv. *Ceræ albæ* ʒ ij, *Adipis Suillæ* ʒ iss M.; the size of a garden bean, to be rubbed into the tumour night and morning, for ten minutes each time.

She continued the use of this ointment for five weeks, dur-

ing which time no pain had been produced in the tumour by its application; and at this time I visited her, and upon measuring her neck, (I having measured it accurately, prior to the use of the iodine,) I found it had diminished in its circumference three quarters of an inch. I then ordered her to persevere in the use of the ointment, increasing the proportion of iodine from thirty-four to forty-four grains, and directing her to abstain from its use in case any inflammation should arise in the tumour. After using this ointment four or five times, the tumour became tense and painful, and the integuments inflamed; the use of the ointment was accordingly omitted; eight leeches were applied to the tumour, and a dose of the sulphate of magnesia was given to her. The inflammation was speedily abated, and in a week she resumed the use of the ointment; and as no pain was again produced, during its use, for several weeks, I again increased the proportion of iodine to fifty grains, in which proportion she continued to use it, without any pain, until the latter part of July, when I had the satisfaction of finding that the tumour, on the left side, had entirely disappeared, whilst that on the right side was also very materially lessened.

Wishing, then, to try the internal exhibition of the medicine, in conjunction with the external, I directed her to continue the use of the ointment, increasing the proportion of iodine to fifty-six grains, and also to take twenty drops of the tincture of iodine three times a day, in a glass of water. As my patient resided some miles from London, I was prevented from seeing her again until the 1st of the present month, when I had the pleasure of finding her perfectly cured, the tumour on both sides having entirely disappeared. She was unable to take the iodine internally, so often as three times a day, in consequence of its having produced sickness, and pain in the stomach and intestines; but she had continued to take it twice a day, for about six weeks, and had taken it then once a day until I saw her, although she had discontinued the use of the ointment for more than a month, as the swelling had entirely subsided.

I am well aware that too much stress ought not to be laid on the successful issue of a solitary case; but as it is confirmatory of others similarly and successfully treated, I cannot but consider that iodine is a most valuable remedy, in a disease where so many different remedies have been tried and found useless; particularly as I have at this time a patient under my care, suffering from a very considerable bronchocele, but which has very materially diminished under

the use of this medicine, the result of which case I shall, at some future period, have the honor of relating to the society.

Letter from H. S. Roots, Esq. M. D., to the Translator.

84, Guilford-Street, Russell-Square,

SIR,

July 15th, 1824.

IN consequence of my having changed my residence, I did not have the honour of receiving your letter until some days subsequent to its date; this circumstance will, I trust, be a sufficient excuse for any apparent rudeness, in not replying to it earlier.

The case of bronchocele to which I alluded in the paper published in the Medical and Chirurgical Transactions, as being then under treatment, was completely cured by a steady perseverance in the administration of iodine externally and internally, conjointly; since which, eleven other cases of bronchocele under my care have also completely yielded to the same remedy. I have had many more cases of this disease under my care, and though they have all materially diminished, under this plan of treatment, I have not had an opportunity of persevering in its use, in consequence of the patients not attending regularly, or removing to some distance whilst under treatment.

In reply to your question, as to what I may have observed of its effects in other diseases, I beg to state that I have given it pretty freely in tuberculous disease of the lungs, but, certainly, without any apparent advantage; on the contrary, in two or three cases I was under the necessity of speedily abandoning its use, from its accelerating the action of the vascular system, and in two instances hæmoptysis appeared to be induced by it; neither have I found it of advantage in disease of the mesenteric glands, but in some scrofulous enlargements of the submaxillary glands I have found it highly useful, and have used it with decided advantage in some indolent affections of the joints.

Much has been said of the alarming symptoms occasionally consequent on the administration of iodine; on reference to my note-book I find that I have prescribed its various preparations in somewhat more than 300 cases, but in no one instance have I witnessed any of these alarming effects; the most urgent symptoms I have seen, during its use, being confined to increased frequency in the vascular system, heat in the stomach, and intestinal canal, and, in a very few instances, vomiting: of course, when either of the above symptoms

have appeared, I have diminished the dose of the medicine, or have directed entire abstinence from its use, for some short time.

In the treatment of bronchocele it is certainly the most valuably remedy we possess.

I must beg to apologize for the brief and hasty way in which I have replied to your questions, and have the honor to be,

Sir,

Your very obedient servant,

HENRY S. ROOTS.

CASE,

By E. Barlow, M.D. of Bath.

From the "Edinburgh Medical and Surgical Journal."

A FEMALE twenty-eight years old, delicate, but not unhealthy, applied to me early in November 1823, on account of a bronchocele of three years' standing. On its first appearance it had been leeches, with the effect of softening it, and somewhat reducing its size, which was that of about half a small orange. It remained stationary for a long time, causing little inconvenience; but about two months previously to my seeing her, it began to enlarge, and increased so rapidly as to reach the size of above half a pretty large orange. At this time its pressure on the larynx and trachea sensibly obstructed respiration, and even impeded deglutition, while her general health had begun to decline. Induced by her former experience, I re-applied leeches, and following the practice which I had myself found most successful in relieving this complaint, I prescribed occasional purges of rhubarb and calomel, with the daily use of bark and burnt sponge. The latter she was soon obliged to relinquish, from its disagreeing with the stomach, and I willingly laid it aside, in consequence of a slight pectoral complaint, attended with febrile symptoms, and resulting from recent cold, which called for different treatment. Saline medicines, with squills, were resorted to, the aperients continued, and leeches were again applied to the tumour. Under this regimen her pectoral

complaints were quickly relieved; her general health improved; the pulse was ninety-six, and soft; the tongue clean, but whitish, and the bowels regular. The menses had been regular throughout.

On the 6th December I began to use the iodine, giving twice a day six drops of a solution of thirty-six grains of hydriodate of potass, in an ounce of distilled water. This was progressively increased to thrice a day, then to eight, ten, twelve, and fifteen drops; which latter dose I did not for some time exceed, as the medicine evinced considerable effect in reducing the tumour. The leech bites having inflamed, I was obliged to poultice them, which prevented me using the iodine externally for some time. They healed, however; and on the 20th December I commenced with the outward employment of iodine, directing the size of a nutmeg to be rubbed in night and morning, of an ointment consisting of a scruple of hydriodate of potass to an ounce of lard. In a week this produced so much irritation of the skin, that one of the daily frictions was omitted.

Under this discipline the tumour rapidly subsided; no disturbance was occasioned in the stomach; the general health improved, so as to be better than she had known it for years; and, on the 10th of January, scarcely a vestige of tumour remained. On the 17th the improvement continued, and only a thin film could be felt by the finger. I have since seen her in perfect health, and free from complaint. The rhubarb with calomel, was occasionally employed throughout; and for a short period towards the close, I increased the drops to eighteen.

This case seems to afford satisfactory evidence of the specific powers of iodine in reducing bronchocele. The disease appears not to be indigenous in this place, for in seventeen years I do not recollect having met with more than half-a-dozen cases in a tolerably wide range of hospital practice. These I have uniformly relieved by purging, and the use of bark and burnt sponge; but the progress has always been slow, and, in one instance, a very troublesome affection of the stomach ensued, which a remark of Coindet* leads me to attribute to the long-continued use of burnt sponge.

In administering iodine, it appears to me that precaution is necessary; first, in improving the general health, so as to afford the remedy fair scope for exercising its specific agency; a remark, indeed, which applies to the use of all specifics:

* "Coindet's Observations on Iodine, p. 4.

and, secondly, in gradually increasing the dose, so as not to exceed the minimum quantity, capable of acting on the local disease. With this limitation, I apprehend that this active remedy may be safely administered, without hazard of those injurious consequences which result from a too free or unguarded employment of it. Its efficacy in reducing glandular enlargement would lead me to think favourably of it as an auxiliary remedy for *tabes mesenterica*.*

Bath, February 15th 1824.

CASES,

By John Baron, M. D. of Gloucester.

From his "Illustrations of the Enquiry respecting Tuberculous Diseases."

As far as my experience goes, there is no remedy which possesses such powers in promoting the absorption of morbid growths, as the hydriodate of potass. The reports of the influence of this remedy in curing bronchocele, as published by Doctor Coindet, of Geneva, first brought it to my notice. The nature of my own enquiries had led me anxiously to look for some agent of this kind; and having been fully convinced of the affinity between bronchocele and the diseases of which I had treated in my enquiry, I considered it extremely probable, that a remedy which could remove the first-mentioned species of disorganization, might be very beneficial in the others. On this principle I acted; and the result of my trials has fully justified the anticipations which I had formed.

I will shortly illustrate this remark, by detailing a few cases.

* This interesting case is, I believe, the first in which Dr. Barlow ever tried the iodine. Previously to its employment I begged Dr. B., (and I have to make the same request to other practitioners,) to *carefully* peruse the observations of Dr. Coindet, and not to administer it but in the way recommended by the Doctor himself. The result of the above case will, I think, be deemed sufficiently satisfactory of the efficacy of iodine in bronchocele; and the Doctor's opinion in regard to its employment in *tabes mesenterica*, is amply confirmed in a case of this nature, successfully treated by this remedy, in Dr. Gairdner's "Essay on the Effects of Iodine, &c." p. 49.

The first I shall mention is one of *physconia hydatidosa*. It much resembled a case which I have described at page 95, of my Enquiry. The abdomen was as large as that of a woman in the last stage of pregnancy. The tumour had been more than once reduced in size, by the long continual use of mercury and liquor potassæ; but it never was effectually removed. More than once its bulk was very much diminished, by an event which establishes its original character, and justifies the name which I have assigned to it: I mean, the disruption of one or more of its cysts, and the discharge of the contents into the alimentary canal; such fluids as hydatids are known to contain * in various stages of their progress, having, after the events just described, been discharged both from the stomach and per anum.

This patient began the use of the hydriodate of potass in solution, on the 6th of October, 1821. She took at first eight drops twice a-day, and continued them very regularly till the 23d of March, 1822. By this time a marked effect had been produced on the size of the tumour; but in consequence of some unpleasant feelings about the stomach and head, the drops were discontinued, and not resumed till June the 22d.

From the use of this medicine, a very striking absorption of the diseased structure has taken place. Before she began it, the bulk was nearly as great as at any former period: now, it is not discernible by the eye; and it requires a pretty accurate examination by the touch to discover the remains of the substance, as she calls it, in the left iliac region.

I am fully entitled to ascribe these results to the remedy in question; for, saving the use of laxatives, and the occasional application of leeches, none other were employed. A small tumour† has recently appeared in the left mamma. This is an occurrence which much confirms my views respecting the origin of this class of diseases, and is easily accounted for, if the principles which I have elsewhere endeavoured to unfold are correct.

The next case was a-kin to that just mentioned. But it occurred in an individual much further advanced in life. The disease had been of slow growth; but it was not much regarded till a few months ago, when it began to give great pain, and rendered the individual incapable of using almost

* *Vide Enquiry, p. 94.*

† It is of importance to observe, that this tumour has, by the continued use of the remedy, been nearly absorbed.

any exertion. When I examined her, I found a tumour, about the size of a child's head, occupying chiefly the left side of the abdomen. It had a solid feel, and was very tender to the touch.

I ordered leeches and fomentations with hemlock, in order to relieve the pain and tenderness; and then directed an ointment, containing hydriodate of potass, to be rubbed upon the swelling night and morning. At the same time Brandish's* caustic alkali was administered internally.

The rapidity with which the size of the tumour has been diminished, has quite surprised me. The remedies have not yet been used four weeks; and I am informed by the gentleman in regular attendance, that it does not equal half its original bulk. The pain and tenderness are quite removed, and the patient can walk, and exert herself almost as well as ever.

Except in cases of bronchocele, when the iodine was employed, I have seen no absorption so marked as this. I do not know if any influence is to be ascribed to the caustic alkali. I am disposed to think that there is; for it certainly is a deobstruent of very considerable power.

In another case of a very formidable aspect, the efficiency of the iodine was shewn in a surprising degree. A gentleman had a series of tumours, which reached from the angle of the jaw to the top of the shoulder; some of them were very large, being equal in size to a goose's egg; they extended also to the front of the neck. Various powerful medicines, such as the compound calomel pill, liquor potassæ, &c. &c. were used without any effect. The hydriodate of potass was administered internally twice a-day, in doses of ten drops. It was continued for several months; at the end of which time, the morbid growths were almost completely removed, all that remained being a very small substance, not larger than the half of a walnut.

The result of these cases gave me great encouragement to use it in others of a kindred nature; but the disorganizations were of a description which gave little hope that their removal could be effected; I mean pulmonary tubercles. The reader will be best able to judge of what there is some reason to hope may be accomplished, by attending to the following

* He was a surgeon at Alcester, in Warwickshire, and acquired a great reputation by the success of his treatment in scrophulous diseases. The preparation in question was invented by him, and an account of it will be found in a very sensible pamphlet which he published.

case. I have selected it, because the symptoms were very strongly marked; and the proofs of the existence of tubercles in the lungs were as complete as they possibly could be.

A young gentleman, of a delicate frame, had been long affected with frequent cough; but at first he did not expectorate at all. He lost flesh; his pulse increased in velocity; his respiration was frequently hurried; and his countenance and manner indicated most serious disease. He had been in this situation for many months; when, after a fit of coughing, more violent than usual, a small globular-shaped, but somewhat flocculent mass of tuberculous matter, partially tinged with blood was discharged. This event fully confirmed my suspicions respecting the cause of the harsh dry cough, which had so long harassed him; and convinced me that tubercles existed in his lungs. Under circumstances of this kind, it is needless to say, that the most unfavourable prognostic was called for. I expected, of course, that in this, as in other similar cases, the patient would soon exhibit all the worst symptoms of pulmonary consumption. The expectoration of such matter as above described, having occurred a great many successive times, at considerable intervals, tended to strengthen my apprehensions. I dwell upon these particulars, because, without such proofs as they disclose, no fair estimate could be formed of the value of the remedy on which I chiefly relied for the removal of the complaint. I consider it, therefore, as proved, that the patient in question had tubercles in the lungs: and that they were rapidly hastening to that stage when recovery becomes almost hopeless.

My plan of treatment was the following: I kept him in a regulated temperature; I stimulated the chest occasionally by blisters and tartar emetic, and confined him to a strictly vegetable diet. At the same time, anodynes were occasionally used, to abate the frequency of the cough. But knowing that all these means, unless the tubercles themselves could be got rid of, would be of little avail, I administered such remedies as appeared most likely to promote that object. I began with the use of Brandish's caustic alkali, in a little compound infusion of orange peel, twice a-day. After employing these remedies for some weeks, I resolved to give him the hydriodate of potass. He began with eight drops twice a-day; and continued it for three weeks without intermission. It was then left off for about a fortnight, and resumed; the quantity having been increased to ten and twelve drops. The consequence of this treatment has been an almost complete removal of the cough; an entire cessation of all expectoration;

a complete freedom of breathing; a reduction of the pulse to its natural standard; a healthy state of the stomach and bowels, and a decided augmentation of flesh and strength. The patient is able to take long-continued and active exercise on horseback, and has consequently been exposed to considerable alternations of temperature, without suffering inconvenience.

The time is not yet come to speak definitively of this case; but, so far as it goes, it is perfectly satisfactory; and affords as strong testimony as one case can give, that a most beneficial impression has been made upon the disease. Should things continue to go on favourably, I shall feel no hesitation in believing, that this was an example of tuberculous phthisis, arrested in its progress mainly, I believe, by the medicine, of the qualities of which we have been speaking.

I have ordered the remedy in a considerable number of other cases of pulmonary consumption. The circumstances, however, in which the patients were placed, gave me little or no hope that any decided advantage could be gained from its employment. Extensive ulceration had already taken place, and all the most threatening symptoms of approaching dissolution existed. My trials, in these cases, only confirmed what was *a priori*, to be expected; namely, that the period for affording effectual relief was past. But, on the other hand, they strengthened that conviction which I have endeavoured to impress upon the reader's mind, that there probably is a period in the most formidable of all the tuberculous diseases, when its course may be stayed, and the cause of subsequent evil eradicated from the system. Whether my expectations on this point will ever be realized to the full, I cannot say; but it is certain, that no just hopes of any great improvement in the treatment of this very fatal malady can be entertained, which do not rest upon the principle to which I have alluded.

I take this opportunity of recording another case which, in all respects, is applicable to the subject of which we are treating. The patient, a female, came under my care about three months ago; she was affected with almost all the symptoms which characterize tuberculated accretions of the peritonæum, in a considerably advanced stage. There was weight, tension, hardness, and in some places tenderness of the abdomen; great oppression after taking food: almost constant nausea, and great irregularity in the functions of the bowels. There was likewise great emaciation and languor; a rapid, feeble pulse, and that peculiar anxious expression of the countenance,

which I have elsewhere insisted upon as a strong indication of the internal disorganization mentioned above. In short, every symptom led me to believe, that that disease had actually begun to establish itself. My hopes of any essential relief, of course, were very small; but the facts already stated, clearly pointed to the sort of aid that it was necessary to attempt to procure for her.

Leeches were applied to the tender part of the abdomen; and an ointment containing the hydriodate of potass was rubbed upon it. The action of the bowels was regulated by mild aperients; and, latterly, the hydriodate of potass was also administered internally. Two blisters were applied in the course of the treatment. The result of these remedies has been a restoration of the healthy feel of the abdomen; the swelling, tension, and hardness, having been altogether removed. The functions of the alimentary canal have become more natural; the pulse has diminished in frequency; the countenance has lost its expression of distress, and she has decidedly acquired flesh and strength.

Possibly some may say, that this was merely an example of what has been denominated chronic peritonitis, which was removed by bleeding and blistering. I think it of consequence to express my clear conviction, that it was not so; and that it belonged unquestionably to that family of diseases, to which tubercles give the character. For an explanation of what I mean by this statement, I must refer the reader to what I have said in my Enquiry, when treating of the difference between tuberculous and inflammatory affections of the serous membranes.

That the present case belonged to the former, I infer from the history of its progress. It commenced insidiously; advanced slowly; and had reduced her to the state which I have already described, in spite of the use of appropriate remedies, which had been judiciously employed before she came under my care. Symptoms may have been mitigated by the means employed; but the disease itself was not arrested; and it was in full progress to a worse condition, when I first saw her. This accords exactly with my experience in similar cases, as given in the Enquiry. And, if I except this single instance, I have seen no example of this form of disease on which any decidedly favourable impression has been made.

The facts detailed in this chapter touching the use of iodine, will be held, I doubt not, by my professional brethren, to confirm the reports of this medicine as given by

Dr. Coindet. I agree with that gentleman, that it has a distinct and direct effect upon the lymphatic system; and that we now seem to be in possession of a remedy calculated to prevent and remove many of the most untractable and hitherto irremediable of human maladies. I have scarcely experienced any of the inconveniences which, he says, sometimes arise from its use; and I am rather inclined to think, that mere friction or inunction will not, in many cases, be successful, without also giving it internally.

Letter from J. Baron, Esq., M. D., to the Translator.

SIR,

Gloucester, August 13th, 1824.

I AM sorry that I am not at present sufficiently disengaged to be able to comply with your request, touching the detail of cases illustrative of my experience of the use of iodine. If, however, the enclosed general statement be deemed interesting enough to appear in your work, it is quite at your service.

I have used the iodine in a great number of cases, (I think not fewer than a hundred,) and I can with truth affirm, that I have seen it accomplish that, which might have been looked for in vain from any other agent with which we are at present acquainted. I know no remedy possessed of equal power that is so manageable, and which may be rendered productive of so much benefit, with so little injury to the constitution. I speak this advisedly; and after weighing what has been said of its pernicious effects by others, and witnessing *some* of them myself, I believe, that in almost every instance they may be avoided with moderate care. In my practice they have not in any case been at all formidable, and moreover I am persuaded, that in general, the beneficial influence of the remedy may be secured, by watchfulness and caution, without the system suffering in any material degree.

Since my last work was published I have had considerable opportunities of judging of the effects of this remedy in pulmonary affections. In certain states and varieties of these diseases, I am persuaded that it exerts a most salutary influence, and I cannot doubt, that when the time and manner of exhibiting it shall become better understood, it will be acknowledged to be an agent of great efficacy in the treatment

of all tuberculous complaints, as well as in the removal of the other disorganizations in which its power is so conspicuous.

The preparation which I chiefly employ for internal use is, the solution of the hydriodate of potass, as made by Mr. Gorden, of Oxford street. It is, I believe, more certain in its effects, and less irritating than the tincture of iodine.

CASES,

By W. Gairdner, M. D. of London.

A FEMALE servant in one of the public hotels of Paris, aged thirty-three, married, who had borne several children, shewed me a tumour of her right breast she had had about two years. It was not attended with any pain, but had lately somewhat increased, which gave her alarm. About a year before she had been advised by a surgeon to have it cut out. This advice gave her so much uneasiness, that she presented herself at the clinical consultations of M. Dubois. That eminent surgeon immediately distinguished the tumour to be scrophulous; and during three months' treatment all the usual remedies of this disease were exhausted without the least effect. A scruple of the ointment of the hydriodate of potass, placed in the axilla at night, completely removed the tumour in about six weeks. *

A young gentleman, aged twenty-six, who had passed four winters in the south of Europe for a cough, with pain in his chest, and occasional expectoration of a thick matured discharge, frequently streaked with blood, consulted me on account of swelled glands in his neck, which he had had from his infancy, but which were at that time particularly troublesome.

* I have taken the liberty of extracting this and the succeeding case from among others that occur in Dr. Gairdner's "Essay on the Effects of Iodine on the Human Constitution, &c.;" a work containing many excellent observations relative to the employment of this very active and powerful medicine. The first case is interesting, not only from its exemplifying the effects of iodine in discussing tumours of the breast, but from the mode of applying the ointment in the way recommended by Dr. Scatigna, of Naples.

I desired him to use a solution of hydriodate of potass, in the dose of twelve drops three times a day. In the course of two months, the swellings in the neck, which had pained him from his infancy, were quite dispersed, and at the same time his sufferings in the chest were so much diminished, that he requested to be allowed to continue the medicine. I allowed him to use it a fortnight longer, at the end of which time he was quite free from complaint.*

CASE,

By Dr. Kolley, of Breslau.

From the "London Medical and Physical Journal."

SCARCELY had the account of iodine been published, when Dr. Kolley resolved to try it upon himself for a goitre of considerable size, and of ten years' standing, which had already resisted all the supposed remedies of this disease. His respiration was much impeded; he could neither walk quickly, nor for any considerable length of time; he could not go up stairs without difficulty, nor exert his voice. To these symptoms were added frequent and violent congestions about the head. During the employment of the iodine he scrupulously followed the prescription of M. Coindet (ten drops of the tincture three times a day in syrup) for a fortnight: this dose was taken without any inconvenience. During the second fortnight he experienced disagreeable effects from the increase

* This young gentleman ultimately fell a victim to the complaint in his chest. The case is only brought forward as one illustrative of the effects of iodine, in discussing scrophulous tumours. Dr. Gairdner, in allusion to the beneficial effects of iodine, remarks, "I have used this medicine in cases where I had good evidence of the presence of tubercles in the lungs; and I do not doubt that it will be found to be serviceable in the incipient stages of the disease. But in advanced periods, where extensive disorganisation has taken place, I think the symptoms may be aggravated by its use. Some cases in which it was prescribed were benefited in so marked a manner as to induce me to suppose that I had at length met with a remedy for that intractable and cruel malady. I have not the smallest doubt of its efficacy in relieving many diseases of the chest." Dr. Coindet, I am well aware, for-

of the gland *, his respiration became very much oppressed, his voice hoarse, the tumour indolent, the congestions violent; he had an unpleasant taste in the mouth, and his appetite fell off. He did not perceive that the excretions were changed. Next fortnight the gland diminished, and disappeared almost entirely in the space of twelve weeks, during which he continued the medicine without intermission. The lower lobe of the right side alone retained some degree of hardness, and the difficulty of breathing disappeared as much as the conformation of his chest permitted. He did not perceive any increase, either in the alvine evacuations, the urine, or perspiration; but he had diarrhœa during some days, having taken forty drops of the tincture at a time. He had no pain at the stomach, though his appetite was rather impaired, and he had frequent head-ache, which he attributed to congestion. In short, though he continued the use of iodine for three months, he perceived none of the symptoms attributed by M. Coindet to what he has called the period of saturation.

bids its use in all affections of this nature; so also does Dr. Kolley. There can be, I think, no doubt, from what is stated by Drs. Baron and Gairdner, that it may be *occasionally* exhibited with safety and advantage, even in such diseases.

* Notwithstanding this increase in the size of the gland, Dr. Kolley did not (as many under similar circumstances would have done) abandon the remedy, considering it to be inefficient, but prudently continued its use. His perseverance was rewarded, as will be seen in the sequel, by his being freed from a very troublesome complaint, under which he had long laboured; an example worthy of imitation by those who complain so loudly of the inefficiency of this medicine. Cases of a similar nature, that is, as to the increase of the gland during the early period of exhibiting the iodine, are recorded in the present memoir (p. 17.), as also in the recent work of Dr. Gairdner.—Dr. G., after remarking that an old woman who took this medicine for a goitre, with which she had been afflicted nearly forty years, and who had the circumference of her neck reduced from twenty-two inches to eighteen, on the twenty-fifth day, observes, “Such rapid diminution in the size of the tumour is not to be always expected. In some cases a *whole month*, and even more, elapses *before any effect is visible*.” “By the use of the ointment or the solution,” he adds, “a soft bronchocele will be discussed in a month or six weeks. Those which are hard and of old growth, generally take a little longer time. I have seen two cases, however, in which the tumours gradually disappeared, some weeks after the medicine had been altogether *discontinued*.” A striking instance of this kind is mentioned in the letter of J. B. Austin, p. 32.

Observations by Dr. Kolley.

From the "Edinburgh Medical and Surgical Journal."

IN cases of goitre the success of iodine depends on the tumour being actually situated in the thyroid gland; on the gland being neither schirrous nor carcinomatous; nor filled with hard concretions, or other analogous productions; on the disease being not too old; on the absence of cachexy, hectic fever, and derangement of the primæ viæ; on the goitre itself being neither inflamed nor painful. If care be taken to abstract these circumstances, Dr. Kolley considers that the practitioner will very rarely fail of success. With regard to scrofula (scrofulous glands and sores, we presume, for his description is not very clear), he remarks, that iodine often shows singular activity in dissipating that disease. But to insure its success, or even its safe administration, the patient must be neither hectic, nor phthisical, nor disposed to be so. In the case of children, a steady regimen is requisite, great cleanliness must be observed, they should be kept in a pretty uniform temperature; and if they are very irritable, of a weak habit, liable to diarrhœa, or hydrocephalus, the remedy must be used with great caution, or avoided altogether. In scrofula he found it of great advantage to combine the iodine with mercury. The cases he has selected from his practice are twelve in number, five of goitre, three of scrofula, and four of eruptive diseases, described under the convenient general term of *dartre*. We shall notice briefly his success in the two first diseases. The first case of goitre is a most admirable history of that disorder as it occurred in himself.* The second case is that of a girl eighteen years old, in whom the disease had existed since her fifth year. When she had used the iodine for a month, the tumour began to diminish. After taking it for sixteen weeks, her stomach began to be affected, and consequently the remedy was abandoned: when the author saw her, *three months afterwards, no trace of the goitre remained*. The third patient, a stout man, thirty-six years of age, with a large goitre of twenty years' standing, took the iodine for eight weeks; and the tumour disappeared entirely four weeks afterwards. In the fourth, a girl of nineteen, the disease was of sixteen years' standing.

* It is on this account it has been inserted in the present publication.

During the third week of the treatment she was seized with a sense of anxiety, heat in the throat, and excessive faintness, each time she took the iodine. In consequence no consideration could induce her to persevere, though the tumour began to decrease. Dr. Kolley is ignorant of the issue of this case. The last was an incipient case, accompanied by hypochondriasis. The tumour was removed in no long time, as well as many of the sensations referred to by the patient to the disease in the neck; but he continued liable to congestions in the head. Of the three scrofulous cases, one was a most deplorable example of the ravages occasioned by a scrofulous diathesis of the most exquisite kind. Among other maladies she had enlargement of the cervical glands, and suppuration of several of them, accompanied with the discharge of serous matter. All the anti-scrofulous remedies had been exhausted upon her in vain. When the iodine had been continued four weeks, in the dose of five drops (tincture) thrice a day, the sores began to discharge a thicker yellow pus, some of them appeared about to cicatrise, and the swellings in the neck diminished. At this period the iodine was intermitted, calomel was given to gentle salivation, and the iodine then resumed. In eight weeks the sores were all healed, and the swellings gone; and the patient never experienced an unpleasant symptom. Ten months afterwards the cure continued permanent. The second case was one of most obstinate and complicated strumous ophthalmia, in a well characterised scrofulous habit. All remedies had proved unavailing. In fifteen days there was a sensible amendment under the use of the iodine; and in three months the ophthalmia and all its effects which were curable had disappeared. The third patient, a child of four years, liable to severe strumous ophthalmia, which had resisted all sorts of treatment, got well in two months, under the combined use of iodine and mercury. In both cases of ophthalmia, Dr. Kolley thought it necessary to remove the active state of the inflammation by ordinary means, before resorting to the iodine.

It is on this account it has been inserted in the present publication.

SINCE the preceding pages were put to press, my uncle, Mr. W. White, surgeon, of Bath, who commenced using the iodine a short time since, informs me that he has found it successful in some cases in which he had recently administered it. Desirous of further information, I wrote to him; the following is an extract from his reply: "I regret that I cannot supply you with particulars of the cases alluded to, not having kept notes. One of the patients was a country boy, about fourteen years of age, of a healthy robust appearance; he had numerous glandular swellings on both sides of his neck; several had suppurated and burst before I saw him. After he commenced taking the iodine, no further suppuration took place, the sores healed, and the other enlarged glands gradually subsided. He took twelve drops of the tincture three times a day. — The other case was that of a girl, about twelve years of age, rather of delicate constitution, who had a swelling of one of the submaxillary glands. As suppuration took place, and the skin became attenuated, the lapis infernalis was applied, and the diseased skin destroyed. Notwithstanding, the glands on each side of that which had suppurated and had nearly got well became enlarged. I now directed the iodine for her in the dose of twelve drops of the tincture three times a day, occasionally exhibiting, as in the former case, a mercurial purgative. These glands did not suppurate, but under this treatment gradually lessened, so that there is now scarcely any induration to be felt."

Several cases illustrative of the effects of iodine in scrophula, bronchocele, and other diseases, will be found in the London Medical Repository; and to these I invite the attention of those medical practitioners, who, without any kind of trial of the iodine, denounce it as a remedy, not only inefficient, but really dangerous. I am fully aware the work above alluded to also contains one or two cases of the fatal effects of iodine; but such effects, I again repeat, would attend the use of opium, digitalis, &c. &c. if injudiciously or unguardedly administered.



