

**Proposal for establishing in Edinburgh, and other towns, a newly improved apparatus, for the application of the vapour of water, sulphur, and other medicinal substances, found so efficacious in the cure of rheumatism and diseases of the skin : with a paper upon the subject, which has been submitted to the perusal and received the approbation of Dr. Hamilton, Sen. Dr. Gregory, Dr. Barclay, Dr. Farquharson, and Mr. Bryce.**

**Contributors**

Scott, W.  
University of Glasgow. Library

**Publication/Creation**

Edinburgh : [Printed for Waugh and Innes], 1820.

**Persistent URL**

<https://wellcomecollection.org/works/p9awk47w>

**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](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>





PROPOSAL  
FOR ESTABLISHING IN  
Edinburgh and other Towns,  
A NEWLY IMPROVED  
APPARATUS,  
FOR THE APPLICATION OF  
THE VAPOUR OF WATER, SULPHUR,  
AND OTHER  
MEDICINAL SUBSTANCES,  
FOUND SO EFFICACIOUS IN  
*THE CURE OF RHEUMATISM AND DISEASES OF THE SKIN.*

PROPOSAL  
FOR THE  
ESTABLISHMENT OF  
A  
MUSEUM OF NATURAL HISTORY  
IN THE  
CITY OF EDINBURGH  
BY  
JAMES HUTTON  
ESQ.  
OF  
THE UNIVERSITY OF EDINBURGH  
AND  
OF THE ROYAL SOCIETY OF EDINBURGH  
IN  
CONJUNCTION WITH  
THE  
MAGISTRATES OF THE CITY OF EDINBURGH  
AND  
THE  
MAGISTRATES OF THE BURGH OF LEITH  
AND  
THE  
MAGISTRATES OF THE BURGH OF GREENOCK  
AND  
THE  
MAGISTRATES OF THE BURGH OF DUNDEE  
AND  
THE  
MAGISTRATES OF THE BURGH OF ABERDEEN  
AND  
THE  
MAGISTRATES OF THE BURGH OF GLASGOW  
AND  
THE  
MAGISTRATES OF THE BURGH OF INVERNESS  
AND  
THE  
MAGISTRATES OF THE BURGH OF PERTH  
AND  
THE  
MAGISTRATES OF THE BURGH OF ST. ANDREW  
AND  
THE  
MAGISTRATES OF THE BURGH OF DUNDEE  
AND  
THE  
MAGISTRATES OF THE BURGH OF ABERDEEN  
AND  
THE  
MAGISTRATES OF THE BURGH OF GLASGOW  
AND  
THE  
MAGISTRATES OF THE BURGH OF INVERNESS  
AND  
THE  
MAGISTRATES OF THE BURGH OF PERTH  
AND  
THE  
MAGISTRATES OF THE BURGH OF ST. ANDREW

3

**PROPOSAL**  
FOR ESTABLISHING IN  
**Edinburgh, and other Towns,**  
A NEWLY IMPROVED  
**A P P A R A T U S,**  
FOR THE APPLICATION OF  
**THE VAPOUR OF WATER, SULPHUR,**  
AND OTHER  
**MEDICINAL SUBSTANCES,**  
FOUND SO EFFICACIOUS IN THE CURE OF  
*RHEUMATISM AND DISEASES OF THE SKIN.*

WITH  
**A PAPER UPON THE SUBJECT,**

WHICH HAS BEEN SUBMITTED TO  
THE PERUSAL AND RECEIVED THE APPROBATION

OF  
DR HAMILTON, SEN. DR GREGORY,  
DR BARCLAY, DR FARQUHARSON, AND  
MR BRYCE.

---

*Multa enim in modo rei et circumstantiis nova sunt quæ in genere ipso nova non sunt. Qui autem ad observandum adjiciet animum, ei etiam in rebus quæ vulgares videntur multa observatu digna occurrunt.—BACON.*

---

**EDINBURGH:**  
PRINTED FOR WAUGH AND INNES, HUNTER SQUARE, EDINBURGH;  
T. AND G. UNDERWOOD, LONDON; AND  
R. MILLIKIN, DUBLIN.

1820.

PROPOSAL

FOR ESTABLISHING

Edinburgh and other towns

A NEWLY IMPROVED

A P P A R A T U S

FOR THE ASPIRATION OF

THE VAPOUR OF WATER, SULPHUR

AND OTHER

MEDICINAL SUBSTANCES,

TOGETHER WITH THE USE OF

THESE APPARATUS AND DIRECTIONS OF THE SAME

WITH

A PAPER UPON THE SUBJECT

WHICH HAS BEEN ADMITTED TO

THE PHYSICAL AND RECEIVED THE ASSURANCE

OF

DR HAMILTON, SEN. DR GREGORY,

DR BALGUY, DR FARQUHARSON, AND

MR BRYCE.

Printed and sold by W. & A. G. LEITCH, Edinburgh, and by J. & R. CLARKE, Glasgow.

EDINBURGH:

Printed for WATSON AND GIBSON, HUNTER SQUARE, EDINBURGH,  
T. AND G. GUNNWOOD, LONDON: AND  
H. MILLER, DUBLIN.

1830.

## ADVERTISEMENT.

---

THE writer of this paper would wish not to be thought presumptuous, in venturing to draw the attention of medical men, and of the public, to a medical subject; and he shall therefore state the simple facts that gave rise to the part which he has taken in the present business.

Soon after he had opened his Academical Institution for students of law and students of medicine, in the beginning of the present session, at the moment that he was sitting down to dinner with the students at one of the Saturday dinners, which he always made a point of attending, and which were open to all men of science, a foreign gentleman entered the room, and requested to be informed of the nature of the Institution: he was invited to stay and dine, and promised every information afterwards; and while these ceremonies were passing, one of the students came up and introduced this foreign gentleman as Dr Gosse of Geneva.



The Doctor dined at the Institution, and contributed, as he always must in every society, very considerably to the happiness of the day: and he was invited to return as often as he found it convenient during his stay in Edinburgh. The writer of this paper had the pleasure of seeing a great deal of Dr Gosse afterwards. The Doctor did him the honour to read the paper he had just then published upon setting on foot an academical Institution upon Milton's plan of education, and informed him that they either had or were about to form an Institution of the same kind at Geneva. In the course of these interviews, the writer of this paper informed Dr Gosse, that, having nothing to do but attend to the education of his own sons, he had projected this Institution, for the sake of bringing studious men together, who were engaged in similar pursuits; that among other things he had often thought an establishment where electricity, galvanism, cupping, and particularly dry cupping, sea water, and medicinal baths, frictions of all kinds, &c. should be employed according to the direction of medical men,

was much wanting in Edinburgh. Dr Gosse then mentioned, that he had seen a great deal of the efficacy of Dr De Carro's improved apparatus for vapour Baths at Vienna, and also of their construction, and that he considered them to be by far the best in Europe; that he had pressed the subject upon many persons in this town, but had not found any body disposed to take it up seriously, by sending to him a skilful mechanic, to whom he could describe the apparatus. In consequence of this, the Author of these pages called upon Mr John Carruthers, a mechanic whom he had long known to be a man of superior skill, and explained the matter to him, and told him that if he chose to undertake the business, the Author would give him the best advice, and all the assistance in his power upon the subject, and would introduce him to Dr Gosse. Mr Carruthers undertook the business, and was repeatedly with Dr Gosse; and from his verbal description, Mr Carruthers not only made drawings, but also all his part of the apparatus, that Dr Gosse might see it. Mr Carruthers was then advised to submit the mat-

ter, first to the approbation and patronage of the medical men of this place; and he accordingly got an address to medical men printed, and circulated among them.

The Author of this paper had wished to have done all he could in promoting this undertaking without being known in it; but circumstances occurred, which made it his duty to avow the part he had taken, and the approbation which the plan has since then received from the most eminent of the profession in this place, leaves him no cause to regret having done so. He first mentioned it to Mr Bryce, who immediately gave it the sanction of his name, which has long stood so high among men of science; indeed ever since his brilliant success in the cure of the crew of the Busbridge Indiaman of the yellow fever, and the important consequences to which his beautiful narrative of that business has since led.\* And as Mr Bryce thought that nothing more was necessary to secure the patronage and approbation of medical men than to get them to look into the subject, a great part of the

\* See Page 45. Post.

following paper was written merely for that purpose; and it having been submitted to the perusal of Dr Hamilton, sen. and Dr Gregory, Dr Barclay, Dr Farquharson, and Mr Bryce, and they all approving of it, and concurring in opinion that it ought to be published, it has been thought right to do so, and to make some little addition, in order to communicate the progress which the practice of the application of the vapour of sulphur and other medicinal substances to the human body is making upon the continent. Hence these pages may perhaps become the first number of a complete work upon this subject, which will be announced more particularly afterwards.

The following letter was written to Dr Gregory, with a great part of the paper now published inclosed, and was returned to the author the next morning, with the Doctor's testimonial of approbation written at the foot.

EDINBURGH, *March* 15. 1820.

“DEAR SIR,

“Will you do me the favour to cast your eye over the inclosed paper; for as you were

among the first upon whom the man, who is to attend at the proposed establishment, was directed to call, I have tried my hand at a medical pleading, in order to obtain the sanction of your great name; but if that does not do it, you are not to think of giving it out of favour to me as an old pupil; for your name stands a great deal too high to be hazarded in any thing where you have any doubt.

“ If I were not persuaded that this was a good thing, if rightly used, I would not have meddled with it; but we Englishmen, as I have heard you say, are apt to run away with the harrows. I will call upon you for the inclosed this forenoon, or at your class to-morrow.

Yours, dear Sir,

WILLIAM SCOTT.”

The paper was returned the next morning with Dr Gregory's approbation written at the foot of it, which is inserted among the subscriptions to the following Proposal.

PROPOSAL  
FOR  
EDINBURGH.

---

IT is proposed to establish in this Town, provided the subscription shall be sufficient to be an indemnity against loss, (no money being to be demanded till value is ready to be given for the subscription), *an Apparatus for applying the Vapour of Water, of Alcohol, of Sulphur, Mercury, or other Medicinal Substances, to the whole or any part of the Human Body*; such Apparatus having been established, and found extremely useful in almost every great town in Europe for the cure of several diseases, particularly of rheumatism and affections of the skin; and this proposal having received the patronage and approbation of some of the most scientific and eminent medical men in Edinburgh, it is now laid before the Public.

The establishment will be conducted in the following manner :

1. No Bath will be administered (except when taken by persons in health as matter of luxury), nor any thing allowed to be done without an order in writing from some medical man, specifying every particular ; because this, like all other re-

medies, may be abused by ignorance, and is not likely to be beneficial unless judiciously applied.

2. Every subscriber of one Guinea is to be entitled to twelve tickets, and every subscriber of half a Guinea to five tickets, and every subscriber of five shillings to two tickets, each ticket being an order for a single Bath; but no money to be demanded till value is ready to be given for it, by the Apparatus being erected.

3. There will be also a Portable Apparatus to be sent in cases of necessity to a sick-bed, by which Vapour may be applied partially, or to the whole body as directed, the expence of which will of course vary according to the time, distance, and attendance required.

4. The things necessary for the patient to send or bring with him, are mentioned at page 27 of the following paper.

5. It is intended to have at this establishment, Shower Baths with sea-water, both hot and cold, electrical machines, galvanic apparatus, mechanical contrivances for giving exercise and motion, friction, and cupping, particularly dry-cupping, either by glasses or partial exhausters, any of which may be used separately, or in conjunction with the vapour Bath, according to the directions of medical men.

The plan has received the patronage of the following Subscribers, whose names and approbation are given in the words, and according to the order in which they have been received.

## SUBSCRIPTIONS.

“ Mr Bryce approves of the above Plan, and will subscribe One Guinea towards its accomplishment .....	£1	1	0
(Signed) “ JAMES BRYCE.”			
“ I highly approve of the above Proposal, from the obvious effects of the Vapour-bath, which I once saw in what had been considered as not only a singular, but a hopeless case. I subscribe .....	1	1	0
(Signed) “ JOHN BARCLAY.”			
Dr Hamilton, Sen. ....	1	1	0
Dr Abercrombie, York Place .....	1	1	0
Dr Alison, Heriot Row .....	0	10	6
Mr Joseph Bell, Surgeon .....	1	1	0
Mr George White, Surgeon .....	1	1	0
“ I highly approve the within Proposal, having reaped much benefit from it in my own person, and will subscribe One Guinea for its accomplishment” .....	1	1	0
(Signed) “ WILLIAM FARQUHARSON.”			
“ A good Vapour-bath may be useful; and I subscribe One Guinea to promote the Plan stated in the preceding pages .....	1	1	0
(Signed) “ JAMES GREGORY.”			
Dr Tweedie, Nicolson’s Street .....	0	10	6
“ I approve very much of the object stated above, and will subscribe One Guinea ...	1	1	0
(Signed) “ WM. BEILBY.”			
Mr Laurie, Surgeon, Buccleugh Place .....	1	1	0
Mr Law, Surgeon, York Place ... ..	1	1	0
Mr Russell, Surgeon, St Andrew’s Square ...	1	1	0



Dr Duncan, Senior .....	£1	1	0
Mr Newbigging, St Andrew's Square .....	1	1	0
Dr Hamilton, Junior .....	1	1	0
Mr George Bell, St Andrew's Square .....	1	1	0
“ Dr Yule. The principle of the utility of the Vapour-bath, in the cure of certain dis- eases, has been long established, and re- quires no additional testimony. <i>Condi- tionally</i> ” .....	1	1	0
“ I highly approve of Baths of the above de- scription being in Edinburgh, and will subscribe One Guinea for that purpose (Signed) “ A. MACKENZIE GREIVES.”	1	1	0
Dr Hunter, Queen Street ... ..	1	1	0
Mr Barker, Elder Street .....	1	1	0
“ I subscribe One Guinea .....	1	1	0
(Signed) “ W. M. CUMMING, Surgeon, Canongate.”			
Dr Aitken, St Andrew's Square .....	0	10	6
Mr Gillespie, Surgeon, York Place .....	1	1	0
Dr John Thomson, Nicolson Street .....	1	1	0
Mr Caird, Surgeon, Nicolson Street .....	0	10	6
Mr Wishart, Surgeon, York Place .....	0	10	6
“ I subscribe with much pleasure One Guinea, to further the within useful intention ... (Signed) “ JOHN THATCHER.”	1	1	0
“ I much approve of the erection of this Bath, as capable of affording great relief in ma- ny diseases .....	1	1	0
(Signed) “ W. STEEL, M. D.”			
“ I think it a disgrace to the city not to have these Baths established on a scale corre- sponding to the medical character of the place. For the present, I subscribe One Guinea, and am ready to subscribe much more .....	1	1	0
(Signed) “ JAMES SANDERS.”			

Mr Andrew Page, Surgeon .....	£0	10	6
Mr John Ogilvie, Surgeon .....	1	1	0
Dr Andrew Berry .....	1	1	0
Dr George Wood .....	1	1	0
Mr William Wood, Surgeon .....	1	1	0
Mr J. Keith, Surgeon .....	0	10	6
Dr Borthwick, George Street .....	1	1	0
Mr Robert Allan, Surgeon .....	1	1	0
Dr James Buchan .....	1	1	0

The above Proposal having received the full approbation of the medical men of this place, an establishment will be opened in Drummond Street, (No. 5.) in the course of the following month; provided individuals, and the great public bodies, shall so far support it in the beginning as to subscribe upon the same terms that the medical men have done; and if the subscription shall be sufficient, it is intended to have a separate Bath for the use of the poor; in which case, every subscriber may, if he pleases, have as many tickets for the poor as he shall subscribe shillings.

The names and address of subscribers may be left with Messrs WAUGH & INNES, at Mr LAING'S, Mr MACKAY'S, or Messrs FAIRBAIRN & ANDERSON, Booksellers.

The names already received since this intention has been privately known, are the following.

The Lord Dean of Guild .....	£1	1	0
Earl of Wemyss .....	1	1	0
Earl of Moray .....	1	1	0

Mr George Miller, Hope Park .....	£1	1	0
Sir J. Hay, Bart. ....	1	1	0
Sir J. Sinclair, Bart. ....	1	1	0
J. Corse Scott, Esq. ....	1	1	0

Mr John Carruthers, No. 24, Green-side Place, being in possession of the whole of Dr De Carro's invention and also of that of M. Rapou, as well as of other improvements upon the application of vapour, is ready to make the apparatus for any charitable Institution, and to correspond with and give every information to any person in other towns who may be disposed to form private establishments similar to that in Edinburgh, where nothing shall be done in case of disease without the written order of a medical man; but it will be necessary for such person to forward a certificate as to his fitness for such an establishment from the principal medical men of the place, and to pay the postage of his letters.

EDINBURGH,  
28th April, 1820.

## PAPER, &c.

---

FOR the sake of those to whom this subject may be new, it has been thought proper to give the following short account of the nature of these Baths, and of the difference between the application of heat by *vapour* and by *water*.

The importance of applying water, vinegar, wine, &c. at different temperatures to the human body, is very fully treated of by Hippocrates in his little work *περι υγρων χρησης* (upon the use of fluids); and in other parts of his works, he recommends the application of vapour or fumigation, and sometimes with aromatics, *ἢ ἐν αρωμασι πυρη*. (See Aphorism 28. Sect. 5; and De Gorter's exposition of it, p. 583.

The Greeks sometimes called the vapour Bath *πυριθηριον* or *υποκαυσον*. The term *Laconicum* was taken from the Lacones: Plutarch, in his life of Alcibiades, tells us, that the Lacones were the authors of this sort of bathing. Martial, having occasion to mention the Etrurian Baths, says,

*“Ritus si tibi placeant Laconum  
Contentus potes arido vapore  
Cruda virgine, martiaque mergi.”*

Celsus uses this word for the vapour-bath: “*Siccus calor est, et arenæ calidæ, et laconici, et clibani, et quarundam naturalium sudationum.*” l. 2. xvii.

Celsus also calls vapour Baths *assæ sudationes*, and forbids the use of them in apoplexy: “*Inimica etiam habet balnea assasque sudationes.*” (lib. 3. xxvii. 3.)

The *vapour* Bath is alluded to by the venerable Dr Cullen in the following words. (Chap. 6. Of the Cure of continued Fevers.)

“ 198. The other external means of taking off the spasm of the extreme vessels is warm-bathing. This was frequently, and in various circumstances, employed by the ancients, but till very lately has been neglected by modern physicians. As the heat of the Bath stimulates the extreme vessels, and, with the concurrence of moisture, also relaxes them, it seems to be a safe stimulus, and well suited to take off the spasm affecting them.

“ 199. It may be applied to the whole body by immersion; but this is in many respects inconvenient; and whether some of the inconveniences of immersion might not be avoided by a *Vapour-Bath*, I have not learned from experience.”

Dr Gregory, in his elegant and very learned *Conspectus Medicinæ Theoreticæ*, Cap. 27. *De remediis diaphoreticis et sudorificis*, reckons the *vapour* of water, or of alcohol (*vapores calidi aquæ vel alcoholis*), amongst the most efficacious auxiliaries for inducing sweat; and says, that it is sometimes sufficient, without medicine of any kind; that by it sweat may be brought out from any particular part, as from a joint, in cases where general sweating would be improper. MCCCCLXXVIII.

He also says, that heat applied by *vapour* (*omnem calorem, sive siccum, sive per balneum, aut fotum aut vapores admotum*), not only relaxes the skin, but acts at the same time as a most powerful stimulus to the whole body. MCCCCLXXIX.

He shows the effects which copious sweating, or a more free insensible perspiration, produces in diminishing the quantity of the circulating fluids, in determining to the skin, &c.; and therefore considers it as established, that it is beneficial in various diseases, and chiefly in such as proceed from suppressed or deficient insensible perspiration, as in various sorts of fevers, severe colds, coughs, rheumatism, and many inflammations, also in certain discharges of blood, *in consumption, in alvi fluxu, aut magno urinæ profluvio*, and in dropsy.

So also he says, “in many chronic diseases of the skin, *veluti lepra varii generis aut lue venerea*, to promote the insensible perspiration, and even oftentimes to induce a copious sweat, is an excellent remedy.” MCCCCLXXXVI to MCCCXC.

The *first* important point, which is now very respectfully submitted to the candid judgment of the Faculty, is this, whether there is not a marked difference between the application of heat to the human body through the medium of vapour, and through that of water; and if so, whether this proposal does not offer to the medical men of this place another powerful engine, whereby, in the exercise of their very honourable and useful, but at

the same time very difficult profession, to combat disease in various forms.

*Secondly*, As to the application of medicinal substances, and how far many of the great cures reported by foreign physicians may not have been produced by the vapour of water alone in inducing a copious sweat, that "*eximium remedium*" of Dr Gregory, must be judged of by medical men; but, with the exception of the medicinal substances above mentioned, and perhaps one or two more, no well-educated physician in these islands will be imposed upon by the farrago of substances enumerated in the various French publications upon this subject.

As to the *first* point. To shew that the application of heat through the medium of *water* does not produce the same effects as through the medium of *vapour*, this argument is addressed: The late Dr Heberden, after his long, judicious, and extensive practice in London, makes the following observation in his Commentaries, which are deservedly held in the highest estimation by medical men, and which, he tells us by his motto, were written when he was an old man, and no longer able to follow his laborious vocation, "Γέρον καὶ κάμνει οὐκέτι δυνάμενος, τοῦτο τὸ βιβλίον ἔγραψα."

(Chap. 79. On Rheumatism.)

"I have remarked some instances in which warm-bathing seemed prejudicial, but not one in which it did any good in either species (acute or chronic) of this distemper."

Now, it is perfectly well known to every medical man in Ireland, that the Irish peasantry have for ages been in the practice of curing themselves of colds and rheumatism, by getting into a place made somewhat like a kiln, which, in some provinces, the peasants have attached to their cabins, and after it has been properly heated, they creep in by a small hole, and remain till a copious sweat is induced, and afterwards wrap themselves up in a blanket and return to their beds; and where these kiln-baths cannot be had, they use large barrels heated in the same manner, and prefer those that have contained salt: this they do with the most decided benefit. The Canadians are also in the practice of curing themselves of rheumatism, by standing in a large tub with a great quantity of cedar or pine leaves boiled at the bottom, and with a blanket over them to keep in the vapour: And Dr Clarke, in the first volume of his Travels, Chap. 8, makes the following observations upon the *vapour* Baths used so generally, and with such good effect, in the north of Europe.

“ Eminent physicians have endeavoured to draw the attention of the English government to the importance of *public Baths*, and of countenancing their use by every aid of example and of encouragement. While we wonder at their prevalence among all the eastern and northern nations, may we not lament that they are so little known in our own country? We might, perhaps, find reason to allow, that erysipelas, surfeit, rheumatism, colds,



and many other evils, especially cutaneous and nervous disorders, would be alleviated, if not prevented, by a proper attention to *bathing*. The inhabitants of countries where the *Bath* is constantly used, have recourse to it in the full confidence of being able to remove such complaints, and they are rarely disappointed. Throughout the vast empire of Russia, Lapland, Sweden, and Norway, there is no cottage so poor, no hut so destitute, but it possesses its *Vapour-Bath*, whither all the family resort every Saturday at the least, and every day in sickness.

“ Lady Mary Wortley Montague, in despite of all the prejudices then prevalent in England against inoculation, introduced this blessing from Turkey. And if some other patriotic individual of equal influence, would endeavour to establish throughout Great Britain the use of *warm* and *vapour* Baths, the inconveniences of our climate might be done away. Perhaps, at a future period, donations for *Public Baths* may become as frequent as the voluntary subscriptions whereby hospitals are maintained, and a grateful people may commemorate the service they have rendered to society by annual contributions for their support. But when we recollect that the illustrious Bacon in vain lamented the disuse of Baths among Europeans, we have little reason to indulge the expectation : At the same time, an additional testimony to their salutary effects in affording longevity and vigorous health to a people otherwise liable

to mortal diseases, from their rigorous climate and unwholesome diet, may conduce towards their introduction. Among the ancients, *Baths* were public edifices, and considered as institutions of absolute necessity. Rome, under her emperors, numbered nearly a thousand such buildings. In Russia, they have only *Vapour-Baths*, and these, for the most part, in wretched wooden hovels. If wood be deficient, they are formed of mud, or scooped in the banks of rivers and lakes; but in the palaces of the nobles, however they may vary in the splendour of their materials, the plan of their construction is always the same."

It is well known to medical men how intractable a disease rheumatism often is: this could not well be the case, if a warm Bath of water produced the same effects as one of vapour. So in various affections of the skin, but particularly of the *rete mucosum*, or mucous membrane, which have been found so perplexing and difficult of cure, especially last Spring in this town among the poor. Now we are not only assured by numerous medical writers upon the continent, of the great advantages they have seen from the use of *vapour Baths*, but also by our own army surgeons during the time that the troops were lately in France. And Dr Thomas, in his useful compilation of the Modern Practice of Physic, treating of rheumatism, says, (p. 223, 6th edit.) "Both remedies (frictions and warm Bath), however may, I think, be considered of inferior value in the cure

of rheumatism, when compared with the topical, and sometimes general use of hot water in the form of *vapour*. Whenever the joints are very rigid, and the pain upon motion exquisitely severe, or where the muscles have become contracted and almost paralytic; and, indeed, in all protracted cases of the disease of the hip-joint, lumbago, or sciatica, the *vapour* of hot water, locally and properly applied, will seldom fail, in conjunction with other proper topical applications, to prove a safe and successful remedy. The mode of applying it must be regulated according to circumstances. In cases of chronic rheumatism, where great debility prevails with deep-seated pain, the warm Bath frequently renders the patient hot and restless, and seldom or never relieves, unless it induces sweat. Now the advantage of the *vapour* Bath is, that perspiration takes place at a much lower temperature in it than in the other: the *vapour* Bath need not to be heated above 96 degrees to produce a salutary perspiration, whereas a warm Bath seldom produces this discharge at a lower temperature than 100 degrees, and from that it is used up to 112 in some of the hot springs at Bath.

Besides this increased heat applied to the skin when the exhalants are ready to yield their contents, the surrounding medium presses upon the cuticle, and in some measure prevents the flow of perspiration, which it had brought on the surface: on the contrary, in the *vapour* Bath the heat

being applied to the body in an aeriform state, unites with the insensible perspiration as it arises by the exhalants, condenses upon the surface, and drops from the body by its own weight, meeting with no resistance from the elastic vapour;" and for this he refers to "Dr Kentish *on Warm and Vapour Baths.*"

"Dr Bardsley, in his Medical Reports, mentions that he has seen at the Manchester Infirmary several hip cases of long standing yield to a persevering use of topical bleeding by means of cupping with scarifying, with the aid of issues; but, in order to remove the rigidity and want of tone, which remained in the parts after the subsidence of the more violent symptoms, he was obliged to have recourse to the aid of *vapour* and *electricity.*"

From what has been said, it seems to be pretty clear that *vapour* and dry heat do produce different effects from heat applied through the medium of water. And from the manner in which heat can be applied by the apparatus for *vapour*, all those inconveniences of immersion alluded to by Dr Cullen are avoided.

With regard to the *second* point, namely, the virtue of medicinal substances applied externally in the form of vapour, the following argument will be confined to the vapour of sulphur, in order to shew, that however it may act, it is reasonable to conclude that it does produce effects which the vapour of water does not.

In the first place, although it is but of late years that we have heard much about it even upon the continent, it is a very ancient remedy. Celsus says, that where a pain of the nerves\* occurs, the part that suffers must be anointed with nitre and water without oil, then wrapped up, and a slow fire of live coals and *sulphur* placed beneath it, and that so it is to be *fumigated*; and that this is to be done for some time, but fasting, and when the digestion is completed.

*Si dolor est, ea ipsa pars sine oleo, nitro ex aqua perungenda est; deinde involvenda, et subjicienda pruna lenis, et sulphur, atque ita id suffumigandum: idque aliquamdiu faciendum, sed jejuno, cum bene jam concoxerit,*” (lib. 3. xxvii. 2.) So in lib. 4. xx. 1. he says, “*Dolens vero ea sulphure suffumigari debet.*” And upon the same subject, see Hippocrates in the beginning of his first book, *De Morbis Muliebribus*.

That sulphur is a most powerful remedy, in many affections of the skin, is well known. In the itch, it is admitted to be a specific. It is also known to our army surgeons who were with the troops in Portugal, Spain, and France, that natural hot Baths impregnated with sulphur, do produce effects which hot Baths not impregnated with sulphur do not produce. They know not by report, but by their own observation and experience, as the author of this paper has been informed by some, upon whose judgment and veracity he can rely, that

\* Celsus uses *nervus* for ligament or tendon, as Hippocrates does *νεῦρον*.

the hot sulphureous waters at Caldas das Reynas in Portugal, at those in the Pyrenees, and at St Amand near Valenciennes in France, do effect cures in old chronic rheumatism, stiff joints, &c. which hot Baths not impregnated with sulphur, as hot sea-water Baths, will not effect. But that the vapour of water will not cure such cases of long-standing chronic rheumatism, stiff joints, &c. which the vapour of sulphur will cure, is a point that, according to the knowledge of the writer of this paper, is not so capable of legitimate logical conclusion as the former point. He understands, however, that since the artificial Baths of the vapour of sulphur have been introduced in France, the distinction is always observed in ordering these Baths for such patients, and not the Baths of the vapour of water simply.

Again, in cutaneous diseases, it is of value to know whether the vapour of sulphur will produce effects which sulphur used as an ointment will not produce; and the following argument is addressed to the affirmative side of the question.

Although sulphur used as an ointment is admitted to be a specific in that disease which is vulgarly called the itch, yet in many other cutaneous affections, though it is generally recommended, it is not only not a specific, but produces little or no effect, and warm sea-water is often found to be beneficial. Yet in some of these affections, neither the one nor the other, nor indeed any other remedy, has been found to cure. For the authority of this, see Dr Bateman's work, Dr Hamilton, jun.

and Mr Burns upon the Diseases of Children ; but, above all, Dr Heberden, who says in his 23d chap. (cutis vitia) “ Sulphur has a specific virtue in curing one distemper of the skin, and there are few others in which it has not been tried externally and internally. The success, whatever it may have been, has by no means been so great as to hinder our doubting whether it have any, except in curing the itch.” And again, “ But it will happen, I fear, to all the known methods, that they will be found too weak to subdue the obstinacy of some inveterate cutaneous diseases.”

Now, if it should be the case that sulphur, applied in the form of vapour, will cure some of those inveterate cutaneous diseases which will not yield to any of the known methods, then a most valuable and important discovery is made for the honour of medicine, and the benefit of mankind. That it at least deserves a fair trial, the following account of what has been doing of late years upon the continent is quite sufficient to show.\*

Dr Alison, who is so well known here by his judicious practice at the New Town Dispensary, and still more by the lectures which he has occasionally delivered with so much credit to himself, and so much to the satisfaction and approbation of the class of one of the greatest favourites as well as ornaments of the Edinburgh school, his uncle Dr Gregory,—made it his business, while he was upon the continent last year, to inquire a good deal about these Baths ; and he has informed the author of

\* See also page 38.

this paper, that he understood from Dr Coindet of Geneva, that, after a series of experiments which that Physician has had the opportunity of making with these Baths, he found the vapour of sulphur particularly beneficial in cutaneous diseases; but that in rheumatic diseases, he thought the simple vapour of water did as well. Dr Alison has also brought home with him the latest publication upon this subject,\* which he has had the goodness to lend to the Author of this paper, and which was presented to Dr Alison by Dr Coindet. This publication will be noticed presently; but the work which will have most weight with the medical men of these islands, is that of Dr De Carro, “*Sur les fumigations sulfureuses.*” Dr De Carro graduated at this University; he is well known to some of the oldest and most respectable members of his profession in this town, to be one of the most accomplished men in Europe; and it is impossible for any educated man to read his work without being struck with the candour, love of science, perseverance and anxious desire to render the noble profession, of which he is so great an ornament, as extensively useful to his fellow-creatures as possible. He opened his establishment at Vienna, where he is in full practice, in the Summer of 1817. He has published every case that had occurred up to the date of his work in 1819, amounting to two hundred cases of persons of both sexes, from five years

\* *Essai sur L'Atmidiatrique ou Médecine par les Vapeurs, par T. Rapou, de Lyon, D. M. P.*



of age to seventy-five, of whom many were very delicate, were considered as incurable, and given over by physicians.

Among the diseases which have fallen under his care, tetters\* (les dartres) have been the most common. Out of fifty-eight individuals, twenty-five were perfectly cured, nineteen considerably benefited, and fourteen received no benefit. He gives one remarkable case in the following words :

“Un septuagénaire, gros, le col tres court, d'ailleurs en bonne santé, avoit depuis un an et demi, sur les bras et les cuisses, dans presque toute leur longueur, des croûtes herpétiques, que recouvroit une matière purulente, qui rendoient les pieds œdémateux, et lui causoient des douleurs, de demangeaisons et une insomnie qui faisoient son tourment. Le mal avoit commencé derrière les oreilles et autres parties de la tête, et s'etoit dissipé par des bains d'écorce de chene. Il avoit pris peu de remèdes. Quatorze fumigations, pendant seize jours suffirint a son entiere guérison. En repartant pour sa province, sa peau étoit presque naturelle. J'ai appris depuis qu'il continue à se bien porter.”

A man of seventy, fat, neck very short, otherwise in good health, had for a year and a half upon his arms and thighs, almost all along them, herpetic scabs, which were covered by purulent matter, making the feet œdematous, and causing him pain, itchings, and a want of sleep, which became a torment. The disease had commenced behind the ears, and in other parts of the head, and had been dissipated by baths of oak-bark. He had taken but few remedies. Fourteen fumigations, in the course of sixteen days, were sufficient for his entire cure. When he set out again for his province, his skin was almost natural. I have learned since, that he has continued well.

\* *Herpes* of Cullen and Willan. See Good's Nosology, 479.

He gives also several cases of remarkable cures of pimples in the face.

Of this work of Dr De Carro, Dr Gosse has published a very able analysis in the *Bibliothèque Universelle des Sciences*, &c.; and he has added some observations of his own, which are the more valuable from the circumstance of his having been an ocular witness of many of the cases that occurred during his residence of four months in Dr De Carro's house. Thus Dr Gosse tells us, that among those who were afflicted with the itch, or with an itchy eruption (*eruption psorique*) twenty-two had been radically cured, after a few fumigations, and four had derived benefit:

That Dr De Carro had had an opportunity of verifying the observations made in France upon the subject of syphilitic diseases, and that the promptness of the cure left no doubt as to the saving of time and money which governments might derive from this method of treatment in the Hospitals:

That hepatic spots (*taches hépatiques*), by which it is presumed he means the *alphoid*\* spots of Dr Willan, had yielded with very remarkable facility in eight cases:

That Dr De Carro had an opportunity of treating six persons in this manner, affected with what he calls *des furoncles*, (boils), which, with the greater part, were rather the result than the cause

\* *Lepa alphoides*, for which Dr Bateman prescribes "the application of steam in order to clear the surface." Page 33.

of disease: two were quite cured, two derived benefit, and the two last did not continue the fumigations.

That a patient whom he considered to be afflicted with the fish-skin\* disease (*ichthyose*) has experienced a slight relief, and that a chronic nettlerash had obstinately continued, “*enfin une urticaire chronique a persistè opiniatremet.*” Dr De Carro has observed, that the fumigations were not commonly beneficial but when amendment, and that promptly, was observable from the beginning. That the more cutaneous diseases were superficial, the more efficacious was the vapour of sulphur in combating them. Thus humid pimples, or itch, have proved more obstinate than when dry. Carbuncles are situated too deep to disappear easily, while *les taches hepaticques ou le prurigo* yield without any trouble to the action of this vapour. Dr De Carro proposes this remedy for the *éphélides* † ou *taches des rousseur*; and Dr Gosse says, that he is the more disposed to adopt this opinion, because Plenck speaks of the gas of sulphur as proper for making the hands white, and Dr G. suggests, whether we may not hope from these fumigations to discover a remedy for the *morbus pediculosus*. ‡

Out of thirty-nine persons tormented with rheumatism, sciatica, and anomalous pains, eighteen were cured, seventeen found themselves better, four were sent away without being benefited.

\* Ichthyosis, the fourth genus of Dr Willan's second order (*Squamæ*.) Good, 475.

† Sunburn. Good, 505.

‡ Ib. 492.

Of gouty affections, and such as were mixed with rheumatism, the number of cases were twenty-six, and the greatest part of these patients had suffered for a long time, or were affected with an hereditary taint. Seven were cured; fifteen much better; four without any benefit: One only had taken internal medicaments with the fumigations. Where œdematous swellings existed, the fumigations had dissipated them; and hence he concludes that they would be useful in dropsies, where no organic injury had taken place, as in anasarca succeeding scarlet fever, &c. He mentions the following extraordinary case of rheumatism.

“ Une femme de vingt-sept ans, mère de trois enfans, ayant une tres-foible constitution, mais une bonne poitrine, accablée de chagrins et de misère, et habitant un logement humide, souffroit depuis deux ans d'un rhumatisme général, qui commença par les lombes, et passa dans les bras, puis dans les pieds; sans fièvre, regles en ordre, sommeil bon, appétit de même, mais manquant souvent de moyens de le satisfaire; obligée de rester au lit, incapable de porter la cuiller à la bouche et marchant sur des béquilles avec la plus grande difficulté. Sa foiblesse étoit

A woman of twenty-seven years of age, mother of three children, having a very weak constitution but a good chest, overwhelmed with vexation and misery, and living in a damp lodging, was afflicted for two years with a general rheumatism, which began in the loins, and went into the arms, afterwards into the feet; without fever, regular in all respects, slept well, appetite good, but often without the means of satisfying it; obliged to remain in bed, incapable of lifting a spoon to her mouth, and walking upon crutches with the greatest difficulty. Her weakness was so ex-

si excessive, que je me déterminai avec peine à entreprendre ce traitement, ne croyant pas qu'elle pût se tenir dans l'appareil et supporter les fumigations. Le cas étant désespéré, je l'essayai, le 22 Juin, avec d'innombrables difficultés, pour la placer dans la boîte, où elle eut bientôt des défaillances et des vomissements. Enfin, vû son extreme foiblesse, il ne fut pas possible d'aller an-delà de six fumigations. Je ne m'attendois plus à la voir revenir. Quel fut mon étonnement d'apprendre par son mari, que malgré sa foiblesse pendant les six fumigations, elles avoient produit un tel effet, qu'elle commençoit à se lever de son lit, à marcher sans béquilles, à porter sa cuiller à la bouche et à tricoter. Je l'encourageai à recommencer. Après en avoir prix dix, elle vint chez moi à pied et sans béquilles, d'un foubourg éloigné, et s'en retourna de même apres la onzieme fumigation. L'allée et la venue font pres d'une heure de chemin. Son teint a repris l'apparence de la sané ; et les progrès de

cessive, that I determined, with reluctance, to attempt this sort of treatment, not believing that she could support herself in the apparatus, and bear the fumigations. The case being desperate, I began on the 22d of June with innumerable difficulties, to place her in the box, where she soon had faintings and vomitings. At last, considering her extreme weakness, it was not possible to go beyond six fumigations. I never expected to see her return. What was my astonishment to hear from her husband, that notwithstanding her weakness during the six fumigations, they had produced such an effect, that she had begun to rise from her bed, to walk without crutches, to lift her spoon to her mouth, and to knit. I encouraged her to begin again. After having taken ten baths, she came to my house on foot, and without crutches, from a distant quarter of the town, and returned in the same manner after the 11th fumigation. Going and coming took up nearly an hour. Her complexion had recovered the ap-

son rétablissement sont aussi rapides qu'étonnans. Elle a pris en tout trente-six fumigations."

pearance of health, and the progress of her recovery was as rapid as it was astonishing. She had taken in all thirty-six fumigations.

Dr Gosse considers an observation of Dr De Carro to relate to some of the grievous consequences of the administration of arsenic in intermittent fevers, and from thence he suggests the assistance that may be derived from these fumigations in combating such grievous consequences; and mentions, that two Hungarian physicians, correspondents of Dr De Carro, attribute to these fumigations a particular efficacy in diseases produced by arsenic and lead; one of them having cured a paralysis which had been produced by lead; but Dr Gosse doubts if the action of lead can be diminished with so much facility as that of mercury, which appears to have a tendency to go to the surface of the skin. He says that the experiments made as to that subject upon gilders and hatters with the vapour of simple water oblige us to consider the fumigations of sulphur as a specific against all the diseases produced by this metal. That this remark leads us to explain the good effects of the gas of sulphur in inveterate syphilitic affections, where mercury has been used, and even abused, the elimination of which alone might effect the cure; unless we prefer attributing these good effects to the exciting action of this gas upon the animal economy, which the mercurial treat-

ment had thrown into a state of extreme debility and relaxation. The number of diseases of this kind to which these fumigations were applied, did not exceed eight: three disappeared entirely, four were much relieved, one only resisted. The other appropriate remedies had been administered at the same time to four individuals, and the assistance which was obtained from them cannot be denied, but alone they would have miscarried; at other times, when these fumigations were made to precede, they seemed to prepare the body for this treatment (mercurial), and to favour it; in fine, they are oftentimes sufficient, as we have seen, to complete the cure. Dr Gosse observes, that this does not apply to recent syphilis, and that it will be proper to verify in such case the efficacy of the vapour of mercury, according to the testimony of Lalouette.\*

Dr Gosse points out a useful remark of Dr De Carro's: "C'est que le traitement fumigatoire est contraire aux chutes de matrice, sans doute par la même raison qui le fait conseiller dans les amenorrhées."

The following case is given in the words of Dr De Carro, and being entirely for professional men, it will not be translated.

"Un homme de cinquante-deux ans, d'une constitution délicate, sec et maigre, commença dans sa trentième année à avoir divers maux veneriens, blénorrhées, chan-

\* *Nouvelle méthode de traiter les maladies vénériennes, par Pierre Lallouette.*

eres et phymosis, traités intérieurement par des mercuriaux et des decoctions. Cette guérison paroissoit assurée, mais il y a sept ans qu'il lui survint sur le crâne une exostose, qui dura deux ans et fut très douloureuse. Après une année de relâche, le poignet gauche commença à enfler, et depuis un an, cette enflure a crevé, s'est ulcérée, mais sans carie. Les douleurs, qui auparavant étoient vagues et plus ou moins fortes, sont continuelles, sur-tout la nuit, depuis quatre mois. Appétit tres bon, forces médiocres. Passage de l'urine difficile après s'être tenu longtemps assis. Du 18 Juillet au 8 août, il prit vingt fumigations, dont malgré d'abondantes sueurs, il n'éprouva aucun soulagement et qui augmentèrent même les douleurs osteocopes. L'ulcère du poignet s'est considérablement amélioré, les fumigations n'ayant été qu'exploratoires, et leur résultat indiquant encore l'existence du virus syphilitique, le médecin de ce malade, de concert avec moi, lui prescrivit un grain de calomel et un demi grain d'opium deux fois par jour, dont le 14 août il éprouvoit déjà un bien tres-marqué. Vu le 31 août, l'amélioration continue à tous égards et rapidement, c'est à dire, qu'il n'a plus de douleurs, qu'il dort bien, qu'il marche lestement, qu'il a abandonné une canne dont il ne pouvoit se passer, et que ces ulcère de l'avant-bras s'améliorent evidemment. Le passage de l'urine n'offre plus aucune difficulté."

Dr Gosse says, that in rheumatic palsies, when they are slight, or at the beginning, these fumigations have been useful ; but they proved altogether inefficacious in two cases of hemiplegia, which is not surprising when we advert to the most common cause of that complaint ;—that he should have been tempted to have established it as a general rule, that these fumigations are not proper for persons



who have had one or more attacks of apoplexy, if the experiments made in other establishments had not demonstrated their utility in some cases;—that four persons afflicted with deafness, and one with a spasmodic cough, had not been more successful;—that there has not been a sufficiently large number of cases in scrofula, to come to any positive conclusion; nevertheless, in the case of a gouty man afflicted with scrofula, the improvement was sensible; but in the case of a little girl, who was scrofulous, they had not been able to continue the fumigations;—that the following letter of Dr Grantzon of Sarvaar in Hungary, to Dr De Carro, gives us hopes also that these fumigations will be useful in the treatment of glandular diseases in general, and of certain *goitres*, or tumours in the throat,\* in particular.

3d July, 1818.

----- “ My first patient has been a priest of 21 years of age, who came hither from a great distance to try the fumigation of sulphur, which his physicians had recommended as the last resource in a case that had resisted all the known remedies, (*rebellé à tous les remèdes connus.*) This patient had about his neck a scrofulous tumour, about the size of *ten fists of a man*.

“ His respiration was so embarrassed, that he could not go fifty paces without resting himself. Three fumigations diminished the size of this tumour one third, and caused the asthma to cease, which was suffocating him; after fifteen sittings,

\* Swelling of the thyroid gland.

the tumour had almost entirely disappeared; but his affairs not permitting him to remain here any longer, and my want of experience in this new remedy hindering me to fix a term for his entire recovery, he went away fully determined to return for the sake of completing his cure in the month of September following."

"There is another case, if possible, still more remarkable, and which has given me the highest opinion of fumigation. A man, or rather a skeleton, thirty years of age and upwards, who had suffered for nine years, and had been under the care of many celebrated physicians, and particularly for the last three years: he was scarcely in a state to walk a few steps; he had, by the aid of purgatives, at the end of five or six days, some scanty, hard, and globular dejections, preceded by a discharge of two or three ounces of puriform matter; he had no appetite; he never slept without taking opium, and only when they caused him to be laid upon hay; he suffered excessive pains in the lower parts of his belly, in his extremities, and, above all, in tumours as large as an egg, which he had upon the left shoulder, and in the joint of the left knee. This man, to my great astonishment, was relieved of his pains after four fumigations; the three first appeared to make his condition worse, and increased his want of confidence; at last, he began to have every morning a regular stool, the puriform evacuation ceased, all his pains disappeared, and at the end of twelve fumigations, he took leave of me

in good health. After having passed so many unhappy years, his cure appeared to him a miracle, and caused the greatest surprise in this country."

Upon this extraordinary case Dr Gosse observes, that the sulphureous acid gas, of which we have just seen the influence on this patient, manifests its action, in the first place, upon the skin, not only by the copious sweats which it excites, by the redness and turgescence which it causes to be determined to that organ, but also by its bringing out a particular exanthema, which Dr De Carro distinguishes by the name of "*eruption sulfureuse ou fumigatoire* ;—that this cutaneous phlegmasia is not very rare, and nevertheless Dr Galès has not mentioned it in his book ;—that it may be considered, in many cases, as a favourable prognostic ;—that it acts as a counter irritation in those diseases, which depend upon some internal irritating cause, or that it modifies the morbid irritation of the skin, in the same way as blisters, which are applied sometimes with success in certain sorts of tetter, without manifesting itself, nevertheless, more particularly upon the part that suffers ;—that it is characterised by an eruption of a multitude of little points of bright red, somewhat prominent, in a middle state between the measles and the miliary eruption, seldom general, but commonly confined to a certain part of the body, above all, to the trunk and the arms ;—that, in one case, it extended itself over almost the whole surface of the skin, and presented upon the back

long streaks of fiery red, (vibices) like those produced by the strokes of a rod;—that it continues two or three days, after which it fades away, and is always followed by desquamation;—that the smart itching which accompanies it is troublesome, and has even become so painful as to oblige the patient to suspend the fumigation, without being hurtful in any other respect to the health;—that this exanthema has much relation to that which is produced by the natural sulphureous Baths, and which is very common at Baden, in Austria, and at Seuckt, where it is known by the name of *Bath-eruption*;—that it disappears quickly after the fumigation has been discontinued, and leaves no bad consequence;—that, independently of this sulphureous exanthema, a general desquamation of the cuticle takes place during or after the treatment of fumigation, and Dr De Carro has seen instances of it two months after this treatment had been left off, and thinks that we ought not to judge of the effect of the vapour of sulphur in obstinate diseases till a long time after this desquamation;—that it is not owing, as some persons believe, to the destruction of the cuticle by the acid gas, but it is the necessary result of the sweats, and of an inflammatory cutaneous turgescence;—that the same effect is produced by blisters, by erysipelas, scarlet-fever, &c.—that the treatment of fumigation brings about, not only a renewal of the cuticle, but it modifies also the functions of the true skin, re-establishes the insensible perspiration, and improves

the sweats, which are at first acrid and fetid:— finally, that the odour which it communicates to the body is not disagreeable, like that of other preparations of sulphur, and resembles that of sulphuric æther.

Dr De Carro has published some extracts of his correspondence with those physicians to whom he has sent his apparatus. These, with many other useful parts of this important work, will be adverted to in the next number; but that of Dr Stiller, physician of the Hospital *des Freres de la misericorde*, is very important: Out of thirty-nine individuals in his hospital, upon whom he tried these fumigations, thirty-six were relieved, and only three received no benefit from them. Dr Gosse observes, that the importance which Dr De Carro attaches to making known the employment of the vapour of sulphur in certain forms of syphilis, has induced him to transcribe two cases from the practice of Dr Galès, which proves its utility in that disease when all other means had failed; and that by the review of his own practice, and of that of his correspondents, Dr De Carro thinks he has fully satisfied what he had advanced in his first publication.—“The impulse,” he says, “is given: governments, encouraged by physicians, cannot remain indifferent to so salutary an invention, in favour of which, interest pleads as much as humanity.”

In the course of fifteen months, there were no less than forty-eight orders for his apparatus, and

new orders were coming every day from different parts of the continent, Austria, Hungary, Poland, Russia, Italy, &c. Among the directions of Dr De Carro are the following :

“ In cutaneous diseases, it is proper to administer one or two Baths of the vapour of water, in order to render the skin supple and clean.

“ The linen which it is indispensable for a patient to bring with him is a night-cap, four napkins, two sheets, and a blanket ; one of the napkins is to go round his head, the second to cover the seat where he sits, the third to cover the foot-board, and the fourth to wipe his face.”

The sheets and blanket, one to be made warm to wrap him up in the moment he comes out of the Bath, and in which he is to be laid down upon a sofa for half an hour or more, according as the sweats are more or less copious. The time for remaining in the Bath is generally about half an hour. The quantity of sulphur put into the crucible is a dram.

In cutaneous diseases, Dr Gosse proposes that the patient should be directed to bring with him clean linen to put on after the sweating, as that which he has worn before may do harm or retard the cure.

Dr De Carro recommends the morning as the proper time for using the fumigation, and that patients should not use them fasting.

Dr Gosse observes, that by Dr De Carro's method of burning the sulphur in a crucible, he can graduate the temperature of the fumigation ac-

ording to the constitution and age of the patient ; that if it is thought proper, the fumigation may be even administered cold, and that it is only by this contrivance that those congestions in the head can be prevented, to which certain individuals are disposed.

Dr De Carro rejects as of no use the employment of local fumigation ; but Dr Gosse thinks that a stream of condensed gas may, in some cases where the disease is purely local, be more advantageously employed than the same gas could be in a diffused and quiescent state, and particularly where it is of consequence promptly to check the progress of disease, and hints, that partial fumigation may, perhaps, be more applicable to mercury and to arsenic, than to sulphur.

In the work of M. Rapou, of whose doctrines a full account will be given in the next number, he particularly recommends local applications of vapour, called by the French *douches de vapeurs*, and shows how they can be conveniently applied.

This work is of a very different kind from that of Dr De Carro, but there is much in it well worth knowing ; and Mr Carruthers being quite master of the whole of M. Rapou's apparatus, the application of the *douches* will certainly be tried.

A few of his heads of cure will give medical men some idea of the cases in which the vapour of different substances have been tried ; and as they alone are competent to form a judgment upon such a subject, these heads will not be translated, lest the

generality of readers should suppose, that M. Rapou, as Dr Johnson observes of somebody else in one of the papers of his admirably conducted Medical Journal, professes to cure "all the ills that flesh, and even bone, is heir to."

“Ulcere fongueux, guéri par les douches de vapeurs aromatiques.

Ulcere dartreux, guéri par les fumigations sulfureuses.

Ulcere lié a une affection de la rate, guéri par les douches de vapeurs dirigées sur cette organe.

Psidracia très ancien, guéri par les bains de vapeurs émoullientes et sulfureuses.

Eruption particulière et héréditaire, guérie par les bains de vapeurs hydrosulfurées.

Dartres squammeuse fluente, guérie par les bains de vapeurs sulfureuses et les fumigations de choux et de vinaigre.

Phlegmasie chronique de l'estomac et des intestins, entretenue par un principe dartreux, et guérie par les bains de vapeurs.

Rhumatisme chronique guéri par les fumigations de succin et les douches de vapeurs hydrosulfurées.

Rhumatisme chronique général avec engorgement des muscles et infiltration de la peau, guéri par les bains d'étuves et le massage. Sciatique ancienne très douloureuse, guérie par les douches aromatiques et la flagellation.

Lombago aigu, guéri par deux fumigations sulfureuses et deux douches de vapeurs aromatiques.

Rhumatisme aigu, guéri par les fumigations sulfureuses.

Névralgie fixée sur les lombes, guérie par les fumigations émoullientes.

Goutte traitée avec succès par les douches de vapeurs.

Paraplégie, avec paralysie de la vessie et des gros intestins, dans les traitement de laquelle les bains de vapeurs ont été très-avantageusement employés.



Atrophie de l'extrémité inférieure gauche, traitée avec succès par les bains de vapeurs.

Paralysie du sentiment avec amaigrissement des jambes, guérie par les douches de vapeurs aromatiques et la flagellation.

Hypocondrie guérie par les bains de vapeurs.

Hystérie, guérie par les bains de vapeurs.

Engorgement de foie, guéri par les vapeurs de sureau et de vinaigre dirigées sur cet organe.

Tumeur anormale dans la fosse iliaque droite, guérie par les bains et les douches de vapeurs aromatiques.

Syphilis ancienne qui avoit résisté à toutes les méthodes guérie par les fumigations mercurielles. Trouble des fonctions de la peau suite de couches, guérie par les bains de vapeurs.

Diverses indispositions suite de couches, avec engorgement douloureux du sein, guérie par les bains et douches des vapeurs.

Douleurs musculaires, suite de couches, guéries par les bains de vapeurs.

Engorgement des viscères abdominaux et notamment du foie, suite de couches, guéri par les bains et les douches de vapeurs.

Retraction musculaire, guérie par les bains et les douches de vapeurs aromatiques

Phlegmasie chronique de l'articulation iléo-femorale, avec tendance à une luxation spontanée, guérie par les douches de vapeurs aromatiques.

Flexion de la jambe sur la cuisse avec engorgement considérable du genoux, guéri par l'action successive des douches de vapeurs et des aspersion d'eau très-froide.

Tumeur blanche articulaire, indolente, guérie par les douches de vapeurs et les frictions glaciales.

Tumeur anormale à une cuisse, guérie par les douches de vapeurs et les applications astringentes.

Déviations ou torsion de l'épine, guérie par les bains et les douches de vapeurs.

Gibosité, traitée avec beaucoup de succès par les douches de vapeurs.

Maigreur extrême, occasionée par la trop grande activité des organes digestifs et guérie par les bains de vapeurs sulfureuses.

Marasme ou maigreur extraordinaire, lié à une sorte d'irritation habituelle du foie, et guérie par les bains de vapeurs.

Catarrhe pulmonaire chronique, guéri par les fumigations sulfureuses et les frictions.

Symptômes précurseurs de fièvre muqueuse,\* produits par une suppression de transpiration et guéris par l'usage des bains de vapeurs.

Pleuro-péripneumonie commençante, guérie par les bains de vapeurs aromatiques.

Catarrhe pulmonaire aigu, guéri par l'usage d'un bain de vapeurs aromatiques.

Irritation chronique de la muqueuse gastro-intestinale, avec fièvre hectique, guérie par les bains de vapeurs.

Doleur pleurodinique, guérie par l'usage de trois douches de vapeurs."

M. Rapou has very properly published, at the end of his book, the Reports of two Commissions appointed to examine his apparatus and his practice.

The first is the Report of a Commission appointed by the Prefect of the department of the Rhone, and in it there is the following passage.

"The application of external remedies is of extreme importance in the cure of tetter and other

\* Huxham's low nervous fever. Pinel says, "La fièvre que Huxham désigne sous le nom de fièvre lente nerveuse, montre une certaine série de symptômes qui conviennent parfaitement à la fièvre pituiteuse ou muqueuse." 1 *Nosographie*, 118.

impetigenous affections. It almost outweighs the utility of internal treatment.

“Rheumatism, for the most part, when it has become chronic, yields to local remedies more readily, and more certainly, than to any internal medicaments however judiciously combined. We say the same thing of certain syphilitic diseases, and of a multitude of other affections of the external organ; which affections, after having been general and subordinate to a diathesis, end by fixing themselves locally, and require nothing more than remedies applied directly to the part where they have fixed. We could easily increase the catalogue of diseases which imperiously require the employment of vapour Baths; and we can only express our regret, in common with many enlightened physicians, that topical remedies, which formerly were attended with such brilliant success in the East, should in these our days be so neglected. The Arabian physicians are still our masters in this part of the art, and it is still to their books, which have been, for the most part, condemned to an unjust oblivion, that we must go and search for the principles and the rules of this salutary practice.”

And again: “In the present condition of society, nothing perhaps can be better to keep the skin in that state of excitement, which is the most favourable to the regular exercise of its functions, than vapour Baths taken at convenient intervals. They produce this effect with more certainty than

the Baths of water. Experience proves that vapour Baths increase the appetite; that they procure a state of general health; that they give agility to the limbs, suppleness to the joints; that they clear the colour of the skin, and make it white in a remarkable manner; and that it is therefore the best cosmetic that women can use, and certainly the least dangerous. We ought, above all, to encourage this establishment in a city like ours, (Lyons), where catarrhal affections, lymphatic obstructions, rheumatism, tetter, and other diseases of the skin, are in a manner endemical."

This report concludes in the following manner: "We finish this report in expressing a desire to see this apparatus placed upon a larger scale, erected into a public establishment, patronised by authority, and offering to the sick of the city, and to those of the hospitals, the numerous advantages which its ingenious mechanism, and its well-directed administration, are capable of producing."

And it is signed, "Sainte-Marie, M. D.; Bouchet, M. D. and chief Surgeon of the Grand Hotel Dieu; Cavenne, chief Engineer; S. Gilibert, M. D.; Egnard, M. D.; Raymond, Professor of Chemistry."

The other is a report to the under Secretary of State for the Home-department, of a commission of the Professors in Paris, appointed by the government to examine the former report, and the apparatus of M. Rapou. It concludes in the following manner.

“ We think that the apparatus of M. Rapou is worthy of fixing the attention of your Excellency, on account of its numerous advantages. Considering that, in the present state of our knowledge, an establishment such as M. Rapou proposes, that is, one that offers a complete system of fumigation, is indispensable at Lyons; and that his apparatus really offers most resources by the advantageous additions which he has made to it: The commission think, that the city of Lyons, and the prefect of the department of the Rhone, ought to grant M. Rapou an indemnity proportional to the expence which he will be obliged to be at, and to that which he has already incurred,

“ *First*, To establish, as soon as possible, at Lyons, a complete system of fumigation.

“ *Secondly*, To direct gratis the construction of his apparatus in any hospitals or charitable institutions, at Lyons, which the local authorities shall judge proper to establish.”

It is signed, “ Leroux, *President, Dean of Faculty*; Halle, Thenard, Royer-Collard, *Professors*; and Darcet, *Reporter*.”

The principles and rules of the Arabian physicians will be given in the next Number. Rhases, Avicenna, and Albucasis, advised vapour Baths in the small-pox. In the mean time, it may not be amiss to point out what Celsus says about vapour Baths, and their application, l. 2. xvii.

“ Sudor etiam duobus modis elicitur: aut sicco calore, aut balneo. Siccus calor est, et arenæ cali-

dæ, et laconici, et clibani, et quarundam naturalium sudationum, ubi terra profusus calidus vapor ædificio includitur, sicut super Baias in myrtetis habemus. Præter hæc, sole quoque, et exercitatione movetur. Utiliaque hæc genera sunt, quoties humor intus nocet, isque digerendus est. Ac nervorum quoque quædam vitia sic optime curantur. Sed cetera infirmis possunt convenire: sol, et exercitatio tantum robustioribus; qui tamen sine febre, vel inter initia morborum, vel etiam gravibus morbis tenentur. Cavendum autem est, ne quid horum vel in febre, vel in cruditate tentetur. At balnei duplex usus est. Nam modo, discussis febribus, initium cibi plenioris, vini que firmioris, valetudini facit; modo febrem ipsam tollit. Fereque adhibetur, ubi summam cutem relaxari, evocari que corruptum humorem, et habitum corporis mutari expedit. Antiqui timidius eo utebantur: Asclepiades audacius. Neque terrere autem ea res, si tempestiva est, debet; ante tempus, nocet."

Celsus also recommends vapour Baths in elephantiasis. See l. 3. xxv.

Two important observations of M. Rapou deserve much consideration.

P. 160. "I have not been able to administer the vapour Bath so often as I would have wished in eruptive fevers, or in the measles, scarlatina, small-pox, &c."

P. 172. "From the result of my experience, and the opinion of one of the most eminent practitioners in Paris (M. Nacquart), I have reason to be-

lieve that the vapour Bath might be still more useful in diseases of deep-seated organs, than in those which appear on the skin."

Dr Gosse mentioned to the Author, that he had seen the best effects from fumigation in *scarlet fever*, after the eruption had, as it is said, struck in.

And the Author has been informed by Colonel Stewart of Garth, whom he has had the pleasure of meeting at Dr Farquharson's, that the Colonel was once entirely cured of a fever in the West Indies, of which a great number of his regiment died, by a Vapour Bath, and he has kindly promised to give the particulars of his case for the next Number.

It seems surprising, that neither in Dr De Carro's work, nor in M. Rapou's, unless it has been overlooked, there should be any directions as to the propriety of a full alvine evacuation as preparatory to the use of the vapour Bath. In nine cases out of ten, it is presumed, such practice could not fail to have the best effect; and the necessity of it is particularly urged by Baccius, physician to Pope Sextus Quintus, whose famous book *De Thermis* may be considered as the work that chiefly contributed to restore in Europe the practice of bathing, which it appears had fallen into total disuse, as he says, p. 97; "Quam partem miror nostros seu negligentia, seu ignorantia omisisse." This work contains all the ancient learning upon the subject, even to the construction of the Baths, and will be particularly alluded to in the future Numbers.

As an Establishment will be opened by the middle of May, in Drummond Street, (No. 5.) which will depend for its continuance, and even for a fair trial, entirely upon the public, now that it has received the decided approbation and patronage of the medical men of this place, the preceding pages may be considered as the first Number of a work upon this subject; including whatever may confirm the utility of a revival of the ancient practice of applications to the external organ by vapour, frictions of various sorts, &c. to which the superior success of Hippocrates in chronic diseases has been attributed. This will be published not periodically, but as often as any important matter occurs; and those who may think them worth their perusal, by ordering any of the future Numbers of their Booksellers, will receive them as soon as they are published, as they will not be again advertised.

In order to make such a work as useful as possible, any communication of important facts, or legitimate reasoning upon the subject, will be inserted with pleasure, and may be communicated to the Author through Messrs Waugh & Innes, or the Publishers in London and Dublin. The introduction which the Author has received for this purpose to Dr De Carro from one of his oldest friends at this university, and also to other medical men who are pursuing this subject, together with what may occur at the Establishment in Edinburgh, where nothing will be done but by the orders of medical men, affords reason to believe that some useful matter may be communicated from those quarters;



and since this intention has been known, three very valuable cases have been received, which will be inserted in the next Number; two from Dr Steel, a surgeon in the navy, now settled in the Canongate, who, after using all the known remedies in vain with two seamen in cutaneous diseases, while off Bourdeaux in the Rota frigate at the end of the last war, sent them to the Baths of the vapour of sulphur which he had heard of at that place, and by which they were completely cured after three or four applications. The other case is from Dr John Campbell of Broughton-street, of a gentleman from Jamaica, who from rheumatism had completely lost the use of every joint in his body, and upon whom all the common remedies, and among them the warm Bath, had been used without success, and who, under Dr Campbell's care, had used the vapour of hot water in the best manner in which it could be contrived to be administered without a proper apparatus, and by which, in the course of two months, he was enabled to walk fifty or sixty yards with assistance, and gradually got quite well, and returned to Jamaica, where he is at present in the perfect enjoyment of his health, and of the use of his limbs.

The evidence and authorities now brought forward are considered amply sufficient to prove the utility of the proposed establishment, and no pains will be spared in the future numbers to shew

in what diseases the application of vapour, galvanism, and frictions to the external organ, do produce such beneficial effects as are not experienced from other remedies.

In considering what are the *diseases of the skin* to which the vapour of water, sulphur, &c. may be applied with the greatest confidence, it may not be found perhaps an unsafe guide to take, as the most comprehensive and correct of any of the arrangements of disease, and preferable to Dr Willan's, the whole of the third order of the sixth class of Good's Physiological System of Nosology. The name of this class, according to his "corrected and simplified nomenclature," is, "Eccritica. Diseases of the excrement function;" to which he adds the following explanation: "Eccritica Ἐκκρίτικα from ἐκκρίνω "secerno, exhaustio," to secern or strain off, to drain or exhaust." The author has preferred this derivative to any other which κρινω affords, as alike applicable to the secernent and absorbent systems. In the view which is here taken of these systems, they bear nearly the same relation to each other as the veins and arteries: the action which commences with the one is carried forward into the other. The health of the general function consists in the balance of power maintained between the two;—its disease, in the disturbance of this balance. There may be undue secretion with healthy absorption; undue absorption with healthy secretion; or there may

be undue or morbid absorption and secretion at the same time."

The third order of this class is "Acrótica. Pravity of the fluids, or emunctories that open on the external surface, without fever, or other internal affection, as a necessary accompaniment:" to which the following explanation is given.

"ACROTICA. From *ἀκρος*, "summus," whence *ἀκροτατης*, "summitas," "cacumen." The genera and species are taken as nearly as the system would allow, from Dr Willan's Cutaneous Diseases."

Under the fifth genus of this order, "Ecphtysis, (from *εκφύζω*, to boil or bubble over) importing vesicular eruption confined in its action to the surface," he makes Herpes one of the species, and in this he is borne out by the opinion of Mr Allan, who says in his treatment of the Herpetic ulcer, "as far as my experience goes, the disease seems to me to be entirely local, and if curable at all, it is by local remedies." (System of Surgery, I. 380.) And upon this species Good has the following explanation: "*Ecphtysis Herpes Excedens*. This variety of Herpes appears to have been much misunderstood, and to have been held of a far severer character than it really possesses, in consequence of an error that has long since crept into the text of Celsus, and been propagated in the common editions. In his list of ulcers, Celsus introduces one called by the Greeks *θηλώμα*, which he describes as being of a livid or black hue, with a fetid smell, and copious discharge, insensible to the touch, though dis-

turbed by itching, with pain and inflammation around it." And he then adds, according to the common editions, "fitque ex his ulcus quod ἔρπητα ἐσθιόμενον Græce vocant." From these proceeds the ulcer, which the Greeks call "*hërpes esthiomenos*," or *excedens*; and thus the herpes, a cutaneous vesicular affection, is extravagantly converted, in one of its species, into "a deep spreading ulcer of a cancerous character," as Dr Bateman has justly described it according to the general lection, and not being aware of the error of the text.—In the *variorum* edition, Leonardi Targa has correctly restored the passage, and given us again φαγέδαιναν, "the ulcer called phagedæna," instead of ἔρπητα ἐσθιόμενον, by which means the whole is rendered simple and intelligible. Herpes, according to Galen, is an eruption of *minute* and crowded *vesicles of the size of millet seeds*, excited on the *surface of the skin*, filled with an acrid bilious secretion, and consists of two species; the one containing in its vesicles a milder or more aqueous fluid, called, from the size of the vesicles, *herpes miliaris*, which merely *seems* to burn, or corrode; the other containing a *thicker* fluid, of a *higher heat and colour*, and so acrid as actually to corrode the continuity of the subjacent skin, still creeping along in a serpentine direction, as the term herpes imports, and hence denominated by Hippocrates *herpes esthiomenos*. The author has put together the above description from various parts of Galen to make it the fuller; chiefly from his book *De tumoribus præ-*

*ter naturam*; his *Methodus medendi*, lib. 2; and his treatise, *De arte curativá*, lib. 2."

Upon the seventh genus of this order, (" *Mális*, from *Μάλις μαλιασμός*, cutaneous vermination, the cuticle or skin infested with animalcules,") he has the following notes :

" In the malis *Acari*, the author has followed the opinion of Sauvages, which is now indeed the prevailing opinion of physiologists; and has supposed, not that the acarus *scabiei* is the immediate cause of, or a constant attendant on, scabies; but only, that wherever it is to be traced on the human skin, it is in or about the pustules of the scabies, which serve as a nidus to it, in the same manner as a diseased liver in sheep serves as a nidus to the fluke or fasciola *hepatica*.

" Common as this genus of diseases is to man, it is still more so to animals of perhaps every other class and description, from the monkey to the fish-tribes, and from these to the lowest worms. All of them are infested with parasitic and minuter beings on their skins, shells, or scales, which afford them an asylum, and, for the most part, supply them with nutriment." This is the disease to which Dr Gosse suggests that the sulphur fumigation may be tried with advantage. Page 16 ante.

Under the 10th genus (" *Epichrósís*; simple discolouration of the surface, from *Ἐπιχρῶσις*, a coloured or spotted surface") is the species *Ephélis*, from *ἔφηλις vitium faciei solis ustione*," to which Dr De Carro proposes his fumigation. Page 16,

ante; and also the species *Pæcilia*. Good concludes his valuable notes upon this class in the following beautiful manner.

“*Epicrosis Pæcilia*. Ποικιλία, a term of Isocrates from ποικιλίς, versicolor, pictus diversis coloribus; whence *Pæcile*, the porch or picture gallery of the Stoics at Athens. The species is new to nosological classification, as well as the genus under which it occurs; but the morbid affection has been long known to physiologists; and it ought to have had a niche in the Catalogue of Diseases before now.

“The different hues of black, copper-coloured, and red, by which different nations are distinguished in different parts of the world, cannot be regarded as diseases. They are as natural to them as a fair complexion to an European, and only constitute distinct features in the different varieties of the human race. They are, however, regarded as diseases by Plenck, who has entered them in his class *MACULÆ*, under the generic terms of *rubedo cutis* (rothe hant,) *nigredo cutis* (schwarze hant,) and *albor cutis* (weisse hant,) by the last intending, not the inhabitants of Europe or Asia Minor, but Albinos, or those included under the genus *Alphosis*, Cl. 3. Ord. 4. of the present system.

“Some of these natural, and many morbid discolourations have often been found relieved by cosmetics, as that of Homberg, which is a dilute solution of oxymuriate of mercury, with a mixture of ox-gall. Hartmann’s cosmetic was a simple dis-

tillation of arum-root in water. If the hands be deeply discoloured, they may be whitened by being exposed to the fumes of sulphur.\*

“ In the American States, a black has occasionally been known to have the whole of the colouring pigment absorbed and carried off during a severe fever, and to arise from his bed transformed into a white man. See the same subject treated by M. Bose, *Pr. de Mutato per morbum colore corporis humani, Lips. 1785.* Büchner relates the case of a man who, on the contrary, on recovery from a severe fever, had his face tinged with a black hue; probably from a morbid secretion and deposite of a black pigment along with the rete mucosum of the face. *Miscel. 1729, p. 260.*

“ It is to the partial or variegated secretion of the cutaneous pigment that we are indebted for all the diversified and beautiful hues evinced by different kinds of animals and vegetables. It is this which gives us the fine red or violet, that tinges the nose and hind quarters of some baboons, and the exquisite silver that whitens the belly of the dolphin, and other cetaceous fishes. In the toes and tarsal membrane of ravens and turkies, it is frequently black; in common hens and peacocks, grey; blue in the titmouse, green in the water-hen, yellow in the eagle, orange in the stork, and red in some species of the scolopax. It affords that sprightly intermixture of colour which besprinkles the skin

\* See Page 16 ante.

of the frog and salamander. But it is for the gay and glittering scales of fishes, the splendid metallic shells of beetles, the gaudy eye-spots that bedrop the wings of the butterfly, and the infinitely diversified hues of the flower-garden, that nature reserves the utmost force of this wonderful pigment, and sports with it in her happiest caprices."

If enough has been said to shew in *what* diseases of the skin the vapour Bath ought to be adopted, it will be for our own enlightened medical men, from the hints they may receive from the ancients, and from the practice of late upon the Continent, to judge in what other cases besides these and chronic rheumatism, the vapour of water, sulphur, alcohol, mercury, or other substances, may be safely and advantageously applied; and being once well acquainted with the principal effect of this remedy, they will no doubt apply it as they do other powerful remedies to counteract particular symptoms, and not to diseases generally. Thus in Colonel Stewart's case, the vapour Bath was applied immediately upon the invasion of fever in the *West Indies*: it produced a most powerful sweat\* for a whole night, and the fever was gone the next morning.†

\* See page 36 ante.

† It certainly ought to be noticed, that Colonel Stewart took at the same time 12 grains of calomel, which, combined with other purgatives, is the favourite remedy of Mr Bryce. Out of 250 of the crew of the *Busbridge* attacked with this fever, Mr Bryce only lost three, and those under peculiar circumstances. See his Narrative; see



It may be worth recollecting, with what commendation Pinel quotes Hoffman's doctrine, not indeed as the proximate cause of fever, but as an exposition of its most general and remarkable phenomena.

“Doit-on regarder comme une détermination de la cause prochaine de la fièvre, l'histoire simple que fait Hoffman de la succession des mouvements qui ont alors lieu de l'extérieur à l'intérieur? Il n'y a point d'espèce de fièvre, dit cet auteur, qu'elle soit continue ou intermittente, bénigne ou maligne, qui, dans son invasion, ses progrès ou ses exacerbations, ne manifeste un refroidissement des parties extérieurs du corps, un resserrement des pores de la peau, une détumescence des vaisseaux superficiels, des horripilations, une suppression de la transpiration, et une constipation de ventre. Le sang se porte de l'extérieur à l'intérieur, et il y a congestion dans le cœur et les gros vaisseaux; enfin le mouvement fébrile ne se termine qu'après la cessation de ce resserrement spasmodique qui a lieu à la surface du corps et dans les vaisseaux capillaires, et alors l'impulsion du sang devient plus libre et plus uniforme vers l'extérieur, ce qui est suivi de la sueur et du retour des sécrétions comme dans une véritable crise. C'est dans la succession de ces deux mouve-

also Dr Clutterbuck's able and ingenious book on Fever, page 303; and Dr Hamilton's book on Purgative Medicines (5th edition) page 184. and Appendix 13, by which it should seem that Dr Hamilton was hereby determined to put to the test of experiment his own early conjectures, and accordingly instituted, immediately after the publication of Mr Bryce's Narrative, and steadily followed out, that series of practice in the Royal Infirmary of Edinburgh which has established such a monument to his fame, as must hand his name down to posterity among the most illustrious physicians of his age.

ments ajoute Hoffman, que consiste l'essence et la nature de la fièvre."—*Nosographie Philosophique*, I. 342.

Without being governed by the humoral pathology, or rejecting every vestige of it,\* the use of a remedy which determines so powerfully to the surface, must be conformable to the approved doctrines of the present day; and the opportunity afforded of acting upon an organ so extensive, so sensible, and so connected, † performing at once the double function of absorption and exhalation, and sympathising in so great a degree with the inter-

\* See Dr Gregory's *Conspectus*, DXXX to DXLV. See also Dr Hamilton's *Observations on the Impediments to the Improvement of Medicine*, where, speaking of the humoral or chemical, the mechanical, and nervous pathologies, he says, "Each of these systems, considered separately, affords many just and important conclusions, which do not, however, serve as a basis for general theory." Page 7.

† "DCCXXVIII. Denique, sudorem copiosissimum, in multis morbis, medici, a Natura ipsa edocti, arte eliciunt cum insigni sæpe ægrotantium commodo: de quo postea suo loco plenius agendum erit."

"DCCXXIX. Minutus vel suppressus sudor habitusque cutis haud raro observantur. Deficiunt hæ excretiones paulatim propter vitæ genus otiosum et sedentarium, graves animi affectus (CCCXLIV, CCCXLVI) qui impetum sanguinis valde minuunt, debilitatem fere omnem, cælum aut tempus frigidum et humidum immunditiam, cibi genus durius, exhalatu difficilium, et demum propter plurima foramina cutis, et vasa minora, coarctata aut conclusa, veluti in sensibus, quibus semper exhalatio per cutem parcior est, urina vero copiosior, pro rata parte, quam junioribus."

"DCCXXX. A tali defectu multa profluunt mala. Totum corpus plenum (nisi aucta alia secretio insolitam retentionem

nal organs, particularly the stomach,\* and the circle of the *Vena Portarum*, † or as Stahl calls it, the *Porta Malorum*, will no doubt lead medical men to consider how to avail themselves of it in fever. The vapour of alcohol, which is mentioned with approbation by Dr Gregory, ‡ can be applied

compensaverit) et hebes, et languidum sit, et animus quoque demissus et tristis; nam hilaris et lætus animus exhalationem promovet, et a libera exhalatione quodammodo efficitur vicissem. Concoctio quoque ciborum vitiatur, et appetitus, minuitur, propter insignem (CCCLVII) inter cutem et ventriculum consensum. Denique, rententa diu materia putrescente, vel noxia saltem, quæ debuisset excerni, haud absimile est, totam massam humorum paulatim corruptum iri."

"DCCXXXI. Subito autem suppressus sudor magis adhuc et citius nocet, non modo propter retentam materiam quam oporteret exhalare, sed propter humores, ad superficiem corporis libere fluentes, inde pulsos, et in alias partes directos, valida contractione vel *spasmo* vasis minutis cutis inductis. Hinc sæpe febres, inflammationes, congestiones sanguinis abnormes, sanguinis profluvia, aliæque excretiones, urinæ et alvi imprimis, auctæ et vitiatæ."

Indeed, the whole of Dr Gregory's Chapters *De motus sanguinis varietatibus et vitiiis*, and *De secretion et excretion; earumque varietatibus et vitiiis*, ought to be at the finger ends of every man who prescribes this remedy.

\* Ibid. "CCCLVII. Porro, consensus vix minus generalis intercedit inter ventriculum et totum *genus nervosum*; quin et cutis ipsa membrana reticulata, vasis nervisque probe instructa, tantum consensum cum reliquis partibus corporis habet, ut parva admodum ejus pars, certa ratione affecta, totam afficiat, et in remotis corporis partibus, ventriculo, renibus, et universo *genere nervoso*, miras mutationes inducat."

† See Dr Johnson's very interesting and well-written work on the Diseases of Tropical Climates.

‡ See page 2 ante.

to a patient in bed without the least disturbance ; and Mr Allan has had the goodness to inform the Author, upon the authority of Mr Charles Bell, that heated air is now used in this manner at the Middlesex Hospital, and has promised to communicate in what diseases, and with what success, for the next Number of this work, upon the same respectable authority. The attendants to the proposed establishment, will be thoroughly acquainted with the mode of its application.

Fever, after all, is the great study for a physician ; and the manner in which this great subject is always opened by Dr Gregory to his class, cannot fail to leave upon the minds of his pupils the most grateful recollection for impressing upon them the vast importance of the subject, and of cutting short, by all the means within their power, so great a scourge of the human race.

The author being very desirous of knowing if the vapour Bath had ever had a fair trial in the Plague, or rather in those varieties of that disease where sweating was indicated, has made some inquiries upon the subject, which may lead to very valuable communications upon that subject for the future Numbers of this work. As far as his information goes at present, he does not think it ever has been fairly tried, and by proper means, as an auxiliary in any of the varieties of that disease : the warm Bath certainly has been tried, and with some good effect. In that variety of plague, which Good calls *Pestis Erythematica*, it is pre-

sumed that the most powerful determination to the surface could not fail to be useful.\* Good says (P. 227), the best description of this variety, is the famous one of Thucydides, and quotes the following lines of Lucretius as an exact copy of it.

“ Spiritus ore foras tetrum volvebat odorem,  
 Rancida quo perolent projecta cadavera ritu :  
 Atque animi prorsum vires totius, et omne  
 Languerat corpus, leti jam limine in ipso :  
 Intolerabilibusque malis erat anxius angor  
 Adsidue comes, et gemitu commixta querela ;  
 Singultusque frequens noctem per sæpe diemque,  
 Corripere adsidue nervos et membra coactans,  
 Dissolvebat eos, defessos ante fatigans.  
 Nec nimio quoiquam posses ardore tueri  
 Corporis in summo summam fervere partem ;  
 Sed potius tepidum manibus proponere tactum,  
 Et simul, ulceribus quasi inustis, omne rubere,  
 Corpus, ut est, per membra SACER quem diditur IGNIS.  
 Intima pars hominum vero flagrabat ad ossa ;  
 Flagrabat stomacho flamma, ut fornacibus, intus :  
 Nihil adeo posses quoiquam leve tenueque membris  
 Vortere in utilitatem.”

*De Rar. Nat. lib. vi. 1152.*

“ Forth pour'd the breath most fetid from the mouth,  
 As steams the putrid carcase ; every power  
 Fail'd through the soul, the body, and alike

\* “ A very favourite remedy in Egypt is a general inunction of the body with the oil of olives, first recommended by Mr Baldwin of Cairo. The coarser and more acrid the oil the better. The application should be accompanied with a long continued friction, and, *when successful*, is followed in about half an hour or an hour *by a general and profuse perspiration, which affords relief.*” Good, p. 225.

Lay they liquescent at the gates of death :  
 While with these dread, insufferable ills,  
 A restless anguish join'd, companion close,  
 And sighs commixt with groans ; and hiccough deep,  
 And keen convulsive twitchings ceaseless urg'd,  
 Day after day o'er every tortur'd limb,  
 The wearied wretch still wearying with assault.  
 Yet ne'er too hot the system couldst thou mark,  
 Outwards, but rather tepid to the touch ;  
 Ting'd still with purple dye, and brandish'd o'er  
 With trails of caustic ulcers like the blaze  
 Strew'd by the Holy Fire. But all within  
 Burn'd to the bone : the bosom heav'd with flames  
 Fierce as a furnace, nor would once endure  
 The lightest vest thrown loosely o'er the limbs."

Dr Clutterbuck, in treating of sudorifics in the cure of fever, says, " In many topical inflammations, AFTER bleeding has been had recourse to, and in many also that do not admit of this evacuation, sweating is a common and an effectual remedy : the restrictions proper to be observed with regard to it are precisely the same both in fever and inflammation ; when either of them is attended with much general vascular action, as pointed out by a full, hard, and strong pulse, sudorific remedies can scarcely be employed with safety, at least till the rigour of the system has been in some degree reduced by previous blood-letting, abstinence, or other means. But where the action of the heart and arteries is irritated rather than increased in point of force,—where the pulse is contracted, quick and weak, and the general habit of the patient

feeble,—neither in fever, nor in topical inflammation of other parts, is blood-letting properly indicated; in such cases, sweating, with an appropriate regimen, forms our principal means of cure.”

Again: “Although the efficacy of sweating, as a remedy for fever under certain circumstances, rests on much and decisive evidence, the use of it has of late years been greatly neglected among practitioners, though it still continues to be a favourite remedy with the public.”

Again: “It would seem not to be a matter of indifference, by what particular mode sweating is excited for the cure of fever; and the want of attention to this has probably, in some degree, contributed to bring the practice into discredit;” and after pointing out the bad consequences of stimulating medicines, and many other sudorifics taken internally, he says, “The most simple mode of exciting sweat, and the most free from the objection stated, appears to be by the application of external heat to the skin, by bathing or otherwise. With proper management, it is probable that sweating might be thus produced without materially increasing the action of the general sanguiferous system; thus, among rude nations, fevers are commonly treated successfully by the *Vapour-Bath*.”  
P. 310.

In all cases of suspended animation, it is presumed *a priori*, that the Vapour-Bath may be a powerful engine. For instance, in the case of drowning, suffocation, and, above all, in cases

of such new-born infants as may be said to be merely born alive; and with this view, at the suggestion of the author, Mr Carruthers is constructing an apparatus that may be safely and commodiously used for such a purpose, which is to be submitted to the approbation of Dr Hamilton, jun.

The author concludes this first Number, by expressing a hope that those lovers of science, who may be disposed to enrich the future Numbers of this work with their communications, will bear in mind the following excellent advice given by Dr Hamilton in the *Observations* above quoted.

“Above all, we ought carefully to shun hasty conclusions in generalisations, which proceed only upon reasoning from matter of opinion. Be it our business, by a circumspect induction from facts, to establish sound principles, which will lead to the discovery of other facts, and these again to the introduction of more general doctrines, or a comprehensive and connected theory of medicine. This is safe dogmatism; by it we will acquire useful knowledge more quickly, and be enabled to combine and arrange its different parts with greater facility and precision, than by means of that meagre empiricism so much vaunted at one time, but which, I believe, never did, and never can exist, independent of theory or reasoning, however incorrect.”

THE END.



*Lately published by the same Author,*

1. The Manner in which Juries are struck and summoned according to the Law of England, compared with the Manner in which they are to be struck and summoned in Scotland under the new Act of Parliament.

2. Scheme of an Academical Institution for Students in Law and Students in Medicine, founded on Milton's plan of Education, the whole of which (being scarce) has been published therewith.

*Preparing by him for Publication,*

1. A Gothic Grammar and Dictionary, with the four Gospels of Ulphilas (Gothic on one side, and English on the other), which are all the remains of a language that is the parent of English, German, and of a great part of Latin. It is confidently believed, that, so far from being a useless study, the acquisition of this language, which may be easily made, would throw much more light upon the philosophy of language, in which it has been truly said "all science must finally centre," than we are yet in possession of.

2. Outlines of a Course of Legal and Medical Logic, founded upon the Philosophy of Language, which Mr Locke foretold "would afford us another sort of *logick* and *critick* than what we have hitherto been acquainted with."

In this course the doctrines of Beauzée, whose *Grammaire Générale* is now so scarce as not to be got at the Booksellers in this town or in London, as well as the doctrines of others, will be brought forward; and the course is further conducted with a view to make the study of Law

and Medicine a part of general education, as recommended by Milton; it is therefore particularly addressed to those who have charge of the education of youth. The manner in which it is conducted being pretty fully detailed in the scheme of an Academical Institution already published, requires only this addition, that the authorities from Aristotle, Thucydides, Hippocrates, and Galen, will be given in Greek, with a literal translation into English on the opposite side, in order to make the student familiar with that language, as well as with Latin and French; Milton's opinion being, that the best way to become familiar with any language, was to read such works as contained the most important matter; and it being considered a great advantage to young men destined to these honourable and important professions, which a long life is too short to acquire, (“ὁ βίος βραχὺς, ἡδὲ Τέχνη μακρὴ”) to learn the fundamental principles of their profession at the same time that they are acquiring languages to which so much of their time is often unprofitably devoted. Another object is to bring into notice some of the most important doctrines of these ancient authors, which are far too much neglected in the present age.

Good, in his preliminary Dissertation, which is highly philosophical, speaking upon this subject, says very truly; “The works of Galen, who was physician to Marcus Aurelius, are speculative as well as practical: they contain a full history of most of the Greek theories, and attack every one which is in opposition to the doctrines and opinions of Hippocrates; whose system he revived, defended, and illustrated with incontrovertible arguments, consummate learning, and unrivalled ingenuity. His genius was almost universal, and led him to drink deeply of every branch of science that adorned his age; and seems sometimes to have tempted him to indulge in a redundant and unnecessary display of learning. The best edition of his works, which is that of Venice of 1625,

extends to seven volumes folio, including a Latin version. *A more valuable present could not be made to the medical profession, than a judicious compendium of these volumes, taking the terse compressed manner of Celsus as an example upon the occasion.*"

The above works will be published in Numbers like the present, and will be forwarded by the Publishers of this Number to those who may think proper to order them through their Booksellers, as it is probable they will not be again advertised.



