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A N
I N Q U I R Y
I N T O T H E
E F F I C A C Y O F W A R M B A T H I N G
I N
P A L S I E S.

BY R. CHARLETON, M. D.
PHYSICIAN TO THE GENERAL HOSPITAL
AT BATH.

*Non quæ mihi suggestit phantasiæ imaginatricis temeritas, sed
quæ phænomena practica edocuere. SYDENHAM.*

O X F O R D :

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and by Mr. Frederick and Mr. Lake at Bath.

Medical
87

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A N

I N V O L U N T A R Y

I N T O T H E

E F F I C A C Y O F W A R M B A T H I N G

I N



By A. J. S. J.

BY R. CHARLESTON, M.D.
PHYSICIAN TO THE GENERAL HOSPITAL
AT BATH.

The one who would...
the patient who...



O X F O R D

At the CLEARNDON Press, MDCCLXX
Printed by J. G. ...
and by the ...

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(2)
A N
I N Q U I R Y

I N T O T H E

Efficacy of W A R M B A T H I N G i n
P A L S I E S.

TH E design of this Inquiry is to ascertain the question, whether Bathing in the *Bath* Waters be useful, or detrimental, in Palsies.

However unnecessary such an inquiry may at first sight appear, as we might reasonably expect the experience of many ages should long since have determined this question, yet, the diversity of opinions to be met with in writers concerning it is too plain a proof, that the subject demands a still further investigation.

A

What

What dependance can we have on authority, when a most eminent physician of the last century has highly extolled the efficacy of these Springs in paralytic diseases, and the most distinguished one in the present has interdicted their use?

Willis, in his treatise *De Anima Brutorum*, pronounces the Waters of this place to be a remedy superior to all others in the palsy; and that, where they suit the constitution of the patient, it is impossible to find out any that can be more effectual.^a

At the time this favourable testimony was given, these Waters were seldom used but for the purposes of Bathing only: His character of them must therefore have been chiefly, if not solely, drawn from those happy effects which followed their external application.^b

^a *Instar omnium vero sunt thermæ nostræ Bathonienses, quibus (si temperamento ægrotantis aptè congruant) nullum præstantius remedium excogitari potest. Quod satis indicant plurimum a membris resolutis curatorum Grallæ, quasi totidem de morbo hoc divincto trophæa suspensæ. p. 420.*

^b *Willis* his treatise *De Anima Brutorum*, was published in the year 1672; but it was not till the year after, that the custom of drinking *Bath Waters*, which had long been discontinued,

I have observed this principally to shew, that the opposition of opinions between the Doctors, *Willis* and *Mead*, is direct and real; the latter in his *Monita et Præcepta Medica* having expressly pronounced, that Warm Bathing does harm to all paralytics. His words are without any limitation, or distinction: “*calidæ vero immersiones omnibus paralyticis nocent.*”

The most respectable authority must give way to the force of Facts. Since the establishment of our HOSPITAL at *Bath*, I have seen so many and such manifest proofs of the virtue of these Waters in paralytic cases, that, as I am fully convinced myself of *Dr. Mead's* mistake, I have thought it my duty to communicate to the Public the grounds of my conviction: further urged thereto by the notoriety that nervous diseases are continually advancing; the Palsy, which formerly used to be for the most part the attendant of worn-out Nature, being, in our days, become, but too frequently, the miserable companion of Youth.

was again brought into use by the authority of *Dr. Guidot*; as appears from the Inscription on his monument in the Abbey Church.

By a clause in the act of parliament for the better regulation of this Charity, it is enacted; that no patient shall be admitted till his case has been drawn up by some person in the place, or neighbourhood, of his residence, and sent to the hospital for the examination of the physicians and surgeons who belong to it; on whose judgments it rests, from the inspection of the state of his case, to determine whether the object recommended labours under a disease in which these Waters are found to be beneficial.

All such cases as are deemed proper for admission are registered. Minutes are taken of each patient's disease, age, parish, time of admission, stay in the house, when discharged, and what degree of benefit he received. The original histories of their several diseases, which are sent upon their petitioning for admittance, are also carefully preserved; and thus an exact account of our patients has been kept from the foundation of the hospital to the present time.

'Tis from these records I shall collect the vouchers which are to determine the subject in dispute; and shall lay before the reader a state of our paralytic patients from *May 1751*, to
May

May 1764. A period of time sufficient for the purpose: For it cannot be doubted, but that the same effects, which these Baths have produced in the course of *thirteen years*, may at all times be expected from them, in like circumstances; as they are invariable in their qualities, and not liable, like most other remedies whether prepared or unprepared by Nature, to change or adulteration. ^a — But before I enter on this examination it may be necessary to give a short detail of the causes and symptoms of this Disease.

The causes which give rise to paralytic complaints, are for the most part comprised in the following catalogue: apoplexies, internal tu-

^a It is well known that the *Romans* were extremely careful to preserve, by great works, their most celebrated medicinal waters. We have a remarkable instance of this fact, in the *Bath Waters*: whose source and manner of conveyance to the places of eruption are so carefully concealed and secured, as not only to have remained undiscovered, but to have been also preserved from any the least injury, though buildings were erected every where round them, and wells dug, for the supplies of common spring water, in every point of the compass. — They have continued unhurt by the ordinary ravages of time; and change of season does not affect them: for chemical experiments are attended, in every part of the year, with the same phœnomena, if made with equal exactness; and their heat is shewn by the thermometer to be invariable.

mors compressing the brain and nerves, external injuries, mineral fumes; colics occasioned by these, or by the use of crude fermenting liquors, or the action of viscid acrimonious bile; extreme cold, excessive indulgence, or violent impressions of the passions, spirituous liquors, scurvy, rheumatism, gout, the suppression of natural evacuations, the imperfect crisis of acute diseases.

The symptoms of the Palsy are, sometimes, a total deprivation of the operations of the mind and internal senses; sometimes only a slight abatement of them. It affects either the whole body from the head downwards, except the heart and muscles of respiration, or one side only, or a particular limb. The parts affected are deprived of sensation alone, or of motion alone, or of both; they either swell and are bloated, or waste and decay; they are either too cold, or preternaturally hot. The palsied muscles yield to the power of their antagonists, which are unaffected; hence those parts, as the fingers for example, are drawn inwards when the extenser muscles are paralytic, and the contractor muscles are not affected. The pulse is usually small, slow and languid; or weak, quick and irregular. The body is generally costive,

costive, and the appetite, commonly, voracious.

Such are the out-lines of this disease, and, as its seat is in the nerves or brain, it may readily be conceived, that it must be extremely dangerous in its consequences, and the cure equally uncertain and difficult.

Hence writers have made the most unfavourable prognostics with respect to its event. "It is generally incurable," says *Celsus*.^a And in another place he observes, that "such as are universally seized with the palsy quickly sink under the attack, or, if they chance to survive, they seldom obtain a perfect recovery; but for the most part linger on, with loss of memory, in a state of wretched existence."^b

In like manner has *Mead* described the unhappy sufferer, "dragging on a miserable life, shaking and tottering, deprived of memory,

a Fere insanabilis morbus est.

b Solent autem, qui per omnia membra vehementer resoluti sunt, celeriter rari; ac si correpti non sunt diutius quidem vivunt, sed raro tamen ad sanitatem perveniunt; & plerumque miserum spiritum trahunt, memoriâ quoque amissâ.

and all vigor of mind ; a spectacle of real misery, no longer a man, but an animal half-dead.^a

Of what powers these Waters are possessed to remove, or alleviate, such afflictions, will appear from the following Table. In which, it is presumed, the State of our Paralytics is so marked as to stand in need of little explanation, except in a very few instances.

The first column marks the several species of the palsy ; the last article of which contains the number of Cases, imperfectly, or improperly described in the accounts sent of such Patients for our information. In some of these accounts the parts affected are only mentioned, and no notice taken of the causes which gave rise to the disease ; in others, even less care has been taken, and neither the causes, nor effects, are particularized ; but only a general certificate vouchsafed, that the patient is a paralytic. Whereas the cause and effect of the disease, the age of the patient, and the length of time he had laboured under his malady, should have

^a Miseram autem vitam plerumque trahit qui illo morbo (Paralyfi scil.) afficitur ; vis enim animi cum memoriâ deperditur, & luctuosum spectaculum, non jam homo, sed animal semimortuum, contremitt & vacillat. *Monita & Præcepta Medica.*

been circumstantially described. If this rule had been observed, we should not have had so many improper persons sent to the hospital: it would have put a stop to the inhumanity of suffering such poor wretches to undergo the fatigues of long and painful journies, to no manner of purpose; and, at the same time, have saved their parishes a very unnecessary expense.

The two columns, which are intitled *Improper*, and *Discharged at their own Request*, may also require some explanation.

In the first of these two columns are contained those, who, from unfortunately having other diseases joined with their palsy, are reduced to a state in which these Waters would be detrimental: as dropfical, or hectical patients; women far advanced in pregnancy; and, in general, all with whom the confinement and air of an hospital do not agree.

The other comprehends those, who through fear of taking the small-pox, when that disease happens to be *here*, or from unwillingness to comply with the rules of the house, or on account of their own private domestic affairs, desire to be discharged.

B

A state

A State of the Paralytic Patients admitted into

Total Number admitted. ——— 1053.

viz.

45	General Palfies
283	Hemephlegias
144	Palfies of the Lower Limbs
3	Dead Palfies
5	Shaking Palfies
237	Palfies from Cyder and Bilious Colics
40	Palfies from Mineral Effluvia
17	Fevers
27	Rheumatifms
9	Nervous Affections
2	Suppreffion of the Menfes
1	Mifcarriage
1	Lying-in
19	External Accidentis
2	Schrophula
24	Extreme Cold
11	Palfies without any affignable Cause
183	Whofe Cafes were not properly described.

the *Bath* Hospital, from *May* 1751. to *May* 1764.

Cured and Benefited.	No Better.	Dead.	Improper.	Discharged for Misbehaviour.	Discharged at their own Request.	Eloped.	Total.
28	12	2	1		2		45
204	41	12	20	1	4	1	283
92	21	10	18	1	2		144
3							3
1	3		1				5
218	5	9	4		1		237
38	1	1					40
13	2		2				17
22	3	1	1				27
6	2		1				9
2							2
1							1
1							1
16	2	1					19
1	1						2
19	2		1		1	1	24
9	2						11
139	16	7	12	3	5	1	183
813	113	43	61	5	15	3	1053

Cured and Benefited ————— 813
 Not Benefited ————— 240

From this Table it appears that out of 1053 paralytics (the total number admitted within the time of this Inquiry) 813 received benefit, and 240 little or none.

So irrefragably do these Facts support the credit of the *Bath Waters*, that it is almost unnecessary to take notice of an error in this calculation tending to their disadvantage; which is, that among the number 240, said to have received no benefit, there are 61 who could not make a proper trial of the Waters, and who were, therefore, discharged under the designation of *Improper*.

These ought to be struck out of the account, as they prove neither for nor against the question; to which it might be added that amongst those who left the hospital at their own request, or were discharged for misbehaviour, or who eloped, some, it may reasonably be supposed, had their stay there been longer, might have received dismissions favourable to the reputation of these springs. So that, if we take into our estimate those only who continued in the house and made a fair trial of the Waters, the evidence in their favour will be considerably increased;

increased; for the state of the account will then be as follows: viz. out of 969 paralytics, there were benefited 813 — not benefited, 156.

But before I proceed to make any deductions from the general evidence which this Table affords, I shall give some particular instances of the efficacy of these Waters extracted out of the histories of our hospital patients. These cases, except a very few, are such as being usually sent to us we must needs suppose to be common, and the publication of which I therefore prefer to that of others which are more rare; as they are more the public concern, and it is on them that Rules of Practice can with propriety be established. To which I must add, that my choice has likewise been directed to such Cases as required little or no medicine, and in which, consequently, the power of these Springs must appear the more clear and decisive.

A general

A general Shaking palsy, from the imperfect crisis of a miliary fever.

MARY Ryan, of St. James's Westminster, aged 28, after enjoying a good state of health till the beginning of *April* 1758, was seized with a miliary fever, which lasted seven weeks. Sometimes the eruptions disappeared with violent sickness at her stomach, great oppressions of her spirits, and a delirium. The delirium became at length continual and lasted three weeks; after which she recovered her senses and was free from fever: but all her limbs from the small of her back downwards were numb, shaking and paralytic. Her urine frequently passed off involuntarily, her stools never. Soon after she had lost the use of her lower limbs, her arms began to be affected in the same manner, and at length her neck and the trunk of her body: so that, when she came into our hospital, *May* 5th. 1759, she laboured under an *universal shaking palsy*; was incapable of standing without the assistance of two persons, and had not been able to walk for five months.

After

After having drunk the Waters for a month, she bathed twice a week, and continued in this course more than a month longer without perceiving any alteration. Soon after this, upon coming out of the bath, she complained of pain and heat in her hips and thighs, which left those parts extremely sore. From this time the paralytic tremors gradually decreased, and her limbs became stronger after every bathing; so that at length she was able to stand without being supported, and to walk about the Ward with crutches. The great heat of the summer, together with bathing, made her at times excessively low, on which account she was directed to take a decoction of the Bark occasionally; but continued to bathe twice a week and to drink a pint and a half of the Waters every day till the 12 of *December* 1759, at which time she was discharged (after having been 7 months in the hospital) perfectly cured.

When fevers go off without a due crisis, much mischief may justly be apprehended; for, besides other complaints which have from hence their origin, the relics of the disease will not unfrequently affect the nervous system and give rise to Palsies.

The

The present case is a proof of this observation, as well as a remarkable instance that the *Bath Waters* are extremely efficacious in such kinds of palsy; of which we have further proofs, in case the first and second among the Dead Palsies, and also in case the second of palsies of the Lower Limbs. But it will be here proper to observe that shaking palsies, unless they are the consequence of an imperfect crisis of some acute disease, or of suppressed gout, seldom receive any considerable benefit from these Waters.

A general

*A general palsy, from a suppression of
the Menfes.*

Elizabeth Jordan, of the parish of Balden in Oxfordshire, aged 19, had her Menfes suddenly suppressed, during the second time of their appearance, by catching cold in rainy weather; and was struck with a general palsy. The catamenia were restored to their regular periods, some months after, by emmenagogues and bathing in common warm water. By the repeated use of the latter, she recovered in some degree the action of her arms and hands; but found no alteration in her lower limbs, except, that, while they were immersed in warm water, their sensibility and motion returned, which were presently lost again upon their being taken out.

She staid in the hospital 251 days, and by drinking the Waters in small quantities, and by bathing in them, as often as her strength would permit, was discharged entirely cured.

This patient's case shews not only the good effects of bathing in common warm water, but at the same time the superior power of our Baths in palsies; as the cure received by the former was only partial and temporary, but that from the latter compleat and permanent.

A general palsy, from Cold.

SAmuel Blifs, a common soldier, from frequently lying on wet ground, during a winter's campaign, had his health much impaired, and became universally paralytic.

All proper care was taken of him while abroad; but finding no relief, he was sent home and admitted into the hospital at *Ipswich*; from whence he was removed to *St. Bartholomew's* in *London*.

Being discharged from this latter hospital incurable, he was brought to *Bath*; where he received considerable benefit, notwithstanding his palsy was of four years continuance.

Sometime after he had left our hospital he relapsed, and petitioned for readmission. His paralytic complaints were now accompanied with severe spasmodic pains, which more particularly affected his arms, hips, and small of the back. The muscles of the thighs and legs were contracted, and those of the arms greatly emaciated.

The

The feverity and obstinacy of his disease which was much augmented in consequence of this relapse, required a long perseverance in the use of these Waters; however at length it gave way to their powers, and he was a second time, though not till after a residence of 308 days, dismissed *Much Better*.

We have numbers of Cases on our books of bargemen, watermen, fishermen, &c. whose trades oblige them to go into cold water while hot with labour, or to stand in it for a long time, in consequence of which they contract paralytic complaints; to which gentlemen are not unfrequently liable, by doing the same thing for their amusement, which the poor are obliged to do for a livelihood.

We commonly find these Waters very efficacious in palsies which arise from Cold.

* *A general*

* *A general palsy, from an external accident.*

G *George Drinkwater*, Labourer, fell from a high tree and pitched upon the back of his head. This accident was followed by a palsy of all his limbs, an involuntary and insensible discharge of his urine, a most obstinate retention of the fæces, a swelled tense belly, frequent convulsions of the abdominal muscles, and excruciating pains in that region.

These latter symptoms were somewhat alleviated before he was sent to our hospital (which was above a year after the accident) though with respect to his palsy he was still in a very bad condition. But it soon gave way to the efficacy of these springs; for he was enabled, after being a patient only 46 days, to return home greatly relieved.

* On the death of *Dr. Oliver*, his medical papers were put into my hands, with liberty to make such use of them as I pleased. I am indebted to them for this case, as well as for all those which are marked with an Asterisk.

In this case the different effects occasioned by the fall on the sphincter muscles of the bladder and rectum are very remarkable : The latter being so contracted, that stools were with the utmost difficulty to be procured ; and the former so relaxed, that the urine was continually and insensibly discharged.

Hemiplegia

*Hemiplegia of the left side, from an
Apoplexy.*

R *Ichard Davis*, aged 60, was seized with an apoplectic fit, which terminated in a hemiplegia of the left side. The palsied limbs were deprived of all motion, and their sensation was likewise greatly impaired. He continued in this state, receiving no benefit from any medicine he made use of, for seven months; when he became a patient in our hospital, *May 17. 1753.*

Having been duly prepared, he began with the Waters; of which he drank a pint and a half for some days, and then went into the bath twice a week. By these measures he soon perceived an abatement in his disease, and advanced fast in his recovery, till the beginning of *July*; when his progress was stopped, the Waters ceasing to make further impressions. On this account I ordered him to abstain from them totally for ten days, or a fortnight, and during that time to take an electuary composed of mustard seed and valerian. At the expiration of which time he left off the medicine, it having done him no service, and resumed his
course

course of drinking and bathing; to which was added a strong stimulating liniment to be rubbed on the spine of the back, after rising from the bath. He quickly became sensible of the good effects of this course; the operation of which was so powerful and speedy, that he left the house, on the 25 of *August*, perfectly free from his complaint.

If the age of this patient, the cause of his disease, and the severity of its symptoms are considered, much credit will be derived to the *Bath Waters* by the cure. The effects of the waters, I am persuaded, were greatly promoted by the season of the year in which they were used. Our hospital affords frequent opportunities of observing, how much their power depends on the state of the atmosphere; or rather, how much more easily diseases give way, when the virtue of our Waters is not checked by the severity of the season: of which a remarkable instance occurred in the winter of sixty three; when a cold, tempestuous, season setting in about the beginning of *November*, and continuing till the end of *February*, scarce a patient, during that time, found the least amendment; on the contrary, no sooner was the weather changed for the better than almost

all

all of them were immediately sensible of the efficacy of these Springs. How it ever, therefore, became a custom to discontinue them in the summer, and to limit their use to the less kindly parts of the year, is as difficult to conceive, as it is easy to shew the impropriety of such a practice. It is evident, that our ancestors thought the warmer months a properer time for their use, from the particular provision in a small hospital built in this place by Sir *Thomas Bellot*, secretary to Lord *Cecil*, in the reign of Queen *Elizabeth*; which admits and maintains, by a weekly allowance, a few persons from the beginning of *April*, to the end of *September*; but affords no supply for the remaining part of the year.

I would not, however, be understood to mean, that the weather may not be improper in the very hottest part of the summer; but, as in our variable climate the interruptions by excessive heat are few and of short duration, I can see no reason for the general prejudice against the use of our Springs in the summer months: especially, when, to my own observation, I add the experience of our ancestors, and the practice now observed, if I am rightly informed, with respect to every other warm mineral water in *Europe*.

Hemiplegia

*Hemiplegia of the Right Side, from the
ceasing of the Catamenia.*

MArgaret Bateman, aged 50, had in general been healthy six months after the menses had left her, when she suddenly fell into a fit and remained senseless a considerable time. Upon coming to herself she found her speech was lost, her mouth drawn to one side, and the right leg and arm deprived of motion. She was bled, though not till four days after the seizure, which was the only thing that was done for her. In *April, 1759*, she was sent to our hospital, when she could not stand, or make the least use of her arm, and her speech was scarcely intelligible.

She was again bled, and took several doses of opening medicines, before she was permitted to meddle with the Waters. After which preparation she drank them in moderate quantities for some time, then went into the bath, and on the days she did not make use of it her limbs were pumped.

By the 15th of *June*, she had entirely recovered her speech; her arm was almost well, and she

had perfectly regained the power of extending and contracting her fingers. Her leg was also much better, and with very little assistance she could walk.

From a continuance of this course, without any other helps, she mended daily, and on the 11th of *July* was discharged greatly recovered.

I have observed, that, in paralytic affections arising from causes peculiar to the Sex, these Waters prove singularly beneficial. Of which besides the present instance we have others in *Case the second*, among the General Palsies; *Case the third and fourth* among the Hemiplegias; and in *Case the second*, of Palsies of the Lower Limbs.

In palsies which happen either at the approach, or cessation, of the Catamenia, a pretty free use either of the Lancet, or Cupping Glass, as well as of Cathartics, will generally be requisite, before a course of these Waters can be advantageously commenced; and a repetition of these evacuations will most likely be necessary during the continuance of it.

* *Hemiplegia*

* *Hemiplegia of the Left Side, from catching Cold in a Lying-in.*

Eleanor Thornton, aged 35, by a cold she caught a few days after delivery, had the Lochia stopped, which brought on a palsy of the left side. At first, she was deprived of her senses, and lost her voice; her face was much distorted, and the mouth so drawn to one side, that when she endeavoured to swallow any liquid it ran out on the other.

These symptoms, however, disappeared in a few days; but her arm and leg remained motionless and void of sensation. The action of the latter was, indeed, in some little degree recovered just before she came here (which was between 5 and 6 months after the attack) so that she was able with assistance to creep about her room.

As, notwithstanding her complaint, she had suckled her child, her breasts were full of milk at the time of her admission; which circumstance prevented her drinking the Waters for near a month. She then began to drink them every day, and to bathe twice a week. In pro-

portion as the weather grew warmer, the benefit she received by them increased; and in the months of *May* and *June* she found them particularly efficacious. But in *July*, the House becoming too close and hot, she was discharged, with orders to return if she found it necessary. As she never petitioned for a readmission, it is presumed that time, air, and exercise completed her cure.

She had been a patient 276 days; and when she left the hospital she could walk (though the leg still remained weak) without any assistance; had quite recovered the motion and strength of her arm; and in a great measure the use of her fingers.

Hemiplegia

*Hemiplegia of the right side, from
frequent miscarriages.*

MARY Balden, 36 years of age, was reduced by frequent miscarriages to a very infirm state of health, attended with convulsion fits. These fits returned frequently in a day and followed her for a considerable time: at length they entirely left her, and soon afterwards she was struck with a palsy of her right side.

She was bled, took various medicines of the cordial and nervous kind, and had blisters applied to the parts affected; which so far restored the action of her leg that, with help, she was able to walk. But her arm still continued useless, and with little or no sensation: the hand hung from the wrist without power in the muscles to raise it, a large swelling arose on the back of it, and the fingers were contracted and drawn into the palm.

Besides these paralytic complaints, her health in general was much impaired; for the catamenia were irregular, she had continual tremblings and flutterings of her heart, with a variety
of

of other nervous affections: her appetite was lost, and her bowels obstructed.

The course taken for her recovery was the constant use of these Waters, both internally and externally; with the occasional assistance of warm stomach purges, and nervous medicines. The success of this plan corresponded with her wishes: her nervous symptoms soon disappeared, her general health was in all respects restored, and she regained the perfect use of her palsied limbs.

She came into the hospital the 8th of *October*, and left it the 19th of *December*.

Hemiplegia

Hemiplegia of the left side, from Pain.

MR S *Whitby*, aged 23, from a severe pain which, suddenly and without any assignable cause, affected her whole left side was, in a few hours, deprived of its use. The palsied parts lost all sensation; the discharges of both stool and urine were involuntary; she was long deprived of sleep, which opiates could not procure; the most powerful medicines produced no effect, and the limbs were covered with blisters without exciting in them the least feeling.

On failure of these measures, she tried Electricity. The shocks were given first on the neck and shoulder, and then gradually down to the toes. She felt them in a slight degree on her neck and shoulder, but no lower; and particularly, the foot, though the strokes were so often repeated as to turn the skin black, still remained insensible to them.

She was now sent to *Bath*, seven months after her seizure; at which time she had neither feeling, nor motion, of the palsied side. She was moreover feverish, nervous, feeble and emaciated; her nights were restless, her appetite destroyed,

destroyed, her bowels costive, and the catamenia deficient.

Much preparation was in this case necessary. As soon as it was thought proper, she drank the Waters of the Cross Bath, in small quantities; which increased her appetite, restored the peristaltic motion of her bowels, and gradually procured her strength enough to enter upon bathing.

She had been many times in the bath, before the catamenia became sufficient; and being thus far advanced in her recovery, she was now order'd to have the palsied parts pumped, while in the bath. Her dead side, after being a few times pumped, perfectly regained its feeling, and soon afterwards she was able to move with crutches.

These benefits increasing as the means were continued, she so far got the better of her disease as to walk the streets with the help only of a common stick. But, as this poor woman unfortunately could not be received into the hospital from being unable to produce a parish certificate, which the act of parliament requires, her stay *here* at this time was not so long as it ought

ought to have been; though long enough to become a proof of the virtue of these Waters, and to do honour to that private bounty by which she was supported from the beginning of *December*, the time of her coming, to the end of *April*, when she left this place: To which she returned about a twelvemonth after, and was then so happy, as to have her palsy entirely removed.

When this patient was first brought here, she was not only in an improper state for drinking the Waters, on account of her fever, but when that was removed she still continued too weak to bathe. For when the palsied parts, by a long continuance, or a great severity, of the disease are grown totally flabby and inelastic, they do not second or assist the activity of our Baths, which operate like a temporary fever; by whose stimulus it probably is, that the nerves regain their natural powers. This, however, is very certain, that, when such a state of debility and feebleness prevails, little or no effect can be produced by bathing, unless the Waters are drunk for some time before the patient is put into the bath; by which means he will possibly obtain such a degree of strength, as may enable him to receive advantage from it.

The unsuccessful use of Electricity in this case corresponds with what the late Dr. *Harrington* told me, that, when it first became a fashion to electrify for medical purposes, he often tried this experiment on the hospital paralytics, but without success.

Several instances have occurred to me which support this remark, and among others the following one.

A young Gentleman, after passing a very intemperate evening, was, on his return home, flung from his horse, and, being alone, lay all night in the road. The shock he received by his fall was so great, that many days passed before the assistance of a very eminent physician could restore him to his senses; when it appeared, the fall had occasioned an hemiplegia of the left side.

He was sent to *Bath*, as soon as he could bear the journey. On his arrival, I found his leg and arm without motion or sensation; both his hearing and eye-sight, on the paralytic side, were extremely imperfect, and his speech so inarticulate as to be scarcely intelligible.

By

By the use of the Waters, and other necessary measures, he regained his hearing, eyesight, speech, the sensation of the whole side and the compleat action of his leg; but neither bathing nor pumping, with every aid that could assist their powers, had any effect on his arm: it remained always bent at the elbow, with the fingers shut into the palm of the hand, frequently agitated with convulsive catchings, but incapable of voluntary motion.

This disappointment suggested to him the trial of Electricity; and, as the proposal was his own, he underwent it with the greater resolution. He used it every day for a considerable time; gently, indeed, at first, but afterwards with a degree of violence I could by no means approve. The operation made the arm sweat profusely both during the time and for some hours after, but never, in the least, contributed to restore its use.

Palsies which are owing to Pain are greatly relieved by these Baths. The Woman's case last mentioned, as also the *first case* among the Dead Palsies, and the *first* of that division which comprehends those who were paralytic of their Lower Limbs, are sufficient evidences of their power in this Species of the disease.

* *Hemiplegia of the left side, from a Convulsion Fit.*

A *NN Lucas*, aged 12, was suddenly seized with a convulsion fit, which, after most violent strugglings, took away the use of her left side. A few weeks after the beginning of her complaint, she became a patient in the *Westminster* Infirmary; where, among other remedies, she (as *Dr. Wilbraham*, who sent her to *Bath*, mentions in his Letter to the Registrar of our hospital) was put twice into a warm bath, and, for a time, was the better for it. But her disorder returning and finding no relief from any measures, she at length petitioned for admission into our Charity.

The disease was then of two years standing: there was a great diminution in the feeling of the whole side, a wasting of the leg and arm, the almost entire loss of action in both, with an immoveable contraction of the fingers into the palm of the hand. The viscera were greatly obstructed; she was costive, short breathed, and chloretic.

She

She was received into the house on the 8th of *January*: was purged and vomited, and then ordered to drink two small glaffes of the Water every morning for a fortnight, with a tea-ſpoonful of Elix. Aloes in the firſt glaſs.

The vomit and purge were then repeated, and her viſcera being now ſufficiently cleaned to venture on a larger quantity of the Water, ſhe increaſed her doſe, and omitted the medicine, which was become unneceſſary. About the ſame time ſhe, likewise, commenced a courſe of bathing, and, after a few repetitions of it, had the palsied ſide pumped while in the bath.

Her diſeaſe, which was very obſtinate, gave no way till the warm weather came on. She then found a daily amendment, and by degrees her ſide recovered its ſenſation; the arm and leg their natural motions, though not their original ſtrength and ſize: ſhe regained the perfect uſe of her fingers, and loſt all ſymptoms of a general ill ſtate of health.

We have in this caſe another inſtance of the fitness of warm bathing in palsies; though the effects of the common warm bath were here,

as in a preceding case, only temporary. This history likewise affords us a farther proof of the increased efficacy of these Waters in the warmer months of the year.

When the hemiplegia is the consequence of an apoplexy, its cure is generally extremely difficult: yet we see from case the first of this division (and others might have been produced) that even *here* these Waters prove successful, after other expedients have been administered ineffectually.

The probability of the cure in this species of palsy may, I presume, be estimated by the violence of the apoplectic seizure and the more or less perfect state of the patient in the Hemiplegia. For it is not unfrequently found that, after the apoplectic fit is over and the hemiplegia is formed, though there is a return of the senses, yet it is so far from being perfect, that the faculties still continue in some degree impaired. Either the eye-sight, or hearing, or speech is defective, and sometimes all three; the memory is weakened, or the patient, though he knows what answer to make and to deliver his thoughts with propriety, yet is frustrated in his design by making use of words he did not intend, and
which

which are neither apposite to, nor expressive of, his ideas. In others, a continual oppression or drowsiness is perceived; and some are subject to frequent returns of slight apoplectic impressions.

Where these symptoms attend the hemiplegia, it is evident that the brain is still injured; and under these circumstances less advantage is to be expected from the Waters. But, where the apoplectic seizure has been slight, where its termination has been perfect (the brain shewing no marks of any remaining injury) and, more especially, where no apoplectic symptom has preceded this palsy, it is most reasonable to hope much benefit from their use. And under these limitations we often find them singularly advantageous in hemiplegias which proceed from causes peculiar to the Sex, or from pain, or from suppressed Gouts, or from the stoppage of natural or habitual Evacuations, or from the imperfect crisis of acute diseases.

It is generally allowed, that a recovery from the hemiplegia does much depend on the age of the patient; for, when this disease happens in advanced years, Nature is already too much depressed to make any very effectual resistance.

And

And I must also observe, that the length of time in which the patient hath laboured under this complaint (as in every other species of palsy) proportionably retards the cure; for I am persuaded these Waters would prove more effectual than they often do, were they applied to as soon as possible after the attack. But the custom is (I speak with respect to the poor) to try every thing first; and, when every thing has failed, when the disease is grown more obstinate through time, and there is danger of their becoming burthensome to their parishes, then recourse is had to the *Bath*.

I have commonly observed, that, where the Waters make in hemiplegias a compleat cure, their good effects become speedily apparent; and that, where they operate more slowly, or the patient finds little alteration after some weeks trial of them, the service they then do is only partial. In these instances the Leg is most usually the only part, as in compleat cures it is the first, that recovers.

*A palsy of the of the Lower Limbs,
from Pain.*

SIMON Field, of Wokingham in Berkshire, aged 25, was brought to the hospital, the 30th of August 1760, for a palsy of the lower limbs. Upon examination I found him without the least motion, or sensation, from the middle of the body to the end of the toes.

The first symptom of his disease was a pain, which, without any apparent cause, suddenly fixed in his back between the shoulders, and continued with unremitting violence for near six months; when it began gradually to abate, and in proportion as it lessened a numbness of the lower limbs came on; at length the pain entirely ceased, and immediately those parts were deprived of all feeling and motion.

He had now been in this palsied state for a year and a half; had taken many medicines, had been often blooded, and blistered, but to no effect.

As soon as he could be prepared, he entered on the usual course of the Waters, which he
F continued

continued for three months without the least advantage. His feeling began then to return, and he could, though with extreme difficulty, just move his legs as he sat in a chair.

About the end of *December* he complained of great weakness and dejection of spirits. The strict adherence to the plan first laid down, and which had been continued regularly for near four months, had sweated him too much. I therefore ordered him to leave off drinking the Waters, but to go on with bathing; and to take a decoction of the Bark.

In six weeks after this alteration he was able to walk the Ward with crutches; and, as his strength and spirits were now greatly recruited, the Bark was no longer continued; but the remainder of his cure committed to Bathing only.

Towards the conclusion of his recovery, he felt violent burning pains in his feet and ankles after rising from the bath; which symptoms at length ceasing, he went out of the hospital perfectly cured, *May 6. 1761.*

It is to be observed in this man's case, that, though he found no benefit from the Waters
after

after a punctual and regular trial of them for three months, yet he was at length entirely cured by them.

Such Perseverance, however necessary it may be, is seldom to be met with in private practice. Those who resort to this place come generally for a limited time; and, if in the six weeks, or two months, allotted for their stay, they receive not the expected amendment, the Waters are blamed and quitted with contempt. But, had this person, and many others whose histories are here related, been sent to *Bath* under such restrictions in point of time, it is evident they would have returned without the advantages they received.

These truths which hospital-practice affords are an ample recompense made by the Poor to the Rich, by whose benevolence Charities of this kind are supported; for by these alone we have obtained the knowledge of facts, the discovery of which is of so much importance to mankind.

A palsy

*A palsy of the Lower Limbs, after
a Lying-in.*

A *NN Graham*, aged 31, from taking cold in her lying-in, which check'd the discharge of the Lochia, and from using fomentations to backen the milk, was seized with a fever, which terminated in a palsy of the lower limbs.

She was sent to *Bath* from the hospital at *Hyde Park Corner*, where she had been a patient seven months, and had received a good deal of benefit. For, at the time of her admission into our hospital, *August 23, 1759*, she could walk, though with much difficulty, by the help of crutches. But the palsied parts were still greatly numbed, always covered with a cold clammy dew, were relaxed and flabby, of a livid colour, and the circulation of the blood in their vessels imperfect and torpid. The action of her bowels was so much impaired, that she was obliged to have continual recourse to opening medicines. The catamenia had ceased for eleven months.

As soon as she had recovered from the fatigue of her journey, she was purged with the Tinctura Sacra; took the Gum and Aromatic pills, and drank the Waters sparingly.

Sept. 3. She was again purged, and then ordered to bathe twice a week.

Oct. 5. Her paralytic affections continuing much the same, except that after bathing she began to feel severe pains in her loins and hips, and her costiveness being still obstinate, the use of an Electuary composed chiefly of Gum: Guaiac: was added to the course of the Waters.

Nov. 16. She could walk without crutches. The Menfes were returned. Her costiveness was abated. The feeling in her limbs was greatly restored, and the cold clammy sweats had left them. But the pains which were first felt after bathing (and which usually go off in some hours or by the next day at farthest) continuing, without any remission, about the lower part of the back and Os Sacrum, the parts affected were covered with a Mustard plaister.

She

She wore this plaister for some time; but receiving very little benefit from it, it was left off, and she was ordered to have her back pumped. The pains soon began now to give way, and as they decreased the sensation and motion of her limbs grew more and more perfect; so that by the 9th of *May*, being greatly recovered, she was dismissed the hospital.

Within the time to which I have confined this Inquiry, nine or ten more instances occur of women who became paralytic in their lower limbs from accidents attending their lying-in. All of whom were either cured, or considerably benefited, except two; one of which had been thus diseased between seven and eight years, and consequently was more fit for an almshouse than an hospital.

It is much to be wished, that we were always fully informed of every circumstance relating to the patients recommended to us. We can only judge of their fitness for admission, from the particulars contained in the cases sent for our inspection, and we have often too much reason to be surpris'd at finding their real state so different from what we were made to expect.

Such

Such improper objects, indeed, ought to be discharged on the first discovery of their real condition ; but it is not always so easy to exert this necessary resolution, and to withstand the entreaties of a miserable Being petitioning for a trial of the only means, from which he can hope for an abatement of his disease : and thus the physician is reduced to the disagreeable alternative of being thought to want humanity, or of acting contrary to the duty of his trust.

A palsy

*A palsy of the Lower Limbs, from
Convulsion Fits.*

SAmuel Manning, of Minchin Hampton, aged 22, had been always healthy till one day, having over-heated himself and getting wet immediately afterwards, he was taken in the evening with so severe a pain in his head and back, that he became speechless and lost his senses.

By bleeding, blisters, and other proper remedies, he was in a few days brought to himself; but the attack left behind a train of nervous spasms, which affected him for a fortnight and frequently occasioned convulsion fits.

When these fits left him, he had, for above a month, periodical returns of a numbness in his legs and thighs; which were preceded by a strange uneasy sensation in the Os Sacrum, and smart pains in the soles of his feet.

This numbness, which always began about eight in the evening and continued till four in the morning, at length ceasing, he was again seized with convulsion fits, for four days successively;

cessively; in which his strugglings were violent, and while they lasted he was deprived of his senses.

Two days after these fits had ceased, the same train of nervous spasms returned with which he had been affected in the beginning of his disorder. Their continuance, indeed, was short, but then they left him totally void of all motion in his Lower Limbs: for which complaint he was sent to our hospital.

About three weeks after his entrance on a regimen of these Waters, he fell ill of the small pox, and was then in so feeble a state, that his recovery was scarcely to be expected. He got, however, through that distemper, which was of the fullest distinct sort, but received no benefit as to his palsy in consequence of it. †

† I have seen many instances of paralytics having the small pox, but never knew one of them receive any amendment in consequence of those discharges which attend this disease, or from the alterations it sometimes produces in the constitution.

The fear of conveying other diseases along with the small pox has been to many persons a prevailing argument against the practice of Inoculation. The evidence of Facts can alone determine the validity of this important objection. On this account, though foreign, indeed, to my present purpose, I shall mention the following very singular case, which I found among the medical papers of the late Dr. *Oliver*. “ A person was

He returned as soon as was proper to the Waters; drank them in moderate doses, and used bathing every third morning. This plan he pursued for two months, and obtained by it a considerable abatement in his paralytic com-

received into our hospital who was a Leper. He was universally covered with moist running scabs. Soon after admission he was taken ill with the small pox; they were of the confluent kind, and his life was with difficulty preserved. But it was remarkable that, as the Variolæ came out, the Leprous eruptions retired; when the skin was cleared of the small pox pustulas, the Leprosy returned, unchanged and in the same degree as before." We have here an instance of the small pox and the Leprosy making way for each other, continuing distinct, and suffering no change in their respective natures.

That the Leprous eruptions should retire, as the small pox came out, is singular; but that the Leprosy should return after the small pox were over is not so: For all the Leprous patients I have seen (and many have fallen under my observation in the hospital) have had their Leprosy break out, without any apparent abatement, as soon as the variolous scabs were fallen off, and their strength was recruited by returning to their customary diet.

Were a sufficient number of cases collected, from whence it should appear (as it certainly does with respect to the Palsy and Leprosy) that diseases, subsisting before the Small Pox, remained after the Variolæ were over, without change or abatement, it might fairly be concluded that the Seeds of disorders had no union with each other; and could not, therefore, be communicated together by *Inoculation*: Which would clear up a difficulty, that reason and argument never can remove, and which it would not be allowable to determine by Experiment, except upon condemned criminals.

plaints;

plaints; when, by an act of great imprudence, he not only put a stop to his progress, but endangered his life. For, as he was carried to the bath, he was taken with a shivering and a pain in his head, yet, notwithstanding these symptoms of a severe cold, he went into the bath and staid there much too long. On his return, the pain of the head increased to that degree as to render him dilirious, and a fever succeeded, which for many days subjected him to the most imminent danger.

When the ill effects of this accident were over, a pursuit of his former plan, uninterrupted by any sinister events, effectually restored his limbs to their native strength and activity; and, after a residence in the hospital of 127 days, he returned home free from all complaints.

It may be remarked from the enumeration of the symptoms in many of the preceding cases, that those disorders which are usually termed *Nervous* or *Hysteric* do frequently accompany the *palsy*; and, as it likewise appears from the present, as well as from a foregoing history (and other examples might have been produced) that they sometimes also give rise to the *palsy*; the connection of these diseases, it

is presumed, will render a state of such patients not unnecessary, who for nervous and hysteric complaints have been received into our hospital.

And this account I shall the more readily give, as there are physicians of good reputation, in the present age, who seem to have no favourable opinion of the *Bath Waters* in such disorders; contrary, indeed, to the judgment of *Sydenham*, by whom they are strongly recommended.* But, waving all claim to authority, let us appeal to facts for the decision of their character.

Within the time allotted to the present Inquiry, I find by our Register books, that eight patients have been admitted, whose disease was the *St. Vitus's Dance*. — Of these 3 were discharged cured; 3 left the house much better; and 2 received no benefit.

* His words are, “ si ob contumaciam ejus hic affectus ferreis aquis minùs cedat, adjuvanda sunt aquæ calidæ Sulphuriæ, quales sunt nostræ *Bathonienses*. — hoc sedulò notandum, quod in earum usu eousque ægro persistendum, donec non tantùm levamen aliquale sentiat, sed, quo minùs symptomata omnia brevi postliminio revertant, donec omnino convalescat.”

Dissertatio Epistolaris de Affectione Hysterica &c.

Of others, who laboured under various anomalous affections of the nerves, the total number amounts to 146. Of which 113 were either cured, or greatly benefited; 18 were no better; 5 died; 7 were improper; and 3 were discharged at their own request.

To this general evidence many particular instances might be subjoined of the efficacy of *Bath Waters* in Nervous diseases; but, this not being our immediate purpose, I shall only mention one case, whose singularity will apologize for its publication.

Mary Ford, of a sanguine and robust constitution, aged 26, was admitted into the hospital, under my care, *Sept. 29th, 1762*. Her complaint was an involuntary motion of her right arm. It was occasioned by a fright, which first brought on convulsion fits. She was uncertain how long these fits continued, but the first perception she had of returning sense was a most excruciating pain in her stomach. On a sudden this pain vanished; and her right arm was instantaneously flung into an involuntary and perpetual motion,

She

She had in vain made use of the most likely means to conquer her disorder; which, at the time she gave me this account, had continued, without any abatement, for upwards of sixteen months: nine of which she had been a patient in the *Exeter* Infirmary.

This motion of the arm was like the swing of a pendulum; which it resembled also in being regular and incessant. It was besides quick and so strong, that the hand was at every vibration flung up higher than her head. And what adds much to this singular phenomenon is, that it neither fatigued her nor abated her strength; yet, if by any means whatever it was stopped, even though by herself, a most severe pain immediately seized her stomach, and convulsion fits were the certain consequence.

Once, at my request, she took a light walking cane in her hand; which she had no sooner done, but, this motion becoming irregular and unequal, the pain of her stomach returned with extreme violence, and she fell into the strongest convulsion fit I ever saw; out of which she did not recover, till the arm had, after infinite struggles, returned to its accustomed vibration.

With

With respect to the general state of her health, this patient was no ways disordered. Her appetite and digestion were good, the catamenia were regular, and the other secretions and evacuations perfect. Her sleep indeed was too short; it seldom lasting longer than 3 or 4 hours. During sleep, the motion of her arm ceased; but the instant she awoke (and she was always awakened by a pain of the stomach) it returned, and continued, without intermission, for the remainder of the four and twenty hours.

After she had drunk the Waters and bathed for about a month, finding no amendment in her complaint, I prescribed for her a medicine composed of *Afafætida* and *Opium*. She began with taking a grain of opium every day, and gradually increased the quantity to four grains a day.

In the use of this remedy, together with bathing, and drinking the Waters, she persisted for another month; but without any kind of benefit. On the contrary, those days she went into the bath her spirits and strength were much weakened. She was ordered, therefore, to omit bathing, and to have her arm and the spine of
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the back pumped every, or every other day, for as long a time as she could bear it. Drinking the Waters and her medicine were continued ; for I observed the opium neither occasioned drowsiness, relaxation of the solids, nor any defect in the performance of those functions on which health depends.

It was near three weeks after she had commenced this last plan, before any alteration was made in her disorder : when, as she was one day using the pump, the motion of her arm suddenly changed ; and, having been perpendicular, became horizontal.

This change made it evident, that a different set of muscles were now affected ; on which account it was not unreasonable to suppose, that, by persevering in those measures which had occasioned such an alteration, the entire cure of the disease might in time be effected. Nor did the supposition happen to be wrong ; for this horizontal motion grew gradually less and less, till it entirely ceased, and the arm became obedient to her Will. Before she left the hospital, *March* 30th, 1763, her arm was so perfectly restored to its natural motion and strength, that I have seen her carry with it
a brass

a brass bucket full of water, and assist in washing the Ward she belonged to.

Upon her discharge, she went into service; but came back to us about two months afterwards. She had felt some slight attacks of pain in her stomach, and, therefore, dreaded the return of the involuntary motion of the arm. But by, occasionally, taking a few warm aloetic purges, and drinking the Waters daily, for about five or six weeks, (neither bathing, nor pumping, being necessary) her stomach was set to rights, and the return of the spasm of her arm prevented. As I have heard nothing of her since this last dismissal, it is to be presumed she has continued free from her complaint.

H *A palsy*

*A palsy of the Lower Limbs, after
a Fall.*

JOHN Waterman, aged 34, by falling from a loaded waggon, had the third and fourth vertebræ of his neck distorted, and in a few hours became paralytic in his lower limbs. His stools and urine at first passed off without his knowledge, and a most violent pain fixed in his stomach, accompanied with an inflation of the whole epigastric region. For some time, he was likewise deprived of the use of his arms; but he had regained their action before he was sent to this place.

He was admitted, *Nov. 11th, 1760*, six months after his accident. The vertebræ were still displaced; he felt severe pains in his neck; his lower limbs were incapable of motion; his belly was distended to a vast size, was sore to the touch, and if struck on sounded like a drum; his bowels were now grown costive, and it was with the utmost difficulty he could part with his urine.

Bathing was first used to abate the pain and tension which were occasioned by the distortion
of

of the vertebræ of the neck: but, as it added much to his uneasiness, by increasing the distention of the abdomen, he was at length obliged to desist. Pumping on his neck was therefore substituted, by which he found an almost immediate relief. For, as the displaced vertebræ slid gradually back again into their natural situation, the perfect use and feeling of his lower limbs returned. And, wind in prodigious quantities being discharged from the stomach, the swelling of his belly subsided; and, in proportion to its decrease, the action of the bladder and the peristaltic motion of the bowels were restored.

Without entering into an anatomical description of the descent of the nerves from the brain and their distribution among the viscera, it will be sufficient to observe, that those nerves which are destined to actuate the stomach and bowels were, by this distortion of the vertebræ of the neck, impeded in their operations; and consequently, that these Organs became in some degree paralytic.

Under such circumstances neither digestion, nor the expulsion of the fæces, could be duly performed.

In the former case, much Wind would be generated from the defective concoction of the food; flatulency being generally in proportion to the weakness of digestion: In the latter, much Air would separate from the obstructed excrements.

Upon these principles, the enormous distention of the belly, in this man's case, may readily be accounted for; and what confirms the explanation is, the subsiding of the swelling upon the flatted vertebræ's being replaced by the use of the pump.

Hence we see why internal medicines (for many had been given him before he came into our hospital) had no effect in reducing this distention; it not having been occasioned by any defect in the viscera themselves, but from a want of their being duly actuated by those Nerves to whose influence they are indebted for their powers.

Two reasons have induced me to make these remarks.

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The first is, that, could we always discover the seat of the cause which produces a palsy, and would the situation of the part originally affected allow of the immediate and direct application of the remedies, such diseases would be less difficult to cure. *

The second (which may be of real advantage) is, that in the treatment of paralytic affections it should be a rule to have the spine of the back pumped, as well as the particular part which appears to be more immediately diseased †. This observation, however, does not seem to extend so much to that species of palsy which is produced by the colic, as to those which are derived from most other causes.

* Maxime autem curandum, ut ad sedem causæ detectam omnia remedia, si possibile, applicentur. *Boer. Aph.* 1070.

† “ Σκέλη κὲ χεῖρας ἐκῆ κὲ μάτην οἱ πολλοὶ τῶν ἰατρῶν ἀνατρέγουσι φαρμάκους θερμαίνουσι, ἀμελήσαντες τῆ τόπῃ καὶ ὅν ὁ νοσῶν ἢ τι τῶ ἀπ’ αὐτῆ βλάπτεται νεύρων,” says *Galen*. *De locis affect.* Lib. 4. Cap. 7. And in another Place: “ ὁσπερ ἐνοχλήσεις τοῖς παρακλειυμένοις κόλοις, ἀφεις τινὶ ῥάχιν, ἀπ’ ἐπ’ ἐκέντη ἀφικόμεθα ἐκθεραπεύσεις τὸ περιποιηθῆναι.” — *Ibid.* Lib. 1. Cap. 6. The truth of which he confirms by the case of *Pausanius Syrus*, who, by a fall out of a chariot on his back, became paralytic in one of his hands; which palsy *Galen* cured by the application of those very remedies to the Spine of the back, which had been before ineffectually applied to the Hand itself.

A palsy

A palsy of the Lower Limbs, from a distortion of the vertebræ of the Back, occasioned by Pain.

JOH*N* Lacy of Briton Gloucestershire, aged 26, was subject for many years, at times, to severe pains in his back; which at length occasioned six of the dorsal vertebræ to slip out of their place.

The distortion of these bones was followed by the entire loss of motion in his lower limbs; together with such a defect of sensation in these parts, that, unless his flesh was squeezed with a force which in a sound state would have been very painful, he had not the least feeling in it. The diseased limbs were cold to the touch, of a livid hue, always covered with a clammy sweat, and their blood vessels preternaturally distended. The pains in his back still raged by fits with extreme violence.

In this miserable state he had continued for above a twelvemonth, before he sought relief from these Springs.

When

When he had bathed a few weeks, his back was pumped; and he was ordered, upon coming out of the bath, to be suspended in a swing, as long as he could bear it; the started vertebræ were then anointed with an emollient liniment, and covered with a soap-plaister.

Such was the plan laid down for his recovery (for I gave him no medicines internally, except such as were necessary to keep his body open) and which finally proved successful; though not till he had pursued it near 13 months.

For the first eight months, he perceived no other alteration, than a gradual abatement of his pain; at the end of this period, he could move his toes; it was two months after this, before he could walk with crutches; and a continuation of the same measures were requisite for near three months longer, to restore the entire feeling, and perfect use of his limbs.

In this case the vertebræ did not get back again into their places, but the arch they formed grew flatter and broader; by which means, the angles that these made with the others that remained in their original situation became less acute,

acute, and thus the pressure was removed from the spinal marrow: In consequence of which, though the patient was relieved from his palsy, yet, an unalterable deformity of the spine remained.

Various are the cases of this kind which come into our hospital. In general, all such patients have from time to time very severe pains in the neighbourhood of the started vertebræ; and, though the lower limbs should be insensible to the touch, at least in a great degree, yet they are subject to violent spasms which make them suddenly fly out and extend their muscles so excessively as to produce the most severe tortures. In some patients, there is a total inability of evacuating either the urine or stools, without having continual recourse to the Catheter and Clysters; in others, there is a perpetual and involuntary discharge of both.

Happy is it for such sufferers to be informed, that these Waters generally succeed in this kind of palsy. I have known the worst affected in this species perfectly cured (of which the present case is an instance) or at least the symptoms so greatly relieved as to render life comfortable, when compared with the state of misery

fery

fery they had before undergone. But the disease most commonly requires a long course of bathing and pumping before the desired effect can be obtained : let such, therefore, who labour under this palsy, not be discouraged, if their recovery does not keep pace with their wishes.

The best method of treating this complaint has been found to be the following.

When the patient has bathed ten or twelve times to supple and relax the parts affected, he should then, after every bathing, be suspended in a swing ; sometimes by the neck, sometimes by the feet. After this extension of the spine, the vertebræ must be anointed with an emollient and moderately warm liniment, and the patient conveyed into bed. It is also useful to cover the displaced bones with some soft relaxing plaister, which is to be taken off when the patient goes into the bath.

The operation of the swing is, commonly, at first extremely painful. The patient must, therefore, be put into it in the most careful manner, and continue there but a very short time. By repetition it grows less painful ; which,

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together

together with the benefit he feels from the operation, will encourage him to bear and prolong it; and he will find, as the disease abates, the pain proportionably to decrease.

I must add, that the Back should be pumped while the patient is in the bath, before he is put into the swing; and, in very obstinate cases, on the intermediate days also, when he does not bathe: but I would not then, generally, advise the suspension in the swing. Pumping, however, is not too hastily to be begun; and great care is to be taken, that it does not inflame the diseased parts.

By these measures, the started vertebræ will either slip back into their places, or the adjoining ones will give way, and, by enlarging the curve, lessen the angles which are made by the first displaced bones with their superior and inferior neighbours.

In either case the palsy is cured; but in the latter a crookedness of the spine must ever remain.

A Dead

*A Dead palsy of the Hand and Arm,
from a Fever.*

A NN West, of Glastonbury, aged 24, was recommended to this Charity for a pain in her right arm and hand.

She had been ill of a fever, which after six weeks continuance terminated in a critical deposit of the febrile matter on these parts. For, immediately as the symptoms of the fever declined, she felt an acute pain between her forefinger and thumb; from whence in a few hours it extended to the wrist, and in about a week reached as high as the elbow.

Such was the case when she petitioned for admission into our Hospital; but before a vacancy happened her disease was changed. The pain had entirely left her, and in its place a *dead palsy* possessed the arm and hand; which absolutely destroyed all sensation and motion from the elbow to the ends of the fingers.

As the patient was in all other respects well, and the disease appeared to be merely a local

one, it was thought unnecessary to have recourse to any other measure than that of pumping the dead limb; by which both its feeling and action were, in 131 days, perfectly regained.

This case is an exception to the general rule before mentioned, of pumping the spine of the back, as well as the palsied limb; though it seldom happens but that both are necessary.

A Dead

*A Dead palsy of the Leg and Thigh,
from a Fever.*

HANNAH Loscomb, of Huntspill, Somersetshire, of a florid complexion, strong and healthy, and of about 40 years of age, by sitting in the open air, after being much heated, was seized with a fever, attended with excessive pain in her hips, thighs, legs and feet.

By the use of sudorifics, the pain abated in the left leg and thigh, but became more violently fixed in the other side. The whole right limb began then to swell, and increased to a prodigious size, without the skin's being discoloured, or the pain abated. In which state it continued for near a month; when, upon the pain's growing less, and the swelling subsiding, the parts affected became more and more numb, and finally were dispossessed of all feeling and motion.

She passed many months in this helpless condition, and such was her state when received into our hospital.

Having first taken such medicines as were necessary to prepare her for the use of the Waters,

ters, she drank them daily, bathed thrice a week, had the limbs pumped while in the bath, and used the dry pump the days she did not bathe.

When warm immersion had been five or six times repeated, she complained of a return of pain in the palsied parts; which was particularly severe after every bathing. But, as this pain was judged to be an indication of returning health, she was ordered to persist.

At the expiration of about six weeks the deadness of her leg and thigh was removed, and she then felt no more pain from the bath; but by persevering in its use, together with the assistance of pumping, she had the strength and motion of the diseased limbs entirely restored.

Pains coming on, after bathing, in palsied limbs, I have generally found to be a pretty sure sign of their recovery.

From these *two cases*, as likewise from *case the fifth* among the Hemiplegias, and *case the first* among palsies of the Lower Limbs, it appears how successful our Waters are in palsies, where not only motion, but sensation also, is destroyed.

* *A Dead*

* *A Dead palsy of the Limbs, without loss of Motion.*

JOHN *Westlake* of *Winchester*, aged 38, attributed to his lying on damp straw a stiffness in his knees, which rendered him incapable of walking. This complaint increasing at length occasioned a paralytic affection of the lower limbs, and, afterwards extending itself to the arms and hands, it deprived all these parts of their sense of feeling; though it left them, in some degree, possessed of their powers of motion.

The parts more immediately affected in this manner were the hands and feet; which notwithstanding their being absolutely dead to the touch, he could move readily enough; though their actions were awkward and too weak to be of much assistance to him.

He followed the customary practice of the hospital as to bathing and drinking, for five months; and was *minuted* in our Register on his discharge *Much Better.*

I have

I have inserted this man's case, as it is the only one I ever knew of that species of palsy, in which the diseased parts retain their *motion*, after being deprived of their sensation. Though, as an instance of this uncommon affection, it was far from being so compleatly satisfactory, as the two facts mentioned in the Memoirs of the Royal Academy, for the year 1743.

A Palsy

*A Palsy of the Hands, from the
Cyder-Colic.*

William Bishop, of Dunster in Somersetshire, of a spare dry habit of body, was affected with an excruciating pain in his stomach, which soon extending to the bowels brought on a total obstruction that continued for 10 days.

These complaints were occasioned by his having drank freely of cyder.

A passage being at length procured, the pains of his stomach and bowels in some degree abated; whereupon a weakness seized his wrists and gradually deprived him of the use of both hands; the backs of which were covered with large hard tumors, that for a time were extremely painful.

It was a year and nine months, from the time this person first lost the use of his hands, before he was sent to *Bath*.

The hands fell pendulous from the Wrists, the power of raising them being gone: The Fingers were contracted into the palms of the hands, and could not be extended. Except the affection of these parts, he was in other respects well; his bowels having long been free from obstruction.

After a few doses of physick, he drank the Waters, and went into the Bath. When he had bathed about a fortnight, he was ordered to have his hands pumped every day, and by these means he, in a very few weeks, was entirely cured.

'Tis to be observed, that five or six other persons, belonging to the same place, were affected, about the same time and from the like cause, in their stomach and bowels, which terminated in a palsy of their limbs; and that they were all, together with this patient, discharged from the *Bristol* Infirmary without having received any benefit; but were afterwards perfectly recovered by these Waters.

*A Palsy of the Arms and Hands, from
the Cyder-Colic.*

JOHN Holman, by drinking too freely of cyder, when heated with labour, was attacked with a colic, which lasted five weeks, and was accompanied with a constipation of the bowels, fever and delirium. As soon as his costiveness was removed, the fever and delirium left him, and the pains in his bowels were much abated. On the remission of these pains, his knees began to swell; but these swellings soon subsiding his hands became paralytic, and then the bowels grew perfectly easy.

This palsy of the hands did not continue above a month; the disease gradually abating of itself, till it entirely left him.

The next year, from the like indiscretion, his disorder returned, and was attended with the same symptoms; which having lasted longer than on the first attack, in the end, totally destroyed the action of his arms and hands. In this condition, near seven months after his relapse, he came to the Hospital. — He drank the

Waters, bathed and was pumped, and in a couple of months regained the perfect action and strength of his arm: but, the muscles of the fingers not advancing equally in their recovery with those of the arms, blisters were applied to the Wrists; by which these parts were also restored to their natural powers.

He was admitted a patient the 9th of *February* 1760, and was discharged the 28th of *May*.

* *A Palsy*

* *A Palsy of the Arms and Hands,
from the Cyder-Colic.*

N*icholas Neale* was taken with a colic, attended with a diarrhæa, upon drinking some new cyder; which complaints continued for fourteen weeks. He then found his voice begin to falter, and for some days could not speak to be understood. After this, his speech returned; and then his arms and hands became paralytic.

These limbs hung loose and helpless from the trunk of the body, and were affected with severe pains continually running from the ends of his fingers to the points of his shoulders.

In this state he was received into the hospital, the 1st of *April* 1759; and by the customary methods was perfectly cured by the 18th of *July*.

I have been induced to mention this case from a circumstance attending it, which is contrary to the usual progress of the disease: For, though a purging came on at the beginning of
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the seizure and continued till the colic ceased, yet a palsy first seized the organs of voice, and then shifting to the arms and hands entirely took away their use.

The colic which gives rise to this species of palsy was not unknown to the ancients. It is twice mentioned in a manner sufficiently descriptive by *Paulus Ægineta*. * Of late years it has engaged the attention of some of our best medical writers. It will, therefore, be sufficient to observe, that in consequence of a most obstinate costiveness attended with exquisite pain in the bowels, upon the constipation being removed and the pain diminished, the patient loses the use of his limbs. The arms and hands are the parts most commonly seized with this palsy; though I have known many instances where the lower limbs have been equally affected. Rheumatic pains sometimes attack the limbs before they become paralytic, and sometimes continue after the palsy is formed: in the latter case, I have generally found the disease less difficult to be removed.

Whether this paralytic affection is owing to a translocation of the morbid matter from the

* Lib. 3. Cap. 18 & 43. Edit. apud Med. Artis Principes.
bowels,

bowels, to those nerves which actuate the limbs; or whether it is occasioned by that influence which some parts of our frame, when diseased, have on others, though situated at a considerable distance from them; is a point that remains undecided. It is certain, however, that anatomy has not hitherto discovered any communication between the nerves of the abdominal viscera and those of the arms: and yet this Palsy of the arms (as *Van Swieten* assures us) has been cured by medicines internally given, and applied externally to the abdomen only.*

The fumes of minerals, and the imprudent use of new cyder, are reckoned among the causes of this colic.

In a very ingenious pamphlet lately published by *Dr. Baker*, † the *Devonshire* colic is attributed to lead, dissolved by the juice of the apples in manufacturing the cyder.

* Probe memini me plures sanasse nullo remedio applicato ipsis partibus paralyticis ad dissipandam morbosam materiam, sed solis remediis internis, una cum frictionibus, unguentis aromaticis, emplastris similibus, Abdomini tantum adhibitis.

B. Van-Swieten Com. Lib. 3. p. 358.

† And since republished with additions among the *Medical Transactions*.

Lead we know is remarkably productive of this complaint. The sugar of lead has been recommended in some cases as medicinal, and perhaps, when judiciously used, may have proved so; but, when either given internally, or externally* applied, without proper caution, is found to bring on the disease. The same effect is produced by correcting acid wines with sugar of lead: and a similar instance, not long since, fell under my own knowledge of six persons who became at the same time paralytic by drinking cyder brought to them, while at harvest work, in a new earthen pitcher whose inside was glazed; which glazing is made chiefly of lead, and was undoubtedly dissolved by the cyder, as appeared not only from those unhappy effects which drinking it produced, but also from its having given (as these persons informed

* I was informed by a surgeon of great eminence, that a palsy of both legs and arms had been brought on, by an attempt to destroy venereal verucæ by rubbing them with Saccharum Saturni.

† Rhenish Wines, however acid, never produce this disease: they give rise to it only when sweetened with Lead. In *Germany* this practice is justly deemed a capital offence. I fear it is too frequent a custom in this kingdom, when cyder is grown so acid as to be unfit for sale, to hang a large ball of lead in the cask to sweeten it.

me) that astringent sweetish taste to the liquor by which solutions of this mineral are peculiarly distinguished.

But whatever be the cause whence cyder derives this deleterious quality, this however is certain, that all such paralytics come to our hospital from the counties of *Devon, Somerset, Gloucester* and *Cornwal*. It is a very remarkable fact, that, during the 13 years to which this Inquiry extends, there has been only one such patient sent us from *Herefordshire*, and not one from *Worcestershire*.

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A Palsy

*A palsy of the Hands, from the
Bilious Colic.*

MArgaret Hobbs of Barnstaple in Devon, 31 years of age, had possessed a good state of health till within a twelvemonth before she was recommended to this Charity; when she was taken with violent pains in the region of the stomach, continual vomitings, and an obstinate costiveness. The vomitings and costiveness being with much difficulty removed, the pains left her stomach and settled in her lower limbs; of whose use she was deprived for two months. They then shifted to her shoulders, and the lower limbs regained their functions. From the shoulders the pains soon descended to the wrists, and her hands were rendered paralytic. Her fingers were so strongly contracted she could not move them, and large hard swellings rose on the backs of her hands. Her bowels were costive, and the catamenia were obstructed.

On account of these two last symptoms, the use of an opening electuary, and the occasional assistance of deobstruent medicines, became necessary with the customary regimen of the
Waters;

Waters; by which all her complaints were cured, except the tumors on the backs of her hands. These, not giving way to the Pump, were removed by the application of blisters, and her recovery was perfected in 151 days.

Pumping will generally dissolve, and, by the perspiration it occasions in the part, discharge these swellings; but sometimes it will only soften them: in which case we find it necessary to cover the tumors with blisters, or plaisters, or cataplasms made of mustard-seed.

The use of *Bath Waters* in diseases of the Liver may, I think, be comprised under the following heads.

They increase the action of the Bile.

They prevent its viscosity; and by uniting its several component principles restore this fluid to a perfect and natural state.

Whether internally, or externally used, they abate spasmodic strictures of the biliary ducts.

In consequence of these properties, joined to their well known effects on the stomach and

bowels, they become extensively useful in most disorders of the Liver and Primæ Viæ; as in jaundices when too obstinate to be removed by the common methods of cure; in preventing the formation of biliary concretions of gall-stones; in bilious colics; loss of appetite; indigestion: and all those various complaints which, both among the rich and poor, are the effects of intemperance and excess. But it is to be observed, that these Waters should be carefully abstained from, if there is the least degree of inflammation attending any of these complaints.

A Palsy

*A palsy of the Arms and Legs, from
the West-India Colic.*

ALLEN Lane, of Portbury in Somersetshire, mariner, aged 19, was in the year 1749. attacked in the *West-Indias* with the dry belly-ach, which brought on a fever, convulsions, and loss of senses. These complaints continued for some time, and, upon their quitting him, he was entirely deprived of the use of all his limbs. It was near a twelve-month after this paralytic seizure, before he came to *England*, and was, at my recommendation, admitted into the Hospital, under the care of the late Dr. Sommers.

His arms hung uselefs, like flails, from his body; his fingers were drawn into the palms of his hands, the backs of which were covered with large hard swellings. His legs were contracted close to his buttocks, and so fixt there, that no external force could displace them. In consequence of this contraction, which made it impossible for him to put his feet to the ground, he rested on his knees; and when he was to remove from one place to another, it

was

was done by crawling on them and his elbows. The muscles of the whole body were greatly emaciated, particularly those of the arms and legs. His bowels were excessively costive and frequently tormented with pains; he was often sick at his stomach, and had little or no appetite.

The first intention in this case was to get the stomach and bowels into a natural state, by improving the appetite and digestion, and procuring a free passage for the excrements. These points were at length effected by a proper regimen of diet, the occasional use of mild aperient medicines, and the Waters drunk in small quantities. He now became able to venture on bathing, and to make use of the pump; which measures he continued till his stay in the hospital was no longer necessary.

It may easily be imagined, that it required a long use of these Waters before a disease of such inveteracy could be expected to give way to them; but it at last yielded, in a great measure, to their powers, though not till he had resided here 622 days.

He

He was discharged the 20th of *May*, 1752 :
 minuted in our Register, *Much Better*. For his
 general health was in all respects restored.
 The contraction of his legs was entirely re-
 moved ; their muscles were grown fleshy and
 full, and the compleat action of the lower limbs
 was regained. He had also the use of his arms
 and hands ; but the muscles of these parts, par-
 ticularly of the latter, were still weak and ema-
 ciated. And it is most probable they never re-
 covered their natural strength and size : as I do
 not remember more than one or two instances,
 where a compleat atrophy had once possessed
 the muscles of the hands, especially those which
 form the ball of the thumb, that the parts
 ever recovered their natural fulness and
 strength.

We have here another remarkable instance
 of what *Bath Waters* can do, in the most un-
 promising cases, by a steady perseverance in
 their use. Such long trials, which are not un-
 frequent in our Hospital, must lessen the num-
 ber of patients discharged ; yet as we find by
 repeated experience, that many chronical cases
 require a long use of the Waters before we per-
 ceive

ceive any great alteration for the better, and yet at last are cured; we think it our duty to persevere, while we find there is the least probability of success. By this conduct we have often the satisfaction of doing the most essential services, which a more hasty procedure would necessarily have prevented.

Palsies

Palsies from Paint.

T *Thomas Woodden*, painter of earthen-ware, was twice admitted into *St. Thomas's Hospital* for a colic and palsy, which were the effects of his occupation, and was both times much relieved; but still so great a weakness remained in his wrists, as to render him incapable of using his hands; on which account he was sent to our hospital, where he was perfectly recovered in 140 days.

We have a great number of instances of this kind on our Books; but this case I have particularly selected as it shews, that a very small quantity of that noxious mineral, Lead, (for very little, I am informed, is used in the business which this man followed) is capable of producing the most pernicious effects. Happy would it be, if some other pigment could be discovered, which might supply its place: For even the very effluvia which arise from newly painted houses have sometimes proved as hurtful to the inhabitants, as mixing the Colours and laying them on too commonly prove to the painters themselves.

The following instance of a patient recommended to us, by a Gentleman of great eminence in the profession, is a proof of this observation. I shall take the liberty of copying his Letter.

“ *Samuel Butts*, aged 41, of *St. George’s Hanover Square*, of a thin habit of body and pale complexion, was seized with colic pains in his bowels, attended with a little quickness of the pulse and costiveness, about the 20th of *August*, 1753. Proper means were used to relieve him by the advice of a very experienced physician. Notwithstanding all the assistance that could be given him, his pains continued about three weeks, sometimes very violent, at others more gentle; but he was never, during that period, quite free from them. As they began to abate, he gradually had a weakness of his legs and arms come on; which has increased so much in his arms and wrists as to disable him from feeding or dressing himself, and has reduced him to a very helpless condition. During the whole time of the complaint, stools have with great difficulty been procured. *He lived in a house while it was new painted, when taken ill.*

Pall-Mall, 29 Sept. 1753.

THOMAS GRAHAM.

This patient, whose complaints were exactly similar to those which painters themselves so often suffer, came into our hospital *October* the 15th, 1753, and was discharged cured the *May* following.

A Palsy

A Palsy of the Hands, from Glass-Grinding.

E*Edward Erridge, of Willington in Sussex,* aged 29, by trade an optic-glass maker, which business he had followed for near twenty years without any inconvenience, was one day suddenly taken, as he was grinding glass, with a most violent spasmodic pain in his stomach, and continual vomitings. To which ensued so costive a state of body, that he was frequently for a fortnight together without any evacuation; during which time the pains he felt in his belly were intolerable. For these complaints, together with wandering pains that more particularly affected his arms, he was admitted into *Guy's* hospital; where he found, with respect to the disorder in his bowels, a good deal of benefit, and was advised by his physician to repair to *Bath*, for the completion of his cure. But not following this advice, he continued for some months in a miserable condition, from the pains which had now fixed together in his arms; but which at length gradually wore away, and were succeeded by a paralytic shaking of these limbs. In this state he continued for five months;

months; when the tremblings ceased, and he lost the use of both his hands.

He came to our Hospital *March* the 14th, 1752: and was discharged in the *August* following, *Much Better*. He returned to us again in *December*, pursued the same course of bathing and pumping till the 5th of *April*, when he obtained a perfect Cure.

I find by Dr. *Oliver's* papers he was informed by a patient, who was paralytic in his arms from the same cause as the person whose history is above related, that, from the wheel used in grinding glass, which is turned by a rapid water-course, there is frequently emitted a blue flame which smells very sulphureous, and is excessively poisonous: that many who follow this business grow consumptive; some lose their senses; but the generality are subject to colics, which usually terminate in palsies of the hands. The person, who gave the Doctor this information, laboured under the latter complaints; of which he was cured by these Waters in 251 days: but relapsed by returning to his business, and upon a readmission into the Hospital received no benefit.

Painters,

Painters, Refiners, Gilders, and all who are employed in digging ore, or in the separation of metals from it, † are liable to colics which end in palsies. The symptoms are much the same with those which proceed from cyder, and the *Bath Waters* are equally a remedy, by whichever of these causes the disease is produced; with this difference, however, that palsies from mineral effluvia require the longest use of these Waters to effect their cure.

I shall here conclude the history of these cases; the number of which might have been much enlarged,* were it not presumed that those I have given, with the assistance of the *General Table of Paralytics*, will fully answer the purpose of this Inquiry.

† Most probably from some portion of lead that it mixed with them.

* I rather think the medical reader will wish I had troubled him with fewer: but as this Tract may fall into the hands of those who are afflicted with this disease, it must be a consolation to such should they find that palsies similar to their own (as arising from like causes) were relieved by these Waters; which consideration will, I hope, be deemed a sufficient apology for my having giving so large a number of cases.

It is apparent from these cases, that the patients usually recommended to our Hospital labour under palsies which have resisted the powers of medicine, and whose original obstinacy has, of course, been augmented by time; yet the Table informs us, that out of 969 paralytics, in situations so unpromising, 813 were benefited.

It cannot have escaped the Reader's notice, that BATHING in these Waters makes an essential part of the hospital practice.

We bathe all our paralytics, where no particular circumstances forbid. When a patient is sent to us whose limbs from a long continuance of the disease are totally relaxed, warm immersion in such a state would be manifestly improper; and he is, therefore, obliged to refrain till by drinking the Waters, or, if necessary, by the aid of medicine, he acquires a sufficient degree of strength to venture on its use. Where no such objections occur, he enters on this regimen after a short preparation. If the Bath weakens, as it sometimes does, he intermits it, and in the mean time has his limbs pumped. Some are able both to bathe and
 pump

pump at the same time, or else to use each alternately; while others stand in need of pumping alone: and thus the external application of these Waters is used in all such complaints, though varied according to the particular nature of the case and the constitution of the patient.

But it is said by Dr. *Mead*, "that warm bathing promotes a return of the apoplexy." † But why ascribe this *return* to the use of warm bathing? Since this disaster happens to those who have never used the warm Bath. For relapses of this sort are common, and are owing to that natural affinity which unhappily subsists between these two diseases.

The evidence which the Table of Paralytics affords will, however, best determine this matter; and to give the objection to warm bathing all due weight, we shall consider it both as a general prohibition to this practice in all palsies, and as a particular one in the Hemiplegia only.

† Ipse quidem novi nonnullos, qui, cum vana medicorum spe delusi ad thermas nostras *Batbonienses* profecti essent, ex aqua calida egressi, mox iterum apoplexia correpti sunt, ac perierunt. *Mon. & Præcep. Med.*

In the first instance it will appear, that out of 969, 43 have died; which in round numbers is as 1 to 22.

In the second we find, that out of 257, 12 have died; which is in the proportion of 1 to 21. †

Both calculations turn out nearly the same, and either of them is sufficient to shew the weakness of the objection. For supposing all those persons to have died from a relapse into the apoplexy (which is granting more than is true, as some of them were carried off by the Small-Pox) yet, these very few instances of ill success, among such a number of patients, whose cases were so hazardous, are proofs rather of a preventive, than an accelerating power in these Waters, as to the point in question. At least, this return will be considered, by those best qualified to judge, as an event very natural in itself, and too apt to happen to those who have never used warm bathing.

† In these calculations, the patients ranked under the four last divisions in the table of paralytics are not considered; they being no ways concerned in the question.

These considerations weigh still more strongly on the side of warm bathing in the Hemiplegia, to which the caution is peculiarly directed. * For, as *Bellini* observes, “they who are paralytic from the apoplexy with difficulty and very seldom recover: on the contrary, they are more apt to relapse into the apoplexy.” In truth, this kind of Hemiplegia is a mere crisis, or effect, of the apoplexy: † Hence we see their alarming connexion, and hence follows the too frequent and fatal termination of the former, *in the disease from whence it arose.*

It is natural for Men to be governed in their judgments by what falls under their own observation: hence it is, that we are too often tempted to draw general conclusions from the good, or ill, success of a few particular Cases. But it is on full and repeated experience, not on partial or casual, that Aphorisms in the art of medicine are to be drawn, or can be well founded;

* Non nisi difficile & raro contingit ut paralytici ex apoplexia evadunt, imo e converso facilius tales paralytici in apoplexiam recident. *Bellini de morbis Capitis.*

† Desinit ut plurimum, nisi mors intercedat, apoplexia in nervorum resolutionem, quæ morbi est solutio.

Mead Mon. & Præcep. Med.

and, therefore, as the evidences here produced are both numerous and decisive, I shall not hesitate to affirm, whatever authority there may be to the contrary, *that Bathing in these Waters is useful in Palsies.*

Should the curious Reader now want to know, after what manner the *Bath Waters* act in the cure of paralytic diseases, his first sollicitude should be employed in seeking, how animal motion and sensation arise from the brain and nerves. That these organs are necessary to the performance of those animal functions is well known; but how they perform them remains yet, and is likely to remain, an inexplicable secret. While nature, therefore, so industriously conceals from us the *manner* of her operations, it should teach us to confine our studies to the acquirement of that useful knowledge, which is the fruit of a patient attention to their *consequences* and *effects*; instead of pursuing speculations and forming systems, which, when well founded, have proved of little use in the art of healing, and, when ill founded, an eternal hinderance to our progress in it.

and, therefore, as the evidences here produced
are both numerous and decisive, I shall not ho-
sitate to affirm, whatever authority there may
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is a Specific Remedy.

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hindrance to our progress in it.