A practical essay on the good and bad effects of sea-water and sea-bathing / by John Anderson.

Contributors

Anderson, John, approximately 1730-1804. Royal College of Surgeons of England

Publication/Creation

London: Printed for C. Dilly, 1795.

Persistent URL

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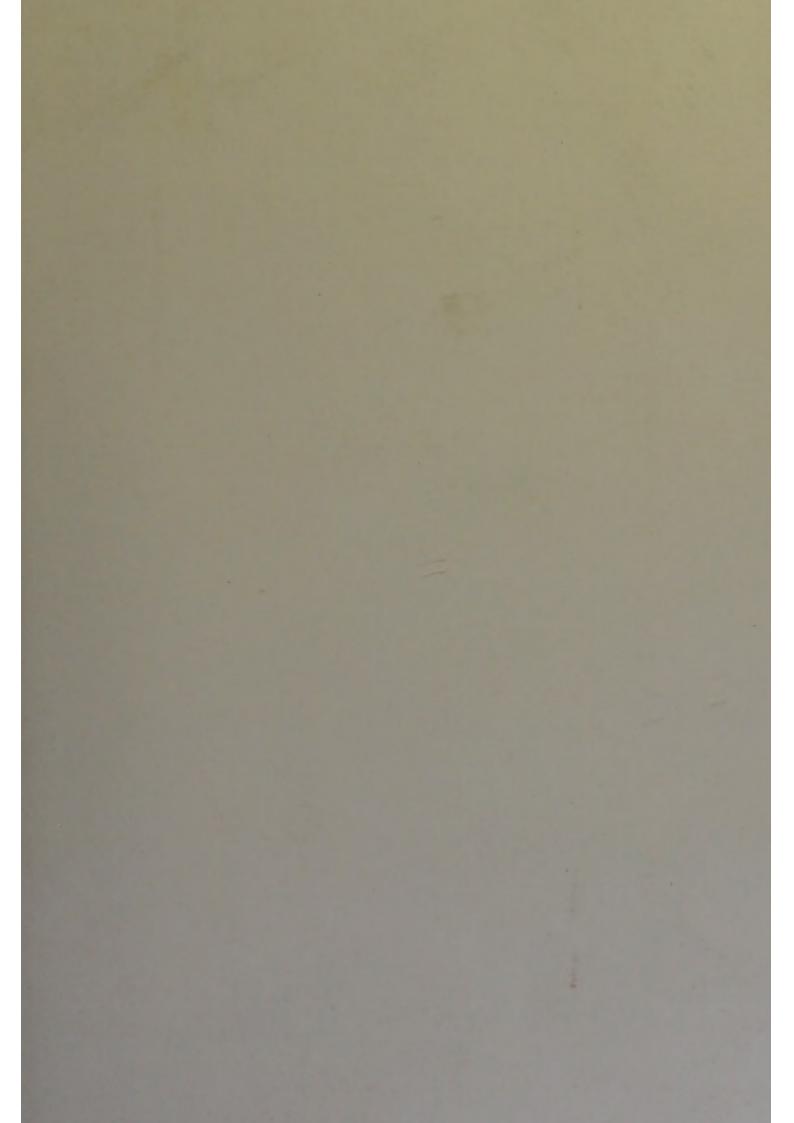
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PRACTICAL ESSAY

ON THE

GOOD AND BAD EFFE

OF

SEA-WATER AND SEA-BATES

BY

JOHN ANDERSON, M. D., F. A.S., C. M.S., &c. PHYSICIAN TO, AND A DIRECTOR OF, THE GENERAL SEA-BATHING INFIRMARY AT MARGATE.

Lavatio corporis frigidæ bona est ad longitudinem. BACON.

LONDON:

PRINTED FOR C. DILLY, IN THE POULTRY: E. MURRAY, FLEET-STREET; S. SILVER, MARGATE; AND ALL OTHER BOOK-SELLERS IN TOWN AND COUNTRY. MDCCXCV.

PRICE TWO SHILLINGS.

PRACTICAL ESSAY

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GOOD AND BANESHEE

SEA-WATER AND SEA BATHLING.

JOHN AMDERSON, BLIEF T. A.S. C. M. S. Sc.

GENERAL SEA-BATHING INFIRMARY
AT MARRATE.

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[CONSELLED OWN ROSES]

N. B. The Profits arising from the Sale of this Book will be appropriated to the Fund of that Charitable Institution, the General Sea-bathing Infirmary at Margate.

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THE

GENERAL SEA-BATHING INFIRMARY
AT MARGATE,

THE FOLLOWING

ESSAY

THEIR MOST FAITHFUL AND OBEDIENT SERVANT,

THE AUTHOR.

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GENERAL SEA-BATHING INFIRMARY
AT MARGATE,

THE POLLOWING

ESSAY

THE MOST PAITHFUL AND ORIGINAT SHRVANT;

THE AUTHOR.

E S S A Y

ON

SEA-BATHING.

In the practice of sea-bathing we have not only to attend to the nature, temperature, power, influence, and effect, sensible and insensible, that result from the use and abuse of the bath and essential auxiliaries, but also to the natural and acquired state of the habit or constitution: the nature of a complaint, and times and periods of its use; ex. gr. there is much difference in the power and effect of the sea-bath between going into it with an empty and full stomach; between going in temperately warm, and in a fervor and perspiring, or chilly; between going in prepared and unprepared; between going in courageously and timidly:

timidly: by all the first there is safety and good to be expected; by all the latter, hazard and danger, except in that one instance of it, in the bite of a rabid animal, when the bather's mind must be alarmed by the greatest fear, and flaccidity brought on the system.

There is again much difference in the effect of the fea-bath used immediately before and after a periodical evacuation, such as the menstrual; or before and after a miscarriage: bathing before a period hastens on, and increases, the discharge: bathing after, strengthens the collapsed uterine system against a premature and violent, irregular return of them; it helps conception, and to enable the uterus to retain its increasing burthen to the full time of gestation. Bathing immediately before a febrile exacerbation, or convulsion, or gouty paroxysm, by stimulating to action the solids, and thereby accelerating the circulating shuids, hastens on, and exasperates, the symptoms.

The efficacy of the fea-bath is much prevented by a person's fear, especially the feeble, nervous, irritable, habit; such as the hysterical or hypochondriacal, or those that may have an antipathy to bathing (hydrophobia excepted), which, if they they have, the intention of the bath will be fruftrated: it is unfortunate, as there is really no danger; they are not carried beyond their depth. If they will only shut their ears, eyes, and mouth, and trust themselves for a moment in the hands of their fagacious, faithful guide, all will be well. Timid persons ought to take a glass or two of generous cordial wine on entering, and on coming out of the bath, if they are the leaft chilly. dent spirits of any kind are improper; they dry, burn, then chill, and check genial perspiration, stupify and confound the fenses, and destroy the nervous fystem; and, instead of exhilarating the fpirits and appealing anxious folicitude, bring on horrors, tremors, or shakings, and depression of fpirits, until difease abbreviates the term of life.

When there is a general or particular weakness in the secreting organs; when the stomach and bowels are unable to perform their excretory functions, or the sibres of the arteries cannot vibrate to accelerate the languid circulation, and the spirits are flat, secretion obstructed, or slow in the glands, or uterus incapacitated to throw off its monthly purgations; or sensible or insensible transpiration is diminished; the sea-bath is efficacious in purifying the habit and maintaining the equipoise.

they have the intention of the bath will be fruf-A Miss P---, at No 18, Holborn, aged eighteen, came to Margate, in Autumn, 1792, to bathe in the fea. She was of a pale chlorotic complexion, and had been four years in the hands of the faculty for bilious bowel-complaints, and irregularity of her monthly terms, which never were in due quantity: in short, she had no one secretion or excretion that went regularly on. She would be frequently constipated, attended with racking pain and diftention of her ftomach and bowels. Her complexion was livid; her lips pale, eyes dull and languid, and her temper exceedingly fretful and impatient. On her coming from the third bath she felt herself extremely sick and fqueamish at stomach, which increased with great commotion and diffurbance through her whole frame; and by the next day her hands were much fwelled and inflamed, and full of fmall limpid ferous vefications. Mr. John Silver, her furgeonapothecary, called me inftantly to her before any thing was done. I defired her to make herfelf eafy, and to be thankful; for that nature, by virtue of the fea-bath, was doing great things for her, by expelling the morbific matter from the internal habit on the fafest part of the body; and that we had only to affift nature, as she pointed, in her falutary efforts, to exterminate noxious humours

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mours and the causes of them, and supply their room with more kindly particles to enter in and assimilate with the blood.

I fimply ordered a fomentation to her hands of a decoction of mallow leaves and elder flowers twice a day, and cataplasms of barley-meal made with the fame liquor, to lie on intermediately; and by the next day the inflammation and pain abated, and a ferous limpid humour began to run, which increased in quantity, at every dreffing, twice a day, and was so intolerably fetid as even to forbid her mother coming into the room. Thus it ran for a week, and then kindly dried up; when her feet became in like manner affected, difcharged, and healed up also in a week. After these discharges she found herself in the enjoyment of perfect health, and every thing became regular in her conftitution. She took two or three doses of gentle physic, and then went round the town of Margate to fhew what a miracle the fea-bath had performed on her: she took only one diaphoretic julep during the time. She left Margate in perfect health and good temper, pleafed with every thing and with every body. This lady waited on Dr. Lettfom and others, to give ocular proof of the great efficacy of the bath.

The fea-bath not only promotes the morbidly suppressed monthly terms, in habits especially unaccustomed to bathing, but other fanguinary hæmorrhages, and the running of iffues; it stimulates, expands, and gives energy and force to the debile flaccid folids; rouzes, warms, and actuates the cold indolent mass of fluids, and separates noxious particles from the purer juices of the body; fuch as in the cold, pale, languid, feeble, chlorotic virgin, and reftores her to warm comfortable health, ftrength, and colour. Nature is brought into her more regular line. To fay feabathing never fails as an emenagogue would be faying more than is true; for, though I have known it to relieve many obstinately obstructed, still I have known some to resist its force, and be obliged to have recourse to other means: it is, however, an excellent auxiliary to medicine.

The fea-bath is certainly a great affiftant to the organs of digestion: it enables them to act on the aliment for elaborating the crude and imperfect chyle, or nutritious juice, for a subsequent sanguistication. A cachectic, or depraved state of the sluids, is induced by excess thrown in, and a defect of the digestions and natural discharges.

The uterus, being the spring, or fountain, of many complaints peculiar to the female fex, I have always confidered its irregular action, attended with either a morbid obstruction or an irregular profusion, of the catamenia, as the first step necessary for the physician to attend to in the cure of their complaints. I have never observed any to yield kindly till that was regulated. There is a great difference, however, in the irregularity being primary or fecondary; for, if fecondary, remove the primary cause, and the concomitant effects will cease; for instance, dejection, fretting, grief, or disappointment, to the females of great fenfibility and irritability of nerves, may be traced to be the occasional cause of many of their complaints; fuch as hysteria, syncope or fainting, epilepfy, obstructio & profluvium menfium, abortion, head-ach, mania, convulfions, and nervous complaints in general; all which are objects of fea-bathing, judiciously managed.

That fea-bathing should have the power and property of removing suppressed menses, and of restraining a too abundant slow, i. e. open and shut, relax and brace, appears somewhat paradoxical; but it is fact, and for which I have the suffrage of the faculty on the coast; of the oldest

fe-

female fea-bathing guides at Margate; of some of the great antient and modern writers, and my own experience for it, though none have attempted to assign a reason for its having two such very opposite effects. Virgins who have had their terms obstructed, some three, some four, sive, six months, have been relieved after bathing a few times in the sea; some after a few weeks, and some have required a short course twice or thrice, previous to the periods of menstruation, before they became perfectly regular and in due quantity.

Weakly women, again, especially after bearing children, that have an irregular profusion, have been relieved by sea-bathing in proportion to the strength they acquired by it: a very long course debilitates, and increases the slooding. Much depends on their being laid softly down in the water, on their back, and instantly sent out again, and not going in oftener than once or twice a week.

Sea-bathing has been recommended as efficacious in fluor albus. I wish I had found all the faculty and semale guides in one opinion; but they are not. Some say it is very efficacious, while others say they never knew it to be of any service in it. To compromife the matter, though I am not warranted to fay, from my own experience, that it has effected a cure by itself, yet I have found it an excellent auxiliary to medicine. *Etius* advises the cold sea-bath for the catamenia when too abundant, fluor albus, and lapsus seminis.

The late illustrious Dr. Robert Whytt, king's professor of medicine at Edinburgh, says, in his Treatise on Nervous Disorders, "that he has known a profusion of the menses and fluor albus cured in a great measure by sea-bathing, when medicines had failed."

Mr. George Slater, furgeon-apothecary at Margate, favoured me with a lift of complaints in which he found fea-bathing efficacious, namely, in glandular obstructions, chronic rheumatism, fcurvy, leprofy, hysteric and hypochondriac affections, nervous complaints in general; fluor albus, gleets, feminal weakness; diabetes, rickets, and in almost all complaints arising from relaxation of the folids; in profuse and suppressed menses from debility, and not from inflammation and plethora; and in preventing abortion.

Mr. Edward Daniel, senior, surgeon-apothecary at Ramsgate, savoured me also with a similar list list of complaints in which he found sea-bathing to be efficacious, namely, in scrofula, hypochondria, hysteria, chronic rheumatism, scurvy, in some chlorotic cases, debility, after sits of illness, uterine fluxes, fluor albus, and in low nervous cases. This was accompanied with general observations on the use and abuse of sea-bathing, as will appear occasionally in the sequel, and in my intended Essay on the warm sea-water bath.

Mr. Thomas Mantell, furgeon-apothecary at Dover, fays, "that a profluvium mensium he regards in two lights, as proceeding from plethora and debility. In the first he has found sea-bathing to do hurt; in the latter to be extremely beneficial. In that kind of menorrhagia which sometimes attends pregnant women he has seen very good effects to result from its cautious use.

found the fea-bath of infinite use, though not in every species of fluor, ex. gr. in gonorrhwa virulenta."

Mr. Samuel Frome, furgeon - apothecary at Broadstairs, says, "the effect of cold bathing on the human body should be that of a tonic or general bracer; nevertheless it will not agree with

every subject who is debilitated, and may require a tonic remedy; for, if there be no reaction on the sedative effect of the water, the consequence will be that of rendering the person cold and unpleasant all the day, and will debilitate instead of restore. In such a case he prefers warm seabathing, which, by exciting a comfortable degree of warmth, gives vigour to the system.

"Females who do not menstruate regularly, or have not begun at the time expected, if it arife from relaxation, attended with shortness of breath, pale fallow countenance, proftration of strength, pain in the loins, ftomach, &c. I would, he fays, recommend cold fea-bathing, provided after one or two trials they find themselves warm and comfortable after bathing; but if, on the contrary, they should be cold, to try the warm sea-bath, for the reasons given; but says, we should well difcriminate between the females who do not menstruate from debility of the fystem, and those who do not from plethora, or a rigidity of the uterine vessels, attended with headach, tension of the veins, &c.; for, as in the former all tonic remedies must be used; in the latter, bleeding, efpecially just before the period when menstruation should take place, in a small quantity, gentle aperient medicines, and putting the feet into

warm water, should be tried, of course sea-bathing must be very improper, upon the principle of its being a tonic: in fact, every thing should be done in this instance that will relax, while in the former every thing that will restore; therefore, the fair sex should not indiscriminately bathe, but should previously consult with some judicious physician or surgeon. And it is a mistaken notion, when young women do not menstruate regularly or not at all, that their complaints arise from that cause: the fact is, there is something wrong in the system, and menstruation is merely the effect of the constitution being right; and therefore, where it does not take place properly, we should endeavour to mend the constitution.

"Too great a profusion of the menses may likewise arise from debility or plethora; the one producing a passive hæmorrhage, the other active, which should be moderated as its nature may require."

Amongst the semale guides, Mrs. Pavey (nineteen years a guide) speaks the most decisive on its effects on fluor albus: she says, she hath bathed many ladies in the sea for this complaint, who experienced a perfect cure.

The facts being thus fo far afcertained, I had next to trace effects to their causes; and I am satisfied that much depends not only upon the conftitution but upon the feafon, temperature of the weather, mode of living, mode of bathing, state of the mind, stage of the complaint, length of a course, and distance of time between each bath. All which shew, that sea-bathing is more at prefent practifed than a knowledge of it is, or can be in general possessed. Much will ever depend upon the judgment, discretion, and sagacity, of the rational physician, and other judicious, experienced, and well-informed directors, refident upon the spot, and confidence and compliance of confulters themselves to rational prescription, without which nothing advantageous will, or can be gained. Hit or mifs, luck will be all.

Sea-water, whether used internally or externally, is a powerful promoter of the monthly terms; for I have known even the paddling of the hands or feet in tepid, and sometimes in cold sea-water, to quicken the evacuation, used, at the period of menstruation. I have known others who have indiscreetly, when in a fervor, and menstruating, plunge into a river, and have instantly stopped the catamenia, so as to affect the brain and greatly derange nature. Some of these I met with in the mad-houses in the county of Surrey,

Surrey, which I attended twelve years with the vifiting magistrates, in virtue of an act of parliament; an act that does honour to humanity.

Those for whom I have been consulted early that were in a maniacal delirium from a sudden suppression during menstruation, I have relieved, by forcibly bringing on the monthly terms at the next ensuing period.

I have never yet heard that sea-bathing has caused mania, or madness of any kind. As the tepid sea-water bath has proved efficacious in febrile and puerperal phrenzy, why may it not in raging mania, in which there is heat and density of blood in the brain, attended with an impervious skin? I have not yet seen or heard of it being tried. In melancholic mania the cold seabath will suit best; but where the globuli sanguinis prevail above the natural degree or quantity of ferum, the mind becomes precipitate, furious, inconstant, and slighty; it indicates a thin, attenuating diet, gentle exercise, and the tepid bath.

The female guides all tell me, they attend ladies in the fea-bath during menstruation, as well as when off, and it does not stop it on them; it rather quickens the discharge. Moreover they say, that many ladies have bathed during pregnancy, and no miscarriage has happened in confequence of sea-bathing. One of the guides, Mrs. Sharp, went so far in praise of it as to affirm it to me for fact, that she bathed a lady from conception throughout her pregnancy, to the last hour, and never had a miscarriage, and that the last delivery she had was much better than any she had had before; which only shewed to me, that excess of the bath had relaxed and paved the way for a miscarriage which she had last season (1794).

The female guides are certainly very fertile in bringing subjects to the state; and all tell me that many ladies have come and bathed in the sea and conceived, though some of them, many years married, never had before, and went their full time; nor did some stop there, but went on regularly afterwards in the productive line of bearing; wherefore we are led to consider seabathing, by strengthening the uterine system, as a potent remedy for barrenness.

The stimulus of the sea-bath medicinally used, and where it can be borne, no doubt braces and gives tone, warmth, and energy to the system, and if so, it must to the uterine system; but, if carried

carried to excess, especially in delicate irritable habits, it debilitates, enervates, relaxes the solids, exhausts the spirits, breaks down and vitiates the blood, and thereby increases the symptoms of a complaint that terminates in abortion or cachexy.

Three fummers ago an amiable lady, aged thirty-feven, who had been fix years in the East Indies with a first husband, and after bearing nine children to him and a fecond hufband, meeting with fome domestic grievances, her excellent natural conftitution became injured, and a profluvium mensium ensued. She was recommended to bathe in the fea. She went to Devonshire, and, to affift the bath, her doctor gave her fome tonics, fuch as the peruvian bark, by which, and the bath difcreetly used, she received much benefit, and returned after a short course to London. Some months afterwards her fymptoms of weakness returned, and she came to Margate, and bathed not only one, but three fuccessive fummers; but, inftead of ufing tonic medicines and strengthening diet, she told me, her physician had strictly enjoined her to live on the low watergruel and vegetable diet; no animal food, or even a glass of cordial wine, or any thing that was comfortable, allowed her; and moreover added, that

that she was much in the habit of taking purgatives, the effects of all which were, as might be expected, acidities to prevail in the first passages, with inactivity of the bowels; and she became often constipated with flatulent bilious colics; and her monthly, I may fay weekly, discharges (fluxus uterinus) became floodings, and the colour and confistence rather like loturæ carnium recentium than natural. Her usual fair and ruddy complexion became fallow, her lips livid, her eyes dull, and her features ghaftly; a febrile paroxysm came on every evening about seven, and lasted until morning: on the accession of the fit her right fide over the region of the liver would heave up to a confiderable fize, and fubfide again on the declenfion of the fit. tongue was furred and brown, attended with other fymptoms of a flow remitting fever far advanced. In this deplorable state, and after having the fentence of despair passed on her by her physician, she came flying to me very much alarmed. Her countenance was ghaftly—the very picture of death. She was exceedingly hafty and anxious to hear my opinion of her case. I bade her make her mind eafy; for, that I could account to myself for all her fymptoms, upon the principle of inanition, alias flarvation, and perfifting in the bath beyond what nature could bear rather than upon that

that of an irremediable disease, and therefore, notwithstanding all that had passed between her and her doctor, I trusted, by putting her upon the very opposite plan, I should be able to procure her a reprieve, and that in no long time.

I forbade her going any more in contact with the water, and enjoined her to forfake the low meagre foup and vegetable diet, and live more generously on fish (shell-fish especially) and animal food, and to drink a few glaffes of generous red port after dinner; but to begin and increase the quantity of food and wine gradually, as all great and fudden transitions, especially of these kinds, are dangerous; and I ordered for her a tonic febrifuge medicine; all which she strictly attended to; in three days her evening fever left her; in feven fhe had not a morbid fymptom. She got on horseback, and rode repeatedly about the island, acquired strength daily, and returned in two or three weeks to London in high health and good spirits, and continues to enjoy it. Mr. John Silver was her apothecary while I attended her.

A married lady of Stratford, aged thirty-three, the mother of several children, on grieving for the loss of a favourite child, &c. her health became impaired: she became subject to hysteric fits, at-

tended

tended with profusion of the menses; and so great a failure of spirits that the least flurry or surprize would throw her into a fainting fit, and bring on floodings. After having taken much medicine without effect, she was fent to Margate ten years ago to bathe in the fea, which she did three succeffive fummers, but at length, inftead of relieving her, it exasperated her symptoms, that is, from one fit in a week to four or five in a day; and she would be feized with a fit in the very act of bathing—an evident proof that the bath was carried too far. I was then confulted, and I forbade her bathing any more, and enjoined her to live more generously. I wrote for her a few cordial antispasmodic medicines, which she strictly attended to, and in a very few weeks she left Margate in perfect good health, and foon after gave her affectionate and endearing husband another pledge of her love, and continues now, after feveral years, to enjoy good health. Mr. George Slater was her apothecary.

The cordial intelligence had a very happy effect, on these two ladies, which I consider as incumbent on me to give whenever I can with propriety, and without betraying my judgement: in which case it would be cruel. Hope gives energy to medicine, and perseverance to method:

Bleffed hope, the universal balm To fickness, pain, and misery below.

Lætitia cordis vitam hominis est.

The physician is called upon to comfort, support, and relieve nature in her difficulties agreeably to her laws and indications, not to depress and kill. The merciful condemn not.

The virtue and efficacy of the fea-bath is not always fo fenfibly felt immediately while on the fpot, as in a few weeks afterwards. In the above two ladies' cases, wherein the bath had been perfifted in too long, that is, until their habits were too much defpumed, a morbid turn given to the fluids, and loss of tension to the folids; yet, on the bath being defifted from, I found it eafier to restore their much debilitated habits by proper medicinal and dietetic adjuvants than if the fymptoms had arisen from any morbid cause. I have found it less difficult to cure hysteria after a course of sea-bathing, though I have never met with any yet cured by it alone. I fay the fame of epilepsia and some other diseases, wherefore in certain cases, it is only auxiliary.

ABORTIONS.

I have feen and heard of but few inftances of miscarriages having happened in consequence of sea-bathing; one, however, has occurred, and it is for me to mention it and the cause.

A Mrs. B—, ten weeks gone in pregnancy, and who happened to have one or two miscarriages, came from London a few seasons ago, to Broad Stairs, to bathe in the sea to prevent this circumstance. After the second bath a flooding came on: two eminent accoucheurs (Slater and Mayhew) were called to her, and I to their assume that the flooding, and had flooded a great deal, and was exceedingly low, though no deadly symptoms had come on. We supported her by proper nutritives and a few medicinal draughts, &c. A miscarriage saved her. Her uterine system was too weak and irritable to bear the stimulus of the bath.

Mr. Mantell fays, he has attended several ladies in pregnancy where sea-bathing had been prescribed, but not always with success: he instances one lady who was sent in the year 1784 to the coast, both for the advantage of bathing and

the fea air, to remove an amenorrhæa. She attended strictly to the advice given; but, after following it for some time, symptoms of an abortion came on, which speedily took place, and convinced her that she and her physician had been for three months mistaken; and though none of the emenagogue medicines which she had taken took effect, sea-bathing did, though not in the most desirable way.

These two instances and one more lady at Margate, that was threatened, and obliged, a few seasons ago, to quit the practice, I confess, rendered sea-bathing during pregnancy somewhat equivocal with me for some time; but not meeting with, or hearing of any more such, though a great many pregnant ladies have since come to Margate and bathed; and having the suffrage of all the semale guides in favour of it, my sears are greatly done away, i. e. excepting in very delicate, nervous, irritable habits, indicated by a quick pulse and preternatural heat, under which circumstances, I still think sea-bathing hazardous and unwarrantable, especially during the first months of pregnancy.

Where I have observed the fea-bath to be of most service in an immoderate profusion of the menses, it has been, when used immediately, or soon

foon after a period; and, for preventing abortion, foon after conception, or an abortion when the uterus is in a collapsed state; and it and the general system is more capable of receiving new elastic tension and spring. Mrs. Sayer and the other guides agree with me in this.

Those who are afraid of the sea may have a spray of sea-water let fall on them, or impinged against a debile lax part, which powerfully roborates, and gives vibration to the debile vessels. The seabath dislodges cold stagnating humours in the course of the circulation, by sensible and insensible transpiration, and warms and invigorates the system, and thereby fortisses the womb.

If the sea-bath had not only the effect of caufing universal oscillation and contraction, but also expansion, it would not be so efficacious in subduing viscidity, or preternatural cohesion in the sluids, and fitting them for passing through the glandular strainers; and the noxious principle for being separated, and either depurated on safe parts, or cast off by the different emunctories or outlets from the body, to leave room for the introduction of new benign particles sit for the process of assimilation, animalization, and reparation of the waste. Unassimilated particles bring nothing to

the stock of the animal fibres, for making them strong and elastic, in their alternate contraction and dilatation.

Animals and vegetables, as well as the ocean, require to be kept in a continual fluxionary flate of ebbing and flowing, contracting and dilating, heating and cooling, filling and emptying. And though fome require oftener and greater mutation than others, yet none bear with eafe the violent extreme long continued. Extreme right is extreme wrong. Swimming long dispirits more by the relaxation of the water than by the exercise, and gives cramps, chills, and rigors. The feabath does not altogether depend upon the mere stimulus of heat and cold on the organs of sensation, but also upon the absorption of some of the aqueous faline particles, or how comes fuch great changes to take place in the animal œconomy? Sea-water, though very penetrating, as the orifices of the inhalent and exhalent veffels are induced to contract on entering the cold bath, there cannot much of the watery particles be abforbed, or the animal fluids pass off on a momentary dip: only, on a long and a frequent immerfion, laxation and debility take place. The cold application to the fkin, whether of air or water, contracts the pores, and retains innate heat, i. e.

condenses the rarefied spirituous air, which, on the pressure being taken off, breaks out again with greater force upon the superficies of the body.

As gravity and pressure must be taken into account, a dip in the sea must be preserable to a dip in a tub or river. In the tepid bath neither gravity nor pressure, nor spring is so much wanted, only longer continuance to answer the purpose of a relaxant, softener, and cleanser. All that is wanted by the sea-bath for the animal machine is to bring about the equipoise or mutual balance between the solids and sluids in the system, for maintaining the pabulum vita, or spark of life.

After fatigue and weariness, whether by travel, business, or incessant pursuit after pleasure, no matter which, if the spirits be exhausted, and the body languid by the nervous chords being too far stretched; or, after a sprain or dislocation, before inflammation and fluxion take place; or, after a regular paroxysm of gout or rheumatism; or, indeed, after any violent sit of illness, as sever, there is nothing that so soon, or so safely, braces up, or gives elastic tone or tension to the debile relaxed sibres, and acceleration to the flow moving

moving fluids, as a general dip, discreetly used; it inspires the soul (divina particulam aura) with rapture and delight; and the being satisfied in the idea of having secured an interest in acquiring and re-establishing health—is a good point gained.

Immersion in the sea is not only of use to the human species but to the brute, such as the horse and dog: it cleanses, strengthens, animates, and preserves them. Many are the great good effects produced by external application, either by increasing or diminishing animal motion, when below or above the standard of health, as is manifest by the stimulus of heat and cold.

None catch cold by the act of sea-bathing but the unthinking, who plunge into the water while in a fervor, or dress after it on a wet skin. I believe it is allowed by physiologists, that wherever there are emissaries, there are also absorbing or inhaling vessels: the body is at no time so liable to catch cold, or infection, as when perspiring.

The cold bath refifts, on coming out of it, the fensation of cold; but on coming out of the warm relaxing bath, the fluids being then rarefied, and the pores of the skin open, the body is more susceptible

fusceptible of cold; but, the moment the cloaths are put on, a genial glowing heat diffuses over the whole body.

To maintain health, the human body requires a certain degree of circumambient weight and preffure, to give tenfion and vibration to the moving fibres, and velocity to the blood in its circulation, and invigorate the fecreting and excreting organs, for performing their functions daily in feparating and expulfing the recrementitious, and retaining the nutritious, particles for the support of life. And, if the gravitation, or weight of air, be not fufficient to maintain the fluids within due bounds, they will rarefy, and be hurried on crude and indigested, and the circulation becomes irregular, fometimes too fast, and fometimes too slow, when recourse must be had to a more dense fluid to maintain the equipoife; viz. water, which is eight hundred times heavier than air, and feawater is still more heavy, buoyant, infinuating, and deterging, than fresh, by the principles it posfesses; and has more force, either as a bracer or relaxer, as ufed.

The degrees of preffure of water depend, not only upon the principles it contains, but proportionate to its depth or diftance from the furface: the deeper, the colder and more compressive and infinuating it is. A fresh dead corpse thrown into the sea sinks; but, there being no resistance to the influx of the water, the body presently fills, and floats again on the surface immensely distended. A well-known experiment shews the vast compressive and infinuating force of the sea: sink an empty quart bottle, firmly corked, sealed, and wired, by a line and lead, forty, sifty, or sixty fathoms in the sea; on hauling it up instantly again, the bottle is found full of water, and the cork in the neck of the bottle inverted. Nature, abhorring a vacuum, forces the cork, and the water rushes in. As Homer says,

"Vast is the force of the deep flowing fea."

By the fea-bath giving new fpring to the animal folids, and increased motion to the circulating fluids, preventing depravation, and supporting the animal powers, it becomes one of the greatest alterants in nature.

Though fea-bathing increases and exasperates febrile and inflammatory complaints, yet hereditary and slow acting chronical affections are objects of it. It is specific in many, regularly and judiciously conducted.

Sayer, Philpott, and the other bathing guides here, all agree in faying, that they confider feabathing as specific in chronic rheumatism: that a course of fix weeks or two months, going in three or four times a week, leaves little or no remains of the complaint; and by revisiting the place one or two seasons more, completely conquers it, and fortisses the system against future attacks. They agree with me, that not any disease, that is attended with acute pain and inflammatory diathesis of the blood, or with visceral inflammation or exulceration, is proper for sea-bathing: these are objects more proper for the warm sea-water bath, for which it is very efficacious.

In fcorbutic rheumatism and scorbutic atrophy, sea or land scurvy, leprosy, tetterous and other cutaneous defedations and glandular swellings, it is efficacious. I have not observed it to be of any use in psora or itch: it enrages it, especially if inveterate, and of long standing. Sea-bathing is of use after it is deadened in cleansing the skin.

Celsus and Antillus mention sea-bathing as a remedy for dropsy; and Zacutus Lusitanus mentions a dropsical patient, who being necessitated on a voyage to drink sea-water instead of fresh, was

thrown into a diarrhaa, or loofeness, and cured. And Barnard mentions an afcites, or dropfy of the belly, cured by drinking fea-water and bathing in the fea. I have enquired particularly if there have been any inftances here to confirm this, but I cannot learn of any having come to bathe for it. In an incipient dropfy, or fcorbutic œdematous legs, it may, and has been of fervice, but in a confirmed dropfy I have no idea of its being of any use. It is rather preventive than curative of dropfy. I rather refer it to the warm feawater bath, as it fweats the bather after it very profusely, and sweating is most wanted in dropfy. In cedematous and anafarcous fwellings the blood moves flowest in the skin, and when the circulation is flow the skin is pale and cold. Sea-bathing, by its contractile force and stimulating power, impels the fluids of the body from the periphera to the center and forces them into their channel, fuch as the urinary, until the pressure of the water is taken off, and moderate exercise and friction after the bath takes place, when the circulation quickens, and the heat reverberates, and is renewed with force on the ikin, and muscles, which acting kindly on the papilla nervosa, communicates by fympathy fensation to loft feeling, and thereby renews loft action in the nervous fyftem; the momentum and velocity of the flow languid blood

blood is increased: it becomes better digested and more fluxile, and fitter to pass through the minima vasa, or minute extreme vessels, to the relief of the inundated habit. Secretion is promoted, as we evidently fee by the increased discharge of glandular juice from glandular fores, a fign, by the bye, of coming health; for, by it noxious particles are excerned, and the body is purified; and, as the fluids approach nigher to the natural state, the discharge gradually lessens, and the fores kindly heal: the hard impervious skin is foftened, opened, and impurities cited from the interior recesses, and these fluids revel on the exterior fuperficies of the body, whereby the glandular and fanguiferous fystems are relieved, fensibly and infenfibly, by the skin, the breath, the urine, stool, bile, pancreatic juice, &c. and the folids are quickened and invigorated, the vital principle fupported, and all the animal actions reftored.

For the tympany, or dry dropfy, Calius Aurelianus commends fwimming in the fea and fweating after it. Possibly it may be efficacious, but I have not feen nor heard of its being tried.

By the sea-bath strengthening the debile system, and promoting the sensible and insensible discharges, it is efficacious in palsies. Besides the

very great cure of palfy it performed on Mr. Allen of Walworth, whose case I gave in my Medical Remarks, I have seen several more since perfectly restored of palsies by it, especially young persons, and where the complaint had been of no long standing. Some even of paraplegia, or universal palsy, have been restored to perfect health by it. The following well known and creditably attested fact is given me by,

1. Zechariah Brazier, a respectable householder in Margate, formerly a sea-bathing guide, and the first who conducted a bather in a simple machine, a cart, into the sea at Margate, who says,

Twenty-five years ago a Mr. Sanguinetta, aged twenty-four years, was brought from London to Margate, to be bathed in the fea for an universal palfy, i. e. all below his head was without sensation or motion, and he was reduced to a mere skeleton: he retained the faculty of speech, and could chew and swallow the food when put into his mouth. He, and his wife, lodged at his house. He had been in this state several months, and the art of the faculty, and the Bath waters had proved in vain.

fetch him from, the bath on his back; and, in the bathing-machine, had three men and his own wife to affift him. When he was stripped, two of the men threw him into the sea as a log, while he and the other man stood in the water to receive him, and keep his head above water after every dip. After holding him some little time in the water, they took him out, rubbed his body long and well with coarse cloths, then dressed him.

"After the feventh or eighth time he was thus bathed, he began and made a fmall struggle with his hands and feet in the water; and though it was but little, yet it was enough to indicate returning strength. In eight weeks he could lift the fpoon to his mouth, take hold of his two crutches, and walk across the room: the tenth week he crept down stairs to the parlour, where, getting into a passion with his wife, he threw one of his crutches across the room at her. After this he walked to the bathing-machine with one crutch only, where a fingle person now managed him in the machine, and handed him into the water; then he struck out, and attempted to swim. After that he threw away his fecond crutch, and walked with a cane, took up his German flute and played; which instrument he had been a great master of; a convincing proof of his having got the full use of his arms, fingers, &c.

"After thirteen weeks' bathing, two or three times a week, he returned to London with his wife, perfectly reftored, without the smallest assistance of medicine at Margate. If he took medicine before, he was not in the smallest degree benefited by it. After he lest Margate, his wife bore him seven children. He died only two years ago, that is, he lived twenty-three years after leaving Margate."

Brazier called on him in London, at his house in Houndsditch, the year after he left him, and found him the very picture of health, and offered to run a race with him.

This case is farther attested by Mr. Nathaniel Solomon, silversmith in Margate, and Phœbe Solomon, his wife, who were lodgers with him at the same time.

years, informs me, a gentleman of forty was ftruck with an universal palfy: his words were inar-

inarticulate and unintelligible: in this deplorable flate he was brought to him to be bathed in the fea. After he had bathed three months, he could fpeak diffinctly and plain, and fenfation and motion returned to every part of his body. His cure was complete. He had been ill two months.

J. Sayer, thirty years a fea-bathing guide, fays, he has not bathed many with palfy; but, of the few he has, all received great benefit. One of the worst he had, had lost the use of his side: his face was miserably distorted, his mouth drawn to one side, and his words were inarticulate. He had been a stout man, but now was much emaciated and enseebled. After bathing a couple of months he lest Margate persectly restored to sull health, and his sless plumped up again.

G. Philpot, sea-bathing guide for upwards of twenty years, says, he has bathed a good many with palfy; and has often had a deal of pleasure in observing the special good effect the sea-bath had in these cases, especially in young persons.

Mrs. Philpot, nineteen years a sea-bathing guide, lately shewed me a young lady of thirteen, who had had an hemiplegia, or palfy of one side,

perfectly restored by the sea-bath: she had bathed between two and three months.

T. Wood, a fea-bathing guide for upwards of twenty years, fays, he only bathed three paralytics; and though, these came most grievously afflicted with the complaint, all went home well after a course of sea-bathing.

T. Hughes, sea-bathing guide eight years, had a Mr. Nightingale, a breeches-maker, from London, brought to him in 1793, to all appearance in a dying state, to be bathed in the sea: his looks were ghaftly, pale, his words unintelligible, and was without the least feeling or power of motion of any part of his body. After he had been bathed in the sea eight or ten times, by the help of men, feeling and motion began to return, which did more sensibly every time after that, insomuch that he soon walked up and down the steps of the machine and bathed himself, put off and on his cloaths, and walked to and from his lodging.

On his coming out of the bath, his skin was always well wiped and rubbed, not only with coarse rubbers, but by a brush until the skin glowed with heat.

After bathing thirty-one times he got well; fo well as to leave Margate in such haste as to forget to take leave of his kind bathers.

I could give abundance of inftances of different fpecies of palfy having been cured by fea-bathing; but these now given, I trust, are sufficient to shew its great efficacy in that complaint. Nor is the idea new; for, Calius Aurelianus, a renowned ancient, commends, very much, swimming in the sea for all palsies, and Celsus, another well-known ancient, directs somentations of hot sea-water.

In order to adapt the curative intention in that complaint, we have to attend not only to the proximate cause—and that is a good deal to be gathered from the nature and temper of the constitution; for, though nervous energy be deficient in them all, and, of course, the subtle actuating principle, whether it be animal spirits, phlogistic aura, æther, or other agency, that excites, and supports, the perpetual motion in the living subject—the occasional remote cause must also be attended to and traced; such as violent affections of the mind, the too free use of spirituous liquors, or of opium or other deadly poison; the too free use of mercury, without guarding against the injurious influence of cold air; or

great waste of blood; or congestion of fizy blood in the brain, compressing the origin of the nerves and spinal marrow; or debility and flaccidity of the muscular fibres and circular membrane, rigidity, &c. no matter which it be, life is destroyed by agency in excess or desect.

Sea-bathing has been recommended by some eminent ancient and modern writers, for the bite of a mad dog and other rabid animals; and, having some doubts of its efficacy in this myself, to satisfy my mind, I have made it my particular business to inquire of the Margate sea-bathing guides of its effect on those they had bathed; and learn from them all, that they consider it as a certain specific.

nany perfons bit by mad dogs, and some of them barked much like a dog while they were under water; and they, and all who submitted to his mode of bathing, were cured, or when early used prevented from ever rising to any head; at least, he never heard of any of them ever going mad: on the contrary, always received favourable accounts of them afterwards. He says, the last that came were five, who were dreadfully torn by one and the

the same mad dog: four of them tamely submitted to be bathed agreeably to his mode, which is by keeping the head and body as long under water as they can bear, bringing up the head occasionally to respire, and down with it again, and this alternately, until their ftrength and ftrugglings in the water flag, and they have become feeble, their flesh foft and flaccid. Four of them bathed thus five mornings a week, fome staid feven, fome of them five weeks, during which time their wounds ran and kindly healed. They went home in high spirits, and continue well after feveral years. The fifth, who refused to fubmit, his wounds never healed, and he went raging mad, and was fmothered-inhuman practice! Binding the patient to his bed, as recommended by fome, is less violent.

Sayer, Philpott, and Hubbard, fay they have bathed many persons bitten by mad dogs and other rabid animals, and none of them ever went mad; at least they never heard any thing but what was savourable of them. Hubbard says, the last person, so bitten, that he bathed, appeared much dejected and melancholic: after he had bathed with him a fortnight, his spirits got up, and he lest Margate satisfied he was well.

Cold-bathing is recommended by *Baccius*, for the poison of the juice of mandrake: if it is efficacious for that, I presume it is for opium or other vegetable poison, and the cold sea-bath is preferable for either vegetable or animal poison.

Celsus recommends in bydrophobia to be thrown into a pond, and to drink of the water; but as I do not pretend to be acquainted with the virtues of pond water; until I am, I shall prefer throwing them into the fea, and drinking the water. have been brought to Margate with hydrophobia to be bathed in the fea, fo I cannot fpeak with the degree of precision on its effects in that stage of the complaint; but, as hydrophobia has never been known to come on during a course of seabathing, I am led to confider it as a powerful prophylactic, or preservative. Notwithstanding these facts, let none rest wholly on it to the neglect of other approved means. If fea-bathing has potent effect in the first stage of rabies canini, have we not reason to imagine it would be efficacious in this higher stage of the complaint?

In raging high, and in low desponding mania, or melancholia, Sayer says, he has not observed sea-bathing to do any good in the first: in the

fecond it was of more fervice: it gave strength at least to the body, if it did not cure the deranged mind.

In nervous and hypochondriacal disorders, in which the mind is feeble, irritable, and unstable, the sea-bath, amusements, exercise, and the air of Thanet, have happy effects. I have observed it in every instance; wherefore I would advise all who would deliver themselves from the tyranny of sear to throw aside their long-tried unsuccessful plan, quit the smoky town, and sly hither to the Isla of Thanet (the Island of Health), and I will promise them health, strength, and good spirits, unless the complaint be too deeply rooted ever to have mens sana in corpore sano.

Sayer fays it is almost inconceivable the spirits got by sea-bathing and the air of Thanet, in all low nervous affections.

Aretæus, a famous ancient, recommends bathing in the sea for beadach; but neither I, nor any of the bathing guides, recollect an instance wherein it had such an effect: on the contrary, have known it to cause headach in improper and unprepared persons. There are various kinds of headachs. Perhaps it may be serviceable in nervous head-

head-achs. Rheumatic head-achs I have generally recommended to the tepid fea-water bath, and with good effect.

In acute inflammatory gout, cold fea-bathing increases the force of the symptoms, and hastens on an approaching sit, that has terminated, some in palfy, some in apoplexy, and some in violent distracting pain of the brain or other viscera: after it, sea-bathing roborates the debilitated joints. I have not seen its effects in atonic or cold numb gout.

Though the acute rheumatism be relieved by the warm, and the chronic or long-standing by the cold sea-bath, yet I have not observed any relief given by hot or cold in sciatica, called by some a species of rheumatism; by others, a species of gout. I have observed in a sew instances the sea-bath rather to exasperate the symptoms; and none of the faculty warrants me to say it relieves: on the contrary, Mr. Mantell says, though it removed in one instance the pain, it was prejudicial by the extreme debility it brought on: on which he made the patient desift from the use of it, but a violent affection of the stomach with spasms and most acute pain succeeded, which, though relieved

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by powerful antispasmodics, it returned frequently, and at last ended fatally.

Mr. John Silver, furgeon-apothecary in Margate, lately introduced to me a patient of his just recovered of a most violent sciatica, that had baffled the faculty's art both in town and country for fix months. He tried the cold and warm feawater bath at different times, which, instead of relieving him, exasperated his symptoms. His pain came on by fits: in one of these, the most excruciating he ever had, Mr. Silver was called to him: it was in the evening, when he found him much worn out by pain, fatigue, reftlessnefs, and great anxiety of mind. He gave him a draught, in which he put a fcruple of fuce. cicutæ spissat. and a few drops tinet. opii, which instantly relieved him: he fell into fweet composure, in which he continued the whole night, and awoke quite refreshed: it was effectual; for, the pain no more returned. The draught was repeated for a few nights, to fecure against a relapse. After that he bathed a few times in the fea, which had now most excellent effect in strengthening him; and he returned to London after a few weeks in perfect health, ruddy of complexion, and in high fpirits. After a year had elapfed he fent a letter to Mr. Silver, acquainting him he continued well, and wished

wished us to publish his case, and the blessed medicine that gave him such instant and effectual relief to his unspeakable distress. His name is Corb. M'Neall, at No. 44, Sackville Street, Piccadilly.

These two instances, without noticing more, have led me to consider sea-bathing as improper in sciatica before pain and inflammation be subdued, and that the affection is more of a species of gout than rheumatism.

In Jaundice and other bilious complaints, in which there is great disturbance in the fluids, and irregular movement in the glands, ducts, and extreme capillary vessels, the sea-bath hath been experienced to do good. I wish, however, that I could speak with more precision, either from my own experience, or the experience of gentlemen of the faculty on it.

J. Sayer, that long-experienced, observing, and intelligent bathing-guide here, helps us out: he says, "I have known, on bathing in the sea for bilious complaints, and drinking the water, the bile to be set associated in the habit, causing retchings, whereupon the person has been greatly relieved; but; whether it completed a cure in any, I am not (he says) competent to say farther than that the parties

parties allowed that they felt themselves better, which was visible by their losing much of the bilious hue from their skin and eyes." If so, it must be efficacious in forcing the bile into its natural channel, and removing obstruction in the biliary organs, which is all we want.

Celsus recommends the cold bath in summer for jaundice: the power and efficacy of the sea-bath was not so well known in his days for promoting the different secretions and excretions as now, or he would have given it greatly the preference for promoting the secretion of bile.

If diabetes, or flux of urine; diarrhæa, or flux of the belly; fluor albus, or whites; lapfus feminis; gonorrhæa virulenta, or other fluor, depended merely on debility and laxity, fea-bathing would be efficacious: but let the fpecific virus and inflammatory fymptoms be first subdued before it is applied, or it will exasperate them. In simple venereal gleets, after superpurgation, I have observed it to increase the discharge at first of soul variegated matter: it scoured the mucous glands, and the discharge gradually lessened: it instames fores at first, the discharge increases, then gradually diminishes, and the fores heal.

In diabetes we have to procure a due mixture and union of the craffamentum and ferum of the blood with the new chyle: the bath primarily is not equal to change the faccharine quality in the urine without medical and dietetical help; and to attempt to suppress a diabetes by direct aftringents is like locking a thief up in a house that breaks out with greater violence: the fymptoms, which I have observed to ensue thereon, were obstinate conflipation, suppression of urine, tumefaction of the belly, violent pain of the kidneys, urmary bladder, testes, loins; and, in the female fex, suppresfion of the catamenia, attended with febrile rigors, fucceeded with burning heat, violent headach, incessant thirst, &c. If the complaint is from a scorbutic cause, it may possibly be of service. I cannot yet speak decidedly for or against it: the fea-bath is a strong diuretic: by its being so, it has fwept the urinary paffages of loofe gravel. Mercurialis tells us he cured himself of a stone in the kidneys by bathing in the river Arnus; not, I apprehend, by diffolving the stone, but by impelling it thence when finall. Nephritic pains are faid to have been relieved by drinking fea-water.

There is a rule, increase one secretion, and you lessen another. I have tried again and again to increase perspiration in diabetes both by external and internal means, but never have been able to effect it, even by the vapour or warm sea-water bath: they were uncomfortable in it, and came out chilly with rigors, which shewed that it disagreed, and that the cold bath was rather indicated; and, vice versa, where the cold disagrees the warm is indicated.

In profuse sweatings, Sayer says, "he has known many persons who perspired profusely, and were much emaciated and enseebled by it, to have received very great benefit by the sea-bath."

In watchfulness the sea-bath has excellent effect if continued long: it causes sleepiness in the bathing guides: a sudden plunge rouses the lethargic, and makes a man sober that is intoxicated with inebriating liquor.

The sea-bath is efficacious in frigidity, Venus languidis, languor or indolence, depression of spirits, scorbutic, bypochondriac, and maniac melancholia: in some spasmodic complaints, such as bysteric, epileptic, especially in St. Vitus's dance, Cynic spasm or wry mouth, tetanus or locked jaw: in chronic

rheumatism, scrofula, lepra, humoral fore eyes and dimness, lax spongy scorbutic ulcers, and promotes a discharge of depurated gross blood from the piles, to the great relief of the habit.

Sea-bathing after the finall pox, chicken pox, meassles, or other febrile eruptive complaints, and drinking the water, is efficacious, in purifying and strengthening a debilitated habit. It is specific in rickets, and in strengthening the spine and loins of infants, and preventing crookedness. There never was an instance of a deformed child who had been well nursed or bathed in the sea.

I have bathed, fays Mrs. Pavey (nineteen years a bathing guide), a young lady of fourteen, a Miss S——, of Milk Street, London, this feafon (1793), who had not been able to stand upon her legs for fix months from a weakness of her knee: during that period nothing of the food-kind staid on her stomach, only her breakfast, and she was reduced to a mere skeleton. After the first time she was in the warm sea-water bath she retained her food: after the third she could put her foot to the ground, and venture to stand. After that she had recourse to the sea-bath, by which she received so much strength that after the third time she walked from her lodging a considerable

way leaning on her mother's arm. After having bathed twenty times in all, she returned to London with the full use of her limbs, and in fine health. She took no medicines worth mentioning while in Margate.

Mrs. Budd (nineteen years a bathing guide) fays "fhe has bathed many weak ladies after fits of illness and after having lain-in, and all acquired strength and good health on it. One in particular she mentions worthy of notice, who, after lying-in, lost the use of her side, and was unable to turn in bed for ten weeks; nor could she put a foot to the ground for six months, owing to the tendons of her hams contracting for want of use: by bathing a course in the sea, the tendons extended to their natural length; her side acquired sensation and strength, and she went home in sine lively health. She returned two or three successive seasons, to confirm the good health she had acquired by the bath."

When the fea-bath has been too much at first for weakly perfons to bear, I have made them begin with the temperate bath, and gradually reduce its heat till it came to its natural standard.

- S. Hubbard (nineteen years a sea-bathing guide) says, "A boy of three years of age, who, after being cut for the stone, was brought to be bathed in the sea: he was exceedingly weak, his belly hard and prominent, and his body extremely emaciated: a course of sea-bathing perfectly restored him, and he is now, at fix years of age, a very fine stout boy."
- 2. He fays, "An officer in the army, who happened to have two of his ribs broken, and was inwardly much bruifed, by a fall from his horfe. After the bones were supposed to be united, he could not endure the least jolting motion. After a few dippings in the sea, his pains vanished, he could bear exercise as well as ever, and left Margate sound and well.
- 3. "A gentleman, he fays, whose hand was rigidly contracted from a wound he recived in the palm: by bathing for some time in the sea, his hand expanded, and was perfectly restored to its natural state."
- 4. "A child three years old was brought from London to Margate a few feafons ago, to be bathed in the fea for what the faculty called a white

white swelling of the knee, but which Hubbard called a black one, as the skin was dark and tawny, and the tumefaction hard and indolent. He bathed the child first for some time in warm seawater, and applied a poultice of quercus marina, seaweed, with the liquor contained in the pods, to the knee twice a day: in five or six weeks it broke, and discharged a considerable quantity of thick creamy-like matter, which it continued to do for some time, then it healed up kindly.

After it broke, he bathed him for some time in the sea, and on the intermediate days, i. e. once or twice a week, he drank some sea-water to purify his habit, and his nurse took him home sound and well; and this after the London surgeons thought the leg must be cut off. By a similar treatment he has sent many home whole of scrosulous and weeping sores and moist lepra."

5. "A young gentleman between five and fix, who, it was faid, by fucking a foul-blooded nurse had his blood dreadfully contaminated: he had fifteen running fores to be dressed twice a day; having besides a great number of dry brown scabs and bumps on the skin, and was so exceeding weak and seeble as to be unable to walk across the room. Whether there was any thing of a vene-

real taint in it or not he could not fay, but the faculty supposed there was. He bathed his body in tepid fea-water for fome time, and applied the fea-weed poultice mixed with greafe to his fores, which brought them to discharge. After some time he left off the tepid fea-water bath, and dipped him in the cold; and intermediately purged him with fome of the water. After fix months the nurse took him home perfectly found, and he is now a fine sprightly youth, seven years old. Hubbard bathed a gentleman feveral years ago, at the age of ninety-five, who received fo much ftrength by it, that he returned and bathed a fecond courfe the next feafon, and when he left Margate he appeared to be no more than feventy. He had no complaint only old age, and the bath renovated it, hence the propriety of the motto to this work.

Though no one will recommend any to bathe in the fea, or cold fpring bath, in inflammatory continued fever, yet I have no doubt of the efficacy of fea-bathing in the intermissions of some agues, feveral having, I am credibly informed, been cured of ague by plunging into rivers: by plunging into the fea there is less danger, and it has more potent effect. I, however, know of no infectious or putrid disorder in which fea-bathing would

would be of any fervice. I think, on the contrary, it would be death to the patient, and ruin to the others if fent.

OF SCURVY.

Sayer observes, "that this complaint is very common in the constitutions of the people of this country, and many of all ages have vifited Margate much afflicted with it, and, after bathing in the fea ten or twenty times, have found great relief; but where the complaint has been deeply rooted, it requires a repetition of the course, seafon after feafon, and to drink fome of the water intermediately to purify the blood. Says, he does not know an instance wherein the sea-bath failed in curing this complaint, provided the person conformed to regular hours and proper rules of living." Philpott was much afflicted with the fcurvy before he was a fea-bathing guide, but has been for many years clear of it.

James Mitchener, twenty years a fea-bathing guide formerly, fays,

- between three and four years ago a female child, between three and four years of age, the daughter of a Mr. Alverfabello of Hackney, was brought to Margate to be bathed in the fea for what they called a fcorbutic diforder. She was in one continued fcab from head to foot. She was bathed in the fea every other day for three months: during the latter part of the time the skin of one of her feet came off complete, with the nails, like a slipper which he fent inciosed in a letter to her father; the foot discharged immensely for some little time, then healed up kindly: her whole skin came to be clear, and she was taken home in fine health. He saw her in her teens a very fine woman."
- 2. He fays, "A farmer in Buckinghamshire, came to Margate with intent to bathe in the sea for a scorbutic disorder, which some called a leprosy: his body was crusted all over with scales like the shell of an oyster, and was so exceedingly itchy, that he was much worn out for want of sleep. After bathing in the sea for a month the scales loosened and came off by handfuls in bed. He drank of the water intermediately, and went home perfectly sound: he returned three seasons successively after that, to secure the ground he had gained."

3. He

3. He fays, "A young gentleman, who had two venereal buboes that refused to yield to chirurgical treatment, came to Margate from London to bathe in the sea. On bathing they inflamed. After a fortnight they discharged freely, and soon the matter thickened, became whiter, gradually lessened in quantity, and healed up kindly: the dressings were rags dipped in seawater."

"After that came another gentleman fimilarly affected, on whom the bath had fimilar effect," which shews the great resolving power of the seawater in indurated glands or obstruction of any kind.

The late Mr. Ifaac Silver, fifty-one years a furgeon at Margate, favoured me with the following case:

"A Reverend Gentleman, well known at the present day among the literati, came to Margate twenty years ago with his skin covered over in many places with thick scabby eruptions and running sores; and his face so bad as to oblige him to put his head in a case, and deny his being seen by any: by bathing a summer's course in the sea,

and drinking a pint of elm bark decoction every day, and some sea-water once a week; he got perfectly well, and continues well at this day. His fores were dressed simply with cabbage-leaves."—His son John, his successor, remembers the case perfectly well, and that it was at the time considered as a most miraculous cure.

Several with lepra have come and bathed, who, the bathing guides fay, received benefit, though not all equally. Two young ladies came from London a few feafons ago with incipient lepras, and bathed in the fea under my direction, and both got well. They bathed first in the tepid fea-water bath twice or thrice; and I made them live on a more generous diet than they had done; and they drank once a week, or so, a wine glass full of fea-water as an alterative.

Mr. Mantell fays, "He has never known any cures of leprofy being made by fea-bathing. In most cases of elephantiases he observes, it has been useful, but more particularly in subjects where, either from the constitution being broke down by illness, or debilitated by mercurial courses of medicine, tonics were necessary."

SCROFULA.

Sayer and the other bathing guides fay, many hundreds of youth afflicted with this complaint come to Margate every year, who, by bathing in the fea and drinking the water, receive great relief after two or three months; but this and all other inherent complaints require a work of time and repetitions of the course, year after year, to eradicate than out of the habit, and to give strength, as they grow up, to man or womanhood to resist its force."

The many children left here in the winter for the benefit of fea-bathing is in proof of its efficacy in that complaint (fcrofula). Its fummer course is only preparatory to a winter one.

Wishing to know whether the sea-bath is radical or not in scrosula, many creditable persons in Margate vouch for it being so, and one of their proof instances is very strong: it is of a farmer in the neighbourhood, who was miserably afflicted with it in his younger days, and, by persevering in bathing, year after year, until he grew up into his teens, got to be persectly well. He mar-

ried, has got a fine family of children grown up to man and womanhood, and neither of them hath the least symptom of it.

Mr. John Silver has been very successful in healing scrosulous fores while under a course of fea-bathing by a mercurial lotion or solution of calomel, mucilage of gum arabic made with lime water; and I have been much in the habit myself of using a similar injection for virulent gonor-rheas, venereal and other malignant sores with great success: it is composed of calomel, chel. cancr. præparatæ, mucilage of gum arabic made with elder flower water.

SERPIGENOUS ULCERS.

Mr. Edward Daniel, senior, informs me a young lady of about six years old, the child of a person of distinction, sent for him lately to look at her lip; he found a dry serpigenous roughness round the edge of it. She had in town the best advice, and was ordered to bathe. As she was of a full habit, he gave her three doses of rhubarb and calomel, which emptied her sufficiently, and she bathed and drank the water alternately for three weeks, and got persectly well.

I cannot from experience speak decidedly on the efficacy of sea-bathing in erisipelas or Saint Anthony's Fire, having seen it but in one instance tried, and it proved too irritating, inflaming, and repercussive; and even the warm sea-water applied had similar effects. The sea-water as a purge inwardly is proper.

In labrifulfcio or tumefied lips, fea-bathing difagrees: coolers and fedatives cure them, unlefs fcrofulous, which is not always the cafe.

Though the warm fea-water bath be efficacious in refolving and foftening indurations of the glands, yet both hot and cold fea-water is too irritating and inflaming for ulcerated cancer.

Of the effects of fea-bathing in spasmodic, comvulsive, and periodical complaints, I have received various and opposite accounts. An old female guide tells me she had epileptic fits in her younger days, and was cured by sea-bathing, which first induced her to become a sea-bathing guide. And another sea-bathing female guide (Mrs. Phillpot) says she hath bathed several ladies with hysteric fits that were cured; and mentions one in particular not long ago who had the complaint to so high a degree as to make her life be despaired

of by the faculty, that after a few weeks bathing was perfectly cured, while two others (Mrs. Thornton, thirty-nine years a bathing guide, and Mrs. Sayer thirty-two years) fay they do not recollect an inftance either of the one or other complaint wherein fea-bathing made a cure. Thornton fays, that she had epileptic fits herself for many years, while she was a bathing guide, which she never got rid of until about eight years ago, when they terminated in swellings of both her feet, something like that in a tonic gout. She was then fixty years of age, and obliged to give up the bathing line.

All the bathing guides agree that fea-bathing is a certain cure for St. Vitus's Dance, and that about a three weeks course effects it.

Mr. Mantell fays, in hysteric affection he has found sea-bathing most serviceable, after the pediluvia, venæsection, and remedies to remove the first cause of this species of neurosis, have been unsuccessfully administered; but that an indiscriminate use of the cold bath, in his opinion, has in this complaint more frequently sixed than removed it.

Mrs. Sayer fays she hath bathed many ladies for convulsive fits before the fit was expected to come on, and, instead of the bath shoving it off, it hastened it on even in the act of bathing; but on being brought out of the water and well rubbed with dry rubbers the circulation of the blood quickened and increased, and they soon recovered out of the fit. Says she hath bathed after a fit, by which they gained strength if they did not get rid of the fits.

I must say I have never met with any cured of epilepsia or bysteria by sea-bathing alone. I have, it is true, been successful with several young persons both in epilepsia and bysteria by sea-bathing and appropriated medicines intermediately, but with none by sea-bathing only; wherefore I consider the sea-bath to be only auxiliary in either of these complaints, though curative in some others. Different constitutions, different effects. If the affection arises from worms, vermisuges must be referred to. Sea-water is an excellent vermisuge purge, whether taken by the mouth or thrown up in clyster.

In asthma, pulmonary consumption, cough, hoarseness, quinzy, or other complaints of the throat, lungs, lungs, or cheft, so far from being serviceable, it exasperates the symptoms. The hectic and confumptive may be referred to the warm sea-water bath, especially if it is from a scrosulous, or scorbutic, or venereal cause. If sea-bathing be good in any cough, I imagine it would in hooping cough, by its sedative power and bracing effect afterwards.

On taking a retrospective view of the power, operation, influence, and effect, of sea-bathing it is as used:

Strengthening or debilitating,
Bracing or relaxing,
Stimulant or fedative,
Augmenting or diminishing,
Condensing or rarefying,
Elevating or depressing,
Inspissating or attenuating,
Evacuating or restringing,
Altering or confirming,
Purifying or vitiating,
Heating or cooling,
Indurating or mollifying,
Deterging and healing,
Irritating, inslaming, and exulcerating.

In a word, in some affection it is curative, even specific: in others it disagrees, and in some dubious.

Sea-water and fea-bathing having thus very extensive powers, good and ill, it is for me, and for every man who professes himself a guardian of health, to be cautious and correct on whom we recommend to it, lest we become guilty, unintentionally, of a breach of the fixth command. Ignorance is not admitted as a plea of innocence for murther.

It is not uncommon for the faculty, when their patients' ftomachs recoil at food and medicine, and their constitutions much worn out, to recommend a change of air, as the derniere refort, which has, generally fpeaking, either very good or very ill effect, according to circumstances, state of the case, and constitution of the air sent to. But those fent to the fea-coast, whether for the sake of air or fea-bathing, or for both, we shall suppose them not yet fo far gone, but to be able to take nourifhment, use exercise (cripples excepted) in the open air, to be amused, and their stomachs able to receive and retain a medicine occasionally in case of need, or they are totally inadmissible: it only hurries them a day fooner to the gravethe domus omnium-and make the fea-watering places a general receptacle for the dead, instead of a prefervatory from the shades.

Although we have had many excellent cures performed, and life renovated, by virtue of the air of Thanet with or without fea-bathing, yet there were still flamina vitæ left to work on; for, as the poet fays,

"When Nature cannot work, th' effect of Art is void."

As medical reasoning without fundamental principles-principles confirmed by long and reiterated experience, not only of one man, but that fupported by the concurring evidence of others of large experience, candour, integrity, judgment, fagacity, and just observation, is a vox & præterea nibil. - I have therefore industriously courted the opinions of experienced men of the faculty on this fide of the coaft, and fagacious long-standing Margate sea-bathing guides, male and female, former and prefent, and upon their mutual relation and my experience refts the foundation of my reasoning. Some of the faculty and bathing guides have not only favoured me with their candid aniwers to my particular queries thereon, but added thereto their general observations; and others have flewn me important cases from time to time, and their cures performed either by the cold or warm fea-water bath, or by both;

both; and also called me in to the relief of some who had fuffered by an indifcreet use of either bath, by which only can we possibly attain to a competent knowledge of the use and abuse of the baths.

GENERAL COMMUNICATIONS.

Mr. Edward Daniel, senior, to Dr. Anderson, Ramfgate, 1793,

Says, "Notwithstanding I have feen many cases in which sea-bathing has been of very great fervice, and esteem it an useful auxiliary, yet I have known many others in which it has been of no fervice at all, owing either to the nature of the diforder, or the absurd use of the remedy. You, Sir, must know there is a mode in medicine as well as in dress; witness the rage of quicksilver, tar-water, and now fea-bathing, all useful things when judicioufly

ciously applied; but when people bathe, as too often is the case, merely because it is the fashion, without taking advice, what can be expected? I have often seen in full, gross habits, and in some very tender irritable ones, especially in the semale sex, very bad essects from it, the shock being too great for their tender frames. Indeed I have been called to several young ladies, and have sound them persectly well in every respect; but they thinking they wanted bathing, I have always advised those of very delicate habits, with fine skins, and full, almost transparent, veins, to let well alone. If you strain an elastic beyond its spring, it will break, especially if it be not well tempered.

"And farther, Sir, you will think with me, that fea-bathing cannot counteract the irregular manner of people's using it: the continual hurry of the dissipated life too many live in at the fea-watering places; their balls, plays, dancing, gaming, drinking, hot rooms, anxiety, and flutter of spirits, and other irregularities, must undo any good effects the sea-bath might have. Innocent, rational, and well-timed amusements are absolutely necessary to our health and happiness: it is the excess we blame. Sea-bathing has certainly very great and powerful salutary effects in

certain cases; but still it is not such a panacea as to meet and subdue all disorders indiscriminately, and correct all the ills of irregularity.

firmary, under proper regulations in respect to the non-naturals, as they are called, would be of great use to the poor who might want it, as they are too apt to follow their betters as far as they can; and under such regulations, and the medical advice they would receive, more cures from it might be expected.

"If these few hints can be of any use to you, they are at your service; and believe me to be, with due respect, &c."

Mr. T. Mantell to Dr. Anderson,

Says, "Thus you will fee, Sir, I have done as you defired; I have fpoken my mind freely, and have given, without referve, the few observations I have made. If any farther observations from me will be of use in this work, I will gladly recollect every case that I have had, and with pleasure submit it to your judgement.

"Of the opinion I entertain of the medical effect to be obtained by fea-bathing, great as undoubtedly it is, I think it a fubject on which much remains to be faid; and, that your inveftigation of it may be crowned with fuccess, you will accept of the fincere wishes of him who is with much esteem, &c."

Dover, 1793.

Mr. John Silver to Dr. Anderson,

Margate, 1793,

Says, "If the cases I have at different times shewn you, and the observations I have made, be worthy of your notice for publication, you are welcome to them, or any I may make. I could give you scores of instances similar to your own and those you have got from others, but that would be only fact upon fact. Had physicians heretofore put us on the line of observing with nice precision the effects produced by the sea-bath, we should have been much more able to have furnished you with important facts. As they have not, I sincerely wish you success in your investigation of the subject: it is far yet from being fully discussed, or its powers accurately ascertained.

"May you, and philanthropic colleagues in London and Margate, speedily succeed in your laudable undertaking to establish the General Seabathing Insurary at Margate: an institution the most wanted in this or other country for the confervation of human lives. Any service I can be of to it in my line shall not be wanting. I am, with all due respect, &c."

Mr. Samuel Frome to Dr. Anderson.

Broadstairs, 1793.

"Sea-bathing, when properly used, is, no doubt, a most excellent remedy, but, like all important medicines, may prove very injurious when used with impropriety: to point out therefore where it may be serviceable, and where not, is a matter of great importance.

"I confider the reaction in fea-bathing as fimilar to that of a fever in which there is a cold and a hot fit; for, upon plunging into the fea the cold water produces a chill or fpasm upon the arterial system, which excites the heart and arteries to action, and thereby a warmth and general glow is felt over the whole body; and, when that is not the case, the cold sea-bath can have no good effect, but the warm bath should be used in its stead.

"It is, and may be, held as a general rule that fea-bathing is only to be used where the constitution is debile, and requires to be strengthened; for that, in all plethoric and strong habits, no advantage arises from it: it is in plethoric bodies that comatose symptoms are brought on by its use.

"I am well convinced much more may be faid on the fubject, which I will leave to a more able pen; but, if what I have written should meet with your approbation, I shall feel myself gratified.

"Permit me to congratulate you, on your zeal and laudable endeavours, in promoting your excellent charity for the relief of the diffressed; and, wishing much success to the undertaking,

"I remain, Sir, respectfully, &c."

Add to those liberal advocates of the faculty on Thanet for the Sea-bathing Insirmary, Mr. George Slater of Margate, Mr. Christopher Mayhew of Ramsgate, and others, who have not only sealed their

their approbation of it by their genteel subscription, but voluntarily make a proffer of their personal services to it. This is charity, and charity is the theological virtue of universal love:

Deeds to thy knowledge, answerable, and faith;
Add virtue, patience, temperance, add love,
By name to come call'd *Charity*, the foul
Of all the rest."

MILTON.

There is more rhetoric in the fingle word charity than in a library of sermons. From unseigned charity and brotherly love flow every noble and virtuous sentiment: from want of it every species of vice and cruelty. "Charity covereth a multitude of sins." "The charity or love of God is not in him that hath the sustenance of this world, and seeth his brethren have need." Vide Scripture.

I can fay thus much for myself, that, from a scrupulous regard and zealous wish I have for the improvement and enlargement of medical science, nothing shall be wanted on my part, God willing, to answer the great end and important design of the institution. Unless we push our refearches into the bosom of Nature, how can we ex-

tend the boundaries of knowledge? Unless we put a torch into the hands of the inquisitive, how can we discover natural causes, and natural and preternatural effects, that will prove advantageous or disadvantageous to human kind?

Each of those respective gentlemen of the faculty on the coast, and sagacious Margate seabathing guides, who have kindly assisted these my endeavours for a public good, merit my most grateful acknowledgements, and every thing that is kind of a grateful public. Those who appeared equally disposed to oblige, deserve thanks also, though their observations were inadmissible, as being unsupported and indecisive. It is to be hoped they will be more accurate in suture, as hundreds, nay thousands, of lives are the concernevery year.

The observations I have made relative to the power and efficacy of the warm sea-water bath I reserve for another tract.

In the course of the foregoing narrative I might have enlarged much more upon the use and abuse of sea-bathing; I might have given the atiology of diseases, their causes, symptoms, and medicinal and dietetical processes; but, after all, it would not

have

have precluded the necessity of taking and following judicious medical advice: to have done it would not only have led off the medical reader from diffinguishing accurately between the power of the medicine and the bath, but have led the common reader into a labyrinth of obscurity. And though these observations are meant for the common as well as medical reader; having, for that purpose, industriously avoided all technical terms, yet I do not pretend to impossibilities, i. e. to make every man his own phyfician; vain, abfurd, and dangerous in the extreme; for, I who have written prescriptions as a physician these twenty years and upwards, and other physicians who have done it twice as long upon rational principles, and attended closely to Nature and her ways, meet with fomething new every day; I do not therefore pretend to be a teaching mafter but a teaching scholar. Physic has done ten times more harm than good in the hands of ignorance. Genius, learning, long and fevere study, and deep reflection, are required to comprehend it.

Finally, in drawing up my evidence, I have candidly stated the facts on both sides: to have given all on one side, and not on the other, would have been partial, uncandid, and deceptive. I have considered it therefore as much for me to

forbid improper objects coming that might receive injury as to invite proper ones to come and receive a benefit: by fo doing I do justice to the Water, justice to the Public, and justice to the Prescriber and Director.

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