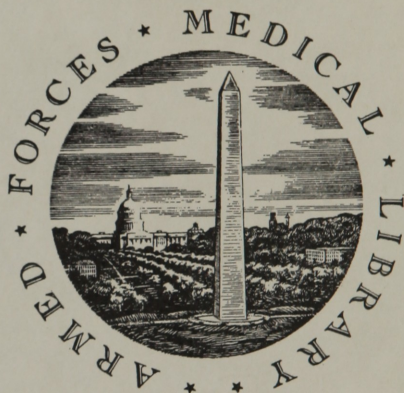


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AN
INAUGURAL DISSERTATION
ON
GENERAL DROPSY.

SUBMITTED TO THE EXAMINATION
OF THE
REV. JOHN EWING, S. T. D. PROVOST,
THE
TRUSTEES AND MEDICAL PROFESSORS
OF THE
UNIVERSITY OF PENNSYLVANIA,

For the DEGREE of
DOCTOR OF MEDICINE,
On the 8th Day of May, 1793.

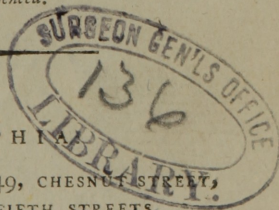
BY
JOHN NEWNAN,
OF SALISBURY, IN NORTH CAROLINA.

ETIAMSI OMNIA A VETERIBUS INVENTA SUNT, TAMEN
ERIT HOC NOVUM, USUS ET DISPOSITIO INVENTORUM
AB ALIIS. — *Seneca.*

PHILADELPHIA

PRINTED BY PARRY HALL, N° 149, CHESNUT STREET,
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M.DCC.XCIII.



THIS
DISSERTATION

IS MOST RESPECTFULLY *INSCRIBED*

TO

BENJAMIN RUSH, M. D.

PROFESSOR OF THE INSTITUTES OF MEDICINE
AND CLINICAL CASES,

IN THE

UNIVERSITY OF PENNSYLVANIA,

BY HIS MUCH OBLIGED

AND AFFECTIONATE

PUPIL.

ALSO,

TO THE

REV. SAMUEL M^cCORKLE, S. T. D.

President of the late Salisbury Academy in NORTH
CAROLINA;

A CHARACTER DESERVEDLY ESTEEMED
BY THE FRIENDS OF VIRTUE AND
SCIENCE :

AND

THAT HE MAY CONTINUE TO ADORN THAT PUBLIC
AND USEFUL STATION IN WHICH HE IS PROVIDENTI-
ALLY PLACED, AND LONG LIVE A PATRON AND
PATTERN OF SOLID AND DISINTERESTED
VIRTUE; AND THAT HIS MANY CHARI-
TABLE OFFICES AND GOOD WORKS
ON EARTH MAY MEET WITH AN
AMPLE AND LATE REWARD
IN HEAVEN, IS THE
HEARTY PRAYER OF

HIS MUCH INDEBTED,

HUMBLE SERVANT,

JOHN NEWNAN.

TO THE

REVEREND FATHERS OF THE

SEMINARY OF THE HOLY SPIRIT

IN THE

DIocese of the Holy Spirit

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INTRODUCTION.

TO search after truth with diligence and perseverance, to scrutinize former opinions, and weigh every sentiment in the scale of reason, are the genuine characters that distinguish a truly noble soul.—In this conduct, all virtue, erudition and knowledge, are entirely comprehended ; and when once a man is possessed of that evenness of temper, that he can relinquish his former darling and favourite opinions, when they appear not grounded on the laws of nature ; we must certainly acknowledge him treading the firm road which leads to that invaluable blessing, knowledge ; which elevates one man above another, and distinguishes all of us from the brutal part of the creation.

In

In attempting a Thesis on Dropsy, I readily perceived I had got into a scene of nature, where it was extremely difficult to discover the least sure footing; where most of the phenomena that concern this inquiry, are intrenched in many difficulties, and where their nature scarcely admit evidence, much less demonstration.

There is a twofold knowledge of natural beings; the one intuitive, the other experimental. The first relates to the discovery of new objects or ideas, and depends upon travel; our experimental knowledge, upon the discovery of the properties of those objects whose invention our intuitive knowledge furnishes us. Of the latter being so essential a part of real knowledge, Seneca appears to have been so sensible as to notice it in the following lines. “ *Eti-*
amfi omnia a veteribus inventa sunt, ta-
men

“ men erit hoc novum, usus et dispositio
 “ inventorum ab aliis.”

He therefore, as this great philosopher hath wisely observed, who has rendered a science, by his skill, more clear and intelligible, by a judicious arrangement, and distinct explication of its several branches, though he may have added nothing new, as to the matter that was not said before by others, yet certainly may be considered a real benefactor of mankind. A further example will familiarize this point more clearly with the mind. The persons who discovered the efficacy of mercury and blood-letting in the dropsey, but imperfectly discovered remedies that will rescue thousands from the jaws of death : but the man who has given the circumstances in which they will always profit, and never damage the human body, is surely a more exten-

five benefactor of the human race, (than those physicians who gave them this general character, that they were most excellent remedies in dropfy,) but could not at the same time point out the particular circumstances in which they might be safely exhibited.

Yet, after all our best discoveries and attainments, we daily fall into gross mistakes, arising not so much from necessary error in our judgment, as the imperfection of our organs, while the soul is chained down to the evidence of the senses : still he is the wisest man, who acquires the most of this knowledge, of himself and human nature, that his faculties are capable of ; than this, God and nature require no more at our hands.

MEDICAL DISSERTATION

ON

GENERAL DROPSY.

SINCE Dropsy has been ranked among the more dangerous and often fatal diseases, it becomes the indispensable duty of every physician, to spare neither labour nor pains by which a more accurate knowledge of the disorder may be acquired, to enable us to found a more successful method of cure, than has been hitherto instituted.

Many who have been deservedly distinguished by no inconsiderable eminence in the profession of medicine, have expected to obtain this end by a minute division of dropsy into various genera and different species. But that I may not transgress the rules of this University, which require of each individual desirous of obtaining a Doctor's degree in medicine, a specimen of his medical science, before this honour can be obtained; I have therefore chosen as the subject of the following Dissertation, Dropsy; concerning which I think it sufficient to treat generally, because the curative indications are supposed to be the same in all the different species and varieties, and moreover a detail of each particular species would far exceed the limits of this Thesis.

SEC-

SECTION I.

DEFINITION OF DROPSY.

BY Dropsy I understand a preternatural collection of serous or watery fluids, in one or more parts of the body, in consequence of an increased effusion or diminished absorption, or both. It derives its name from the Greek word, ὕδωρ, signifying water: It has sometimes been called Parenchyma, which chiefly denotes the diffused Dropsy, called by Horace, the languor aquosus.

The most general division of the disease is into the encysted and diffused Dropsy; the first comprehending the watery tumours of the larger cavities, viz. the dropsy of the head, thorax, abdomen, and the hydrocele or dropsy of the tunica vaginalis testis; the latter is applied to denote the diffusion of water in the cellular substance of a part or of the whole body, by which the part or parts become preternaturally enlarged and swelled.

SECTION II.

HISTORY AND SYMPTOMS.

THE disease begins with an inelastic intumescence of the feet, appearing most evidently in the evening after the exercise of the preceding day, and disappearing in the morning after the body has been for some time in a horizontal posture; the swelling first appearing

ing about the joints of the toes, gradually ascends the legs and thighs ; at length the whole abdomen becomes much enlarged, by pressing which with the hands on opposite sides of the body, an undulatory motion of the fluid within will be perceived,

* From the commencement of the disease there is a paucity of urine, paleness of the countenance, lassitude pervading the limbs, little or no perspiration, of course the surface of the body is dry to the feel. The pulse is sometimes hard and full, at others small, quick, and irregular. The difficulty of breathing becomes more troublesome in proportion to the extension of the intumescence. There is a universal leanness of both the superior and inferior parts of the body, and livid spots begin to appear upon the skin ; at length a slow continual fever supervenes, with a vitiated appetite and insatiable thirst ; sometimes there is a prominency about the navel ; finally, hemorrhages from different parts of the body, ulcers, gangrene of the external and internal parts, to which death shortly succeeds.

But the above phenomena manifest themselves, neither always in every patient nor in the same order in which they have been above stated ; frequently before there is any swelling of the feet, the breast, belly, or scrotum become

* In women the labia pudendi are sometimes much enlarged, and the vagina considerably elongated ; which occasions a difficulty in evacuating the urine, and a bearing down of the womb. In these also some of the principal symptoms which characterise the hysteria frequently occur, and the mind becomes affected as in the hypochondriasis.

come tumid: neither is the progress of the disease always and invariably the same; in some it advances slowly, in others rapidly: many recover a sound state of health; but more die through the violence of the disorder.

SECTION III.

D I A G N O S I S.

WHEN the dropsy shall have observed its regular and common course, as abovementioned, our diagnosis will not be difficult. But an incipient dropsy is more difficultly distinguished from some other diseases. It often requires considerable skill and ingenuity in the physician, to distinguish the various species and concomitants of dropsy from certain other affections. Most physicians, however, know that tumours of the legs are more certain symptoms of dropsy in men than in women: for they often occur to these in consequence of pregnancy or an obstruction of the catamenia, but disappear with the concomitant affection. The tympanites will sometimes deceive us, unless we advert to the sound, (similar to that of a drum) which the belly emits when impressed with the fingers. Dr. De Haen has observed that an enlargement of certain viscera is often apt to mislead an incautious observer, especially if the physconia be attended with a swelling of the feet; which would be a source of much disgrace to a medical character, if through inattention he should institute the operation in such a case; but if the physician will but attend to the history and previous

previous duration of the complaint, and be fully convinced of the absence of the undulatory motion in the belly when examined by the hand and fingers, great disgrace to the medical profession may be shunned.

In hydropic swellings of the abdomen it is not always easy to ascertain, whether the water be contained in the cavity of the belly, in a cyst within the duplicature of the peritoneum, or in certain follicles adhering to the viscera.

In these cases we are only able to distinguish the particular affection, by a history of the progress of the disorder, and a careful examination of the present symptoms. In hydatids the swelling is at first confined to a particular part, where the patient generally feels an obtuse pain and tension. The progress of the affection is more slow than in the ascites, and the swelling extends itself more outwardly, and the belly changes its figure less in the different movements of the body where they are fixed; but when the hydatids are moveable or attached to any of the pendulous viscera, they sometimes seem to fall from one side of the abdomen to the other, when the patient turns in bed. The respiration is not commonly so much affected in walking and going up stairs as in the ascites; the appetite continues better and the thirst is less; the face and other parts of the body are not so much emaciated; and the legs do not become œdematous till the tumour is very large.

Where

Where the peritoneum is the part distended, the tumour is always moveable, whereas the hydropic cysts that proceed from the pendulous viscera fall downwards a little at first, when the patient changes his posture; but at length they either grow so large, or adhere so to the peritoneum, as no longer to shift their place.

These encysted dropfies seldom yield to internal medicines, and the bowels are sometimes so insensible to the stimulus of the most drastic purgatives, that it is exceedingly difficult to procure a stool.

SECTION IV.

PREDISPOSING AND REMOTE CAUSES.

THE predisposing cause of this, as well as most other general diseases, in concurrence with Dr. Rush, I suppose to be debility, hereditary or acquired.

The remote, are all such causes as tend directly or indirectly to debilitate the human body; such as,

1. Intemperance in eating and drinking.
2. Relaxation of the absorbents on the surface of the body.
3. Profuse hemorrhages. Forest gives us the case of an anasarca produced by a menorrhagia. Two cases of the same disease Schwenk, in his third book, *De Hydrope*, mentions to have occurred,

occurred, one in consequence of a bleeding at the nose, the other after a hematuria.

4. An inactive and sedentary life.
5. Obstructed secretions and excretions.
6. A too thin and watery diet.
7. Pregnancy; by compressing the iliac arteries and veins.
8. Inflammations and contusions; from the last the hydrocephalus internus frequently occurs.

Monro, in his Essay on the Dropsy, relates the case of an officer who on board a ship received a violent blow on the breast, which being neglected, from there being no surgeon on board to bleed or give him any directions. After he arrived in England, he was seized with the symptoms of an hydrothorax and died; upon dissection the cavity of the breast was found full of a watery fluid with serum of a yellow colour.

Turner, in his second volume of Surgery, gives us the history of a hydrocele brought on by a bruise on a saddle.

9. Dysenteries, diarrhœas, and intermittent fevers in our southern states, frequently lay a foundation for the dropsy.

10. Certain affections of the mind, as fear, sorrow, grief, and anxiety, contribute much to producing this disease.

11. Salivations, when frequently repeated or too long continued, are often succeeded by this complaint; especially if the unhappy sufferer be imprudently exposed to cold and moisture.

The 12th and last cause I shall mention, that subjects to this disease, is a moist climate,

and hence we are able to account for dropfy being more prevalent in Holland and other fenny countries, than in thofe where the air is more pure and dry.

SECTION V.

THE PROXIMATE CAUSE

OF dropfy I fuppofe to be excefs or defect of action in the arterial fyftem, accompanied by an effufion of water in one or more parts of the body.

The idea of this excefs of action taking place in certain dropfies, is fupported by a number of arguments; but I fhall mention only a few of the moft obvious, fuch as, the full and hard pulfe, which I prefume no attentive obferver will deny, to be perceived in fome dropfies. The infatiable thirft that fo often attends this diforder. The above opinion is farther confirmed by the high coloured urine, fizy blood, and fever, that often attend the complaint; all which fymptoms indicate too much action in the fyftem.

The opinion is farther fupported, by contemplating the injurious effects of certain medicines in this difeafe, fuch as opium, wine and ardent fpirits, whole indifcriminate ufe has been productive of much injury to the fyftem.

That this exceffive action prevails in dropfy, is to be inferred from the remedies that have been known to cure it, either by accident

dent or design, as, The digitalis, nicotiana, nitre, and blood-letting ; the principal advantage attendant upon whose use results from their debilitating the system, and thereby diminishing arterial action.

SECTION VI.

PROGNOSIS.

TO enable us to form a prognosis, not only the age and temperament, but the causes, violence, and progress of the disease are to be accurately weighed in the mind of the physician. The younger the patient, the greater will be our hopes of his recovery. If the disease be founded in hereditary debility, we can expect but a palliative cure.

As various as the causes of dropsy shall be, so must our prognosis vary : when it occurs from impeded perspiration alone, the greater will be our prospect of a recovery. But when a schirrous liver, a polypus of the heart or larger vessels, has induced the disease, death may be prognosticated as the inevitable consequence.

It has been an opinion of Hippocrates, that the older disorders are, the more difficultly will they admit of cure : This is undoubtedly true in dropsy, and when it not only eludes all our efforts to remove it, but the several symptoms shall increase, and all the functions become impaired, the physician may safely predict death as the issue.

SECTION VII.

METHOD OF CURE.

THE history, causes, symptoms, and progress of the disease being briefly premised, I shall next attempt to institute a method of cure according to the theory advanced in the preceding pages. This, which has so often in every age deceived the most experienced in medicine, has at length, through the unwearied desire for the attainment of truth, and the indefatigable industry of the worthy professor of the institutes of medicine in the University of Pennsylvania, become, in my humble opinion, extremely simple as well as certain, and which shall therefore influence me in the succeeding pages.

Previously to my proceeding to the cure of dropsy, I think it necessary to divide it into two states or species, tonic and atonic; that depending upon too much, this on too little action, in the arterial system.

The remedies for the first state, are all such as are calculated to diminish arterial action, and thereby induce that degree of relaxation in the lymphatics, which shall prepare them for absorbing the effluxed fluids, and which I therefore name the healthy absorbing point. That a certain degree of relaxation in the absorbents is necessary to fit them for their assigned office of absorption, I conclude, from the effusion that generally accompanies a
rheumatic

rheumatic affection of the joints, the excessive tone attending which disqualifies them for their proper office; and that too little action favours effusion, as well as diminishes absorption, is to be inferred from the preternatural effusion that so often follows the last stage of the phthisis pulmonalis, in which we must consent there is universal deficiency of tone.

The remedies for the above indication, are, First, blood-letting, the repetition and quantity of which should be regulated by the state of the pulse, and appearance of the blood when drawn.

For the efficacy of this remedy in curing dropsy, I take the liberty of referring to the M. S. Lectures of Dr. Rush, who relates the circumstances of several cases wherein it succeeded with him in curing this disease. In further confirmation of the opinion respecting the propriety of blood-letting in dropsy, I beg leave to quote the following lines from Dr. Monro's Essay on the Dropsy, page 41.

“ Where the blood is too thick and fizy, and
 “ its momentum too great in the vessels, which
 “ is often the case in young people, the cool-
 “ ing antiphlogistic regimen must be pursued,
 “ and the patient must be bled, nature has
 “ frequently directed it: one of the oldest and
 “ best authorities prescribes it; and daily ex-
 “ perience confirms its use. I have frequent-
 “ ly ordered blood-letting in such circumstan-
 “ ces, but never found any bad effects from
 “ it, but on the contrary, have seen the pati-
 “ ents considerably relieved by it; and in re-
 “ cent

" cent anasarcaous cases, where the lungs are
 " much affected, attended with fever, often
 " nothing will give relief till the lancet is us-
 " ed." The following case given by the same
 good authority, tends to establish the propri-
 ety of the practice : " On the 20th of Decem-
 " ber, 1758, a girl, aged 14 years, was admit-
 " ted into St. George's Hospital, for an uni-
 " versal anasarca, attended with a difficulty
 " of breathing, small, quick pulse, paucity of
 " urine; her disorder had begun four weeks
 " before, from catching cold; she was at first
 " ordered a squill draught, morning and even-
 " ing, and a scruple of jalap with ten grains
 " of nitre, to be taken twice a week: on the
 " 23rd her skin was dry, she complained of
 " being restless at nights, and was ordered to
 " take sixty of the anodyne antimonial drops,
 " every night at bed-time: on the 25th the
 " difficulty of breathing had continued and
 " increased; I ordered her to lose six ounces
 " of blood, and continue her former course;
 " next day her breathing was easier, and the
 " blood that had been taken away appeared
 " fizy; from this time the medicines began to
 " take a good effect. On the fifth of January
 " she was threatened with a relapse, her breath-
 " ing became worse, and the swelling began
 " to increase; but these symptoms were reliev-
 " ed by a second bleeding and the application
 " of a blistering plaister to the back." Hoff-
 man also mentions the case of an hydropic that
 had been cured by repeated bleedings. And
 Sponius likewise affirms that a man in a drop-
 sy, which had rather increased than diminish-
 ed

ed by hydragogues and diuretics, was cured by twenty bleedings.

The second remedy in tonic dropfy, is nauseating doses of emetics; for the use of which we have the authority of Dr. Sydenham, who tells us he expects much from them where the pulse is hard and full; and as spontaneous vomiting, says Dr. Cullen, has so often excited an absorption in hydropic parts, and thereby evacuated the water, it is reasonable to suppose, that vomiting should have the same effect when excited by art, and it has accordingly been practised with great advantage; the practice however requires the emetic medicines to be given in small repeated doses, until the tone of the system be reduced to the absorbing point.

3. Purges; they have been used with great advantage in all the different species of dropfy. Dr. Sydenham recommends them highly where the system is not already too much debilitated. Of this remedy Dr. Cullen also speaks very favourably; he informs us patients will more readily submit to the use of them than to that of emetics; at the same time he affirms there are no medicines we can employ to procure a copious evacuation of serous fluids, with greater certainty than purgatives. Crem. tartar has been recommended by Dr. Home and others, which I think acts as well by lessening the tone of the system, as by evacuating the contents of the bowels. The Doctor mentions several cases wherein this medicine

cine succeeded, but he observes they were persons of a young and vigorous constitution.

4. Exercise, when violent, has succeeded in evacuating the water ; by debilitating the system to that point we have in view, in recommending the above with the following remedies.

5. Fasting; which we are constrained to acknowledge to be evidently debilitating. And that it has a tendency to evacuate the water in dropsy, I infer, from its having excited absorption in two ascitical patients, who were under the care of Dr. Rush, during my attendance at the Pennsylvania hospital. I also infer, that fasting has a tendency to excite absorption in dropical patients, from the history of two cases given us by Dr. Mead; these were entirely cured by abstaining for a certain time from using any kind of liquids.

6. Low diet, and copious draughts of weak diluting drinks. I have heard of one person's being perfectly cured by low diet and weak drinks.

Dr. Rush accounts for abstinence from, and excess in drinking, proving equally effectual in curing dropsy, by supposing the former to act by preventing a fresh supply of fluids, and the latter by opening the urinary passages, and thereby evacuating the superfluous waters from the body.

7. Certain

7. Certain sedative medicines have been known to cure the dropfy, such as,

1. Digitalis, or Fox-glove.
2. Nicotiana, or the Tobacco plant.
3. Nitre.

That the first effects a cure, not from any specific operation on the urinary organs, but by lessening arterial action, I think very probable from certain observations made by Drs. Wistar and Rush. The former informed me, that he had found the digitalis, when given even in small doses, to reduce the pulse from sixty to thirty five pulsations in a minute, and therefore gives it as his opinion, that this substance acts on the principle of a sedative in the human body. Hence we learn the impropriety and pernicious tendency of the practice of those physicians, who have recourse to the digitalis indiscriminately in every state and species of the dropfy, without being governed by the state of the pulse, which, to use the words of the worthy professor*, quoted above, should be the polar star of a physician in his inquiries into the state of the arterial system.

The digitalis when judiciously administered in dropfies attended with excessive action, is undoubtedly a good remedy; but in that state in which there is deficiency of tone, it is a dangerous medicine, and the best authority* informs us he has seen death produced by it.

D

For

* Dr. Rush.

For the efficacy of the nicotiana in performing a cure in dropsy, and also for the manner of exhibiting it, I refer to the last volume of Duncan's Medical Commentaries.

In support of the efficacy of nitre in this disease, we have the daily experience of most physicians in the city of Philadelphia. Dr. Rush tells us in his Medical Lectures, that he is disposed to ascribe much to nitre in the treatment of the sthenic dropsy.

SECTION VIII.

CURE OF ATONIC DROPSY, OR

THAT state in which there is universal deficiency of tone. The intention of the remedies in this is directly contrary to those in the former species: those being such as are calculated to diminish the action of the heart and arteries; these, such as have a general tendency to increase action, and raise the excitement of the system to the healthy absorbing point. With this intention are to be chosen the several substances comprehended under the two following classes, viz.

Stimulants and Tonics.

OF the first class, and such as are to be selected as the most effectual, for the purpose of stimulating the sensible organs, and increasing the action of the vessels, are,

1. Opium.

2. Mer-

2. Mercury.
3. Wine and ardent spirits.
4. Alkaline salts, as,
 - a. Vol. Alk. or,
 - b. Fixed Veg. Alk.
5. Aromatic substances, the chief of which are,
 - a. Ginger.
 - b. Nutmegs.
 - c. Cubebs.
 - d. Cort. Winteranus.

The opium should be administered in small repeated doses, either alone, or combined with mercury, in the proportion of one grain of the former to two grains of the merc. calc. to be taken morning and evening, until a gentle salivation be induced, which is a proof of its having pervaded the system: but in the exhibition of these, as well as all the other remedies, we should pay the strictest attention to the pulse, which is our index of the state of the system. For the use of mercury in dropsy, we have the experience of the late Dr. Bond, who I am told first introduced the practice in this country. The present professor of the institutes of medicine and clinical cases in the University of Pennsylvania, also informs us he has cured several dropsies with it, and believes it would have been more successful in his hands, had he been always influenced in the administration of it, by the theory delivered in former pages of this Dissertation. Doctor Wistar informed me that he has likewise used the mercury with astonishing success in the dropsy; his mode of using it is in the form of
unction,

unction, when the disease has succeeded a local or visceral obstruction, or in pills alternated with tonics.

Alk. Salts. If the vol. alk. be chosen as an internal medicine, (but I would here remark that it has been successfully used, when diluted with water or spirits, by rubbing it over the surface of the body) the dose should be from five to eight drops: but when the fixed alkali is preferred, the patient should begin its use by taking it in the quantity of four or five grains, to be gradually increased, as the patient shall become habituated to its use.

Under the second class of remedies in the asthenic dropy, are the following substances, viz.

1. Bitters of various kinds, as,
 - a. Columbo.
 - b. Gentian.
 - c. Centaury.
 - e. Tansey.
 - d. Wormwood.

2. Medicines possessed of an astringent as well as bitter quality, as,

- a. The Peruvian bark; all which medicines when exhibited in a proper manner, and in proper doses, either in tinctures or infusions, restore and increase the tone of the digestive organs.

3. Medicines endowed with a strong astringent virtue only, as allum, the oak and pomegranate bark, and parsimmons.

4. Certain

4. Certain metallic tonics, viz.

1. Iron, either in the form of the rubigo ferri, or in the saline state, viz. the iron combined with the vit. acid in sal martis, the dose of which is from five to fifteen grains, two or three times a-day. 2. Copper, the chemical preparations of which are, the cuprum ammon. and vitriolated copper, the dose of the former is from one to four grains; the latter may be given from the quantity of $\frac{1}{4}$ to one grain per dose.

5. Frictions and compression of the part affected; for pressure, as is justly observed by Dr. Monro, supports and sustains the relaxed and weak vessels, prevents the distraction of the fibres, and is often of considerable service in the cure of dropsy.

Frictions with oil were among the ancients a common remedy, but had been laid aside, until the practice was revived by Dr. Oliver, who has given several cases in which it proved effectual. Dr. Monro tells us, tho' he never saw a confirmed dropsy cured by this method, yet he has seen several cases of the ascites considerably relieved, by rubbing the abdomen with oil, morning and evening for some time.

Those corroborating remedies that increase absorption, when externally applied, do more service in the subcutaneous dropsy, than in any other kind, because they can be applied to the seat of the disease; and therefore frictions with the stimulating, aromatic and spirituous

rituous medicines, are frequently found to have a good effect, and ought to be assiduously employed. Bandages are highly proper in supporting the tone of the parts, and for preventing the influx of the fluids into the cellular texture, and for expelling the water from it; but care should be taken not to apply them too tight, lest the free circulation of the blood should be impeded in the parts below the bandage, and occasion an increase of the dropical swellings of those parts, or give rise to dangerous inflammations and obstructions.

6. A nourishing and generous diet. The aliment should be easy of digestion; bread well leavened, toasted, or seasoned with aromatics, eggs, and the firmer kinds of flesh, should compose the principal part of the daily diet; for drink, the patient ought to use good old wine, or beer in which bitters have been infused.

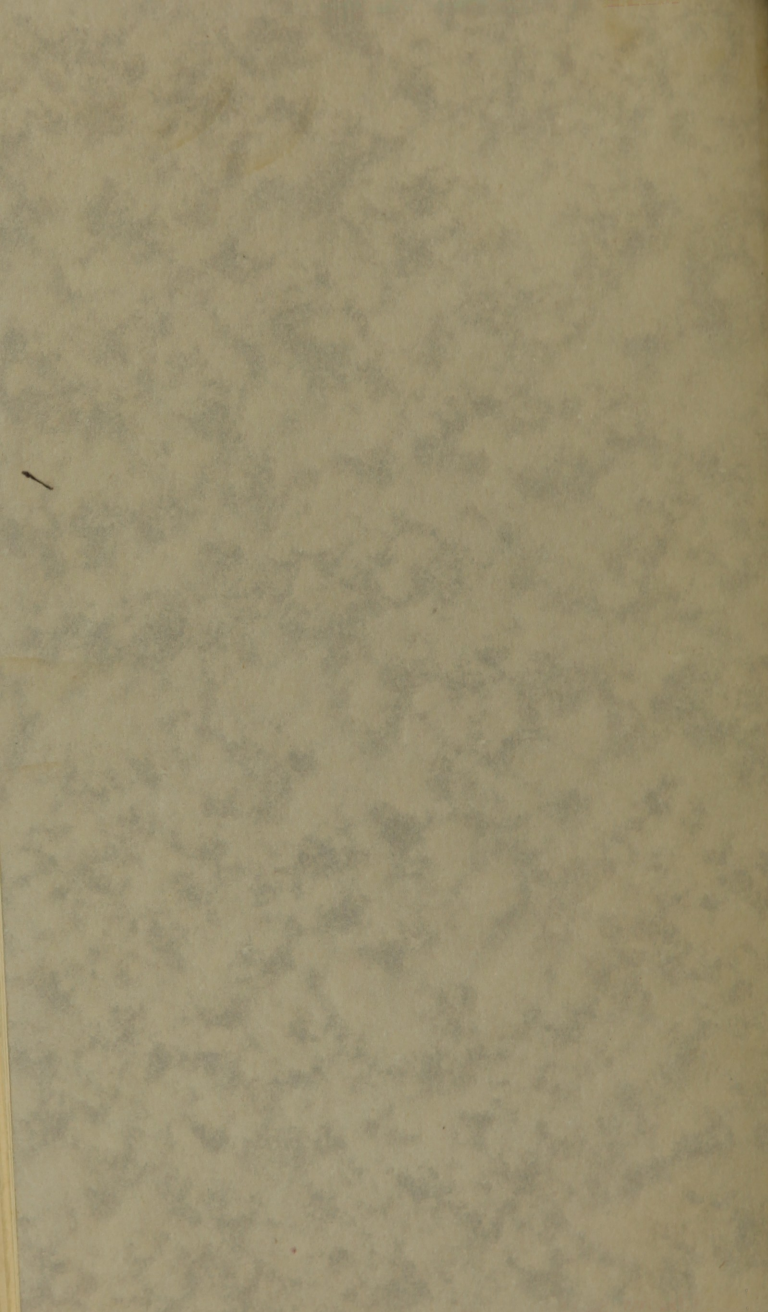
7thly and lastly, Exercise, with the use of chalybeate mineral waters.

Exercise it is to be observed, produces that action of the muscles necessary for promoting the regress of the venous blood from the extremities; therefore as much exercise in walking as the patient can easily bear, will often prevent that œdematous swelling, which a sedentary and inactive posture would have occasioned. This remedy, however, although it may be very useful at the beginning of a dropy, will be insufficient in a more violent disease.

Exercise is a sovereign assistant in all the functions of the animal system, particularly in promoting perspiration, and thereby preventing the accumulation of watery fluids in the body, and is also a most effectual means for preventing an imbibing state of the skin. This therefore promises to be a very useful remedy in dropfy, and that should be preferred which the patient most easily and conveniently bears; but I am inclined to think, that bodily exercise being most effectual in producing the above action, should always be preferred when moderate.

The cold bath, which has been serviceable in many other diseases proceeding from a relaxation of the fibres, is generally prejudicial to hydropic patients. Wherever the fibres and vessels are already so much relaxed, that the immersion of the body into the cold water is not succeeded by a stimulus sufficient to increase their action, and promote the circulation of the blood, the cold bath does hurt; for in these cases, the cold water instead of rendering the circulation brisker, to increase the absorption and excretion of the watery fluids, chills the blood, and renders the circulation more languid.

But if all the above remedies should fail to excite absorption, and thereby evacuate the effused fluids, we must then have recourse to tapping; for the method of punctures, &c. and cautions necessary in performing which, I refer to Bell and other surgical writers.



Med. Hist.

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