

**A discourse relative to the subject of animation, delivered before the Humane Society of the Commonwealth of Massachusetts, at their semiannual meeting June 13th, 1797 / by John Fleet, Jun. M.D. M.M.S.**

### **Contributors**

Fleet, John, 1766-1813.

Fleet, John, 1734-1806

Fleet, Thomas, 1732-1797

Humane Society of the Commonwealth of Massachusetts.

National Library of Medicine (U.S.)

### **Publication/Creation**

Boston : Printed by John & Thomas Fleet, Cornhill, 1797.

### **Persistent URL**

<https://wellcomecollection.org/works/xrex2tbb>

### **License and attribution**

This material has been provided by This material has been provided by the National Library of Medicine (U.S.), through the Medical Heritage Library. The original may be consulted at the National Library of Medicine (U.S.) where the originals may be consulted.

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

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

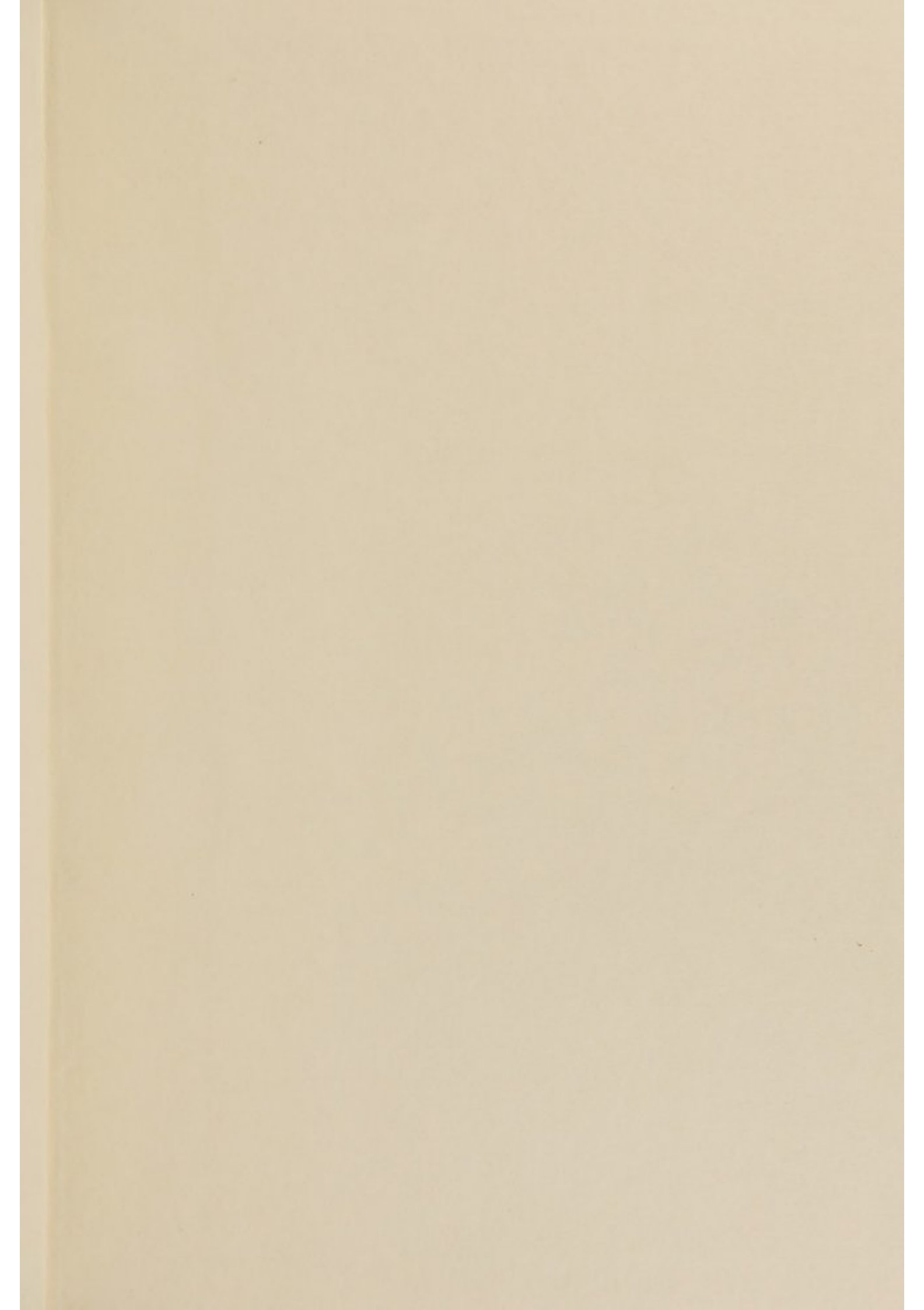
**wellcome  
collection**

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



NATIONAL LIBRARY OF MEDICINE

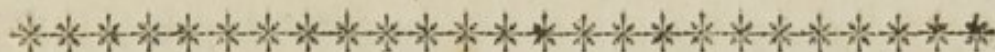
Bethesda, Maryland







Mr John Jenks.



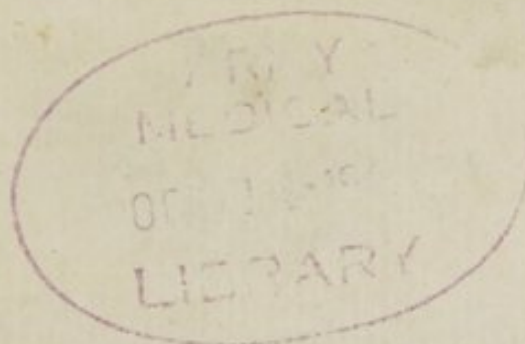
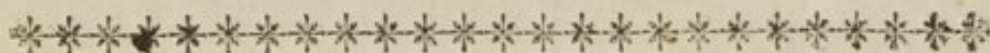
DR. FLEET'S

DISCOURSE

TO THE

HUMANE SOCIETY,

JUNE 13th, 1797.



\*\*\*\*\*

THE

DISCOUR

OF

HUMAN

WISDOM

\*\*\*\*\*

A  
DISCOURSE  
RELATIVE TO THE SUBJECT OF  
ANIMATION,  
DELIVERED BEFORE THE  
HUMANE SOCIETY  
OF THE  
COMMONWEALTH OF MASSACHUSETTS,

AT THEIR SEMI-ANNUAL MEETING

JUNE 13th, 1797.

By JOHN FLEET, JUN. M.D. M.M.S.

"ARS LONGA EST."



---

B O S T O N :  
PRINTED BY JOHN & THOMAS FLEET, CORNHILL, 1797.



*At a semi-annual meeting of the HUMANE SOCIETY, of  
the COMMONWEALTH OF MASSACHUSETTS, June 13th 1797.*

*VOTED, That the Honourable Judge PAINE, Honourable  
SAMUEL PHILLIPS, JOHN WARREN, M.D. JUSTIN ELY, Esq ;  
and Mr. SAMUEL SALISBURY, be a Committee to wait upon  
Doct. JOHN FLEET, jun. and return him the thanks of this  
Society, for his elegant and ingenious discourse delivered this day,  
and to request of him a copy for the press.*

JOHN AVERY, *Record'g Secretary.*

---

BOSTON, June 13th, 1797.

GENTLEMEN,

*Deeply impressed with the candor bestowed on my discourse,  
by the members of the Humane Society at their semiannual  
meeting, I shall evade expressing a determination I had formed,  
and shall present it for publication: confident that while their  
superior knowledge and acquaintance with this subject, will dis-  
cover ; their extensive liberality will not severely scrutinize into  
its many faults.*

Gentlemen,

*Your most obedient Servant,*

JOHN FLEET, jun.



A

*DISCOURSE, &c.*



ONE important object of Humane Societies has been the institution of inquiries into the nature of life, and the most rational and successful modes of restoring animation. That this has not been without effect is evident from Dr. Fothergill's New Inquiry into the suspension of Vital Action. And the numerous annual assemblage around the London Humane Society, of those, who but for their exertions would have been numbered with the dead, is a demonstration of the success of their benevolent undertaking.

UNDER a consciousness that there are many who can give to the whole subject of animation a more pleasing and philosophic garb, their candor is solicited to a short account of the proximate cause of its suspension and of death.

IT



It has been ably contended, that Apoplexy, which is a disease arising from compression of the origin of the nerves, or from something destroying the mobility of the nervous fluid, was the cause in question. But dissections have not sufficiently authorized us to conclude, that even in drowning and hanging there is great accumulation or extravasation of blood in the brain ; and experiments advise that no artificial obstruction of the return of the blood from the head, can produce suspended animation, under a time immensely longer than that taken for drowning or suffocation. Nor did a deficiency of blood sent to the brain by the carotid arteries being tied, alter the case, or retard the fatal event in strangulation.

THOUGH we must renounce this so natural and mechanical explanation, yet the great fatality in these accidents evinces that some sudden disease takes place. To elucidate this by the phenomena of drowning an animal. In less than two minutes his voluntary motions and senses cease, and he is faint and exhausted, in about the same time convulsion follows, and in ten or fifteen minutes he is in general past recovery.

THESE are evidently symptoms of disease, and will be explained as such. When an unfortunate man is sinking, he exerts his voluntary motions with the greatest activity, and he uses the vainest attempts, such as catching at a straw to save himself—This is well known to such as have rescued others from their fate. Unfortunately for humanity, owing to  
to



to these unavailing exertions, some have dragged their intended preservers into the same grave with themselves.—Next succeeds a quiescence, called syncope or fainting, which is the proximate cause of suspended animation : carried further, it ends in complete apoplexy, the proximate cause of death. Exertions of the respiratory muscles alone, have produced this effect. The Negroes in the West-Indies when tired of existence, obstinately continue the act of inspiration, and thus purchase their freedom with their lives.

FROM an analogy of this quiescent state with that of Trance, the prospect of restoring life would be so great, as to equal the wishes of the most humane, did not convulsions succeed, which whatever the philosophy of it be, bodes no good. Dr. Kite believes, that after this motion ceases, none of the animals that are drowned recover by being placed in the air, nor by having their lungs inflated.\* Many diseases of the human body, and perhaps all in brutes, end when fatal, as those of the latter almost invariably are, in a convulsion fit. The similitude of the nervous and electric fluid, is at no time better expressed than here ; for this convulsion seems to be an explosion of it. Others have not thought it so serious a circumstance.

\* I once made a couple of experiments on rats, to ascertain the nature of this convulsion, and though they easily recovered after the voluntary motions ceased, this could not be effected by any means after convulsions were ended, which was in less than 15 minutes.

This is not introduced as denying, that there have been recoveries, after 40, 50, or more minutes ; for these facts are strong proofs of the theory here intended to be established, and the above writer admits, that there was often a great variety of time, in those that recovered or were lost.

Vide, What is said on Convulsion and Epilepsy, (p. 8.)



circumstance. Dr. Hunter supposes it to be an effort of the respiratory muscles, or a gasping for breath. According to Dr. Darwin, it is a disease of Volition produced to avoid pain, which he has seen go so far as to threaten instant death, had not convulsions intervened. But in another place he observes, that a delirium, alternating with convulsions was the less dangerous disease.

THE pathology of these diseases is involved in obscurity.—The brain to which we must trace the cause of them, is in part highly organized ; but has the uses of no one part demonstrated.—And as a mechanism suited to its several functions is not at all perceived, some have referred it to a greater or less mobility of the nervous fluid, called excitement and collapse ; others to an accumulation or diminution of it. For instance, in syncope, the remote cause produces a diminution of the nervous fluid, or a collapse of the brain—hence loss of all animal motion. The secret powers of life exert themselves ; or according to others, the sensorial power becomes accumulated, and then a stimulus less than natural is sufficient to throw it into action.

THIS may serve to explain the quiescent state in drowning and the comparative danger of Convulsion and Epilepsy ; as the latter is followed with coma or sleep and the former is not—thus indicating its fatality.

HOWEVER



HOWEVER we may wonder at the operations of the nervous system, our Atmosphere presents us with things full as unaccountable. When it is full of water, ready to descend, its weight is decreased, and the Barometer falls; after the rain is over, it recovers its usual standard. There are states of it called by Sydenham constitutions, which elude our senses; but are the causes of epidemical distempers, and add rage to contagious ones.

CONSIDERING our subject in the light of disease, we might say, that drowning and suspension, were attended with syncope and convulsion.\* The accidents from noxious air and lightning, by that species of Apoplexy, arising from the mobility of the nervous fluid being destroyed. This receives confirmation from observing, that after a long course of debility, all voluntary motion was lost; stupor and laborious respiration closing the scene.

By a stroke of lightning all motion ceases at once, by this power being greater than that of debility. We cannot apply any of these to the torpid state of animals.

THESE modes not appearing entirely satisfactory, it has been customary to search for other causes, and these centre in what may be called the pendulum of the vital organs, the lungs.

## B

## EXPERIMENTS

\* That certain sensible conditions of disease may exist in the body without specific disease, may be drawn from (p. 6.) It would seem also, that there was a difference between violent exertions on the shore and those made in the water; for it has been noted, that recovery from submer-  
sion,



EXPERIMENTS have determined, that the little water found in the lungs could not be the cause.

THE blood in passing through the lungs, without receiving the influence of the air is black, and therefore supposed to want the stimulus necessary to excite the left cavity of the heart. This too from the many difficulties attending it, is now given up.

Is mechanical obstruction of the circulation from a collapse of the lungs, a more probable solution? The advocates for sanguineous apoplexy assert, that death ensues after a complete expiration; and on examination, the right cavity of the heart and neighbouring vessels are turgid with blood. — On the contrary it is said, that the lungs are often found distended, and by experiment it was managed, that no accumulation of blood took place, yet the animal deprived of vital air, died in the usual space of time.

ON this is erected a theory, "That life is alike in both the animal and vegetable kingdom, and depends on irritability." This requires explanation. The brain is void of sensation, the nerves are highly sensible, the muscular fibres, among which the extreme branches of the nerves are interwoven, are both sensible and irritable. Irritability is called a property peculiar

sion, never induces hemiplegia, the almost constant result of Apoplexy. And a lady after a great exertion, in drawing out of the water her companion, who had slipped into a brook, walked but a few steps and sat down paralytic. Vide Darwin.



peculiar to muscles, independent of the brain and nerves—Vital air is called the source of this in animals, and must be so in vegetables, which have neither brain nor nerves, but are supplied with air vessels \*—by this the involuntary motions as of the heart and other organs are sustained, and the curious problem of animal heat partly solved ; for vital air consisting of oxigene and latent heat, undergoes a decomposition in the process of respiration, and by that means enters the blood in an inelastic state. The oxigene communicates its florid colour and deposits its latent heat, which in its progress through the circulation, is evolved in a sensible form. The cause of nervous influence, from which arises voluntary motion, is ascribed to electricity, drawn into the lungs at the first inspiration. From all this it is inferred, that exclusion of vital air, is the primary cause of suspended respiration, which is the immediate cause of the suspension of the other vital actions. And if to this succeeds the extinction of irritability, it is the proximate cause of death. It is added, that the principle of sensibility or nervous influence, often remains in a dormant state, till roused by proper modes of excitation.

THIS ingenious account receives plausibility, from observing the foetal and atmospheric states. In the former, the animal

\* Vegetables are said to delight in contaminated air. Vide Priestley's experiments, and others. On this subject I shall only state, that they are generally allowed irritability and respiratory organs : And in their natural state, if vegetables be deprived of atmospheric air they certainly



animal is considered as no more than an aquatic plant, the lungs are useless and but little supplied with blood ; for then the principal branch of the artery of the right cavity of the heart, goes to the aorta. The placental root serves the office of lungs. The brain then has not become important, for it may be compressed for hours, or be wholly wanting, without hazard ; while the funis can remain so, for no longer time than it takes for drowning. When the animal has breathed, the lungs from being inactive, become the main spring of life, and are destined to transmit through their substance, in equal times, a quantity of blood equal to what passes to the rest of the body. And at every expiration they communicate an undulatory motion to the brain, absolutely necessary, perhaps, to its developement and functions.

HEAT and air so necessary to life, are not life itself; else when the punctum saliens of the chick was suspended in its motion, we should be able to renew its action, and thus throw new light on the theory of animation. The Marmot, which remains torpid during winter, shuts himself up in his cell, and the confined air which he consumes or contaminates, assists his torpor : But when the vernal warmth returns, *this* excites his irritability, and restores him to life, without the aid of vital air. To

tainly perish. M. Bonnet covered some young trees, except a few extreme branches with a varnish, and those that had the air most perfectly excluded, in every instance died. Vid. Gregory's economy of Nat.



To me it appears, that there is but one principle, or spirit of animation—that muscular fibres contain a larger proportion than the nerves, and this is the *vis plastica*, or *vis conservatrix naturæ*, for the purpose of preserving and propagating the several species of animated nature. Some animals possess this property to such a degree, as to be able to renew a part or whole of their bodies, as the crab, snail and polipe, and others regard but little the loss of their head, as the tortoise and toad.

THE following opinion of the ingenious Darwin, may be considered as a proof, or not, of the sameness of this fluid.—The first rudiment of an embryo is an irritable fibre or filament, and lodged in its nutriment, and supplied with air it is able to form new combinations, and from thence arise new necessities and appetences, and hence the brain, limbs, and other parts are formed in succession. This is not surprising, from what has been said of the snail and other animals.—And our bodies would go on forming new parts were they not bounded by the skin and periosteum.

THERE is a great resemblance between the nervous and electric fluid. If a nerve be divided and a proper conductor of electricity be applied, from one divided end to the other, the motion in the part below will be restored, and some experimenters have been sure, that they have restored contraction to muscles, that had long lost their original life.



ANOTHER argument perhaps, may be drawn from the state of rest and hibernial torpor. Long sleep exhausts the nervous energy, and what I shall call the accommodating disposition of nature, seen in many diseases, may be an exhaustion of nervous electricity, from want of the friction of muscular fibres, which if carried too far would end in death.

BEEs seem sensible of this. When the cold becomes severe, as they hang in clusters, by a general motion of their legs, they produce a warmth that delays their torpid state, and at the same time replenishes their nervous electricity. Without motion, electricity is not collected, and without some sort of motion, perhaps, there is no vitality.

IN fine, though irritability may be the support of animal and vegetable life, and electricity be the animating principle; yet what first begins irritability, or fits the fibres to collect this fluid, is still beyond the reach of our senses, and must be traced to the First Cause of All. For all that we call causes are probably but effects—Of course the difference between a living and sound dead body, is not satisfactorily known.

THE treatment of these cases, must be governed by the *juvantia* and *lædientia*. From the effects of cold air and cold water in cases of syncope, we should be led to treat cases of drowning in the same manner. But it has often been observ-  
ed,

ed, that soon after submersion, a rigidity of the muscles of the thorax and jaw ensues, like that of Tetanus, a disease in which the cold bath, in general, has not proved successful. If the body remains flexible, I see no reason why this novel method may not be used. But otherwise, electricity and heat are more promising stimulants. Inflation of the lungs with air deserves the first attention, and the more deslogisticated, perhaps the better ; though this has been doubted—The persons who perished in the black hole at Calcutta, did not die in numbers, till a pungent effluvia had been generated from the living and dead bodies.

FRICTION, gently applied, imitates the oscillatory motion of life, and in like manner the mild influence of the sun, in union with the accommodating disposition of nature, has recovered life, when others immersed a much less time, and who had their lungs inflated, were lost.

OWING to this principle it is, that expert divers remain under water 14 or 15 minutes without danger. Life has been restored even after interment, by gentle concussion.

VENESECTON in some instances, has revived persons faint and apparently lifeless, and where the vessels are crowded, by restoring the elasticity of the arteries, which when opened continue to pour out blood, even after death, the circulation will at least be promoted.



I SHALL refrain from any observations on the other methods, experience the only sure guide, having not yet rejected them. And shall congratulate the friends of humanity that all the ingenuity of man has not been employed in forging arms, or contriving stratagems for the destruction of man. As an evidence of this, may be seen, the huts which you have erected, to invite the shipwrecked sufferer to his safety and refreshment.

THE patronage and support which this institution has received from the first personages in the community, the daily accession to the catalogue of its members, and the countenance and approbation, which the presence of so many respectable characters on this occasion evinces, are a solacing relief to the painful emotions, which scenes of a far different nature are calculated to excite—Amidst the disgustful train of vices which prevail in civilized life, and which spread a dark and baleful shade over the face of society; the lustre of that virtue which shall cover a multitude of sins, displays its influence, and dispels the clouds which have threatened the destruction of all civil institutions.

AUTHORITIES.—The Author is sensible that frequent references by notes would be tedious, and has chosen to mention the principal writers to whom he has been indebted, and conceives that any obscurity he may have thrown on their works, may be best obviated by consulting the books themselves. Viz. Dr. Fothergill's New Inquiry, Kite in the III. Vol. Memoirs Lond. Med. Society, Cullen's Physiology, Sabatier's Anatomy, and Darwin's Zoonomia.





*The Trustees have received the following Communications  
since their last Publication.*

## I.

*LETTER from William Hawes, M. D. Register of the Royal Humane Society  
in London to the Corresponding Secretary.*

LONDON, May 15, 1796.

REVEREND SIR,

I TAKE the earliest opportunity of informing you, that Dr. Brooks's elegant and judicious discourse came safe to hand.

In the name of the Royal Humane Society, be pleased to accept my grateful and sincere thanks, for the additional mark of your esteem. It is with great pleasure, that I now request the Trustees and you, to favor the Report of this year, with a candid perusal, and hope it will be considered as the *anniversarium donum* to the beneficent friends of an Institution, by one well known to possess—*Mens obfessa curis*.

If, in consequence of our Prize questions, the ingenious should be stimulated by our honorary premiums, to make further investigations in the important and interesting art of resuscitation, it will afford me the highest pleasure to communicate them to the Boston Humane Society; as both Institutions are zealously anxious to explode error, however sanctioned by custom, and prepared to follow truth wherever it may lead us.—Wishing arduously your Society most ample success in the advancement of science; and above all in its laudable endeavours to diminish the triumphs of death,

I remain, Reverend Sir,

Your most humble servant,

WILLIAM HAWES.

*Rev. Dr. Parker.*

## II.

*Letter from Dr. Anthony Fothergill, of Bath, to the Corresponding Secretary.*

BATH, November 28, 1796.

SIR,

YOUR packet containing dispatches from the Humane Society of Massachusetts, by some adverse accident, being diverted out of its proper course to the Cove of Ireland, did not reach Bath till yesterday.

From the perusal of the copies of the Discourses by Drs. Warren and Robbins, with which they have favoured me through your hands, I promise myself much satisfaction. Nor can I conclude without sincerely sympathizing

C



ing with the Humane Society, on the loss of their late illustrious President, the Honourable THOMAS RUSSELL, whose fame and character (to which I was no stranger) will be long remembered with gratitude, not only by the Humane Society of Boston, but also by the Humane Society of London, as well as by multitudes of the inhabitants of both Continents.

With best wishes to your Society, and the prosperity of all its members, I remain with the utmost respect and gratitude,

Their much obliged Servant and Colleague,

ANTHONY FOTHERGILL.

### III.

*Letter from the Hon. Samuel Tenny, Esq;*

EXETER, 10th April, 1797.

DEAR SIR,

SOME time since, I had your favour accompanying a certificate of my being admitted an honorary member of the Humane Society established by law in the Commonwealth of Massachusetts.—I beg you will communicate to the Trustees of the Society, the very high sense I have of the honor, which they have conferred on me, and assure them that I shall cheerfully embrace every opportunity, to promote the interests of so benevolent an institution.

For the very polite and flattering manner, in which you have conveyed the certificate, you will please to accept my cordial thanks—and believe me to be, with great respect,

Sir, your obliged and most obedient Servant,

SAMUEL TENNY.

Rev. John Clarke.

### *PREMIUMS* adjudged by the TRUSTEES,

*since June 1796.*

*Dollars.*

To Ephraim Mann, for saving Joseph Withington, who fell from his canoe on Dorchester shore,	3
To Nathaniel Kitchen, for saving the life of John Davis,	3
To Joseph Diamond, for saving a Boy,	4
To Ebenezer Adams and Lazarus Fenno, for saving the life of Peter Munwell, between Spectacle & Thompson's Islands.	10
To Francis Smith, for saving John Hardison, who had fallen from Green's Wharf,	3
To Samuel Polly, for saving Benjamin Bucknam, who was overfet in a gale of wind upon Chelsea shore.	10
To Jacob Whipple, for saving Andrew Mainfee, William Penniman and his Daughter, who were overfet in a sudden gust of wind,	10



# A P P E N D I X.

19

To Andrew McIntire, for saving the life of a Lad by the name of Billings,	-	-	-	-	-	7
To Francis Lane, for saving two Children from drowning,						4
To James Gregory, for saving a Boy of William Tufts,						4
						<hr/>
						Doll. 58

## State of the Treasurer's Accounts for the Year past.

1796.			Doll.	Cts.
June 14.	Balance due to the late Treasurer,	=	31	68
	Premiums paid,	=	58	
	Repairing Hut on Scituate Beach,	=	28	84
	Printing Dr. Robbins's Discourse, hymns, receipts,	}	89	44
	and for Music at last annual meeting,			
	Jacob Kuhn, 2 year's services, notifying meetings,	}	63	
	collecting subscriptions & delivering discourses, &c.			
	25 Shares in Union Bank stock,	=	241	67
	Balance in hands of the Treasurer,	=	236	74
				<hr/>
				Doll. 749 37

## Contra Cr.

By Collection at annual meeting,	=	=	108	7
1 year's Interest on 6 and 3 per cent stock,			137	4
Ditto on 5 per cent Mass.	=	=	105	68
Dividend at Union Bank,	=	=	46	80
Ditto Malden Bridge, 3 quarters,	=	=	18	
Donation from Thomas Hancock,	=	=	20	
Annual subscriptions to June 12.	=	=	313	78
				<hr/>
				Doll. 749 37

## Property of the Society in the Hands of the Treasurer.

6 per cent stock of the United States,	=	=	1442	17
3 per cent ditto,	=	=	708	83
Deferred ditto,	=	=	34	
Mass. 5 per cent Notes,	=	=	2113	71
Union Bank stock,	=	=	568	
Cash,	=	=	239	74
Certificate of a Share in Malden Bridge,				
Fund from dividends on said share in deferred stock,	300		58	

The above appears to be the state of the accounts of the Treasurer, as audited by us the subscribers, June 12, 1797.

Ebenezer Hancock, } Committee.  
Thomas Cushing, }

OFFICERS



*OFFICERS of the Humane Society, chosen Dec. 1796.*

Hon. JONATHAN MASON, Esq; President.  
 JOHN WARREN, M. D. first Vice President.  
 Rev. SIMEON HOWARD, D.D. Second Vice President.  
 Rev. SAMUEL PARKER, D.D. Treasurer.  
 Rev. JOHN CLARKE, D.D. Corresponding Secretary.  
 JOHN AVERY, Esq; Recording Secretary.

Rev. JOHN LATHROP, D.D.	}	Trustees.
Rev. PETER THACHER, D.D.		
Doct. THOMAS WELSH,		
AARON DEXTER, M.D.		
NATHANIEL BALCH, Esq;		
JEREMIAH ALLEN, Esq;		

*Members deceased since the last Publication of the Names.*

Hon. Thomas Russell, Esq; <i>President,</i>	Mr. Ephraim May,
John Deming, Esq;	Mr. Joseph Russell,
Mr. Jonathan Freeman,	Capt. Isaac Smith, <i>Malden,</i>
John Gore, Esq;	Dr. Oliver Smith,
Mr. Algernon Sidney Howard,	Mr. Edward Wayne.
Thomas Lee, Esq;	

*CATALOGUE of the MEMBERS of the HUMANE SOCIETY.**Names and Places of Abode.*

<b>E</b> XCELLENCY John Adams, Esq; <i>President of the United States,</i>	Loammi Baldwin, Esq; <i>Woburn,</i>
Mr. Thomas Adams,	Mr. Luke Baldwin, <i>Brookfield,</i>
Jeremiah Allen, Esq;	Rev. Thomas Baldwin,
Mr. Thomas Amory,	Mr. John Ballard,
Mr. Thomas C. Amory,	Jos. Barrell, Esq; <i>Charlestown, 3.33</i>
Mr. Jonathan Amory, <i>tertius,</i>	Dr. Joshua Barker, <i>Hingham,</i>
John Andrews, Esq;	Rev. Joseph Barker, <i>Middleborough,</i>
Mr. James Andrews,	Rev. Thomas Barnard, D.D. <i>Salem,</i>
Nathaniel Appleton, Esq;	Samuel Barrett, Esq;
Mr. John Apthorp, <i>Cambridge,</i>	Mr. John Barrett,
Mr. Phineas Ashmun, <i>Stockbridge,</i>	Dr. Josiah Bartlet, <i>Charlestown,</i>
Dr. Israel Atherton, <i>Lancaster,</i>	Dr. John Bartlet, <i>Roxbury,</i>
Rev. Noah Atwater, <i>Westfield,</i>	Mr. George Bartlet, <i>Charlestown,</i>
John Avery, Esq;	Dr. Thomas Bartlet,
James Avery, Esq; <i>Machias,</i>	Dr. Zaccheus Bartlett, <i>Plymouth,</i>
Jonathan L. Austin, Esq;	Hon. William Baylies, Esq; <i>Dighton,</i>
Nathaniel Balch, Esq;	Maj. William Bell,
	Mr. Shubael Bell,

Rev.



Rev. Jeremy Belknap, D. D.  
 Mr. Joseph Belknap,  
 Mr. Nathaniel Bethune, *Cambridge*,  
 Mr. Afahel Biglow,  
 Mr. Edward Blake,  
 Mr. George Blanchard,  
 Samuel Blodget, Esq; *Haverhill*,  
 Mr. William Boardman, jun.  
 Mr. Nathan Bond,  
 Mr. Kirk Boot,  
 Mrs. Elisabeth Bowdoin, 5 *Dollars*.  
 Hon. James Bowdoin, Esq;  
 John Boyle, Esq;  
 Rev. John Bradford, *Roxbury*,  
 Mr. John Bray,  
 Samuel Breck, Esq; *Philadelphia*, 3-33  
 Mr. Thomas Brewer,  
 Mr. John Brewer, No. 4. *Passamaquoddy*  
 Mr. Oliver Brewster,  
 Rev. Josiah Bridge, *East Sudbury*,  
 Hon. E. Bridge, Esq; *Chelmsford*,  
 Martin Brimmer, Esq; *Roxbury*,  
 Henry Bromfield, Esq; *Harvard*,  
 Hon. John Brooks, Esq; *Medford*,  
 Mr. William Brown,  
 Mr. Josiah Brown,  
 Dr. M. Brown, jun. *Brookfield*,  
 Moses Bullen, Esq; *Medfield*,  
 Mr. Jeremiah Bumstead, jun.

Hon. George Cabot, Esq; *Brookline*,  
 Maj. William Calder, *Charlestown*,  
 Mr. Joseph Callender, jun.  
 Mr. Benjamin Callender,  
 Samuel Cary, Esq; *Chelsea*,  
 Mr. Gardner L. Chandler,  
 Benjamin Clarke, Esq;  
 Rev. John Clarke, D.D.  
 Mr. William Cleland,  
 Hon. David Cobb, Esq; *Taunton*,  
 John Codman, Esq;  
 Mr. Michael Collins, *Wellfleet*,  
 John Collins, jun. Esq; *Newport*,  
 Samuel Cooper, Esq;  
 Joseph Cordis, Esq; *Charlestown*,  
 Andrew Cragie, Esq; *Cambridge*, 2. 50.

Capt. Nathaniel Curtis,  
 Mr. Thomas Curtis,  
 Hon. Will. Cushing, Esq; *Scituate*, 3.  
 Hon. Nathan Cushing, Esq; *Scituate*,  
 Thomas Cushing, Esq;  
 Mr. Edward Cushing,  
 Mr. John Cushing,  
 Mr. Benjamin Clarke Cutler,  
 Mr. James Cutler,  
 Mr. Gersthom Cutler, *Berlin*,

Hon. Fran. Dana, Esq; *Cambridge*, 3-33.  
 Mr. John Dabney, *Salem*,  
 Mr. William Dall,  
 Mr. Peter Roe Dalton,  
 Samuel Dana, Esq; *Groton*,  
 Mr. Isaac Davenport,  
 Hon. Caleb Davis, Esq;  
 Amasa Davis, Esq;  
 Robert Davis, Esq;  
 Hon. Thomas Davis, Esq;  
 John Davis, Esq;  
 Mr. Samuel Davis, *Plymouth*,  
 Mr. William Davis, *Plymouth*,  
 Mr. Joshua Davis, jun.  
 Hon. Thomas Dawes, Esq;  
 Hon. Thomas Dawes, jun. Esq.  
 Mr. Benjamin Dearborn,  
 Elias H. Derby, Esq; *Salem*,  
 Richard Devens, Esq; *Charlestown*,  
 Mr. John Deverell,  
 Hon. Sam. Dexter, Esq; *Weston*, 2. 20.  
 Aaron Dexter, M. D.  
 Mr. Thomas Dickason,  
 Rev. Timothy Dickenson, *Holliston*,  
 William Donnison, Esq;  
 Mr. Ebenezer Dorr,  
 Mr. Samuel Dunn,

Rev. Joseph Eckley, D. D.  
 Mr. Edward Edes,  
 Samuel Eliot, Esq;  
 Mr. Eleazar Ellis,  
 Justin Ely, Esq; *Westfield*,  
 Mr. Thomas English,

Mr.



Mr. John Erving,  
Oliver Everett, Esq; *Dorchester,*

Mr. Richard Faxon,  
Mr. Nathaniel Fellows,  
John Fleet, M. D.  
Mr. Thomas Fleet,  
Dwight Foster, Esq; *Brookfield,*  
Mr. Boffenger Foster, *Cambridge,*  
Mr. William Foster  
Mr. Joseph Fofdick,  
Hon. Samuel Fowler, Esq; *Westfield,*  
Rev. James Freeman,  
Dr. Nathaniel Freeman, *Sandwich,*

Mr. Caleb Gannett, *Cambridge,*  
Rev. John Sylvester John Gardiner,  
Capt. Lemuel Gardner,  
Hon. Elbridge Gerry, Esq; *Cambridge,*  
His Honor Moses Gill, Esq; *Princeton,*  
Mr. Benjamin Goddard,  
Nathan Goodale, Esq;  
Mr. Samuel Gore,  
Stephen Gorham, Esq;  
Mr. Moses Grant,  
Mrs. Catharine Gray, 5.  
Mr. Benjamin Gray,  
Mr. William Gray,  
Edward Gray, Esq;  
Rev. Thomas Gray, *Roxbury,*  
Capt. John Gray, 3. 33.  
Mr. Joseph Green,  
Mr. Richard Green,  
Col. Peter Green,  
Mr. Thomas Green,  
Joseph Greenleaf, Esq;  
Enoch Greenleaf, Esq; *Weston,*  
Daniel Greenleaf, Esq;  
Mr. John Greenleaf,  
Mr. Thomas Greenleaf,  
David S. Greenough, Esq; *Roxbury.*

Capt. Ebenezer Hall, *Medford,*  
Mr. Nathaniel Hall,  
Joseph Hall, Esq;  
Mr. Lott Hall, *Westminster, Vermont,*  
Hon. Will. Hammett, Esq; *Nantucket,*

Capt. Abraham Hammett, *Plymouth,*  
Ebenezer Hancock, Esq;  
Mr. Thomas Hancock,  
Mr. John Hancock,  
Mr. William Harris,  
Dr. Benjamin Haskell,  
Mr. Moses M. Hayes,  
Dr. Lemuel Hayward,  
Mr. Caleb Hayward, *Weston,*  
Doctor Nathan Hayward, *Plymouth,*  
Mr. Barnabas Hedge, *Plymouth,*  
Samuel Henshaw, Esq; *No. Hampton.*  
Stephen Higginson, Esq;  
Henry Hill, Esq;  
Benjamin Hichborn, Esq;  
Mr. P. Hitchcock, *Brookfield,*  
Alexander Hodgdon, Esq;  
Hon. Samuel Holten, Esq; *Danvers,*  
Capt. Michael Homer,  
Rev. Simeon Howard, D. D.  
Mr. Nathaniel Howe, *Abington,*  
Mrs. Abigail Howard,  
Mr. John Clarke Howard,  
Mr. Samuel Hunt,  
Mr. Henry Hunter,  
Mr. Joseph Hurd, *Charlestown,*  
Mr. Zaccheus Hufsey, *Nantucket,*

Jonathan Jackson, Esq;  
Henry Jackson, Esq;  
Mr. Samuel Janes,  
Leonard Jarvis, Esq;  
Patrick Jeffrey, Esq; 10.  
Mr. John Jenks, *Salem,*  
Hon. John Coffin Jones, Esq;  
Stephen Jones Esq; *Machias,*  
Col. Israel Jones, *Adams,*  
Mr. Thomas K. Jones,  
Dr. John Joy.

Mr. John King, *Abington,*  
Rev. John Thornton Kirkland,  
Mr. Josiah Knapp,  
Mrs. Sufannah Kneeland,  
Mr. Thomas Knox.

Mr.



- Mr. William Lambert, *Roxbury*,  
 Rev. John Lathrop, D. D.  
 Mr. John Lathrop, jun.  
 Col. Silvanus Lazell, *Bridgewater*.  
 Mr. Caleb Leach, *Plymouth*,  
 Hon. Benj. Lincoln, Esq; *Hingham*,  
 Mr. William Little,  
 Dr. James Lloyd,  
 Col. John Long, *Shelburne*,  
 Mr. Caleb Loring,  
 Isaac Lothrop, Esq; *Plymouth*,  
 Mr. Joseph Lovering, jun.  
 Hon. John Lowell, Esq; *Roxbury*,  
 John Lucas, Esq;  
 Hon. S. Lyman, Esq; *Springfield*,  
 Mr. Edward McLane,  
 Mr. John McLean,  
 Mr. John Marston,  
 Jonathan Mason Esq; 3. 33.  
 Jonathan Mason, jun. Esq; *Brookline*,  
 Mr. Joseph May,  
 Rev. John Mellen, *Barnstable*,  
 Mr. Pliny Merrick, *Brookfield*,  
 Hon. George R. Minot, Esq;  
 Mr. Paul Morrissey,  
 Rev. Jedidiah Morse, D.D. *Charlestown*.  
 Rev. John Murray,  
 Hon. T. Newell, Esq; *Sturbridge*,  
 Mr. Henry Newman,  
 Col. Robert Orr, *Bridgewater*.  
 Hon. Robert T. Paine, Esq;  
 Mr. William Paine,  
 Nathaniel Paine, Esq; *Worcester*,  
 Rev. Samuel Parker, D. D.  
 Mr. John Parker,  
 Samuel Parkman, Esq;  
 Mr. Eliphalet Pearson, *Cambridge*,  
 Mr. John Peck,  
 Mr. Ebenezer Pemberton, *Billerica*,  
 Mr. Thomas H. Perkins,  
 Mr. Thomas Perkins,  
 Charles Phelps Esq; *Hadley*,  
 Hon. William Phillips, Esq;  
 Hon. Samuel Phillips, Esq; *Andover*,  
 William Phillips, jun. Esq;  
 Mr. Joshua Pico,  
 Mr. Isaac Pierce,  
 Mr. Joseph Pierce,  
 Mr. John Pipon, *Cambridge*,  
 Mr. Joseph Pope,  
 William Powell, Esq;  
 Mr. William Pratt,  
 Mr. Henry Prentiss,  
 Rev. Thomas Prentiss *Medfield*,  
 Ezekiel Price, Esq;  
 Edward Proctor, Esq;  
 William Pynchon, Esq; *Springfield*.  
 Edward Pulling, Esq; *Salem*,  
 Mr. Sampson Reed,  
 Col. Paul Revere,  
 John Rice, Esq;  
 Rev. C. Robbins, D.D. *Plymouth*,  
 Mr. Chandler Robbins, *Hallowell*,  
 Mrs. Hannah Rowe, 5 Dollars.  
 Mr. John M. Russell,  
 Mr. Daniel Russell,  
 Major Benjamin Russell,  
 Mr. Francis Sales,  
 Mr. Samuel Salisbury,  
 Dr. Erastus Sargeant, *Stockbridge*,  
 Daniel Sargeant, Esq;  
 Mr. Daniel Sergeant, jun.  
 Mr. John Saunders, jun. *Salem*,  
 William Scollay, Esq;  
 Hon. William Sever, Esq; *Kingston*,  
 William Sever, Esq; *Worcester*,  
 Hon. David Sewall, Esq; *York*.  
 Samuel Sewall, Esq; *Marblehead*,  
 Mr. William Shattuck,  
 Dr. William Sheldon, *Springfield*,  
 Hon. Wm. Shepard, Esq; *Westfield*,  
 Mr. Abel Sherman,  
 Mr. Elisha Sigourney,  
 Mr. Nathaniel Sigourney,  
 Mr. Nathaniel Skinner,  
 Mr. William Smith, Capt.



- Capt. Stephen Smith, *Machias*,  
 Abiel Smith, Esq;  
 Mr. Samuel Snelling  
 Capt. Nehemiah Somes,  
 Mr. John Soren,  
 Mr. David Spear,  
 William Spooner, M.D.  
 Mr. Andrew Spooner,  
 John Sprague Esq; *Lancaster*,  
 Mr. David Stearns, *Charlestown*,  
 Mr. Zebina Stebbins, *Springfield*,  
 William Stedman, Esq; *Lancaster*,  
 Rev. Samuel Stillman, D.D.  
 Dr. Charles Stockbridge, *Scituate*,  
 Ebenezer Storer, Esq; 2.  
 Mr. Ruffel Sturgis,  
 Hon. James Sullivan, Esq;  
 Excellency I. Sumner Esq; *Roxbury* 10.  
 Mr. Thomas Swain, *Nantucket*,  
 John Sweetser, Esq;  
 Dr. Joseph Taft, *Westown*,  
 Rev. Peter Thacher, D.D.  
 Rev. Thomas Thacher, *Dedham*,  
 Rev. Thomas C. Thacher, *Lynn*,  
 Dr. James Thacher, *Plymouth*,  
 Dr. Thomas Thaxter, *Hingham*,  
 Dr. Stephen Thayer,  
 Hon. Joshua Thomas, Esq; *Plymouth*  
 Mr. Joshua Thomas,  
 I. Tiffany, Esq; *West Stockbridge*,  
 Mr. Isaac Townsend,  
 Mr. Edward Tuckerman,  
 William Tudor, Esq;  
 Charles Vaughan, Esq;  
 John Vinall, Esq;  
 Rev. B. Wadsworth, *Danvers*,  
 Eben. Wales, Esq; *Dorchester*,  
 Mr. Ephraim Wales,  
 Col. Joseph Ward, *Newtown*,  
 A. Ward, jun, Esq; *Westown*,  
 Dr. Samuel Ware, *Conway*,  
 John Warren, M.D.  
 Henry Warren, Esq; *Plymouth*,  
 George Watson, Esq; *Plymouth*,  
 Col. Marston Waton,  
 Josiah Waters, Esq;  
 Mr. John Waters,  
 Arnold Welles, Esq;  
 Dr. Thomas Welsh,  
 Hon. Oliver Wendell, Esq;  
 Rev. Samuel West,  
 Mr. Joshua Wetherly,  
 Mr. James White,  
 Mr. Ezra Whitney,  
 Mr. Amos Whittemore,  
 Rev. J. Willard, D.D. *Cambridge*,  
 Mr. William Williams,  
 E. Williams Esq; *West-Stockbridge*,  
 Thomas Williams, jun. Esq; *Roxbu.*  
 Dr. Isaac Winflow, *Marshfield*.

## HONORARY MEMBERS.

- NATHANAEL ADAMS, Esq; *Portsmouth*.  
 Rev. ANDREW BROWN, D.D. *Halifax*.  
 JOHN BULKELEY, Esq; *Lisbon*.  
 Mr. THOMAS BULKELEY, *Lisbon*.  
 AMMI RUHAMAH CUTTER, M.D. *Portsmouth*.  
 Capt. JOHN CALEF, *St. Christophers, (West Indies.)*  
 Hon. OLIVER ELLSWORTH, *Chief Justice of the United States*.  
 Rev. JOHN ERSKINE, D.D. *Edinburg*.

ANTHONY



ANTHONY FOTHERGILL, M.D. *Bath.*  
 EDWARD GOODWIN, M. D. *Bath.*  
 Dr. WILLIAM HAWES, *London.*  
 Rev. JOHN KEMP, D.D. *Edinburg.*  
 Dr. JOHN LETTSOM, *London.*  
 Hon. JOHN LANGDON, Esq; *Portsmouth.*  
 Dr. JOHN OSBORNE, *Middletown, (Connecticut.)*  
 TIMOTHY PICKERING, Esq; *Philadelphia.*  
 Hon. JOHN PICKERING, Esq; *Portsmouth.*  
 Dr. BENJAMIN RUSH, *Philadelphia.*  
 WILLIAM RUSSELL, Esq; *Philadelphia.*  
 Right Hon. EARL of STAMFORD, *London.*  
 Hon. JAMES SHEAFE, Esq; *Portsmouth.*  
 Hon. SAMUEL TENNY, Esq; *Exeter.*



SUMMARY of the METHOD of TREATMENT to be used with  
*Persons apparently dead from drowning; as approved by the Humane*  
*Society of this Commonwealth, and published by desire of the Trustees.*

CONVEY the person to the nearest convenient house, with his head  
 raised:—Strip and dry him as quick as possible; clean the mouth and  
 nostrils from froth and mud—if a child, let him be placed between two per-  
 sons naked, in a hot bed—If an adult, lay him on a hot blanket or bed, and,  
 in cold weather, near a fire—in warm weather, the air should be freely ad-  
 mitted into the room. The body is next to be gently rubbed with warm  
 woollen cloths sprinkled with spirits, if at hand, otherwise dry: A heated  
 warming-pan may be now lightly moved over the back, properly covered  
 with a blanket—and the body, if of a child, is to be gently shook every few  
 minutes:—Whilst these means are using, one or two assistants are to be em-  
 ployed in blowing up tobacco smoke into the fundament, with the instru-  
 ment provided for the purpose, or a tobacco-pipe, if that cannot be had—  
 the bowl filled with tobacco, and properly lighted, being covered with a  
 handkerchief, or piece of linen, so as to defend the mouth of the assistant in  
 blowing: Bathe the breast with hot rum, and persist in the use of these means  
 for several hours. If no signs of life should then appear, let the body be  
 kept warm several hours longer, with hot bricks, or vessels of hot water, ap-  
 plied to the palms of the hands, and soles of the feet, and this for a longer  
 or shorter time, as the circumstances of the case may dictate.

The too customary method of rolling on a barrel, suspending by the feet,  
 and every other violent mode of agitation, particularly in removing the body  
 from the water, should be most carefully avoided.







Med Hist  
WZ  
270  
F594d  
1797  
C.1



NATIONAL  
LIBRARY OF MEDICINE