An apology for British anatomy, and an incitement to the study of morbid anatomy: being an abstract of a lecture, introductory to a course of illustrations of the morbid anatomy of the heart and aorta, delivered to the profession in the autumn of 1826 / by John Richard Farre.

#### Contributors

Farre, J. R. 1775-1862.
Thompson, H., active 1826
Lane, Richard James, 1800-1872
Academy of Minute Anatomy and Pharmaceutical Analysis (London, England)

## **Publication/Creation**

London: Academy of Minute Anatomy and Pharmaceutical Analysis, London Ophthalmic Infirmary: Published for the author by Longman, Rees, Orme, Brown, and Green, 1827.

#### **Persistent URL**

https://wellcomecollection.org/works/nng4rpnf

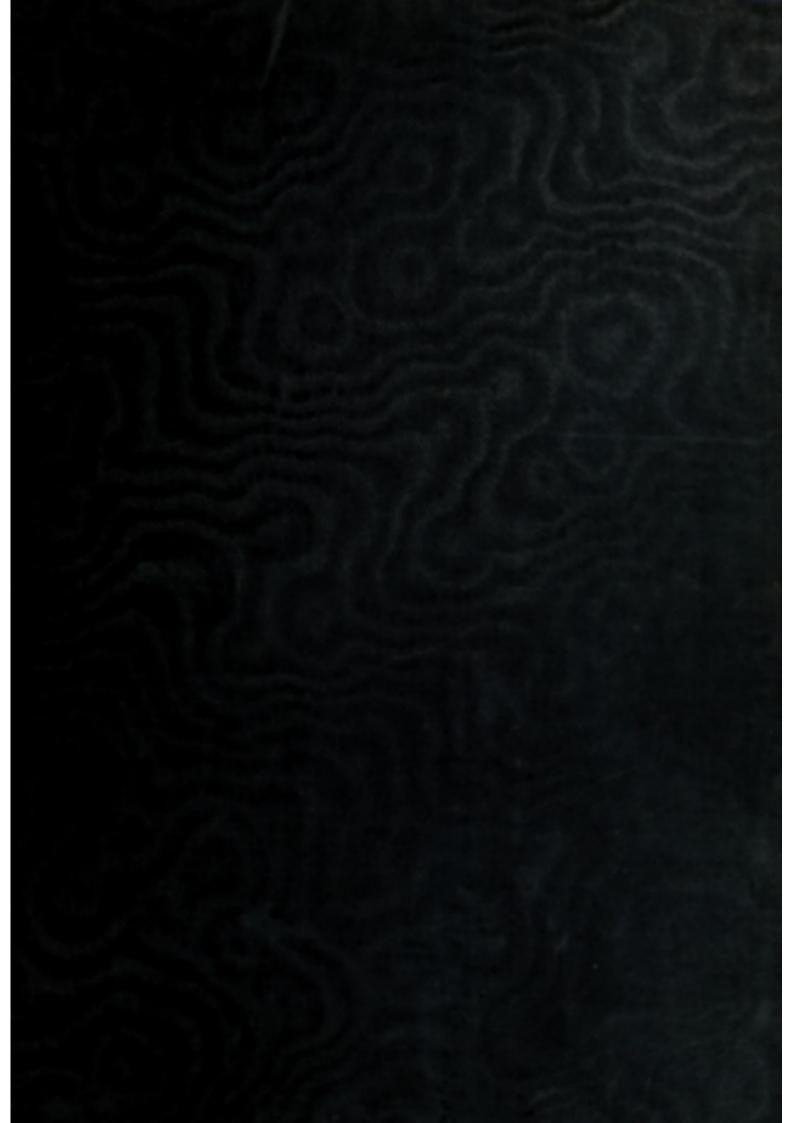
#### License and attribution

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

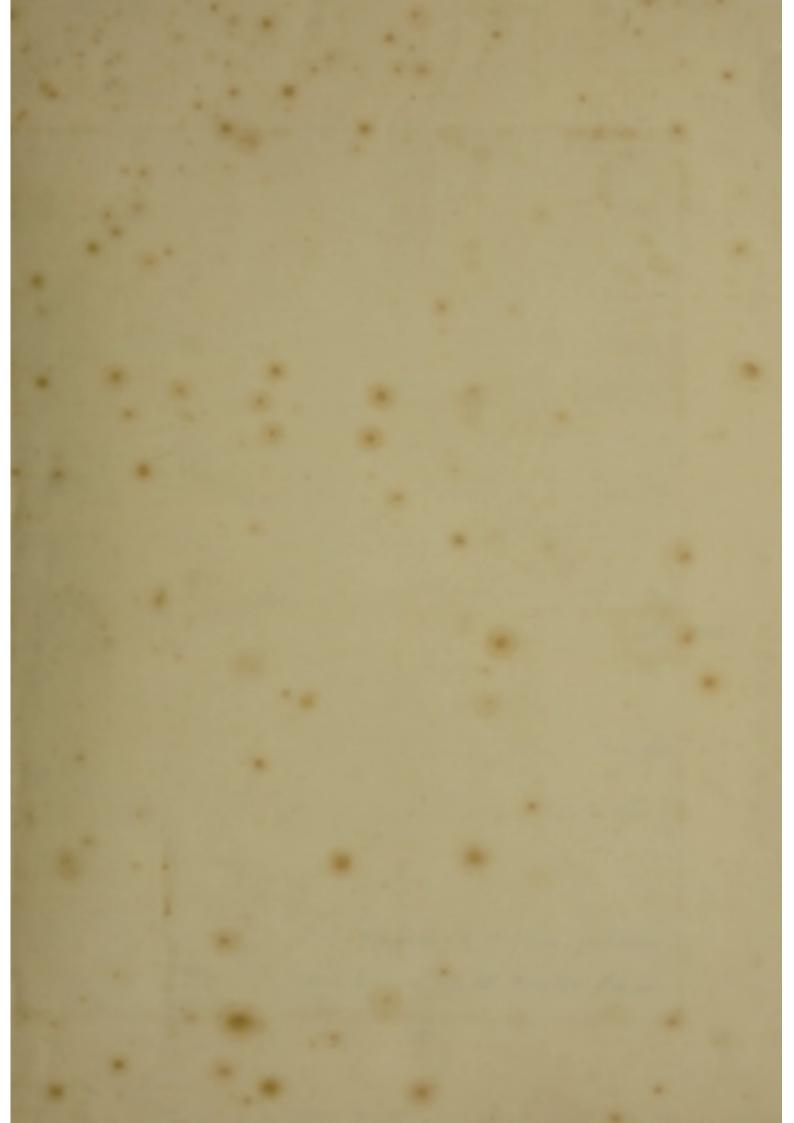
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



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

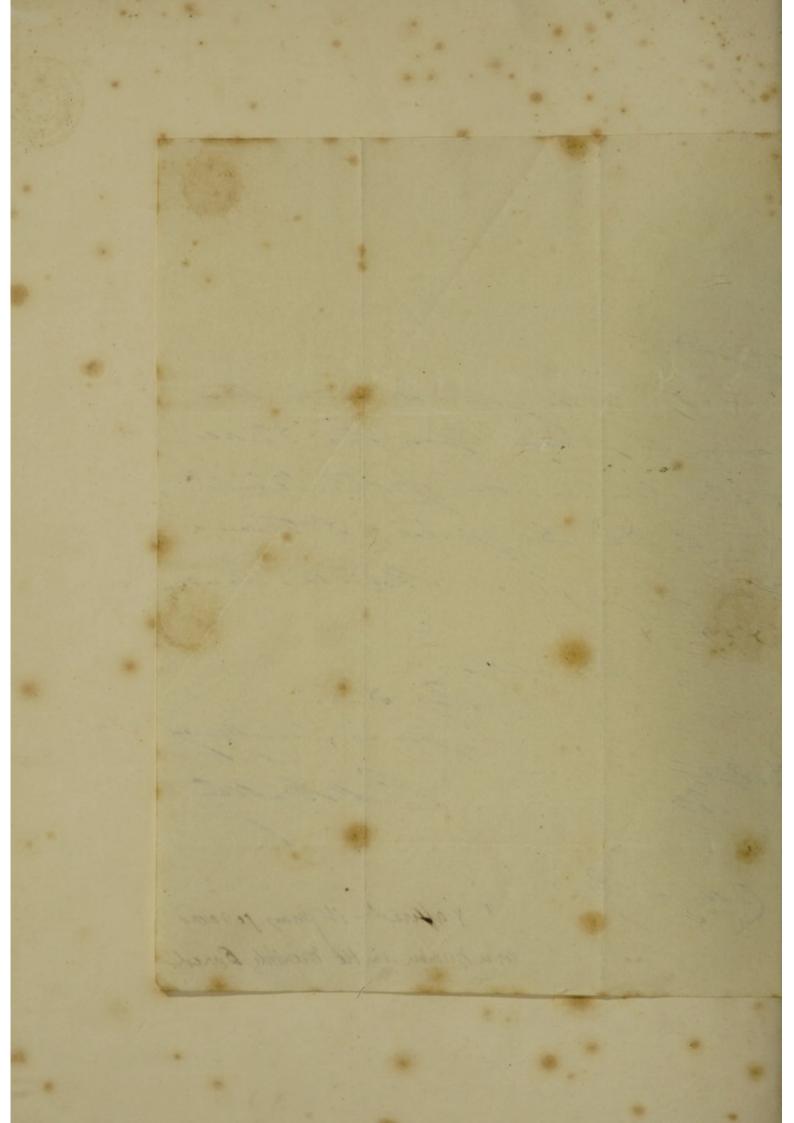


B. /.

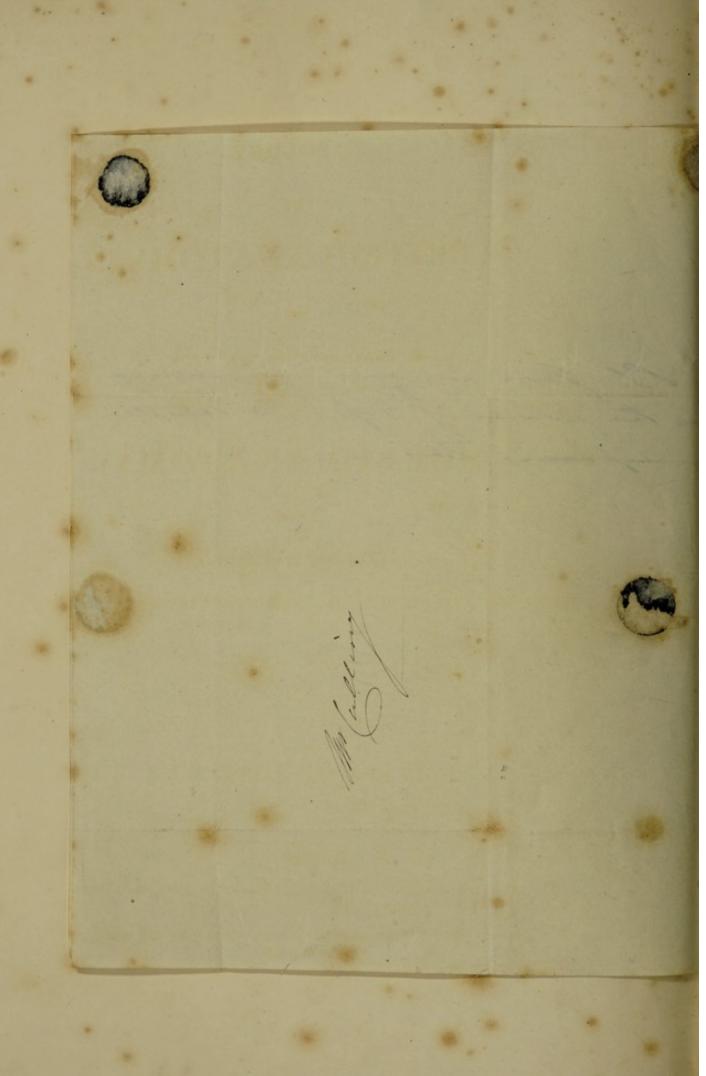




This you do have the even to folam offen the Table The law of the Minh ". Tantalo, Supilar Soffamis Intry of for Boile anong x . y - x and olly My St. good of welling Sep. Mul Ballly (May En + y affered it may so record on a humber in the menthy Dancel



the former of Soft.





## APOLOGY

FOR

## BRITISH ANATOMY,

AND

AN INCITEMENT TO THE STUDY

OF

# MORBID ANATOMY;

BEING

An Abstract of a Lecture.

INTRODUCTORY TO A COURSE OF ILLUSTRATIONS OF THE MORBID ANATOMY
OF THE HEART AND AORTA,

DELIVERED TO THE PROFESSION IN THE AUTUMN OF 1826.

BY

## JOHN RICHARD FARRE, M.D.

## London:

ACADEMY OF MINUTE ANATOMY AND PHARMACEUTICAL ANALYSIS,
LONDON OPHTHALMIC INFIRMARY.

PUBLISHED FOR THE AUTHOR BY LONGMAN, REES, ORME, BROWN, AND GREEN, PATERNOSTER-ROW.

APOLOGA

\* BHITISH ANATOMY.

THUT SET OF THE LITTER !

MORRID ANATOMY:

rimige of to mismooth ut

TOA GOA THANK SHE 2

Wellcome

ATHY MICHAEL PARRIE, M. D.

-noneM

Committee and more access

THE REPORT OF THE PROPERTY OF THE PARTY OF T

and the state of t

J. M'Creery, Tooks Court, Chancery Lane, London.

# THE PRESIDENT, VICE PRESIDENTS, TREASURER,

AND

GOVERNORS,

OF

## THE LONDON OPHTHALMIC INFIRMARY,

THIS PLAN TO IMPROVE

BRITISH MEDICO-CHIRURGICAL SCIENCE,

PROMOTED BY THEIR CONCURRENCE,

18

MOST RESPECTFULLY INSCRIBED

BY THE AUTHOR.

THE PRESIDENT,

VICE STREETS TREASURED

OVER

GOVERNORS.

413

THE LORDON OPHTHALMIC INFRIBRY.

STORTED OF MARKON

PRINCE MEDICO CHIRURGICAL SCIENCE.

Then tendent states An activities as

A 107

STORY OF STREET YOU

## ADVERTISEMENT.

The following apology for British Anatomy, and incitement to the cultivation of Morbid Anatomy, would little avail, unless a plan for promoting both, but especially the latter, easy of execution, and admitting of extensive application in all the cities and principal towns of the empire, were submitted through the Profession to the Public, and its adoption invited by the example of its utility.

The Plan was formed by Dr. Farre, in the autumn of 1825; was announced, and the Building for it commenced in the spring of 1826, and was more particularly detailed by him in a Course of Illustrations on Organic Diseases of the Heart and Aorta, which he gave to the Profession at the close of 1826. The Academy for carrying it into effect will be opened for the admission of Members and Students on the 26th of March, 1827.

## PLAN OF THE ACADEMY OF MINUTE ANATOMY,

AND

## PHARMACEUTICAL ANALYSIS.

Firstly, To cultivate the Anatomy of Structure, as contradistinguished from the Anatomy of Relative Situation, which chiefly occupies the attention of the Schools.

Secondly, To give facility to Post Mortem Examinations, for which a Demonstrator of Anatomy is provided, who will always hold himself at the service of those Medical Gentlemen who wish to encourage, but cannot command the time which is required for this pursuit.

Thirdly, To develope, by researches into Minute Morbid Anatomy, not only those organic changes which distinguish structural from functional diseases, but also to trace the peculiarities of the organization of morbid parts, which constitute the generic and specific characters in disease, and especially to observe the series of morbid appearances which occur successively in organs which are united, not only by the more obvious natural sympathies, but also by obscure morbid associations.

Fourthly, To publish, at stated periods, a Journal of Morbid Anatomy, Ophthalmic Medicine and Surgery, and Pharmaceutical Analysis, open to the Profession for the reception of communications, recorded on the responsibility of the contributors.

Fifthly, To publish, separately from the Journal, Essays on the Subjects of the Illustrations in Morbid Anatomy, occasionally given by Dr. Farre, with plain or coloured Plates, illustrating the successive changes of structure.

Sixthly, To cultivate the Fine Arts of Drawing and Modelling, as far as it is desirable that they should be connected with Minute Practical and Morbid Anatomy. Most Anatomists have felt the disadvantage of being unacquainted with these Arts, and especially those who have more particularly directed their attention to Morbid Anatomy. The difficulty of preserving Morbid Appearances, and of obtaining an Artist to perpetuate them, renders this combination of studies very desirable. His friend, Sir Astley Cooper, distinguished as much by his zeal in this as in his other professional pursuits, and himself, to insure fidelity of representation in the execution of the Plates attached to their Works, retained a Miniature Painter in their joint service for several years, and educated him to the Profession.

It is indeed highly desirable that all persons who cultivate Medicine from a love of the Science, should study Painting, as far as it is subsidiary to the primary pursuit, for an accurate Sketch is a permanent Memorandum. He intends that every Student of the Academy, over whom he may have control or influence, shall both Dissect and Sketch.

This Academy is at present an instrument in the hands of an individual; it rests with the Medical Public to make it an Institution. Regarding it in its humblest form, he will consider his labour repaid, if it produce but one British Anatomist, deserving to rank with the eminent men who have preceded him.

As an instrument of Analysis, it will not interfere with the Schools of Anatomy, and its object being the Anatomy of Structure, which is chiefly applicable to the Physiology of Health and Disease, entire Subjects will not be admitted, although the Anatomy of Relative

Position, as far as it is subservient to the primary pursuit, will not altogether be excluded. Demonstrations in a regular Series, on Select Subjects of Minute Anatomy in the Gastric or Absorbent, Cardiac, and Sexual, but more especially of the Cerebral Systems, and in particular, of the Eye, Ear, and other Senses, will be given by Mr. Dalrymple to the Pupils of the Academy, as opportunity may offer.

Pharmaceutical Analysis is blended with the pursuit of Minute Anatomy, with a view of obviating the difficulty often experienced by Medical Students of obtaining Pharmaceutical Knowledge. Many Physicians are defective in this part of their education. It is desirable that Students should have the opportunity, which they cannot now be said to possess, of gaining, by the readiest access to such Institutions, this knowledge, the importance of which to the Practitioner may be estimated, not only by the extent of its application to Medico-chirurgical Science, but also by its affording the only means of correcting, and finally putting down the adulteration to which drugs are so extensively subjected.

This part of the Academy is under the direction of Mr. Battley, whose liberal offer of erecting a Laboratory at his sole expense, for the instruction of the Students of the London Ophthalmic Infirmary, in his own Pharmaceutical Processes, made to the General Committee, shortly after the removal and permanent establishment of that Institution in 1822, deserves, in this place, particular notice and acknowledgment.

A successive Analysis of the most important Articles of the Materia Medica will be conducted by Mr. Battley, in which the greatest pains will be taken to separate their efficient principles, as nearly as possible, in the state in which they exist in the drug, without permitting them to enter into new combinations. The elementary parts thus obtained, will then be recombined, and the difference between the new compound and the original drug illustrated.

Not only will the operations of the Pharmaceutical Laboratory, but also a Museum of Materia Medica, be open to the inspection of the Profession, and the study of the Pupils. The Museum will contain the finest Specimens of Galenical and Pharmaceutical Preparations, contrasted with those of an inferior kind. The different Processes of the various Pharmacopæias will be investigated, and the best means of obtaining them pointed out.

Every facility will be given to Anatomical and Pharmaceutical Analysis, for the purposes of Medical Jurisprudence, and of countervailing the Effects of Poisons.

Due notice of the Transactions of the Academy will be given in the Journal, at stated periods, and a Diary will always be open to its Visitors and Pupils.

Contributors of perfect Cases, that is, of accurate Histories, with careful Post Mortem Examinations of all the Cavities and External Condition of the Subject, with the Morbid Specimens; or of New Articles for the Materia Medica; or of Models, Drawings, or Instruction, to increase and diffuse Medical Science by aid of the Fine Arts, will be accounted Honorary Members of the Academy.

The Academy adjoins the London Ophthalmic Infirmary, has been erected, and is supported by the Saunderian Fund, which is independent of the Funds of the Infirmary. Voluntary Contributors to this Fund, either in or out of the Profession, will be accounted Benefactors, and constitute another class of *Honorary Members*.

Students who contribute to the Fund which supports the Academy, at the moderate rate which may be known at the Infirmary, will be considered as its Pupils.

#### NOTICE OF THE INSTITUTION OF

#### AN ANNUAL SAUNDERIAN LECTURE ON OPHTHALMIC MEDICINE.

IT is intended that the First of these Lectures be given to the Profession, at The London Ophthalmic Infirmary, on Wednesday, the 28th of March, 1827, at Four o'Clock in the Afternoon, precisely, by Dr. Farre; and that the Morbid Anatomy of the Organ of Respiration be subsequently given, on Monday, the 28th of May, and on each succeeding Monday, at the same place and hour, until the subject be finished.

The Card only, of each Gentleman desirous of attending these Lectures, is required, which may be previously left at the Lecturer's House, No. 4, Charter-house Square.

## APOLOGY,

&c.\*

Great Britain has been reproached that her Medico-Chirurgical Schools have no pretensions to Anatomy; as having done little either in the way of discovery to advance it, or of practice to cultivate what had already been discovered.

A comparison of the works of Cheselden and Albinus would support this charge, and a tracing of anatomical researches, from the æra of the celebrated Vesalius, the restorer, or rather beginner, of that which deserves the name of mechanical, or as it is, perhaps, improperly called in the schools, practical anatomy, through the long and distinguished list of Italian, German, and French anatomists, to the present time, including the minor lists of other nations, would, apparently, leave the lecturer without an argument in defence.

Cheselden and Albinus are selected for comparison, because they published their respective works in the same year.

The very great superiority of Albinus is manifest on a comparison of the figures of the two, and it is, indeed, difficult to render him the praise that is due to him. But his works were properly appreciated in Great Britain at the period of their publication. London and Edinburgh editions were soon published; and, indeed, the plates of the London edition were superior to those conducted under his own eye. Every Encyclopædia was enriched with his anatomical figures; and British artists made them their study. A celebrated artist of the present day, who is distinguished for the correct anatomy of his figures, informed Dr. Farre, that he had no other master than the English edition of Albinus.

The palpable neglect of his labours at the present time is a reproach, not only to the British schools of anatomy, but also to the fine arts, and marks the decline of both. This valuable work could not recently be obtained without seeking a copy of the original, for the English edition of Albinus had ceased to be saleable. The late proprietor had even contemplated the destruction of the plates; but the enterprise of a medical bookseller has at present rescued the profession from this reproach.

How has it happened, that amidst this confessed deficiency, Great Britain, in particular, has produced the anatomists, whose discoveries, doctrine, and mode of instruction, have advanced medicine to the dignity of a science?

The answer will be found in the genius of the British nation, and in the peculiar character of its mind, which requires utility in the object of its pursuit, brevity in expressing it, and energy in applying it to useful purposes. Utility perpetually engrosses it, to the exclusion of that misplaced patience, which would for ever mechanically trace the filament of a nerve, or the ramification of an artery. British anatomy is, therefore, physiological. The cui bono is perpetually asked in every object of pursuit; and that which is not useful is not pursued.

Harvey may be given as an illustrious example of the British mind. His energy was finely displayed by the manner in which he pressed forward to the mark, and grappled with his subject; by the brevity of his discourse; the conviction resulting from his demonstrations, and the most important discovery of the circulation of the blood, which he fully proved by his experiments. His aversion to the *Novum Organum* of Bacon, well styled, by a late eminent modern lecturer and writer, the noblest present that philosophy ever received; his error respecting the termination of the arteries, and his consequent ignorance of the changes going on in the capillary circulation, rendered his great discovery very imperfectly applicable to the physiology of

<sup>\*</sup> This abstract, in which the former subject is now further condensed, and the latter somewhat expanded, has been published partly from notes of the lecture taken by Dr. Chapman, a pupil of the Infirmary, and a very intelligent physician.

disease, for about one hundred and forty-five years, from 1628, the most celebrated æra in the history of medicine.

The progressive anatomy of the foreign schools, conducted during that period by men rendered eminent by their successive discoveries of the lacteals, thoracic duct, lymphatics, red globules of the blood, termination of arteries, glandular structures, art of injecting, &c., facilitated the discovery of those changes which take place at the extremities of arteries in proportion to the loss of balance, and inequalities of the circulation, which constitute the basis of pathological science, and will for ever distinguish the name of John Hunter.

As a tribute to the Hunterian School, the illustrious Baillie may be selected as the finest medical example of the excellence of its doctrine; and the best model that can be held up to the young physician for his pursuit of pathological anatomy.

The words of the eminent founder of that celebrated school, Dr. William Hunter, himself no mean contributor to practical anatomy, seemed to point out to his nephew and pupil the line of study by which he should distinguish himself, and serve his profession. "Were I to guess," says Dr. Hunter, "at the more probable future improvements in physic, I should say, that they would arise from a more general, and more accurate examination of diseases after death. And were I to place a man of proper talents in the most direct road of becoming truly great in his profession, I would chuse a good practical anatomist, and put him into a large hospital to attend the sick, and dissect the dead."

The offer of carrying into effect the plan of a theatre, museum, &c., for the improvement of anatomy, surgery, and physic, proposed by Dr. Hunter, was the most liberal that was ever made by a private individual to the British public, through the medium of its executive power; and its rejection the most serious loss that British anatomy, and consequently medico-chirurgical science ever sustained. Dr. Hunter himself predicted that the neglect of his proposal would cause the decline of anatomy in Britain.

Before his time, anatomy had been but little cultivated in London, and scarcely at all in any other part of the kingdom. He feared, that unless some permanent institution, under the fostering care of the government, was established for the cultivation of this science, it would again speedily decline into its former state. He thought this pursuit required the immediate protection of government, because it is opposed by the natural and religious feelings of the public: this protection being afforded to the anatomical student in other countries, where there is also no difficulty in obtaining the necessary subjects for investigation.

Dr. Hunter proposed to give lectures himself, during his life, at the Royal Institution, the establishment of which he recommended; and, to perpetuate a succession of public teachers of anatomy after him, he offered to expend seven thousand pounds, and to give his museum, his time, and personal labour.

It is to be regretted that he did not act independently. The sum which he offered to advance would have accomplished more than was wanted.

Glasgow now enjoys the benefit of his museum; but all the other advantages of his proposal are lost.

In recording the refusal on the part of the government to carry Dr. Hunter's plan into effect, the language of censure must not too hastily be used. A free government necessarily respects public opinion; and the public feeling being adverse to anatomical pursuits, the government cannot encourage them.

In lamenting, for the sake of the living, the obstacles which are put in the way of practical anatomy, by a popular feeling, which yet does honour to the nation, it is to be confessed, that lukewarmness in morbid anatomy is not to be excused by this plea. The impediment to its progress does not here rest with the public, but with the profession. All persons, who have had opportunities of judging of the fact, are aware, that little or no opposition is made to the post-mortem investigation of disease, by the friends of the deceased. All private and personal feelings are sacrificed to a noble sense of the public good.

In consequence of the difficulty of obtaining a sufficient supply of subjects for the schools in this metropolis, an undue preference has been given to those of France. Hundreds of British students resort annually to Paris. It is true, that while the difficulty has increased in England in the last twenty years, there is every facility afforded to the anatomical student in France.

But the difference is not so great, as to warrant the desertion of the British schools, for if the difficulty of obtaining subjects be so great in London, as to make it necessary that some students should go elsewhere to acquire a knowledge of practical anatomy, let them study at Dublin, for that city affords great facilities, and is an excellent school of anatomy.

It is necessary to give the student a caution on the subject of the morbid anatomy of the French School. Their writers confuse the subject by a verbose and inflated style, which is very seductive to young minds. The sound writers among the English use, in their descriptions, the fewest words possible. Harvey and Baillie may be cited as examples of brief and

simple perspicuity.

The practical bearing of morbid anatomy upon the cultivation of medicine as a science, cannot be better illustrated than by giving the pathology of the heart, in particular, as an example of its successful application. If the æra so distinguished by the labours of a Cullen be referred to as a standard of all that nosology, unassisted by morbid anatomy, could do for the profession, and the best of that celebrated physician's works, his Synopsis Nosologiæ Methodicæ, be taken as the proof of what his learned predecessors and himself had actually contributed to the common stock of knowledge, on the difficult and most important subject of cardiac disease, their own admissions require the application of the words of Cullen himself, to all that they had written respecting it: "Distinctionem morborum aliquando difficilem esse, fatentur omnes; possibilem autem in plerisque esse, fateri etiam oportet; nam si quis hoc negaverit, idem fecerit, ac si nullam esse artem medicam dixisset." How utterly the possibility of the diagnosis was overlooked, and the negation of all medical science, in respect of the diseases of the heart, was admitted by them, will be evident from the following remarks. Cullen, in the last edition of his First Lines, which he published in 1783, disposed of the most important of all diseases, viz. those of the heart, in the space of something less than two short pages, and merged all that he had to say on that subject into the very distinct and distinguishable disease of pneumonia. Thus this great physician confirmed the errors of Vogel and his predecessors, in his First Lines, as well as in his Synopsis; from the latter of which, as being more briefly expressed, the following note may be extracted: "Rectè omnino dixit Vogelius, carditidis symptomata ferè eadem esse ut in peripneumoniá, sed graviora; ut ita etiam sensisse videtur Linnæus, cum apud illum neque Carditis, neque Pericarditis, inter morbos phlogisticos recensetur. Certè novimus pericardium sæpe inflammatum fuisse sine aliis præter peripneumoniæ signis."

After a lapse of only fourteen years, Baillie took up the subject, in the legitimate mode of investigating it, restored Pericarditis to its place, and presented the profession with its anatomical character, affording us one of the finest specimens of the physiology of disease on record. He superadded the symptoms, which will be examined in the subsequent illustrations of cardiac disease with becoming freedom, and erred chiefly in not marking with sufficient accuracy those which are diagnostic of pericarditis and carditis, derived from their distinct textures and functions. But further observations on the basis of morbid anatomy, contributed both by the British and foreign schools of medicine, in the last thirty years, have so advanced this study, that it has become possible, not only to distinguish carditis from pericarditis, but even the extension of the former to the valvular apparatus of the heart, and to the mouths of its ventricles and arteries. And it may be confidently expected, ere long, from the united efforts of the profession, directed by the light of accurate histories and careful post-mortem examinations, that the pathology of the heart will be made as accessible to the student as that of any other viscus.

In addressing himself, by way of conclusion, to the junior members of the Profession, the Lecturer would earnestly press on their attention still more general views of the extensive application of Morbid Anatomy to Medicine and Surgery. He would remind them that the grand division of disease, into structural and functional, can only be demonstratively obtained in the former, by the aid of Anatomy; and that even in the latter, notwithstanding the superficial situation of the organs, it is only in a few of them, and under favourable circumstances, that the generic or specific characters of the disease can be permanently established without it.

That they exceedingly undervalue its services, when they limit them to a sepulchretum, or mere depositary of the ultimate and immutable forms of structural disease, which are hopeless either to the curative or palliative powers of medicine, and inseparable from death: that Morbid Anatomy, for the legitimate purposes of Medical Science, is to be viewed as a retracing

of organic changes, from the final to the most incipient alterations of structure; for being warned, by the inevitable destruction resulting from the disorganization of parts essential to human life, students should seek with avidity, not only the symptoms which mark the first transition from disordered function into diseased structure, but also the means which can avert, while there is opportunity, the impending fatal change.

That they must early learn to submit to many a humiliating lesson, in correcting their opinions by this light; not sparing their feelings, in order that they may improve their judgment; but, that they may not unintentionally deceive both themselves and their brethren, it is essential, that an extensive acquaintance with Practical Anatomy be made their introduction to this important study, since the natural structure of organs affords the only standard of comparison with that which is morbid.

That Nosology cannot be perfected without, first, an attention to the anatomical character of diseases of structure, sufficiently strict to exclude the false genera and species, which are often, in truth, but varieties in seat and degree, of one genus, of which the present classification of inflammation affords abundant proof; and, secondly, a diligent comparison of the morbid appearances with the symptoms, and a careful separation of those which are diagnostic from those which are anomalous.

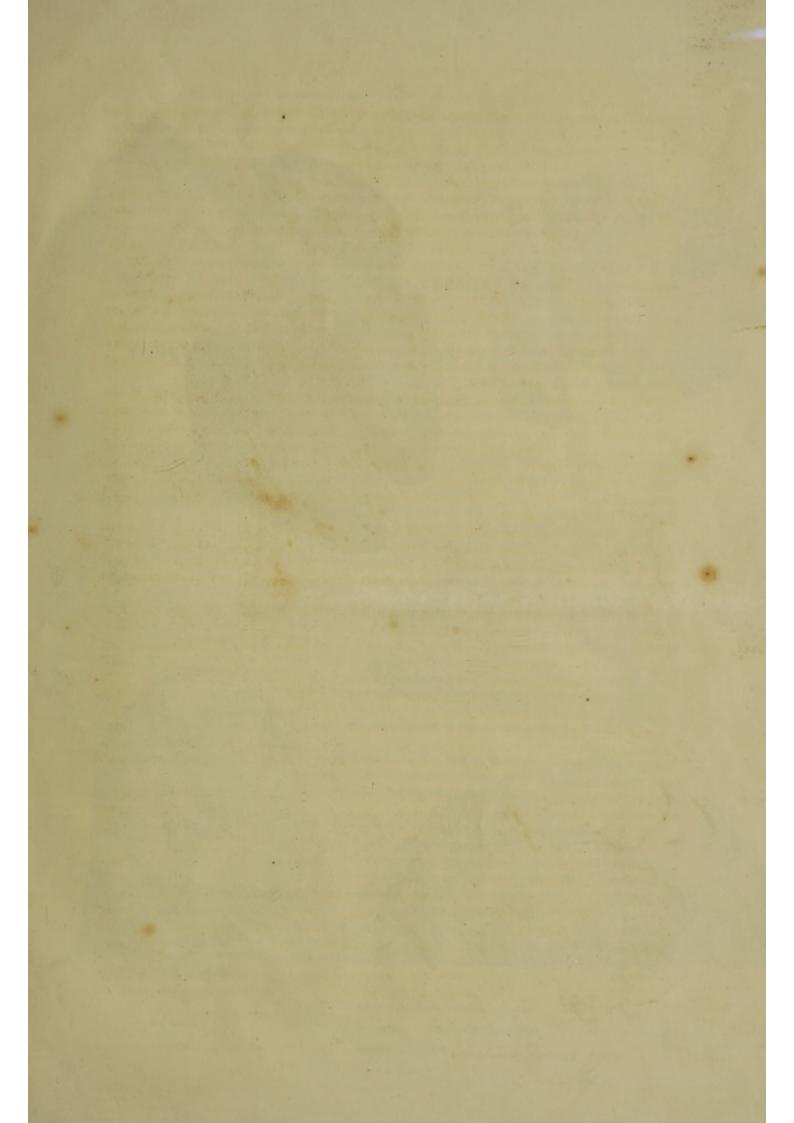
That disease, being a process consisting of certain morbid actions, of which each has its corresponding change at the extremities of the exhalent arteries affected by it, the means which control one stage are not applicable to another: Thus, the remedies which are adapted to serous and hemorrhagic inflammation, are not vigorous enough to arrest the effusion of coagulable lymph, and its subsequent organization; the active remedies indicated in the adhesive are dangerous in the suppurative, and fatal in the gangrenous inflammation. In proportion then as the diagnosis, not merely of the disease, but also of its several stages, is perfect, so will be the treatment.

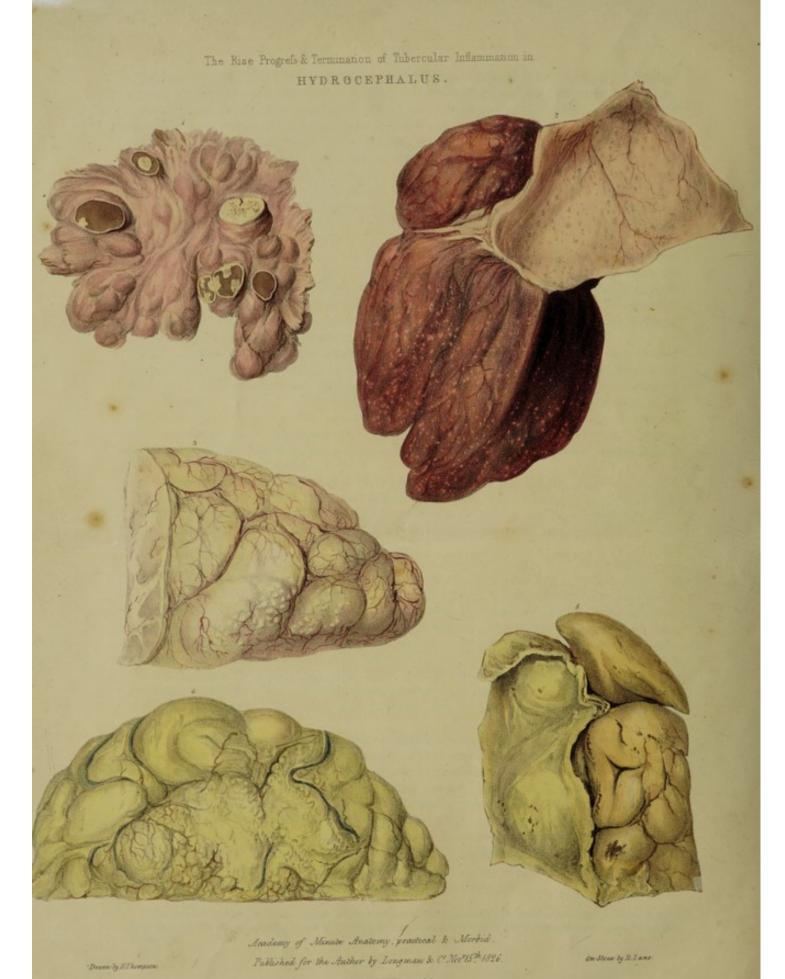
That whilst the manual department of the Profession distinguishes the Surgeon from the Physician, Pathology unites them, the science being one; and, consequently, by a careful record of the morbid changes which take place in the respective organs submitted to their management, each will enlighten the department of the other, and thus contribute to the perfection of the whole.\*

Thus it may be made to appear, that not only the ultimate change of structure, which destroyed life, but even the previous successive organic changes, including the stages of inflammation up to the primary depositions of coagulable lymph, which converted functional into organic disease, may, most distinctly, be demonstrated by the aid of Morbid Anatomy; nay, more, that not only the disorganization of a single texture, constituting an example of simple organic disease, may satisfactorily be traced, and the case fully made out; but the disorganization of a series of textures, affording the most striking illustration of constitutional organic disease that can be given, may, with equal facility, be demonstrated; so that the young Physician may retire from the inquiry with the deepest conviction on his mind, that that which had been called the disease, was, in reality, but the last link of a very extended chain of morbid affections.

These considerations have induced him to annex a plate, illustrative of the great utility of this extended application of Morbid Anatomy, which opens up a large field of inquiry, as it regards chronic inflammation, and constitutional organic diseases, including tumors, properly so called. It is his intention during the ensuing summer, if permitted, to submit to the attention of the Profession, such observations as he has been enabled to make on these subjects; and also to offer some reflections on the opposite effects of different climates upon certain textures, and especially upon the mucous surfaces, involving questions of no mean importance, viz. Medical Views of Emigration, in respect to Individuals and Families predisposed to, or suffering under the incipient Forms of Affections, resulting from Climate, which are unhappily too frequent, and necessarily fatal, unless thus arrested.

<sup>\*</sup> The two last paragraphs, somewhat altered, formed part of a Prospectus of a Course of Lectures, intended to have been given by Dr. Farre, in 1812, in which the Surgical Department would have been ably sustained by his friend Mr. Travers.





## RISE, PROGRESS, AND TERMINATION,

OF

## TUBERCULAR INFLAMMATION IN HYDROCEPHALUS.

The present object of annexing this plate is, neither to compare the anatomical character with the symptoms and appropriate treatment of one of the most frequent forms of Hydrocephalus, nor to illustrate the nature of tubercular inflammation, (for to both of these important applications of morbid anatomy, a more ample consideration is intended to be given than the present occasion can admit) but simply to demonstrate the extensive utility of this mode of research by developing a series of organic changes, which commenced in the mesenteric glands, extended to the lungs and their investing membranes, and terminated in the pia mater and brain.

Figures one, two, and three, were painted from recent preparations, taken from a child who died of hydrocephalus, about the period at which the process of dentition was completed.

- Fig. 1, Represents the rise and progress of Tabes Mesenterica. Sections of several of the mesenteric glands show the manner in which they are disorganized by the successive formation of tubercles, and the extension of tubercular inflammation.
- Fig. 2, Represents the most incipient form of Phthisis Pulmonalis. The passive congestion of the lung, and the very minute depositions of coagulable lymph, constituting tubercles as yet unorganized, show the extension of the morbid process to this vital organ and its pleura, but still in contrast with the much more advanced stage of the disease in the mesenteric glands in which it commenced.
- Fig. 3, Represents Tubercles on a portion of the Pia Mater, scarcely, if at all, larger than in fig. 2; but yet sufficiently advanced to excite serous effusion into the ventricles of the brain, and consequent death by hydrocephalus, before either the tabes or phthisis could prove fatal.
- Fig. 4, Represents a Section of the Brain of a Child, a year or two older than the last, who also died of hydrocephalus from tubercular inflammation. The tubercles were further advanced than in fig. 3, and the stage of their organization had commenced. A higher action is manifested by the considerable effusion of coagulable lymph between the pia mater and tunica-arachnoidea, which partially obscured the turgid veins of the former membrane. A blow on the head had preceded the hydrocephalus in this case; but the strumous tubercles around the margin of the lymph determined the source of the disease; for in fig. 5, taken from a young adult who suffered phrenitis in consequence of an injury of the head, coagulable lymph was deposited on the pia mater, in such quantities, as to form an adventitious membrane; but no tubercles were produced.

## CHRONIC HYDROCEPHALUS.

The pathology of this subject will be treated in conjunction with the former, in its proper place. Fig. 1, conformable to the preceding prefatory matter, is intended to represent a further application of painting to the expression of disease, from which experienced practitioners often form both their diagnosis and prognosis. The outward expression affords a certain uniformity in the present example; but in the acute form of hydrocephalus, it varies in every stage of the disease, and contributes to distinguish each from the other.

Fig. 2, is intended to represent the unfolding of the natural structure of the brain, by the equal and gradually increasing pressure from the serous effusion within the ventricles, in a manner which art could not effect, and thus morbid anatomy, besides its proper application to the pathology, may be made subservient even to the physiology of this important organ. The section was carried nearly through the centre of the cerebrum, cerebellum, and medulla oblongata, so as to preserve a good lateral view of the enormous expansion of one of the lateral ventricles, the complete unfolding of the convolutions of the brain, and the extreme tenuity of the medullary membrane. The yielding of the texture of the brain, just under figure 2, has been the effect of long maceration in alcohol, and not of the disease. The painting was made by the late Mr. H. Thompson, from the wet preparation, which, when recent, was taken from an infant fifteen months old. 1, is a reduced figure from an original painting by the same artist, of the natural size, taken from a living subject, somewhat older. The figures in both plates have been drawn on stone with the greatest fidelity, under the direction of Mr. Lane, who has advanced lithographic drawings to such perfection, as already to embrace almost every purpose which either practical or morbid anatomy can require.

Chronic Hydrocephalus.

# Summer des on time of History of Minute Strate my practical & Merked Path for the Author by Longman & C. Nov. 75 th 1876. mand by Chelmonia









