

GIOVANNI BATTISTA MORGAGNI.

(A.D. 1682-1771.)

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We cannot hope within the compass of this short sketch to do adequate justice to the great name which appears at the head of this page. The great work of Morgagni, by virtue of which he is entitled to a place in the very front rank of founders of modern medicine, is not one to be lightly handled, and a mere summary of its plan and the subjects treated therein might well occupy the paper between the covers of a small volume. He remains almost without challenge and without rival the founder of modern pathological anatomy. His intellectual ancestry and posterity are alike illustrious. On the one hand a pupil of Valsalva, who himself sat at the feet of Malpighi, on the other the preceptor of Scarpa and Caldani, he forms one of a galaxy of brilliant minds such as history not unfrequently acquaints us with in times of great mental activity.

BIOGRAPHICAL SKETCH.

Morgagni was born at Foroli, then an important town near Bologna, February 25, 1682. At the age of 18 he went to Bologna to study philosophy and medicine, and in 1701 he graduated with high honors in both faculties. He became

Prosector in Anatomy to Valsalva, and on the latter's transference to Parma, succeeded him as Demonstrator of Anatomy. His references to Valsalva in his works are very numerous, and his reverence and esteem for that great man profound. He subsequently edited the anatomical writings of Valsalva, supplementing them by observations of his own and adding a memoir of the life of Valsalva. To this work he refers in the preface of the "De Sedibus." His first notable work, however, was the "Adversaria Anatomica" in 1706, being the substance of his communications to the Academia Inquietorum of Bologna, of which body he became president when only in his 24th year. After a time he resigned his demonstratorship and pursued anatomical studies and investigations at Padua and Venier for the space of two or three years. He then settled in practice in his native town, Foroli, and it is stated became at once a successful practitioner. This practical part of his profession, however, soon palled upon him, nor did he pursue it for more than three years, after which he in 1720 succeeded to the chair of Theoretical Medicine in the University of Padua, being now in his 31st year. Thus began a long and uninterrupted academic career at Padua, for here he taught until his death, sixty years later. After holding the above-named post three years, he was promoted by the Venetian Senate to the Chair of Anatomy, a chair become famous by a long line of illustrious occupants, among whom were Vesalius, Fallopius, Gasserius and Spigelius. Shortly after coming to Padua he married a lady of his native town, of noble birth. He had a numerous progeny, who, however, would seem to have done nothing of note except in many instances to pre-decease him.

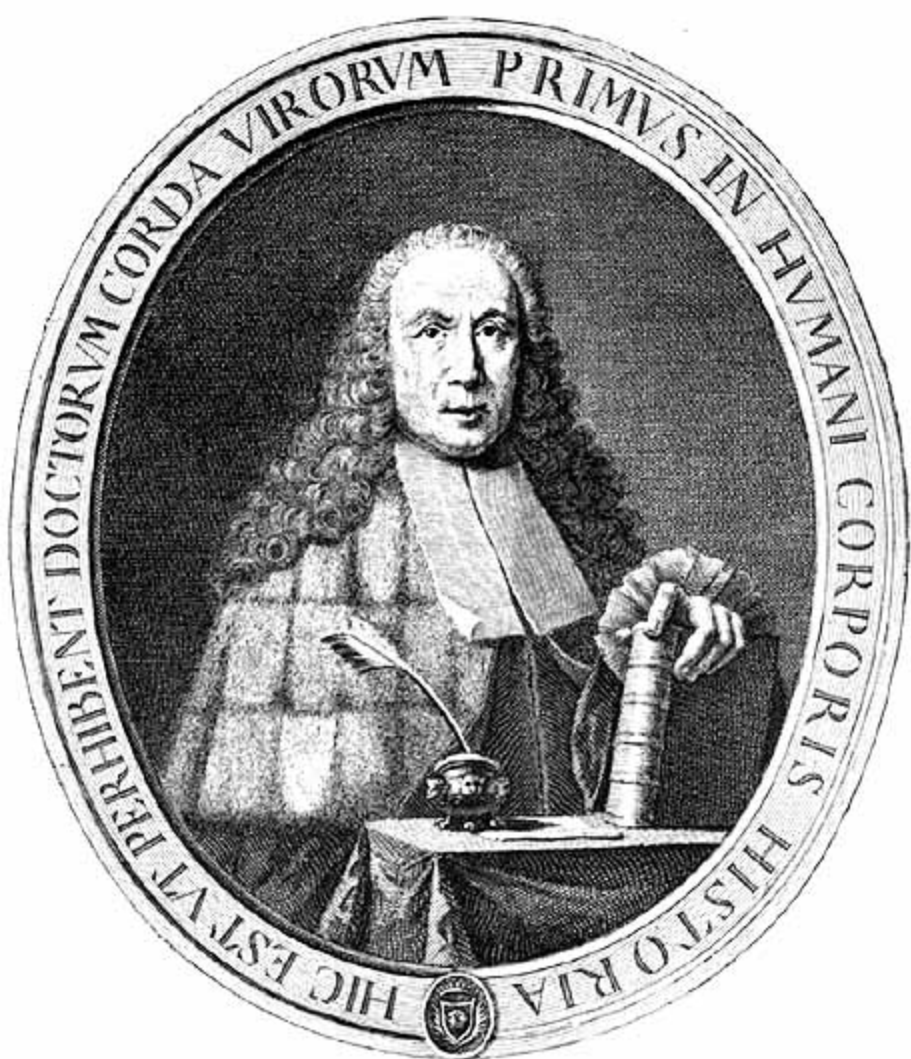
Morgagni was exceedingly popular both as a teacher and as a man, and though we are told that the salary granted him for his professional work was unprecedented in its liberality, no envy or jealousy appears to have been aroused in the breasts of his colleagues. Tall, fair, of a dignified carriage, yet withal of frank, open, and joyous expression, of polished manners, and of a scholarship by no means confined to his profession, he was a favorite both with the powerful and great of his time and with the humblest among his students. Of the latter the best known is Scarpa, who died comparatively recently (1832). Besides the anatomical publications mentioned above, there flowed from his versatile pen many literary and antiquarian treatises embodying the results of much research. But all these are now comparatively forgotten, and it was not until 1761, when he was in his

80th year, that he gave to the world his famous "De Sedibus, et Causis Morborum per Anatomen Indagatis." This is his monument. Long as it is, it was reprinted several times before his death, at one period as many as three times in four years. He died on December 6, 1771, at the ripe age of 90 years.* In the edition of the "De Sedibus" before us, is a portrait of Morgagni in his wig and official robes (see Plate 13), which agrees well with the personal description already given, and around it is a Latin inscription: "Hic est ut perhibent doctorum corda virorum primus in humani corporis historia."

THE ORIGIN AND OBJECTS OF THE "DE SEDIBUS."

Morgagni's monumental work on the "Seats and Causes of Diseases investigated by Anatomy," was, he tells us in his preface, inspired by the perusal of an early attempt to systematise morbid anatomy, the "Sepulchretum" of Theophilus Bonetus, which was first published three years before the birth of Morgagni. Useful as this book undoubtedly was, its value was marred according to our author by various inaccuracies, the most serious of which was the frequent mistaking of natural appearances for morbid states. The absence also of good indexes whereby its contents might be conveniently utilized, was an omission acutely felt. There were also much uncritical quotation of authority, undigested excerpts from authors ancient and modern, many notable omissions and not a few needless repetitions. Morgagni had long meditated a work on stricter lines, and at length the stimulus furnished by the friendship of a person whom he does not name, but whose pursuits were congenial with his own, induced him to make an attempt in that direction. This took the form of a series of "Letters" written at the request of his friend and addressed to him, which ultimately reached the number of seventy. These he was eventually induced to publish *in extenso*, and they form the substance of the work before us. He divided up his treatise into five books, choosing the number and arrangement, as he informs us, both to conform to the order of the "Sepulchretum" and that he might severally dedicate them to the five learned Academies of which he was a member, and to each book is prefixed a prefatory letter inscribed to a representative member of one or another of these bodies. He does not

*For most of the biographical details we are indebted to the excellent article "Morgagni" in the *Encyclopædia Britannica*, but for nothing else.



claim to have included every observation then made, being unfamiliar with some of the languages in which they were reported, and like a cautious man he "did not choose to put great confidence in any interpreters, especially in affairs of this kind." He, however, produced a large number of observations never before published, for a great number of which he acknowledges his indebtedness to Valsalva and other of his friends, "but," he adds, "the greater part are mine."

THE WORK ITSELF.

We have on our desk the second edition, being two vols. bound under one cover, revised by Morgagni himself. This is a large though not unwieldy folio, of date of publication 1765, containing as a frontispiece, an engraving of the author. The title page is too long to be quoted in full, but the following extract indicates the scope and purpose of the work: "Jo. Baptistæ Morgagni, . . . De Sedibus et Causis Morborum per Anatomicen Indagatis Libri Quinque. Multiplex Præfixus est Index rerum, et nominum accuratissimus. . . Tomus Primus duos priores continens Libros. Editio Secunda ab auctore recognita, atque a mendis omnibus expurgata. Patavii MDCCLXV." The work is preceded by a laudatory inscription to the "Illustrissimus atque excellentissimus viris Angelo Contareno. . . Paulo Rainerio Francisco II. Mauroceno." A special feature and one upon which Morgagni laid great stress, is the series of four carefully prepared indexes, of which the first is a general contents list, giving the subject matters of the five books: "Argumenta ex ordine ostendens totius operis." The second is an index of disease symptoms, causes and other matters appertaining thereto. The third gives the appearances found in the cadaver internal and external: "Index Visorum in Cadaveribus." The fourth index is of names and things worthy of note: "Index Nominum et Rerum Notabilium," and is the longest and most copious, being a carefully compiled list for general reference.

We also found in the College Library an English translation by Benjamin Alexander, M.D., in three vols. quarto (1769), whereupon the present writer did "seriously rejoyce and triumph," for the translation of these volumes is a task scarcely to be performed "on one leg," to quote Sir Thomas Browne. The subjects of the five books are, Book I.: "Of Disorders of the Head." Book II.: "Of Disorders of the Thorax." Book III.: "Of Disorders of the Belly." Book IV.: "Of Chirurgical and Universal

Disorders." Book V. consists of Addenda: "De addendis ad singulos quatuor Libros superiores." The work runs to a very great length, but it is scarcely to be expected that the life-work of such a man would admit of compression between the covers of an ordinary manual. It is impossible, however, in places to absolve him from the charge of diffuseness, and now and again the length of his parentheses exhausts the attention before it can be concentrated upon his main argument. This, however, was the common fault of the learned in that age.

This great collection of autopsies exerts upon one a peculiar fascination. Morgagni's book is, as it were, the key which opens for us the doors of a great charnel-house. Here the reverend entrails of a bishop, there the illustrious aneurism of a marquis, there again in close proximity the anatomised remains of highwaymen, malefactors, priests, thieves, merchants, nuns—all add their quota to explain the "Seats and Causes of Diseases." Melancholy, however, as is his theme, Morgagni is by no means destitute of a keen sense of the incongruous, and his pages abound in caustic sallies directed against the empiricism of his time, and in shrewd remarks and aphorisms, not yet out of date, and still worthy to be borne in mind. Of such a nature is his complaint that many physicians kill their patients "because they do not know when to be quiet."* What a delicate irony, too, is conveyed in his mention of one John Baptist Molinari, who, he says, "besides being physician to a most potent monarch, the King of France, is a very great man!" Of one illustrious patient he tells us: "He was attended, out of regard to the dignity of the patient, by three physicians, who were thought to be the most skilful of that time, and without doubt were so, or at least they were the oldest!" And these "applied remedies in great number and variety, and for a long time together." The sick man had evidently "suffered much from many physicians." He deems worthy of special note the ingenuousness of one physician who admitted to him in consultation, that the patient had been made worse by his treatment. A most diverting account is given in another place, of the ratiocinative gymnastics often indulged in at contemporary consultations. He seems, however, to have been most careful of the feelings of his brother practitioners, and so modest is he, that it is often by inference rather than by direct statement that we are enabled to judge that to him belonged the correct diagnosis in many an obscure case in which he was asked to give his opinion.

*Letter xx., Section 23.

Morgagni's industry strikes the reader as prodigious. The entire stream of pathological anatomy appears to have flowed through him freshened and enriched by his own tremendous additions. At the foot of every page are numberless references to the already copious literature, and the English reader is gratified by his constant citations of, and the full justice done to, such men as Harvey, Willis and others of our great countrymen. The modern medical student of pure anatomy tracks our author's scalpel in the sinus of Morgagni and the hydatid of Morgagni, the pathologist turns with interest to the rich and varied stores of information in the "De Sedibus." He reports some of the earliest cases of fibrinous bronchitis, and gives an admirable description of some of the casts which he had himself seen.* He noted the bad prognosis in cases of phthisis, where concretions are expectorated, though with his usual candor he gives a prominent place to the exceptions.† His description of the hepatised lung in pneumonia might stand even now without alteration.‡ In the sections upon dropsy of the thorax and pericardium one is struck by the observant shrewdness of these mediæval anatomists, who without the aid of percussion or auscultation, assisted only by the eye and a perceptive brain, were often enabled to make a correct diagnosis in cases where we have even now to employ every known method. He lays stress in another place upon the necessity for a "cautious delay" in giving an opinion, before doing which it is necessary to consider "not only the symptoms that are present, but those that are absent also." The gynecologist will note a partially successful case of *post-mortem* Cæsarean section performed within half-an-hour of the death of the mother, in which a living fetus was extracted, which by inference from the passages referring to the mother's pregnancy, could scarcely have been more than a five months' one.§ Yet it is not on isolated discoveries and contributed facts that the fame of Morgagni chiefly rests—others have obtained results far more striking. We doubt even, as the result of perusal of a great part of the "De Sedibus," whether his was that superlative quality of mind that wrests great generalisations from collections of facts. It is not upon these grounds that his title to immortality rests. His great service to morbid anatomy, and through this to general medicine, consisted in the

*Letter xxi., Sect. 20.

†Letter xv., 22.

‡Letter vi., 12-13, and xxi., 20; also xxi., 28.

§Letter xvi., 38.

impetus which he gave to the scientific study of the relations between the living and the *post-mortem* aspects of disease by his splendid systematisation of a myriad of isolated facts and discoveries; an impulse the impetus of which the practitioner of to-day even now feels, though he may not know it. It was largely the work of Morgagni which made possible a rational view of disease. It paved the way for a new era of accurate and truthful work founded upon verifiable fact rather than upon elusive speculation and indiscriminate citation of authority.

Morgagni's method reminds the reader of that adopted by Willis, to which we have referred in a previous paper, though the latter did not write a systematic treatise upon morbid anatomy. In, we believe, nearly every case (except one or two where Morgagni has had to accept second-hand observations), a most careful and minute history of the patient's illness, together with any antecedent circumstances likely to have a bearing upon it, are first set down.* Nor do his enquiries end here. He expressly enjoins the advisability of enquiring into the family health. Then, the case proving fatal, a most careful and systematic *post mortem* is made, and the explanation of every symptom and sign observed during life is sought for in the appearances of the organs after death. This is of course often impossible, but an attempt is always made. But even though the symptoms point clearly to the involvement of a definite organ, a complete autopsy is his almost invariable rule, though we note one case where the head was not opened because there were during life no symptoms referable to disorder there. Lastly, his own results are compared with those of other workers, a comparison which, from his extensive reading, he was eminently fitted to make.

We conclude this brief and necessarily inadequate account of Morgagni's great contribution to scientific medicine by the citation of a few passages which exemplify either his accuracy in observation or his soundness of judgment.†

"Those who have dissected or inspected many (bodies), *have at least learned to doubt*; when others, who are ignorant of anatomy and do not take the trouble to attend to it, are in no doubt at all."‡ "It is very easy to be deceived by those very appearances which seem to prevent us from falling into deceptions."

*These histories are, however, surprisingly terse and brief.

†The translations are those of Benjamin Alexander.

‡Letter xvi., Art. 25.

"(All these remedies) were of no effect, as generally happens where Nature herself does not co-operate with the physician."* "However. . . . the case ought to be a caution to all practitioners not to compel patients to admit of any remedy to which they are utterly adverse, especially in obscure diseases."† He has but little sympathy with the anti-vivisectionist cant which we of to-day know so well: "It is far less melancholy and dreadful to be detained long in the consideration of dogs which are tortured by experiments than in the consideration of strangled men." (Referring to some experiments which had been made on death by hanging.)

Valsalva, he notes, once tested the "serum which gives rise to a gangrene" and found it very acrid, so much so that the tongue was irritated for a whole day. As Morgagni observes, this extraordinary enthusiasm for research could scarcely have been credited had not Valsalva related it himself, but "See," says he admiringly, "how far the desire of knowing and making experiments has carried some men!"‡ He was himself, we judge, rather cautious than otherwise. In a wool-comber, whose symptoms appear to have resembled those of pulmonary anthrax, he would on no account open the thorax,§ and he confesses elsewhere that he purposely avoided dissecting the bodies of patients who had died of a consumption, and curiously enough this aversion would appear to have been shared by Valsalva himself.

*Letter xxxviii., Art. 30.

†Letter xvii., Art. 32.

‡Letter iv., 23.

§Letter lxx., 7.