

## Historical and Bibliographical Notes.

A SERIES OF SKETCHES OF THE LIVES, TIMES AND WORKS OF THE OLD  
MASTERS OF ANATOMY AND SURGERY.

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### IV. GERMAIN COLOT, AND OTHER OLD LITH- OTOMISTS.

1460-1706.



GERMAIN COLOT and succeeding members of his family furnished France with its chief lithotomists for the long period of two hundred years. Prior to his day the operation of cutting for stone in the bladder was practiced in that country by itinerant quacks and mountebanks, of whom Italy furnished the greater number. It would appear that ignorant, conceited and mercenary specialists monopolized this important operation from the earliest times of which we possess any information concerning it. Though an operation of so much importance that one would suppose it would have been most carefully studied and included among the legitimate duties of the surgeon, yet we find that while the Asclepiadæ

did not hesitate to recommend cutting into the kidney, they excluded cystotomy from the domain of surgical art.

The only mention of lithotomy in the Hippocratic writings is in the "OATH," where it is entirely interdicted, thus: "I swear not to cut any person attacked with stone: I will abandon that practice to the mercenaries who devote themselves to it;" or, as Mr. Adams renders it, "to be done by men who are practitioners of this work." No satisfactory reason is given for this prejudice, so that we are left to infer that it was considered at that time—as it certainly was some centuries later—not respectable. The Arabians held this view of lithotomy, for it is distinctly avowed to be *infra dig.* by Avenzoar, who wrote about the middle of the twelfth century, saying, "It is an operation which no upright and respectable physician would witness, and far less perform."

In the North of Scotland, a little over a century ago, lithotomy was performed by non-professional persons. Mr. Adams states, that when a boy he heard of an old miller, whose name was Cromar, who was very famous for cutting persons for the stone. To this day, in many parts of the East, this operation is still cultivated as a separate branch of surgery. And thus it was in Italy down to the time of Germain Colot, who was a French surgeon of great renown, and in high favor with Louis XI. About the year 1460, having previously ingratiated himself into the good will of the Italian lithotomists, whereby he was allowed to be frequently present, and often permitted to assist in their operations, and having attentively observed all the details of their procedures, Colot declared that it was a shame and a disgrace that an operation of so much importance should have been so long and so entirely neglected by the surgeons of his own country. He accordingly resolved to remove the opprobrium by instituting a series of experiments upon

the cadaver, which having done, he promptly communicated the results to the medical faculty of Paris, and the physicians of the Court, from all of whom he received a satisfactory encouragement. Having thus carefully prepared himself, and being confident of his skill, he next made application to the King for permission to operate on a culprit,—one of his Majesty's Archers of Bagnolet—who had been condemned to be hanged for robbery, and was known to have suffered much from stone in the bladder. The petition was granted and the death sentence commuted to this operation, which was publicly executed with enlightened hardihood by Colot, in the churchyard of St. Severins, and in the presence of the King, the operation having been borne with heroic fortitude by the patient, who is said to have recovered in a fortnight, having thus saved his own life and contributed to the salvation of others. Germain Colot made his own name immortal. He received the esteem of the King, who also gave him a liberal pension.

Before proceeding further, it is necessary briefly to allude to the several methods of operating which have been in vogue at different historical periods.

Celsus, who wrote in the first century, gives the earliest account of lithotomy which we possess. It was the simple method, called "cutting on the gripe;" by moderns, "the minor operation," "the apparatus minor," or the *petit appareil*, on account of the small number of instruments required in its performance; and also to distinguish it from the more complex operation requiring many instruments, known as the "apparatus major," or *grand appareil*. Celsus mentions two distinguished lithotomists whose methods he describes, viz.: Ammonius, at Alexandria, in the time of Erasistratus, and Meges, at Rome, during the reign of Augustus.

As an evidence of the judgment and skill of Ammonius,

Celsus says, that he practiced breaking the stone in pieces when it was so large that it could not be extracted without tearing the neck of the bladder.

Cutting on the gripe was always practiced down to the time of Joannes de Romanis, a surgeon of Cremona, who flourished in the early part of the sixteenth century.\* To this man belongs the glory of having invented the grand apparatus. About the year 1520 he communicated his secret to his "best friend Mariano Santo de Baroletta," who was a Neapolitan professor, by whom, soon after the death of Romanis, it was published (1534) and it was subsequently known to the world as "the Marian operation," though the fact of Romanis being its true author was frankly set forth by his pupil Mariano. The improvement which Romanis and Mariano introduced consisted chiefly in the use of a grooved staff, upon which a median incision was made. I have a copy of the work of Marianus, published in folio at Tiguri in 1555, which is illustrated with figures of handsomely-shaped sounds, grooved staff, dilators, forceps like the most approved modern form, a small scoop, etc. The work is entitled *Libellus aureus de lapide e vesica per incisionem extrahendo*. The preface is dated 1534.

Mariano Santo instructed Octavien de Ville, of Rome, in all the secret arts of the major operation. Octavien having been called to Tresnel, in Champagne, France, to perform lithotomy, made the acquaintance of Laurent Colot, a physician and surgeon of that place, and having formed a friendly intimacy with him, he instructed Laurent in all the details of the art, and left him, after his death, which occurred within a short time, the sole possessor of the secret of the great apparatus. Laurent Colot became so distinguished that in 1550 Henry II called him to Paris, gave him

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\* It is still practiced with great success by the native doctors of Hindostan. In 1827 Dr. Madden, the traveller, saw it performed in Tyre by an old pilot on a boy of thirteen who did well.

valuable presents, made him one of his court surgeons, and appointed him lithotomist of the Hôtel Dieu, which office was retained by the family down to the time of François Colot, of whom mention is yet to be made.

Laurent transmitted the secret to his grandson, Philippe, as a precious patrimony; this grandson was born in 1593, and died in 1656. He was the last of three who had inherited the family secret. Philip had a European reputation, and was called to all parts of the continent. He was the father of a third Laurent, who, strange to relate, was afflicted with stone, for which he was operated upon by his own son François. Philip instructed two of his relatives in the art, viz., Severin Pineau and Restitut Gyrault, his own nephew. The former undertook, by order of government, to establish a school of lithotomy, beginning with ten pupils, but utterly failed. Gyrault had two scholars, to whom he gave instructions, one his own son, who, in turn, became the master of François, the grandson of Philip Colot.

M. Vallot tried to purchase the secret of François, who refused all overtures, as he had in mind the more noble purpose of publishing it freely to the whole world.

Thus it came to pass that François Colot was the last member of this distinguished family to whom this specialty descended as a secret. He practiced the art of his ancestors with greater dexterity than any of his predecessors, having much simplified all the procedures. He became renowned, not only in France, but in England, Germany and Italy, to which countries he was frequently called. It is said that he was so much occupied in Paris that he was obliged to refuse the request of Cardinal Chigi, of Cologne, who desired his services in that city. He was the only one of the Colots who possessed the learning and public spirit to write a treatise on the subject, which he did under the

following title: *Traité de l'opération de la taille, avec des observations sur la formation de pierre, et le suppression d'urine.* Paris, 12mo., 1727. It will be observed by the date that it was not published until twenty years after his death. He was not influenced by pecuniary considerations in his practice. With charitable generosity he bestowed his skill to the poor as freely as to the rich, and for a period of eighteen years he performed all the operations for stone at the Hôtel Dieu without any fee or reward. This benefactor died June 25, 1706, leaving an imperishable name and fame.

About the time that Marianus Sanctus published his work, (1534) one Peter Franco, a native of France and resident of Lausanne, invented what was called the "apparatus altus," or the high operation. This method soon passed into disuse; an attempt was made in 1580 to revive it by Francis Rousset, but with only partial success. In 1717-18 James Douglass read a paper at the Royal Society on this mode of operation, and three years after his brother John "performed it with great applause." Wm. Cheselden also practiced this method at St. Thomas' Hospital, and brought it again into vogue by having cured six of every seven upon whom he performed it, while by the old methods at Paris, of an aggregate of eight hundred cases, two in five died.

Interesting as is the history of lithotomy, the limited space which can be spared in the ANNALS, for matters not strictly practical and recent, will not admit of an exhaustive account of all the distinguished persons whose names are associated with it. There is one more character, however, who must not be passed over in silence. About the year 1695, a man, ignorant of anatomy, but possessed of unlimited surgical audacity, named Baulot, or Beaulieu, better known under the name of Friar Jacques, enriched science with a process of cystotomy known as the lateral-

ized method. It was by a slight modification of this plan that the Hollander Ravius Raw, or as sometimes printed, Rau; and the Englishman Cheselden, developed the complete lateral operation. Jacques was born in 1651 and died in 1720. He was at first a simple domestic of Pauloni, a Venetian, soon after became a monk and then began the practice of lithotomy at Bescon in 1695. It is believed that he was once the assistant of a more skilled operator, monks being employed in those days to care for their horses, and hold their patients; hence they often set up as independent operators, and being perfumed with the odors of the stables their success was in correspondence with their merits. Friar James went to Paris in 1697 and was received by influential persons and the canons of Notre Dame as the possessor of a new method of extracting vesical calculi. Heister gives a lengthy account, in his surgery, of Fr. Jacques, of which the following is an abstract partly in his own language: "About the year 1697 this person who was an obscure monk or hermit, as some call them, came to Paris, from some of the outposts of France, in a miserable condition, being both destitute of money, victuals, and clothes, but of an open and free temper, his simplicity of mind being judged commendable by some of the French writers." He showed his testimonials of patients whom "he had happily cut and cured by his safe and ready method." He made no secret of his mode and asked no reward except "to repair his instruments, pay for mending his shoes, or the like." He asked to be allowed to exhibit his skill in the hospitals, which was not granted. He soon, however, acquired a great renown; even with the King, "and made most of the Parisians look upon him as a physician sent from heaven for the relief of mankind." "He was always attended by such a crowd of spectators that at last it became necessary to have a guard of

soldiers to keep the tumult in order. He was rough and even coarse in his handling of patients and very careless in the after-treatment, saying, 'It is sufficient that I have extracted the stone; God himself will cure the wound.'" His success was accordingly very bad: of sixty whom he cut in Paris twenty-five perished, thirteen were cured, and the remainder had fistulæ, or incontinence of urine. In 1712 he began to use a grooved staff, with greater success. It is said that he had this improved instrument brought to his attention by Fagan and others of Paris, having previously used a plain sound, without a groove, upon which he cut obliquely and from below upward. He also used a tenaculum, the forceps, and a sort of spoon or scoop for the removal of the stone. He died in 1720, at the age of sixty-nine, having operated, it is said, on not less than five thousand different persons. It is stated that he had been known to operate upon sixteen persons in one afternoon. He travelled from one country to another, and performed all his operations gratuitously, accepting only the rewards which were voluntarily presented to him. He spent a long time in Holland, and it was there that Raw, the master of Heister, took the opportunity to witness his methods, which he improved upon and developed into the true "lateral operation," which bore his name for a long period after as "the process of Raw," or the "Ravian method."

Such is a brief outline of the gradual evolution of the science and art of lithotomy, and thus slowly the race of improvement runs on in the cultivation of the useful arts of civilization. Now and then the hare of genius makes spasmodic strides, alternating with naps, while the tedious tortoise of experience crawls leisurely but unceasingly on.