

## GORDON OF ABERDEEN

BY HERBERT THOMS, M.D., F.A.C.S., NEW HAVEN, CONN.

THE controversy regarding priority in the discovery of the contagiousness of puerperal fever rivals in an able manner that concerning the discovery of anesthesia. In both instances historians have been most decisive in praise of their respective heroes, and so it is not unexpected to find that while on one side A. W. W. Lea writes, "to Gordon of Aberdeen (1795) must be ascribed the credit of having first clearly demonstrated the infective nature of puerperal fever," with equal ardor W. J. Sinclair says, "we cannot but think that Gordon has been unduly praised by patriotic friends equally unacquainted with his real opinions and the value of his one contribution to obstetrical literature." So, as Mr. Dunne would say, "there you are." However, the believers in Gordon need not feel too badly because he was thus thrown overboard by the worthy Manchester biographer. He was sacrificed in goodly company, along with Thomas Denman, Charles White, and O. W. Holmes. Indeed, Sinclair's devotion to Semmelweiss seems to have formed within him an extraordinary barrier to all afferent influences from other sources.

After a survey of the field prior to the contribution of Semmelweiss, I am in sincere accord with the first named authority. The "Treatise on the Epidemic Puerperal Fever" written by Alexander Gordon of Aberdeen in the year 1795 stands out not only as a noteworthy contribution to obstetric science, but further gives a remarkable insight into the mind of an extraordinary observer. It is a kind of writing whose very attractiveness of form invites further intimacy with the author. Half a century after it was written it so impressed the anatomist-poet, Oliver Wendell Holmes, that he quoted a noteworthy passage in capital letters and further observed "his expressions are so clear, his experience is given with such manly distinctness and disinterested honesty, that it may be quoted as a model which might have been often followed with advantage." With no attempt to detract from the timeliness or importance of Holmes' essay, I think it may be honestly said that not only did Gordon's treatise serve as a morphotic model but that any innovations of thought of the essay over that of the treatise are not remarkable. Obstetricians owe to themselves an intimate knowledge of Alexander Gordon—who he was, and what he did.

Some time in 1752 in the small parish of Strachan, about twenty miles to the west and south of Aberdeen, Scotland, Alexander Gordon was born, one of twin boys. His preliminary education is but little known, but he did take the degree of Master of Arts in Marischal

College in Aberdeen. Following this, he began the study of medicine, first at the Aberdeen Infirmary and later at the University of Edinburgh. Then, as now, it seems to have been popular for the young physician on graduation to enter for a time the British service. So after receiving letters testimonial from the Corporation of Surgeons in London, Gordon entered the Royal Navy as a surgeon's mate. Two years later, in 1782, he obtained the rank of surgeon. After three years he was retired on half-pay, and we find him a resident pupil at the Lying-in Hospital on Store Street in London. At the same time he attended joint lectures on midwifery by Denman and Osborn. This was Thomas Denman, the "affectionate friend" to whom the pupil later dedicated his famous treatise. Subsequently at the Middlesex Lying-In Dispensary he became a pupil under Dr. Thynne. At this time he also attended lectures on surgery and dissections at the Westminster Hospital under Justamond. We may believe that this teacher was well fitted for his task, for he had been one of the few members of John Hunter's famous "private class."

Thus, well fitted for practice, Gordon returned to Aberdeen, where from his alma mater he soon obtained his doctorate in medicine. Very shortly he was appointed physician to the dispensary, and for ten years ably directed the activities of that institution. It was only four years previous to this that the dispensary had been founded, "for the purpose of attending in their own houses such patients as could not be admitted into the infirmary." We are informed by a contemporary that Gordon's "success is most conspicuous in acute diseases; but especially in fevers. What led to this success was the frequent occurrence of that class of diseases; for other diseases occurred only occasionally but fevers constantly."

We may judge that his time was well occupied, for in nine consecutive years following his appointment a total of 12,925 admissions for treatment is recorded. In addition to this his private practice, in which he devoted himself particularly to obstetrics, had grown considerably, and at the same time he was giving an annual course of lectures to the medical students.

Not long after the publication of the famous treatise in 1795, Gordon was again called by the Admiralty to active duty. While it was with considerable reluctance he relinquished his successful practice, yet we may believe that in some measure it was a grateful change from the abuse and calumny which his publication had brought him. In the preface, his heart speaks to us as he writes, "The benevolent reader must observe, with displeasure, the ungenerous treatment which I met with from that very sex whose sufferings I was at so much pains to relieve; for, while I was using my best endeavors to mitigate the calamities of many miserable sufferers, several others were very

busy traducing my character, who, prompted by prejudice, very uncandidly proclaimed the deaths, and concealed the cures, on purpose to raise an odium against my practice."

In 1799, while still on duty in the navy, he became ill as the result of a severe cold, and was invalided home. From this he never recovered and died of pulmonary tuberculosis on the 19th of October, 1799, at his brother's home in Logie, Aberdeenshire. At the time of his death, he was forty-seven years of age.

Dr. Gordon married in 1783 Elizabeth Harvey, by whom he had two daughters. The younger of these died in childhood, and the other married a former pupil of his, Robert Harvey, of Braco. Dr. Gordon left behind him a number of manuscript writings, and we are told that these "sufficiently indicate that Dr. Gordon was well informed in his profession, and possessed of excellent parts." Such in brief is the life of Alexander Gordon, short in the years of life and limited to but a decade of actual practice.

As an introduction to a brief survey of his work, the high ideals and great devotion of the author are preeminent as he writes, "But I consider it as a sacred duty, a matter of conscience, to mention every circumstance relating to the subject. And as the lives of thousands are at stake, the less apology is necessary. The maxim of every author ought to be the same with that of Aristotle, who says 'Plato is my friend, but truth is much more.'"

In the present communication no attempt is made to survey the whole treatise, but it is the hope of the author that interest may be stimulated by pointing out the more remarkable features of that work. The definite contagiousness of puerperal infection finds itself most strikingly put forth in the paragraph that so impressed Holmes. "By observation," writes Gordon, "I plainly perceived the channel by which it was propagated and I arrived at that certainty in the matter, that I could venture to foretell what women would be affected with the disease, upon hearing by what midwife they were to be delivered, or by what nurse they were to be attended during their lying-in; and in almost every instance my prediction was verified." This was indeed striking proof, and with extraordinary honesty the writer proceeds: "It is a disagreeable declaration for me to mention, that I myself was the means of carrying the infection to a great number of women." And with the fortitude that befits a countryman of John Knox, he writes such statements as "the midwife who delivered Mrs. K— carried the infection to No. 55 in Nigg, a country parish not far from Aberdeen from whom it spread through the whole parish." Hell could have no fury like that of a few of these industrious women, and we can imagine an escape only in the manner of which we have spoken. And so the doctor soon came to the conclusion "that scientific practice and popular opinion very seldom correspond."

Nor could one be more sure of his ground. His conviction came from actual observation of a great number of cases, and it was this convincing testimony that prompted him to write, "I am fully persuaded, that if practitioners had observed more and reasoned less, there would have been little dispute, either about the nature or the seat of this disease."

It is a pity that Sinclair in his quotations from Gordon did not include the following, which I consider the most striking in the whole text: "The analogy of the puerperal fever with erysipelas will explain why it always seizes women after and not before delivery. For at the time when erysipelas was epidemic, almost every person admitted into the hospital of this place with a wound, was, soon after his admission, seized with erysipelas in the vicinity of the wound. The same consequence followed the operations of surgery; and the cause is obvious, for the infectious matter which produced erysipelas was at that time readily absorbed by the lymphatics, which were then open to receive it, *just so with puerperal fever, women escape it until after delivery, till that time there is no inlet open to receive the infectious matter which produces the disease, but after delivery the matter is readily and copiously admitted by the numerous patulous orifices, which are open to imbibe it, by the separation of the placenta from the uterus.*"

The historians of puerperal fever are myopic indeed who overlook the *Appendix*, which contains one sentence which in itself immortalizes Alexander Gordon, "And if in the dissection of a putrid body," he writes, "a surgeon scratch his finger, the part festers, that is, inflames and suppurates; and if a fever should be the consequence, it is inflammatory in the beginning and only ultimately putrid. And further, if such a fever be properly treated in the beginning it never becomes putrid at all. In like manner if putrid matter be applied to the uterus, it inflames that organ and the contiguous viscera; that is, *it gives rise to the puerperal fever*, which is ushered in with a cold stage and succeeded with a very rapid pulse and acute pain in the abdomen."

Alexander Gordon did more than point out the infectiousness of puerperal fever; he also had a very definite idea of the accompanying pathology. Both Drs. Hulme and Lake, authorities in his day, had pronounced the omentum as the seat of the disease. Gordon, however, differed, and observed, "The dissections which I made prove that the puerperal fever is a disease which principally affects the peritoneum and its productions and the ovaria. The peritoneum, or investing membrane of the abdomen was inflamed; and the extension or production of the same membrane which constitute the omentum, mesentery, and peritoneal coat of the intestines, were all promiscuously affected."

Gordon not only recognized the infectiousness and pathology of the disease, but his rules for prophylaxis deserve much consideration. "The same means," he writes, "ought to be practiced for preventing the infection of puerperal fever. The patient's apparel and bed clothes ought either to be burnt or thoroughly purified; and the nurses and physicians who have attended patients affected with puerperal fever ought carefully to wash themselves and get their apparel properly fumigated before it be put on again."

These few quotations from the celebrated treatise are alone enough to show its very great importance, and no sincere student of puerperal infection can omit reading the entire essay. It is readily available in most medical libraries, if not in the original in either of the works by Meigs or Churchill referred to.

Alexander Gordon was not an uneducated country doctor who stumbled on a few facts and published a few scattered observations. Alexander Gordon was a finely educated physician, who practiced in one of the three great cities of Scotland, who was associated with the university of that place, and who was in a position to observe accurately and in a scientific manner hundreds of cases of childbirth during his ten years of practice. Not only did he discover a great surgical principle, but with true courage he proclaimed it in the face of opposition amounting to persecution. As a student in Marischal College, he would have many times passed within the principal entry, which contains the following curious old inscription, "Thay haif said: Quhat say thay: Lat them say." And with this spirit in his soul, Alexander Gordon proclaimed a great truth, and I heartily agree with the writer who says, "To Gordon of Aberdeen must be ascribed the credit of having first clearly demonstrated the infective nature of puerperal fever."

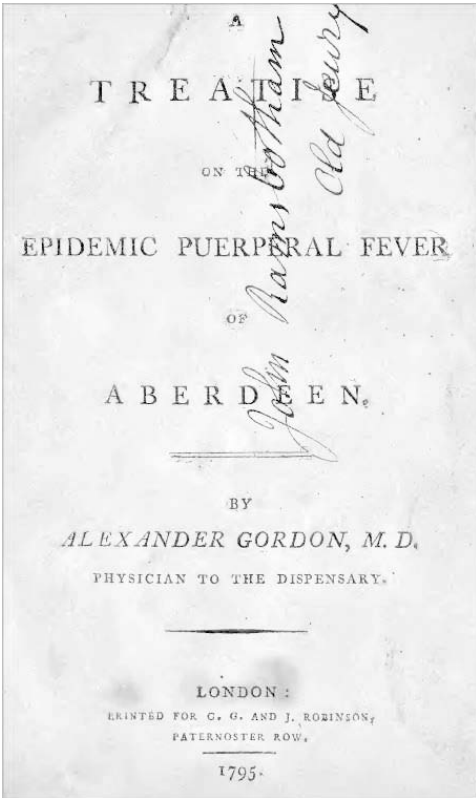
#### REFERENCES

*Adami, J. G.*: Charles White and Puerperal Fever, London, 1922. *Black, A. and C.*: Scotland Edinburgh, 1875. *Churchill, F.*: Essays on the Puerperal Fever, London, 1849. *Camac, C. N. B.*: Epoch-making Contributions, etc., Philadelphia, 1909. *Gordon, A.*: A Treatise on the Epidemic Puerperal Fever of Aberdeen, London, 1795. *Lea, A. W. W.*: Puerperal Infection, London, 1910. *Meigs, C. D.*: History, Pathology, and Treatment of Puerperal Fever, Philadelphia, 1842. *Ottley, D.*: The Life of John Hunter F.R.S., Philadelphia, 1839. *Sinclair, W. J.*: Semmelweis, His Life and Doctrine, Manchester, 1909.

NEW HAVEN HOSPITAL.

## Herbert King Thoms (1885-1972)

- M.D. Yale 1910
- PG training Sloane Hosp NYC and Johns Hopkins U.
- Prof and Chair ObGyn, Yale U, CT
- 1935 History of ObGyn book



## CLASSICAL CONTRIBUTIONS TO OBSTETRICS AND GYNECOLOGY

By  
HERBERT THOMS, M.D.  
*Associate Professor of Obstetrics and Gynecology  
Yale University*

*With a Foreword by*  
HOWARD A. KELLY  
*Emeritus Professor of Gynecology  
Johns Hopkins University*



CHARLES C THOMAS

SPRINGFIELD, ILLINOIS

BALTIMORE, MARYLAND