Men and Books

GASPAR ASELLIUS

THE DISCOVERER OF THE LACTEALS

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Born at Cremona in 1581, Gaspar Aselliuss was one of the lesser lights of the group of famous anatomists of the 16th century, Vesalius (1514-64) and his contemporaries, Fallopius and Eustachius. He became professor of anatomy in Pavia and was a surgeon practising in Milan, eighteen miles northward. His discovery of the lacteals has earned him an abiding place in the history of medicine, and may best be described in Foster's translation of his own words:—

"On the 23rd of July of that year (1622), I had taken a dog in good condition and well fed, for a vivisection, at the request of some of my friends, who very much wished to see the recurrent nerves. When I had finished this demonstration of the nerves, it seemed good to watch the movements of the diaphragm in the same dog, at the same operation. While I was attempting this and for that purpose had opened the abdomen and was pulling down with my hand the intestines and stomach gathered together into a mass, I suddenly beheld a great number of cords as it were, exceedingly thin and beautifully white, scattered over the whole of the mesentery and the intestine, and starting from almost innumerable beginnings. At first I did not delay, thinking them to be nerves. But presently I saw that I was mistaken in this, since I noticed that the nerves belonging to the intestine were distinct from these cords, and wholly unlike them, and, besides, were distributed quite separately from them. Wherefore, struck by the novelty of the thing, I stood for some time silent while there came into my mind the various disputes, rich in personal quarrels no less than in words, taking place among anatomists concerning the mesaraic veins and their function. And by chance it happened that a few days before I had looked into a little book by Johannes Costaeus written about this very matter. When I gathered my wits together for the sake of the experiment, having laid hold of a very sharp scalpel, I pricked one of those cords and indeed one of the largest of them. I had hardly touched it, when I saw a white liquid like milk or cream forthwith gush out. Seeing this, I could hardly restrain my delight, and turning to those who were standing by, to Alexander Tadinus, and more particularly to Senator Septalius, who was both a member of the great College of the Order of Physicians and, while I am writing this, the Medical Officer of Health, 'Eureka,' I exclaimed, with Archimedes, and at the same time invited them to the interesting spectacle of such an unusual phenomenon. And they indeed were very much struck with the novelty of the thing."

He repeated his experiment a few days later but to his disappointment the demonstration failed. He then passed wakeful nights thinking over all the circumstances attending his first experiment and any departure from them that might explain the failure. On repeating, it then occurred to him that the first experiment had been carried out shortly after the dog had been fed, whereas the second was done a longer time after feeding. He again vivisected a dog soon after it had been fed and was then able to confirm the observations of his first experiment, as the lacteals were filled with chyle and therefore visible.

His discovery was published at Milan in 1627, the year after his death, and the publication is notable for being the first work in anatomy in which coloured woodcuts were used for illustration; it also contained an engraving of Aselliuss by Bassanus (reproduced here).

A second edition was published at Venice a year later, and a third edition, the one which I am presenting to-night,* was published at Leyden in 1640, with the following title page:

*This paper was read before the Academy of Medicine, Toronto, on January 5, 1932.
This error of Asellius was corrected later by the discovery of the thoracic duct and receptaculum chyli by Jean Pecquet in 1651, and of the connection of the intestinal lymphatics with the thoracic duct, demonstrated by Olaf Rudbeck of Upsala in 1653. Rudbeck’s priority in the discovery that the lacteals drained into the receptaculum chyli, however, was disputed by Thomas Bartholin, Professor of Anatomy in Copenhagen, who published his work in 1652, and also by Jolyff, an Englishman. The claim of the latter however was based upon a drawing only, as he never published an account of his observations. It is interesting to note that Harvey never accepted the truth of Asellius’ observations.

The pancreatic duct was discovered by Wirsung in Padua in 1642; the duodenal glands by Brunner in 1662; and the lymphatic follicles of the small intestine by Johann Conrad Peyer in 1677.

**Association Notes**

**AMENDMENT TO BY-LAWS—NOTICE OF MOTION**

On the recommendation of the Honorary Treasurer, the Executive Committee offers the following amendment to our by-laws, such amendment to be placed before Council for action at its next meeting to be held in Saint John on June 19th and 20th, 1933.

WHEREAS travelling expenses incurred by officers of the Association are provided for in the By-Laws as undermentioned, namely

CHAPTER VI—Section 4—Chairman of Council

He shall be reimbursed for his legitimate travelling expenses incurred in attending the annual meeting.

CHAPTER VI—Section 5—Treasurer

He shall be reimbursed for his legitimate travelling expenses incurred in attending the annual meeting.

CHAPTER VI—Section 6—General Secretary

All his legitimate travelling expenses shall be paid for him out of the funds of the Association.

CHAPTER VIII—Section 1—Editor

He shall be reimbursed for his legitimate travelling expenses incurred in attending annual meetings.

AND WHEREAS

Travelling expenses for members of the Executive Committee incurred in attending meetings of the Executive Committee (other than the first meeting of the Committee) are paid out of the funds of the Association.

BE IT RESOLVED THAT the following paragraph be added to Chapter VIII—Section 1, Executive Committee, as follows:

Each member of the Executive Committee shall be reimbursed for his legitimate travelling expenses incurred in attending meetings of the Executive Committee other than the first meeting of the Executive Committee, which meeting is held before the close of the annual meeting.

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**Fig. 2.—Tabulae Tertiae Explicatio.**