149.—The **Canon Doctrinae Triangulorum** (1551) of **Rheticus** (1514–1576). Some facts with reference to this excessively rare publication have been given in material about **Pitiscus** and **Rheticus** in **MTAC**, v. 3, p. 394, 396, 553–554, 559–560. It is here noted that the only copies known to have been preserved were in the Bibliothèque Nationale and British Museum. **DeMorgan** had a copy in 1845 when he published1 a description of the work, but this was doubtless in his Library at the University of London, destroyed during the recent World War.

In Catalogue 19, 1952, of the London bookseller **E. Weil**, a copy was offered for 27 £ 10 s. **Mr. William D. Morgan**, of 1764 St. Anthony Ave., St. Paul 4, Minnesota, was so fortunate as to secure this item for adding to his already valuable collection (see **MTAC**, v. 3, p. 562–563). Since Mr. Morgan graciously loaned this precious work to me that a microfilm copy might be made for the Brown University Library, I take the opportunity to add a little to the information already published in **MTAC**. The complete title is as follows: **Canon Doctrinae Triangulorum. Nunc primum a Georgio Ioachimo Rhetico, in locum editvs, com privilegio imperiali, Ne quis haec intra decennivm, quacunque; forma ac compositione, edere, neve sibi vendicere aut operibvs suis inserere ausit. Lipsiae ex officina Wolphgangi Guenteri. Anno M.D. LI.** In the title page is an obelisk with a man drawing a diagram on the base.

The back of the title page is blank; then follows a page of Latin verses. On the back of this page is the first of 14 pages of 7D tables of the six trigonometric functions, at interval 10′, arranged for the first time in semi-quadrantal display. The degrees are in black, and the minutes and differences are in red. This is the first table in which all trigonometric functions are brought together. Rheticus was the first to define trigonometric functions by means of a right-angled triangle without any reference to a circle.

Immediately following the tables are 6 pages of dialogue between Philomathes, a supposed friend of Rheticus, and Hospes, his pupil. The pupil asks what the intention of the book is, and is answered at length. He suggests that, perhaps, the intention may be to complete the system of Copernicus, by publishing tables from it resembling those then in use. But he is answered that Rheticus would rather that Copernicus himself had not done so much in this line, as he thereby diminished the geometrical practice of the learner, and so on.

An undated 1580 reprint of the **Canon** is in the British Museum.

The copy of the **Canon** before me has evidently had its pages trimmed; but the present size of its pages is 15.8 × 22.5 cm.

R. C. Archibald

Brown University
Providence, R. I.

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