

On Musical Automata¹

Incidental to a comprehensive work on the clocks of the Islamic People, which will appear in the publications of the Leopoldische Akademie, I have also more intensively occupied myself with the clock attributed to Archimedes. Baron Carra de Vaux has given a description of this clock in an Arabic manuscript.² In his work on this manuscript³ he briefly mentions a related section about a flautist connected to this clock that intermittently plays its flute, and describes the contents of the subsequent parts of the texts, which amount to a description of a similar flautist to that described by Apollonius the Carpenter, the Geometer.

I believe that a more complete translation of this section will be of interest. This would be an extension of my work “On the Musical Automata of the Arabs”, which appeared in the *Amari Festschrift*, p. 164ff. In the introduction by Gazari provided there, it says, “I came across a famous essay by Apollonius the Carpenter, the Geometer (technician, it must be *Handasi*, and not *Hindi* (Indian)). He used a slowly turning wheel, which, upon a half-revolution opened a water intake valve”.

Any further historical details have only been alluded to.

¹ First published in German in *Sitzungsberichte der Physikalisch-medizinischen Sozietät zu Erlangen* 46 (1915): 17–26. Translator’s note: For the most part, this text is a translation of a translation. With regard to the use of parentheses, the round brackets () and square brackets [] are used as in the original, i.e., they are Wiedemann’s parentheses. My comments and notes, including the instances cited where Wiedemann’s German is ambiguous, are labelled, so that these are immediately recognisable to the reader.

² Carra de Vaux, *J. Asiat.* [8] 17 (1891): 287.

³ Catalogue by de Slane, p. 437, no. 2468. Mr. Blochet was so kind as to have some photographs of the manuscript made for me. A second manuscript can be found in the British Museum in London (Catalogue no. 1336, p. 619). These must, however, be of an earlier origin, since specifically Islamic expressions such as “if God wills it” appear very frequently. I was able to use one photograph. A fragment about Apollonius’ flautist can be found in Beirut (see again below). The best would be this latter manuscript, then the Paris manuscript, and finally, the one from London. This last has obviously been copied by someone who did not understand the subject matter; thus he writes the word “Su’ud” (happiness) instead of “Saffud” (rod), which would have been less familiar to him.