Gravet’s Patent Application for the Mannheim Slide Rule (1851)

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Abstract

In 1851, Mannheim invented the new disposition of scales and presented it to Gravet. This gave birth to the modern slide rule. In this article, I present the patent application of Gravet to make this new slide rule, and some prototypes conserved at the CNAM Museum in Paris.

Introduction

The slide rule was really introduced in France by Jomard, in 1815, when he described enthusiastically the Soho rule he discovered in England. Some French people already knew of it, but Jomard was the first in France to present it like a popular instrument which should be used by many people (everyone, as he wrote). In 1821, Jomard could present the prototype made by Lenoir, the famous French instrument maker, and the slide rule began its career in France.

After Lenoir’s death, Mabire, until 1839, and then Gravet, kept making and selling slide rules. In the beginning, like Mabire, Gravet signed his rules « Lenoir », which was the trade mark of his workshop. But in 1851, a judgement of the business court in Paris obliged him to sign « Gravet-Lenoir ». The same year, a young (20 years old) artillery officer, Amédée Mannheim, invented the new arrangement of the scales which, combined with the use of a cursor, became the Mannheim type slide rule. It is well known that Mannheim did not make slide rules (he became a math teacher at the Ecole Polytechnique) and that he gave the right to make slide rules according to his invention, for free, to Gravet, who was succeeded by his son-in-law Tavernier-Gravet after 1865.

I did not know if Gravet patented his model until last summer, when M. Steeve Gallizia from the French patent institute, told me that there was a Gravet patent from 1851 concerning slide rules. He sent it to me and I thank him very much. Here is that patent, which...