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(*b*. Sosa, near Eibenstock, Germany, 8 July 1777; *d*. Freiberg, Germany, 13 March 1833)

mathematics, mechanics.

Virtually nothing is known about Hecht's childhood, youth, or family. It may be supposed that, born in one of the most important German mining districts of the time, he became interested in mining in his early youth and obtained an education in that subject. The course of his life can be followed more exactly from 1803, when, at the age of twenty-six, he enrolled in the Bergakademie at Freiberg, Saxony. After completing his studies he took a position as overseer (mine manager) and then taught at the Freiberger Bergschule.

Hecht's predilection and talent for solving mathematical and mechanical problems resulted in his appointment in 1816 as second professor of mathematics at the Freiberg Bergakademie, where he assumed from F. G. von Busse the lectures on elementary pure mathematics and applied mathematics (mechanics). In the following year he presented a course of lectures on theoretical mining surveying, which with a few interruptions he continued until his death. Following Busse's retirement in 1826, Hecht advanced to first professor of mathematics. He soon ceased lecturing on pure mathematics and devoted his teaching activity solely to mechanics and mining machinery, especially to contemporary mechanical engineering. From this it is evident that, for Hecht, the growing union of engineering with mathematics and physics had become mechanics. It can also be clearly seen in his book *Erstc Gründe der mechanischen Wissenschaften* (1819).

Hecht was not a leading figure at the Freiberg Bergakademie, but through his great industry and his strict conscientiousness in carrying out his duties he was of great help to his students. His lectures were designed less for gifted students than for those who needed extra assistance and an external stimulus in their studies. For this and for his friendly, sincere manner Hecht won many friends.

In addition to the *Erste Gründe*, Hecht's scientific activity at the Bergakademie resulted in a number of short essays in journals and widely used high school textbooks on mathematics, geometry, and underground surveying, as well as examples and tables for mathematical calculations.

BIBLIOGRAPHY

I. Original Works. Hecht's writings include *Lehrbuch der Arithmetik und Geometrie*, 2 vols. (Freiberg, 1812–1814; II, 2nd ed., 1826); *Tafeln zur Berechnung der Seigerteufen und Sohlen für die Länge der schwachen Schnur = 1* (Freiberg, 1814); *Erste Gründc der mechaniscen Wissenschaften* (Freiberg, 1819; 2nd ed., 1843); *Tafel zur Berechnung der Längen und Breiten für die Sohle = 1* (Freiberg, 1819); *Von den quadratischen und kubischen Gleichungen, von den Kegelschnitten und von den ersten Gründen der Differential- und Integral-Rechnung* (Leipzig, 1824); *Beispiele und Aufgaben aus der allgemeinen Arithmetik und gemeinen Geometrie* (Freiberg, 1824); *Einfache Construction zur Bestimmung der Kreuzlinie zweier Gänge, nebst einer Anweisung, um mit Hilfe der Kreuzlinie einen verworfenen Gang wieder aufzusuchen* (Leipzig, 1825); *Nachtrag zu den ersten Gründen der Differential- und Integral-Rechnung* (Leipzig, 1827); and *Lehrbuch der Markscheidekunst* (Freiberg, 1829).

II. Secondary Literature. See "Daniel Friedrich Hecht," in *Festschrift zum hundertjährigen Jubiläum der Königl. Sächs. Bergakademie zu Freiberg* (Dresden, 1866), pp. 22–23; and "Daniel Friedrich Hecht," in Carl Schiffner, *Aus dem Leben alter Freiberger Bergstudenten*, I (Freiberg, 1935), 244–245.

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