

"ABEL, NIELS HENRIK.

(7 papers in "Crelle's Journal":) 1. Untersuchung der Functionen zweier unabhängig veränderlichen Grössen x und y , wie $f(x,y)$, welche die Eigenschaft haben, dass $f(z, f(x,y))$ eine symmetrische Function von z,x und y ist. - 2. Beweis der Unmöglichkeit ...

Reference: 39053

Berlin, Duncker und Humblot, 1826. 4to. Contemp. hcalf. Part of spine lacks, some of spine loose. IV,387,(1) pp. and 5 folded engraved plates. Wide margins, on good paper, light marginal browning, a few scattered brownspots. The whole volume of "Journal für die reine und angewandte Mathematik. Herausgegeben von A.L. Crelle" Erster Band. In 4 Heften. Mit 5 Kupfern. Abel's papers: pp. 11-15, pp. 65-84, pp. 159-60, pp. 185-221, pp. 311-339, pp. 153-160, pp. 117-136.

Comment: First edition of all 7 papers, among these 3 of Abel's masterpieces: his attempt to demonstrate the impossibility of solving the quintic equation algebraically (Beweis der Unmöglichkeit...), one of the most celebrated theorems in mathematics and here offered as no. 2, the first direct use and solution of an integral equation (Auflösung einer mechanischen Aufgabe), here offered as no 6, and his investigations into the domaine of convergence of the binominal series (Untersuchungen über die Reihe...), here offered as no. 5."Crelle's Journal was the leading German mathematical periodical during the nineteenth century. The first volume alone contains seven papers by Abel and the following volumes contains many more, most of them of preeminent importance in the history of mathematics. Among the first is the expanded version of the proof of the impossibility of the solution of the general quintic equation by radicals. Here Abel developed the necessary algebraic background, including a discussion of the algebraic field of extensions." (DSB)."All of Abel's works carry the imprint of an ingenuity and force of thought which is unusual and sometimes amazing, even if the youth of the author is not taken into consideration. One may say that he was able to penetrate all obstacles down to the very foundations of the problems, with a force which appeared irresistible" he attacked the problems with an extraordinary energy...all the difficulties seemed to vanish under the victorious onslaught of his genius..." (A.L. Crelle).Also contained in this volume is : "Über Gauss Methode, die Werthe der Integrale nährungsweise zu finden.", pp. 301-307.

Year 1826

Price: **DKK18,500.00**

This item is offered by:

Herman H. J. Lynge & Son
 herman@lynge.com
 Phone: +45 33 155 335
 Silkegade 11
 1113 Copenhagen
 Denmark

<https://v5.livre-rare-book.net/livres/28279079-39053>