

## Contents

Foreword	ix
Introduction to Dunnington's <i>Gauss: Titan of Science</i> by Jeremy Gray	xix
Guy Waldo Dunnington by Fritz-Egbert Dohse	xxvii
I <i>Introduction: Family Background</i>	3
II <i>The Enchanted Boyhood</i>	11
III <i>Student Days</i>	23
IV <i>The Young Man</i>	32
V <i>Astronomy and Matrimony</i>	49
VI <i>Further Activity</i>	67
VII <i>Back to Göttingen</i>	85
VIII <i>Labor and Sorrow</i>	90
IX <i>The Young Professor: A Decade of Discovery, 1812–1822</i>	100
X <i>Geodesy and Bereavement: The Transitional Decade, 1822–1832</i>	113
XI <i>Alliance With Weber: Strenuous Years</i>	139
XII <i>The Electromagnetic Telegraph</i>	147
XIII <i>Magnetism: Physics Dominant</i>	153
XIV <i>Surface Theory, Crystallography, and Optics</i>	163
XV <i>Germination: Non-Euclidean Geometry</i>	174
XVI <i>Trials and Triumphs: Experiencing Conflict</i>	191
XVII <i>Milestones on the Highways and Byways</i>	208
XVIII <i>Senex Mirabilis</i>	225
XIX <i>Monarch of Mathematics in Europe</i>	250
XX <i>The DOYEN of German Science, 1832–1855</i>	265
XXI <i>Gathering Up the Threads: A Broad Horizon</i>	280
XXII <i>RELIGIO SCIENTIAE: A Profession of Belief From the Philosopher and Lover of Truth</i>	298

XXIII	<i>Sunset and Eventide: Renunciation</i>	318
XXIV	<i>Epilogue</i>	
	1. Apotheosis: Orations of Ewald and Sartorius	331
	2. Valhalla: Posthumous Recognition and Honors	335

## *Appendixes*

A	<i>Estimates of His Services</i>	343
B	<i>Honors, Diplomas, and Appointments of Gauss</i>	351
C	<i>The Will of Gauss</i>	356
D	<i>Children of Gauss</i>	361
E	<i>Genealogy</i>	376
F	<i>Chronology of the Life of Carl F. Gauss</i>	391
G	<i>Books Borrowed by Gauss From the University of Göttingen Library During His Student Years</i>	398
H	<i>Courses Taught by Gauss</i>	405
I	<i>Doctrines, Opinions, Theories, and Views</i>	411
	<i>Bibliography</i>	
	1. Publications of Gauss	420
	Collected Works	430
	2. About Gauss	
	Manuscripts and Related Material	431
	Books	431
	Pamphlets	434
	Articles	435
	<i>An Introduction to Gauss's Mathematical Diary</i> by Jeremy Gray	449
	<i>Gauss's Mathematical Diary</i>	469
	<i>Commentary on Gauss's Mathematical Diary</i> by Jeremy Gray	485
	<i>Annotated Bibliography</i>	497
	<i>Index</i>	507

## *List of Illustrations*

### *Frontispiece:*

Carl Friedrich Gauss: full-length portrait by R. Wimmer in the Deutsches Museum in Munich (1925)

### *Following page 130:*

The birthplace of C. F. Gauss

The Gauss coat-of-arms

Silhouette of Gauss in his youth

Bust of Gauss by Friedrich Künkler (1810)

The Collegium Carolinum in Brunswick

The Schwarz portrait of Gauss (1803)

Minna Waldeck, second wife of Gauss

Portrait of Gauss by S. Bendixen (1828)

A sketch of Gauss by his pupil J. B. Listing

The observatory of the University of Göttingen

The courtyard of the Göttingen observatory as it appeared in Gauss' time

Gauss' personal laboratory in the observatory as he left it

The Gauss-Weber telegraph (Easter, 1833)

Gauss' principal instrument, the Repsold meridian circle

Gauss and Weber

Biermiller's copy (1887) of the Jensen portrait of Gauss (1840)

Ritmüller's portrait of Gauss on the terrace of the observatory  
Gauss in 1854

Gauss about 1850

Portrait of Wolfgang Bolyai by János Szabó

Johann Friedrich Pfaff

### *Following page 322:*

Heinrich Christian Schumacher

Heinrich Wilhelm Matthias Olbers

Friedrich Wilhelm Bessel

Alexander von Humboldt

Johann Franz Encke

Johann Benedikt Listing