

# Contents

PREFACE	vii
<b>Part 1</b>	
CHAPTER I THE STAGE	1
II DRAMATIS PERSONAE	10
III COMMENTARY	21
<i>A. The Work of Oersted</i>	21
<i>B. Biot and Savart</i>	23
<i>C. The Early Work of Ampère and his Theory of Magnetism</i>	26
<i>D. Ampère's Philosophy of Science</i>	31
<i>E. The Design of Ampère's Basic Experiments</i>	42
<i>F. Ampère's Theory of the Action of Current Elements</i>	48
<i>G. Ampère's Quantitative Theory of Magnetism</i>	77
IV THE CRITICS	98
<b>Part 2</b>	
1. <i>A. Oersted</i>	113
2. <i>B. Biot and Savart</i>	118
<i>I. Note on the Magnetism of Volta's Battery</i>	118
<i>II. Extracts from Précis Élémentaire de Physique</i>	119
3. <i>C. The Early Papers of Ampère</i>	140
4. The Mémoire Read to the Académie in 1825	155
<i>D. Ampère's Philosophy of Science</i>	155
<i>E. Ampère's Basic Experiments</i>	161
<i>F. Ampère's Theory of Current Elements</i>	172
<i>G. Ampère's Quantitative Theory of Magnetism</i>	181
5. Grassmann	201
INDEX	215