

CONTENTS

		<i>Page</i>
	INTRODUCTION	iii
	EDITORIAL NOTE	v
<i>Paper</i>		<i>Paragraph Numbers</i>
I.	ON AN IMPROVEMENT IN BOOLE'S CALCULUS OF LOGIC (1867)	1 3
II.	UPON THE LOGIC OF MATHEMATICS (1867)	
	1. The Boolean Calculus	20 16
	2. On Arithmetic	42 24
III.	DESCRIPTION OF A NOTATION FOR THE LOGIC OF RELATIVES, RESULTING FROM AN AMPLI- FICATION OF THE CONCEPTIONS OF BOOLE'S CALCULUS OF LOGIC (1870)	
	1. De Morgan's Notation	45 27
	2. General Definitions of the Algebraic Signs	47 28
	3. Application of the Algebraic Signs to Logic	62 33
	4. General Formulæ	81 47
	5. General Method of Working with this Notation	89 55
	6. Properties of Particular Relative Terms	135 85
IV.	ON THE APPLICATION OF LOGICAL ANALYSIS TO MULTIPLE ALGEBRA (1875)	150 99
V.	NOTE ON GRASSMANN'S CALCULUS OF EXTENSION (1877)	152 102
VI.	ON THE ALGEBRA OF LOGIC (1880)	
	<i>Part I. Syllogistic</i>	
	1. Derivation of Logic	154 104
	2. Syllogism and Dialogism	162 106
	3. Forms of Propositions	173 111
	4. The Algebra of the Copula	182 116

EXACT LOGIC

<i>Paper</i>	<i>Paragraph Numbers</i>	<i>Page</i>
<i>Part II. The Logic of Non-Relative Terms</i>		
1. The Internal Multiplication and the Addition of Logic	198	125
2. The Resolution of Problems in Non- Relative Logic	204	133
<i>Part III. The Logic of Relatives</i>		
1. Individual and Simple Terms	214	138
2. Relatives	218	140
3. Relatives connected by Transposition of Relate and Correlate	223	142
4. Classification of Relatives	225	144
5. The Composition of Relatives	236	147
6. Methods in the Algebra of Relatives	245	151
7. The General Formulæ for Relatives	248	153
VII. ON THE LOGIC OF NUMBER (1881)		
1. Definition of Quantity	252	158
2. Simple Quantity	255	159
3. Discrete Quantity	257	159
4. Semi-infinite Quantity	260	160
5. Discrete Simple Quantity Infinite in both Directions	272	164
6. Limited Discrete Simple Quantity	280	166
VIII. ASSOCIATIVE ALGEBRAS (1881)		
1. On the Relative Forms of the Algebras	289	171
2. On the Algebras in which Division is Unambiguous	297	175
IX. BRIEF DESCRIPTION OF THE ALGEBRA OF RELATIVES (1882)		
	306	180
X. ON THE RELATIVE FORMS OF QUATERNIONS (1882)		
	323	187
XI. ON A CLASS OF MULTIPLE ALGEBRAS (1882)		
	324	189
XII. THE LOGIC OF RELATIVES (1883)		
	328	195

CONTENTS

<i>Paper</i>	<i>Paragraph Numbers</i>	<i>Page</i>
XIII. ON THE ALGEBRA OF LOGIC: A CONTRIBUTION TO THE PHILOSOPHY OF NOTATION (1885)		
1. Three Kinds of Signs	359	210
2. Non-Relative Logic	365	214
3. First-Intentional Logic of Relatives	392	226
4. Second-Intentional Logic	398	233
5. Note	403A	239
XIV. THE CRITIC OF ARGUMENTS (1892)		
1. Exact Thinking	404	250
2. The Reader is Introduced to Relatives	415	257
XV. THE REGENERATED LOGIC (1896)		
	425	266
XVI. THE LOGIC OF RELATIVES (1897)		
1. Three Grades of Clearness	456	288
2. Of the Term Relation in its First Grade of Clearness	458	289
3. Of Relation in the Second Grade of Clearness	464	292
4. Of Relation in the Third Grade of Clear- ness	468	295
5. Triads, the Primitive Relatives	483	310
6. Relatives of Second Intention	488	311
7. The Algebra of Dyadic Relatives	492	313
8. General Algebra of Logic	499	316
9. Method of Calculating with the General Algebra	503	317
10. Schröder's Conception of Logical Prob- lems	510	320
11. Professor Schröder's Pentagrammatical Notation	520	327
12. Professor Schröder's Iconic Solution of $x \approx \varphi x$	523	331
13. Introduction to the Logic of Quantity	526	332
XVII. THE LOGIC OF MATHEMATICS IN RELATION TO EDUCATION (1898)		
1. Of Mathematics in General	553	346
2. Of Pure Number.	562A	352

EXACT LOGIC

<i>Paper</i>	<i>Paragraph Numbers</i>	<i>Page</i>
XVIII. INFINITESIMALS (1900)	563	360
XIX. NOMENCLATURE AND DIVISIONS OF DYADIC RELATIONS (1903)		
1. Nomenclature	571	366
2. First System of Divisions	578	369
3. Second System of Divisions	583	374
4. Third System of Divisions	588	376
5. Fourth System of Divisions	601	383
6. Note on the Nomenclature and Divisions of Modal Dyadic Relations	606	386
XX. NOTES ON SYMBOLIC LOGIC AND MATHEMATICS (1901 and 1911)		
1. Imaging	609	388
2. Individual	611	390
3. Involution	614	392
4. Logic (exact)	616	393
5. Multitude (in mathematics)	626	399
6. Postulate	632	401
7. Presupposition	635	403
8. Relatives	636	404
9. Transposition	644	409
APPENDIX. ON NOTIONS	646	411
INDEX OF PROPER NAMES		417
INDEX OF SUBJECTS		419