

CONTENTS

CHAPTER I

ELEMENTS OF THE SYSTEM

§ 1. <i>The true form of the Aristotelian syllogism</i>	. . . . .	1
§ 2. <i>Premisses and terms</i>	. . . . .	3
§ 3. <i>Why singular terms were omitted by Aristotle</i>	. . . . .	5
§ 4. <i>Variables</i>	. . . . .	7
§ 5. <i>Syllogistic necessity</i>	. . . . .	10
§ 6. <i>What is formal logic?</i>	. . . . .	12
§ 7. <i>What is formalism?</i>	. . . . .	15

CHAPTER II

THESES OF THE SYSTEM

§ 8. <i>Theses and rules of inference</i>	. . . . .	20
§ 9. <i>The syllogistic figures</i>	. . . . .	23
§ 10. <i>The major, middle, and minor terms</i>	. . . . .	28
§ 11. <i>The history of an error</i>	. . . . .	30
§ 12. <i>The order of the premisses</i>	. . . . .	32
§ 13. <i>Errors of some modern commentators</i>	. . . . .	34
§ 14. <i>The four Galenian figures</i>	. . . . .	38

CHAPTER III

THE SYSTEM

§ 15. <i>Perfect and imperfect syllogisms</i>	. . . . .	43
§ 16. <i>The logic of terms and the logic of propositions</i>	. . . . .	47
§ 17. <i>The proofs by conversion</i>	. . . . .	51
§ 18. <i>The proofs by reductio ad impossibile</i>	. . . . .	54
§ 19. <i>The proofs by ecthesis</i>	. . . . .	59
§ 20. <i>The rejected forms</i>	. . . . .	67
§ 21. <i>Some unsolved problems</i>	. . . . .	72

CHAPTER IV

ARISTOTLE'S SYSTEM IN SYMBOLIC FORM

§ 22.	<i>Explanation of the symbolism</i>	77
§ 23.	<i>Theory of deduction</i>	79
§ 24.	<i>Quantifiers</i>	83
§ 25.	<i>Fundamentals of the syllogistic</i>	88
§ 26.	<i>Deduction of syllogistic theses</i>	90
§ 27.	<i>Axioms and rules for rejected expressions</i>	94
§ 28.	<i>Insufficiency of our axioms and rules</i>	98

CHAPTER V

THE PROBLEM OF DECISION

§ 29.	<i>The number of undecidable expressions</i>	100
§ 30.	<i>Stupecki's rule of rejection</i>	103
§ 31.	<i>Deductive equivalence</i>	106
§ 32.	<i>Reduction to elementary expressions</i>	111
§ 33.	<i>Elementary expressions of the syllogistic</i>	120
§ 34.	<i>An arithmetical interpretation of the syllogistic</i>	126
§ 35.	<i>Conclusion</i>	130

CHAPTER VI

ARISTOTLE'S MODAL LOGIC OF PROPOSITIONS

§ 36.	<i>Introduction</i>	133
§ 37.	<i>Modal functions and their interrelations</i>	134
§ 38.	<i>Basic modal logic</i>	135
§ 39.	<i>Laws of extensionality</i>	138
§ 40.	<i>Aristotle's proof of the M-law of extensionality</i>	140
§ 41.	<i>Necessary connexions of propositions</i>	143
§ 42.	<i>'Material' or 'strict' implication?</i>	146
§ 43.	<i>Analytic propositions</i>	148
§ 44.	<i>An Aristotelian paradox</i>	151
§ 45.	<i>Contingency in Aristotle</i>	154

CHAPTER VII

THE SYSTEM OF MODAL LOGIC

§ 46. <i>The matrix method</i>	. . .	158
§ 47. <i>The C-N-δ-p-system</i>	. . .	160
§ 48. <i>δ-Definitions</i>	. . .	163
§ 49. <i>The four-valued system of modal logic</i>	. . .	166
§ 50. <i>Necessity and the four-valued system of modal logic</i>	. . .	169
§ 51. <i>Twin possibilities.</i>	. . .	172
§ 52. <i>Contingency and the four-valued system of modal logic</i>	. . .	174
§ 53. <i>Some further problems</i>	. . .	178

CHAPTER VIII

ARISTOTLE'S MODAL SYLLOGISTIC

§ 54. <i>Moods with two apodeictic premisses</i>	. . .	181
§ 55. <i>Moods with one apodeictic and one assertoric premiss</i>	. . .	183
§ 56. <i>Rejected moods with one apodeictic and one assertoric premiss</i>	. . .	186
§ 57. <i>Solution of the controversy</i>	. . .	188
§ 58. <i>Moods with possible premisses</i>	. . .	191
§ 59. <i>Laws of conversion of contingent propositions</i>	. . .	194
§ 60. <i>Rectification of Aristotle's mistakes</i>	. . .	198
§ 61. <i>Moods with contingent premisses</i>	. . .	201
§ 62. <i>Philosophical implications of modal logic</i>	. . .	205
INDEX	. . .	209

ERRATA

Page 84, line 35: for *h* read *b*

Page 90, last line: exchange *a* and *c*

Page 120, line 29: for $*100 \times *61$. *c/b* read $*61 \times *100$. *b/c*

Page 129, line 24: for *Icd* read *NIcd*