

CONTENTS

Frontispiece. Section of the shell of a Pearly Nautilus fossil. (Reproduced by permission of Dr A. M. Winchester of Stetson University, Florida.)

PREFACE	<i>page</i> vii
HISTORICAL INTRODUCTION	ix
NOTATION	xi

PART I. SPEC

1	The Parabola	<i>page</i>	2
2	The Ellipse		12
3	The Hyperbola		24
4	The Cardioid		34
5	The Limaçon		44
6	The Astroid		52
7	The Nephroid		62

PART II. WAYS OF F

14	Conchoids	126
15	Cissoids	130
16	Strophoids	134
17	Roulettes	138
18	Pedal Curves	152
19	Negative Pedals	156

CIAL CURVES

8	The Deltoid	72
9	The Cycloid	80
10	The Right Strophoid . . .	90
11	The Equiangular Spiral . .	98
12	The Lemniscate of Bernoulli	110
13	The Tractrix and Catenary	118

INDING NEW CURVES

20	Glissettes	160
21	Evolutes and Involutives . .	166
22	Spirals	172
23	Inversion	176
24	Caustic Curves	182
25	Bipolar Coordinates	186

FURTHER READING	191
GLOSSARY	192
INDEX OF NAMES	196
INDEX OF SUBJECTS	198