

Contents

Introduction by OWEN GINGERICH	v
Editor's Preface	vii

Star-crossed lives

1 Tycho Brahe's nose	3
2 The cosmic vision of Robert Burton	6
3 Hans Egede and early astronomy in Greenland	10
4 The diary of an early American amateur astronomer	12
5 America's last King and his observatory	15
6 The crucial years of Wilhelm Struve	20
7 John Pond: sixth Astronomer Royal	26
8 Some British amateurs of the Golden Age	32
9 John Herschel's expedition to South Africa	37
10 The Airy regime at Greenwich	41
11 About an astronomer-explorer	47
12 The Sadler-Smyth scandal	51
13 The adventures of C. H. F. Peters	56
14 John Tebbutt, his observatory, and a probable nova	66
15 Lewis Swift and the lives of a 16-inch refractor	71
16 Garrett P. Serviss and some Brooklyn amateurs	78
17 The legacy of S. W. Burnham	84
18 Harvester of the skies	92
19 The many Moons of Dr. Waltemath	97
20 A South American tragedy	99
21 The curious career of Leo Brenner	103
22 The sage of Mare Island	111
23 Some invisible astronomers	115

Telescopes and techniques

24 The era of long telescopes	123
25 Herschel's "large 20-foot" telescope	127

Contents

26	A harem of telescopes	133
27	The telescopes of William Lassell	136
28	James Nasmyth's telescopes and observations	141
29	Leon Foucault's heritage to telescope making	148
30	The Clarks and some of their refractors	155
31	An episode in early astrophotography	160
32	Early photography and the Great Comet of 1882	165
33	Five lives of a 60-inch reflector	168
34	The lost legacy of Dr. Peate	176
35	The great Paris telescope fiasco	179
36	Beginnings of the Space Age	183

Phenomena of the Earth, Moon, and planets

37	Thoughts about twilight	189
38	Darkness at noon	192
39	Some notes about earthshine	196
40	Observing very thin lunar crescents	200
41	The first observed occultation of one planet by another	209
42	Edmond Halley at St. Helena	213
43	Father Hell's reputation	218
44	Father Perry's expedition to Kerguelen Island	221
45	The next transit of Venus	227

Studies and students of the Moon

46	Lunar studies before the telescope	233
47	The “long night” of selenography	236
48	Roger Boscovich and the Moon’s atmosphere	244
49	The first true mapper of the Moon	247
50	Julius Schmidt: An incredible visual observer	251
51	J. N. Krieger: The Moon half-won	258
52	Philipp Fauth and his Moon atlas	265
53	Linné in fact and legend	272

Contents

Planets and other Solar System objects

54	An alleged satellite of Venus	281
55	The problem of visual observations of Venus	284
56	The disappearance of a marking on Mars	287
57	Asaph Hall finds the moons of Mars	290
58	Naming some early minor planets	297
59	Tales of two lost planets	302
60	Perrine discovers Jupiter's sixth and seventh satellites	310
61	300 Years of Jovian satellite eclipses	316
62	Comets true and false	322
63	An early American meteorite	330

Stars and stellar systems

64	William Herschel and the Sun	337
65	Richard Carrington and a “singular appearance” on the Sun	340
66	The gradual recognition of helium	344
67	Algol and scientific conservatism	347
68	The story of Groombridge 1830	352
69	The eagle eye of William Rutter Dawes	360
70	Mizar, Alcor, and a planet that wasn’t	365
71	Visual star colors and a list of red stars	369
72	The visual Milky Way	373
73	The visual Orion Nebula	379
74	E. P. Mason and the nebulae	388
75	A hole in the sky	392
76	The discovery of spiral structure in galaxies	397
77	The nucleus of the Andromeda galaxy	404

Star atlases and other publications

78	Johann Bayer and his star nomenclature	411
79	Hevelius: his star catalogue and atlas	419
80	How the BD was made	427
81	The brothers Henry and the <i>Carte du Ciel</i>	436

Cambridge University Press

978-0-521-10604-7 - The Astronomical Scrapbook: Skywatchers, Pioneers, and Seekers in Astronomy

Joseph Ashbrook

Table of Contents

[More information](#)

Contents

82	A. G. Pingré and his annals	440
83	An enigmatic astronomical woodcut	444
	Notes and references	450
	Index	464