

Contents

<i>Preface</i>	vii
<i>Acknowledgements</i>	xvi
<i>Chapter 1</i>	
The Beginnings	1
How Might Fermented Beverages Have Originated?	1
Some General Definitions and Musings	9
References	30
<i>Chapter 2</i>	
Ancient Egypt	32
Introduction	32
The Grains	37
Grain Cultivation and Processing	41
Beer as Compensation for Labour	43
Beer Export and Import	44
<i>Bouza</i>	46
Brewing Technology	48
Brewery Sites	51
Information from the Artistic Record	53
The “ <i>Folkloristic</i> ” Approach to Interpretation of Ancient Egyptian Brewing	56
Beer Flavouring	61
Fermentation	63
The Role of Women	64
The Contributions of Dr Samuel	64
References	72
<i>Chapter 3</i>	
The Ancient Near East	75
Introduction	75

The Role of Beer in Society	77
The Terminology and the Techniques	78
The Evidence for Breweries and Brewing Equipment	79
Types of Beer	81
Methodology	83
Drinking Through Straws, <i>etc.</i>	86
The Goddess Ninkasi	87
Notes from the <i>Hymn to Ninkasi</i>	89
Chemical Evidence for Beer	91
A Question of Primacy	92
The Grains	96
Flavouring	103
Banqueting, Over-indulgence and Retribution	104
References	113
<i>Chapter 4</i>	
Other Ancient Beer-drinking Peoples	117
Introduction	117
Israel and Palastine	119
The Land of the Hatti	125
Phrygia	128
Lydia	130
Cicilia	131
Armenia	132
Syria	133
Thrace	134
The Phoenicians	136
Galatia and the Celts	139
Urartu	140
Mitanni	142
The Scythians	143
The Cimmerians	148
The Urnfield Society	150
The Celts	151
Evidence for Celtic Brewing	161
References	163
<i>Chapter 5</i>	
The British Isles and Europe	165
Introduction	165
Cereals as Markers for Brewing Activity	169

Neolithic Britain and Northwest Europe: the Beginnings of Agriculture	172
The Passage of Farming Across Europe	181
Farming <i>vs</i> Gathering	185
A Short Interlude in Southeast Europe	190
Why Did Agriculture Spread Across Europe?	191
Did Neolithic Britons Brew?	193
The Bronze Age and the Culture of the Beaker	199
Evidence of Bronze Age Brewing	210
The Iron Age	211
Roman Britain	225
Anglo-Saxon Britain	233
Did <i>Beor</i> Equate to Beer?	251
Ireland Before Guinness	259
The Early Days of Brewing in Holland	268
References	276
<i>Chapter 6</i>	
From the Norman Conquest to the End of the Tudors	282
William the Conqueror	282
The First Regulations	284
Henry III and the Assize of Bread and Ale	292
The Formation of the Guilds	296
Domestic Ale Consumption Around the 15 th Century	302
Hops	303
The Beer Trade with Holland	314
More about Hops and Beer	317
Measures to Combat Dishonesty	321
Beer <i>vs</i> Ale	323
Henry VIII and the Alewife	326
Brewsters	330
A Tudor Miscellany	333
Elizabeth I	346
Brewing in Tudor Times – Some Details	351
References	361
<i>Chapter 7</i>	
The Start of Large-scale Brewing	365
The Stuarts	365
The Use of Coal	372

Charles I and Oliver Cromwell	375
Commercial (Common) Brewers	383
Mumm	387
Gin (Madame Geneva)	391
The End of “Medievalism”	392
Gervase Markham	395
The Onset of Brewing Science; Lavoisier <i>et al.</i>	401
Adulteration of Beer	416
Some Early Brewing Texts	421
James Baverstock and the First Brewing Instruments	424
Steam Power	437
Big is Beautiful	440
The Need for Attemperation	451
James Prescott Joule	457
Refrigeration	462
Some Technological Improvements	469
Taxes on Everything	472
The Golden Years of Brewing Science	477
References	482
<i>Chapter 8</i>	
Some Beer Styles and Some Breweries	485
Porter	485
Bavarian Beer	508
Potato Beer	514
Heather Ale	515
Pale Ale	523
Devonshire White Ale	530
<i>Gruit</i> : The Major Beer Flavouring, Prior to the Hop, in Many Parts of Europe	534
City of London Brewery	538
Truman’s Brewery	540
Golden Lane Brewery	551
Courage	554
References	565
<i>Chapter 9</i>	
The 20th Century	568
The Lull Before the Storm	568
The Storm: 1914–1918	579

The Sign of Things to Come	589
Bottled Beer	593
The Story of British Lager	604
The Origins of the “ <i>Amber Nectar</i> ”	620
Brewing Becomes Really Scientific	627
Brewery-conditioned Beer	670
CAMRA – A Response to Brewery-conditioned Beer	678
The “ <i>Big Six</i> ”	684
Beer and Health	699
References	709
Appendix 1	
Timescale for Europe, Western Asia and Egypt	716
Appendix 2	
Ancient names for parts of Europe and the Near East	718
Appendix 3	
Sketch of working brewery of the 15 th century	719
Appendix 4	
John Taylor: “The Water Poet”	720
Appendix 5	
Section through brewery showing layout	722
Appendix 6	
Summary of brewing processes	723
Appendix 7	
Explanation of chronological signs	724
Subject Index	725