

Contents

x	Preface
1	Splitting the infinitive <i>Charles R Langmuir</i>
2	Broken English <i>H B G Casimir</i>
5	NPL haiku
6	Four dimensional stress analysis (photograph) <i>P L Kirby</i>
7	Federalese <i>G R Hicks</i>
7	Readability ratings
7	God grant . . . (poem)
8	A note on the game of refereeing <i>J M Chambers</i> and <i>Agnes M Herzberg</i>
13	Why should editors not be gluttonous? (quotation)
14	Preparing scientific papers <i>N S Haile</i>
16	Huxley quotation
17	Commandments for the writer of a dissertation
19	Moore's report on Wittgenstein
19	Wittgenstein (quotation) <i>Bertrand Russell</i>
19	A philosophical joke
19	Shaw quotation
20	Royalties: the Quatorze connection <i>Marque Bagshaw</i>
20	Perish, but publish! <i>William J McGlothlin</i>
20	Clarification
21	How to win arguments <i>V D Landon</i>
22	The acceptance of a scientific idea <i>J B S Haldane</i>
23	On the reading of scientific papers <i>Eugene F Dubois</i>
23	Clerk Maxwell's comments on Herbert Spencer
23	Advice to lecturers <i>Michael Faraday</i>
24	The use of small dogs in physics teaching <i>A W S Tarrant</i>

- 29 Teaching *Picasso*
- 30 Teacher evaluation *John Gauss*
- 31 Refraction cartoon *P Hewitt*
- 31 Proclamation *Michael Scott*
- 32 Free thinking *Alexander Calandra*
- 34 A revised PhD comprehensive
- 35 Syllabus for a detective story written by a physics professor
H R Crane
- 36 Challenging experiments *John H Reynolds*
- 36 Images *W S Franklin* and *B McNuit*
- 37 Mission statements *Richard Chait*
- 38 The rank order on campus *Pearl G Aldrich*
- 38 Budget
- 39 The University hierarchy—who's on top?
- 40 View from the bottom *C E K Mees*
- 41 On the problem of innovation *Amrom H Katz*
- 42 In the days of old . . . (poem) *J D Pye*
- 42 An undergrad from Trinity . . . (poem)
- 43 The Dreistein case *J Lincoln Paine*
- 47 Artsimovich quotation
- 48 The Hydrogen Dog . . . (poem) *Frederick Winsor*
- 48 Science and wisdom (quotation) *Arthur Stanley Eddington*
- 48 Punch quotation
- 49 Sir Edward Victor Appleton's Nobel Award (1947)
Ronald Clark
- 50 Hypothesis *A S Parkes*
- 50 Bruno quotation

- 51 Finagle's laws
- 52 Twain quotation
- 53 Murphy's Law (photograph) *J A Venables*
- 54 Descent of man *D L Austin* and *J D Bu'Lock*
- 54 Schrödinger quotation
- 54 Sullivan quotation
- 54 Doyle quotation
- 55 Literacy in an age of technology *George Steiner*
- 58 How to live with the Philistines *Henry E Duckworth*
- 61 A Philistine asks for equal time *Sister Johnell Dillon*
- 63 Brain Drain *Joan Butt*
- 64 Robert Boyle's tombstone
- 64 When hydrogen played oxygen . . . (poem)
- 64 Chemistry and physics (quotation) *Frederick Soddy*
- 64 Quips from *Orbit*
- 65 Pan's pipes *Robert Louis Stevenson*
- 65 Seventeenth-century recognition of resonance *Andrew Marvell*
- 65 Voltaire quotation
- 66 Precipitates on a surface (photograph) *Siemens*
- 67 Demon theory of friction *Eric M Rogers*
- 69 Natural-science viva, c1890
- 70 Physics instructor *John N Shive*
- 71 Moiré cartoon *Piggins*
- 72 Influential textbooks: *The Feynman lectures on physics*
Ivar Giaver
- 73 A lecture to a lady on Thomson's reflecting galvanometer
James Clerk Maxwell

74	European atom
75	I'm grateful, Lord, for NMR . . . (poem)
76	Error bars <i>Jerry D Wilson</i>
77	The British high energy physics community <i>John Ziman</i>
80	Blackett quotation
80	Fermi quotation
81	All power to particles
82	The future European harmonic pendulum
87	The fluttering, spiralling flight of cyclotron evolution <i>David L Judd</i>
92	E O Lawrence, driver
93	Ten commandments of electrical safety
94	<i>hv G Stead</i>
94	Darrow quotation
95	Tea-time with Rutherford <i>A S Russell</i>
96	Science commemorated in stained glass: The Zeeman Windows, the John Glenn Window, the Albert Einstein Window and the Space Window (colour plates)
97	Pauli in Heaven
97	Working for Pauli (quotation) <i>Victor Weisskopf</i>
98	Physikalisches Lied <i>Molly Kule</i>
99	Tracking the elusive quark <i>Lewis Grossberger</i>
101	Bohr quotation
101	Spin-orbit coupling <i>Maria Goeppert Mayer</i>
102	Reference frames <i>John N Howard</i>
102	Space and time anecdote about Frank
102	Space <i>Felix Bloch</i>
103	The Einstein and the Eddington <i>W H Williams</i>

- 105 Einstein's philosophy of science *Philipp Frank*
- 106 Relativity *Robert Williams Wood*
- 106 Michelson quotation
- 107 R W Wood—improviser
- 109 Schuster's library *Robert L Weber*
- 109 Hubbard quotation
- 110 Hetherington and Willard *J Hetherington*
- 111 Eddington quotation
- 112 Captain DeKhotinsky *Paul E Klopsteg*
- 114 The Doppler effect *Steven Weinberg*
- 115 My anecdotage *Ronald D Edge*
- 118 The diabolical heating scheme of J C Maxwell *John Lowell*
- 119 Proof by induction *Edgar W Kutzscher*
- 119 Stauffer's law of the entropy of change *Don Stauffer*
- 119 Twain quotation
- 120 International Court of Scientific Nomenclature, rival claims of
scientists: Celsius vs McKie *A S McKie*
- 122 $m\mu$ —an optician's lament *M J Merrick*
- 123 The King who kept his 0°C *Edward Crowley*
- 124 Name for unit radian frequency *M Strasberg*
- 125 On the mathematics of committees, boards and panels
Bruce S Old
- 126 The 'Legal' value of π *M H Greenblatt*
- 127 Holmes quotation
- 127 Functions (quotation) *E Kasner and J Newman*
- 128 Science in double dactyls *Alan Holden, Jay M Pasachoff and
A P French*
- 130 Hymne to Hymen *Blanche Descartes*

133	Resolution of the paradox <i>Abner Shimony</i>
135	Saving time: a commentary <i>Norman Sperling</i>
137	Could the earth run backward? <i>J B Priestley</i>
138	Twixt earth and sky with matter-horns <i>Richard H Lyon</i>
139	Astronaut cartoon
140	Astronomical funding <i>M Minnaert</i>
140	Higgledy pigglede . . . (poem) <i>Jeanne Hopkins</i>
140	O, telescope! <i>Johannes Kepler</i>
141	Planetoid for sale <i>H H Turner</i>
141	Celsius—the astronomer
142	The satellite question
145	Astronomical aberration <i>Clarence Day</i>
146	Creation of the Universe <i>Jay M Pasachoff</i>
149	Creation
150	Stressing the astronauts <i>Tom Wolfe</i>
151	On the spot?
152	Confirmation of the discovery of a black hole (photograph) <i>Roy L Bishop</i>
153	Cocking a Snootnik at Sputnik <i>David S Evans</i>
153	Still in the galaxy <i>Jeanne Hopkins</i>
154	A damsel in distress <i>John Scoffern</i>
155	Chemical history is shaped by a maker of wine bottles
157	To err is human . . .
157	A chemical hoax
161	Early molecular biology (illustration)
161	The name of vitamin C
162	Professionalism—to the end

- 162 The purist *Ogden Nash*
- 162 The ant *Ogden Nash*
- 163 Fellowshipmanship *Ian Rose*
- 167 Outline of evolution as dimly recalled from college education
Stephen Leacock
- 168 Struthiomimus *J Maynard Smith*
- 169 J B S Haldane quotation
- 170 The dinosaur *Will Cuppy*
- 170 R W Wood *Paul E Klopsteg*
- 171 The Pansy and the Chim-pansy *R W Wood*
- 172 The dry-rot of our academic biology *William Morton Wheeler*
- 176 Name dropping *Robert L Weber*
- 177 Pollution *Kenneth E Boulding*
- 178 Modelling the cat falling *Henry Petroski*
- 180 The speed of the deer fly *Robert L Weber*
- 181 Horse breeding *Aaron Katchalsky*
- 182 Designer genes: a new look in fish genetics *Joel E Cohen*
- 183 The reason life . . . (quotation)
- 184 Curve fitting *David W Roubik* and *Robert M Hazen*
- 185 Understanding atomic physics . . . (quotation)
- 186 Biorhythm: imitation of science *W S Lyon, F F Dyer* and *D C Gary*
- 189 The original electrocardiograph (photograph) *Cambridge Medical Instruments Ltd*
- 190 On being blinded with science *D E H Jones*
- 197 That thing will never work *Don Groves*
- 198 Errors and myopia

199	Weather cartoon <i>Norris</i>
200	Extracts from <i>Modern Geography</i> c1740
201	Continental drip <i>Ormonde de Kay Jr</i>
203	Sir Isaac Newton quotation
204	Acknowledgments

