

INDEX

Headings which do not appear in the Index may be found in the Dictionary of Chemical Terms, page 210, or in the Glossary of Papers, page 217.

- | | |
|---|---|
| <p>Acetic acid, 197, 198
 Acids, action of, on cellulose, 196
 Acidity of paper, 11, 142
 Adansonia, 170, 195
 Agalite, 129
 Alkalies, action of, on cellulose, 196
 Alam, 41, 217
 Aniline dyes, 10
 for art paper, 87
 differentiation of fibres by, 164
 Animal size, 23
 detection of, 137
 Antique paper, 6, 51
 Art paper, 3, 84
 "body," 88
 colouring, 87
 defects in, 89
 imitation, 93, 96
 materials for, 86
 mineral matters in, 91
 qualities of, 88
 surface of, 94
 Asb, estimation of, 131
 testing, 130

 Backwater, 27
 Bacteria, and deterioration, 9
 Bakery trade, paper for, 81
 B Barium sulphate in paper, 129, 130
 Barkers for wood-pulp manufacture, 65
 Beating, effect of, on bulk, 8
 transparency, 10
 various fibres, 52
 engines, 19, 40, 50, 70
 esparto, 39
 object of, 51
 rags, 19
 time occupied, 51
 wood pulp, 70
 Birch fibre, 168
 Biscuit papers, 81
 Bisulphite of lime, 64
 Black liquor, 87
 Blanc fixe, 130
 Bleaching, 17, 19, 38, 70, 196
 and transparency, 10
 Block, production of half-tone, 96
 Blotting paper, 13, 228
 testing, 118
 Boards, 81, 83
 Boiling rags, 15, 16
 Breaker, for rags, 17</p> | <p>Breaking length of paper, 108, 176, 183
 and sectional area, 108, 181, 187
 Brown paper, 78
 Bulk, factors influencing the, 8
 in relation to transparency, 10
 measurement of, 8, 100
 variations in, 182
 Bursting strain of paper, 109, 176

 C.B.S. units, 179, 181
 Calenders, 24, 33, 43
 Carrington paper-tester, 105
 Cassia, 87, 139
 Caustic soda, 15
 Cellulith, 195
 Celloid, 197
 Cellulose, 194, 200
 action of acids on, 196
 alkalies on, 196
 ferments on, 198
 heat on, 198
 compound, 194, 195
 derivatives, 195
 in fibres, percentage of, 195
 Charmal, 198
 Chemical and physical constants, 2
 constituents of paper, 128, 142
 terms, 216
 Chemical wood pulp, 61
 beating, 52
 chipping logs for, 61
 pressing, 63
 process of manufacture, 61
 process, high pressure, 62
 process, Mitscherlich, 65
 screening, 68
 China clay, 11, 40, 77, 128, 129
 Chloride of lime, 17
 Chlorine in paper, 143
 Chronology of paper, 208
 City and Guilds exam. questions, 239
 Coated paper, 84
 Collodion, 197
 Colophony, <i>see Rosin</i>
 Colouring-matter, addition of, 20
 Colour of paper, unevenness in, 10
 how measured, 125
 reactions on paper, 151
 of fibres, 155, 172</p> |
|---|---|

INDEX

Confectionery trade, paper for, 81
 Congo-red, 142
 Constants, chemical and physical, 2
 Cornetti's breaking engine, 73, 79
 Cotton fibre, 157, 160, 194, 201
 mercerised, 196
 Couch-rolls, 28, 31, 182
 Coucher, duties of, 21, 22
 Creases, 7
 Crumpling test, 111, 176
 Cutting rag papers, 34
 esparto, 45

Dandy-roll, 25, 30
Deckle, 21
Deckle straps, 28
 Deterioration of paper, 2, 9
 Difficulties, technical, relating to paper, 6
 Digesters, 18, 37, 46, 62, 198
 Dirt particles in paper, 11, 143
 Discoloration, 6
 Donkin, paper machinery, 205
 Drapery trade, paper for, 81
 Drying, 26, 26
 cylinders, 31
 ovens, 61, 134
 Duplex coated papers, 96
 Dust from paper, 11
 Duster for rags, 14

Edges, wavy, 7
 Elasticity of paper, 110, 176
 Engine sizing, 41, 139
 Envelope papers, defects in, 7
 Equivalent weights, 99
 Esparo, nature of, 157, 175, 201
 fibres, 160
 effect of beating, 52
 testing for, 155, 172
 paper, colouring, 43
 finishing, 44
 sizing, 41
 pulp, cleaning, 36
 beating, 39
 boiling, 36
 loading, 40
 washing, 37

Feed-box, 26
 Fibres and bulk of paper, 9
 analysis of papermaking, 198 *et seq.*
 animal, 171
 bamboo, 170
 birch, 168
 chemical wood, 166
 classification of uses of, 166
 colour reagents for, 151, 172
 colours of, stained, 155, 172
 composition of papermaking, 201
 cotton, 159, 160
 differentiation of, 151
 esparto, 160, 181
 estimation of, in paper, 149, 172
 ground wood, 169

Fibres, hemp, 163, 164
 investigation of new, 199
 jute, 164, 165
 linen, 158, 160
 measurement of, 150
 microscopic examination of, 148
 mounting, for microscope, 148
 poplar, 167
 rags, 158
 relative sizes of, 171
 resistance to chemical treatment, 157
 silk, 171
 staining of, 153, 154
 straw, 161
 uses in papermaking, 156
 various commercial, 170
 vegetable, 156
 wood pulp, 165
 wool, 171

Filter paper, testing, 123
 Finishing, process of, 25, 44
 Flax, 157, 195, 201
 Folding, resistance of paper to, 112, 176
 Foulscap, 22
 Fourdrinier, 204
 machine, 25, 43
 Friction glazing, 44
 Furfural, estimation of, 202

Gas, and deterioration of paper, 10
 Gelatine, 28, 24, 136
 testing for, 137
 Glazing paper, 25, 44
 effects of, 8, 187
 Glossary of papers, 227
 Glucose, 197
 Glue, estimation of, 137
 Grease spots, 12
 Grease-proof paper, 52, 69
 blister, test for, 124
 testing, 123
 Grinding wood for pulp, 55
 Guillotine, 34
 Gen-cotton, 197

Half-stuff, 5, 19, 51
 Half-tone blocks, 96
 Hand-made paper, 20
 Hemp, 163, 164, 195, 201
 Herring, on paper making, 25
 History of paper, 203
 Hollander beater, 19, 40, 50
 Humidity in the air, 134
 Hydrocellulose, 197
 Hygrometer, 136

Imitation art paper, 92, 96
 parchment, 195
 Impurities, 9, 11
 Ink, for art papers, 99
 penetration, and sizing, 115
 Iodine, reagent, 152
 use of, 135, 149, 151

Jackson paper-tester, 105

Journals, scientific, 2

Jute, 78, 164, 195, 201

Laid paper, 21, 31

Layerman, duties of, 21

Lechner's paper-tester, 105

Lime, sulphate of, in paper, 129

Linen fibre, 158, 160

Lithographic paper, 3

Loading, addition of, to pulp, 20
and bulk, 8

transparency, 10

Loft drying, 25

Logs, barking, 54

for pulp-making, 54

grinding, 55

Loss, in treatment of rags, 19

M.G. Caps, 81

Machine direction of paper, 107

Machine wire, 28

Magnesia, silicates of, in paper, 129

Manila hemp, 164, 195

Manufacture of paper, stages of, 4

Marshall's paper-tester, 105

Mather Kier, 16

Mechanical wood pulp, 53

effect of beating on, 52

fibres of, 169

grinding, 55

pressing, 59

screening, 56

testing for, in paper, 172

Mercerisation, 200

Mercerised cotton, 196

Methoxyl, estimation of, 202

Metrical system, 190 et seq.

Micrometer thickness gauge, 101

Microscope, accessories for, 146

convenient magnification, 145

description of, 145

exercises in use of, 149

general hints on use of, 145

manipulation of, 147

reagents for analysis by, 151

Microscopic work, reagents for, 151, 156

Middle, 83

Millboards, 81

Million's reagent for animal size, 138

Mineral adulterations, 143

matter, 12, 128, 132

effect on bulk, 8

transparency, 10

excess of, 9

in coated paper, 91

Mitscherlich pulp, 65

Moisture in air, 134, 136

estimation of, in paper, 134

influence of, on paper, 6, 77, 134

Monld for laid paper, 21

wave, 21

Mullen's paper-tester, 109

Opacity of paper, 10, 177

Oxalic acid, 196

Packing rag papers, 85

Panel boards, 83

Paper, abnormal constituents of, 11, 142

analysis of a typical, 173

art, 84

ash in, 130

breaking length of, 108, 176, 183

brown, common, 79

medium, 79

strong, 78

bulk of, 8, 100, 182

bursting strain of, 109, 175

chemical constituents of, 2, 128, et seq.

chronology, 208

common printing, 71

cutting of, 45

deterioration of, 2, 9

elasticity of, 110, 172

equivalent weights, 99

esparto, 36

expansion of, 4

gelatine in, 137

H. M. Stat. Office classification, 3

hand-made, 20

historical account of, 203

ideal, 4

impurities in, 9, 11

loss of strength from folding, 112, 176

machines, early, 205

machine-made, 25

manufacture, questions on, 239

of cheap news, 71

common printing, 71

mechanical wood pulp in, 172

moisture in, 6, 77, 134

packing, 78

physical qualities of, 98

road, size in, 189

soluble matter in, 141

specific gravity of, 181, 188

stages of manufacture, 4

starch in, 135

statistics, 211 et seq.

strength of, 102

stretch of, 110

tearing qualities, 115

technical difficulties, 6

testing machines, 102

thickness of, 100

trade, 1

transparency of, 10, 124

varieties of, described, 227

volume composition, 178

wear and tear of, 111, 112

wood pulp, 68

Papermaking, principles of, 4

fibres, analysis of, 199

composition of, 201

Papyrus, 203

Parchment, 3

imitation, 195

Pearl hardening, 129

Pecto-cellulose, 195

INDEX

- Phloroglucine, 154, 172
 Photo mounts, 12
 Physical constants, 2
 qualities of paper, 98
 Pine, composition of, 201
 Piping creases, 7
 Plants, fibrous, 156
 Plate-glazing, 25
 Poplar, 167, 201
 "Post," 22
 "Pott," 22
 Presse-pâte, 38
 Press-rolls, 31
 Principles of papermaking, 4
 Printing on art paper, 96
 paper, 71
 Prussian blue, 191
 Pulp, esparto, 36
 rag, 15
 soda, 65
 straw, 46
 wood, 68
 chemical, 61, 66
 mechanical, 63
Quality, standards of, 1
 H.M. Stat. Office, classification, 3
 improvement with keeping, 4
Questions on paper manufacture, 239
Rag chopper, 14
 duster, 14
 papers, sizing of, 23
Rags, 169
 boiling of, 19
 bleaching of, 17
 boiling of, 15
 classification of, 13
 cutting of, 13
 grades of, 13
 half-stuff, 19
 hand-cut, 14
 loss in treating, 17, 19
 machine-cut, loss of fibre, 15
 sorting, 13, 35
 washing, 17
Ralspall reaction for size, 140
Ramie, 170, 195, 201
Reagents for microscopic work, 151
Recovered ab, 37
Refining engine for wood pulp, 71
Register, unequal, 7
Roofing, 83
Rosin size, 42
 use of, in sizing, 41
 testing paper for, 139
 quantitative estimation of, 140
"Royal hand," 22
Sand traps, 27
Save-all, 80
Schopper's paper-tester, 102
Seeds, use of, in papermaking, 167
Silk, artificial, 197
Sinclair esparto boiler, 36
Single cylinder machine, 81
Size, analysis of, 42, 139
 animal, 23, 139
 rosin, 41, 42, 139
Fixing, excess of, 9
 how measured, 115
 materials used for, 137
 rag papers, 8
Smalta, 131
Soda pulp, 65
 recovery, 37
Southworth's paper-tester, 109
Sorting rag papers, 35
Specific gravity of paper, 181, 188
Spots, defective, in paper, 6
Standards of quality, 1
Starch in paper, 135
Steam pressure, in rag boiling, 16
Strainers, 28
Straw, 46, 195, 201
 beating, 47
 bleaching, 47
 boiling, 47
 effect of beating, 52
 fibres, 161
 pulp, 45
Strength of paper, testing, 102, 175
 and glazing, 25, 187
 variations in, 185
Stretch of paper, 110, 175, 188
Stuff chest, 20, 26
Substance of paper, regulation of, 26, 28
Sulphate pulp, 67
Sulphate of lime, 129
 aluminium, 11, 41, 217
Sulphite liquor for digesting pulp, 64
Sulphur in paper, 142
Sunlight and deterioration, 9, 10
Sunn hemp, 195
Supercalender, 44
Surface of paper, 92, 94, 127
Test strip, standard size of, 105, 107
Testing machines, 105
Thickness of paper, controlling, 26
 measurement of, 100
 variations in, 100, 182
Tintometer, 126
Transparency, 10, 124
Trees, for wood pulp, 165
Tubing, 23
Ultramarine, 10, 131
Umpherston beater, 40
Vacuum boxes, 10, 30, 39
 effect on colour, 1
Vatman, duties of, 21
Viscose, 198
Volume composition of paper, 178
Vulcanised board, 88
 fibre, 106
Washing Rags, 17
Water, amount required for washing, 17
Water finish, 95
Waterleaf paper, 21, 22, 23

- Watermark, 22, 25
Wavy edges, 7
Weight of paper, 98, 175
variations in, 6
Wendler testing-machine, 105
Wet press machine, 59
Willanden paper, 94, 196
Wire of paper machine, 28
Wood, cellulose in, 195
 papers, colouration of, 11
Wood pulp, 53, 69, 165
 beating, 70
 boards, 83
 chemical, 61, 65, 166
 colouring, 71
 hydraulic press for, 60
 loading, 71
 mechanical, 53, 169
Wood pulp, Mitacherlich, 65, 68
moisture in, 61
papers made of, 68
qualities of, 68
screening of, 56, 63
soda, 65
sizeing, 71
sulphate, 67
sulphite, 61
Woolley's paper-tester, 110
Wove paper 21, 31
Wrinkles in paper, 7
Writing paper, 70
Xylonite, 197
Zinc chloride, 83, 196
and Iodine for microscope work, 149,