

# Index

## I General

For place names see also maps and their keys.

- AAS *see* atomic absorption spectrophotometry  
 Abbad region 161  
 Abdel 'AI, I. 51  
 abesh 591  
 Abies 445  
   *A. cilicica* 348, 431–2, 443, 447  
   *A. cilicica cilicica* 431  
   *A. cilicica isaurica* 431  
   *A. nordmanniana* 431  
 abietane 445, 454  
 abietic acid 445, 450, 453  
 abrasive 329, 356  
 Abrak 148  
 Abri-Delgo Reach 323  
 absorption spectrophotometry 500  
 Abu (Elephantine) 323  
 Abu Aggag formation 54, 55  
 Abu Ghalib 541  
 Abu Gurob 410  
 Abu Hamid, Tell 400  
 Abu Hawam, Tell 452  
 Abu'l-Qasim 186  
 Abu Rawash 23, 43  
   Tomb I 22  
 Abu Rusheid 46  
 Abu Salabikh 397  
 Abu Seyal 150, 151  
 Abu Sha'ar 23, 260  
 Abu Simbel 23, 27, 29, 32, 51  
 Abusir 24, 28, 64, 126, 137, 141, 179, 237, 300,  
   356, 626, 634, 642  
 Abusir papyri 138  
 Abusir el-Meleq  
   Tomb 1052 40  
 Abu Zaidan 29  
 Abydos 5, 18, 19, 27, 32, 33, 36, 42, 44, 46, 47,  
   51, 55, 61, 62, 69, 79, 85, 91, 96, 136, 168,  
   171, 180–1, 180, 188, 192, 293, 294, 306,  
   324, 327, 335, 347, 349, 363, 367, 419,  
   463, 464, 496, 508, 539, 540, 541, 577,  
   581, 582, 600, 623, 631  
 Butcher's Yard 409  
 Kom el-Sultan 91, 100  
 Locus 14 180–1, 180  
 Shunet el-Zebib 91  
 Temple of Khentiamentiu 180  
 Tomb E3 59  
 Tomb E10 59  
 Tomb E21 52  
 Tomb W2 315  
 Tomb 113 A'09 332  
 Umm el-Qa'ab, 63, 79, 363, 496, 577, 582,  
   591, 594, 631, 637  
   Tomb Q 62  
   Tomb U-j 582  
   Cemetery U 79  
 Abyssinia 46  
 acacia 91, 148, 305, 335–6, 335, 344, 367, 487,  
   489  
 Acacia 335, 476–7, 488, 491, 586  
   *A. albida* 335, 477  
   *A. arabica* 477  
   *A. arabica* var. *adansoniana* 477  
   *A. farnesiana* 477  
   *A. nilotica* 279, 335, 354, 367, 477, 488  
   *A. nilotica leiocarpa* 477  
   *A. nilotica tomentosa* 477  
   *A. raddiana* 335, 335, 354, 477  
   *A. senegal* 476, 486, 489  
   *A. seyal* 477  
   *A. tortilis* 335, 477  
 Acer 336  
   *A. campestre* 336  
   *A. cappadocicum* 336  
   *A. monspessulanum* 336  
   *A. platanoides* 336  
   *A. pseudoplatanus* 336, 340  
 Aceraceae 336  
 acetic acid 245, 590  
 Achaemenid 322  
 acorn 344  
 actinolite 38, 52  
 Adāima 643  
 Adams, M. 180  
 Adams, W.Y. 121  
 addax 408, 656  
*Addax nasomaculatus* 408  
 additive 545, 548  
 adhesive 22, 160, 234, 243, 244, 245, 248,  
   249, 250, 367, 411, 430, 456, 475–92,  
   594  
 adipocere 385  
 adit 6, 25, 44, 45, 62  
 adobe 78–80  
 adze 355, 356, 368  
*aegyptilla* 27  
 aerenchyma 229  
*Aeschynomene elaphroxylon* 336  
 Afghanistan 39, 435, 436, 443  
 African black wood 338–9, 339  
 African iron wood 338–9, 339  
 agate 15, 21, 25, 26, 27  
 Agatharchides 162  
 agathic acid 453  
*Agathis* 453, 464  
 Agricultural Museum, Dokki (Cairo) 558, 559,  
   564, 632, 634, 666  
 agriculture 228, 247, 341, 344, 391, 505,  
   506, 510, 515, 517, 521, 526, 528, 569,  
   583, 584, 609, 615, 616, 617, 628, 637,  
   647, 656  
 agrimi 327  
 A Group 323  
 Ahmose (Amarna official) 115  
 Ahmose (Valley of Queens) 312  
 Ahmose II (Amasis) 185, 196  
 Ahmose Hentempe 497  
 Ahmose Hetimehu 498  
 Ahmose Meritamun 295, 296, 666, 669  
 Ahmose Nefertari 498  
*ajouré* 325  
 Akhenaten 27, 45, 56, 60, 111, 118, 183, 200,  
   293, 598, 598  
*akhet* 515  
 Akhetotep 290  
 Akhmim 36, 43, 205, 311, 395  
 Akhziv 452  
 Akkadian 195  
 alabaster calcite *see* travertine  
 alabaster gypsum 5, 6, 14, 17, 19, 21–2, 29, 59,  
   60, 68, 105, 109, 113, 114, 117, 274  
*alabastrites* 60  
 alabastron, alabastra 22, 333, 483  
 Alashia 322, 338  
 Alaska 373  
 albumen 160, 332, 475  
*Alcelaphus buselaphus buselaphus* 408  
 alcohol 393, 467, 537, 543, 546, 551, 555, 580,  
   582, 590, 592, 599, 602, 664  
 aldehyde 302–3, 599  
 ale, pale 557  
*Alectorius barbara* 408  
 Alen, J. 182  
 Aleppo pine 351–2, 351

- aleurone 545, 550, 551  
 Aleutia 373  
 Alexander the Great 107, 322, 513, 669  
 Alexandria 18, 49, 109, 117, 155, 178, 185, 205, 219, 584, 591  
 Alexandria formation 40  
 Algeria 431, 491  
 alizarim 279  
 alkali, alkalise 109, 112, 178, 185, 187, 189, 190, 191, 197, 214, 216–17, 219, 220, 239, 302, 411, 491  
 alkaloid 392, 405  
 alkanet 279  
 alkapturia (ochronosis) 378  
*allaharum* 304  
 Allibert, A. 186, 190  
*Allium cepa* 628–30, 628  
   *A. ampeloprasum* var. *porrum* 630  
   *A. ampeloprasum* var. *kurrat* 630  
   *A. longicuspis* 630  
   *A. sativum* var. *minus* 630–31  
 almandine 31, 32  
 almandite 31  
 almond 343–4, 343, 390, 401, 405, 480, 614  
*alopecia senilis* 498  
 alum 160, 165, 198, 206, 212, 239, 244, 299, 303, 304, 305, 306, 316, 317  
 alumina 192, 212, 217, 219, 220  
 aluminium 39, 52, 62, 106, 150, 192, 197, 198, 304, 316, 317  
 aluminium sulphate 244  
 aluminosilicates 40, 45  
 Amanishaketo 28  
 Amarna (Tell el-) 1, 6, 19, 22, 27, 29, 59, 64, 66, 80, 81, 81–2, 88, 92, 93, 96, 98, 100, 113, 114, 117, 118, 122, 139, 140, 142, 143, 181, 182, 183–4, 186, 187, 188, 190, 191, 192, 195, 197, 199, 200, 201, 204, 205, 208, 209, 210, 213, 214, 215, 216, 217, 218, 219, 220, 220, 259, 265, 272, 280, 293, 300, 307, 307, 311, 311, 313, 314, 316, 328, 393, 394, 398, 404, 409, 458–9, 458, 463, 495, 508, 509, 528, 549, 555, 561, 565, 567, 567, 568, 578, 579, 582, 583, 594, 597, 598, 612, 616, 619, 621, 623, 625, 626, 630, 631, 634, 635, 640, 643, 646  
 Boundary Stele F 293  
 Building R41.5 97  
 Chapel 556 566  
 Great Aten Temple 567  
   bakeries 565  
 Great Palace 83, 598  
 Great Wall 83  
 House N48.15 60  
 House N50.1 311  
 House O45.1 124, 126, 183, 184, 187, 201, 201, 202, 202, 204  
 House O49.17 115  
 House P46.14 312  
 House P46.33 567  
 House P47.2 22  
 House Q44.1 98  
 House Q46.2 309  
 House Q48.4 115, 124, 139  
 House of the King's Statue 118  
 King's House 115  
 Kom el-Nana 83, 89, 139, 568, 633  
 Main City 81, 269  
 Maru-Aten 97  
 North City 81, 81,  
 North Palace 81, 83  
 North Riverside Palace 83, 89  
 North Suburb 139  
 Royal Tomb 112  
 Small Aten Temple (Hwt Aten) 81, 81, 84, 88  
 South Suburb 139  
 South Tombs 115  
 Stone Village 81, 81  
 Tomb EA 1 (Huya) 291, 598  
 Tomb EA3 (Ahmose) 291  
 Workmen's Village 81, 81, 109, 112, 114, 115, 142, 143, 255, 259, 265, 268, 269, 274, 278, 279, 285, 289, 401, 508, 527, 542, 542, 547, 548, 548, 549, 551, 552, 552, 554, 560, 561, 561, 562, 570, 578, 668  
 Amarna Letters 29, 167, 196, 323, 324, 325, 338, 339  
 EA5 339  
 EA10 163  
 EA14 196, 293  
 EA25 196, 293, 322, 338  
 EA31 339  
 EA40 322, 338  
 EA148 196  
 EA235 196  
 EA314 196  
 EA323 196  
 EA327 196  
 EA331 196  
 amazonite *see* microcline  
 amazonstone 46  
 amber 416, 430, 451–4, 464, 465, 469  
   Baltic 451, 452, 453, 454  
 Amenemhat (Beni Hasan) 29, 126, 136, 292, 292, 357, 357, 537, 565, 578, 586  
 Amenemhat (Deir el-Bersha) 365  
 Amenemhat (Thebes) 590  
 Amenemhat Q 660, 666  
 Amenemhat I 181  
 Amenemhat II 29, 32, 36, 40, 161, 162  
 Amenemhat III 37, 47, 52, 53, 63, 85, 158, 159, 160  
 Amenemope 284  
 Amenhotep 109  
 Amenhotep I 56, 60, 295, 489, 666  
 Amenhotep II 56, 110, 118, 196, 207, 275, 489, 498, 645, 666, 669  
 Amenhotep III 36, 37, 42, 47, 54, 57, 60, 86, 94, 111, 118, 182, 183, 196, 205, 324, 339, 345, 346, 374, 404, 408, 597–8, 600, 658  
 Amenhotep son of Hapu 37, 93, 139  
 Amenuser 115  
 Amenwahsu 54  
 America, North 468, 667  
   South 51  
   tropical 477  
 amethyst 15, 20, 26, 29, 45, 50–2, 51, 52, 65  
 amethystine quartz 50–1  
 amino acid 418, 481, 481, 482, 483, 484, 491, 550, 551, 556, 600, 637, 639, 646, 656, 664  
   analysis 482, 483, 483, 484, 485, 491  
 Ammon 399  
 ammonia 198  
 ammonium nitrate 240  
*Ammoperdix heiji* 408  
 amphibole 24, 30, 34, 35, 38, 39, 52, 69  
 amphora 122, 123, 124, 125, 132, 137, 140, 420, 436, 447, 458, 459, 463, 464, 543, 570, 594, 600, 664, 667, 669  
   'Canaanite' 458, 458, 459, 463, 596  
   'Dressel I transport' (Roman) 600  
   'Lamboglia 2' (Roman) 600  
   transport 601  
*amphoriskoi* 196  
 el-Amra 79, 179  
*Amsterdam* 600, 602  
 amulet 23, 26, 27, 29, 38, 39, 47, 51, 52, 152, 164, 165, 168, 179, 180, 181, 182, 183, 184, 186, 189, 196, 202, 295, 327, 332, 377, 380, 430, 451, 464  
 Amun 34, 46, 83, 99, 142, 150, 165, 293, 315, 353, 632  
 Amunet 496  
 Amun-Ra 294, 498  
 Amuq plain 322, 326  
*Amygdalus dulcis* 343  
   *A. communis* 343  
 amygdule 49, 50  
 amyl acetate 245  
 amylase 550, 554, 555, 556  
 Anacardiaceae 434  
 anaemia 656  
 analytical electron microscopy (AEM) 382  
*Anas* 408  
 Anatolia 114, 115, 162, 167, 170, 304, 305, 320  
 anchor 309, 352  
*Anchusa tinctoria* 279  
 Anderson, D.M.W. 477  
 Anderson, K.B. 454  
 andesine 30, 33, 35, 48, 49, 61  
 andesite-dacite porphyry 48–9, 48  
 andesite porphyry 48, 49–50  
 andradite 31  
 André, L. 46  
 Andrews, C. 205  
 Angola 338  
 Anhay 110  
 anhydrite 22–3, 105, 114, 332  
 anhydrock 22  
 Ani (11th-Dynasty) 619  
 Ani (18th-Dynasty) 625  
 animal glue 236, 244, 480  
 animal gut 245, 510  
 animal husbandry 390, 511  
 animal pen 549  
 Anja Hafir 239  
*ankh* sign 276  
 Ankhefenekhonsu 295  
 Ankhtifi 109, 111  
 Anlamani 34  
*Annals of Thutmose III* 195, 442  
 annealing (glass) 202, 203, 204  
 annealing (metal) 155, 167  
 anointing 402, 420, 559  
 anorthite 30  
 anorthosite 32–4, 33  
*Anser* 408  
 Anta 312  
 antelope 300, 301, 307, 327, 656, 657  
 antetype 159, 165  
*Anthemideae* 385  
 Anthes, R. 309  
 anthocyanin 599, 600, 601, 602  
 anthraquinones 279  
*Anthropoides virgo* 408  
 antigorite 56  
 antimony 149, 152, 153, 162, 168, 182, 184, 185, 198, 207, 208, 209, 210, 216, 217  
 Antinoë 443, 559  
 anti-oxidant 515  
 antiseptic 581, 592, 645, 662, 667  
 antler 320, 327  
 Antwerp Museum 488  
 Anymen 142

- apatite 24, 34, 35, 37, 38  
 aphanitic 20, 23, 48, 49  
 aphrodisiac 632  
 Apicius 632  
 apiculture 390, 409  
 Apis-bull 36  
*Apis mellifera lamarckii* 409  
*Apium graveolens* var. *dulce* 632–3  
 Apophis 658  
 apple 616, 634  
 appliqué 280, 281, 306, 307, 311  
 apricot 480  
 Apries 100  
 apron 286  
 aquamarine 24  
 Arabia 46, 197, 216, 345, 397, 430, 435, 438, 439, 442, 447, 476, 618, 625, 627  
 arabinose 234, 485, 488, 489, 491  
 Arachosia 322  
 Arafali 46  
 aragonite 59  
 Araucariaceae 453  
 Aravah Valley 395  
 arbour 584  
 arch 93, 96  
 archaebotany 509–510, 510, 513, 522, 527, 529, 540, 541, 544, 548, 549, 552, 590, 648  
 archer 90, 97  
 archer's brace 309  
 archer's guard, arm guard 307, 310, 311, 325  
 archil 279  
 Archimedes screw 616  
 architect 18, 282  
 architraves 55  
 arc-source emission spectrometry (AES) 206, 207, 210, 218  
 ard 517, 518  
*Ardea* 408  
 arenite 55  
 argentite 170  
 argon 247  
 Armant 27, 85, 403, 633  
 Tomb 1207 53  
 armband 63  
 Armenia 46, 436, 581  
 Armitage, P.L. 385  
 armour 155  
 army 293, 592  
 Arnold, D. 17, 64, 181  
 Arnold, Do. 136, 567  
 Arnold, F. 181  
 aromatic compound 444–5, 450  
*aroura* 515  
 arrow 309, 335, 336, 338, 341, 344, 352, 401  
 arrowhead 327, 339, 340  
 arsenic 116, 149, 151, 152, 153, 157, 160, 168, 212, 381  
 arsenic sulphide 112, 114, 115, 116, 153  
 arsenic trioxide 246  
 arsenic trisulphide 239, 241, 246  
 arthritis 378  
 artist 15, 108, 110, 111, 117, 118, 119, 409, 579, 591  
*Arundo donax* 65, 255, 257  
*aryballo* 196  
 Arzawa 339  
 asafetida 442–3, 442, 448  
 Asafis 56, 260, 364  
 Tomb 37 171  
*Ascaris* 382  
 Asensi Amorós, V. 609  
 ash (burnt plant, wood) 124, 129, 131, 135, 180, 181, 182, 192, 197, 202, 204, 243, 302, 541, 561, 623, 641  
 ash (tree: *Fraxinus excelsior*) 341, 344, 346, 540  
 Ashkeit 139  
 ashlar 22, 23  
 Ashmolean Museum, Oxford 214, 302, 303, 311, 315, 317, 323, 361  
 Ashmunein 113  
 Asia 634, 656, 665  
 central 430, 628, 630, 634, 644  
 eastern 332, 397, 479  
 western 31, 39, 47, 110, 118, 119, 149, 177, 195, 219, 320, 321, 322, 323, 324, 325, 336, 343, 346, 352, 393, 402, 407, 430, 436, 438, 459, 480, 645  
 Asia Minor 114, 163, 198, 341, 344, 351, 435  
 Asmar, Tell 453  
 asphalt 451, 455, 456, 466, 468  
 'pure' 455  
 'rock' 455  
 asphaltite 456  
 Assyria 197, 322, 323, 326, 330  
 Aston, B.G. 33, 45, 50, 64, 69  
*Astragalus* 476, 477–9, 489  
*A. bethlehemicus* 478  
*A. creticus* 478  
*A. cruentiflorus* 478  
*A. echidnaeformis* 478  
*A. gossypinus/gossypinoides* 478  
*A. gummifer* 478, 489  
*A. kurdicus* 478  
*A. microcephalus* 478  
*A. parnassi cylleneus* 478  
 Aswan 6, 7, 15, 16, 17, 17, 18, 20, 24, 25, 32, 35, 36, 37, 38, 45, 51, 53, 54, 55, 69, 93, 109, 111, 116, 122, 148, 150, 151, 161, 166, 285, 323, 368, 394, 410, 599, 620  
 Aswan High Dam 391, 615  
 Asyut 28, 54, 110, 289, 309, 348, 361, 394  
 atacamite 105, 106, 112, 150, 151  
 el-Atawi 150  
 Atbara 324, 514  
 atelier 285  
 Aten 598, 628  
 Athenaeus 538, 591, 592  
 Athribis 37, 279  
 Atika 150  
 atlantone 447  
 Atlas Mountains 323, 349, 436  
 atom 193  
 atomic absorption spectrophotometry (AAS) 68, 69, 133, 172, 192, 207, 219, 468  
 Attic pottery 185  
 Augustus 185  
 aurochs 408  
 Australia 665  
 Austria 69, 451  
 autopsy 380, 381, 384  
 Avaris 324, 326  
 avidin 485  
 awl 261, 265, 308, 356  
 awn 505, 526, 558, 559  
 awning 259, 260, 263, 265, 292  
 axe 7, 39, 150, 152, 157, 309, 353, 354  
 axle (chariot) 337, 341, 344, 346  
 Axum 322  
 Ay 290  
 'Ayn Asil (Dakhla) 122, 123, 124, 125, 131, 134, 135, 135, 138, 141  
 azelaic acid 491  
 azulene 447  
 azurite 23, 43, 44, 105, 111, 151  
 Baas, P. 338, 340, 343, 344, 345, 347, 348, 349, 350, 351, 352  
 ba-bird 63,  
 baboon 52, 54, 296, 588, 620, 621  
 Babylon 195, 349, 456  
 Babylonia 168, 293, 322, 339  
 Bacchus 229  
 Bachmann, H.G. 44, 127  
 Badakhshan 39  
 Badari 257, 262, 307, 308, 312, 349, 350, 352, 391, 392, 396, 621, 656  
 Tomb 3000 270  
 Tomb 3802 276  
 Badarian 28, 29, 32, 44, 59, 78, 151, 256, 262, 269, 332, 345, 353, 495  
 Badawy, A. 98  
 Badler, V.R. 600  
 bag 254, 258, 259, 259, 261, 262, 262, 265, 266, 266, 291, 295, 304, 308, 309, 395, 406, 407, 408, 411, 462, 519, 620, 641  
 net-495  
 bag press *see* press  
 Bahariya Oasis 19, 52, 166  
 el-Bahnasa 23  
 Bahrain 333  
 Bakelite 454  
 baker 538, 564, 566  
 Baker, S.W. 231  
 bakery 407, 541, 562  
 baking 135, 136, 184, 537, 539, 539, 542, 544, 546, 557–70, 566, 567, 580  
 el-Bakriya 31  
 Bakt 111 123, 136, 162, 273, 292, 332, 462, 462, 578, 589, 589  
 Balabish 309, 495  
 Balanaticaeae 392  
*Balanites aegyptiaca* 392–3, 442, 614  
 balanos 390, 392–3, 393, 395, 405  
 Balat 664  
 baldness 498  
 Balkans 336, 346  
 ball I–II, 309, 311, 495, 594  
 Ball, J. 52  
 Ballana  
 Tomb B. 114 25  
 Ballas 122, 123, 126, 132, 139, 142,  
 Tomb Q80 49  
 balm 442  
 Balm of Gilead 442  
 balsam 342, 442, 444  
 Mecca 442  
 storax 342  
 Baltic 451, 452, 453, 454  
 Baltimore, Walters Art Gallery 324  
 bamboo 255, 257  
 bandages 292, 294, 295, 373, 375, 377, 385, 385, 421, 465, 466, 468, 660, 666  
 Banik, G. 240  
 Bannister, C.O. 156, 158, 160, 166, 167, 168  
 Baramia 170  
 barge 368, 526  
 bark (tree) 269, 271, 305, 337, 344, 349, 350, 351, 353, 355, 430, 431, 434, 437, 439, 442, 446, 456, 460, 464, 476, 559, 622, 625  
 bark (tusk) 328, 329,  
 barley 262, 266, 505, 505, 506, 510, 511–13, 519, 520, 521, 522, 525, 526, 527, 528, 529, 541, 543, 545, 547, 549, 550, 551, 552, 552, 553, 557, 560, 562, 569, 602, 615, 640, 645, 646

## 676 INDEX

- barley (*cont.*)  
 four-row 512  
 hulled 505  
 naked 512  
 six-row 512  
 two-row 505, 512  
 Barnett, R.D. 326  
 Barns, J.W.B. 244  
 Barrandon, J. 234  
 barrel 341, 360, 667  
 Barron, T. 29  
 barter 293  
 Barth 242  
 Barthoux, J. 114  
 barytes 51  
 basalt 5, 12, 19, 23–4, 24, 47, 57, 58, 400  
 basan 58  
 basanites 58  
 Basile, C. 231, 236  
 basket, basketry 1, 78, 119, 243, 254–66, 256, 257, 261, 282, 286, 293, 299, 300, 303, 308, 353, 356, 400, 522, 524, 526, 527, 528, 553, 557, 560, 561, 562, 585, 586, 588, 619, 622, 641, 647, 667  
 'basket burial' 257  
 basket-maker 254, 260, 265  
 basket weave 274  
 bass 356  
 bassorin 476, 479  
 Bass, G. 200  
 bast 269  
 Basta, Tell el- 263  
 bat 271, 617  
 Bates, O. 592  
 bathtub 35  
 bating 302  
 battarah 668  
 batten 356, 365  
 batter 90  
 Battle of Raphia 323  
 Baum, N. 438  
 Baumgartel, E. 28  
 bauxite 190  
 Bayer, G. 234, 239, 240  
 el-Baz, F. 149, 166  
 bdellium 440  
 bead 27, 29, 31, 32, 38, 39, 40, 44, 45, 46, 47, 51, 52, 59, 65, 78, 82, 113, 149, 164, 167, 171, 179, 180, 181, 182, 184, 186, 196, 197, 280, 287, 289, 290, 308, 430, 451, 453, 454, 456, 495, 620, 626  
 beam 84, 89, 90, 93, 94, 96, 99, 182, 261, 274, 276, 277, 278, 291, 303, 309, 332, 336, 348, 349, 363, 367, 368, 400, 433, 518, 620  
 bean 641, 646  
 broad 641  
 faba 613, 616, 637, 639, 641–2  
 horse 641  
 beater 277  
 Beck, C.W. 452, 453  
 Beck, H.C. 195  
 Becker, L. 171  
 beckerite 451  
 bed 258, 261, 291, 325, 339, 342, 345, 353, 356, 358, 362, 363, 367, 619, 626, 647  
 bedding 276, 285, 290, 291  
 Bedigian, D. 406  
 bedouin 18, 406, 627  
 bee 390, 409, 410  
 beef 408, 419, 663, 669  
 salt 663  
 beehive 390, 410, 410, 411  
 beekeeping 390, 409, 410  
 beer 79, 131, 136, 137, 262, 507, 512, 537, 538, 541, 542, 543, 543, 545, 547, 548, 548, 549, 550–57, 554, 565, 569–70, 577, 579, 590, 602, 609, 619, 636, 659, 669  
 barley-based 547  
 lambic (Belgian) 546, 556  
 wheat-based 547  
 beer jar 139, 142, 262, 537, 542, 570, 636  
 beer-making (*see also* brewing) 512, 538, 569, 570  
 beeswax 157, 385, 390, 409–11, 412, 416, 420–22, 452, 454, 466, 467, 468, 475, 480, 489–91, 496  
 beetle 374, 384, 385, 664  
 Beheira province 216  
 Beirut 433, 451  
 Beit Allam 28  
 Bell, B. 514, 515  
 bellows 151, 152, 157, 163, 184, 202  
 belt 287, 308, 312  
 Belus, River 216  
 Belzoni, G. 25  
 bending (timber) 356–7, 357  
 Benha 49  
 Beni Hasan 41, 83, 108, 136, 139, 277, 284, 553, 624  
 BH2 29, 126, 136, 268, 284, 292, 292, 357, 357, 360, 537, 565, 578, 586  
 BH3 136, 268, 269, 274, 277, 284, 284, 353, 537, 565, 615, 624, 628  
 BH15 123, 136, 162, 268, 272, 273, 292, 332, 462, 462, 537, 578, 589, 589  
 BH17 261, 261, 265, 268, 272, 273, 309, 537, 578, 588, 589  
 BH116 553  
 BH275 314  
 BH366 554  
 BH569 362  
 BH585 553  
 Beni Suef 28  
 benzene 444, 448  
 Berenice, Queen 219  
 Berenike 22, 23, 27, 47, 169, 260  
 Berger, S. 520  
 Berlin, Ägyptisches Museum 307, 311, 312, 314, 339, 421, 422, 443, 558, 626  
 Berlin-Dahlem, Botanical Garden 632  
 Sarvis 667  
 berseem 624, 638, 646  
 Berthelot, M. 153, 164, 171  
 beryl 15, 20, 24–5, 32, 46, 48, 65, 69  
 beryllium aluminosilicate 24  
 Bes 98, 325  
 Beth Yerah (Khirbet Kerak) 400  
*Betula pendula* 336–337, 337, 353  
*B. verrucosa* 336  
 bevelling 356, 360, 368  
 Bietak, M. 121  
 bilharzia 620  
*Bilharzia haematobium* 378, 382  
 biltong 663, 665, 666, 667, 669  
 Bimson, M. 109, 203, 219  
 bin 552  
 binder, binding agent/medium 104, 110, 117, 157, 241, 332, 367, 411, 475–92, 488, 490  
 egg 485  
 bindheimite 208  
 binding (basketry) 256, 256, 257, 258, 258, 260, 263, 265, 266  
 Binns, C.F. 189  
 biomarker 599, 601, 602  
 biotite 32, 34, 35, 37, 45, 48, 69  
 birch 336–7, 337, 353  
 bird (*see also* fowl) 264, 282, 296, 375, 475, 519, 585, 617, 626, 656, 657, 660, 662, 664, 668, 669  
 game 658  
 bird droppings 516  
 birdlime 626  
 bird tray 309  
 Bir Nasib 43, 44, 152  
 Bir Umm Fawakhir 31, 35, 38, 56, 162  
 birefringence 543  
 bismuth 152, 208  
 Bissing, F.W. von 64  
 bitumen (*see also* asphalt) 372, 374, 385, 421, 430, 434, 452, 453, 454–6, 455, 459, 460, 461, 461, 464, 465, 466, 467, 468, 469, 475, 480, 491, 593  
 'annealed' 456  
 Blackman, W.S. 524, 525  
 Black Obelisk of Shalmaneser 322  
 Black Sea 337, 431  
 black-topped red ware 125, 128  
 blanket 291, 292  
*Blastophaga psenes* 623, 624  
 bleach, bleaching 229, 280, 285, 411  
 blending (wines) 590, 592, 592  
 blinker 310  
 Blom-Böer, I. III, III, III, III  
 blood 300, 301, 383, 657, 658  
 blood pudding 409  
 'bloom' 246–7, 246, 249, 590  
 blotting paper 243, 247, 248  
 blowpipe 151, 157, 163, 165, 199  
 Blue Nile 514  
 blue-painted pottery 140, 141, 143  
 boar 322, 328, 408  
 board 244, 360, 365, 368, 461, 518  
 boats (*see also* ships) 18, 83, 93, 94, 107, 228, 234, 235, 259, 263, 292, 308, 335, 344, 345, 349, 352, 366, 367–8, 514, 659  
 papyrus, papyriform. 235, 368  
 sea-going 368  
 boat-building 235, 335, 336, 337, 340, 341, 344, 346, 347, 349, 350, 352, 366, 367–8, 588, 620  
 boat pit 259, 367  
 'Bohemian garnet' 31  
 Boki 285  
 bolt 336, 339  
 Bolton Museum 114  
 Bondina 248  
 bonding 84, 87, 90, 367  
 bone 115, 131, 192, 202, 282, 301, 307, 308, 320, 321, 324, 326, 327, 329, 334, 373, 374, 380, 381, 382, 409, 475, 520, 609, 656, 657, 661, 663, 664, 666, 668  
 bird 282  
 fish 282  
 Bongrani-Fanfoni, L. 312  
 boning rod 336  
 Bonnet, E. 559  
 Boodle, L.A. 344, 398, 401  
 Book of the Dead 110, 118, 119, 232, 238, 241, 242, 246, 247, 295, 303, 522  
 Ch.30b 30  
 Book of the Dead of Ahmose 239  
 Book of the Dead of Anhay 116  
 Book of the Dead of Irtyru 244  
 Book of the Dead of Khar 116  
 Book of the Dead of Nebamun 119

- Book of the Dead of Nebseny 118  
 Book of the Dead of Nestanebtisheru 119, 233  
 Book of the Dead of Nu 112  
 Book of the Dead of Psamtek 119  
 Book of the Dead of Tjenena 116  
 'Book of the Secret Chamber which is in the Underworld' 119  
 bookworm 240  
 boot 315, 315, 316, 317, 317, 375  
 Boratynski, A. 436  
 Borchardt, L. 63, 64, 113, 300, 538, 566  
 boring 65  
 boss 309  
*Bos taurus* 407  
   *B. indicus* 407  
   *B. primigenius* 408  
*Boswellia* 438–9, 438, 442, 447  
   *B. bhau-dajiana* 438, 439  
   *B. carteri* 438, 439  
   *B. frereana* 438, 439  
   *B. papyrifera* 438, 439  
   *B. rivae* 439  
   *B. sacra* 438, 438, 439  
 bottle 600, 602  
 'bottling' (wine) 578, 591, 593–4, 599  
 boundary stone 515  
 bouquet 342  
 Bourriau, J.D. 130, 132, 142, 182  
*bouza* 557  
 bovid 656  
 bow 65, 335, 336, 337, 338, 345, 346, 347, 352, 353, 356, 357, 357, 627  
   composite 310–11, 328, 341  
   self 309  
 bow box 337  
 bowdrill 356  
 bowl 337, 341, 344, 352  
 Bown, T.M. 19  
 box 169, 170, 254, 255, 262, 263, 265, 286, 287, 291, 321, 325, 336, 337, 339, 341, 344, 345, 346, 349, 350, 358, 359, 360, 363, 364, 365, 366, 367, 480, 496, 497, 660  
 boxwood 337–8, 337, 350, 431  
 Boyce, A. 204  
 bracelet 51, 63, 153, 166, 281, 293, 325, 326, 495  
 Brack, A. 595  
 bracteates 280  
 braid 276, 276, 280, 281, 282, 283, 495, 496, 497, 498  
 braising 159  
 Brak, Tell (Syria) 220, 220  
 bran 542, 545, 554, 560, 562, 568  
*Branta* 408  
 brass 217  
*Brassica* 418  
   *B. rapa/campestris* 402  
   *B. juncea* 402  
   *B. napus* 402  
   *B. napus oleifera* 402  
   *B. nigra* 402  
 Bravo, G. A. 302, 303, 304, 305, 316  
 Brazier, J.D. 337, 339  
 Brazil 69  
 bread 125, 136, 139, 182, 265, 379, 507, 512, 537, 538, 539, 540, 542, 542, 545, 547, 548, 554, 555, 557–70, 577, 609, 613, 622, 627, 629, 639, 644, 646  
   emmer 569  
   fig 564, 623  
   granary 564  
   harvest grain 564  
   multi-grain 564  
   pumpernickel 558  
   sour dough 546, 558  
   sun 568  
 bread-making (*see also* baking) 544, 552, 569, 570  
 Breasted, W.H. 338  
 breccia 6, 42–3  
   limestone 42–3, 43  
   *breccia verde antico* 58  
   *breccia verde d'Egitto* 58  
 brewer 537, 538, 553, 554, 555, 556  
 brewing 135, 136, 262, 537, 538, 539, 539, 540, 540, 541, 542, 543, 544, 546, 547, 548, 549, 550–57, 554, 562, 563, 569–70, 577  
 bricklaying 87, 88–92, 90, 92  
 brick-making 83, 87, 88, 89, 91  
 bricks, magical 84  
 Bridgeman, C.F. 242  
 Brill, R.H. 177, 195, 198, 203, 206, 207, 214, 216, 218, 219  
 brine, brining 661, 663–4, 665, 668, 669  
 brine-boil 668  
 Brissaud, P. 122  
 Britain 87, 375  
 British Museum 105–19, 152, 153, 154, 158, 160, 161, 162, 168, 203, 232, 237, 238, 240, 241, 243, 244, 245, 246, 247, 248, 249, 288, 302, 303, 306, 312, 314, 315, 322, 324, 326, 327, 356, 358, 366, 367, 368, 375, 385, 419, 420, 464, 467, 543, 559, 662  
 bronze 7, 28, 40, 66, 111, 150, 150, 153, 154, 155, 157, 158, 159, 185, 198, 202, 204, 282, 337, 499, 520  
   black 158, 160  
 Brooklyn Museum, New York 233  
 broom 254, 256, 525, 619  
 broomrape 642  
 broom shrub 431  
 Browicz, K. 433, 435  
 Brown, J. 547  
 Brown, V. 19, 33  
 Bruce, J. 25, 29, 227, 228, 231, 231  
 brucite 44, 56  
 Brunton, G. 125, 157, 307, 309, 558  
 brush 238, 254, 259, 346, 367, 476, 480, 566, 617, 619, 620  
 Bruyère, B. 259, 338, 559, 561, 660, 669  
 Bubastis 170  
 bucket 515  
 Buckley, A. 109  
 Buckthorn 627  
 Budge, A.E.W. 231  
 Buhen 54, 83, 97, 151, 152, 594, 595, 599  
 building 5, 64, 78–9  
 bulghur 560  
 bull 98, 292, 296, 326, 327  
 Bülow-Jacobsen, A. 232  
 bulti 667  
*buon fresco* 118  
 Burckhardt, J.L. 339, 557, 592  
 bureaucracy 15  
*buri* 662  
 Buri peninsula (Eritrea) 46  
 Burnaburiash II 293  
 burnishing 127, 143, 159, 164, 169, 237, 367, 420  
 burr 356  
 Burseraceae 439, 452  
 Burstein, S.M. 330  
 Butana (Sudan) 323  
 butcher, butchery 300–301, 301, 327, 329, 390, 407, 475, 657, 657, 658, 660, 661, 661, 668, 669  
 butler 339  
 Buto 79, 137, 186, 188, 396, 567, 577, 582, 596, 597, 624, 639, 640  
 butter 374, 409, 418  
 button 312, 620  
 Butzer, K.W. 515, 616  
 Buxaceae 337  
*Buxus sempervirens* 337–8, 337  
 bytownite 23, 33  
 cabin(ship) 361  
 cabinet 338, 363  
 cabinet-maker 360, 361  
 cable (basketry and leather) 258, 308  
 cabochon 47, 52  
*caeruleum* 109, 178, 205  
 cage 255, 264, 274, 619  
 Cailliaud, F. 25  
 Cairo 6, 19, 23, 28, 30, 59, 60, 62, 69, 121, 202, 229, 240, 261, 665  
 Cairo, Survey Department 228  
 Cairo University 229  
*calasiris* 269  
 calcarenites 42  
 calcareous tuff 61, 61  
 calcite 22, 26, 39, 40, 44, 45, 54, 55, 57, 58, 59, 61, 105, 109, 111, 114, 117, 124, 203, 216, 463, 463, 484, 488, 495, 497  
 calcium 45, 67, 109, 110, 115, 171, 206, 207, 208, 216, 303, 316, 418, 485, 621, 622, 627, 636, 639, 646  
 calcium aluminosilicate 31  
 calcium antimonate 207, 208, 209, 210, 212, 217, 218  
 calcium carbonate 23, 40, 59, 83, 111, 114, 158, 491  
 calcium-copper tetrasilicate 177, 205  
 calcium-magnesium aluminosilicate 38  
 calcium-magnesium carbonate 40  
 calcium oxalate 229  
 calcium oxide 186, 190, 216, 218  
 calcium silicate 205  
 calcium sulphate 114, 367  
 calcium tartrate 464  
 calc-sinter 60  
 Caley, E.R. 197  
 calf 409  
 calyx 559, 624  
 Cambridge 665  
 camel 122, 646  
 cameo 27  
 camphor 405, 467  
 canal 18, 242, 394, 514, 515, 516, 517, 585, 616, 622, 628, 629, 638, 641, 646  
 Canaanites 278  
*Canarium schweinfurthii* 452  
 cancer 378  
 canine 321, 326, 327, 328, 329  
 canoe 367  
 canopic chest 119, 350, 459, 460, 468, 487  
 canopic jar 60, 125, 140, 143, 212, 374, 382, 384, 421, 466, 468  
 Canopus 667  
 canopy 291, 363  
*Capra hircus* 407  
   *C. ibex nubiana* 408  
 capstone *see* pyramidion  
 captive, prisoner 83, 183, 184  
 carbohydrate 234, 239, 599, 621, 627, 633, 637, 639  
 carbon 108, 113, 117, 118, 165, 168, 238, 241, 246, 540

## 678 INDEX

- carbon and oxygen isotope ratios 45  
 carbonate 41, 42, 67, 68, 187  
 carbon dioxide 109, 546, 558, 590, 595  
 carbonisation 243, 245, 345  
 carburisation 168  
 carcass 300, 301, 309, 384, 408, 657, 658  
 card 244, 245  
 cardamom 446  
 cargo 18, 114, 115, 326  
 caries 379  
 Carnarvon, Lord 195  
 'Carnarvon knife-handle' 323  
 carnelian *see* cornelian  
 carob 338, 338, 479, 616, 621, 626–7  
 carp 408  
 Carpenter, H.C.H. 157  
 carpenter 236, 355, 356, 357, 358, 359, 361, 366  
 carpentry 136, 342, 347  
 carpet 300  
*Carpinus betulus* 346  
 Carsten-Niebuhr Institute, Copenhagen 242  
 cart 346  
 Carter, G.S. 228  
 Carter, H. 275, 303, 342, 375  
*Carthamus tinctorius* L. 279, 393–4  
 cartonnage 22, 232, 234, 243, 245, 420, 421, 468, 487, 488, 491  
 carving 15, 17, 23, 28, 65, 113, 117, 168, 179, 320, 325, 328, 329–30, 343, 344, 346, 350, 356, 456  
 caryophyllene 447  
 cased skin 301, 309  
 casket 325, 329, 340  
 Caspian Sea 336, 337, 581, 625  
 cassia 405  
 cassiterite 105, 109, 171  
 Castiglioni, A. and A. 161  
 casting 150, 150, 152, 153, 154, 155, 156, 157, 158, 159, 164, 165, 168, 171, 202  
   hollow 158, 159, 170  
   lost-wax 158, 165, 170, 196, 203, 411  
 casting fin 165  
 casting on 159, 160  
 castor 390, 391–2, 391, 405, 406, 407  
 cat 152, 153, 296, 375, 375, 385  
 Çatal Hüyük 436, 640  
 catechol 305  
 catfish 662  
 Caton-Thompson, G. 22, 307, 558  
 cattle (*see also* cow, bull) 136, 300, 301, 309, 323, 327, 407, 408, 409, 517, 519, 524, 642, 656  
   long-horned 656  
   short-horned 656  
 Caucasian 495  
 Caucasus 336, 341, 346  
 caulking 450  
 causeway 18, 20, 24, 48, 364, 368  
 caustic soda 229  
*cavetto cornice* 98, 363  
 Cavoli (Elba, Italy) 69  
 Çayönü 640  
 cedar 237, 325, 344, 347, 349, 351, 365, 367, 368, 431, 433, 434, 436, 438, 443, 445, 446, 447, 463, 464, 466, 467, 468, 668  
   Atlantic 349  
   Cyprus 349  
   deodar 349  
   of Lebanon 349–50, 353, 367  
*cedrium* 240  
*Cedrus* 334, 344, 347, 351, 368, 445  
   *C. atlantica* 349, 431  
   *C. deodora* 349  
   *C. libani* 349, 367, 431, 447  
   *C. libani brevifolia* 349, 431  
   *C. stenocoma* 349  
 celery 632–3, 648, 665  
 celluloid (film) 244, 245  
 cellulose 229, 235, 239, 240, 241, 246, 278, 489  
 cellulose nitrate (adhesive) 244, 245, 250  
*Celtis australis* 342  
 cementum 329  
 ceramic 540, 553  
*Ceratonina siliqua* 338, 338, 479, 626–7  
*Ceratosolen arabicus* 622, 624  
 cereal 270, 391, 505–29, 505, 506, 537, 542, 542, 545, 545, 547, 548, 549, 552, 553, 555, 557–8, 559, 560, 569, 585, 609, 616, 637, 639, 643, 647  
 cereal processing, grain processing 506, 507–37, 507, 507, 510, 539, 541, 542, 544, 545, 549, 563, 565, 583, 612, 613, 615  
 cereal production 506, 507, 507, 508, 510, 519, 583, 612, 615  
 Černý, J. 232  
*Ceruana pratensis* 255, 257  
 cerussite 168, 170  
 Cervidae 408  
 C Group 139  
 chacopyrite 150  
 chaff 82, 92, 157, 505, 509, 510, 511, 512, 513, 519, 525, 526, 529, 540, 542, 543, 543, 544, 545, 549, 551, 552, 552, 553, 554, 555, 557, 558, 559, 560, 561, 562, 565, 568, 569, 594  
 chair 258, 260, 261, 262, 262, 263, 291, 312, 325, 337, 339, 345, 362, 363, 365, 366  
 chalcedony 21, 25–6, 27, 28, 52  
 chalcocite 171  
 chalk 114, 186, 302, 303  
 Chalk, L. 336, 341, 350  
 Chamberlain, D.F. 443  
 chamomising 303  
 chaplet 159  
 Chappaz, L. 163  
 charcoal 107, 108, 166, 168, 186, 190, 192, 201, 335, 336, 345, 353, 354, 392, 451, 456, 476, 477, 509, 540, 541, 647  
 chariot 22, 281, 292, 295, 309–10, 336, 337, 341, 343, 344, 345, 346, 357, 411  
 Charles, M.P. 397  
 chasing 159, 161, 165  
 chate *see* melon  
 chatter marks (turning) 357, 358  
 cheese 409, 418  
 chemical analysis (*see also* wet chemistry) 579, 593, 599–602, 647  
 Chephren *see* Khafra  
 chequer (perforated floor) 186  
 cherry 476, 480, 616, 667  
   Japanese 480  
 chert 5, 7, 17, 21, 26, 28–9, 40, 43, 53, 58, 65  
 chessylite 23, 111  
 chest 262, 263, 286, 325, 339, 356  
 Chester Beatty Collection 238, 241  
 Chicago Field Museum 375  
 chicken 384, 475, 659, 667  
 chickpea 265, 616, 637, 639, 640–41, 640  
 'chief of the estate' 18  
 Chilmak 39  
 China 405, 636, 661, 664, 667  
*chinam* 214  
 Chios 434  
 chisel 6, 7, 28, 29, 64, 65, 66, 151, 157, 167, 325, 328, 335, 342, 355, 356, 357, 367, 368, 400  
   firmer 355–6  
   mortise 355, 358  
 chloride 667  
 chlorine 106, 228, 239, 242  
 chlorite 32, 49, 55, 57, 58, 61  
 chloroform 483  
 chlorophyll 582  
 chocolate 626  
 cholestane 457  
 cholesterol 316, 412, 419, 419  
 Christ's thorn 346, 347, 548, 559, 613, 616, 627, 648  
 chromatogram 483, 483, 484, 486, 487, 488, 489, 492  
 chrome 26  
 chromite 170  
 chrysocola 43, 44, 105, 112  
 chrysolite 47, 56  
 chrysopraxe 25, 26, 52, 65  
 chrysotile 56  
 chufa (tiger nut) 402–3, 614, 636–7, 637, 648  
 'chunk gathering' 202  
 Ciani River (Syracuse) 236  
*Cicer arietinum* 640–41, 640  
   *C. arietinum reticulatum* 641  
 cinnabar 166, 169, 239  
 cinnamic acid 448  
*Cinnamomum verum* 405  
   *C. camphora* 467  
   *C. cassia* 405  
   *C. zeylanicum* 405  
 cinnamon 405, 446  
 circumcision 28  
 cis-abienol 445, 446, 468  
 Cistaceae 436  
 cistenolic acid 446  
 cistern 616, 623  
 Cistus 436–7, 437, 446  
   *C. creticus/incanus/villosus/tauricus* 436–7  
   *C. ladanifer* 436  
   *C. laulifolius* 436, 437  
 Citadel (Cairo) 60  
 citrine 25, 50, 52  
*Citrullus colocynthus* 403, 403, 633, 634  
   *C. lanatus* 403, 633–4, 633  
*Citrus aurantium* 548  
 clam-shell 202  
 clapper 321, 327, 519, 587  
 Claridae 662  
 clarification 407  
 Clarke, S. 7, 63, 64, 82,  
 clay 40, 54, 55, 78, 81, 81, 92, 115, 121–44, 123, 132, 134, 157, 158, 181, 182, 183, 184, 185, 186, 187, 189, 191, 203, 242, 272, 278, 279, 291, 308, 308, 332, 406, 410, 475, 528, 566, 583, 586, 628, 631, 636, 648  
   ferruginous 203  
 cleaving 354, 354, 355, 359  
 cloak 286, 289–90, 290, 293, 294, 295, 307–8, 309  
 clone 582  
 cloth 107, 243, 254, 268, 269, 270, 274, 275, 276, 277, 282, 284, 285, 286, 288, 290, 291, 292, 293, 294, 295, 296, 396, 407, 409, 566, 617  
 Cloudsley-Thompson, J.L. 384  
 club 284, 586  
 Clutton-Brock, J. 385  
 Cnidios 338  
 coarse ware 137, 144

- cobalt 105, 111, 152, 182, 184, 187, 198, 200, 201, 204, 206, 207, 210, 212, 213, 217, 218, 219, 220, 304
- cobalt oxide 213
- Cockburn, A. 268
- Cockle, W.E.H. 240
- cockling 244, 244, 248, 249
- coconut 415, 621
- coffee 626
- coffin 22, 27, 47, 52, 107, 110, 112, 114, 116, 119, 164, 181, 203, 242, 243, 254, 255, 258, 258, 259, 264, 269, 287, 295, 302, 312, 315, 335, 336, 339, 340, 341, 342, 344, 345, 346, 347, 349, 350, 351, 352, 354, 356, 357, 358, 359, 364, 365, 366, 375, 383, 384, 399, 420, 459, 460, 460, 461, 465, 480, 495, 622, 626, 627
- coffinet 660, 660
- Coffin Texts 246
- Spell 61 295
- coil building (pottery) 125
- coiling (basketry) 255, 256, 257, 257, 258, 259, 260, 260, 261, 262, 262, 263, 264, 265, 266, 266
- coin, coinage 165, 293
- coir 269
- Coles, R.A. 237
- collagen 249, 301, 302, 303, 475, 481, 482, 483, 483, 484
- collar 290, 335, 483, 625
- colocynthis 390, 403, 403, 634
- colorant 182, 185, 186, 187, 188, 197, 198, 199, 200, 207, 208, 211, 212, 214, 217, 218, 219, 220
- Colossi of Memnon 69
- Columbia 69, 382
- Columella 411
- column 18, 28, 30, 34, 35, 36, 38, 49, 58, 64, 93, 97, 98, 100, 340, 488, 584
- comb 43, 271, 277, 324, 326, 327, 337, 396, 496
- Commiphora* 437, 438, 439–40, 439, 442, 443, 447
- C. africana* 440
- C. erythraea* 440, 442
- C. gileadensis* 442
- C. kataf* 440, 442
- C. myrrha/molmol* 439, 439
- C. opobalsamum* 442
- C. sarnharensis terebinthina* 442
- common ash (tree species) 341
- common box (tree species) 337
- communic acid 445, 446, 453, 454
- communol 453, 454
- Compositae 393, 403, 631
- Condamin, J. 420, 600
- condiments 260, 609, 615, 628, 630, 632, 633, 643–6, 643, 644, 645, 648
- cone 308, 308, 348, 350
- confit 669
- conglomerate 12, 42, 55, 57–8
- conglomerate glass 202, 204
- conifer, coniferous 334, 348–52, 353, 367, 419, 430, 431, 433, 434, 445, 445, 447, 450, 453, 454, 464, 466
- Connan, J. 456, 466
- conservation 105, 106, 107, 109, 113, 114, 116, 154, 171, 234, 243–50, 324, 353, 367, 372, 383, 484, 492, 669
- consolidant 249
- convict 162
- cooking 108, 138, 143, 390, 402, 406, 408, 409, 422, 511, 537, 550–51, 553, 554, 555, 557, 559, 564, 567, 569, 589, 593, 613, 622, 631, 632, 634, 635, 637, 639, 641, 642, 646, 647, 658, 661, 662, 664, 667, 669
- cooking pot 124, 131, 135, 143, 667, 668, 669
- Cooney, J.D. 184, 196, 200
- copal 452, 453, 454
- copper 7, 23, 28, 43, 44, 47, 62, 65, 66, 105, 107, 109, 111, 112, 139, 148, 149–61, 162, 163, 164, 165, 168, 169, 170, 171, 172, 178, 179, 183, 185, 198, 205, 206, 208, 217, 218, 219, 241, 263, 282, 291, 306, 308, 329, 355, 363, 365, 408, 409, 411, 520, 642, 662
- copper acetate 241
- copperas 238
- copper carbonate 43, 111, 151, 165
- copper chloride 106, 110, 112
- copper oxide 160
- copper salts 317
- copper sulphate 160
- copper wollastonite 105, 110, 112
- Coptic 627
- cord 309, 517
- Cordia myxa* 343, 592
- core forming 181, 182, 188, 191, 203, 203, 204, 214, 215, 216, 218
- cork oak (*Quercus suber*) 344
- cork wood (*Aeschynomene elgphroxylon*) 336
- coriander 462, 528, 548, 559, 643, 643, 644, 645, 646, 665, 666
- Coriandrum sativum* 528, 548–9, 643, 643
- cornelian 6, 15, 25, 26–7, 29, 47, 52, 63, 65
- cornice 30, 97
- Corning Museum of Glass (USA) 207
- corrosion 160
- Cos 341
- cosmetics 23, 44, 47, 59, 196, 295, 324, 325, 397, 419, 419, 446, 461, 462, 463, 479, 480, 495
- cosmetic spoon 325
- cosmos 5
- cotton 255, 268, 271
- cotton wool 243, 248
- Coturnix coturnix* 408
- cotyledon 335
- couch 347
- couchwork 311
- covellite 112
- cow 159, 160, 292, 296, 302, 308, 314, 409, 410, 475
- Cowell, M. 109
- Craddock, P. 150, 155, 167, 168
- Craig, J. 514
- cramp 339, 340, 365–6
- butterfly 366, 366
- crane 408
- crate 255, 261, 262, 264, 619
- cream 409
- 'Cream of Tartar' 580
- Cretaceous 28, 53, 55
- Crete 44, 51, 52, 183, 220, 320, 326, 328, 333, 350, 399, 433, 437, 451, 452, 461, 478, 587
- crew 18
- crocodile 60, 154, 160, 284, 296, 302, 376, 408
- crop rotation 638
- Crowfoot, G.M. 261, 296
- crown 25, 36, 166
- crucible 124, 149, 151, 155, 163, 166, 167, 199, 199, 200, 217, 219
- Cruciferae 401, 418, 636
- CT *see* tomography
- cubit 353, 367, 522
- cubit rod 7, 350, 356
- cucumber 611, 628, 634, 635–6, 645, 648
- Cucumis sativus* 611, 635–6
- C. melo* var. *chate* 611, 634–5, 634, 635
- Cucurbitaceae 403, 633–5
- culinary 336, 397, 398, 400, 404, 405, 409, 413
- cullet 195
- culm 255, 257, 258, 259, 260, 263, 264, 265, 522, 594
- cultivar 581
- cumin 528, 644, 645, 646, 665, 666
- black 644–5, 644
- Cuminum cyminum* 644
- cuneiform 617, 629
- cup 131, 138, 309, 332, 570
- cupellation 170
- Cupressaceae 350, 351, 431, 434, 445, 446, 446, 491
- Cupressus* 445
- C. sempervirens* 350–51, 350, 434
- cuprite, 150
- cuprorivaite 105, 109, 110
- cuprous oxide 208, 217
- curds 409
- curing 299, 300, 301, 302, 303, 304, 306, 307, 308, 314, 315, 316, 317, 373, 411, 659, 662, 664, 667
- beer 659
- dry (salt) 663, 665, 667, 668
- fat 659
- salt 668, 669
- wet (brine) 663, 665, 668
- curl 496, 497, 498
- currying 301, 303
- curtains 285, 290, 291
- cushion 290, 291
- Cutler, D. 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 352
- cut-mark (butchery) 657
- cuttlefish 115
- cylindrical vessels (for vitreous materials) 184, 186, 187, 199, 199, 200
- cynotrichous 495
- Cyperaceae 227, 402, 636
- Cyperus* 594
- C. alopecuroides* Rottb. 229, 255
- C. articulatus* 255
- C. conglomeratus* 255
- C. esculentus* 402–3, 636–7
- C. esculentus* var. *aureus* 636
- C. papyrus* L. 227, 228, 229, 255, 258, 594
- C. rotundus* 613, 636, 637
- C. schimperianus* 255
- cypress 350–51, 350, 431, 434, 443, 445, 446, 447, 469
- Cypriot base ring juglet 404
- Cyprus 116, 148, 151, 164, 183, 203, 320, 322, 326, 328, 333, 349, 399, 433, 434, 435, 436, 437, 622, 625
- Cyprus cedar 349
- cyst 380
- Dab'a, Tell el- 118, 508, 582, 583, 586, 614, 619, 624, 625, 639, 640
- Dabaki Island 34
- dacite 48
- dagger 160, 167–8
- Dagi 268, 271, 271, 272, 274
- Dahamsha 60
- Dahschurstrasse 19
- Dahshur 6, 19, 25, 32, 36, 47, 83, 85, 138, 141, 153, 164, 364, 368, 463, 660

- dairy products 407, 409, 412, 418  
 Dakhla Oasis III, 123, 125, 138, 140, 198, 597,  
 598, 663  
*Dalbergia melanoxylon* 338–9, 339  
*D. pterocarpus* 339  
 Dallimore, W. 431  
 Damascus 451  
 Damascus pigment 212  
 Damietta 227  
*Daniellia oliveri* 452, 453  
 daniellic acid 454  
 Daniels, V. 316  
 Danzing, R. 231, 233, 234  
 Daphnae 166  
 Darby, W.J. 549, 592, 656  
 Darfur 323  
 Darius 126, 196, 322  
 darning 282, 283  
 date (fruit) 348, 480, 488, 548, 549–50,  
 556–7, 559, 581, 592, 614, 616, 617–20,  
 627  
 David, A.E. 383  
 David, A.R. 383, 385  
 Davies, N. de G. 358, 481  
 Davies, W.V. 324, 335  
 Dayton, J.E. 149  
 Dead Sea 392, 395, 399, 434, 455, 456, 466  
 Debeni 182  
 De Bignicourt, M.-C. 231, 234, 236  
 Debono, F. 127  
 Debye Scherrer camera 106  
 deck-plank 346, 368  
 decoloriser 197, 198, 217  
 deer 320, 408  
 Defenna, Tell (Daphnae) 166  
 degradation 109, 110, 111, 114, 116, 245, 246,  
 247, 335, 413, 416, 417, 418, 419, 2 420,  
 422, 446, 448, 450, 458, 468, 540  
 dehulling (decortication) 406  
 dehydroabiatic acid 445, 445, 450, 463, 464,  
 466, 467, 467, 468  
 Deir Alla 397  
 Deir el-Bahari 18, 23, 30, 45, 55, 56, 92, III,  
 242, 260, 269, 274, 276, 285, 291, 322,  
 339, 340, 345, 353, 368, 373, 438, 496,  
 554, 559, 619, 634, 659, 660  
 Temple of Mentuhotep II, Pit 25 496  
 Deir el-Ballas 118  
 Deir el-Bersha 15, 19, 69, 83, 93, 136, 268,  
 272, 274, 365, 468, 483, 491  
 DB2 273  
 Deir el-Gabrawi 292, 538  
 Deir el-Medina 18, 45, 88, 92, 97, 98,  
 121, 136–7, 139, 140, 142, 259, 260, 266,  
 276, 281, 284, 285, 287, 289, 291,  
 293, 306, 312, 314, 316, 397, 404, 497,  
 497, 508–9, 528, 538, 542, 547, 548,  
 549, 558, 559, 560, 561, 563, 564, 578,  
 579, 582, 597, 598, 602, 619, 621, 624,  
 626, 627, 630, 631, 634, 635, 637, 641,  
 644, 658, 659, 660, 662, 664, 667,  
 669  
 House NE.V 561  
 House SE.I 136  
 House SW.V 561  
 Tomb 1386 315  
*Demostachya bipinnata* 255  
 Demotic 232, 238, 401  
 Demotic Mythus Papyrus 244  
 Den 36, 47, 596  
 Dendara 55, 88, 461  
 dendrochronology 200  
 dental studies 378–9  
 dentine 320, 321, 329  
 depilation 302, 303  
 De Putter, T. 64  
 Deraheib 161  
 derivatised, derivative 482  
 Derven 239  
 Desch, CH. 167  
 Deschesne, O. 456  
 Deshasha 42, 303, 312, 314, 354, 354  
 Dessort, D. 466  
 detergent 216, 284, 496  
 devitrification 24, 185  
 dextrin 550  
*dhal* 639  
 Dhamar-reda (Yemen) 46  
 diadem 32, 44  
 diamictic 58  
 diastatic power 553  
 dicotyledon 227, 335–347  
 diet 372, 379, 383, 412, 499, 509, 513, 609,  
 611, 636, 647, 648, 658, 669  
 differential thermal analysis (DTA) 69  
 diffusion bonding 165  
 diglyceride 420  
 dill 645, 646  
 Dimutiudu 233  
 Di Natale, A. 231, 236  
 Dinsmore, J. E. 435  
 diobase 23  
 Diocletian 69  
 diode array detection 463  
 Diodorus Siculus 162, 339, 340, 593, 667  
 dioecious 617, 620, 621, 624  
 Dionysus 229  
 diorite 12, 30–31, 32, 33  
 diorite-gabbro 12, 19, 32  
 Dioscorides 335, 342, 390, 631  
 Diospolis Parva 127, 312  
*Diospyros ebenum* 338  
*D. mespiliformis* 338  
 dip-plating 165  
 Dirar, H.A. 557  
 disaccharide 488  
 disease 372, 373, 376, 378, 381, 382, 383, 499,  
 514, 519, 528, 632, 647, 663, 664  
 dismembering 300  
 dissection 380, 384  
 distaff 272, 274  
 distillation 401, 405, 431, 446, 450, 452, 460,  
 467  
 diterpenoid 444, 445–6, 445, 446, 447, 450,  
 453, 454, 467, 491  
 diuretic 581, 591  
 divine adoratrice 178, 178  
*djed* symbol 366  
 Djehuty 625  
 Djer 6, 44, 51, 63, 419, 463  
 Djoser 22, 24, 28, 36, 64, 65, 179, 263, 342,  
 347, 350, 352, 356, 357, 582, 596, 623,  
 626, 627  
 DNA analysis 383, 509, 544, 546, 582  
 DNA extraction 647  
 docket 132  
 document case 308  
 dog 56, 296  
 dolerite 12, 23, 61  
 doll 495  
 dolomite 39, 40, 41, 42, 44, 56, 105  
 Dolphin Jug 182  
 dome 93, 95, 100, 201  
 domestication 332, 390, 407, 505, 581, 616,  
 618, 633, 636, 637, 639, 640, 641, 643,  
 656, 665  
 dom nut/fruit 260, 265, 548, 549, 613, 620–1,  
 620  
 Dongola Reach 324, 326  
 donkey 19, 122, 124, 259, 262, 265, 292, 407,  
 411, 495, 519, 524, 526, 656  
 door 255, 265, 266, 291, 334, 339, 348, 349,  
 350, 433, 528, 620  
 Dorginarti 99  
 Dott, R.H. 21  
 Douche 122  
 dough 127, 538, 539, 555, 557, 558, 563, 564–5,  
 566, 568, 569  
 dove 408  
 dovecote 516  
 dovetail (*see also* joint) 87  
 dowel 158–9, 325, 329, 335, 336, 340, 341, 343,  
 344, 345, 347, 350, 359, 360, 362, 366,  
 627  
 Dra Abu el-Naga 397, 542  
*Dracunculus medinensis* 378  
 draftsman 283  
 drapes 291  
 Drar, M. 197, 228, 236, 395, 402, 559, 619  
 Drenkhahn, R. 65, 178, 309  
 dress 286, 288, 289  
 beaded net 289  
 dressing (stone) 63  
 drill 17, 22, 29, 64, 65, 66, 179, 185, 328, 332,  
 360  
 bow- 356  
 chain- 356, 359  
 drill-bit 356  
 drought 516  
 drug 405  
 Drunka formation 40, 41  
 drying 475, 660–63, 662, 663, 665, 666, 668  
 air- 667  
 sun-and-air 660, 667, 668  
 salt- 667  
 Duathathor-Henuttawy 498  
 duck 23, 325, 328, 475, 658, 659, 662, 663,  
 664, 669  
 dung 192, 203, 265, 509, 510, 511, 513, 516, 525,  
 526, 585, 616, 638  
 Dungul Oasis 621  
 Dunham, R.J. 21, 40  
 Dura Europos (Syria) 239  
 Duwi formation 54, 55  
 dwarf 324  
 dye, dyeing 104, 106, 107, 113, 119, 255,  
 278–9, 296, 299, 303, 304, 306, 316,  
 393, 394, 510, 520, 620, 625, 629, 641,  
 646, 647  
 acid/non-vat 279  
 double/two-layer/topping 279  
 vat 279  
 vegetable 306, 500  
 dye-bath 279  
 Dyer, T. 397  
 dye-works 279  
 dyke 514  
 earring 29, 164, 197  
 Eastern savin 351, 351  
 Ebers, G.M. 232  
 Ebers Medical Papyrus 232, 591, 627, 637,  
 645  
 ebony, Egyptian 323, 324, 325, 338–9, 339, 353,  
 366, 367  
*Echinococcus granulosus* 380  
 Eckey, E.W. 401  
 eclogite 31  
 economy 17, 135, 141, 144, 148, 293, 329, 405,



- 407, 505, 506, 513, 515, 529  
 ecospecies 581  
 Edfu 79, 91, 461  
 Edgar, C. 348  
 edging 302, 311, 315  
 Edinburgh, Royal Scottish Museum 178, 564  
 Edom 395, 434  
 Edwards, I.E.S. 64  
 Edwin Smith Surgical Papyrus 294  
 EDXA *see* energy dispersive X-ray analysis  
 eel 408  
 egg 303, 304, 332–3, 382, 418, 484–5, 491  
   hen's 484  
   lice 496, 499  
   wasp's 622, 624  
   wildbird's 484  
 Eggbrecht, A. 300  
 egg white 475, 476, 484–5  
 egg yolk 476, 484–5  
 Egypt Exploration Society (EES) I, 19, 130  
 'Egyptian alabaster' *see* travertine  
 Egyptian Antiquities Organization (aka Department of Egyptian Antiquities, Antiquities Service, Supreme Council of Antiquities) 184  
 Egyptian blue 44, 105, 106, 107, 108, 109, 110, 111, 113, 119, 177, 178, 184, 199, 205, 205, 207, 484  
 Egyptian Geological Survey 161  
 Egyptian Ministry of Agriculture 558  
 Egyptian Museum (Cairo) 39, 107, 139, 260, 264, 285, 290, 344, 375, 379, 466, 537, 538, 554, 559, 562, 625  
 Egyptian Topographical Survey 51  
*ehlipakku* 195  
 'eight-ribbed boat' 18  
 Eilat 44, 347  
 'eish shams' 568  
 Ekron 400  
 el-: all names or toponyms beginning with 'el-' are alphabetized under second part of name  
 elderberry 431  
 'Elder Lady' 499  
 electron microprobe/electron probe microanalysis (EPMA) 46, 68, 105, 207, 208, 210, 212, 213–8, 213, 219  
 electron microscopy (*see also* AEM, SEM and TEM) 384  
 electrum 47, 154, 160, 161–6, 169  
 elemi 452  
 elephant 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 495  
   Asian 321, 322, 323  
   Bush 321, 322, 323  
   Forest 321, 322, 323  
   'Syrian' 322  
 Elephantine 35, 79, 113, 138, 141, 142, 219, 323, 398, 508, 632, 635  
*Elephas maximus* (Asian elephant) 321, 322–3  
   *E. assurus* ('Syrian' elephant) 322  
 el-Hadidi 229  
 Elkab 23, 150, 187, 517, 517, 597, 663  
   EK3 270, 517, 522  
   Mastaba A 33  
 elm 344, 346  
 embalming 28, 216, 342, 374, 377, 378, 379, 380, 384, 385, 465, 631  
 embroidery 278, 280, 281, 285, 290, 375  
 'embroidery stick' 278  
 embryo 545, 545, 550, 552, 562, 564, 641  
 emerald 24, 48  
 emery 65  
 Emery, I. 275  
 Emery, W.B. 29, 355, 356, 360, 364, 367  
 emmer *see* wheat  
 emollient 392, 411, 419  
 enamel 166, 327, 329  
 endocarp 436  
 endoscopy 377, 380–81, 381, 384  
 endosperm 545, 551, 553  
 energy dispersive X-ray system (EDS) 68, 106, 192, 207, 208, 211, 212, 213  
 energy dispersive X-ray analysis (EDXA) 317, 378  
 enflourage 446, 461  
 Engedi 392, 442  
 Engelbach, R. 7, 19, 29, 33, 51, 63, 64, 82, 258  
 England 235, 422, 451  
 engraving tool 356  
 enstatite 188  
 enzyme 381, 409, 545, 550, 551, 551, 553, 554, 555, 564, 590, 642, 658  
 Eocene 28, 41, 42, 43, 59  
 epiderm 255  
 epidermis 271  
 epidote 57, 58, 219  
 epoxy resin 192, 213, 213, 454  
 Epstein, H. 656  
*Equus asinus* 407  
*erasin* 476  
 Eritrea 46, 338, 435  
 Erman, A. 566  
 erucic acid 418  
 Esh Mellaha range 49, 50  
 Esna 6, 28, 40, 43, 54, 59, 121  
 ester 452, 463, 489, 491, 599  
 etching 160, 172  
 ethanol 546, 556  
 Ethiopia 46, 161, 162, 169, 170, 227, 338, 339, 340, 392, 397, 406, 435, 438, 439, 442, 455, 477, 479, 514, 559, 560, 565, 625, 644, 645  
 ethnoarchaeology, ethnography 65, 265, 329, 507, 510–11, 514, 518, 519, 520, 521, 522, 524, 525, 526, 539, 541, 544, 557, 558, 559, 560, 561, 562, 563, 564, 566, 580, 602, 609, 644, 647, 657, 660, 663  
 ethyl alcohol 334  
 euphorbia 431  
 Euphorbiaceae 391  
 Evans, A.J. 333  
*Evernia furfuracea* 559  
 Everts, H. 127  
 evisceration 373, 374, 658, 659, 662, 664  
   *per anum* 374  
 ewer 153, 154, 158  
 excerebration 374, 377, 384  
 expedition (ancient) 5, 18, 19, 32, 44, 62, 148, 198, 294  
 expedition (modern) 25, 32, 61, 379  
 experimental archaeology 65, 93, 179, 188, 190, 191, 201, 204, 231, 233, 235, 302, 329, 381, 384, 507, 511, 519, 521, 539, 541, 544–5, 557, 558, 559, 561–3, 563, 568–9, 580, 602, 657, 659, 660  
 extended weave 274  
 extraction (oil, fat, honey) 391, 405–7, 406, 409, 410, 588, 589, 633  
 eye-lashes 339  
 eye-paint 44, 107, 112, 149, 168  
 Eyre, C.J. 64, 616  
 faba bean 613, 616, 637, 639, 641–2  
 Fabaceae 479  
 factory 181, 182, 183, 184, 185, 186, 205  
 Faenze 177  
 Fagaceae 344  
 Fahn, A. 338, 340, 343, 344, 345, 347, 348, 349, 350, 351, 352  
*Faidherbia albida* 335, 477  
 faience 26, 47, 127, 144, 148, 149, 157, 167, 177–93, 178, 180, 195, 196, 198, 201, 202, 205, 206, 216, 263, 280, 289, 290, 304, 333, 337, 350, 367, 586, 596, 635, 641  
   glassy 184, 185, 196, 197, 205  
   paste 181, 182, 183, 184, 185, 187  
   Variant A 177, 179  
   vitreous 187  
 fake 159, 164  
*fakshia* vessel 124  
 falcon 63, 160, 296, 486, 542  
 fallow 516, 517, 518  
 false door 5, 42, 263  
 Faltings, D. 538  
 famine 514, 528  
 fan, fanning 261, 271, 332, 337, 591  
 fan-bearer 497  
 FAO *see* Food and Agriculture Organisation  
 Fara, Tell el- (Israel) 85, 149  
 Farafra Oasis 663  
 Fara'in, Tell el- 186, 577, 582  
*faridat* 47  
 Farina, G. 304  
 Farnsworth, M. 206, 207, 212, 218  
*Fasciola hepatica* 382  
*faseekh* 667, 668  
 Fasolo, U. 346  
 fass 517  
 fast atom bombardment tandem MS (FABMS) 466  
 fast green 543  
 fat 137, 301, 302, 303, 304, 309, 411, 412–22, 447, 452, 461, 463, 464, 475, 480, 481, 491–2, 545, 579, 595, 659, 667, 669  
   animal 316, 390, 406, 407–9, 412, 413, 415, 417, 418, 419, 420, 422, 461, 480, 484, 492  
   'bone' 409  
   butter 409  
   'cutting' 408  
   'killing'/storage 408  
   liquid 661  
   milk 418  
   polyunsaturated 412, 415  
   saturated 412, 415  
 fat liquoring 303  
 fatty acid 412, 413, 413, 417, 418, 419, 420, 421, 446, 488, 489, 491, 492  
 fauna 92  
 favism 642  
 fayalite 47  
 Fayum 6, 19, 22, 23, 24, 29, 52, 113, 158, 205, 228, 242, 257, 257, 270, 339, 345, 346, 348, 392, 396, 397, 398, 401, 483, 488, 488, 489, 506, 515, 516, 580, 584, 585, 589, 631, 656  
 Fayum A 256  
 feather 160, 291, 293, 332, 658  
 Feigl, F. 599  
 Feigl spot test 600  
 feldspar 23, 25, 30, 32, 33, 34, 35, 37, 44, 45, 46, 50, 55, 61, 129, 130, 216, 219  
 feline 302  
 fellos 341  
 fenugreek 528, 645, 646

- fermentation 409, 537, 539, 540, 542, 545, 546, 547–8, 549, 550, 551, 554, 555–6, 558, 569, 577, 580, 586, 590–91, 592, 593, 594, 595, 596, 601, 602, 613, 618, 619, 626  
acetous 594  
lactic acid 547, 556  
ferric gallotannate 238, 246  
ferric oxide 50, 278  
ferro-magnesium 23  
ferrous gallotannate 238  
ferrous sulphate 316  
fertilisation, fertiliser 391, 516, 582, 585, 615, 616, 617, 628, 635, 636, 638, 641  
*Ferula* 442–3, 448  
*F. assa-foetida* 443  
*F. foetida* 443  
*F. Gabrielii* 443  
*F. galbaniflua* 442, 442, 443  
*F. gumosa* 442  
*F. narthex* 443  
*F. persica* var. *latisepta* 443  
ferulic acid 450  
festival 577, 580  
jubilee 598  
of the New Year 294  
fever 499, 581, 642  
fibre 268–76, 271, 299, 306, 308, 312, 314, 315, 316, 358, 396, 495, 498, 619, 620  
*Ficus* 622  
*F. carica* 340, 409, 548, 559, 622, 623–4  
*F. sycamorus* 192, 201, 334, 340–41, 340, 367, 548, 622–3, 624  
field maple 336  
fig 229, 338, 340, 409, 548, 559, 564, 581, 585, 591, 592, 613, 614, 616, 618, 622–4  
capri- 624  
figurine 39, 50, 78, 153, 155, 156, 158, 159, 165, 179, 324, 326, 327, 495  
filler 123–4, 125, 128, 129, 131, 132, 133  
filter, filtering 407, 580  
finger guard 282  
fir 348, 431, 433, 436, 438, 443, 445, 447, 463, 466, 467, 559  
Cilician 348–9, 348  
fir-cone 229, 348, 348  
fire-brick 540  
fire-dog 143  
firing 79, 117, 122, 124–5, 126, 127–8, 129, 131, 132, 134, 138, 140, 141, 180, 182, 185, 186, 187, 188, 189, 190, 191–2, 201, 567, 568  
open 181  
Fischer, H. 18  
fish 183, 249, 296, 408, 475, 481, 563, 609, 656, 657, 659, 659, 662, 664, 667–8  
fishing 390, 656, 669  
fishing float 619  
fishing line 667  
Fitzwilliam Museum, Cambridge 154, 159, 164, 555  
fixative 480, 496  
flag 293, 349  
flail 182  
flame photometry 68, 206  
flange 345  
flask 127, 171  
flavonol 599  
flax 100, 140, 255, 257, 258, 264, 268, 269, 270, 270, 271, 271, 272, 274, 275, 276, 278, 294, 305, 396, 521, 522, 582  
flaying 300, 301, 309, 657  
fleece 269  
Fleming, S.J. 219  
Fletcher, F. 402, 404, 633, 647  
Flieder, F. 231, 234, 236  
flint 29, 65, 148, 282, 344  
float 336  
floor 87, 92–3, 262, 336, 341, 342, 344, 510  
Florence Museum 341, 343, 344, 346  
flotation 406, 409, 509, 509, 529, 609, 638, 647  
flour 302, 303, 316, 379, 538, 539, 541, 542, 545, 546, 557, 559, 560, 561, 563, 563, 564, 621, 636, 639, 641  
bread wheat 568  
emmer wheat 568, 569  
rye 569  
fluorite 31  
fluoroscopy 375–6  
fluorspar 15, 31, 65  
flux, fluxing 151–2, 155, 166, 167, 189, 190, 191, 197, 199  
fly 384  
flywheel 126  
fly-whisk 495  
Foaden, G.P. 402, 404, 633, 647  
fodder 353, 393, 404, 510, 512, 513, 519, 522, 524, 525, 526, 527, 580, 619, 626, 632, 633, 636, 637, 638, 639, 640, 641, 642, 645, 646, 647  
foliation 21, 32, 34, 35, 37, 57, 67  
Folk, R.L. 21, 40  
Food and Agriculture Organisation (FAO) 302, 615, 647  
footstool 291, 325, 339, 360  
footwear (see also shoe, sandal) 299, 300, 305, 307, 309, 312–6, 311, 312, 313, 314, 316, 317, 317, 344  
foraminifera 42  
Forbes, R.J. 308  
foreigners 83, 167  
foreleg 657  
forge 356  
fork (agricultural) 508, 524, 525  
Formenti, F. 600  
Forrest, I. 552  
fort, fortress 20, 23, 51, 83, 90, 91, 92, 94, 97, 98, 99, 100, 139, 142, 161, 309  
fossil 40, 656  
fossil wood 19  
fosterite 47  
foundation deposit 30, 83, 84, 219, 260, 266, 559  
foundry 354  
Fouquet 379  
Fourier transform infrared spectroscopy (FT-IR) 415, 416, 416, 420, 421, 464, 481, 485, 487, 492, 601  
Four Sons of Horus 411  
fowl, fowling 390, 609, 656, 663, 667  
frame 358, 360, 364, 366, 524  
Frankfurt 375  
frankincense 438–9, 442, 444, 447, 449, 452, 456, 459, 469  
Franklin, G.L. 337, 339  
Franz, J.H. 164  
*Fraxinus* 346  
*F. excelsior* 341  
*F. ornus* 341  
*F. syriaca* 341  
Freestone, I.C. 197, 219  
freezing 247  
freighter 368  
French, C.A.I. 80  
French, P. 567  
fresco III, 117, 118, 326  
*fresco secco* 117  
fringe 269, 276, 280, 281, 282, 288, 290, 309  
frit 109, 110, 177, 187, 197, 199, 205  
blue 177, 199, 201, 205  
turquoise blue 178  
fritting, fritting pan 186, 187, 191, 199, 200, 202, 220  
frog 50  
frogging 96  
fructose 488, 489, 580  
fruit 255, 265, 340, 341, 342, 343, 343, 345, 346, 346, 347, 348, 351, 351, 390, 391, 392, 393, 400, 401, 403, 405, 406, 436, 438, 452, 480, 549–50, 556, 557, 559, 580, 581, 582, 583, 585, 586, 588, 591, 592, 593, 600, 609, 611, 611, 612, 613, 614, 615, 616–27, 628, 633, 643, 644, 647, 648  
citrus 548  
fuel 181, 186, 192, 345, 353, 394, 406, 422, 480, 509, 510, 511, 513, 516, 520, 521, 524, 525, 526, 580, 590, 612, 613, 619, 622, 638, 647, 658, 661, 668, 669  
fugitivity 248  
*ful medammes* 397, 642  
funeral 295  
funerary equipment 5, 27, 44, 52, 110, 339, 340, 420, 459, 468  
funerary palace (Abydos) 91  
fungus 247, 465, 528, 546, 556  
funori 249  
fur 308, 496  
furnace 151–2, 183, 184, 186, 192, 197, 199, 200, 201, 201, 202, 202, 204, 217, 218  
furniture 27, 254, 255, 260, 261, 264, 302, 307, 311, 325, 326, 336, 338, 339, 340, 341, 343, 344, 349, 350, 351, 363, 366, 367, 430, 619, 647  
Fustat, I 42  
gabbro 12, 30–31, 32  
*gabú* 304  
Gaillard, C. 666  
galactose 234, 249, 485, 488, 489, 491  
galbanum 385, 430, 442–3, 442, 448, 468  
Gale, N.H. 162–3, 168, 170  
Gale, R. 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 352  
galena 5, 38, 44, 168, 170, 216  
Galilee 399, 401  
gall 305, 430, 435, 549  
insect 622, 623  
gallery 6, 150  
gallotannic acid 238  
*Gallus gallus* 475, 659  
gaming board 325, 339  
gaming piece 43, 324, 325, 326, 329, 337  
gamma-rays 206, 210  
gamma-ray spectrometer 68,  
gang 18  
garden 338, 340, 401, 515, 518, 583, 614, 615, 615, 616, 617, 617, 621, 625, 626, 628, 644, 647  
Gardiner, A. 244, 555, 557  
garland, funerary 335, 344, 399, 625, 626, 632, 648  
Garland, H. 156, 157, 158, 159, 160, 166, 167, 168  
garlic 616, 624, 629, 630–31, 648, 665  
Gamer, H. 207, 384  
garnet 15, 31–2, 44, 65  
*garrigue* 623, 626  
Garstang, J. 326, 362  
gas chromatography (GC) 385, 416, 417, 444,

- 467, 481–2, 483, 487, 488, 489, 491, 492, 492, 600, 603, 647
- gas chromatography combustion/isotope ratio-mass spectrometry (GCC/IRMS) 420
- gas chromatography/mass spectrometry (GC/MS) 405, 416, 417, 417, 418, 418, 419, 420, 422, 444, 446, 447, 450, 453, 454, 456, 458, 458, 459, 460, 463, 464, 465, 466, 467, 468, 486, 487, 488, 491, 492, 599, 601, 602
- 'gashing' 623, 624
- gas-liquid chromatography (GLC) 468
- Gautier, A. 656
- Gazella dorcas* 408
- G. soemmeringii* 408
- gazelle 5, 263, 296, 301, 302, 307, 308, 311, 353, 408, 656, 658
- GC/MS *see* gas chromatography/mass spectrometry
- Gebel Abu Diyeiba 51
- Gebel Adda (Nubia) 600
- Gebel Ahmar 53, 69
- Gebel el-Asr 19, 20, 27, 29, 32–4, 33, 51
- Gebel Barkal 34, 36
- Gebel Dokhan 48–9, 48, 49
- Gebelain 42, 52, 107, 299, 301, 302, 304, 305–6, 312, 312, 344
- Gebel Elba 395, 435
- Gebel Gimal 24
- Gebel Gulab 7, 15, 17, 53, 54, 69
- Gebel el-Hammalya 50
- Gebel Ibrahim Pasha 37
- Gebel Ineigi 31
- Gebel Manzal el-Seyl 61, 61, 62
- Gebel Mellaha 61
- Gebel Migif 46
- Gebel Mitiq 32
- Gebel Muelha 31
- Gebel Nagug (or Togok) 37
- Gebel Nugrus 24
- Gebel el-Qatrani 19, 23
- Gebel Rod el-Barram 59
- Gebel Rokham 44, 45
- Gebel Rosas 168
- Gebel Salatit 59
- Gebel Sikait 24, 25, 45, 69,
- Gebel el-Silsila 6, 18, 20, 54, 55, 323
- Gebel el-Teir 23
- Gebel Tingar 53, 69
- Gebel Togok (or Nagug) 37
- Gebel Urf Hamam 50
- Gebel Zeit 5, 38, 455
- Gebel Zubara 24, 25, 46, 69
- gedanite 451, 454
- gedano-succinite 454
- geese *see* goose
- Geilmann, W. 197
- gelatin 106, 244–5, 244, 484
- Geller, J.R. 540, 541
- gemstone 6, 10–11, 15, 20, 21, 27, 32, 39, 43, 46, 50, 51, 62, 63, 65, 69, 166, 178, 287, 451
- gene 581
- amplification 383
- genealogy 375
- Genebeteyew 338
- geophysical survey 183
- George, E. S. 384
- Georgia 581
- gereed 93, 255, 264
- German Archaeological Institute, Cairo 47
- Germany 547, 562
- Germer, R. 255, 278, 304, 306, 391, 394, 398, 404, 433, 442, 509, 513, 559, 609, 619, 635, 636
- germination 519, 545, 545, 550, 551, 552, 556, 569, 643
- gesso 22, 159, 160, 164, 166, 171, 243, 245, 367, 481, 488, 586
- Gettens, R.J. 239
- gezira 131
- Ghalioungui, P. 656
- Ghaly, H. 567
- Ghassulian 312
- ghee 409
- Ghiordie knot 276
- Gibbium psylloides* 385
- gidr (vessel) 124
- gilding 22, 116, 159, 164, 307, 334, 344, 367, 480
- Gilead 399
- ginger 446, 620
- giraffe 260, 495
- girdle 26, 52, 276, 288
- Girga 44, 410
- Girza 167
- Giza 6, 18, 19, 23, 24, 33, 36, 45, 53, 57, 58, 60, 63, 64, 69, 85, 93, 95, 96, 97, 98, 125, 138, 141, 155, 167, 259, 287, 349, 355, 367, 379, 537, 541, 567, 578, 588, 623
- G6020 461, 462
- LG89 353, 353
- Tomb G2370 587
- Tomb G7440Z 289
- Tomb of Hetepheres 363, 365, 366, 367, 373
- glacis 92
- Glanville, S.R.K. 353
- glass (ancient) 26, 27, 46, 52, 61, 109, 110, 112, 140, 148, 149, 157, 166, 177, 178, 179, 181, 182, 183, 184, 185, 186, 187, 190, 191, 192, 193, 195–224, 203, 205, 208, 220, 287, 342
- cane 203
- rod 204, 218
- glass (modern) 243, 244, 245, 246, 246, 247, 248, 249, 250, 416, 417, 481, 543
- glass, basaltic 24
- glass blowing 196
- glass-making 188, 197, 198, 199, 201
- glaze, glazing 59, 63, 109, 122, 127, 148, 149, 150, 155, 156, 157, 167, 177, 179, 181, 182, 183, 184, 185, 186, 187, 188, 189–91, 190, 191, 192, 199, 205, 212
- application 177, 179, 182, 183, 187, 189, 191, 191, 192
- cementation 177, 179, 181, 182, 185, 187, 189, 190, 190, 192
- efflorescence 177, 179, 180, 181, 182, 183, 185, 188, 189, 189, 190, 191, 192
- self- 189
- glazing powder 190, 192
- GLC *see* gas-liquid chromatography
- gleaning 522, 524, 525
- glessite 451
- Glickman, M. 479
- globigerinids 41, 42
- glove 290
- glucose 488, 489, 491, 545, 546, 550, 551, 580, 664
- glue *see also* adhesive and animal glue) 160, 164, 165, 236, 243, 247, 301, 307, 310, 325, 359, 360, 362, 367, 475, 480, 481, 482, 483, 484
- glume 505, 513, 527
- gluten 558, 565
- glyceride 416
- glycerol 334, 412, 412, 413, 491
- glycogen 664
- gneiss 5, 6, 7, 12, 15, 19, 20, 21, 27, 29, 31, 32, 33, 34, 35, 46, 51, 68
- quartz diorite 34
- tonalite 34–5, 35, 68, 69
- gneissoid 35, 36, 37
- goad 337
- goat 268, 269, 301, 302, 307, 308, 327, 328, 407, 409, 437, 495, 586, 656, 658, 669
- goatskin 302, 305, 308, 309, 313, 315
- Godin, V.J. 400
- Godin Tepe (Iran) 600
- God's land 324
- Goedicke, H. 242
- goethite 29, 40, 43, 53, 55, 105, 115, 166
- Golan 399, 400
- gold 25, 26, 27, 30, 31, 40, 44, 47, 51, 52, 53, 63, 116, 148, 150, 151, 158, 160, 161–6, 168, 169, 170, 171, 172, 179, 202, 280, 290, 291, 295, 309, 312, 314, 323, 325, 356, 363, 366, 367, 483, 495, 543, 666
- alluvial/placer 161, 162, 169
- native 162
- 'of Koptos' 161
- 'of Kush' 161
- 'of Wawat' 161
- red 164
- vein/reef 161, 162, 169, 170
- gold-beater 244
- gold collar 290
- goldsmith 116, 165
- gold-washing 161, 162, 162
- Goodman, S. 658
- goose, geese 296, 325, 362, 408, 475, 487, 658, 659, 669
- Goramis (Iran) 115
- el-Goresy, A. 112
- Gore-Tex 248
- gossan 148
- Gossypium* 255
- gourd 122, 140, 403
- Gourlay, Y.J.-L. 259
- Gout, J.-F. 202
- governor, provincial 5
- Gowland 167
- grafting 616
- grain 137, 138, 139, 148, 181, 256, 257, 265, 292, 505, 511, 512, 513, 514, 518, 519, 522, 526, 527–8, 538, 540, 541, 542, 543, 545, 545, 549, 550, 551, 552, 552, 554, 555, 556, 557, 558, 559, 560, 561, 562, 565, 646
- cracked 560
- malted 552, 554, 569
- sprouted 552, 552, 554, 564, 569
- grain price 508, 515, 528
- grainstone 41, 42
- granary 505, 506, 526, 527–8, 527, 551, 557, 641
- granite 5, 6, 7, 12, 15, 16, 17, 17, 20, 25, 30, 31, 32, 34, 35–6, 37, 38, 46, 51, 58, 117
- granodiorite 6, 12, 17, 21, 24, 30, 34, 35, 36, 37, 37, 38
- Grant 239
- granulation 165
- Granville, A.B. 384
- grape 183, 229, 234, 265, 292, 480, 488, 549, 577, 578, 579, 580, 581, 582, 583, 585, 585, 586, 590, 592, 601, 602, 614, 616, 618, 623, 631, 646, 667
- black 591

## 684 INDEX

- grape (*cont.*)  
 Cabernet Sauvignon 582  
 Pinot Noir 581, 582  
 red 582, 591, 600  
 white 582, 591  
 wild 582  
 grape juice 580, 586, 588, 589, 590, 591, 600, 602  
 grape seed 580, 581, 582, 586, 588, 590, 591, 599, 600  
 grape skin 580, 588, 590, 591, 600, 602  
 grape syrup 589  
 graphite 45, 206  
 grass 255, 256, 257, 258, 258, 259, 259, 260, 263, 264, 265, 269, 373, 411, 499  
 canary 518  
 rye 518, 558–9  
 wild nut 613, 636, 637  
 yellow nut 636  
 grating 613  
 'grave wax' 385  
 gravel 583  
 Gray, P.H.K. 375, 376, 378  
 grease 294  
 Greaves, R.H. 161  
 Greece, Greeks 30, 159, 161, 170, 183, 185, 196, 228, 232, 238, 284, 305, 326, 333, 336, 337, 349, 351, 401, 404, 431, 433, 436, 437, 451, 461, 478, 559, 602, 631, 632  
 'green' (pottery) 125  
 Green, F.W. 107  
 Greenfield Papyrus 232, 233  
 green frit 112  
 Greenland 167  
 green vitriol 238  
 greisenised granite 31  
 Greiss, E.A.M. 255, 257  
 grenadine 625  
 greywacke 6, 7, 12, 24, 57–8, 57  
 griddle 565  
 griffin 280  
 Griffith, F.L. 555  
 grinding stone 162, 505  
 grist 550, 553  
 grit 563, 565  
 Grivetti, L. 656  
 Groenman-van Waateringe, Prof. Dr. 302  
 grog 123–4, 127  
 'Groningen solution' 231  
 Groningen State University 231  
 Groom, N. 438, 442  
 grossular 31  
 gruel 553  
*Grus grus* 408  
 Grüss, J. 546, 547, 548  
 Guinea worm 378, 380  
*gulla* 143  
 gum 233, 234, 238, 249, 367, 444, 447, 451, 467, 475, 476, 485, 486, 487, 487, 489, 491  
 acacia (*Acacia*) 476–7, 479, 480, 488, 491  
 arabic 187, 234, 236, 238, 476–7, 479, 486, 487  
 cherry 476, 479–80  
 locust bean 476, 479  
 plant 485, 487, 488, 489, 492  
 -resin 430, 437, 438, 439, 440, 442, 444, 476  
 tamarind 476, 479, 488, 489  
 tragacanth (*Astragalus*) 476, 477–9, 486, 487, 488, 489  
 Gunn, B.G. 231  
 Gurob 171, 184, 205, 208, 299, 313, 314, 352, 499, 499  
 Tomb N 312, 313, 314  
 gymnosperms 335, 348–52  
 gypsum (plaster) 92, 158, 202, 367, 475, 562, 568, 586  
 gypsum (stone) *see* alabaster gypsum  
*habb el-aziz* 636  
 el-Hadidi, M. 404  
 Hadrabia hills 29  
 haematite 15, 27, 29, 38, 40, 43, 49, 51, 53, 55, 59, 65, 105, 111, 113, 114, 119, 166, 239, 306  
 haematoma 658  
 Hagia Sophia (Turkey) 69  
 Hagg Qandil 19  
 Haifa (Israel) 216  
 hair (animal) 265, 268, 269, 302, 303, 308, 409, 480, 495, 496, 657, 658  
 hair (human) 374, 382, 392, 412, 495–500  
 false 496, 498, 499  
 hairdresser 498  
 Hairfield, E.M. 447  
 Hairfield, H.H. 447  
 hair-net 311  
 hairpiece 499  
 hair-ring 29, 165  
 Hajar Bin Humeid 397  
 Hajji Firuz Tepe (Iran) 464, 600  
 halfa 255  
 halophytic plants 187, 197, 214  
 ham 663, 669  
 Hamamelidaceae 341, 437, 454  
 Hamburg, Museum für Volkerkunde 152  
 Hammam, Tell 393  
 Hammamat Series 57  
 Hammash 150  
 hammer 168  
 hammerstone 5, 7, 28, 29  
 Hamret Mikpid 31  
 Hamroush, H. 135  
 Hamza, M. 184, 200  
 Hanbury, D. 437  
 handrail 346  
 hand stone 560, 561, 563, 563, 564  
 Harbottle, G. 133  
 harbour 19, 20  
 Harden, D.B. 20  
 hare 408, 409  
 Harkhuf 324  
 Harlan, J.R. 406, 560  
 harness 310  
 harp 339  
 Harpocrates 153, 154, 157  
 harpoon 326, 667  
 Harpur, Y. 517, 519  
 Harrapa 397  
 Harrell, J. 19, 33, 61  
 Harris, J.E. 375  
 Harris, J.R. 1, 149, 177, 195, 465  
 harrowing 506, 518, 629, 633, 639, 641, 646  
 Hart, G.D. 383  
 hartebeest 5, 408  
 Hartnett, H.E. 453  
 Haruba (Site A-345) 139  
 harvest, harvesting 262, 265, 270, 392, 394, 395, 396, 400, 401, 402, 404, 405, 410, 430, 505, 506, 507, 508, 510, 511, 514, 515, 518, 520–24, 523, 526, 528, 529, 558, 560, 578, 580, 581, 584, 585, 585, 586, 591, 614, 615, 616, 617, 624, 625, 627, 629, 630, 631, 635, 636, 637, 638, 639, 640, 641, 643, 644, 645  
 harvest-goddess 588  
 Hassan, A.A. 168  
 Hassan, F.A. 168  
*hasyrat* mat 258  
 Hathor 42, 55, 59, 62, 148, 295, 312, 340, 496, 498, 622, 662  
 Hatnefer 295, 498  
 Hatnub 5, 17, 19, 20, 59, 59  
 Hatshepsut 18, 115, 153, 197, 206, 212, 322, 323, 324, 339, 353, 367, 368, 430, 438, 459, 462  
 Hawara 53, 338, 344, 346, 351, 395, 446, 468, 633  
 hawk 168, 170  
 hayūnite 39  
 Hayward, L.G. 323  
 headband 290  
 headdress 165, 171  
 header 88, 90, 90  
 headrest 168, 196, 202, 291, 325, 329, 336, 339, 342, 345, 626  
 health 372, 412, 545  
 Hearst Papyrus 294  
 hearth 202, 204, 510, 561, 565, 647  
 heavy mineral 82  
 Hebron 399  
*heb-sed* (*see also* festival) 598  
 heddle rod 276, 277  
 hedgehog 181, 656  
 Hedges, R.E.M. 148, 157, 177, 185, 192, 198, 207, 212, 217  
 Heidelberg 107  
 Institute of Egyptology 105  
 Max-Planck Institut für Kernphysik (Heidelberg) 105, 109, 110, 111, 112, 113, 114, 115, 116  
 Heizer, R. 65  
 Hekanakhte Letters 242, 293, 508  
*hekat* 526  
 Helbaek, H. 436  
 Helck, W. 538, 562  
 heliodor 24  
 Heliopolis 33, 579, 598  
 heliotrichous 495, 497  
 helium 247  
 helmet 168, 328  
 Helwan 59, 258, 269, 455  
 hem 282, 282, 292  
 Hemaka 29, 227, 338, 347, 367, 627  
 hemi-cellulose 229, 239  
 Hemmamiya  
 Tomb 1910 30  
 hemp 269  
 hen 484  
 henna 279  
 Henderson, J. 215  
 Hendriks, I.H.N. 231  
 Henein, N.H. 202  
 Henutmehyt 420, 660  
 Henutudjebu 293  
 Hepper, F.N. 234, 237, 399, 401, 438, 439, 440, 442, 566, 631  
 Herakleopolis 119  
 herb 403, 412, 430, 446  
 Herculanum 239, 243, 245  
 Herihor 63  
 Hermann, G. 39  
 hermit 266  
 Hermopolis Magna 598  
 Herodotus 269, 335, 339, 345, 383, 508, 519, 538, 579, 593, 657, 662, 664, 667  
 heron 408

- Heron, K. 450  
Hesse, A. 85  
Hester, G. 65  
Hesyra 107, 263, 360  
Hetepherakhti 537  
Hetepheres I 159, 291, 363, 365, 366, 367, 373  
el-Hiba 398  
Hibis (Kharga) 126  
hickory 668  
hide, animal 300, 301, 301, 302, 305, 308, 309, 314, 315, 316, 326, 407, 411, 475  
Hierakonpolis 29, 36, 42, 55, 58, 79, 89, 90, 107, 122, 129, 131, 133, 134, 135, 137, 141, 148, 179, 308, 326, 392, 540, 541, 549, 612, 619, 627, 634, 635  
Cemetery HK.43 496  
‘main deposit’ 40, 323  
Site 24 79  
Site 29 79  
Site 29A 79  
Tomb 100 79  
hieratic 18, 119, 132, 236, 240, 243, 285, 596, 597  
high magnesia glass (HMG) 197, 206, 212, 214, 216  
high performance/high pressure liquid chromatography (HPLC) 416, 417, 418, 420, 463, 464, 482, 483, 483, 484, 487, 488, 491, 600, 601  
High Priest of Amun 196  
Hildesheim, Pelizaeus Museum 33, 105, 159, 166, 184  
Hillman, G. 524, 560  
Himalayas 349, 581  
Hippocrates 581  
hippopotamus 38, 43, 181, 302, 320, 321, 322, 324, 326–7, 328, 329, 408, 656  
*Hippopotamus amphibius* 326  
Hiram 322  
histology 379, 380, 381, 384  
Hit (Iraq) 456  
Hit-Abu fir (Iraq) 466  
Hittites 155, 167, 316  
Hiw *see* Hu  
Hobbs, J.J. 395  
hoe 508, 516, 517, 518  
Hoffman, M. 133  
hogging truss 368  
Hohlwein, N. 348  
Holland, T. 375  
Holthoer, R. 122, 136, 139, 569  
Homr Akarem 31  
honey 137, 143, 279, 294, 390, 410–11, 410, 475, 480, 488, 489, 579, 591, 626, 636, 659, 665, 669  
honing 356  
Hood, S. 452  
‘Hood Textile’ 275  
hoof, hooves 320, 327, 409, 475  
hook 261, 291, 566, 659  
hoop 357, 360  
hop 548  
hopane 456, 457, 460, 466  
Hope, C. 126, 127  
Hopf, M. 402, 403, 404, 615, 624  
Hor 151  
*horchata di chufa* 636  
*Hordeum sativum* 505  
*H. tetrastichum* 512  
*H. vulgare distichum/sativum* var. *distichum* 512  
*H. vulgare* var. *nudum* 512  
*H. vulgare vulgare/sativum* var. *hexastichum* 512  
Horemheb (king) 85, 292, 662  
Horemheb (Theban official) 110, 115, 118  
horn 51, 98, 269, 301, 320, 323, 327–8, 475, 517, 658  
hornbeam (wood) 346  
hornblende 24, 30, 32, 33, 34, 35, 37, 48, 52  
hornet 617  
horse 276, 292, 310, 475, 495  
horse blanket 275  
horseradish 396  
horse trappings 316  
Horus 40, 160, 294, 345, 542, 596  
Hounsfield, Sir G. 375  
Howarth, J.T. 199  
Howes, F.N. 437, 440  
HPLC *see* high performance/high pressure liquid chromatography  
Hu 29  
hull (boat) 360, 366, 368, 447  
Hume, W.F. 25, 29, 150  
*hummus* 641  
Humphrey, S. 112, 116  
humus 229  
hunting 65, 228, 280, 290, 323, 324, 326, 327, 330, 332, 390, 408, 656, 669  
and gathering 505  
huntite 105, 107, 114, 117, 119  
*huratu* 305  
Hurghada 44, 48, 395  
Hurrian 195  
Hurst, H.E. 514  
Hussein, A.A.A. 31, 32, 39, 46  
Huya 291, 598  
*Hyaena hyaena* 408  
hydrochloric acid 245  
hydrogen 233  
hydrogen peroxide 244  
hydrolysis 239, 481, 485, 489  
hydrothermal 50, 56  
hydroxylapatite 115  
hyena 408, 656  
Hyksos 278, 475  
*Hymenaea verrucosa* 452, 453, 454  
‘Hymns to Senusret II’ 237  
*Hyphaene thebaica* 255, 347, 548, 620–21, 620  
ibex 408  
Ibi 178, 178  
ibis 157  
Ibrahim Awad, Tell 396, 577, 582  
Ibscher, H. 231, 244–5  
ICDD 106  
ICPES *see* inductively-coupled plasma emission spectroscopy  
ICP-MS *see* inductively-coupled plasma/mass spectrometry  
ideology 5  
al-Idrisi, M.M. 39  
Idut 287, 659  
igneous rocks 9, 20, 21, 23, 29, 30, 31, 32, 33, 34, 35, 45, 46, 47, 48, 50, 52, 54, 58, 61, 67  
Ikram, S. 409  
illuminant, illumination 390, 392, 411  
ilmenite 37, 216  
*im-KÜ.GI* 306  
immunohistochemistry 381–2  
*Imperata cylindrica* 255  
imperial porphyry 48, 49  
Imti 599  
INAA *see* instrumental neutron activation analysis  
incense 143, 430, 434, 439, 451, 456–9, 463, 464, 468, 480, 495  
incisor 321, 326, 327, 328, 329  
India 24, 27, 117, 322, 334, 338, 378, 395, 396, 397, 405, 439, 479, 565, 635, 646  
indigo 278, 299, 306, 641  
indigotin 275, 279  
inductively-coupled plasma emission spectroscopy (ICPES) 213  
inductively-coupled plasma/mass spectrometry (ICP-MS) 68, 133, 172  
Indus valley 397  
Ineni 117, 118, 621  
infrared spectroscopy (IR) 25, 69, 415, 416, 416, 419, 420, 421, 421, 450, 452, 453, 459, 464, 467, 488, 600, 601, 602, 603, 647  
ingot (glass) 187, 195, 199, 199, 200, 220  
ingot (metal) 149, 155, 156, 157, 162, 165, 170  
bar 165  
bun 151  
oxhide 151  
plano-convex 151  
ring 162, 165  
Ingram, M. 664  
inhibition agglutination test (IAT) 383  
injury 376  
ink 237, 238, 239, 241, 245, 246, 248, 285, 295, 597  
inlay 22, 27, 29, 32, 39, 47, 52, 63, 110, 117, 154, 158, 160, 164, 166, 169, 179, 180, 181, 182, 183, 184, 185, 188, 189, 196, 197, 204, 260, 287, 320, 325, 326, 327, 328, 329, 334, 337, 339, 340, 346, 350, 353, 366, 367  
insect (*see also* beetle, fly, termite) 83, 92, 239, 240, 240, 242, 243, 247, 248, 249, 279, 382–3, 384, 385, 430, 454, 476, 511, 519, 528, 561, 617, 622, 639, 641, 647, 667  
insecticide, insect repellent 561, 643, 646, 647  
Institute of Ancient History (Konstanz University) 105  
Institute of Egyptology (Heidelberg University) 105  
Institute of Fine Arts (New York) 180  
Institute of Industrial Organic Chemistry (Poland) 240  
instrumental neutron activation analysis (INAA) 68, 69  
insulation 88  
intaglio 27, 47  
Intef (11th-Dynasty, TT386) 56, 578  
Intef (18th-Dynasty, TT155) 589, 589, 594, 595, 599  
Intefiqer 537, 549, 555, 556, 568, 661  
International Institute of Papyrus (Syracuse) 236  
International Mummy Database (Manchester) 372  
International Union of Geological Sciences (IUGS) 20, 21, 30  
investment 157, 158, 159  
Iny 301  
ion chromatography 419, 421, 458, 467  
ion etching 499  
Ionia 338  
Ipuy 284, 353, 356, 596, 657, 662  
Ipy 18, 657  
Iran 115, 186, 190, 198, 341, 345, 346, 350, 407, 431, 433, 435, 437, 442, 443, 455, 456, 464, 477, 478, 479, 600, 630

- Iraq 335, 345, 351, 397, 431, 435, 436, 437, 455, 456, 466, 477, 478, 480, 635
- iridium 169
- iridosmine 169
- Irinefer 620
- iron 7, 26, 27, 29, 31, 32, 35, 38, 39, 40, 43, 45, 47, 52, 53, 54, 56, 58, 61, 67, 105, 111, 115, 121, 128, 150, 151, 152, 159, 160, 162, 163, 164, 166–8, 171, 186, 197, 198, 200, 203, 216, 217, 218, 238, 305, 306, 621, 622, 625, 627, 636, 639, 642, 646
- cast 168
- meteoric 166–7
- native/telluric 166–7
- wrought 167
- iron-gall ink 238, 241
- iron oxide 111, 113, 115, 151, 166, 171, 197, 208, 217, 239, 241, 246, 278
- iron sulphate 238,
- irrigation 122, 391, 392, 398, 411, 508, 512, 512, 513–15, 517, 583, 584, 585, 602, 615–16, 618, 629, 635, 638, 644
- basin 512, 514, 515, 516, 517, 528, 584, 596, 614, 615, 628, 633, 635, 638, 639, 641, 642, 647
- canal 638, 639, 642, 646, 647
- lift (i.e. *shaduf*- or *saghiya*-based) 516, 628
- perennial 514, 516, 628
- isinglass 249, 475
- Isi 292
- Isis (goddess) 40, 166, 626
- Isis (queen) 37
- Iskander, Z. 465
- Isler, M. 64
- Israel 44, 46, 62, 82, 216, 340, 400, 403, 433, 435, 436, 447, 451, 452, 453, 454, 455, 456, 478, 581, 622
- Issawiya formation 43
- Istemkheb 306, 307, 498, 498, 660
- Italy 49, 58, 59, 111, 149, 152, 177, 351, 404, 406, 436, 632
- Iteti 354, 354, 355
- IUGS *see* International Union of Geological Sciences
- ivory 29, 39, 164, 237, 320–30, 328, 333, 334, 339, 359, 362, 363, 364, 366, 367, 620, 625
- ivory-working 320, 328–30, 328, 330
- Iymery 461, 462, 588
- lynefert 549, 556
- jack 277
- Jackson, A.B. 431
- Jackson, M. 547
- Jacquet-Gordon, H. 144, 542, 566
- jade 38–9
- jadeite 38, 39
- Jagiella, C. 335, 345
- jam 625
- James, T.G.H. 586, 588, 589, 596
- Janssen, J. 367, 528
- Japan 636
- jarosite 105, 112, 116
- jar label 142–3, 409, 578, 579, 581, 583, 590, 592, 596–9
- jar stopper 594, 595
- jasper 15, 26, 27, 29–30, 38, 65, 166
- jaundice 642
- Jericho 442
- Jerusalem 349
- jewellery 6, 25, 26, 27, 29, 30, 32, 39, 40, 46, 47, 51, 52, 62, 63, 65, 117, 149, 163, 164, 165, 166, 171, 172, 178, 184, 265, 279, 280, 281, 307, 312, 325, 332, 337, 350, 366, 430, 451, 456, 464, 625
- jift* 400
- Jodrell Laboratory (Kew) 335
- joinery 342, 344, 348
- joint (meat) 656, 657, 659, 660, 661, 662, 663, 665, 666, 667, 668, 669
- joint (wood) 355, 356, 358
- bridle 361, 361
- butt 125, 358–9, 359, 368
- coopered 360, 360
- dovetail 363–4, 364
- dowelled edge 360, 360
- edge 359–60, 359, 360
- half-lap (rebated butt) 360, 360
- halving 361, 361
- housing 361, 361
- loose tongue or tenon 359, 359, 368
- mitre 364–5, 365
- mortise and tenon 159, 329, 341, 347, 361–3, 362, 363, 364, 368
- scarf 365–6, 366, 368
- tied 359, 359
- tongue and groove 125
- Jordan 335, 345, 350, 397, 399, 400, 433, 435, 436, 451, 453, 478, 581
- Josephus 442
- jubilee (*see also* heb-sed, festival) 598
- Judaea 197, 399, 401
- Julamerk (Kurdistan) 115
- Julius Pollux 667
- Juncus acutus* 255
- J. rigidus* 255
- juniper 240, 349, 378, 431, 433, 434, 443, 445, 446, 447, 469, 614
- American 349
- Grecian 351, 351
- prickly 351
- Phoenician 351
- Juniperus* 334, 433, 445
- J. communis* 433
- J. drupacea* 351, 433
- J. excelsa* 351, 351, 431, 433
- J. foetidissima*, 351, 433
- J. oxycedrus* 351, 433
- J. phoenicea* 351, 433
- J. sabina* 433
- Junker, H. 257, 373
- jute 271
- Juvenal 629
- ka* 577
- Kaaper 362
- Kabri, Tell 118
- Kaczmarczyk, A. 148, 156, 177, 185, 192, 198, 206, 207, 212, 306
- Kaemrehu 537, 562
- Kafr Ammar 337
- Kagemni 659
- Kahay 587
- Kahun 83, 87, 237, 268, 269, 271, 277, 299, 302, 303, 309, 314, 338, 350, 356, 360, 393, 463, 463, 495, 509, 518, 528, 582, 609, 619, 622, 623, 626, 627, 628, 634, 635, 636, 640, 642, 644, 648
- Kahun Medical Papyrus 240
- Kahun papyri, 237
- Kaimenu 33
- Kalopsidha (Cyprus) 436
- Kamal, A.B. 559
- kandake* 27
- kaolin 122
- kaolinite 55, 105, 113, 122, 124, 134
- Karaduniyaš 196
- Karanis 91, 260, 339, 345, 348, 516
- Karlshausen, C. 64
- Karmir Blur 397
- Kamak 36, 37, 47, 55, 56, 60, 80, 81, 88, 99, 112, 116, 140, 150, 156, 293, 353, 459, 488, 538, 566, 567, 625, 628
- karst 43
- Kashmir 38
- Kaup, Y. 466
- Kawa 34
- Kea 333
- keel 368
- Keftiu 322
- keg 122
- Keimer, L. 391, 393, 394, 395, 397, 632
- keli* 214
- Keller, C.A. 205
- Kemet ('black land') 24
- Kemni 364
- Kemp, B.J. 64, 142, 259, 561
- Kenamun 122, 136, 141, 292, 310, 553, 566, 569, 583
- kenching 667
- Kenya 452
- keratin 320, 475
- kerchief 282, 290
- kerf 354, 355
- Kerkeosiris 516
- Kerma 113, 115, 139, 181, 182, 188, 323, 324, 326, 495
- Tumulus KX, Grave 1044 45
- kermes 279
- Kermococcu vermilio* 279
- kernel 390, 392, 393, 395, 400, 401, 436, 489, 620, 635
- Kfarie 456
- KH3 *see* Naqada
- Kha 259, 260, 275, 276, 282, 285, 286, 289, 291, 291, 312, 342, 404, 497, 563, 564, 637, 659, 662, 664, 667, 669
- Khaemwaset (son of Rameses II) 54
- Khaemwaset (TT261) 578, 583, 595, 596
- Khafajeh, 402
- Khafkhufu 287
- Khafra 6, 33, 36, 51, 60, 348, 353
- Khai-Hapy 33
- Khamernerneby (queen) 58
- khamseen* 642
- khar* 526, 528
- Kharga Oasis 39, 111, 115, 122, 126, 198, 266, 323, 348, 620, 663
- khart* 80
- Khartoum 339
- Khasekhemwy 27, 36, 58, 153, 162, 584, 596
- khat* headdress
- Kha'y 162, 162
- khekher* 263
- Khendjer 36
- Khentkaus 137
- Khentiamentu 180
- Kheruef 114, 115
- Khety 261, 261, 265, 272, 273, 309, 537, 554, 578, 588, 589
- Khirbet Kerak (Beth Yerah) 400
- Khnumet 32
- Khnumhotep 136, 269, 274, 277, 284, 353, 565, 615, 624, 628
- Khnumnakht 553
- Khons 165
- Khufu 24, 32, 36, 59, 259, 263, 291, 292, 349, 355, 367, 368
- Khuit 110, 112

- Khuzistan 455  
 kick-wheel 126  
 kid 409  
 Kiefer, C. 186, 190  
 kiln 79, 121, 122, 123, 124, 125, 128, 133, 135, 136, 137, 138, 139, 140, 141, 180–1, 180, 181, 182, 183, 184, 185, 186, 187, 192, 201, 201, 202, 266, 540  
   electric 191  
   supports 186, 189, 191, 192  
   updraught 186, 201  
 kilt 282, 283, 284, 286–90, 293, 309  
 net (Nubian) 311  
 Kingery, W.D. 186, 191, 192  
 kiosk 260  
 Kislev, M.E. 436  
 Kite 295  
 Klebs, L. 538, 566  
 Klemm, D. 7, 14, 33  
 Klemm, R. 7, 14, 33  
 kneading 564  
 knob 286, 336, 622  
 Knossos 328, 329  
 knot, knotting 256, 262, 263, 264, 272, 283, 287, 288, 290, 308, 333, 496, 497  
 knotless netting *see* looping  
 Knowles, P.F. 403  
 kohl 22, 30, 38, 40, 44, 46, 56, 59, 113, 302, 321, 327, 347  
 Kom el-'Abd 86  
 Kom el-Sultan 623  
 Kom Gi'eif 185  
 Kom el-Hisn 510, 640  
 Kom el-Nana 19,  
 Kom Ombo 79  
 Kom Rabi'a 436, 614, 619, 623, 624, 627, 637  
 Kom W 272  
 König, W. 375  
 Konstanz, Institute of Ancient History 105  
 Kopp, A.H. 453  
 Koptos 33, 42, 161  
 'Koptos lions' 42  
 Kordofan 323  
 Kotyga, G. 198  
 Kouklia (Greece) 166  
 Kowalik, R. 240  
 Kozak Dag (Turkey) 69  
 krater 139  
 Krzyszkowska, O.H. 324  
 el-Kubaniya 25  
 Kuény, G. 410  
 Kühne, J. 183, 188, 203, 219  
 el-Kula 42  
 Kumma 88  
 Kurdasseh 272  
 Kurdistan 115  
 kurrat 627, 630, 648  
 kurrat baladi 630  
 kurrat rūmi 630  
 el-Kurru 26  
 Kürschner, H. 335, 345  
 Kush 161, 322, 324, 330, 338  
 kyanos 178, 205  
 Kynebu 592, 592  
 kyphi 462  
  
 labdane 464  
 labdanolic acid 446  
 labdanum, ladanum 436–7, 437, 443, 446, 454  
 label, labelling (*see also* jar label, mummy-label) 327, 339, 578, 579, 596–9  
 labgi 593  
  
 Labino, D. 203  
 'laboratory' 461  
 labradorite 23, 24, 33  
 Lachish (Palestine) 80, 436  
 lacing 308  
 lactic acid 542, 546, 547, 548, 550, 555, 556, 558, 569, 590, 664  
*Lactuca sativa* 403–4, 615, 631–2  
*L. sativa* var. *longifolia* 631  
*L. scariola* 404, 632  
*L. scariola* var. *oleifera* 404  
*L. serriola* 403–4, 631  
 ladder 341, 344  
 ladle 337  
 lager 557  
 lahma mahfooz 667, 669  
 lahma mujfuf 667  
 Lahun 19, 47, 52, 63, 93, 118, 149, 350, 366, 453  
 LA-ICPMS *see* laser-ablation inductively coupled plasma mass spectrometry  
 Lake Kinneret 447  
 Lake Manzala 227  
 Lake Mareotis 663  
 Lake Nasser 54, 121  
*La Madrague de Giens* 600  
 lamb, 409  
 Lambert, J.B. 207, 454  
 Lamentations of Isis and Nephthys 238  
 laminating 356  
 lamp 143, 291, 291, 295, 392, 402, 422  
 lamp-work 202  
 Lane, E.W. 525  
 Lane, R.P. 384  
 Lang, J. 167  
 lapis hecatontalithos 58  
 lapis lazuli 32, 39–40, 46, 63, 65, 111, 178, 195  
 lapis porphyrites 49  
 lard 408, 409  
 Larsen, H. 542  
 laser-ablation inductively coupled plasma mass spectrometry (LA-ICPMS) 46  
 Lassaigue test 468  
 lassoo 657  
 latex 409  
 lathe 125, 357–8, 357  
 pole lathe 357  
*Lathyrus sativus* 638  
 latticework 584, 585  
 Lau, O. 305  
 Lauer, J.-P. 64, 179  
 laundry, launderer 284, 284, 285, 588  
 Lauraceae 405  
 lauric acid 412, 418  
 laurifolic acid 446  
 Laurie, A.P. 111, 115  
 lava 58  
*Lawsonia alba* 279  
   *L. intermis* 279  
 laze rod 277  
 lazurite 39  
 'lazy basket-maker's stitch' 260, 260, 261  
 LC/MS *see* liquid chromatography/mass spectrometry  
 Leach, B. 231  
 leaching 302, 613  
 lead 46, 114, 148, 150, 154, 155, 157, 159, 160, 161, 163, 165, 166, 168–9, 170, 171, 172, 182, 198, 211, 216, 241, 306, 381  
 lead antimonate 208, 208, 209, 216, 217, 218  
 lead isotopes 155, 168, 170, 171, 216  
 lead oxide 115, 209, 214, 217, 218  
 lead sulphide 168  
  
 leaf-sheath fibre 255, 259  
 leather 1, 44, 45, 118, 157, 258, 262, 291, 299–318, 355, 359, 437, 496, 625  
 'leather hard' 125, 140  
 leather-worker, leather-working 136, 299–318  
 leavening 545, 546, 547, 555, 558  
 Lebanon 341, 348, 349, 350, 351, 431, 433, 434, 435, 436, 437, 438, 451, 453, 478  
 Leeds Mummy 378, 380, 384, 385  
 leek 62, 630, 648  
 Leek, F.F. 559, 565  
 Leeson, J.D. 382  
 LeFur, D. 487  
 leggings 290  
 legume, leguminous 339, 516, 637–8, 639, 641, 646, 657  
 Leguminosae 477, 626, 638, 640, 641, 646  
 Leguminosae-Caesalpinioideae 338  
 Leguminosae-Mimosoideae 335  
 Leguminosae-Papilionoideae 336, 338  
 Lehner, M. 13 8, 541  
 Leiden, Rijksmuseum van Oudheden 159, 244, 278, 302, 375, 537  
 Leipzig 232  
 lemma 505  
*Lens culinaris* 638–9, 638  
*L. culinaris macrocarpa* 639  
*L. culinaris microcarpa* 639  
*L. culinaris orientalis* 639  
 lentil 265, 613, 616, 637, 638–9, 638, 641, 648  
 Leonard, A. 596  
 leopard 302  
 lepidolite 45  
 'Lepsius quarry' 48  
*Lepus capensis* 408  
 Lerstrup, A. 578, 583, 584, 586, 595, 597  
 Lesko, L. 586, 593, 594, 598  
 letter (*see also* Amarna Letters, Hekanakhte Letters) 143, 283, 508, 512, 516, 528, 593  
 lettuce 390, 403–4, 614, 615, 628, 631–2  
   Cos 403, 631  
   garden 632  
   prickly 632  
 Levant 196, 269, 279, 304, 309, 312, 316, 333, 443, 505, 513, 581, 616  
 levelling (soil) 518  
 Leveque, M. 187, 188, 669  
 lever 19, 354, 400, 515, 616  
 levigation 122, 129, 131, 134  
 Lewin, P.K. 382  
 Lewis, N. 234  
 lexicography 21, 29  
 L'Hôte, N. 25  
 libation 300, 579  
 Libya, Libyan (*see also* Tjehenu-Libyan) 323, 324, 328, 332, 400, 592  
 lice 496, 499–500  
 lichen 51, 279, 559  
 Liebermann-Storch test 444  
 light-transmitting microscope 334  
 lignin 239, 240  
 Liliaceae 630  
 lily 292  
 Lilyquist, C. 177, 195, 206  
 lime (plaster) 79, 92, 109, 112, 118, 124, 131, 178, 186, 187, 191, 197, 199, 209, 210, 211, 217, 218, 302, 306, 411  
 lime (tree) 345–6  
 limestone 5, 6, 9, 12–14, 15, 17, 18, 19, 20, 21, 22, 23, 28, 29, 39, 40–2, 41, 43, 55, 56, 59, 61, 65, 67, 68, 69, 78, 108, 112, 116, 118, 121, 122, 129, 130, 131, 132, 134, 158,

## 688 INDEX

- limestone (*cont.*)  
 186, 203, 227, 242, 272, 278, 284, 374,  
 435, 439, 455, 560, 561, 562, 596  
 dolomitic 40  
 indurated 40  
 limestone breccia 42–3, 43  
 liming 302  
 limonite 105, 113, 115, 166  
*Linaceae* 269, 396  
 Lindqvist, K. 404  
 linen 44, 100, 107, 116, 136, 156, 160, 243,  
 243, 244, 248, 265, 268, 280, 281, 284,  
 285, 286, 291, 293, 294, 295, 296, 300,  
 311, 355, 359, 367, 373, 374, 375, 377, 396,  
 408, 411, 421, 465, 466, 483, 489, 495,  
 496, 498, 588, 669  
 LINK analysis 666, 666, 667  
 Linnaeus, C. 227  
 Linné, C. 227  
 linoleic acid 412, 413  
 linolenic acid 412  
 linseed 271, 390, 396–7, 396, 412, 413, 480,  
 614  
 lintels 64, 348  
*Linum* 269  
*L. angustifolium* 270  
*L. bienne* Mill. 270, 396  
*L. usitatissimum* 255, 270, 396–7, 396  
 lion 36, 42, 45, 195, 324, 408  
 lipid 412, 413, 415, 416, 417, 418, 419, 420,  
 421, 422, 446, 459, 461, 463, 464, 467,  
 476, 484, 485, 543, 599  
 lipoprotein 381  
 liqueur 592, 645  
 liquidambar 437, 443, 454  
*Liquidambar orientalis* 341–2, 341, 437  
 liquid chromatography/mass spectrometry  
 (LC/MS) 601, 602  
 Lisht 19, 56, 93, 181–2, 184, 188, 192, 198,  
 200, 282, 368, 496  
 Building A1.2 181  
 Building A1.3 181, 182  
 'glaze factory' 181  
 North Pyramid 181, 182  
 Tomb 879 182  
 Litany of Ra 119  
 litharge 170  
 lithium 210  
 Little, O.H. 33, 161  
 liturgy 240, 577  
 liver fluke 382  
 Liverpool Museum 276, 361, 375  
 lixiviation 302  
 lizardite 56  
 LMG *see* low magnesia glass  
 loaf 538, 539, 542–4, 542, 543, 547, 554, 555,  
 558, 559, 560, 563, 564, 565, 566, 567,  
 568, 569, 613  
 disc-shaped 566, 566  
 paddle-shaped 566  
 triangle-shaped 568  
 loam 583, 624, 625, 628, 630, 631, 632, 633,  
 635, 646  
 Loat, W.L.S. 540  
 lock 364  
 locust bean 476, 479, 626–7  
 log 335, 339, 348, 353, 354, 355, 366, 518  
 loincloth 283, 285, 286–90, 287, 302, 311  
*Lolium* 518, 558–9  
*L. multiflorum* 558, 559  
*L. temulentum* 559  
 longifolene 447, 466, 467  
 loom 254, 256, 261, 264, 265, 268, 274,  
 276–8  
 ground/horizontal 274, 276–7, 277  
 vertical/fixed-beam 277–8, 277  
 loom weight 139  
 loop, looping 256, 256, 260, 264, 264, 275,  
 291, 292, 309, 314, 406, 496  
 looping around a core 256, 256, 263, 264  
 Loret, V. 338, 391, 395, 434, 435, 436, 443, 458,  
 630  
 Lortet, C.L. 666  
 lotus 275, 632  
 lotus chalice 182, 191  
 Louvre 153, 154, 158, 159, 237, 238, 340, 344,  
 364, 549  
 Löw, I. 197  
 low magnesia glass (LMG) 197, 207, 216, 219,  
 220  
*Loxodonta africana* (African elephant) 321, 323  
*L. afficana* (Bush elephant) 321, 323  
*L. cyclotis* (Forest elephant) 321, 323  
 Lucas, A. 1, 23, 27, 39, 45, 46, 47, 52, 59, 63,  
 107, 108, 111, 113, 114, 121, 127, 144, 149,  
 150, 151, 152, 153, 157, 164, 167, 169, 177,  
 187, 195, 197, 198, 206, 207, 216, 218,  
 228, 231, 242, 245, 299, 301, 304, 305,  
 306, 335, 346, 372, 383, 385, 390, 391,  
 392, 401, 404, 409, 413, 415, 421, 422,  
 431, 434, 437, 442, 444, 450, 451, 452,  
 453, 456, 459, 460, 464, 465, 466, 467,  
 468, 475, 476, 480, 483, 484, 491, 495,  
 599  
 Luristan 455, 456  
 lute, luting (clay, pottery) 182  
 lute (musical instrument) 312  
 Lutz, H.F. 538, 584, 586, 588  
 Luxor 65, 122, 150, 216, 379, 488  
 Luxor Museum 260, 538, 566  
 Luxor temple 36, 658  
 Lycabettus 48  
 lye 302  
 Lyon Mummy 466  
 lyre 302, 307, 312  
 lysing, 637  
 Maadi 78, 79, 107, 257, 391, 396, 456, 477,  
 624, 635  
 Maat 170  
 mace 40, 43, 50  
 maceration 446, 461  
 McGovern, P.E. 600, 601  
 McHenry, P.G. 82  
 Mackay, E. 337, 365, 489  
 McLaughlin, C.D. 207  
 McLeod, W. 338  
 macrocrystalline 21, 50  
 madder 113, 275, 279, 304, 305, 306, 316  
 mafic 26, 61  
 maggot 374  
 magic 84, 181, 312, 412, 564  
 magma, magmatic 35, 46, 50  
 magnesia 187, 197, 207, 214, 216, 217, 219,  
 220, 220  
 magnesite 39  
 magnesium 31, 38, 45, 56, 58, 114, 115, 192,  
 198, 485  
 magnetite 24, 30, 32, 34, 37, 38, 48, 49, 56,  
 166  
 el-Mahamid quarry 55  
 el-Mahasna 631  
 Maiherpri 286, 287, 311, 497  
 majolica 177  
 malabathrum 391, 405  
 malachite 15, 32, 43–4, 52, 62, 65, 105, 109,  
 110, 111, 112, 150, 151, 165  
 Malaysia 322  
 malic acid 580  
 Malkata 85, 118, 140, 143, 183, 188, 196, 202,  
 204, 205, 578, 579, 592, 594, 595, 596,  
 597, 598, 660, 661, 664, 667  
 Palace 600  
 Site E 85, 86, 94  
 Site K 85, 86  
 workmen's village 597  
 mallet 7, 234, 237, 271, 518, 560  
 mallow 647  
 malt, malting 550–53, 554, 555, 556, 557, 564,  
 565, 569  
 barley 553  
 caramel 557  
 crystal 557  
 emmer 569  
 free-threshing wheat 553  
 malting installation 553  
 malting iar 552–3  
 maltose 546, 550, 551  
*Malum punicum* 625  
 mammal 657–8, 659, 664, 667, 669  
 mammoth 320  
 Manchester Egyptian Mummy Research  
 Project 375, 380, 382  
 Manchester Museum 376, 385, 421, 468  
 Manchester Royal Infirmary 375  
 Manchester, University of 372, 372, 375  
*Mandragora officinarum* 625–6  
 mandrake 625  
 manganese 52, 53, 107, 108, 150, 181, 185, 197,  
 198, 206, 212, 217  
 Manichean 238  
 Mann, I. 303  
 'manna' (lichen) 559  
 manna ash 341  
 Manniche, L. 402, 443, 559, 626, 636  
 el-Mansha 205  
 Manuelian, P. der 358  
 map 161  
 maple 336, 341  
*maquis* woodland 338, 399, 401, 434, 623, 626  
 marble 14, 23, 39, 40, 44–5, 68  
 marbled, marblising 181, 188  
 marl. (clay) 81, 81, 85, 121, 123, 123–4, 125,  
 131–2, 134, 134, 137, 138, 140, 142, 143, 192  
 Marl A 131  
 Marl B 131, 134  
 Marl C 125, 131–2, 134  
 Marl D 130, 132, 132, 134  
 Marl E 132  
 marquetry 325, 367  
 marrow 329  
 marvering 203, 204, 218  
 Ma'sara 19, 42  
 mashing 406, 407, 540  
 mask 22, 47, 66  
 maslin 519  
 masonry 5, 22, 63, 64, 167  
 mason's mark 15  
 massicot 115  
 Masschelein-Kleiner, L. 480  
 mass spectrum, mass spectrometry (MS) 420,  
 421, 422, 460, 461, 463, 465, 467, 483,  
 491  
 mast 335, 349, 553  
 Mastabat Far'aun 19,  
*mastaba*-tombs 17, 47, 56, 63, 92, 98, 107, 235,  
 263, 286, 287, 289, 290, 356, 359, 368,  
 537, 659, 660, 664  
 'master of the roads' 18



- mastic 430, 434, 435, 456  
*mastica* 434  
 mat, matting 78, 84, 93, 137, 228, 254, 255, 256, 257, 258, 258, 259, 259, 260, 261, 262, 262, 263, 265, 266, 269, 276, 292, 293, 308, 312, 353, 358, 409, 410, 511, 552, 556, 569, 619, 620, 621, 647  
 Matariya 641  
 matauralite 26  
 Mathieson, I. 183  
 mat-maker 261, 261, 262, 264, 266  
 Matmar 48, 125, 157, 347, 639  
   Grave 5108 31  
 Mattingly, D.J. 400  
 mattress 291  
 mausoleum 69  
 Maximinus 49  
 Maxwell-Hyslop, K.R. 170  
 measure 346  
 meat I, 294, 295, 332, 390, 407, 408, 411, 577, 579, 609, 631, 637, 639, 643, 656, 660, 661, 663, 664, 665, 668  
 meat jar 124, 140, 142, 143, 661  
*Medemia argun* 255, 621–2  
*Medicago* 638  
 medical, medicine 149, 216, 294, 332, 372, 383, 385, 392, 404, 406, 408, 412, 436, 626, 627, 629, 630, 631, 632, 633, 635, 636, 637, 639, 641, 643, 644, 645, 646, 659, 660, 669  
 medieval 548, 555  
 Medinet Habu 91, 92, 93, 96, 99, 339, 527  
   Clothing Room 294  
 Megiddo (Palestine) 294, 325  
 Meidum 19, 42, 63, 82, 111, 278, 373, 404, 518, 598, 658  
   Tomb 6 (Rahotep) 91  
   Tomb 16 (Nefermaat and Atet) 92, 98, 180, 658  
 Meiggs, R. 431  
 Meikle, R.D. 434, 435, 437  
 Meikle-Troodos mountains 349  
 Meir 65, 235, 235, 300, 301, 354, 554, 591  
   Tomb B1 309  
 Meketra III, 268, 268, 274, 295, 409, 538, 554, 659  
*mekku* 195  
 melanin 500  
*Melilotus* 638  
 Mellor, J.E. 410, 411  
 melon 628, 634–5, 648  
   chate 611, 634, 634, 635, 648  
   musk 634  
 Melos (Greece) 47  
*melouha* 667  
*Meltmount* 106  
 membrane 312, 668  
 Memphis I, 6, 29, 58, 100, 119, 122, 123, 130, 130, 132, 140, 185–6, 188, 192, 205, 399, 401, 410, 436, 507, 508, 528, 579, 582, 596, 598, 614, 619, 623, 624, 637, 662, 663  
 Memphite necropolis 6, 17, 18, 24, 52, 85  
 Memphite Theology 58  
 Mendes 642  
 Ménei, E. 237,  
*menit* (necklace) 154, 157  
 Menkaura 6, 36, 45, 53, 57, 58, 85, 138  
 Menkheperra 280  
 Menkheperra (High Priest) 498  
 Menkheperraseneb 328, 328  
 Menna 271, 522, 523  
 Mentuhotep 154  
 Mentuhotep II, Nebhepetra 55, 276, 285, 340, 345, 496  
 Mentuhotep IV, Nebtawrya 51  
 Mera 312  
 mercenary 185, 311  
 mercuric oxide 239  
 mercury 164, 166, 169, 381  
 Merenptah 36, 60, 285, 645  
 Merenra 57  
 Mereruka 65, 165, 286, 521, 522, 523, 578, 587  
 Meresankh 537  
 Merimda Beni Salama 78, 79, 256–7, 396, 506, 640  
*merissa* 557  
 Merit (queen) 40, 47  
 Merit (wife of Kha) 286, 497, 497  
 Meritamun 259, 342, 344, 495, 497  
 Merkel, J. 152  
 Meroe, Meroitic 28, 166, 309, 326  
 Merrillees, R. 404  
 Mersa Matruh 332, 333  
 Mesehti 361  
 mesocarp 620–21  
 Mesopotamia 39, 40, 79, 98, 110, 149, 153, 163, 168, 169, 177, 198, 207, 216, 219, 220, 300, 302, 303, 304, 305, 306, 322, 333, 348, 396, 397, 453, 456, 461, 591, 592, 602, 612, 618, 619, 629  
 metaconglomerate 57  
 metagreywacke 57  
 metal 148–72, 179, 185, 188, 204, 263, 282, 287, 333, 334, 354, 356, 361, 377, 381, 411, 524, 544, 667  
 metallurgy 148, 188, 198, 216  
 metal-working 136, 149, 155–6, 155, 157, 163, 167, 169, 184  
 metamorphic rocks 9, 20, 21, 24, 25, 29, 31, 32, 33, 34, 35, 44, 45, 50, 52, 53, 54, 57, 58, 67,  
 metasiltstone 57  
 metasomatic 46  
 Metcalfe, C.R. 336  
 methyl bromide 247  
 Metjen 583  
 Metjetji 116  
 Metropolitan Museum of Art, New York 45, 112, 158, 160, 165, 171, 181, 183, 185, 247, 260, 268, 338, 350, 358, 554, 660  
 Meyers, P. 149, 170  
 mica 35, 39, 45, 51, 57, 65, 129  
 micaceous schist 25, 31, 32, 45  
 mice *see* mouse  
 Michigan, University of 379  
 micritic 41  
 microcline 15, 32, 34, 35, 36, 37, 38, 45–6, 65  
 microcrystalline 21, 25, 53, 61, 106  
 microfibril 233, 334  
 micromorphology, seed 638  
 micromorphology, soil 511  
 microsparites 41, 42  
 microtome 334  
 midden 510, 516, 549, 616, 659  
 Middle East 663  
 Middleton, A.P. 21, 112, 116  
 Midgley, W.W. 269, 296  
 military 19  
 milk 128, 409, 413, 415, 418, 566, 639, 642  
 'milk pail' 309, 311  
 milky quartz 52, 53, 65  
 millefiori 202, 204  
 miller 538, 563  
 milling (*see also* grinding stone, quern) 538, 541, 542, 553, 554, 560, 563, 563, 564, 569  
 wet 560, 564  
 milling stone 544  
 Mills, J. 479  
 mimosa 305  
*Mimusops laurifolia* 342, 342, 625–6  
 Min 42, 404, 632  
 Min-Amun 159  
 al-Mina tusks 322–3  
 mineral 545, 622, 641  
 Minia formation 42  
 mining 5, 18, 20, 24, 31, 32, 38, 39, 44, 45, 51, 53, 62, 63, 122, 148, 150, 155, 156, 157, 161–2, 168, 169, 170, 198  
 Minoan 30, 116, 220, 220, 320, 322, 326, 333, 399, 452  
 Minshat Abu Omar 396  
 el-Minya 43, 166  
 Mirgissa 84, 85, 88, 90, 91, 92, 93, 94, 98, 139, 309  
 mirror 45, 47, 157, 158, 327  
 Mishara, J. 170  
 Mission Français des Fouilles de Tanis 243  
 Mitanni 195, 197, 293, 338  
 Mitrahina 60  
 mitre 356, 363  
 el-Mo'alla 109, 111  
 models (tomb) 83, 91, 111, 115, 121, 135, 136, 154, 262, 268, 268, 274, 292, 309, 312, 314, 340, 342, 344, 352, 361, 367, 409, 507, 527, 537, 538, 553, 554, 624, 631, 635, 641, 648, 659, 660, 663, 668  
 Mohs hardness scale 20, 21, 24, 25, 31, 32, 38, 39, 40, 43, 44, 45, 46, 47, 50, 62, 67, 329  
 Mokattam formation 40, 42  
 molar 322  
*molea olearia* 400  
 mollusc 647  
 molybdenum 455, 468  
 monastery 627  
 Monastery of Epiphanius 594, 595  
 Monastery of St Simeon 53, 93, 599  
 Mongolia 332  
 monkey 23, 59  
 monocotyledons 227, 335, 347–8  
 monopoly 5, 196, 198, 390  
 monosaccharide 485, 485, 486, 487, 487, 489, 491  
 monoterpenoid 444, 444, 446–7, 466, 467  
 Mons Claudianus 21, 32, 34, 35, 35, 69, 300, 309, 310, 526, 529, 633, 635, 644  
 Mons Porphyrites 48–9, 48  
 Monthu 99, 325  
 Montuherkhepeshef 358  
 monzodiorite 37  
 Moodie, R.L. 375  
 moonstone 46  
 Moore, R. 339  
 Moorey, P.R.S. 168, 196  
 Moraceae 340, 623  
 morbid anatomy 381  
 Morcos, S.R. 557  
 mordant 279, 304, 305, 306, 316, 317  
 moretane 456, 457  
 Morgan, J. de 47, 359, 463  
 moringa 390, 394–6, 395, 395, 399, 405, 406, 614  
*Moringa apter* 394–6, 395  
   *M. oleifera* / *M. pterygosperma* 395  
   *M. peregrina* 394  
 Morocco 349, 431, 436, 491, 667  
 Morrison-Scott, T.C.S. 385

## 690 INDEX

- mortar (adhesive) 22, 79, 82, 84, 87, 89, 90, 90, 92–3, 95, 96, 117, 118, 430, 456, 456  
 mortar (see also quern, grinding stone) 143, 400, 527, 544, 553, 560, 561, 562, 563, 569  
 and pestle 406, 407, 508, 560, 562  
 mortar emplacement 527, 542, 560, 561, 561  
 Mortensen, B. 127  
*Morus nigra* 335  
 mosaic 205, 306, 307  
 mosaic glass see millefiori  
 Moscow Mathematical Papyrus 549  
 Mosiniak, M. 233  
 mosque 200  
 Mostagedda 48, 308, 309, 312: 495, 498, 637  
 Grave 3120 311  
 Grave 3133 311  
 Grave 3148 304  
 mould (form) 84, 85, 86, 87, 88, 90, 98, 117, 125, 149, 155, 157, 159, 165, 178, 179, 182, 183, 184, 185, 187, 189, 199, 199, 200, 202, 218, 220, 594  
 bread 125, 138, 142, 144, 541, 542, 563, 564, 565, 566–7, 567, 570  
 brick 352  
 mould (fungus) 239, 240, 247–8, 409, 552, 556, 665, 669  
 moulding (plaster, wood) 96, 97, 341  
 Mount Athos Library (Greece) 247  
 Mount Carmel 401  
 Mount Lebanon 349  
 mouse 243, 296, 408  
 Mouterde, P. 437–8  
 mucilage 480, 485  
 mud brick 19, 78–100, 87, 90, 91, 94, 95, 96, 107, 143, 180, 180, 181, 201, 201, 242, 261, 525, 528, 561, 561, 562, 566, 647  
 mudstones 41, 42  
*Mugil cephalus* 659, 668  
*M. batarekh* 668  
 Muhammad Ali 25  
 Muhammad Ali Mosque 60  
 mulberry 335, 623  
 mule 642  
 mullet 668  
 multivariate analysis 511, 519  
*mumia* 372  
 mummification 242, 282, 296, 372–85, 390, 412, 422, 430, 451, 456, 461, 464–8, 593, 629, 665, 668, 669  
 mummy 1, 22, 111, 158, 243, 268, 276, 280, 281, 288, 288, 292, 294, 295, 349, 359, 372–85, 372, 374, 375, 376, 377, 380, 381, 394, 419, 421, 422, 464–8, 467, 483, 487, 489, 491, 495, 497, 498, 499, 629, 630, 660  
 stucco 373  
 victual 658, 660, 660, 666, 667  
 Mummy 1770 (Manchester) 377, 380  
 mummy-braces 307, 312  
 mummy-label 302, 312, 338, 349, 368, 627  
 mummy portrait 340, 483, 485, 488, 488, 489, 491  
 Munich, Staatliche Sammlung Ägyptischer Kunst 160, 419, 421, 467  
 Munich University 161  
 Munsell Colour Chart 81, 105  
 Muqdam., Tell el- 5 8  
 Murray, G.W. 51  
 Murray, Margaret A. 192, 372, 381, 399  
 Murray, Mary Anne 436, 544, 545, 549, 552, 557, 565  
 muscovite 35, 38, 45, 57  
 muscovite-granite 32  
 Musée des Beaux Arts, Lyon 292, 420, 466  
 Musées Royaux d'Art et d'Histoire, Brussels 385  
 Museum of Fine Arts, Boston 287, 420, 484, 488, 489, 490, 559, 564, 669  
 music 587  
 musical instrument 336, 337  
 Musri 322  
 must 590, 601  
 free-run 590  
 mustard 402  
 Mut 36  
 mutton 663  
 Mycenae, Mycenaean 32, 160, 164, 166, 200, 321, 326, 328, 452, 462  
 Myers, O. 121  
 myristic acid 412, 418  
 myrrh 437, 438, 439–42, 444, 446, 447, 449, 452, 456, 459, 463, 467, 469  
 mythology 91, 92  
*myxa* 343  
 NAA see neutron activation analysis  
 Nabasha, Tell 79  
*nabk* 346, 347, 559, 627  
 Nag el-Baba 139, 141  
 Nag el-Deir 33, 57, 62, 83, 354, 360, 495, 567  
 Grave N7338 364  
 Grave N7454 360  
 Grave N7531 359  
 Nagel, G. 121, 567  
 Nag Hammadi codices 237  
 Nag el-Hammam 55  
 Nag el-Hoch 54  
 Nag el-Madamud 55, 88  
 Nahal Hemar (Israel) 403, 643  
 Nahal Mishmar (Israel) 312, 436  
 Nahr Ibrahim 171  
 Nahya 271, 272  
 nail 164, 325, 356, 367, 566  
 Nakht 578, 585, 587, 594, 611, 658, 664  
 Nakhtsobek 284  
 Nany 498  
 naos 36, 58, 60, 117  
 Napata 323  
 naphthalene 456  
 Naqada 47, 107, 170, 179, 182, 269, 312, 332, 356, 359, 392, 397, 403, 582, 627, 631  
 Cemetery T 79  
 KH3 627, 633  
 South Town 79, 627, 633, 640  
 Tomb T5 30  
 Tomb T29 39  
 Tomb 89 56  
 Tomb 218 155  
 Tomb 1257 50, 168  
 Tomb 1587 308  
 Tomb 1589 308  
 Tomb 1592 308  
 Tomb 1611 308  
 Tomb 1743 308  
 narcotic 404  
 Narmer 58  
 Narmer Palette 58, 308  
 Nassim, L. 51  
 National Library, Austria (Vienna) 242, 249  
 natron 105, 109, 185, 186, 187, 188, 189, 197, 198, 216, 219, 280, 284, 295, 373, 375, 377, 378, 381, 383, 384, 411, 475, 663  
 Natsef-Amun (Leeds Mummy) 378, 379  
 Natural History Museum (London) 39  
 Natural History Museum (Paris) 236, Naukratis 166, 185, 188, 192  
 nave (of chariot) 346  
 Naville, E. 373  
 navy 18  
 Nazlet Khater 5, 28  
 Nazlet Safaha 28  
 Nebamun 116, 566, 566, 587; 90  
 Nebemakhet 125  
 Nebeseyet 293  
 Nebnefer 288  
 Nebuchadnezzar 349  
 necklace 495  
 Nectanebo II 58  
 nectar 410, 475, 488, 489  
 needle 256, 261, 262, 265, 282, 329  
 Neef, R. 397  
 Nefer 483, 587  
 Nefer and Kaha 353, 355, 588  
 Neferefra 179, 180  
 Neferherenptah 584, 587  
 Neferhotep 291, 512, 586, 594  
 Neferirkara 24, 138  
 Neferkhaut 364  
 Nefermaat and Ankhnesneferibre 92, 180, 658  
 Neferronpet 268  
 Nefertari 164, 420, 485, 488  
 Nefertiabet 302  
 Nefertiti 27, 109, 113, 116, 422, 491  
 Nefery 553  
 Negev 395, 435, 662  
 Negroid 495  
 Nehesy 324  
 Nemty-wi 340  
 Nenkheftka 42  
 Nenna, M.-D. 185  
 Neolithic revolution 616  
 nephrite 38, 39  
 Neri 199  
 Nesikhons 196  
 Nesitset 281  
 Nesmin 237, 239, 244  
 Nessana 239  
 nest 243  
 net 254, 259, 262, 262, 272, 311, 495, 496, 524, 619, 620, 658, 659, 667  
 nettle tree 342  
 network former 187  
 network modifier 187  
 network stabiliser 216  
 Neumann, B. 198, 208, 219  
 neuropathology 377  
 neutron activation analysis (NAA) 46, 133, 134, 210, 219, 468, 499  
 Newberry, P.E. 205, 275, 338, 346  
 Newman, R. 487  
 Newton, R.G. 195, 218  
 niacin 621  
 Niankhhnum and Khnumhotep 538, 578, 584, 589, 615  
 Niankhppepykhem 554  
 Nicholson, P.T. 124, 187, 199, 199  
 nickel 26, 150, 151, 152, 155, 167, 169, 198, 212, 217, 455  
*Nicotiana* 385  
 Nielsen, I. 240, 242, 246  
*Nigella sativa* 528, 644–5, 644  
 Nigeria 661  
 Nile silt (clay) 121, 123, 123–4, 125, 130–1, 133, 134, 134, 135, 138, 140, 142, 143, 184, 464, 568, 660  
 Nile A 130  
 Nile B 129, 130, 130–1, 132

- Nile C 131  
Nile D 131  
Nile E 131  
Nilometer 515  
Nimrud 321, 635  
Nims, C.F. 552  
nitrate 664, 665  
nitre 160, 190  
nitrite 664, 665  
nitrogen 247, 418, 516, 633, 638  
nitrogen anoxia 247  
nitrogen dioxide 245  
*nitrum* 'soda' 109  
Niusera 24, 410  
Niy 322  
Noble, J.V. 187, 189  
Nodjmet (20th-Dynasty queen) 498  
Noll, W. 198  
nomad 618, 620  
non-clay ceramic 186  
*norag* 524, 641, 642  
Nordström, H. 121, 130  
North Akkad village 34  
nozzle 309  
Nuba 406  
Nubhotepikhered 660  
Nubia 6, 45, 53, 79, 85, 88, 93, 94, 98, 99, 113, 121, 136, 137, 138–9, 140, 150, 151, 169, 170, 261, 266, 266, 269, 286, 293, 300, 301, 305, 309, 311, 323, 324, 326, 332, 333, 335, 379, 392, 398, 477, 483, 497, 557, 570, 586, 592, 599, 600, 621  
nuclear magnetic resonance spectroscopy (NMR) 378, 416, 450, 453, 454  
nummulitids 41, 42  
Nun 92  
Nunamiut 665  
Nunn, J.F. 636  
Nut 295  
nut 343, 345, 391, 393, 394, 395, 405, 433, 509  
nutrition 376, 537, 546, 557, 581, 615, 642, 664  
*nu-ur-ma* 306  
Nuzi 207  
Ny Carlsberg Glyptotek, Copenhagen 268, 538  
*Nymphaea coerulea* 632  
  
oak 305, 344, 431, 436  
oak-gall 238  
obelisk 7, 15, 18, 36, 54, 58, 63, 64, 322, 323, 324, 368  
obsidian 29, 46–7, 212, 453, 456  
ochre 105, 106, 108, 111, 116, 129, 278, 279, 304, 316  
  brown ochre 111  
  iron ochre 105  
  red ochre 105, 111, 113, 114, 118, 131, 374  
  yellow ochre 105, 111, 113, 115, 116, 374  
ochronosis 378  
O'Connor, D. 138, 324  
*Ocoteca usamarensis* 405, 467  
OES *see* optical emission spectrometry  
offering bearer 611  
offering formula, offering lists 110, 340, 577, 579, 599, 611, 663  
offering stand 139, 143  
offering table 34, 63, 629, 658  
'official of the masters of the roads' 18  
Ogden, J. 26, 39, 51, 62  
oil 51, 137, 142, 157, 237, 291, 292, 301, 303, 306, 308, 309, 315, 356, 390–422, 406, 447, 452, 461, 462, 463, 464, 465, 475, 476, 480, 481, 491–2, 543, 559, 579, 588, 596, 614, 629, 631, 632, 633, 635, 636, 643, 644, 645, 646, 647, 648, 669  
almond 401  
castor 406, 407, 415, 418  
cinnamon 405  
colocynth 403  
free run 406  
lettuce 403–4  
linseed 271, 390, 396–7, 412, 413, 415, 480  
malabathrum 405  
marine 408, 413, 418  
moringa 399, 406  
neat's-foot 301  
olive 343, 398–401, 406, 407, 411, 413, 416, 446, 462  
pomegranate 625  
poppy 404–5, 418, 480  
radish 402, 636  
sesame 397–8, 415, 416  
sheep's-foot 408  
vegetable 316, 402, 404, 408, 409, 412, 413, 415, 417, 418, 419, 420, 422, 463, 484, 583, 641  
oil boiler 406, 409, 462  
oil flask 356  
ointment 196, 405, 406, 412, 419, 430, 460–64, 646  
*oipe* 526  
Old Testament 82  
Oleaceae 341, 342, 398  
*Olea europaea* 342–3, 343, 398–401, 614  
  *O. europaea oleaster* 399  
  *O. europaea sylvestris* 399  
oleander 431  
oleanonic acid 448  
oleoresin 446  
oleuropein 400  
olibanum 439, 468  
Oligocene 53  
oligoclase 33, 34, 35, 37, 38  
oligoclase-andesine 48, 57  
olive 342–3, 343, 390, 395, 398–401, 405, 406, 407, 411, 462, 581, 584, 585, 614, 616, 618, 623, 646  
olivine 23, 24, 25, 47–8, 56, 65  
Oman 322, 340  
el-Omari 78, 131, 134, 255, 396, 403, 619, 623, 633, 640  
onion 616, 624, 628–30, 628, 645, 646  
  bulb 629  
  spring 629  
onyx 25, 27  
ooliths 42  
opacifier 207, 208, 209, 210, 212, 214, 216, 217, 218, 219  
opening of the mouth 28, 47, 52, 384, 461  
Ophir 322  
opium 405  
opium poppy 404–5  
opobalsam 440, 442  
opopanax 437–8, 440, 442, 443, 448, 468  
*Opopanax* 437, 443, 448  
  *O. chironium* 437  
  *O. hispidum* 437  
  *O. syriacum* 437  
Oppenheim, L. 195  
optical emission spectrometry (OES) 133  
*Orabanche* 642  
orange, sour 548  
orbis 499, 499  
orchard 515, 583, 614, 615, 616, 628, 647  
*Origanum*, 446  
Orontes 322, 326  
orpiment 105, 106, 107, 108, 111, 113, 114, 115, 116, 117, 119, 153, 239, 241, 246, 247  
orseille 279  
orthoclase 35, 37, 46  
orthoquartzite 53  
Ortiz, G. 158, 159, 160  
oryx 327, 408, 656, 658  
*Oryx gazella dammah* 408  
  *O. leucoryx* 408  
Osborn, D.J. 395  
Osiris 40, 155, 242, 281, 295, 345, 626  
Osiris shroud 295  
Osman, A. 162  
osmiridium 169  
osmium 169  
osmosis 665  
Osorkon II 40  
ossification 376  
osteoarthritis 376  
osteology 321, 322, 326  
Ostia 35  
ostracon, ostraca 18, 136, 143, 227, 266, 284, 306, 600, 659, 662  
ostrich 260, 332–3, 408, 663  
ovalbumin (*see also* albumen) 484–5  
oven 136, 138, 182, 266, 510, 541, 542, 544, 561, 565, 566, 567  
  cylindrical 544, 565, 566, 566, 568, 569  
overseer 7  
'overseer of the faience workers' 182  
ovicaprid 656  
*Ovis aries* 407  
  *O. longipes palapaegyptiarchus* 269  
  *O. platypra aegyptiaca* 269  
Owen, A. 231, 233, 234  
Owen, G. 64  
owner's marks 285  
ox, oxen 19, 270, 301, 305, 495, 517, 518, 525, 657, 659, 665  
oxalic acid 229  
oxen yoke 336  
oxygen 546  
*Oxyrhynchus papyri* 237  
ozic acid 54  
  
Pääbo, S. 383  
packing 465, 466, 668  
  subcutaneous 374, 377, 465, 466  
packstones 41, 42  
paddle 341  
paddle and anvil technique 125  
Padihorresnet 464  
Paheri 270, 517, 517, 522  
pail 337, 352  
paint 100, 104–19, 126–7, 181, 188, 243, 245, 304, 306, 308, 312, 314, 317, 332, 334, 367, 368, 374, 411, 420, 480, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491  
painter 65, 241  
Pakistan 345, 351  
palace 22, 63, 78, 94, 100, 118, 140, 291, 293, 322, 328, 333, 528, 538, 592, 598  
palace-façade (niched brickwork) 90, 90, 91, 97, 98  
palaeography 243  
palaeohistology 379, 381  
Palaeolithic 5, 161, 348, 399, 613, 656  
palaeopathology 372, 379, 381  
palaeoserology 383  
Palaikastro, 333  
Palazzo dei Conservatori (Rome) 56  
palea 505

- Paleocene 41  
 Palermo Stone 353  
 Palestine 85, 118, 134, 168, 227, 293, 346, 347, 392, 395, 399, 400, 401, 403, 407, 419, 434, 435, 442, 452, 456, 463, 478, 577, 581, 582, 591, 594, 667, 669  
 palette (cosmetic) 44, 58, 329  
 palette (painting) III, II5  
 palette (scribal) 118, 119  
 palimpsest 240  
 palisade 259  
 pall 295, 345  
 palladium 169, 543, 666  
 palm (tree) 93, 94, 96, 269, 274, 347–8, 518, 619  
   argun 613, 621–2, 648  
   date 255, 259, 260, 261, 265, 347–8, 498, 499, 549–50, 557, 581, 592, 617–20, 617  
   dom/doum 255, 258, 259, 260, 265, 347, 548, 549, 620–21, 620, 648  
 palm (unit of measurement) 87, 88, 353  
 Palmae 347, 617, 620, 621  
 palm cabbage 621  
 Palmer, R. 5 80, 602  
 palmette 311  
 palm fibre 255, 268, 269, 498, 499  
 palm frond 257  
 palmitic acid 412, 413, 415, 418, 418, 420, 421, 491  
 palm leaf 255, 256, 258, 258, 259, 260, 261, 262, 264, 265, 585  
 palm rind 258  
 palm sap 592–3  
 pan-bedding 91, 100  
 panel, panelling 87, 98, 311, 325, 329, 337, 339, 350, 359, 360, 366  
 pan-grave culture 125, 139, 161, 301, 308, 309, 311, 495  
 panning (gold) 161–2  
 Panopolis (Akhmim) 538  
 Pantheon 34  
 Pantocrate 49  
 Papaveraceae 404  
   *Papaver somniferum* 404–5  
   *P. hortensis* 404  
   *P. rhoeas* 404  
   *P. setigiterum* 404  
 paper 228, 231, 239, 242, 244, 244, 245, 246, 249, 620  
   Japanese 248, 249, 250  
 paper chromatography 481, 483  
 papyri, Abusir 138, 237  
 papyri, Lahun 19, 83, 87  
 papyrus, papyri 105, 106, 107, 108, 110, 111, 112, 113, 114, 115, 116, 118, 119, 124, 143, 227–50, 230, 232, 235, 237, 240, 243, 244, 246, 259, 260, 261, 262, 265, 269, 282, 328, 344, 362, 392, 397, 411, 498, 579, 584, 585, 594  
   roll 227, 228, 231, 236–8, 239, 240, 240, 242, 243, 243, 245, 246, 248, 249  
   sheet 227, 228, 229, 231, 232, 234, 235, 236, 237, 237, 242, 245, 250  
 Papyrus Amiens 18  
 Papyrus Anastasi I 98  
 Papyrus Anastasi IV 593, 662  
 Papyrus Boulaq II 669  
 Papyrus Boulaq 18 549  
 Papyrus Cairo C-D 293  
 Papyrus Chester Beatty VIII 564  
 Papyrus Harris 150, 583, 584, 597, 631  
 Papyrus Louvre 3326 549, 557  
 Papyrus Reisner I 83, 85  
 Papyrus Sallier II 136  
 Papyrus Turin 1881 293  
 paraffin 454  
 Paraloid 249  
 parapet 97  
 pararealgar 105, 113, 114, 116, 239  
 parasite 378, 380, 382, 382, 383, 384, 499, 514  
 paratacamite 44, 105, 106, 112  
 parching 540, 562  
 parchment 227, 303  
 parenchyma, parenchymous 229, 231, 233, 235, 271, 336, 637  
 Parennefer 593, 596  
 Parks, T. 515  
 Parodi, H.D. 197, 198  
 parquetry 367  
 parsley 632  
 particle-induced X-ray emission (PIXE) 208, 210, 212, 214, 218, 219, 238  
 partridge 408  
 Pashebmutwebkhet 232–3  
 pasta 545  
 Pasteur, L. 590  
 pastoralism 299, 309  
 pathology 381, 383  
*patrix* 125, 181, 182, 188  
 Pay 283  
 Payne, J.C. 39  
 pea 616, 637, 639, 640, 641, 646  
   field 640  
   garden 640  
   grass 638  
   split 640  
 peach 342, 480, 614  
 Peacock, D.P.S. 69  
 pear 614, 616, 634  
 pectin 580  
 pectoral 27, 63, 166  
 Pedaliaceae 397  
 pedestals 34, 35  
*Pediculus humanus capitis* 499  
 Pedimahes (troop-commander) 58  
 Peet, T.E. 259, 312, 540, 560, 568, 661  
 peg 261, 274, 276, 277, 336, 345, 352, 356, 365, 368  
 pegmatite 25, 30, 45, 46  
 pelecypods 42  
 Pella (Jordan) 220, 220  
 Peltenburg, E. 172, 179, 188, 189  
 pemmican 667  
 pen 227, 232, 238,  
 Pendlebury, J.D.S. 29, 661  
 Pennesettowy 281  
 Pennsylvania, University Museum,  
   Philadelphia 114, 116, 158, 159, 180, 183, 268, 380, 465, 467  
 Pepi I 18, 24, 47, 57, 148, 152, 157, 158  
 Pepi II 629  
 Pepyankh 65, 300, 301, 354  
*peret* 515  
 Perez-Die, M.C. 315  
 perfume 196, 292, 342, 393, 395, 403, 405, 406, 407, 436, 443, 446, 460, 461, 462, 476, 559, 636, 644  
 Peribsen 33  
 pericyclic fibres 271  
 peridot 15, 47–8  
 peridotite 56  
 Perneb III  
 Perpawty 359  
 perseia 342, 342, 616, 625–6, 648  
 Persia 113, 117, 163, 168, 207, 300, 322, 326, 347, 372  
*Persica vulgaris* 480  
 Perspex 247, 250  
 Peru 373, 375  
 pesticide 247, 391  
 pestle 406, 407, 508, 560, 561, 562, 569  
 Petosiris 357, 357, 524, 578  
 Petra 239  
 Petrie, W.M.F. 19, 23, 30, 39, 47, 56, 62, 63, 85, 87, 107, 149, 150, 168, 169, 183, 184, 185, 186, 187, 191, 192, 195, 197, 198, 199, 199, 200, 201, 203, 204, 205, 214, 215, 237, 243, 245, 257, 269, 279, 307, 308, 312, 337, 340, 350, 355, 358, 360, 361, 373, 375, 397, 446, 522, 555  
 Petrie Museum (University College London) 39, 42, 65, 168, 184, 186, 199, 240, 302, 303, 308, 309, 324, 326, 356, 358, 361, 364  
 petrified wood 28  
 petroleum 454  
 petrological microscopy *see* polarised light microscopy (PLM)  
 petrology 20, 21, 24, 40, 66, 67, 69,  
 Pettijohn, F.J. 21  
*Peucedanum galbaniflora* 443  
   *P. galbanifluum* 443  
   *P. officinale* 443  
 pewter 168, 171  
*Phalaris* 518  
 phaneritic 20, 23, 30, 35, 48  
 phenocryst 24, 35, 37, 48, 49, 50, 67  
 phenol 236, 302  
 phenolic acid 600  
 Philae 91  
 phloem 229, 271  
 phlogopite 45  
 Phoenicia 166, 196, 326  
*Phoenix dactylifera* 255, 347–8, 548, 617–20, 617  
   *P. reclinata* 620  
   *P. sylvestris* 348, 620  
 phosphate 51, 55, 62, 240, 418  
 phosphorus 106, 115, 150, 621, 622, 625, 636, 639, 642, 646  
 photo-oxidation 245  
 photosynthesis 550  
*Phragmites communis* 255  
 phytane 456, 457  
 phytolith 511  
 phytosterol 456, 457  
 Piaggio, A. 245  
*Picea orientalis* 431  
   *P. abies* 431  
 pick 7, 22, 168  
 pickling 664, 667  
 piemontite 49  
 piercing (basketry, matting) 256, 256, 257, 259, 262, 263, 264  
 piercing (leather) 309, 3111  
 pig 302, 393, 407, 409, 5 ig, 656, 664, 668, 669  
 pigeon 384, 658, 664, 669  
 pigment 40, 44, 62, 66, 104–19, 127, 128, 140, 148, 152, 153, 155, 157, 160, 165, 166, 169, 171, 178, 183, 184, 186, 198, 199, 204, 205, 212, 238, 239, 241, 246, 247, 248, 249, 304, 306, 308, 325, 330, 378, 422, 481, 482, 483, 492, 600, 664  
 pilgrim flask 124  
 pillow 291, 308  
 pimarane 445, 454  
 pimaric acid 447, 450  
 pin 155, 282, 325, 327, 329, 337, 361, 363, 499  
 Pinaceae 348, 431, 433, 445, 446, 450, 459,

- 463, 465, 466, 468  
 pincers 202  
 pine 148, 305, 351–2, 431, 433, 436, 443, 445, 446, 447, 453, 463, 466, 467, 468  
   Aleppo 351–2, 351  
   Brutian 351  
   ‘stone’/‘umbrella’ 351  
 pine cone 351  
*Pinites succinifer* 453, 454  
   *P. stroboides* 454  
 Pinudjem I 196  
*Pinus* 148, 351, 433, 445, 467  
   *P. brutia* 351, 433, 434  
   *P. halepensis* 351–2, 433, 447  
   *P. laricio* 433  
   *P. nigra* 433  
   *P. pinea* 433  
   *P. succinifera* 453  
 Piramesse 155, 598  
 pistacia 434–6, 434, 435, 443, 448, 456, 458–9, 460, 463, 467, 614  
*Pistacia* 433, 434–6, 434, 435, 438, 447, 448, 464, 468, 492, 594  
   *P. aethiopica* 435, 436  
   *P. atlantica* 435, 436, 464, 600  
   *P. atlantica* var. *kurdica* 436  
   *P. chinensis* var. *falcata* 435, 436  
   *P. eurycarpa* 436  
   *P. khinjuk* 435, 436  
   *P. lentiscus* 434–6, 434, 456, 459, 463, 491  
   *P. lentiscus* var. *emarginata* 435  
   *P. lentiscus chia* 434, 435  
   *P. mutica* 435  
   *P. terebinthus* 434–6, 435, 436  
   *P. terebinthus palestina* 433, 435  
   *P. terebinthus terebinthus* 435  
   *P. vera* 436  
*Pisum sativum* 640  
   *P. sativum* var. *arvense* 640  
   *P. sativum* var. *sativum* 640  
   *P. sativum humile* 646  
 pitch 372, 430, 431, 450–51, 459, 463, 464, 465, 467  
 pith 229, 231, 232, 233, 236, 239  
 pit props 122, 148, 349, 350  
 Pitt Rivers Museum, Oxford 356  
 Plains Indian 660, 661  
 plait (hair) 495, 497, 498, 499  
 plaiting (basketry etc.) 255, 256, 256, 258, 259, 261, 263, 264, 307, 496  
 plane, planing 355, 368  
 planks 19, 98, 302, 346, 347, 353, 354, 355, 359, 360, 367, 368, 668  
*Plantago* 480  
 plantain 480, 488  
 plant ash 185, 186, 187, 189, 198, 199, 201, 214, 216–17, 219  
 plantation 228, 229, 233, 234, 618  
 plaque 45, 63, 84, 164, 293, 321, 324, 325, 328, 456  
 plaster (*see also* gypsum, lime) 22, 66, 82, 84, 87, 90, 90, 92–3, 94, 104, 107, 108, 110, 117–8, 184, 201, 257, 263, 373, 524, 525, 561, 562, 566, 586, 647  
 plaster tray 184, 192  
 plastic 250, 667  
 plate 346  
 platelets 187  
 plating 161, 164, 165, 169  
 platinum 162, 163, 169–70  
 platter 541, 542, 566, 567–8, 567, 569  
 pleating 281, 287, 289  
 Pleistocene 348, 656  
 Pliny 18, 25, 111, 197, 199, 229, 231, 233, 236, 237, 238, 306, 335, 337, 338, 339, 340, 342, 343, 344, 390, 401, 402, 491, 508, 524, 538, 584, 592, 626, 627, 629, 636, 643, 647  
 Pliocene 43, 135  
 plough, ploughing (*see also* ard) 270, 346, 506, 507, 508, 514, 517, 518, 519, 525, 628, 629, 633, 639, 641, 646  
   mould-board 518  
 plucking 658, 664  
 plum 667  
   Egyptian 343, 344, 480, 592, 616, 626  
   Plum Red Ware 122, 129  
 Plutarch 269, 579  
 plutonic 21  
 ply, plying (basketry and textiles) 140, 258, 272  
 plywood 347, 352, 356, 357, 358, 366  
 pneumoconiosis 380, 382  
 pod 279, 338, 338, 339  
 pointing 92  
 Poland 451  
 polarised light microscopy (PLM) 67, 106–7, 109, 192, 543  
 pole 89, 90, 90, 93, 94, 310, 344, 345, 346, 354, 357, 358, 363, 400, 406, 407, 515, 586, 588, 589, 616  
 pole lathe 357  
 politics 5  
 Pollard, A.M. 450  
 pollen analysis 511, 580  
 polyester 248, 454  
 polyhydroxyphenol 599  
 polymer 450, 453, 454, 464, 481  
 polymerase chain reaction (PCR) 383  
 polymerisation 240, 413, 453  
 polyphenol 305  
 polysaccharides 233, 485, 485, 489  
 polystyrene 378, 378, 454  
 polythene 248  
 pomegranate 170, 279, 306, 592, 593, 624–5  
 Poo, M. 578  
 pool 97, 122, 583, 583, 617  
 poplar 344  
 Poplin, F. 329  
 Popper, W. 515  
 poppy 391, 404–5, 418, 480  
*Populus euphratica* 344  
 pork 302, 664, 668  
 porphyry, porphyritic 6, 12, 24, 30, 35, 37, 48  
 porridge 540, 553, 569  
 port 322  
 Porto 35  
 Post, G.E. 435  
 potash 109, 197, 284  
 potassium 185, 242, 635, 639, 642  
 potassium aluminosilicate 45, 46  
 potassium carbonate 189, 599  
 potassium nitrate 190  
 potassium oxide 207, 214, 216, 219, 220, 220  
 potassium tartrate 599  
 potmark, potter’s mark 140–41  
 pot stand, jar stand 254, 262, 265, 308, 361, 361, 409, 593, 594, 594  
 potter’s wheel 125–6, 137–8, 182, 185, 411  
 pottery I, 19, 22, 25, 32, 44, 51, 78, 107, 108, 111, 113, 114, 116, 117, 121–44, 123, 126, 127, 157, 177, 180, 180, 181, 182, 183, 185, 186, 191, 195, 196, 201, 204, 227, 265, 278, 284, 295, 296, 338, 374, 401, 404, 406, 406, 407, 411, 417, 418, 418, 420, 456, 460, 461, 463, 524, 526, 537, 542, 543, 547, 554, 566–8, 567, 579, 586, 594, 596, 603, 632, 664, 667, 668  
 poultry 656, 658–9, 658, 660, 668, 669  
 pounding, pounder 7, 61, 505, 519, 526, 527, 544, 559, 560, 561, 562, 613, 660–61  
 Powell, C. 126, 139  
 Powell, M.A. 591, 602  
 Pozzuoli 109, 111  
 prase 50, 52, 53  
 Precambrian 32, 57  
 Preemheb 283  
 Pre-Pottery Neolithic 403, 436  
 prescription 408  
 preservatives 302, 303, 411  
 preserving, preservation 657, 659–69  
 press (oil, wine) 400, 461, 577, 577, 581, 588–90, 589, 596, 600  
   bag/cloth/sack 406, 406, 407, 409, 411, 462, 462, 588, 589, 597  
   lever/beam 400, 407  
   screw (olive) 411  
   stone 406  
   torsion 407, 461  
   wax 411  
 pressing (oil, wine) 400–401, 402, 404, 405, 406–7, 406, 409, 437, 462, 462, 578, 580, 588–90, 589, 591, 592, 593, 618  
 prices 266, 508, 515, 528  
 priest 158, 269, 362, 379, 629, 642  
 priestess 280, 295, 312, 340, 496  
 prill 151, 157  
 primeval mound 92  
 prisoner *see* captive  
 prisoner of war 162  
 pristane 456, 457  
 production, household/domestic 553, 563, 577, 619  
   large-scale 553  
 propolis 410, 411, 422  
 prospecting 148  
 prosthetic limb 377, 380, 380  
 proteolipids 381  
 provenancing 69, 104, 168–9, 170  
 ‘Prudhoe lions’ 36  
 pruning 584, 585  
*Prunus* 479, 488  
   *P. amygdalus* 343, 401  
   *P. armeniaca* 480  
   *P. domestica* 343, 344, 480  
   *P. dulcis* 343–4, 343, 401  
   *P. fruticosa* 480  
   *P. persica* 342, 480  
   *P. serrulata* 479  
 prussic acid 397  
 Psamtek I 178, 178, 579  
 pseudo-tannage 299, 302, 305  
 psilomelane 198  
 Ptah 295, 528  
 Ptahhotep 290, 301, 348, 584, 585, 657  
 Ptahshepses 42, 356, 537  
 Ptolemais Theron 323  
 Ptolemy II 36  
 Ptolemy III 56, 219  
 Ptolemy V 37  
 puering 302  
 Pulak, C. 200  
 pulse 265, 509, 519, 609, 615, 616, 637–42, 646  
 PUM I (i.e. Mummy I at Pennsylvania University Museum) 380  
 PUM II 268, 382, 465, 467  
 PUM III 380  
 PUM IV 380

- Punicaceae 624  
*Punica granatum* 279, 624–5  
 Punic wax 491  
 Punt 322, 323, 324, 332, 338, 339, 353, 368,  
 430, 435, 438, 442, 462  
 purgative 403, 581  
 purslane 647  
 putlocks 88  
*Puwatu* 305  
 Puyemra 155, 163, 235, 587  
 Py-GC *see* pyrolysis-gas chromatography  
 pylon 36, 96, 263, 293, 538  
 Py-MS *see* pyrolysis-mass spectrometry  
 pyramid 6, 17, 18, 20, 22, 24, 27, 32, 36, 40,  
 42, 52, 63, 64, 83, 84, 85, 87, 92, 138,  
 167, 179, 292, 342, 348, 364, 367, 368,  
 579  
 pyramidion (capstone) 18, 24, 36  
 Pyramid Texts 295, 579, 591, 597, 624  
     Utterance 417 295  
 pyrite 39, 105, 109, 112  
 pyroantimonate 208  
 pyroclastic 60  
 pyrolusite 105, 107, 108, 198, 217  
 pyrolysis 450, 451, 453, 458, 482, 483, 487  
 pyrolysis-gas chromatography (Py-GC) 417,  
 483  
 pyrolysis-mass spectrometry (Py-MS) 421,  
 483, 487, 488, 491  
 pyrolysis-gas chromatography/mass  
 spectrometry (Py-GC/MS) 454  
 pyrope 31, 32  
 pyroxene 23, 24, 30, 49, 56, 216  
 Pythagoras 642  
 pyxis 321, 328
- Qa'a 62  
 Qadesh 292  
 Qantir 122, 155, 155, 167, 184, 198, 200, 205,  
 328, 583  
 Qasile, Tel 326  
 Qasr Ibrim 260, 261, 266, 300, 301, 305, 398,  
 420  
 Qasr el-Sagha 19  
 Qau el-Kebir 7, 20, 41, 42, 98, 289, 348  
 Qebhsenuf 468  
 Qena 28, 29, 131, 161, 404, 410, 620  
 Qertassi 54  
 Qift 42, 55  
 Qom (Iran) 190  
 quail 408, 658, 662  
 quality marks 285, 285  
 quarrying 5, 6, 7, 18, 20, 27, 30, 32, 34, 35, 37,  
 38, 39, 40, 44, 48, 49, 50, 51, 53, 54, 54–5,  
 55, 56, 57, 57, 59, 59, 60, 60, 61, 61, 64,  
 81, 93, 98, 137, 309, 526  
 quartz 15, 21, 24, 25, 26, 28, 31, 32, 34, 35, 37,  
 38, 39, 40, 44, 49, 50–3, 54, 58, 61, 65,  
 66, 82, 109, 113, 115, 124, 129, 130, 162,  
 169, 170, 178, 179, 181, 182, 183, 185, 186,  
 187, 188, 189, 190, 191, 197, 205, 216  
 quartz diorite gneiss 34  
 quartzite 6, 7, 9, 12, 16, 17, 20, 53, 54, 58, 67,  
 68, 69, 108, 161, 356, 561  
 Quaternary 345  
 Quban 151, 161  
 'quench-harden' 168  
*Quercus cerris* 344  
*Q. suber* 344  
 quern 508, 561, 562, 563, 565, 569  
     rotary 538, 560  
     saddle 538, 542, 553, 560, 561, 563, 564, 565,  
 569  
 quern emplacement 542, 562, 563, 563  
 Quibell, J.E. 107, 269, 340, 373  
 quicklime 22  
 quinones 236  
 Quirke, S. 235  
 quiver 295, 300, 302, 307, 309, 310, 311  
 Quseir 26, 27, 29, 150, 161, 168, 395  
 Quseir el-Qadim 292, 529  
 Quseir formation 54, 55  
 Qustul 300
- rabbit 475, 656  
 rachillas 541  
 rachis 505  
 Radcliffe, W. 662  
 radiocarbon dating 5, 78–9, 269, 302  
 radiograph, radiography 242, 375–8, 377, 379,  
 380  
     fluoroscopic 375  
     rbiting 375  
     tomographic 375, 377, 378, 378  
 radioimmunoassay 405  
 radiology 375–8, 379  
 radish 390, 391, 401–2, 420, 614, 628, 636,  
 648  
     *baladi* white 402, 636  
     common red-topped 402, 636  
     Spanish black 636  
 raft 336, 345, 353  
 rag 283, 284, 296  
 Ragab, H. 229, 231, 233, 234, 235, 236, 238  
 Rahenem 538  
 Rahotep 42, 91  
 Rainier Papyrus 242  
 raisin 580, 581, 591, 602  
 rake, raking 346, 508, 518, 524, 525  
 ram 296  
 Ramadan 626  
 Rameses II 18, 36, 54, 55, 137, 162, 166, 198,  
 205, 242, 268, 283, 284, 285, 288, 292,  
 293, 328, 374, 383, 385, 598, 621, 629  
 Rameses III 91, 276, 288, 294, 339, 538, 566,  
 579, 597, 657  
 Rameses IV 30, 57, 158  
 Rameses V 150, 495  
 Rameses VI 57, 58  
 Rameses IX 293, 421  
 Rameses XI 164  
 Ramesseum 18, 36, 88, 90, 95, 98, 242, 527,  
 579, 594, 597, 598, 599  
 Ramesseum Papyri 242, 244, 245  
 ramie 269  
 'rammed earth construction' 98  
 Rammius quarry 48  
 Ramose (TT55) 287  
 Ramose (TT166) 594  
 Ramose and Hatnefer (TT271) 259, 260, 285,  
 291  
 ramp 19, 20, 32, 96, 98, 368  
 Ranunculaceae 644  
 rape 402  
*Raphanus sativus* var. *aegyptiacus* 401–2, 636  
     *R. sativus* var. *nige* 636  
     *R. sativus* var. *radicula* 636  
 Ras Banas 23, 150, 161  
 Ras Shamra 456  
 Rathgen, F. 244  
 ration 293, 537, 592, 670  
 Raven, M. 411, 422, 452  
 rawhide 300, 302, 303, 304, 305, 306, 307,  
 308, 308, 309, 310, 311, 312, 314, 316  
 razor 337  
 Rea, J. 237
- realgar 105, 107, 111, 113, 114, 115, 116, 117, 239,  
 246  
 reaping 510, 518, 521, 522  
 recycling 40, 58, 82, 126, 163, 368, 555  
 red burnished ware 137  
 'recker of gold' 148  
 'redox conditions' 128, 185, 199, 217  
 reed 65, 79, 84, 91, 96, 98, 117, 118, 232, 238,  
 254, 257, 260, 261, 262, 263, 264, 265,  
 269, 355, 409, 456, 496, 516, 521, 584,  
 594, 595  
 Reed, R. 238, 316  
 Rees, A. 440  
 refining 152, 162–5, 407  
 reflected light microscopy 105  
 refractive index 46, 106  
 Rehren, T. 199, 200  
 Reisner, G. 63–64, 82, 115, 121, 182, 288, 373  
 Rekhmun 179  
 Rekhmira 65, 66, 83, 91, 150, 150, 151, 156,  
 266, 266, 280, 282, 286, 288, 293, 302,  
 310, 322, 332, 356, 366, 410, 410, 480,  
 481, 569, 596, 621, 636, 669  
 relative humidity (RH) 246–7, 249  
 Rendel Harris papyri 237  
 rendering (fat, wax) 408–9, 410, 411  
 Renenutet 587  
 Renfrew, J. 436  
 rennet 409  
 resin 128, 157, 158, 248, 303, 352, 373, 374,  
 376, 377, 378, 380, 393, 412, 416, 419,  
 420, 421, 422, 430–51, 453, 455, 456, 461,  
 463, 465, 466, 467, 468, 475, 476, 482,  
 487, 491, 492, 496, 593, 594, 600, 601,  
 614, 647, 660, 669  
     aromatic 450  
     Bursaceae 451, 459  
     cedar 447, 463, 464  
     coniferous 447, 450, 451, 459, 467, 468  
     cypress 447  
     Hamamelidaceae 454  
     juniper 447  
     labdanum 451  
     Leguminosae 454  
     Pinaceae 463, 466, 467  
     pine 447  
     pistacia 447, 448, 448, 451, 458–9, 458,  
 459, 459, 460, 463, 467, 468, 491, 492,  
 594, 600  
     sandarac 491  
     synthetic 485  
     storax 447, 451  
     triterpenoid 447  
 resinite 451, 452, 453, 454  
 Resti 119  
 retene 450, 450, 463, 466, 467  
 retinite 452  
 retting 271  
 Revenue Laws 397  
 Reynolds, T. 234, 237  
 Rhamnaceae 347, 627  
 rhamnose 234, 295  
 Rhind Mathematical Papyrus 240, 538  
*Rhizobium* 638  
 rhizome 229, 235, 402, 446, 636  
 Rhodes 338, 341, 350, 435, 437  
 rhodium 169  
*rhyton* 333  
 ribonucleic acid 546  
 ribose 664  
 Ribstein, W. 344  
 rice 560  
 ricinoleic acid 418

- Ricinus communis* 391–2, 391  
 rickets 378  
 Riederer, J. 127, 148, 153, 154,  
 Riefenstahl, E. 296  
 Rift Valley (Ethiopia) 46  
 ring 27, 39, 154, 164, 170, 171, 182, 189, 204,  
 327, 620  
   bezel 182  
   shank 182  
 ringlet 496, 497  
 rippling (flax) 270, 396  
 Riqqa 309, 311  
 Ritchie, P.D. 206, 207, 212, 218  
 rivet 157, 158  
 Rizqallah, F. 568  
 Rizqallah, K. 568  
 RNA *see* ribonucleic acid  
 road 18, 19, 20, 32, 51, 93  
 roasting 564, 633, 634, 636, 641, 660  
 Robinson, J.M. 237,  
*Rocella tinctoria* 279  
 rock-carvings 5, 51, 332  
 rock crystal 27, 29, 50, 52, 65  
 rockers 19, 341  
 rock rose 436  
 rodent 302, 393, 639  
 Rod el-Gamra 50  
 Rod Um el-Farag 45  
 roe 659, 659, 668  
 Roland, J.C. 233  
 rollers 18, 19, 406  
 ROM I 380, 382  
 Romania 451  
 Romans 35, 49, 53, 59, 160, 284, 300, 309,  
 337, 349, 420, 513, 632  
 Rome 34, 35, 49, 56, 69, 261, 322  
 Romit 53  
 roof, roofing 82, 88, 93–6, 94, 96, 255, 259,  
 265, 335, 336, 340, 344, 346, 348, 511,  
 524, 526, 528, 619, 620, 647  
 Rooksby, H.P. 216, 218, 219  
 root 335, 340, 345, 430, 437, 443, 456, 480,  
 509, 517, 521, 583, 585, 620, 625, 636,  
 638, 647  
 rope 15, 100, 228, 255, 256, 257, 262, 270, 288,  
 291, 353, 354, 357, 366, 368, 586, 594,  
 619, 620, 621  
 Rosaceae 343, 401, 479  
 rosemary 467  
 Rosetta Stone 37  
 rosette 164, 166, 280, 295  
 rosin 244, 450  
 Rosivale abrasion hardness test 20  
 Roth, L. 296  
 rove 272  
 Royal Botanic Gardens Museum, Kew 234,  
 339, 344, 351, 397, 398, 401, 625  
 Royal Ontario Museum 380  
 rubber (stone) 54, 66, 481  
 rubbish dump/heap 183, 192, 241, 560, 578,  
 597  
*Rubia tinctorum* 279, 305  
 Ruffer, M.A. 379, 381, 385, 564, 566  
 rumanite 451, 452, 454  
 Rupprecht, H.A. 239  
 rush 232, 255, 257, 258, 259, 261, 265, 291,  
 411  
 Russell, W.J. 113  
 Russia 451  
 Russmann, E. 155  
 rutabaga 402  
 ruthenium 169  
 rutheniridosmine 169  
 rutile 52  
 Ryder, E.J. 403  
 rye 558  
 Saad, Z. 269  
 Sabaya formation 54, 55  
 Sabni 18  
 saccharide 448  
*Saccharomyces winlockii* 546  
*Saccharum biflorum* 255  
   *S. spontaneum* 255  
 sack 286, 291, 292, 395, 411, 524, 528, 588,  
 589, 663  
 sack press *see* press  
 Sacred Lake 156  
 Sadurska, I. 240  
 saddle 22, 265, 538  
 saddle cloth 276, 292  
 Safaga 51, 150  
 safflower 279, 391, 393–4, 394, 404, 406, 538,  
 614  
 safranin 543  
 saggari 182, 186, 192  
 Sahara 332, 618  
 Sa Hathor 161  
 Sahura 18, 24, 33, 64, 626, 634  
 sail 292  
 sailor 286  
 St John's Island 47, 114, 115, 169  
 St Petersburg 169  
 St Simeon's Monastery *see* Monastery of St  
 Simeon  
 Saleh, S.H. 217  
 Salicaceae 344  
*Salicornia* 187, 197, 214  
*Salix subserata* 344, 346  
 salmonella 664  
*Salsola* 197, 214  
   *S. fruticosa* 197  
   *S. herbacea* 197  
   *S. lignosa* 197  
 salt 26, 187, 189, 191, 228, 240, 242, 245,  
 246, 249, 279, 302, 303, 304, 305, 316,  
 384, 409, 475, 485, 491, 516, 538, 618,  
 625, 636, 639, 659, 660, 663, 664, 665,  
 666, 667, 668, 669  
   efflorescence 246–7  
 salt-boiling 668  
 salting 475, 659, 667–8  
   dry 659, 667, 668  
   wet 659, 667, 668  
 saltpetre 664  
 Saluja 35, 36  
 Samalut formation 40, 42  
 Samannud 36  
 Samaria 399  
 Samian ware *see* terra sigillata  
 Samiuki 150, 168  
 Samland peninsula 451  
*samn* 409  
 Samos 478  
 Samuel, D. 506, 507, 526, 619  
 San Clemente (Rome) 111  
 sand 40, 53, 57, 65, 66, 80, 81, 81, 91, 98, 109,  
 123, 124, 129, 130, 131, 132, 134, 157, 158,  
 161, 162, 186, 187, 197, 199, 201, 216,  
 217, 219, 242, 374, 379, 382, 456, 565,  
 625, 628, 632, 633, 635, 636, 641  
 sandal 228, 254, 255, 256, 261, 299, 302, 303,  
 304, 306, 307, 307, 308, 311, 311, 312–6,  
 312, 313, 314, 380, 619, 620  
 'sandal tray' (from Tarkhan) 312  
 sandarac 431, 491  
 Sandford, K.S. 345  
 sanding (wood) 356, 357  
 Sandison, A.T. 381, 382, 384  
 sandpaper 622  
 sandstone 5, 6, 9, 14, 15, 16, 18, 19, 20, 21, 42,  
 44, 53, 54–6, 54, 55, 108, 115, 117, 358, 455,  
 481  
   Aswan 166  
   Nubian 54, 198  
   quartzose 53, 565  
   siliceous 53, 356, 488  
 sandstone-siltstone 7  
 Sandy, D.B. 400, 401  
*Saponaria officinalis* 284  
 Sapotaceae 342, 625  
*saqiya* 515, 616  
 Saqqara 5, 18, 19, 22, 24, 28, 36, 42, 49, 50,  
 51, 53, 57, 62, 64, 65, 93, 98, 100, 111, 125,  
 126, 132, 156, 157, 162, 162, 165, 179, 235,  
 237, 286, 287, 288, 290, 292, 301, 304,  
 325, 338, 342, 347, 348, 350, 352, 353, 354,  
 355, 356, 357, 360, 361, 362, 368, 373, 418,  
 483, 521, 522, 523, 526, 537, 549, 553, 556,  
 562, 578, 579, 582, 585, 585, 589, 615, 621,  
 624, 626, 627, 657, 657, 659, 667  
 Pyramid of Unas 579  
 Sacred Animal Necropolis 385  
 Tomb D21 587  
 Tomb 61 587  
 Tomb LS6 583  
 Tomb 2190 43  
 Tomb 2322 22  
 Tomb 2405[A3] 107  
 Tomb 3035 29, 227, 367  
 Tomb 3070 97  
 Tomb 3471 355, 356  
 Tomb 3500 93, 95  
 Tomb 3504 359, 360, 361, 367, 599  
 Tomb 3505 257, 263  
 Tomb 3507 90, 364  
 sarcophagus, sarcophagi 5, 18, 24, 36, 49, 54,  
 57, 58, 60, 63, 105, 108, 115, 117, 170, 280,  
 295, 336, 341, 344, 349, 350, 356, 385,  
 483, 488, 492, 492, 622  
 sard 26–7, 29, 65  
 sardonix 25, 27  
 Sarenput I 285  
 Sar-i-Sang 39  
 sash 284, 286–90  
 satin spar 21, 22  
*Satire of the Trades* 293, 303  
 Satsobek 286  
 Saudi peninsula 332, 333  
 saw 328, 336, 354, 355, 366  
   hand- 354  
   double-handed 354  
   pull- 354, 355  
 el-Sawayta 41  
 sawdust 128, 374, 467  
 sawing post 354  
 saw-pit 354  
 Sax, M. 21  
 Saxon 422  
*Sayings of Onchsheshonqy* 592  
 Sayre, E.V. 135, 198, 205, 210, 216, 217, 219  
 scaffolding 66, 88  
 scaling (fish) 659  
 scanning electron microscopy (SEM) 67–68,  
 69, 105, 106, 115, 172, 185, 189, 190, 190,  
 191, 192, 205, 207, 212, 229, 231, 317,  
 382, 384, 385, 499, 543, 544, 547, 548,  
 549, 551, 554, 554, 558, 638, 647, 666,  
 666

## 696 INDEX

- scarab 27, 28, 29, 30, 39, 47, 56, 59, 169, 170, 181, 182, 185, 195, 464, 465  
 Scheel, B. 167  
 Schenk, Prof. 232  
 Schenkel, W. 616  
 Schiaparelli, E. 107, 260, 305, 312, 315, 395  
 Schiegl, S. 112  
 schist 25, 58, 624  
*Schistosoma haematobium* 378  
 schistosomiasis 620  
 Schlick-Nolte, B. 196, 198, 202, 203, 204  
 Schneider, O. 25  
 Schorsch, D. 159, 164  
 schraufite 451, 453, 454  
 Schuler, F. 203, 204  
 Schwarz, O. 349  
 Schweinfurth, G. 559  
 Schweingruber, F.H. 336, 337, 338, 340, 341, 344, 345, 346, 349, 350, 351, 352  
 scimitar 160  
 Scipio 47  
 scissors 282  
 Scorpion Macehead 515, 517  
 Scotland 177  
 Scottish and Newcastle Breweries 552  
 Scottish Courage Brewers 553  
 screen 255, 257, 260, 265, 266  
 screw weight 400  
 scribal equipment 325  
 scribe, scribal 284, 293, 295, 303, 526, 527, 538, 599  
 Scullard, H.H. 323  
 sculptor 64, 65, 66, 66, 116, 361, 362  
 sculpture 5, 15, 18, 20, 24, 30, 34, 36, 42, 45, 47, 49, 55, 63, 64, 108, 117, 156, 158, 185, 196, 337, 340, 352, 456, 483  
 scutching 271  
 S-direction, S-plied, S-spun, S-twisted (basketry and textiles) 257, 258, 258, 272, 274, 282  
 seal, seal impression 22, 31, 39, 40, 78, 113, 132, 154, 170, 236, 291, 337, 498, 579, 584, 590, 594–5, 595, 596, 597, 597, 599, 602, 664, 665  
 cylinder 340, 456, 596  
 sealant (*see also* waterproofing) 390, 411, 456, 601  
 seam 282, 283, 290, 292, 308, 309  
 seamstress 283  
 seasoning (timber) 355  
 seat 260, 263, 312, 356, 358  
 seaweed 234, 249  
*sebakh* 516, 616  
 Sebennytos 36  
*sed*-garments 286  
 sedge 227, 228, 229, 255, 257, 263, 265, 402, 516, 521, 594, 636  
 sedimentary rocks 21, 22, 25, 31, 40, 53, 54, 57–8, 59, 61, 67  
 Sediment 538  
 seed (botanical) 203, 259, 259, 262, 265, 269, 271, 279, 292, 338, 338, 341, 343, 343, 346, 349, 350, 351, 390, 391, 392, 393, 394, 396, 397, 398, 399, 400, 401, 403, 404, 405, 406, 407, 413, 420, 446, 452, 476, 477, 480, 489, 509, 517, 518, 519, 525, 526, 543, 549, 558, 559, 577, 580, 581, 586, 588, 627  
 corn 518, 519, 527, 599, 600, 615, 616, 618, 619, 620, 622, 624, 625, 626, 628, 629, 630, 631, 632, 633, 634, 635, 636, 639, 640, 641, 642, 643, 644, 645, 646, 648  
 seed (glass) 199  
 Sehel Island 35, 36  
 Sehetepibraankh 56  
 Seif el-Din, M. 185  
 Sekhemkara 353, 353  
 Sekhmet 36, 37  
 selected-ion monitoring gas chromatography/mass spectrometry ((SIM)-GC/MS) 419  
 selenite 21, 22  
 Selenkahiye 393, 394  
 Seleucid 322, 323  
 sel-sap 233, 234, 239, 242  
 selvedge 258, 275, 277, 290  
 Semna 599  
*Senbi* 235, 309  
 Seneb 95  
 Senebtisi 164  
 Senedjemib Inty (Tomb G2370) 18, 587  
 Senegal 338  
 Senenmut 197, 276, 281, 285, 292, 498  
 Senet (wife of Intefiqer, TT60) 114  
 Senna 578  
 Sennefer 314  
 Senusret I 33, 36, 55, 83, 181  
 Senusret II 20, 47, 52, 87, 237, 237  
 Senusret III 33, 40, 47, 83, 364, 367  
 sequence dates 257  
 'sequin' 164, 280, 290  
 Serabit el-Khadim 20, 23, 43, 44, 59, 62, 63, 149  
 Serai formation 40, 41, 42  
 Serapeum (Saqqara) 36, 385  
 Serapis 23  
*serekh* 63, 596  
 seriation 144  
 sericite 5 8  
 serological micromethod (STYM) 383  
 serology 383  
 serpentine 23, 56–7  
 serpentinite 6, 12, 26, 38, 44, 47, 56–7, 59, 65, 170  
 Serpico, M. 614  
 Serra East 90  
 servant 286, 293  
 sesame 303, 391, 396, 397–8, 398, 406, 641  
*Sesamum indicum* 397–8, 398  
*S. alatum*/*S. capense* 397  
 sesquiterpenes 463  
 sesquiterpenoids 444, 445, 446–7, 464, 466, 467  
 Seti I 7, 15, 54, 55, 60, 91, 96, 139, 150, 294, 353, 354, 409, 422, 465, 577  
 Seti II 155, 285  
 Setka 109, 111  
 Seton-Karr, W.H. 28  
 'Seven Sacred Oils' 419, 453, 461, 462  
 sewing 256, 276, 280, 281, 282–3, 289, 291, 292, 295, 299, 301  
 sewn plaits 256, 256, 259, 260, 261, 262, 263, 264, 265  
 Shabaka Stone 58  
 Shabaqo 58  
*shabti* 56–7, 60, 117, 119, 155, 184, 185, 185, 190, 191, 196, 262, 339, 340, 351, 420, 421, 459, 460  
*shabti* box 459, 459  
*shaduf* 512, 515, 596, 616, 619, 628, 646  
 shaft 25, 150  
 Shaga-Darra-i-Robat-i-Paskaran 39  
 shake (tree-felling) 354  
*shakudo* 160  
 shale 55, 121, 122  
 Shalmaneser 322  
 el-Sharkawi, M.A. 31, 32, 39, 46  
 shawl 286, 289–90  
 sheaf, sheaving 522, 524  
 shears 282  
 sheath 312  
 shed 276, 277  
 counter- 276  
 natural 276  
 Shedu 303, 312  
 sheep 268, 269, 270, 301, 327, 407, 408, 409, 519, 656, 658, 669  
 barbary 269  
 fat-tailed woolly 407  
 sheepskin 269, 303, 308  
 Sheikh Abd el-Gurna 65, 285  
 Sheikh el-Beled 362  
 Sheikh Saïd 270, 270  
 shell III, 115, 122, 129, 131, 164, 216, 237, 332–3, 495, 620  
 shellac 245  
 Shellal 35  
*shemu* 515  
*shena* 662  
 Shendi 339  
 Shennan, S. 453  
 Shephelah 399  
 Sheshi 116  
 Shesmu 461  
 shield 302, 309, 310, 344, 346  
 ship 335, 353, 360, 361, 447  
 shipwreck 200, 219, 220, 321, 326, 399, 401, 436, 447, 458, 463, 468, 593, 600  
 shipyard 353, 354, 367  
 shirt 286  
 shoe 302, 303, 306, 312–16, 316, 317, 317, 341  
 shoemaker 305  
 Shorter, A. 244  
 Shortland, A. 188  
 shovel 508, 525  
 shrine 5, 36, 98, 116, 196, 295, 335, 339, 344, 346, 349, 350  
 shroud 109, 116, 119, 242, 281, 295, 296  
 Shu 325, 329  
 esh-Shuna, Tell 400  
 shuttle 278  
 Siamun 196  
 Sicily 227, 236, 239, 451  
 sickle 29, 47, 148, 505, 508, 520, 521, 521, 522, 526  
 sidder 344, 346, 347, 367, 627  
 Sidon 433  
 siegburgite 454  
 sieve, sieving 254, 259, 259, 262, 265, 406, 411, 508, 509, 510, 525, 526, 527, 539, 545, 555, 558, 559, 560, 561, 563, 564, 565, 609, 615, 642, 647  
 silica 40, 50, 105, 109, 121, 129, 152, 178, 186, 187, 191, 197, 199, 207, 209, 210, 211, 211, 216, 217, 218, 382, 520  
 silicate 47  
 siliceous aggregate 188  
 siliceous conglomerate 53  
 siliciclastic 21  
 silicified wood 25, 28  
 silicon 106, 171, 206, 209, 211  
 silicon borate 211  
 silicon dioxide 25, 50  
 silk 268, 282, 286  
 silo 78, 81, 98, 181, 256, 257, 528  
 silt 5, 40, 80, 81, 85, 92, 129, 132, 518  
 siltstone 6, 12, 24, 57–8, 57, 62  
 silver 25, 40, 149, 150, 159, 160, 161, 162, 163, 164, 165, 168, 169, 170–1, 263, 282, 309,



- 367, 625  
 silver birch 336–7, 337, 353  
 silver lime 345  
 Silwa Bahari 332  
 simitite 451, 452, 453, 454  
 Simunt 161, 162  
 Sinai 6, 19, 23, 28, 32, 38, 43, 44, 46, 52, 62, 107, 108, 111, 137, 139, 142, 149, 150, 152, 154, 166, 171, 198, 395, 435  
*Sinapis alba* 402, 418  
 sinew 301, 312, 329  
 Singh, T. 553  
 Sinki 19  
 sintering 109, 112, 128, 189, 199  
 siphoning 592, 592  
 Sist, L. 538  
 sistrum 184  
 Sithathoriunet 47, 52, 63, 366  
 situla 157, 160, 165  
 Siwa Oasis 19, 398, 663, 666, 667  
 size 244  
 skein 299  
 skeleton 269  
 skeuomorph 254  
 skin, animal 227, 244, 299–318, 301, 304, 308, 309, 311, 314, 403, 409, 475, 657  
   bird 667  
 skirt 284, 286–90  
 slag 149, 150, 151, 152, 155, 166, 186  
 slate 57, 58  
 slaughterhouse, slaughteryard 300–301, 309  
 slaughtering 300, 309, 408, 475, 656, 657–9, 664  
 slave 162  
 sledge, sledging 18, 19, 93, 364, 524, 525  
 sleeve 281, 282, 288, 289, 289  
 slicker 303  
 slip 122, 126, 127, 143, 200, 420  
 slipper 316  
 'slow wheel' 125  
 slurry 181, 182, 185, 191  
 smelting 44, 150, 151, 155, 155, 157, 161, 166–7, 167, 168, 170, 335, 662  
 Smenkhkara 383  
 smith 152  
 Smith, G.E. 375, 381, 465  
 Smith, R.W. 206, 210, 219  
 Smith, S. 195  
 Smith, S.T. 314  
 Smith, W. 549  
 smoke, smoking 302–3, 373, 659, 664, 665, 668–9  
   wood- 665  
   drying-and- 668  
 smoke house 665, 668  
*Smyrniopsis syriaca* 437  
 snake 296, 408  
 Sneferu 6, 138, 353  
 soap 402, 411, 436, 496  
 soapstone 58–9  
 soapwort 284  
 Sobek 60  
 Sobekhotep II 8  
 Sobkemsaf I 36  
 Sobkemsaf II 30  
 sock 316  
 soda 187, 197, 207, 209, 216, 284, 467, 496  
 soda-lime-silicate 186, 187, 197, 199, 206, 207, 210, 212, 213, 214, 216, 218, 219, 220  
 sodalite 39  
 sodium 33, 38, 45, 109, 112, 192, 199, 206, 210, 211, 242, 639, 667  
 sodium aluminosilicate 38  
 sodium bicarbonate 187, 558  
 sodium carbonate 187, 189  
 sodium chloride 116, 187, 240, 242, 246, 384  
 sodium sesquicarbonate 216  
 sodium sulphate 187  
 Sohag 404  
 soil 78–100, 227, 228, 240, 242, 420, 512, 514, 516, 517, 518, 521, 522, 561, 582, 583, 584, 585, 618, 622, 624, 625, 628, 629, 630, 632, 633, 635, 636, 637, 638, 640, 641, 644, 646, 647  
 soldering 159, 164, 165, 166, 171, 172, 475  
 soldier 276, 285, 286, 291, 292, 305, 496  
 Soleb 36  
 solid state reaction 199, 205  
 Solomon 322, 346, 349  
 solubility test 444, 483, 599  
 Somalia 435, 438, 439, 440, 442, 477, 479  
 soot 108, 566  
 Soped 62  
 Sorbonne 245  
 sorghum 529, 557, 560  
 sorghum beer 557  
*soubia* 636  
 South Countries 324  
 'Southern Oasis' 598  
 'southern tomb' (of Djoser) 22  
 sowing 262, 268, 270, 270, 271, 391, 394, 396, 398, 402, 404, 506, 507, 510, 514, 517, 518–19, 529, 615, 629, 631, 635, 637, 639, 640, 641, 642, 644  
   broadcast 506, 519, 630, 632, 636, 639, 641, 644, 645, 646  
 soy sauce 664  
 spacer 307  
 Spain 436, 580, 636  
 spalling 91  
 sparites 42  
 spatch-cocking 658  
 spear 341, 344, 352  
 specularite 38  
 spelothem 60  
 Spencer, A.J. 84, 87  
 Spensely, P.C. 400  
 spessartine 31  
 sphene 32, 34, 35, 37, 38  
 sphinx 33, 37, 196, 280  
 spices 265, 279, 281, 291, 405, 412, 422, 446, 641, 644, 664, 665  
 Spiegelberg, W. 244  
 spikelet 505, 512, 518, 524, 525, 526, 527, 540, 541, 541, 544, 545, 557, 558, 559, 560, 561, 561, 562, 564, 565, 636  
 spindle 272, 346  
 spinner 268, 272, 274  
 spinning (basketry and textiles) 258, 268, 268, 271, 271, 272, 273, 274, 281  
 spinning bowl 140, 142, 143, 272, 274  
 splicing (thread) 271, 271, 274  
 splint 294  
 Split 69  
 spokes (chariot) 343, 344  
 spool 278  
 spoon 337, 346, 352  
 spores 240, 247  
 spruce 431, 443, 451  
 sprue 157, 165  
 Spurrell, F.C.J. 108, 109, 111, 113, 114  
 Sri Lanka 338  
 Sroboda, J. 28  
 stabiliser 199  
 stable isotope fractionation 68  
 Stachelberger, H. 240  
*stacte* 437  
 Stadelmann, R. 64, 354  
 staff 339, 340, 353  
 stain, staining 278, 306, 307, 309, 312, 313, 314, 317, 325, 329, 359, 485, 543  
 stairs 90 90  
 stake-and-strand 255, 260, 261, 264  
 staking 303  
 stalactites 60  
 stalagmites 60  
 stamp 83–4, 86, 89, 132, 139, 307, 308, 309, 311, 596, 597  
 standard 293  
 Stanworth, P. 376  
 star 295  
 starch 234, 236, 238, 294, 480, 537, 542, 543, 545, 545, 548, 550–51, 551, 553, 554, 554, 555, 556, 563, 564, 565, 569, 626, 636, 641  
 statue 7, 15, 18, 24, 29, 30, 33, 34, 35, 36, 37, 37, 42, 43, 43, 45, 47, 49, 54, 56, 58, 65, 66, 66, 98, 116, 117, 118, 148, 152, 154, 170, 262, 294, 295, 339, 340, 341, 342, 344, 348, 349, 350, 351, 362, 459, 460, 626  
   servant- 314  
 statuette 23, 45, 50, 56, 59, 60, 110, 148, 150, 152, 153, 154, 155, 156, 157, 158, 159, 160, 165, 170, 171, 288, 339, 341, 345, 352, 537, 538  
 stave 337, 339, 360  
 steam 243  
 steam-bending 357, 357  
 steam chest 357  
 stearic acid 412, 413, 413, 415, 417, 418, 420, 421, 491  
 steatite 14, 58–9, 177, 179, 188  
 steel 168  
 Step Pyramid 22, 28, 49, 50, 51, 62, 64, 65, 98, 263, 342, 347, 350, 352, 356, 582, 626  
   Gallery V 357  
 sterane 456, 457, 466  
 stereo microscope 231, 238,  
 Stern, E.M. 196, 202, 203, 204  
 sterol 419, 419, 420, 422  
 Steuer, R.O. 437  
 stick 272, 274, 277, 278, 284, 308, 308, 337, 345, 437, 519, 524, 637, 643, 644, 658  
 stitch 259, 260, 260, 262, 262, 263, 280, 282, 283, 307, 308, 309  
 Stocks, D. 65, 179, 185  
 stokehole 186, 201, 202  
 Stol, M. 305  
 stone 1, 5–69, 140, 179, 180, 181, 186, 188, 191, 195, 196, 204, 227, 263, 271, 274, 277, 284, 303, 329, 348, 349, 356, 400, 406, 488, 492, 492, 520, 522, 524, 560, 565, 586, 587, 661, 664, 667, 668  
 stonemason 58  
 stone press 406  
 stones (glass) 199  
 stone-working 5, 64, 82, 179, 185, 188  
 stool 255, 258, 260, 336, 339, 358, 362  
   folding 312, 325, 362  
   U-shaped 312  
 storax 341–2, 341, 437, 447, 448  
 Stos-Gale, Z.A. 162–3, 168, 170  
 stout 557  
 Stout, G.L. 239  
 Strabo 25, 47, 335, 338, 339, 340, 538, 592

## 698 INDEX

- strainer, straining 265, 292, 292, 409, 461, 475, 489, 591  
 strap 311, 312, 314, 315, 437  
 straw 79, 80, 81, 82, 89, 92, 93, 124, 126, 130, 132, 134, 181, 186, 192, 255, 256, 410, 411, 456, 509, 510, 522, 524, 526, 529, 561, 594, 595, 639, 642  
   node 525  
*Streptopelia turtur* 408  
 stretcher 87, 88, 90  
 striation 520  
 string 254, 255, 256, 258, 258, 259, 259, 261, 263, 264, 282, 290, 329, 496, 498, 665, 666, 667  
 stringer (boat-building) 368  
 Stromby 39  
*Strongyloides* 382, 382  
 Strudwick, N. 105  
*Struthio camelus* 408  
 stub (SEM) 543  
 stucco 373  
*stypsis* 462  
*Styrax officinalis* 437, 443  
 succinic acid 452, 453, 454, 601  
 succinite 451, 452, 453, 454  
 sucrose 489, 664  
 Sudan 6, 32, 34, 36, 54, 161, 169, 181, 182, 188, 229, 272, 277, 323, 326, 330, 332, 338, 391, 392, 394, 395, 398, 404, 406, 435, 438, 439, 442, 452, 453, 476, 477, 514, 557, 560, 570, 620, 622, 634, 642  
 Sudan Archaeological Research Society (SARS) 326  
 suet 408  
 Suez 23  
 sugar 480, 485, 487, 488, 489, 491, 540, 545, 546, 549, 550, 551, 554, 555, 556, 580, 582, 590, 592, 600, 602, 618, 620, 622, 625, 626, 633, 634, 635, 664, 665, 669  
 acid 485, 485, 487, 582  
 cane 255, 488, 555  
 sulphur 106, 111, 171, 212, 238, 241, 455, 468, 629, 637  
 sulphuric acid 601  
 sulphur isotope ratio 39  
 Sultan Hasan 30  
 sumac 305, 306  
 Sumerian 163, 397  
 sunflower 394  
 sunt 279  
 surgery 294  
*Sus domesticus* 407  
   *S. scrofa* 408  
 Susa 322, 456  
 swab 294  
 Swan, C.P. 219  
 swede 402  
 Sweden 227  
 Swiss-darning 282  
 sword-beater 277  
 sycamore 336, 340, 660  
 sycamore fig 201, 334, 340–41, 340, 367, 548, 549, 613, 622–3, 624, 648  
 syconium 622, 623, 624  
*Sycophaga sycomori* 622–3  
 syenite 37  
 syphilis 378  
 Syracuse (Sicily) 236  
 Syria 46, 170, 197, 214, 220, 305, 322, 323, 332, 337, 338, 345, 348, 349, 350, 351, 393, 400, 401, 406, 431, 433, 434, 435, 436, 437, 438, 456, 478, 584, 656, 667  
 Syrian ash 341  
 ‘Syrian elephant’ 322  
 Syria-Palestine 320, 322, 323, 326, 328, 333, 351, 397, 431, 435, 436, 442, 455, 456, 477, 480  
 syrup 625, 626  
 system (basketry) 263  
 tabby (basketry and textiles) 258, 274, 276  
 table 255, 260, 290, 336, 342, 562, 626  
 tablet 339, 340  
 Tabo 34  
 taboo 642, 647  
 Täckholm, V. 197, 228, 236, 255, 391, 402, 433, 559, 619, 621  
 Tadmor, H. 322  
*Taenia* 382  
 Taharqo 34  
 tail grain 526  
 tailoring 282, 286  
 Tait (Tayt, Tayet) 294, 295  
*talatat* block 111, 566  
 talc 58, 59  
 talc schist 14, 58  
 Tallet, P. 462  
 tallow 303, 408, 409, 415  
   beef 419, 464  
 Talmud 53 8  
 Tamaricaceae 345  
 tamarind 385, 476, 479, 488, 489  
*Tamarindus indica* 479  
 tamarisk 345, 350, 367, 431  
*Tamarix aphylla* 345  
   *T. articulata* 345  
   *T. jordanis* 345  
   *T. nilotica* 345, 367  
 tambourine 312  
*tanbour* 616  
 Tanis 37, 40, 114, 165, 166, 170, 243, 245  
 tannage, tanning 299, 302, 303, 304, 306, 311, 315, 316, 403, 436, 625  
   aldehyde (smoking) 302–3  
   vegetable 304–6, 307, 316  
 tanner 305  
 tannery 299, 305–6, 344  
 tannin 299, 303, 305, 306, 316, 317, 580, 600  
*tannour* 565  
 Tanut 315  
 Tanutamani 34  
 Tanyidamani 34  
 Tanzania 411, 452, 627  
 tapestry weave 274, 275  
 tapping (resin, gum) 430, 434, 435, 452, 476, 477, 478–9  
 tar 242, 403, 431, 450–51  
   pine 450  
   spruce 451  
   wood 601  
 Taramsa 28  
 Tarawan formation 40, 41  
 el-Tarif 116  
 Tarkhan 57, 179, 257, 258, 258, 264, 278, 312, 358, 361, 362  
   Grave 1004 257–8, 258  
 tartaric acid 579, 580, 582, 598, 600, 601, 602  
 tassel 301  
 Tatton-Brown, V. 205  
 tattoo 119  
 Taurus Mountains 171, 352, 431  
 Tausret 155  
 Taweret 43, 43  
 tawing 299, 303, 304  
 tax, taxation 293, 506, 508, 512, 513, 515, 516, 520, 526, 580  
*Taxus baccata* 352  
*Teaching of Duaf's Son Khety* 284  
 Tebtunis 238  
 teeth *see* tooth  
 Teleilat Ghassul 399  
 Tell el- All names beginning with ‘Tell el-’ are alphabetised under the second part of the name  
 temper (bricks, pottery) 81–2, 524, 525, 526, 568, 642, 646, 647  
 temper (metal) 168  
*tempera* 117  
 temple 5, 6, 14, 15, 18, 19, 20, 22, 23, 36, 40, 42, 55, 60, 62, 63, 83, 91, 92, 96, 99, 105, 106, 108, 112, 115, 126, 136, 137, 138, 140, 148, 150, 155, 156, 170, 180, 181, 228, 242, 263, 269, 278, 285, 293, 294, 299, 328, 345, 349, 364, 459, 461, 496, 508, 527, 528, 538, 562, 564, 565, 566, 567, 569, 597, 598, 621, 628, 669, 670  
 mortuary 17, 24, 37, 42, 53, 54, 85, 93, 137, 139, 140, 150, 179, 242, 339, 353, 364, 593, 626  
   sun 63  
   valley 17, 24, 33, 85  
 tent 292–3, 306, 307, 344  
 terebinth 435, 600  
 termites 82, 400  
 terpene 444, 444  
 terpenoid 422, 437, 444–8, 444, 445, 448, 449, 453, 464, 467, 491  
 terracotta 587  
*terra sigillata* 185  
 tetanus 294  
 tethering stones 308  
 Teti 53, 57  
 Tetisheri 498  
*Tetraclinis articulata* 431, 491  
 texts 18  
 textile marks 285, 285  
 textiles 119, 184, 254, 268–98, 285, 299, 304, 305, 308, 311  
 thatching 524  
 Thebes 18, 36, 37, 42, 45, 46, 54, 55, 56, 60, 65, 69, 83, 104, 105, 106, 108, 110, 114, 116, 117, 119, 131, 139, 140, 150, 183, 205, 216, 233, 235, 269, 275, 276, 277, 285, 288, 294, 295, 324, 328, 335, 338, 340, 342, 343, 344, 348, 354, 364, 368, 392, 395, 401, 409, 419, 442, 489, 496, 507, 520, 538, 577, 579, 584, 597, 598, 617, 621, 626, 627, 659, 663, 664  
 DB320 497, 498  
 DB358 259, 342, 498  
 DB 813 291  
 Temple of Isis 496  
 TT8 259, 275, 282, 285, 286, 289, 291, 291, 312, 342, 404, 497, 497, 563, 564, 659, 662, 664, 667  
 TT17 566, 566  
 TT20 358  
 TT21 277  
 TT36 178  
 TT39 155, 163, 235, 587  
 TT49 291, 512, 586  
 TT51 23  
 TT52 578, 585, 587, 611, 658, 664  
 TT55 287  
 TT60 114, 537, 549, 555, 556, 568, 661, 661  
 TT61 118  
 TT63 118  
 TT69 271, 522, 522

- TT71 276, 281, 292  
 TT73 410  
 TT74 110, 118, 595  
 TT78 110, 115, 118  
 TT80 114, 118  
 TT81 117, 621  
 TT86 328, 328  
 TT90 587, 590  
 TT93 122, 136, 141, 292, 309, 553, 566, 569, 583  
 TT100 65, 83, 91, 150, 150, 151, 156, 266, 266, 280, 282, 286, 293, 302, 309, 322, 332, 356, 367, 410, 410, 480, 569, 588, 596, 621, 636, 669  
 TT103 268, 271, 271, 274  
 TT104 110, 114, 118, 268, 271, 273, 277, 278, 663  
 TT113 592, 592  
 TT131 115  
 TT133 268  
 TT155 578, 588, 589, 589, 594, 595, 599  
 TT166 594  
 TT168 625  
 TT169 578  
 TT175 461  
 TT188 593, 596  
 TT192 114, 115  
 TT196 464  
 TT217 284, 353, 356, 596, 657, 662  
 TT260 291  
 TT261 578, 583, 595, 596  
 TT279 410  
 TT290 620  
 TT358 660, 666, 669  
 Theophilus 199  
 Theophrastus 305, 335, 337, 338, 340, 342, 343, 344, 347, 367, 390, 622, 623, 626, 636  
 Thera III, 116, 333  
 thermogravimetric analysis (TGA) 68–9  
 thermoluminescence (TL) 144, 158  
 thimble 282  
 thin layer chromatography (TLC) 385, 405, 415, 421, 447, 467, 468, 481, 482, 487, 488, 500, 559  
 thin section 20, 21, 30, 57, 59, 67, 69, 92, 129, 132–3, 132, 192, 334, 381  
 thixotropic 187  
 Thomas, A.P. 299  
 thong 258, 308, 310, 311, 312, 355, 437  
 thorn 282, 335  
 Thoth 54, 621  
 thread 256, 271, 272, 274, 276, 277, 279, 282, 285, 286, 299, 301, 308, 498  
 threshing 391, 396, 505, 506, 507, 508, 511, 513, 520, 522, 523, 524–5, 527, 545, 615, 628, 639, 641, 643, 644, 645, 646  
 floor/yard 521, 524, 515  
 platform 525  
 sledge 524  
 throne 93, 197  
 throwstick 345, 658  
 Thulin, M. 438, 439  
 'thumb-pot' 125  
 Thutotep (Deir el-Bersha) 15, 18, 93, 268, 272, 273, 274  
 Thutotep (graffito at Abrak) 148  
 Thutmose (butler) 339  
 Thutmose (sculptor) 66  
 Thutmose I 60, 322  
 Thutmose II 592  
 Thutmose III 26, 30, 34, 37, 38, 45, 46, 60, 65, 85, 108, 109, 118, 149, 153, 158, 160, 171, 182, 195, 206, 220, 260, 294, 311, 322, 324, 353, 354, 358, 364, 459, 567, 625, 666  
 Thutmose IV 114, 115, 116, 153, 158, 275, 325, 375  
 Thutnakht 116, 468  
 Thutnefer 268, 271, 272, 273, 277, 278, 663  
 thwart 367  
 thymol 243, 244, 247  
 thyrsis 229  
 Tibesti 46  
*tibn* 82–3  
 tiger nut 391, 402–3, 636–7, 637  
 tilapia 408  
 tiles 49, 96, 179, 183, 184, 263  
*Tilia x vulgaris* 345–6  
*T. cordata* 345  
*T. europaea* 345  
*T. platyphyllos* 345  
*T. tomentosa* 345  
 Tiliaceae 345  
 tilling 391, 506, 510, 511, 517–8, 521  
 timber 54, 84, 89, 90, 91, 93, 99, 200, 334, 335, 336, 338, 342, 343, 345, 347, 348, 351, 353, 354, 356, 357, 357, 359, 360, 361, 363, 365, 366, 367, 368, 433, 435, 476, 619, 620, 622, 627  
 Timna 43, 148, 150, 151–2, 154, 436, 662  
 Timsah formation 53, 54, 55  
 tin 109, 111, 149, 151, 152, 153, 154, 157, 158, 160, 162, 163, 171, 177, 185, 198, 208  
 tin oxide 208, 219  
 titanium 52, 111, 115  
 titanomagnetite 105, 109  
 Tite, M.S. 109, 187, 191  
 Tivoli 34, 59  
 Tiye (Queen) 30, 59, 164, 339, 347, 352, 495, 499, 598  
 Tjanuni 110, 118, 595  
 Tjaroy 295  
 Tjehenu-Libyans 323, 324  
 Tjerti 19  
 TLC *see* thin layer chromatography  
 Tobia, S.K. 135  
 Toch, M. 111  
 el-Tod treasure 39, 40, 162, 170  
 toggle 307  
 tomb-robbers 293  
 tomography 375–6, 378  
 computer (CT) 375–6, 377, 378, 378, 384, 466  
 tonalite 21, 32, 34, 37  
 tonalite gneiss 34–5, 35, 68, 69  
 tooling 307, 308, 309  
 tool marks 7, 14, 17, 64, 321, 329, 357  
 tooth, teeth 307, 321, 326, 378–9, 393, 565, 656  
 topaz 47  
 torsion press 407  
*torus* moulding 98, 263  
 tourniquet 588  
 towel, towelling 276, 291  
 toy 346  
 trace element 46, 53, 68, 69, 134, 170, 192, 193  
 traces (leather) 310  
 trachyandesite 48, 49  
*Trachylobium verrucosum* 452, 453  
*Trachyspermum copticum* 643  
 trachytic 62  
 tragacanth 234, 479, 486, 487, 488, 489  
 Trajan 499  
 trampling (seed) 506, 507, 517, 518, 519, 522, 524, 525, 644  
 Transcaucasia 149, 581  
 transmission electron microscopy (TEM) 382, 382  
 transportation 5, 15, 17, 18, 20, 64, 83, 93, 135, 142, 143, 148, 165, 300, 353, 399, 407, 459, 463, 524, 585, 597, 600  
 Transvaal 338  
 trap 65 8  
 fish 259, 262, 659, 667  
*trapeturn* 400  
 trauma 378, 381  
 travertine 5, 6, 9, 14, 17, 19, 20, 21, 22, 23, 59–60, 59, 60, 67, 68, 272, 374  
 tray 260, 356, 359, 360, 361  
 treading (grapes) 578, 585, 586–8, 587, 589, 591, 592, 593, 597, 641  
 tree-felling 353, 354  
 trellis 584, 584, 585, 586, 596  
 tremolite 38, 56  
 tremolite-actinolite group 39  
 trestle 354, 368  
 tribulum 524  
*Trichinella* 382  
*Trifolium* 638  
*T. alexandrinum* 638, 646  
 triglycerides 412, 412, 413, 420, 491  
*Trigonella* 638  
*T. foenum-graecum* 528, 645, 646  
 Tripolitania 323  
 triterpene 491  
 triterpenoid 444, 445, 447–8, 448, 455, 458, 459, 491  
*Triticum dicoccum* 505, 512  
*T. aestivum* 510, 513  
*T. compactum* 510  
*T. durum* 510, 513  
*T. monococcum* 510, 513  
*T. spelta* 513  
*T. vulgare* 540  
 trona 216  
 trough 561  
 trumpet 159, 170  
 trunk 336, 345, 347, 348, 349, 350, 351, 352, 353, 354, 367, 431, 617  
 try-square 356  
 tuber 390, 402, 403, 405, 406, 407, 480, 509, 521, 588, 613, 614, 630, 647  
 tuberculosis 378  
 tufa 59  
 tuff 6, 12, 60–2  
 tuffaceous limestone 60–2, 61  
 Tumbos 15, 32, 34, 35  
 Tuna el-Gebel 357, 357  
 tunic 269, 276, 280, 281, 282, 284, 285, 286, 289–90, 289, 293, 295  
 bag 276, 281, 289  
 beaded 280  
 Tunisia 114  
 Tura 17, 18, 42  
 turban 311  
*turiah* 517  
 Turin, Museo Egizio/Egyptian Museum 107, 161, 260, 563, 568  
 Turkestan 38  
 Turkey 171, 336, 341, 346, 348, 349, 350, 352, 399, 401, 406, 431, 433, 434, 435, 436, 437, 447, 458, 463, 477, 478, 480, 522, 560, 625, 630, 641  
 Turkey oak 344  
 Turkman 393  
 Turner, E.G. 237  
 Turner, W.E.S. 197, 200, 206, 216, 217, 218, 219  
 turning (woodwork) 337, 344, 357, 357, 358

## 700 INDEX

- turnip 402  
 turntable 125, 126, 139  
 turpentine 431, 450  
 turquoise 6, 15, 20, 32, 43, 44, 46, 51, 62–3,  
 63, 65, III, 149–50, 166, 178  
 tusk 308, 320–30  
 boar 320, 328  
 al-Mina 322–3  
 Tushratta 293  
 Tutankhamun 39, 40, 45, 52, 64, 118, 149,  
 153, 154, 158, 159, 160, 164, 168, 170, 195,  
 197, 198, 202, 256, 259, 260, 265, 275,  
 276, 278, 280, 280, 281, 281, 282,  
 286, 287, 288, 290, 292, 294, 295, 302,  
 303, 309, 314, 316, 324, 325, 329, 332, 337,  
 339, 341, 342, 344, 346, 347, 349, 351, 353,  
 360, 363, 366, 367, 383, 394, 398, 399,  
 401, 402, 433, 437, 451, 459, 489, 495,  
 497, 499, 509, 520, 527, 528, 559, 561,  
 579, 582, 591, 594, 595, 596, 597, 598,  
 599, 609, 619, 621, 623, 624, 625, 626,  
 627, 631, 632, 634, 637, 639, 641, 643,  
 645, 646  
 Tutankhamun Ale 553  
 Tutu 419, 419  
 tuyère 149, 155, 167  
 Twilley, J.W. 477  
 twill pattern 258, 258  
 twining 254, 255, 256, 257, 258, 259, 261,  
 262, 262, 263, 264, 265, 266, 301, 308,  
 519  
 'Two Brothers' (mummies) 372, 382, 385  
 Ty 93, 125, 126, 235, 354, 356, 368, 521, 526,  
 537, 552, 553, 585, 657, 659  
 Tykot, R.H. 46  
 Tylecote, R. 151  
 typhus 499  
 tyre 3  
 Udden-Wentworth scale 20, 21, 57, 186  
 Uganda 228, 406  
 Ugarit 305, 322, 325, 326, 400  
*úháb* 306  
 Ukh-hotep 235  
*Ulmus* 344  
*U. campestris* 346  
*U. carpiniifolia* 346  
*U. minor* 346  
*U. nitens* 346  
 ultramafic 24, 47  
 ultramarine III  
 ultrasonic humidifier 248  
 ultrastructure 382  
 ultraviolet light (UV) 245, 247, 316, 601  
 ultraviolet (LTV) -spectral analysis 464  
 ultraviolet-visible spectrophotometry (UV-Vis)  
 240  
 Ulu Burun 114, 115, 151, 200, 219, 220, 321,  
 326, 399, 401, 436, 447, 458, 463, 468,  
 593  
 umbel 229, 230  
 Umbelliferae 442, 445, 448, 632, 643, 644  
 Umm Barmil formation (Taref sandstone) 53,  
 54, 55  
 Umm Esh el-Zarga 31  
 Umm Gheig 168  
 Umm Huetat 51  
 Umm Kabu 24  
 Umm el-Qa'ab see Abydos  
 Umm el-Sawwan 5, 17, 19, 22, 29  
 Unas 18, 57, 579, 629  
 UNESCO 119  
 'unfinished obelisk' 7, 17, 35  
 unguent 390, 461, 462, 462, 467  
 Ur 617  
*uraeus* 158  
 Urals 69  
 Urarna 270, 270  
 Urartu 397  
 urbanisation 506  
 urine 165, 302, 316  
 Uronarti 91  
 uronic acid 485, 485, 489  
 Uruk 79, 600  
 USA 268, 663  
 User (TT21) 277  
 User (TT260) 291  
 Userkaf 24  
 Useramen 118  
 Usermeter 301  
 uvarovite 31  
 Uweinat Oasis 39  
 Vacala B. 28  
 vacuoles 50, 52  
 Valley of the Kings 29  
 KV9 5 8  
 KV11 409, 538, 566  
 KV 17 60  
 KV23 290  
 KV34 660, 666  
 KV35 645, 657, 660, 666  
 KV36 497, 660  
 KV43 114, 115, 660  
 KV46 195, 291, 366, 497, 660, 660  
 KV55 383  
 KV60 660  
 KV62 39, 40, 195, 197, 198, 259, 265, 275,  
 276, 280, 281, 290, 294, 295, 325, 342,  
 344, 366, 394, 401, 451, 459, 489, 499,  
 527, 559, 579, 591, 593, 595, 597, 599,  
 609, 622, 624, 631, 639, 641, 646, 660  
 KV63 311  
 Valley of the Queens 312, 315  
 QV46 660  
 QV51 660  
 QV66 485, 488  
 vanadium 455, 468  
 Van de Mieroop, M. 305, 306  
 Vandier, J. 538, 566  
 Vandiver, P. 177, 179, 182, 183, 186, 188, 189,  
 190, 191, 192, 200, 204  
 Van Soldt, W.H. 305  
 varnish 104, 244, 420, 421, 430, 459–460,  
 459, 460, 460, 461, 461, 464, 466, 468,  
 484, 489  
 de Vartavan, C.T. 528, 561, 609  
 vascular bundles 229, 231, 235, 239  
 vase-stand 157  
 vat 539, 540, 541, 552, 556  
 treading 585, 585, 586, 587, 587, 588, 602  
 Vatican 119  
 vault 93, 95, 96, 96, 97, 98, 143  
 vegetable 299, 301, 302, 303, 304, 306, 385,  
 385, 402, 509, 609, 611, 612, 613, 614,  
 615, 616, 621, 622, 627–37, 639, 646,  
 647, 648, 657  
 veneer 30, 60, 320, 325, 329, 334, 339, 340,  
 344, 347, 348, 353, 360, 366–7  
 Venetian glass 206  
 Vercoutter, J. 162  
 verdigris 165, 241, 246  
 vermifuge 625  
 vermilion 105, 113, 114, 117, 239, 246  
 Vernus, P. 315  
 vessels (stone) 5, 6, 17, 20, 22, 23, 24, 26, 27,  
 29, 32, 33, 33, 35, 36, 38, 43, 44, 45, 46,  
 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59,  
 60, 61, 62, 63, 64, 65, 69, 136, 202, 420,  
 463, 624  
 Vestorius 109  
 vetch 638, 642, 646  
 bitter 638  
 Via dei Fori Imperiali 35  
*Vicia ervilia* 638  
*V. faba* 641–2  
*V. faba* var. *minor* 642  
 Viciae 638  
 Victoria and Albert Museum, London 275,  
 280, 291  
 Vienna System (pottery fabrics) 122, 130  
 vine  
 grape 580, 581, 582, 583–4, 585, 591, 596,  
 600, 623, 631  
 watermelon 633  
 vinegar 580, 594, 600, 601  
 vineyard 183, 515, 578, 579, 581, 583, 583, 586,  
 587, 592, 597, 615, 616  
 vintage 588, 598, 602  
 vintner 598  
 vitamin 545, 599, 622, 625, 627, 633, 634,  
 635, 636, 639, 641, 646, 656  
 viticulture 577–603  
*Vitis* 581, 600  
*V. sylvestris* 581  
*V. vinifera* 580, 581, 601  
 vitreous materials 183, 204, 205, 206, 217, 541  
 vitric tuff 61  
 vitrification 124, 183, 191, 201  
 Vitruvius 109, 111, 152–3, 205  
 vizier 118, 150, 151, 282, 322, 356  
 'volcanic ash' 62  
 volcanic rocks 23, 26, 46, 48, 57, 58, 60, 61,  
 62, 67,  
 volcanoclastic 61  
 Vollesen, K. 439, 442  
 vulture 280  
 wackestones 41, 42  
 Wadi Abbad 18,  
 Wadi Abu Gelbana  
 Wadi Abu Gerida 26, 27, 29, 3 8, 166  
 Wadi Abu Had 51  
 Wadi Abu Maamel 48  
 Wadi Abu Marakhat 34  
 Wadi Abu Marwat 38  
 Wadi Allaqi 44, 161  
 Wadi Araba 43, 15 2  
 Wadi Atalla 56, 57  
 Wadi Ballit 162  
 Wadi Barramiya 59  
 Wadi Barud 30  
 Wadi el-Dabba  
 Wadi Dib 3 8, 44  
 Wadi Fatiri el-Bayada 30  
 Wadi Gabbanet el-Qirud 46  
 Wadi Gabgaba 161  
 Wadi Galala 435  
 Wadi Gerrawi 19, 59, 60  
 Wadi Ghazza 30  
 Wadi Gimal 24, 32, 46  
 Wadi Haimur 44  
 Wadi Hammamat 7, 18, 24, 38, 56, 57, 57, 58,  
 62, 161, 168  
 Wadi Higelig 46  
 Wadi Hof 78  
 Wadi el-Hudi 19, 20, 45, 51  
 Wadi Kubbaniya 613, 637, 647  
 Wadi Maghara 23, 43, 44, 62, 149

- Wadi Maghrabiya 30  
 Wadi Mellaha 61  
 Wadi Mia 44  
 Wadi Natrun 187, 216, 229, 663  
 Wadi Qena 121, 345  
 Wadi Rigbeh 435  
 Wadi Saga 27, 29, 3 8  
 Wadi Saqiyah 59  
 Wadi el-Sheikh 28  
 Wadi el-Sid 38, 170  
 Wadi Sikait 32  
 Wadi Sitra 150  
 Wadi Tushka 19, 20  
 Wadi Umm Balad 30  
 Wadi Umm Diqal 34  
 Wadi Umm Dira el-Qibli Rod el-Gamra 50  
 Wadi Umm Esh 49, 56  
 Wadi Umm Hussein 34  
 Wadi Umm Huyut 32, 34–5  
 Wadi Umm Shegilat 30  
 Wadi Umm Towat 48, 49  
 Wadi Umm Wikala 30  
 Wadi Zebeida 41  
 Wadjethotep 538  
 wages 293  
 wagon-building 336, 337, 340, 341, 344, 346  
 Wah 295  
 Wahibra 24  
 Währen, M. 565  
 Wah-set 293  
 waling 264  
 walking stick 344, 345  
 Wallert, A. 231  
 Wallert, I. 556–7, 619  
 wall-hanging 290, 308  
 walrus 320  
 wand 321, 327  
 war 292, 322, 339, 443  
 Warburg, E.F. 436  
 Warfa, A.M. 438, 439  
 warp 261, 264, 274, 275, 276, 277, 279, 286  
 warp-pattern 275  
 warp-spacer 276  
 Waseda University 183  
 washboard 284  
 washerman 284  
 Wasif 51  
 wasp 622–3, 624  
 was-sceptre 182  
 waster 127, 137, 139, 186  
 water buffalo 123, 323, 4 10  
 water dish 325, 329  
 water jar 138, 143, 411  
 watermelon 403, 479, 633–4, 633, 648  
 water pipe 344, 346, 620  
 waterproofing 456, 660  
 water skin 309, 310  
 water table 583, 616, 622  
 water wheel 515, 616  
 Watson, A. 634  
 wattle and daub 78, 79  
 wavelength dispersive spectrometry (WDS) 68, 192, 211, 213  
 Wawat 161, 335  
 wax (*see also* beeswax) 110, 157, 158, 159, 160, 165, 189, 244, 247, 294, 323, 381, 384, 409–11, 417, 421, 447, 452, 475, 480, 483, 487, 489–91  
 waxed glass 245  
 wear patterns 521, 553  
 Weatherhead, F. 109  
 weathering 84, 92  
 weaver 261, 276, 278, 294  
 weaver's/maker's marks 285  
 weaving (basketry) 254, 255, 256, 256, 258, 258, 259, 260, 262, 263, 264  
 (hair) 496  
 (leather) 308, 312  
 (textiles) 140, 268–96  
 web 276  
 wedge 7, 20, 354, 357, 361, 362, 363  
 wedge holes 7, 20  
*wedjat*-eye 27, 110, 112,  
 weed, weeding 506, 507, 509, 510, 511, 513, 516, 517, 518, 520, 521, 522, 525, 526, 549, 558, 559, 560, 561, 565, 584, 585, 612, 628, 631, 634, 636, 638, 639, 645, 646  
 Weeks, K. 375  
 weft 261, 264, 274, 275, 276, 279, 281, 286, 496  
 weft-fringe 277  
 weft-looping 276  
 Weidemann, H.G. 234, 239, 240  
 weight 50, 243, 272, 400, 407  
 welding 159, 167  
 well 616  
 Wendjebaendjed 166  
 Weni 18, 335  
 Wepemnofret 155  
 Werker, E. 338, 340, 343, 344, 345, 347, 348, 349, 350, 351, 352  
 Werner, A.E. 203  
 Western, A.C. 338, 345  
 'Western River' 597, 598  
 Weta 308  
 wet chemistry III, 112, 114, 116, 206, 207, 599  
 Wetterstrom, W. 616  
 whale 320  
 wheat 256, 262, 265, 266, 519, 521, 522, 524, 538, 540, 545, 639, 640, 645  
 bread 513, 558, 568; 69  
 'common' 540  
 durum 513  
 einkorn 510, 513  
 emmer 505, 505, 506, 511–13, 519, 520, 521, 524, 525, 526, 527, 528, 529, 538, 540, 541, 541, 545, 547, 549, 550, 551, 551, 552, 553, 557, 558, 559, 560, 561, 561, 562, 563, 565, 568, 569, 615  
 free-threshing 510, 513, 538, 553  
 hulled 512, 513  
 naked 513  
 spelt 513, 559  
 wheel 310, 341, 346, 411, 524  
 kick- 126  
 potter's 125–6, 137–8, 182, 185, 411  
 pulley 309  
 wheel-head 126  
 wheel-throwing (of pottery) 125, 126, 126, 137, 139, 141, 182, 185, 188, 189  
 wheelwright 357  
 whey 409  
 whip 339  
 Whitaker, T.W. 403  
 White, R. 479  
 White Nile 514  
 White Walls 596  
 whitening 22, 114, 367  
 whorl 272  
 wick 291, 295, 411  
 wicker, wickerwork 264  
 Widan el-Faras 23–4, 24  
 wig 158, 170, 184, 422, 495–9, 497  
 double, duplex 496, 497, 497, 498  
 wig-making 495–6  
 Wilbour Papyrus 508, 515  
 Wild, H. 549, 552, 553  
 Wilkinson, Sir J.G. 25, 588  
 Willcocks, W. 514  
 Williams, C.R. 169  
 Willis, A.J. 442  
 willow 261, 264, 344–5, 346  
 Wilson, H. 566  
 window grilles 100  
 wine 137, 142, 292, 461, 462, 464, 543, 577–603, 577, 625  
 blended 592  
 'date' 591, 592, 618  
 dry 591  
 Egyptian plum 626  
 Mareotic 591, 597  
 'mixed' 592  
 of the north 597  
 palm 592–3, 619  
 pomegranate 593, 625  
 red 590, 591  
 St Emilion 600  
 sweet 591, 592, 618  
 Taeniotic 597  
 white 590, 591, 602  
 wine jar 140, 142–3, 464, 577, 578, 579, 581, 583, 590–91, 592, 593, 594, 595, 595, 596–8, 599, 601  
 wine-making, wine production 461, 577–603  
 wine press *see* press (oil, wine)  
 Winlock, H.E. 279, 311, 340, 345, 453, 538, 546  
 winnowing 406, 506, 507, 510, 511, 521, 525–6, 527, 545, 559, 560, 561, 562, 615, 642  
 winnowing fan 508, 525  
 wire 65, 152, 159, 160, 166, 179, 263  
 wisdom text 592  
 withies 344  
 Wittmack, L. 558, 564  
 woad 278  
 wollastonite 105, 109, 112, 178, 205  
 wood 19, 112, 148, 158, 164, 189, 192, 195, 227, 238, 242, 244, 258, 262, 263, 271, 272, 282, 284, 291, 302–3, 306, 309, 310, 320, 325, 332, 334–68, 335, 337, 338, 339, 340, 341, 342, 343, 346, 348, 349, 350, 351, 353, 354, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 375, 385, 393, 399, 400, 406, 407, 409, 412, 430, 431, 433, 450, 451, 461, 464, 467, 476, 483, 484, 486, 489, 497, 507, 510, 524, 560, 569, 580, 582, 586, 596, 619, 621, 622, 626, 627, 647, 668  
 woodcutter 353, 353, 354  
 Woods, A.J. 124  
 woodworker, woodworking 54, 158, 168, 328, 334, 355–68, 393, 400  
 wool 268, 269, 282, 291, 299, 300, 311  
 Woolley, C.L. 259, 312, 560, 568, 661  
 workshop 17, 22, 61, 65, 66, 107, 108, 116, 118, 119, 123, 123, 124, 135, 136, 137, 138–9, 142, 150, 155, 156, 180, 182, 183, 184, 187, 188, 191, 200, 204, 205, 265, 268, 291, 303, 306, 309, 320, 322, 326, 328, 328, 329, 354, 355, 356, 407, 462, 538  
 worm 382, 382, 384  
 filarial (*Filari*) 382, 382  
 round (*Ascaris*) 382  
*Strongyloides* 382, 382  
 wort 551, 555, 556  
 Wosinski, J.F. 203  
 wrap-around 286–90

## 702 INDEX

wrappings 242, 292, 294, 295, 304, 307, 308,  
 374, 376, 376, 378, 385, 394, 419, 421,  
 465, 466, 467, 479, 483, 487, 489, 495,  
 660  
 Wreszinski, W. 538  
 wrist guard 309  
 writing board 270  
 Wulff, H.E. 190  
 Wypynski M. 183, 207  
  
 xenolith 35  
 xero-radiography 192  
 X Group 25, 309  
 X-ray 192, 206, 209, 210, 210, 211, 211, 212,  
 216, 217, 218, 375–8, 376, 466  
 X-ray diffraction (XRD) 25, 39, 67, 69, 106,  
 109, 112, 113, 115, 133, 172, 207, 208, 216,  
 219, 467  
 X-ray fluorescence (XRF) 20, 46, 67, 68, 69,  
 106, 111, 112, 114, 116, 133, 134, 135, 172,  
 192, 193, 207, 210, 211, 212, 213, 306, 317,  
 419, 421, 467  
 xylem 229  
 xylose 488  
  
 Yahudiya Tell el- 200  
 Yale University 180  
 Yam 323, 324  
 yarn 254, 256, 257, 258, 269, 272, 274  
 yeast 538, 539, 539, 542, 543, 546–7, 548, 548,  
 550, 551, 554, 555, 556, 558, 569, 570, 580,  
 590  
 Yemen 46, 340, 342, 622, 625, 646  
 yew 339, 352  
 yield (crop, grain) 517, 520, 526  
 yoke 310, 336, 346, 517, 585, 16  
 Yubdo 170  
 Yugoslavia 581  
 Yuya and Tuyu 195, 291, 366, 367, 497,  
 660  
  
 Zabargad (St John's Island) 47, 169  
 zaffre 212  
 Zagros 322, 600  
 zahaffa 518  
 Zahran, M.A. 442  
 Zaki, A. 465  
 Zambesi 402  
 zanzibaric acid 454  
 Zapon 245  
 Zawiyet el-Meitin 586  
 Z-direction, Z-plied, Z-spun 258, 258, 272,  
 282

zebu 407  
 Zeist, W. van 397, 436  
 Zenon archive 411  
 Zimbabwe 665  
 zinc 150, 152, 155, 171, 198, 212, 217  
 'zip fastening' 312  
 zir 124, 143, 411  
 zircon 34, 35, 37, 38  
 Ziziphus 344  
   *Z. lotus* 347  
   *Z. mucronata* 347  
   *Z. spina-christi* 346, 347, 367, 548, 627  
 Zohary, D. 392, 402, 403, 404, 431, 433, 434,  
 435, 615, 624  
 Zoological Gardens, Cairo 229  
 Zoizimus 538  
 Zygophyllaceae 392

## II Ancient Egyptian

N.B. A number of Egyptian words that are more commonly used (e.g. *shabti* and *serekh*) are included in the main index, with their more familiar anglicised spellings.

3bš 591  
 izkt 630  
 iwfr 661  
 ibnw (alum) 306  
 ip (*madder*) 306  
 imy-r irw hsbā 178  
 inr n wdḥ 195  
 irp 577  
 irp bnr 591, 592, 618, 619  
 irp mhḥ 597  
 irp ndm 591  
 irp sm3 592  
 ithw-inrw (stone-haulers) 20  
 idg3 (garments) 286  
 'zt wdḥt 195  
 'nt nrt 460  
 'ntyw 435, 437, 438, 442, 456, 459  
 'š 431, 443, 464  
 w'b (-priest) 657  
 w'bt 198  
 w'h 636  
 wshḥ (boats) 18  
 wt (medical bandager) 294  
 wdḥ 44  
 b3k 395, 399  
 bnbnt (pyramidion) 18  
 bnr 549, 556–7, 619

bḥn (stone) 58  
 bš3 552, 557  
 ps sgnn 406, 409, 462  
 pšs-kf implement 28  
 mimi 508  
 mfk3t 44, 62, 149  
 mnnn 461  
 mnt (jar) 137, 140  
 mrḥt 406, 462, 462  
 mss 289  
 msdmt (eye-paint) 44  
 mk (linen) 286, 293  
 mtk/mdg 592  
 nwd 462  
 nwdw 406, 462  
 nbt mfk3t (lady of mefkat) 62  
 nfr, nfr-nfr, nfr-nfr-nfr 590, 593, 598  
 nhḥ 397  
 nhnm (ointment) 419  
 ndm (carob) 338  
 hbny (ebony) 338  
 hmwtj (craftsman) 64  
 hr-b'k 641  
 htp 26  
 hsbā (lapis lazuli) 178  
 hsmn-km (black copper) 160  
 szḥ (boat) 18  
 sm (cloth) 293  
 snr 434, 435, 436, 438, 442, 456, 458, 459  
 swḥ garments 28  
 swt 508, 513  
 sft 464  
 srmt 555  
 shḥ 83  
 sk3 518  
 šwtjw 293  
 šdh 462, 593, 625  
 k3mw, k3nw 583  
 kdt (wood) 286  
 thnt 178  
 dw (clothes) 293  
 dh3 (straw) 82  
 dbt (brick) 80

## III Greek

κικί 392  
 κνήκος 394  
 κολόκυντος 403  
 κροτων 392  
 λίνον 397  
 ραφανός 401  
 σησαμιον 397, 398