(Eng. trans. 1872), and Nichol (1880); and see memoirs and biographical works by Medwin (1824; new ed. 1898), Leigh Hunt (1828), Lady Blessington (1834; new ed. 1894), Trelawney (1878; new ed. 1887), Countess Guiccioli (1868), and Matthew Arnold in *Essays in Criticism* (1888). See also for the disputed passages in his life Lord Lovelace's *Astarte* (1906), and Edgcumbe's *Byron: the Last Phase* (1909).

**Byron,** HENRY JAMES (1834–84), English dramatist and actor, born in Manchester, was the author of nearly 150 pieces (comprising comedies, farces, burlesques, and pantomimes) produced in London between 1858 and 1882. His most popular success was *Our Boys*, which ran for more than four years at the Vaudeville Theatre (January 1875 to April 1879). His best piece of work, however, was probably *Cyril's Success* (Globe Theatre, 1868). His farces and comedies were characterized by a ready and homely humour, and in his extravaganzas he displayed much ingenuity in punning. He acted occasionally, in his own plays, between 1868 and 1878, and at various times ventured upon theatrical management, usually with disastrous results. He was the first editor of *Fun*, and in 1865 published a novel entitled *Paid in Full*.

**Byron,** JOHN (1723–86), English vice-admiral, was second son of the fourth Lord Byron, and grandfather of the poet. He accompanied Anson in his voyage round the world (1740–4), and appears during that period to have gained the nickname of 'Foul-weather Jack.' In 1761 he was given command of a small force which was dispatched on a new voyage of discovery. In the *Dolphin* (1764–6) he visited Madeira, Brazil, Patagonia, the Falkland Islands (of which he took possession), the Pacific, including the Society Islands, the Ladrones, Batavia, and the Cape, and reanchored in the Downs in May 1766. In 1769 he was appointed governor of Newfoundland, and ten years later he was in command of a squadron in the W. Indies, and fought an action with D'Estaing off Grenada in July 1779. His views concerning the duties of the navy in connection with maritime exploration led to the voyages of Captain Cook. See Byron's *Journal of a Voyage Round the World* (1767).

**Byssus** ('flax'). (**1.**) The silky threads by means of which many bivalves attach themselves to a firm surface. The byssus threads are secreted in a gland in the foot which is the homologue of the mucus gland of the snail, and can be speedily renewed if severed. They are seen in very simple form in the common edible mussel (*Mytilus*), which is always attached to its surroundings by a tuft of golden threads. In *Lima* the threads are used to fasten together stones, shells, and calcareous weed to form a nest, within which the animal lives. In some bivalves—*e.g.* the fresh-water mussel (*Anodon*)—the byssus is present only in the young; in others it is always absent. In the south of Italy and in Sicily byssus threads are woven, mixed with silk, into gloves, stockings, etc. (**2.**) An extraordinarily fine, transparent textile, woven in antiquity out of a delicate linen thread grown in Egypt and Syria. Hence there were two chief varieties, Alexandrine and Syrian, the latter woven at and near Antioch. It was generally used as a head covering, and seems not to have been made after the 15th century.

**Byström,** JOHAN NIKLAS (1783–1848), Swedish sculptor, studied under Sergell at Rome, whence he returned in 1816 with an almost complete portrait-statue of

*Bernadotte* as Mars. His are the colossal statues of *Charles X.*, *Charles XI.*, *Charles XII.*, and *Gustavus Adolphus;* the altar decorations *Christ with Faith, Hope, and Charity* in Linköping Cathedral, and the sitting *Linnæus* at Upsala. He succeeded best, however, with the figures of women and children—*e.g.* his *Juno with Little Hercules.*

**Bytown.** See OTTAWA.

**Byzantine Empire.** The formal foundation of the Eastern, or East Roman, or Byzantine empire took place in 395 A.D., when Theodosius the Great, at his death, permanently divided the empire between his sons Arcadius and Honorius. To the share of Arcadius fell the Asiatic portions, together with Egypt, Thrace, Mœsia, Macedonia, and Greece.

From 488 onwards the Slavs became the molesters of the empire on its Danube frontier; but the emperors who succeeded Arcadius had rectified the mistakes of Theodosius, and reorganized the army, making the native element more prominent. The consequence was that, while the Eastern was as much exposed as the Western empire to the barbarians, the Eastern empire was preserved intact, while the Western was broken up. Arcadius had been nominally succeeded by Theodosius (408–450), but really by Pulcheria, a sister of the young emperor, by whose advice Theodosius was content to be guided, and whom he designated as his successor. The three emperors who succeeded Pulcheria and her husband Marcianus (450–457), Leo (457–474), Zeno (474–491), and Anastasius (491–518), carried the Eastern empire safely through the storms which proved fatal to the empire of the West.

On the death of Anastasius the sceptre passed to Justinus, and in 527 to his nephew Justinian, who reigned for thirty-eight years, and dominated his century. Justinian received an intact and, on the whole, prosperous realm; but in spite of the brilliance of his reign, the empire was in a depressed condition when he died, in 565. This was due partly to the oppressive financial measures which his foreign policy rendered necessary, and partly to the terrible ravages of the plague in 542. Personally he is most celebrated as a legislator for his codification of the laws; he is also notable as the supporter, though not the originator, of Byzantine architecture; but his foreign policy renders him not less noteworthy. After a five years' indecisive war with Persia (which is notable chiefly because it revealed the generalship of the great Belisarius, who assisted also in the suppression of the Blue and Green factions in the capital, which, by the 'Sedition of Nika' in 532, nearly drove Justinian from Constantinople) it was possible to direct the forces of the empire, under Belisarius and Narses, to the reconquest of the Western empire from its German invaders. As a result, Africa and Italy and a considerable portion of Spain were added to the Eastern empire. The attention of Justinian's successors, Justinus II. (565–578), Tiberius (578–582), and Maurice (582–602), all of them able administrators, was taken up with meeting the Slavic invasions; but in spite of their ability, the empire was steadily going downhill. Maurice was not able to make headway against the barbarians; and owing to his harsh and niggardly treatment of his army, a rebellion broke out against him which resulted in his murder in 602.

Phocas, who was then raised by the army to the imperial throne, proved much more incapable than Maurice, and plunged

# BYZANTINE EMPIRE

Milia passuum Roman 75·1°

0 50 100 200 300

0 50 100 200 300

English Miles 69·1·1°

15 20 25 30 35 40 45

40 35

MARE ADRIATICUM

Salona

Ister F.

Odessus

MACEDONIÆ

THRACIÆ

Dyrrachium

Adrianopolis

Brundusium

Byzantium

Theodosia

PONTUS EUXINUS

Sinope

Tium

PONTICÆ

Callipolis

Lemnos

Croton

Ancyra

Satala

ARMENIA

Phasis F.

Arsissa Palus

Sardes

ASIANÆ

Zacynthus

Corinth

Athenæ

Tyana

Perre

Selge

Miletus

Sparta

Tarsus

Selinus

Rhodus

Myra

Antiochia

TAURUS

Creta

Euphrates F.

Tigris F.

Dura

Palmyra

Cyprus

Damascus

Tyrus

MARE INTERNUM

Cyrene

Jerusalem

Arabia Deserta

Alexandria

Gaza

AEGYPTI

Partes Occidentalis

Partes Orientalis

20 25 30 35 40

the realm deeper into anarchy and confusion, from which it was rescued by the arrival of Heraclius, the son of the exarch or governor of Africa. Phocas was deserted by his own troops, and Heraclius, in 610, took over the empire, then almost in the throes of dissolution. For twelve years Heraclius strove to reorganize the army and the finances of the empire, without much apparent success. Against the Persians he could not hold his own, till the blasphemous insolence of the Persian king, after his capture of Jerusalem, roused the empire to a religious war, and the churches supplied not only enthusiasm but money, while Heraclius was able to stop the expenditure on corn for the doles to the citizens of Constantinople —an expenditure which, from 616, when Egypt was lost, had paralyzed the treasury. After a prolonged struggle with the barbarian Avars on his northern boundary, he was able in 622 to take the field against Persia; and in six campaigns, in which he showed such skill that Gibbon compares him to Hannibal, he crushed its power completely, and in 628 concluded a glorious peace, which restored the empire to its former boundaries and recovered the cross. But his victory did not secure him rest, for the great Saracen invasion was at hand; indeed, at the very moment of his triumph Mohammed sent out his famous letter inviting the kings of the earth to embrace Islam. The Saracens quickly overran Syria and Egypt; and in 641 Alexandria alone of Egyptian territory remained in Roman hands.

After the death (641) of Heraclius things went from bad to worse, although the empire received a valuable respite, after twenty-seven years' war, by the civil war among the Moslems due to the contest for the Caliphate. This respite enabled Constans II. (642–668) to reorganize the administration of the empire on practically a war basis. But the energy of the empire was unprofitably consumed in theological controversies, which did not cease even in the face of renewed activity on the part of the Saracens. In 673 the now united Saracens launched a fleet and an army against the capital itself, and for four years strove in vain to capture it. But this success against the Moslem was short-lived, and for a quarter of a century anarchy prevailed, and the empire lost most of its provinces in Asia to the Saracens and in Europe to the Bulgarians, and was only saved from complete destruction by the energy and ability of Leo the Isaurian, one of the generals in the East, who in 716 seized the throne. In 717 Constantinople had to endure another siege by the Saracens; but they were repulsed with heavy loss, and, so far as danger to Europe was concerned, their power was broken. Leo, and not Charles Martel, really saved Europe from the Saracens, for he drove back the main army of advance. For three hundred years longer there was war on the borders, but before Leo's death, in 741, Asia Minor was cleared of the Saracen hosts.

The history of the 8th century is chiefly remarkable for the controversy regarding image-worship. The successive emperors were in favour of the iconoclasts, and therefore out of sympathy with the priests and the populace of Constantinople. Meanwhile Crete and Sicily were lost to the Saracens, and the theological controversy was not brought to a close till the Council of Nice in 842 decided against the iconoclasts. So long as the Asiatic provinces supplied the emperors the controversy continued, and was not really ended till a European line, in the person of

Basil the Macedonian (867–886), ascended the throne, and the European iconodules triumphed. The Macedonian dynasty which began with Basil continued, with some short interruptions, till 1056. It ruled over an empire which was now solely an empire of the East. Down to the year 800 the West had, through the popes, acknowledged nominal dependence on the East; but when, in that year, Pope Leo III. crowned Charlemagne as Roman emperor, the division of East and West, commenced by Diocletian and continued by Constantine and Theodosius, was finally and permanently completed.

The eighty years which followed the death of Basil in 886 are the most uneventful in the history of the empire. The empire of the caliphs was breaking up, and the Bulgarians were converted to Christianity, and thereafter gave but little trouble; and the Emperors Leo VI. (886–912) and Constantine (912–959) being men of letters rather than men of action, and being left in peace, did not seek war by committing aggression on their neighbours. A period of military glory under the successful general Nicephorus Phocas, who became emperor in 963, but was murdered by John Zimisces, who succeeded him in 969, revived the memory of earlier days; but, except that the Russians made their first attempt on Constantinople in these reigns, nothing of decisive importance occurred. About the middle of the 11th century Isaac I. (1057–9) founded the Comnenian dynasty, which ruled to 1185. A new and more formidable enemy was gathering strength in the East while the dribble of incompetent emperors continued through the 11th century. The forces of the empire which should have been employed against the Seljuk Turks were wasted in almost continuous civil wars: and after the defeat of the Emperor Romanus by the Seljuk chief Alp Arslan at Manzikert in 1071, which may be regarded as the turning-point in the history of the empire, no serious effort was made to check the advance of the ruthless enemy. The Turks had reached the Hellespont, when the first crusade gave a much-needed relief. The enemy was driven back 200 miles, and was so badly beaten by the crusaders that for a hundred years he acted mainly on the defensive; and the empire recovered many of its richest Asiatic provinces, and, but for the faithlessness of Alexius I. (1081–1118) towards the crusaders, might also have recovered Syria, which, however, was divided up into Frankish kingdoms. The welter of obscure and incompetent emperors continued during the 12th century, and the empire began the 13th century with a Latin occupation (1204) by French and Venetian adventurers diverted from a crusade by the wily policy of Venice —an occupation which lasted for nearly sixty years, long enough to inflict irreparable injury upon the empire, which never recovered from the anarchy of this time. The feudal ideas of those adventurers, chief of whom was Baldwin, Count of Flanders, were rejected by most of the Asiatic provinces; and in these a succession of usurpers kept alive the idea of the empire till, in 1261, the Latins were driven out by Michael VIII., the founder of a new dynasty, the Palæologi, who ruled to 1282 with some energy and wisdom over a realm greatly shrunken in its European limits. In the interval the commercial importance of Constantinople, on which the prosperity of the empire had largely depended, had been reduced by the opening up, as a consequence of the crusades, of

new avenues of trade with the East. Trading supremacy was transferred to the Italian cities, and much of the little energy that remained in the empire was dissipated in the fruitless struggle with Venice and Genoa.

The restoration of the empire was, however, followed by renewed activity on the part of the Turks; and the Western allies whom the weakness of Andronicus II. (1282–1328) called in did more damage to the empire than to the infidel. In the meantime the Turks—now the Ottoman or Osmanli Turks—deprived the empire of all its Asiatic possessions except a narrow strip opposite Constantinople (1333). In a civil war the usurper John Cantacuzenus (1341–55) called in the Turks to his aid, and succeeded in preserving his own cause by destroying the empire at which he had aimed. Thereafter it was a matter of years only. In 1354 the Turks made their first permanent settlement in Europe by the capture of Gallipoli. In 1361 Adrianople was taken by Murad, but the capital remained for yet a century the sole remnant of the Eastern empire. The Turks devoted themselves to fighting the Servians and the Bulgarians, and contemptuously allowed Constantinople to maintain a separate parochial history. For a moment in 1402 there was a prospect of relief, when the Tartar hordes under Tamerlane burst into Asia Minor, and the emperor of the East recovered, during the civil war which followed the defeat of the Turkish Bayazid at Angora, some of his ancient realms. But little use was made of the opportunity, and by 1444 Constantinople was again the limits of the empire. In 1452 came the final siege, and after a heroic defence the city was captured by Mohammed II. on May 29, 1453.

The verdict of history has become more favourable to the Byzantine empire. For centuries it remained the bulwark of Christianity against the Saracens and then against the Turks. It is to be remembered that it was founded upon the Oriental provinces of the Roman empire, and throughout its history had Oriental characteristics in its court ceremonies and in its diplomacy and administration. It kept alive the tradition of classical learning during the dark ages in Western Europe. Its organization was purely despotic, with no check except the ambitions of its provincial administrators who might rise in rebellion. The policy of the emperors was to destroy all local patriotism, and to remove from ambitious provincials the means of successful revolt. In this way the power of the empire to meet external attack was also weakened. In the latter days of the empire the emperors came to depend almost entirely, not on native troops, but on foreign mercenaries, among which the famous Varangian Guard had a great reputation. See Gibbon's *Decline and Fall of the Roman Empire* (1827; new ed. 1903), Finlay's *Hist. of Greece* (1877), C. W. C. Oman's *The Byzantine Empire* (1886), G. Schlumberger's *L'Epopée Byzantine* (4 vols. 1896–1905), and Harrison's *Byzantine History in the Early Middle Ages* (1900). Sir Walter Scott's *Count Robert of Paris* deals with this subject.

BYZANTINE ART AND ARCHITECTURE. The foundation of a new and magnificent city gave a great impulse to architecture; and the meeting of East and West, Pagan and Christian, Greek and Roman, developed a new style, in which the arch replaced the line of the architrave, and the dome the flat roof of Greek temples, while the Roman basilica formed the basis of the whole, the dome rising from the centre of the cross.

'The union of engineering skill with exquisite ornament,' such as marble panelling and mosaic, is characteristic. No less than seven forms of capital were evolved from the Greek columns by the Byzantine sculptors—the impost, melon, bowl, Byzantine Ionic, Byzantine Corinthian, bird and basket, and wind-blown acanthus. 'The union of the dome, on the grandest scale and in infinite variety, with arched ranges of columns in rows and in tiers—this was the unique triumph of Byzantine art, and nothing in the history of building has borne a fruit so rich.' The zenith of this art was reached under Justinian (528), when the architects Anthemius and Isodorus built the church of Sancta Sophia. The church of St. Sergius is also a famous example. Four periods may be noted: (1) 328 to 527 A.D.; (2) 527 to the end of the 8th century; (3) 9th to the 12th century; (4) 1204 to 1453 A.D. In W. Europe copies of Byzantine churches may be found at Ravenna (St. Vitale), Venice (St. Mark's), and at Monreale, near Palermo. From the 5th to the 11th century 'the Byzantine and Eastern world preserved the traditions and led the development of art in all its modes.'—*Mosaic*, especially *glass mosaic*—now being revived for mural decoration—was a strictly Byzantine art; so was *enamelling*, now the heritage of W. Europe. The Pala d'Oro at St. Mark's is of Byzantine origin. *Ivory carving* and *jewellery* were produced abundantly, *miniature and fresco painting* cultivated with success. *Le Manuel d'Iconographie Chrétienne* (published 1845), found in the hands of the monks of Mt. Athos, and as old as the 11th century, describes fully the designs and processes. *Metal-work* was highly artistic, as may be seen in the bronze doors at Amalfi. *Numismatic art* was considerable, if not supreme. *Silk and satin embroidery* was a Greek monopoly, and we read of a senator's robe adorned with 600 figures representing the life of Christ. And the Dalmatic of the Vatican is renowned. *Samite* is Greek for six-threaded stuff. *Cendal* is *σινδων*, a kind of muslin or taffeta. *Imperialis* was stuff supplied only to the great. *Greek manuscripts*, though in lettering inferior to the Irish, are in miniature painting superior, and the Vatican and Paris specimens are unsurpassed. In *music*, Greek notation was, during the first six hundred years of the Christian era, in universal use, and for the next four hundred with slight modifications, till the change introduced by Guido Arezzo in the 11th century. The Emperor Copronymus sent to Pepin the first organ seen in W. Europe.

BYZANTINE LITERATURE. 'The peculiar indispensable service of Byzantine literature was the preservation of the language, philology, and archæology of Greece.' From Proclus (5th century) there were never lacking students of the philosophy of Plato and Aristotle. Geometry and astronomy were kept alive, if not much improved. The architects of St. Sophia were mathematicians, and wrote on mechanics. Leo (9th century) lectured on geometry, and composed an essay on Euclid. Michael Psellus (11th century), 'prince of philosophers,' treated of mathematics and astronomy. From the 4th to the 11th century there was a regular series of writers on medicine, zoology, botany, mineralogy, and geography. (See Krumbacher's 1,200 pages.) Epigrammatists formed a class by themselves. Grammarians, scholiasts, lexicographers, produced much useful work and the *Ety-*

*Byzantine Architecture. The Mosque of St. Sophia, Constantinople (interior).*

*mologicum Magnum.* Much of the best intellect of the times was absorbed in theological problems, and Chrysostom, Cyril, Methodius, the Patriarch Photius, Gregory of Nazianzus, are great names in the Eastern church. Amongst poets were Pisides, Theodosius, Leo, Tzetzes, and the Silentiary Paul, who wrote on St. Sophia. Civil law is represented by the great compendium in sixty books inspired by Basil, but published by Leo VI. Historians who wrote on universal history, or of their own city and its customs, are legion. Gibbon is the only guide through a maze of names that include emperors, generals, and statesmen. Their works, first printed at Paris in thirty-six volumes by Labbé (1654-1711), and reprinted at Venice (1727-33), were incorporated in forty-eight volumes by Niebuhr and others, under the name *Corpus Scriptorum Historiæ Byzantinæ* (1828-53). Procopius wrote Byzantine History; Eusebius, Universal History; Proxagoras, History of Constantine; Zonaras, Annals; Nicetas Acominatus, History of Byzantine Emperors. Other names of authors, covering with their works the period 553-1463, are Agathias, Anna Comnena (see Scott's *Count Robert of Paris*), Cinnamus, Nicephorus Gregoras, John Cantacuzenus (emperor), Michael Ducas, Chalcocondyles. They are valuable not for what they originate, but for what they preserve. Cinnamus and Ducas make some claim to philosophic history, Anna Comnena to artistic skill. See Harrison's *Byzantine History in the Early Middle Ages* (1900); Schlumberger's *L'Epopée Byzantine* (1896); Lethaby and Swainson's *A Study of Byzantine Building* (1894); Krumbacher's *Geschichte der Byzantinischen Literatur* (1897); Bayet's *L'Art Byzantin* (1883); and Strzygowski's *Byzantinische Denkmäler* (1891-1903).

**Byzantium,** tn. on the Thracian Bosporus, the forerunner of the modern Constantinople, founded by the Megarians in 667 B.C. From the commercial advantages of its position it soon became a place of great prosperity and importance. During the 5th and 4th centuries B.C. it was for the most part included among the states subject to Athens, except that from 515 to 478 B.C. it was subject to Persia. From the middle of the 4th century B.C. until it was merged in the Roman empire the town enjoyed independence. In 196 A.D. it was destroyed by Severus, after a long siege; but its excellent site caused the Emperor Constantine to choose it for the capital of the Eastern empire in 330 A.D., when it was called Constantinopolis. See BYZANTINE EMPIRE.

END OF VOL. IV.

# NELSON'S ENCYCLOPÆDIA

# NELSON'S ENCYCLO= PÆDIA