personal and national, and the unscrupulous ability with which he pursued his ends. In all these points he is the antithesis of his great rival Aristides (*q.v.*). Of his early years little is known. He may have been strategus of his tribe at Marathon (Plut. *Arist.* 5) and we are told that he deeply envied the glory which Miltiades earned. At all events the death of Miltiades left the stage to Aristides and Themistocles. It is sufficiently clear that their rivalry, terminated in 483-82 by the ostracism of Aristides, turned largely on the fact that Themistocles was the advocate of a policy of naval expansion. This policy was unquestionably of the highest importance to Athens and indeed to Greece. Athens was faced by the equal if not superior power of Aegina, while the danger of a renewed Persian invasion loomed large on the horizon. Themistocles therefore persuaded his countrymen to put in hand the building of 200 triremes, and —what was of even greater importance—to fortify the three natural harbours of Peiraeus (see E. Gardner, *Ancient Athens,* 562 f.) in place of the open roadstead of Phalerum. For the building of the ships Themistocles persuaded the Athenians to allocate *100* talents obtained from the new silver mines at Laurium *(Ath. Pol.* 22) which were about to be distributed to the citizens (10 drachmae each). One hundred of the proposed 200 were built.

According to the *Ath. Pol.* it would seem that Themistocles was archon in 483-82 at the time when this naval programme began. Dionysius of Halicarnassus places his archonship in 493-92, in favour of which are several considerations. In 487 the office lost much of its importance owing to the substitu­tion of the lot for election: the chance that the lot would at the particular crisis of 483 fall on Themistocles was obviously remote: and the *Ath. Pol.* is generally wrong about Themis­tocles. In any case the year prior to the invasion of Xerxes found Themistocles the chief man in Athens if not in Greece. Though the Greek fleet was nominally under the control of the Spartan Eurybiades, it was Themistocles who caused the Greeks to fight the indecisive battle of Artemisium, and still more it was he who, by his threat that he would lead the Athenian army to found a new home in the West, and by his treacherous message to Xerxes, precipitated the engagement at Salamis *(q.v.).* The retirement of the Persians left the Athenians free to restore their ruined city (sec Athens). Sparta, nominally on the ground that it was dangerous to Greece that there should be any citadel north of the Isthmus which an invader might hold, urged that this should not be done, but Themistocles by means of diplomatic delays and subterfuges enabled the work to be carried sufficiently near to completion to make the walls defensible. He also carried out his original plan of making Peiraeus a real harbour and fortress for Athens. Athens thus became the finest trade centre in Greece, and this fact, coupled with Themistocles’ remission of the alien’s tax (μϵτοίκιον)*,* induced many foreign business men to settle in Athens.

After the crisis of the Persian invasion Themistocles and Aristides appear to have composed their differences. But Themistocles soon began to lose the confidence of the people, partly owing to his boastfulness (it is said that he built near his own house a sanctuary to Artemis Aristoboulē “ of good counsel ”) and partly to his alleged readiness to take bribes. Diodorus (xi. 54) and Plutarch (*Themist.* 23) both refer to some accusation levelled against him,@@1 and some time between 476 and 471 he was ostracized. He retired to Argos, but the Spartans further accused him of treasonable intrigues with Persia, and he fled to Corcyra, thence to Admetus, king of the Molossians, and finally to Asia Minor. He was proclaimed a traitor at Athens and his property was confiscated, though his friends saved him some portion of it. He was well received by the Persians and was allowed to settle in Magnesia on the Maeander. The revenues (50 talents) of this town were assigned to him for bread, those of Myus for condiments, those of Lampsacus for wine. He died at Magnesia at the age of sixty- five, and a splendid memorial was raised by the people of the

town, though it is said that his bones were secretly transferred to Attica. He was worshipped by the Magnesians as a god, as we find from a coin on which he is shown with a patera in his hand and a slain bull at his feet (hence perhaps the legend that he died from drinking bull’s blood: cf. Aristoph. *Eq.* 83; Diod. xi. 58; Plut. *Them.* 31).

Though his end was discreditable, though his great wealth can hardly have been obtained by loyal public service, there is no doubt that his services to Athens and to Greece were great. He created the Athenian fleet and with it the possibility of the Delian League *(q.v.)* which became the Athenian empire, and there are many indications (e.g. his well-attested plan of ex­pansion in the west) that the later imperialist ideal originated in his fertile brain.

There are monographs by Bauer (Merseburg, 1881) and Wecklein (Munich, 1882); but the best discussions of his career will be found in the chief Greek histories *e.g.* Busolt; on the difficult chronology of his later years see Grote, *History of Greece* (and the one-vol. ed. by Mitchell and Caspari, 1907, p. 283, note 1, with the authorities there quoted); on the Magnesian coin, Rhousopoulos, in *Athen. Mitteil.* (1896), p. 22. On the walls, see Ed. Meyer in *Hermes,* xl. (1905), pp. 561-569. (J. Μ. Μ.)

**THÉNARD, LOUIS JACQUES (1777-1857),** French chemist, was bom on the 4th of May 1777 at Louptière, near Nogent- sur-Seine, Aube. His father, a poor peasant, managed to have him educated at the academy of Sens, and sent him at the age of sixteen to study pharmacy in Paris. There he attended the lectures of A. F. Fourcroy and L. N. Vauquelin, and succeeded in gaining admission, in a humble capacity, to the latter’s laboratory. But his progress was so rapid that in two or three years he was able to take his master’s place at the lecture-table, and Fourcroy and Vauquelin were so satisfied with his per­formance that they procured for him a school appointment in 1797 as teacher of chemistry, and in 1798 one as *repétiteur* at the *École Polytechnique.* In 1804 Vauquelin resigned his pro­fessorship at the *Collige de France* and successfully used his influence to obtain the appointment for Thénard, who six years later, after Fourcroy’s death, was further elected to the chairs of chemistry at the *École Polytechnique* and the *Faculté des Sciences.* He also succeeded Fourcroy as member of the Academy. In 1825 he received the title of baron from Charles X., and in 1832 Louis Philippe made him a peer of France. From 1827 to 1830 he represented the department of Yonne in the chamber of deputies, and as vice-president of the *conseil supérieur de l’instruction publique,* he exercised a great influence on scientific education in France. He died in Paris on the 21st of June 1857. A statue was erected to his memory at Sens in 1861, and in 1865 the name of his native village was changed to Louptière-Thénard.

Above all things Thénard was a teacher; as he himself said, the professor, the assistants, the laboratory—everything must be sacrificed to the students. Like most great teachers he published a text-book, and his *Traité de Chimie élémentaire, théorique et pratique* (4 vols., Paris, 1813-16), which served as a standard for a quarter of a century, perhaps did even more for the advance of chemistry than his numerous original dis­coveries. Soon after his appointment as *repétiteur* at the *École Polytechnique* he began a lifelong friendship with J. L. Gay- Lussac, and the two carried out many researches together. Careful analysis led him to dispute some of C. L. Berthollet’s theoretical views regarding the composition of the metallic oxides, and he also showed Berthollet’s “ zoonic acid ” to be impure acetic acid (1802); but Berthollet (*q.v.*), so far from resenting these corrections from a younger man, invited him to become a member of the *Société d’Arcueil.* His first original paper (1799) was on the compounds of arsenic and antimony with oxygen and sulphur, and of his other separate investiga­tions one of the most important was that on the compound ethers, begun in 1807. His researches on sebacic acid (1802) and on bile (1807), and his discovery of peroxide of hydrogen (1818) also deserve mention. The substance known as “ Thénard’s blue, ” he prepared in r799 in response to a peremp­tory demand by J. A. Chaptal for a cheap colouring matter, as

@@@1 There is, however, much difficulty regarding this accusation. It may be simply a misunderstanding of his ostracism.