

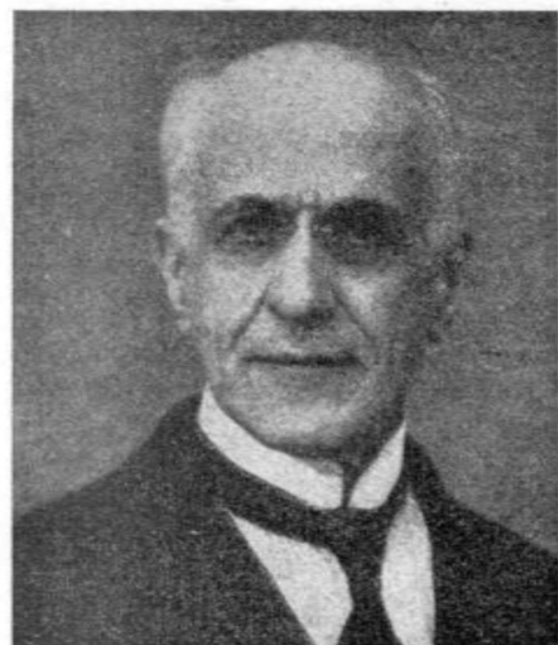
E. M. Antoniadi

A report that M. Antoniadi, the eminent Greek astronomer, had died in France during the occupation reached us by a roundabout route some time ago. It is now, unfortunately, confirmed that M. Antoniadi died at his home in Paris on 1944 February 10.

Eugène Michael Antoniadi was born at Constantinople, of Greek parentage, in 1870. At the age of eighteen he was making astronomical observations with a 3-inch telescope, and a little later

with a 4½-inch, at his native city and on the island of Prinkipo in the Marmora Sea. His notes and drawings of sunspots, Jupiter, Saturn and Mars attracted immediate attention in France, where they were published, revealing as they did an observer endowed with unusually acute and sensitive vision, and a gifted draughtsman. He joined our Association in 1890 as an original member, was one of the first to join the Mars Section when it was formed in 1892, and contributed a number of notes and drawings, made at Constantinople with his 4½-inch telescope, to the first "Report" of the Section dealing with the perihelic opposition of that year.

Emigrating to Paris a year later, he worked with M. Camille Flammarion at Juvisy for some years. His observations of Mars, made with the 9¼-inch refractor of that observatory, were also communicated to our Mars Section for the second "Report", opposition of 1896. In that year he went to Lapland to observe the total eclipse of the Sun, and there became personally acquainted with several of our members; in the following autumn he was appointed Director of the Mars Section, succeeding Cammell and Maunder in that office.



E. M. ANTONIADI
(1870-1944)

In the following years Antoniadi applied himself assiduously to the study of Mars, observing with the 9¼-inch refractor at Juvisy and with his own reflecting telescopes of 6½- and 8½-inch aperture. In 1909 M. Deslandres, Director of Paris and Meudon Observatories, placed the great telescope at Meudon at his disposal. Antoniadi has described how his first view of Mars through the giant refractor was a revelation to him. "At the first glance cast through the 32¼-inch on 1909 September 20," he writes, "[he] thought he was dreaming and scanning Mars from his outer satellite." This was the year of a memorable perihelic opposition of Mars, and Antoniadi, now at the height of his powers, made good use of his exceptional opportunities. His keen and well-trained eye for planetary detail and unequalled draughtsmanship had full scope, and some of the results may be seen in the corresponding "Report" or *Memoir* of the Mars Section (*Memoirs*, B.A.A., vol. 20, Part 2), one of the most noteworthy of the series.

From this time on Antoniadi, who had done much good work with instruments of moderate size, became a decided advocate of large tele-

scopes for planetary observation. His mode of representing the surface markings of Mars also underwent a considerable change.

At the commencement of the present century many observers of Mars were labouring, as it were, under a spell. The brilliant work of Schiaparelli, followed by Lowell's imaginative writings (and stylised drawings), had contributed to the establishment of a conventional mode of drawing certain details, especially those indistinctly seen or momentarily glimpsed, and this "school" undoubtedly exerted its influence, by suggestion, on many observers of that time. Antoniadi himself was not free from this influence, as may be seen from his earlier drawings; but persistent observation and the self-confidence derived from the command of a powerful instrument enabled him to free himself from all such prejudices, and from 1909 on he gave a very different picture of the planet, characterised by a general spottiness and the absence of narrow straight lines. Many of the continuous shadings were broken up, under high resolving power, into separate portions, and the large dark "seas" showed many considerations. In much of this, though not all, he was supported by his British associates; but whatever view be taken Antoniadi, through his long-continued personal effort, undoubtedly had a large share in establishing an impression of the surface of Mars more truthful than that so much in vogue a few decades earlier.

During his twenty-one years as Director of the Mars Section Antoniadi produced ten *Memoirs*, covering all the oppositions from 1896 to 1916 inclusive. These are models of what such "Reports" should be. The large amount of heterogeneous material, of very unequal value, on which they were based was handled in a masterly manner, and the analysis and presentation of the facts and deductions must have involved an immense amount of labour, as well as judgment and a knowledge of what others had done. His unfortunate resignation in 1917 was a blow from which the Mars Section has not yet recovered.

Antoniadi also made numerous observations of Mercury and Venus with the 33-inch at Meudon. He recorded a number of dusky markings on Mercury, and from them concluded that the rotation period of the planet is the same as the period of revolution round the Sun. He gave these markings names based on Greek and Egyptian mythology, believing them to be permanent features of the

planet's surface, and he explained their not infrequent invisibility by supposing them to suffer obscuration by dust or haze. Venus, on the other hand, he believed to be covered with cloud through temporary gaps in which glimpses of a darker surface could occasionally be seen but no permanent features distinguished.

Antoniadi was an excellent linguist—the style of his “Mars Reports” was worthy of any British-born writer—and this gift was of assistance to him in an extensive research into the history of Greek and Egyptian astronomy, the results of which were published in an elegant volume entitled *L'Astronomie égyptienne*.

Apart from astronomy, Antoniadi was interested in archæology and architecture. In 1904 he undertook a study of the basilisk of St. Sophia, Constantinople; the Sultan Abd-el-Hamid granted him permission to photograph for the first time the interior of the building, and he obtained over a thousand negatives and made many sketches.

For services rendered to France, especially during the war of 1914-1918, the Government conferred upon him the Croix de Chevalier de la Légion d'Honneur, and in 1928 he and Madame Antoniadi became naturalised French subjects. During the last three months of his life, though suffering from an incurable complaint, he gave weekly talks on Astronomy, which were broadcast from Radio Paris.

Eugène Antoniadi was an amateur in the best sense of the word. Lacking at the commencement of his career the advantages—observatory equipment, etc.—which fall to the lot of the young professional, nevertheless by his own ability and industry he came to occupy an honoured place among astronomers of his day, being recognised as a planetary observer of first rank and the world's greatest authority on the planet Mars.

He leaves a widow but no family.—P. M. R.