Cecilio Plá's The Discovery of Anesthesia

The Contribution of a Painting to Anesthesia History

Avelino Franco, M.D., Ph.D.,* José C. Diz, M.D.,† Abel García, M.D., Ph.D.,‡ Joaquín Cortés, M.D., Ph.D.,† Julián Alvarez, M.D., Ph.D.,§ Francisco J. Aneiros, M.D.†

THAT the anesthetic potential of nitrous oxide (N₂O) was first perceived by Horace Wells in December 1844 after a demonstration of its inebriating effects by Gardner Q. Colton at the Union Hall in Hartford, Connecticut, is well known, as are the failure of Wells's attempted demonstration of N₂O anesthesia at Harvard Medical School and his suicide in a New York jail in January 1848 under the influence of chloroform.¹⁻³ In this article, we describe a painting by a Spanish artist, Cecilio Plá, that was painted under the supervision of the Spanish dentist Dr. Luis Subirana Matas, who wanted to illustrate Wells's tragic story.

Despite the circumstances of his death, Wells's place in anesthesiology was soon recognized. In 1848, the Paris Medical Society declared that he was "due all honor for having successfully discovered and applied the use of vapors or gases whereby surgical operations could be performed without pain." In the 1860s, N₂O became accepted as an anesthetic thanks to the efforts of a wiser experimenter, T.W. Evans. This led to Wells's being given due recognition in the United States as a pioneer anesthetist whose naivete and weakness, despite their tragic consequences, did not detract from the fundamental correctness of his vision. In Spain, N₂O was used widely by Spanish dentists between 1869 and the late 1880s, and thereafter its popularity declined.

* Associate Professor.
† Staff Anesthesiologist.
‡ Professor of Maxillofacial Surgery.
§ Chairman of Anesthesiology.

Received from Servicio de Anestesiología y Reanimación, Hospital General de Galicia-Clínico Universitario, Santiago, Spain. Submitted for publication September 3, 1997. Accepted for publication December 30, 1997.

Address reprint requests to Dr. Franco: Servicio de Anestesiología y Reanimación, Hospital General de Galicia-Clínico Universitario, c/ Galerías s/n, 15705-Santiago, Spain. Address electronic mail to: cifranco@uscmail.usc.es

Key words: Nitrous oxide; Wells, Horace.

Luis Subirana Matas (1871–1938; fig. 1) initially acquired his professional training under Dr. Angle in Pasadena, where he qualified as a dental surgeon in 1894. In 1902 he obtained a degree in odontology in Spain, and in 1913 he was appointed to the chair of odontology in the Medical Faculty of the Central University of Madrid. He founded and edited the journal La Moderna Estomatología and served as vice-chairman of the Spanish Odontological Society. A prolific writer and effective public speaker, he was a habitual active participant in both national meetings and international congresses, at

Fig. 1. Luis Subirana Matas (1871–1938). Spanish odontologist (courtesy of Dr. Subirana Pita).
Fig. 2. Cecilio Plà y Gallardo (1860–1934), Spanish painter of the picture The Discovery of Anesthesia (photograph of a self-portrait of the painter, provided by the Museum of Bellas Artes, Valencia).

which he sometimes acted as Spain's official representative. He received many official honors.

Subirana learned of Wells' contribution to the development of anesthesia when he read a book by a French author, Lemerle, entitled Notice sur l'Histoire de l'Art dentaire. Impressed with Lemerle's brief account of Wells' discovery and fate, Subirana began his own biographical investigations and became a fervent admirer of Wells. In 1906 he commissioned the Valencian artist, Cecilio Plà (fig. 2), to paint, under his supervision, a triptych in gauche on paper illustrating the crucial moments of Wells' last years (fig. 3).

Cecilio Plà y Gallardo (1860–1934) was a well-known, socially successful artist who in the course of his career received many awards and prizes. Competent but conventional, he followed artistic fashions rather than creating them, progressing from the minutely detailed representation of regional rustic themes, through sunbathed impressionism in the manner of Sorolla, to final flirtation with modernism. His watercolors are facile and light-hearted; he was an excellent decorator, and as an illustrator, he contributed frequently to Spanish magazines.

At the time of Subirana's commission, Plà's painting was wholly "realist," and The Discovery of Anesthesia (fig. 3) is no exception: its left-hand panel (measuring 495 × 562 mm) shows Wells and his wife watching Colton's demonstration; its right-hand panel (measuring 495 × 560 mm) shows his crestfallen exit from the Harvard lecture hall among the students' jeers; and its central panel (measuring 636 × 860 mm) depicts his horrified jailers' discovery of his body in a bathtub, with the veins of one arm cut open and a bottle of chloroform and a sponge on the floor. All three scenes exhibit the theatrical use of light and the broad gamut of color that are typical of Plà's work in those years.

On January 17, 1907, Subirana presented The Discovery of Anesthesia at a crowded, extraordinary session of the Spanish Odontological Society that was presided over by the minister of health. There he read an extensive paper that constituted a passionate defense of the crucial contribution that Wells made to the discovery of anesthesia, and he closed with an appeal to his fellow dentists to contribute toward a wreath to be placed on Wells' tomb in Hartford, the final resting place of their unfortunate colleague's remains. "Let us be the first," he said, "to feel the immense satisfaction of having initiated, in the European scientific community, a movement consecrated to doing justice to truth and to Horace Wells." His brilliant speech caused a great impression, as did Plà's dramatic illustration, which was none the less effective for its deviation from strict historical truth in its artistic composition of Wells' death. There was a handsome response to Subirana's appeal, and the following year the city of Hartford was sent, as a tribute to Wells, a silver wreath "of highly refined artistic taste" that is currently kept in the city's medical library.

Accompanied by Plà's triptych, Subirana continued his crusade on Wells' behalf at international congresses (Brussels, 1908) and other public events, and in 1910 he spoke as representative of the Spanish delegation at the unveiling of a statue of Horace Wells in Paris.

It is no longer easy for the interested historian to view The Discovery of Anesthesia, which remained in Dr. Subirana Matas' family until some 15 yr ago but was then sold to a private collector. It is still possible to come across one of the large photographic reproductions that once hung in many Spanish dental surgeries in the 1920s and 1930s. Ironically, the melodramatic realism that Subirana had sought of Plà as an aid in his crusade on Wells' behalf may have been the cause of
its subsequent removal from most dental offices; apparently, the vivid portrayal of Wells’s gruesome end tended to exacerbate the fears of apprehensive patients.

References
7. Subirana Matas L: El descubrimiento de la anestesia y Horacio Wells. Madrid: Biblioteca de ‘La Estomatología,’ 1907

Anesthesiology, V 88, No 5, May 1998