

DAVID ALTER, M.D.—“Among those members of the medical profession of Armstrong county who have earned high reputation in the walks of science, Dr. David Alter, who died in 1881, deserves to be mentioned.

“Dr. Alter was born on the 3d of December, in the year 1807, in Westmoreland county, Penna., in what is now Allegheny township, and within a few miles of the town of Freeport, in which he lived a great part of his life, and died, on the 18th of September, 1881.

“In the year 1878,” says Dr. Cowan, “I called upon him at his residence in Freeport, and found him, in appearance, an old man, with a calm and kindly countenance, in stature above the ordinary, albeit stooped and shrunken with age, still pursuing his profession, that of a physician, for a livelihood, while in effect he was the puzzle or sphinx that every philosopher must be to those around him who cannot appreciate the work of his hands in an objective form in the open day, much less encompass in the depth, the distance, and the darkness of his windowless mind, the complexity of cerebration and entanglement of thought from which his work has been evolved.

“The ultimatum attained by Dr. Alter in science and invention, namely, the discovery and application of the principles of the prism in that marvelous mode of investigation universally known to-day as spectrum analysis. And here, in setting forth his claim to this achievement, which in effect has added almost a new sense to mankind, beyond that statement which the doctor made to me that he made his discovery in 1853, I desire to give in evidence only that which is unimpeachable and indisputable, namely, the documents setting forth the discovery in detail, which were published in a leading scientific journal and spread before the eyes of investigators and inventors throughout the world. And in doing so I doubt not that I shall do all that my lamented friend, were he here, would ask or allow to preserve his name among his fellow-men, without condemning either the encyclopaedists for ignoring him or the distinguished scientist, who, perhaps unconscious of the prior claim of another, ears the crown of glory to which he, Dr. Alter, is entitled.

”The first paper of Dr. Alter appeared in November in the year 1854, or no less than five years before the announcement of the discovery of spectrum analysis as his own achievement by Gustav Robert Kirchoff, of K?nigsberg, Germany, for a sketch of whose life and works the reader is referred to the leading encyclopaedias of the day.

“It appears in Silliman’s *American Journal of Science and art*, 2d Series, vol. xviii., for November, 1854, pp.55-57, under the following head: ‘Article VI. On Certain Physical Properties of Light, Produced by the Combustion of Different Metals in the Electric Spark, Reflected by a Prism. By David Aleter, M.D., Freeport, Pa.’

“A second article appeared int eh same scientific journal for May, 18955, vol. sis., pp. 213-14, under the caption, “Article XXI. On certain Physical Properties of the Light of the Electric Spark within certain Gases, as seen through a Prism. By Dr. Alder, M. D., of Freeport, Pa.’ In this explicit article a paragraph is found indicating the application of his discovery to the detection of the elements in combustion in shooting-stars or luminous meteors; in other words, to the application of spectrum analysis to the study of celestial phenomena, *at infinitum*.

“Dr. Alter daguerreotyped the dark lines of the solar spectra, two of which he sent, along with his communication, to Professor Silliman.

“It is a little matter in comparison with the above, but it is curious, and perhaps not without its use, to know that the prism with which Dr. Alter made his remarkable experiments was made by him from a fragment of a great mass of very brilliant glass found in the post of a glass-house which had been destroyed in the great fire of Pittsburgh, on the 10th of April, 1845. Thus remotely was the burning of Pittsburgh the solution of the combustion of the sun of the solar system, and of the otherwise incomprehensible conflagrations of more distant furnace spheres in illimitable space.

“Besides the achievement of Dr. Alter, referred to above, he accomplished much more that is deserving of note. Of other inventions, I may mention here a rotating retort for the extraction of coal-oil from cannel-coal and the oleiferous shales. With this apparatus in operation by a company with ample capital, the philosopher was on the high road to making a fortune, when, presto! E. L. Drake, at the depth of only seventy feet, in Venango county, struck oil or petroleum, and the days of coal-oil and Dr. Alter’s affluence were at an end.”