

Men and Medicine



SIR GEORGE BAKER AND LEAD POISONING

■ George Baker, like many other eighteenth-century physicians, was the son of a clergyman. He was born in Devonshire in 1722, was educated at Eton and King's College, Cambridge, and received his doctor's degree at the age of 34. He was an omnivorous reader and a great medical scholar; he was elected president of the Royal College of Physicians nine times. His extensive reading combined with his acuteness of observation and precision of reasoning made him one of the outstanding practitioners of his day. He became physician to the royal household soon after he moved to London and was knighted in 1776.

Today Baker's fame rests on his acute analysis of the cause of "Poitiers colic," or lead poisoning. Although the malady had been described around 200 B. C. by Nicander in Greece and later around A. D. 650 by Paulus Aeginata, it was given its name "colica Pictonum" or "Poitiers colic" in 1616. Voltaire's physician Théodore Tronchin in 1757 suggested that the disease was in fact lead poisoning. In 1767 George Baker reported his meticulous observations on the condition. His report in the *Medical Transactions of the College of Physicians of London* includes the following:

In some letters which I have lately received from Dr. Wall, of Worcester, the

following facts are asserted. "The counties of Hereford, Gloucester, and Worcester, are not, so far as I know, subject to the colic of Poitou, or any other endemic illness, unless it may be the rheumatism: which I think, the inhabitants of Herefordshire are more liable to, than those of some other counties. There is no lead, which can give occasion to that colic, used in any part of the apparatus for grinding or pressing the apples, or fermenting the liquor. Once indeed, in a plentiful year of apples, I knew a farmer, who, wanting casks, filled a large leaden cistern with new cyder, and kept it there, till he could produce hogsheads sufficient to contain the liquor. The consequence was, that all, who drank of it, were affected by it as lead workers usually are. We had eleven of them, at one time, in our infirmary.

"I have lately had two or three patients in that distemper, occasioned by their having drunk cyder made in a press covered over with lead. But this fact of a cyder-press covered with lead, is a singular, and perhaps the only instance of the kind in this part of England. It happened in a part of the county of Worcester, adjoining to Warwickshire, where very few apples grow; and the bed of the press being therefore cracked by disuse, the sagacity of the farmer contrived this covering, to prevent a loss of his liquor. In general, the cyder-drinkers with us are healthy and robust; but for the most part lean. The liquor is clear, and passes off readily by urine and perspiration; which enables the common people to drink immense quantities of it when at labour, to the amount of several gallons a day. I have heard it observed by a physician, late of this place, who was much employed in the cure of lunatics, that more

of those unhappy people come to him from Herefordshire, than any other place. The fact, if true, may possibly arise from the quantity drunk, rather than the quality."

I determined therefore to make use of the first opportunity, which might occur, to satisfy myself by experiment, whether or not there might be in fact any solution of lead discovered in the cyder of Devonshire. Happening to be, in the month of October 1766, at Exeter, I procured some of the expressed juice of apples, as it flowed from a cyder-press, lined with lead, in the parish of Alphington. On this I made and repeated several experiments, by means of the atramentum sympatheticum, or liquor vini probatorius; and of the volatile tincture of sulphur. The experiments satisfied me, that the Must did contain a solution of lead. The same experiments were made on some cyder, made in the parish of Alphington, of the preceding year. This likewise showed evident signs of lead contained in it; but in less proportion than in the Must.

Baker went on to identify lead in Devonshire cider; his methods although cumbersome and time-consuming were so precise as to rule out any other cause of the poisoning. Baker found no lead in the cider of Hereford. Baker was attacked by his Devonshire neighbors as a dangerous radical, a traitor, etc., etc. However, the Devonshire farmers removed the lead from their cider-presses and Poitiers—or Devonshire—colic disappeared from his native county. ■