

brass ball, suspended by a silk thread, to play between and strike the bells when clouds passed with electricity in them. After having frequently drawn sparks and charged bottles from the bell of the upper wise, I was one night awaked by loud cracks on the staircase. Starting up and opening the door, I perceived that the brass ball, instead of vibrating as usual between the bells, was repelled and kept at a distance from both; while the fire passed, sometimes in very large, quick cracks from bell to bell, and sometimes in a continued, dense, white stream, seemingly as large as my finger, whereby the whole staircase was inlightened as with sunshine, so that one might see to pick up a pin.⁽²⁶⁾ Those bells rang in his house for years.

Though he had, it seems, put up his rod chiefly to get electricity for experiments without the work of making it by laborious friction, he also thought it protected his house, as other rods protected other houses in Philadelphia that year.²⁷ When on 1 October he wrote to Collinson about the kite he added a postscript about lightning rods. "I was pleased to hear of the success of my experiments in France, and that they begin to use points upon their buildings. We had before that placed them upon our academy and state house spires."⁽²⁸⁾ This is the earliest American reference to lightning rods in actual use. Printing a copy of this letter in the *Gazette* for the 19th (of course long before the original reached Collinson and the Royal Society), Franklin left off the postscript. The rods on the academy and state house were already known to Philadelphia. When they were put up is not clear from Franklin's "before that" in the postscript to Collinson. Did he mean before the French began to "erect points upon their buildings" in May or before he heard about it in September or earlier? If it was before May, why did he wait till September to install the rod on his house? The whole chronology of the episode is guesswork. But it may with some reason be guessed: (1) that Franklin, having proposed the experiment which D'Alibard verified in May, was waiting for the high Christ Church spire which he thought he needed; (2) that in June he thought of another method of proving his theory and flew his kite; (3) that he then, without giving away his kite secret, suggested the rods on the lower spires, as much to obtain electricity as to safeguard the buildings; (4) and that he