

breaks, are matters of speculation. 'Tis a pleasure indeed to know them, but we can preserve our china without it."

Now repeating his suggestion of lightning rods, Franklin provided also for "a wire down the outside of the building into the ground, or down round one of the shrouds of a ship and down her side till it reaches the water. . . . To determine the question whether the clouds that contain lightning are electrified or not, I would propose an experiment to be tried where it may be done conveniently. On the top of some high tower or steeple place a kind of sentry box . . . big enough to contain a man and an electrical stand [an insulator]. From the middle of the stand let an iron rod rise and pass bending out of the door, and then upright twenty or thirty feet, pointed very sharp at the end. If the electrical stand be kept clean and dry, a man standing on it when such clouds are passing low might be electrified and afford sparks, the rod drawing fire to him from a cloud. If any danger to the man should be apprehended (though I think there would be none), let him stand on the floor of his box and now and then bring near to the rod the loop of a wire that has one end fastened to the leads, he holding it by a wax handle; so the sparks, if the rod is electrified, will strike from the rod to the wire and not affect him."¹⁴

Franklin did not know enough about lightning to know how dangerous such an experiment might be, and the experience he had two days before Christmas the same year did not disturb his plans. "Being about to kill a turkey by the shock from two large glass jars, containing as much electrical fire as forty common phials, I inadvertently took the whole through my own arms and body, by receiving the fire from the united top wires with one hand while the other held a chain connected with the outsides of both jars. The company present (whose talking to me, and to one another, I suppose occasioned my inattention to what I was about) say that the flash was very great and the crack as loud as a pistol; yet, my senses being instantly gone, I neither saw the one nor heard the other; nor did I feel the stroke on my hand. . . . I then felt what I know not well how to describe: a universal blow throughout my whole body from head to foot, which seemed within as well as without; after which the first thing I took notice of was