

current through water and found it still able to ignite alcohol, ignited gunpowder, and charged glasses of wine so that the drinkers received shocks. More important, perhaps, he began to develop the theory of the identity of lightning and electricity, and the possibility of protecting buildings by iron rods. By means of an iron rod he brought down electricity into his house, where he studied its effect upon bells and concluded that clouds were generally negatively electrified. In June, 1752, he performed the famous experiment with the key, drawing down electricity from the clouds and charging a Leyden jar from the key at the end of the string.

Franklin's letters to Collinson were read before the Royal Society but were unnoticed. Collinson gathered them together, and they were published in a pamphlet which attracted wide attention. Translated into French, they created great excitement, and Franklin's conclusions were generally accepted by the scientific men of Europe. The Royal Society, tardily awakened, elected Franklin a member and in 1753 awarded him the Copley medal with a complimentary address.¹

¹ It may be useful to mention some of the scientific facts and mechanical principles which were known to Europeans at this