

over some of the crude electrical apparatus of the day, which Franklin used, as well as some contrivances he had purchased in Boston. He says in a letter to Collinson: "For my own part, I never was before engaged in any study that so engrossed my attention and my time as this has lately done."

Franklin's letters to Collinson tell of his first experiments and speculations as to the nature of electricity. Experiments made by a little group of friends showed the effect of pointed bodies in drawing off electricity. He decided that electricity was not the result of friction, but that the mysterious force was diffused through most substances, and that nature is always alert to restore its equilibrium. He developed the theory of positive and negative electricity, or plus and minus electrification. The same letter tells of some of the tricks which the little group of experimenters were accustomed to play upon their wondering neighbors. They set alcohol on fire, relighted candles just blown out, produced mimic flashes of lightning, gave shocks on touching or kissing, and caused an artificial spider to move mysteriously.

Franklin carried on experiments with the Leyden jar, made an electrical battery, killed a fowl and roasted it upon a spit turned by electricity, sent a