tric matter with that of lightning completely demonſtrated.

I was pleaſed to hear of the ſucceſs of my experiments in France, and that they there begin to erect points upon their buildings. We had before placed them upon our academy and ſtate-houſe ſpires.

XCVI. *A Letter of Mr.* W. Watſon, *F. R. S. to the* Royal Society, *concerning the electrical Experiments in* England *upon* Thunder-Clouds.

To the Royal Society.

Gentlemen,

Read Dec. 21, 1752.

AFTER the communications, which we have received from ſeveral of our correſpondents in different parts of the continent, acquainting us with the ſucceſs of their experiments laſt ſummer, in endeavouring to extract the electricity from the atmoſphere during a thunder-ſtorm, in conſequence of Mr. Franklin's hypotheſis, it may be thought extraordinary, that no accounts have been yet laid before you, of our ſucceſs here from the ſame experiments. That no want of attention, therefore, may be attributed to thoſe here, who have been hitherto converſant in theſe inquiries, I thought proper to appriſe you, that, though ſeveral members of the Royal Society, as well as myſelf, did, upon the firſt advices from France, prepare and ſet up the neceſſary apparatus for this purpoſe, we were defeated in our expectations, from the uncommon coolneſs and dampneſs

dampneſs of the air here, during the whole ſummer. We had only at London one thunder-ſtorm; *viz.* on July 20; and then the thunder was accompanied with rain; ſo that, by wetting the apparatus, the electricity was diſſipated too ſoon to be perceived upon touching thoſe parts of the apparatus, which ſerved to conduct it. This, I ſay, in general prevented our verifying Mr. Franklin's hypotheſis: but our worthy brother Mr. Canton was more fortunate. I take the liberty, therefore, of laying before you an extract of a letter, which I received from that gentleman, dated from Spital-ſquare, July 21, 1752.

" I had yeſterday, about five in the afternoon, an " opportunity of trying Mr. Franklin's experiment " of extracting the electrical fire from the clouds; " and ſucceeded, by means of a tin tube, between " three and four feet in length, fixed to the top of " a glaſs one, of about eighteen inches. To the up- " per end of the tin tube, which was not ſo high " as a ſtack of chimnies on the ſame houſe, I faſtened " three needles with ſome wire; and to the lower " end was ſolder'd a tin cover to keep the rain from " the glaſs tube, which was ſet upright in a block " of wood. I attended this apparatus as ſoon after " the thunder began as poſſible, but did not find it " in the leaſt electrified, till between the third and " fourth clap; when applying my knuckle to the " edge of the cover, I felt and heard an electrical " ſpark; and approaching it a ſecond time, I re- " ceived the ſpark at the diſtance of about half an " inch, and ſaw it diſtinctly. This I repeated four " or five times in the ſpace of a minute; but the

" ſparks

" ſparks grew weaker and weaker; and in leſs than
" two minutes the tin tube did not appear to be
" electriſed at all. The rain continued during the
" thunder, but was conſiderably abated at the time
" of making the experiment." Thus far Mr. Canton.

Mr. Wilſon likewiſe of the Society, to whom we are much obliged for the trouble he has taken in theſe purſuits, had an opportunity of verifying Mr. Franklin's hypotheſis. He informed me, by a letter from near Chelmsford in Eſſex, dated Aug. 12, 1752. that, on that day about noon, he perceived ſeveral electrical ſnaps, during, or rather at the end of, a thunder-ſtorm, from no other apparatus than an iron curtain-rod, one end of which he put into the neck of a glaſs phial, and held this phial in his hand. To the other end of the iron he faſten'd three needles with ſome ſilk. This phial, ſupporting the rod, he held in one hand, and drew ſnaps from the rod with a finger of his other. This experiment was not made upon any eminence, but in the garden of a gentleman, at whoſe houſe he then was.

Dr. Bevis obſerved, at Mr. Cave's at St. John's gate, nearly the ſame phænomena as Mr. Canton, of which an account has been already laid before the public.

Trifling as the effects here mention'd are, when compared with thoſe, which we have received from Paris and Berlin, they are the only ones, that the laſt ſummer here has produced; and as they were made by perſons worthy of credit, they tend to eſtabliſh the authenticity of thoſe tranſmitted from our correſpondents.

I flatter myſelf, that this ſhort account of theſe matters will not be diſagreeable to you; and am, with the moſt profound reſpect,

Gentlemen,

Your moſt obedient humble ſervant,

Lincoln's-Inn-Fields,
Dec. 20, 1732.

W. Watſon.

XCVI. *Extract of a Letter from Mr.* Brown, *Apothecary, at* Salisbury, *to Mr.* Wm. Watſon, *F. R. S. concerning the Succeſs of* Inoculation *there.*

Read Dec. 21, 1752, and here printed with Additions:

I AM much obliged to you for the obſervations, which you were ſo kind as to ſend me, concerning the method of inoculating for the ſmall-pox, and the ſubſequent treatment of that diſtemper. This I ſhould not have deferred till now, but that I was deſirous of ſending you ſome account of our ſucceſs therein.

Since the receipt of your letter, inoculating has been very much practiſed here, and with great ſucceſs; of which the account I now ſend may be looked upon as pretty authentic. From the 13 of Auguſt, to the beginning of February, have been inoculated, in this city and neighbourhood, four hundred and twenty-two perſons. On five or ſix of theſe, to my knowlege, it had no effect; though on one the experiment was tried a ſecond time.

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