

6. And from the whole it seems probable, that if even such a small wire had been extended from the spindle of the vane to the earth, before the storm, no damage would have been done to the steeple by that stroke of lightning, though the wire itself had been destroyed.

LIII. A Letter concerning the Effects of Lightning at Darking in Surrey, from Mr. William Child to Mr. James Pitfold. Communicated by Mr. Peter Collinson, F. R. S.

S I R,

Darking, Sept. 30, 1755.

Read Dec. 18,
1755.

AFTER several disappointments of sending you the account I so long ago promised, you have here the best particulars I can obtain. The day, on which the storm happened, was Monday the 16th of July 1750, about seven o'clock in the evening. During the preceding part of the day the air was of a very red fiery appearance, accompanied with frequent thunderings. About six o'clock the wind arose, and blew exceeding strong, and in a very short time the hemisphere became uncommonly dark; the flashes of lightning were much stronger, and came in very short intervals of time, and the thunder-claps long and loud, attended with a very hard rain for near half an hour, in which time came the strongest flash of lightning I ever saw, and instantly with it the most terrible burst of thunder.

der. I was then in an open shop, not more than 200 yards from Mr. Worsfold's house, where it did the damage. Several persons, who were nearer, saw at the same time, in different places about the house, large balls of fire, which, as they fell upon the houses or ground, divided into innumerable directions. I should have mentioned, that the wind was southward during the whole storm.

The lightning entered Mr. Worsfold's house upon the south side of the roof, close in a small angle of a stack of chimneys, that stand out several feet above the tiling, and falling perpendicular through the roof, met with a small crank, which was in a passage between the north and south chambers: To which crank hung a bell, and from the crank went a wire both ways into the two chambers. It ran along the wire, that went into the back or south chamber, melting it to the end, and, when it left it, split the post of a bed, that stood in the chamber, as though it had been cleft with wedges. It followed the course of the other wire into the north chamber, which turned towards the east, and went partly round the room, following its direction in every angle where the wire went *, till it reached the end, which was joined by a string, to which hung a handle for ringing the bell, it being close by the side of the bed: but the greatest force of the lightning seemed to fall perpendicular down the side of a wall in the chamber. Against the chimney were hung several barometers, the glasses of which were all shattered to pieces, and

* These wires conducting the lightning, as far as they went, confirms Mr. Franklin's opinion, that if they had been extended to the earth, the great damage, that ensued, might have been prevented.

forcing away the plaistering of the wall, entered the shop, piercing through the two upper shelves, and the parcels of nails, &c. that were upon them. And here it is observable, that from the perpendicular course it took the same direction in the shop, as in the chamber over it, but in almost as many lines as there were shelves, leaving very visible marks of its course. Near its perpendicular course in the shop, upon one of the shelves, it pierced through seven box-irons, making a small hole about the bigness of common shot on one side, and leaving a roughness on the opposite side of each box where it came out. The several parcels of nails, tacks, hinges, &c. that lay in the course it took, were very plainly affected by it: some of the small tacks in particular were soldered together, six, seven, eight, or ten in a clump, as if they had had scalding metal run over them. The papers of the parcels were burnt in small holes. At one end of the shelves hung several long pendulums, the springs of which were melted so that they fell to the ground; and the lightning spreading its remaining force to some littered straw and packing-paper, that lay about the shop, set fire thereto, which was happily extinguished without doing any further damage. Mr. Worsfold was in his shop the whole time, but received no hurt.

This, Sir, is the best account I can procure; from which if you can reap any satisfaction, I shall think myself happy in having it in my power to oblige you. I am

Darling, Sept. 30,
1735.

Your most humble servant,

W. Child.

LIV.