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The young man's book of amusement

Halifax, 1848

Beautiful Electrical Experiment

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Another Electric Orrery, (See p. 118.)

From the prime conductor of an electric machine, suspend six concentric hoops of metal at different distances from each other, in such a manner as to represent in some measure the proportional distances of the planets. Under these, and at a distance of about half an inch, place a metallic plate, and upon this plate, within each of the hoops, a glass bubble blown very thin and light. On electrify ing the hoops, the bubbles will be immediately attracted by them, and will continue to move round the hoops as long as the electrification continues. If the electricity be very strong, the bubbles will frequently be driven off, run hither and thither on the plate, making a variety of pleasing and surprising motions round their axis; after which they will return to the hoop, and circulate as before; and if the room be darkened, they will all appear beautifully illuminated with electric

Beautiful Electrical Experiment.

Take some oxalate of lime, obtained by precipitation, well washed, and dried in a Wedgewood's basin at a temperature of 300 degrees, until so dry as not to render a cold glass plate, placed over it, dim Stir it with a platina spatula; in a few moments, by friction against the metal, it will become so strongly

electrical, the will fly about over its side little stirring all of then effect.

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The safe cellar; for earth, the l him, and w on it. Dr. lightning to metal lustr feet upon adds, to l middle of the chairs silk cords ratus. Pe to the vicir der-storm, cult to be e 72,420 leag

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electrical, that it cannot be collected together, but will fly about the dish whenever it is moved, and over its sides into the sand-bath. It requires some little stirring before the particles of the powder are all of them sufficiently electrical to produce the effect.

Safest Situation during a Thunder-Storm.

[Though not exactly an experiment, the following advice will be important to the reader.]

The safest situation during a thunder-storm is the cellar; for when a person is below the surface of the earth, the lightning must strike it before it can reach him, and will of course, in all probability, be expended on it. Dr. Franklin advises persons apprehensive of lightning to sit in the middle of a room, not under a metal lustre, or any other conductor, and to lay their feet upon another chair. It will be safer still, he adds, to lay two or three beds or mattresses in the middle of the room, and folding them double, to place the chairs upon them. A hammock suspended by silk cords would be an improvement upon this apparatus. Persons in fields should prefer the open parts to the vicinity of trees, &c. The distance of a thunder-storm, and consequently the danger, is not difficult to be estimated. As light travels at the rate of 72,420 leagues in a second of time, its effects may be considered as instantaneous within any moderate distance. Sound on the contrary, is transmitted

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