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The young man's book of amusement

Halifax, 1848

To shew Electric Attraction and Repulsion

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when, as glass is a non-conductor, the equilibrium can only be restored by the saw-dust or balls, which will accordingly jump up and down till the charge of each plate is the same.

To shew Electric Attraction and Repulsion.

Two distinct bodies in the same electrical state repel each other, whether they have both more or less than their natural share of electricity; but if the one has more or less than the other, attraction takes place; this is a summary of the doctrine of electrical attraction and repulsion, and explains the various experiments which bring these properties into action.



If a bundle of hairs or feathers be hung upon the prime conductor, the moment they are electrified by working the machine, they begin to fly from one another, and they will not again collapse until the electricity is taken off. A fanciful mode of shewing

this experiment consists in making the form of a human head, (See the Fig.) with hair on, and placing this image upon the electrified conductor, the hair immediately stands up like "quills upon the fretful porcupine."

Curious Peal of Bells.

From a small pedestal A, (Fig. 10.) rises a stem, F, which supports a small bell, B. From this bell rises a glass tube, to the top of which is cemented a brass ball, C, with four wires of the same metal fastened in it at equal distances. From each extremity of these wires, which terminate in small knobs, hangs, by a brass chain, a small bell, like a bell B. From the middle of each wire, hangs, by a silken thread, a small brass ball. The bells are all suspended in the same plane, and the balls *a, b, c, d*, are at such a height that they will, if caused to vibrate, equally strike near the base, the bell in the centre, and their respective bells hanging from the wires. From this construction it will be understood, that the brass balls *a, b, c, d*, are insulated, because they are suspended by silk; but the bell B has a communication with the earth, because its support is a conductor, while it is separated from the brass knob C and the wires, by the non-conductor or glass pillar. Connect the knob C with the machine, by means of a chain or wire, and electrify it; the wires and bells suspended from them will be electrified at the same instant. As soon as this is done,

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