The young man's book of amusement

Halifax, 1848

To Exhibit Electrical Attraction on a Number of Objects at once

urn:nbn:de:bsz:31-100120

Electrical Automata.

If a metal plate be attached to the prime conductor of the electrical machine, and a similar plate be supported by a foot beneath, small figures, made of pith or paper, will readily leap from the one to the other continuously; and to effect this amusing dance, it will only be necessary to turn the cylinder of the electrical machine rapidly. A representation of this simple apparatus is seen at Fig. 9.

Electric Spider.

Insulate two bodies, and charge one of them plus, the other minus. Then suspend between them, by a silken string, an artificial spider, of which the body may be cork and the legs and fibres of feathers; the spider will move from one of the insulated bodies to the other, till their charge is equalized.

To Exhibit Electrical Attraction on a Number of Objects at once.

Place a cap or covering of metal upon the two extremities of a glass tube four or five inches long, and enclose in the tube some saw-dust or pith-balls; then charge one of the plates plus and the other minus,

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