

iron through the coil and noticing the action on a compass-needle at various distances.

ELECTROLYSIS.—This can be shown as follows: Fit a cork in the narrow end of a lamp chimney; bore two holes in the cork and pass two small electric light carbons through it, so that they will project a couple of inches into the lamp chimney; attach a bit of copper wire to the outer end of each. Now pour melted paraffin into the chimney until the cork is well covered, being careful not to let any fall on the projecting carbons. When the paraffin is cold, almost fill the chimney with water containing a small quantity of sulphuric acid (1 to 50). Fill two test-tubes with the same solution, cover the test-tubes with little pieces of paper, invert in the liquid in the chimney, and put one over each carbon. Have the lamp chimney supported in a ring of a retort stand. On connecting the wires with the battery terminals the gases will be given off.

THE ELECTRIC BELL AND INCANDESCENT LIGHT.—These should be examined by each pupil. The incandescent light apparatus should be examined in all its available parts—not merely the bulb, but all the attachments to be seen in a room. These should be taken apart by means of a screw-driver and put together again. The electric bell should be connected up with a battery by each pupil, and drawings of both should be made and the course of the current indicated by arrows. Talking about these things is time wasted when they can be studied practically.