all the dots with a curve. In a similar way get lines coming out from all around the magnet. This will give a magnetic field, and the pupils will have a much clearer conception of what a line of force means. Iron filings may now be sprinkled on the paper and tapped, and it will be seen that they form along these lines.

THE INDUCTIVE ACTION OF A MAGNET.—This can be well illustrated by hanging nails or steel pens from the end of a magnet. The different retentivity of the nails and the pens is shown on removing the suspended row of either; the pens will still hold together pretty well, while the nails will almost at once lose their magnetism and fall apart.

The inductive action of the earth can be shown, as in Watson's *Elementary Physical Science,* page 195.

INCLINATION.—To show the angle of inclination some sort of dipping needle must be procured. Any pupil may make a satisfactory one which will illustrate the principle and allow the angle to be measured with a fair degree of accuracy. Pass an unmagnetized knitting-needle through the centre of a small cork in the direction of its long axis. Then pass a sewing needle through the cork at right angles to the direction of the knitting-needle, to serve as an axis. Adjust the knitting-needle in the cork, so that it will retain a horizontal position when the ends of the axis rest on the edges of two glass beakers and the knitting-needle points east and west. Put a small nail into the cork at right angles to both the needles and on that side of the cork that is uppermost when the needle is balanced between the beakers. By adjusting this nail and the knitting-needle, the latter may be made to retain any position in which it is placed—vertical, horizontal, or oblique. Now