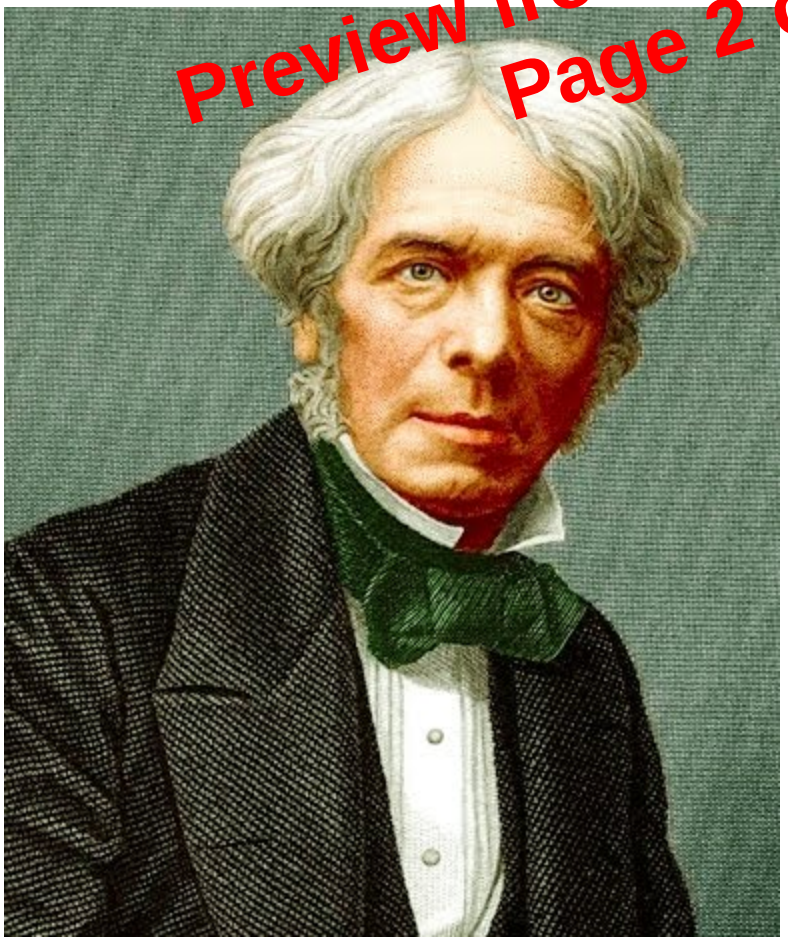
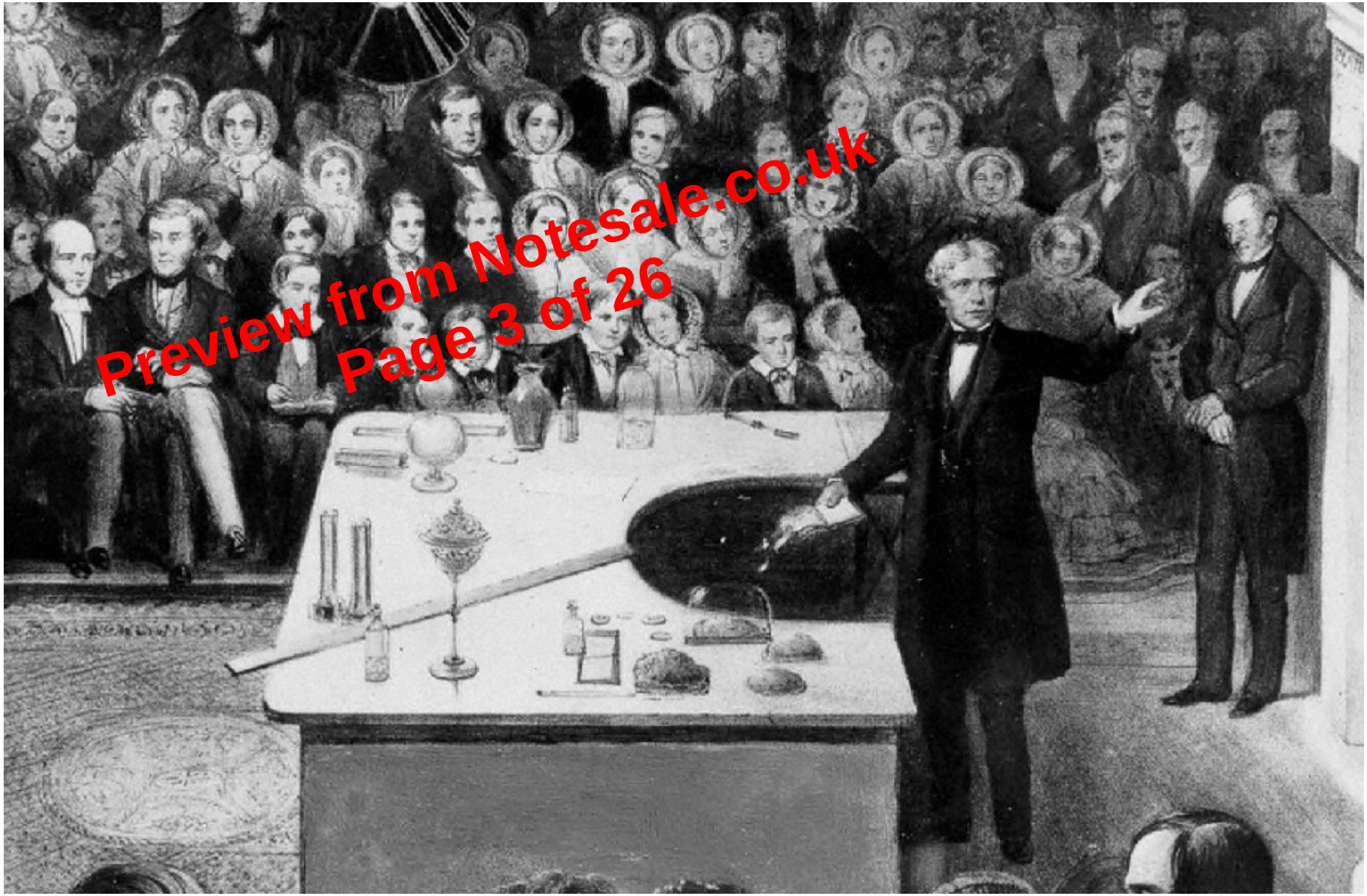
Chapter 7 Magnetostatic Field

7.1 Faraday's Law

7.2 Displacement Current



Michael Faraday



Faraday's Law Experiment

1. A coil of wire, X, was connected to a battery.
2. The current that flowed through X produced a magnetic field that was intensified by the iron core.
3. Faraday hoped that by using a strong enough battery, a steady current in X would produce a great enough magnetic field to produce a current in a second coil Y.
4. This second circuit, Y, contained a galvanometer to detect any current but contained no battery.
5. He met no success with steady currents.

Transformer and Motional EMFs