when supplanting manual labour on a large scale by the introduction of his perfected steam-engine, had suggested the term "horse-power" as the common measure of both; and the French mathematicians, who treated mechanics with a view to practical application, had introduced the term "work." In the general industries, however,—outside of special branches, notably marine engineering,—these measures were very crudely applied; they became unintelligible and meaningless where other agencies—notably those of chemistry and electricity—had to be employed. It is only since the terms "power" and "work" have been enlarged and the more general conception of energy introduced that it has become possible to measure the new forces or agencies in terms applicable to all alike. Practically as well as theoretically the system of measurement remained imperfect so long as the energy of chemical combination could not be measured in the same way as Watt measured the energy of heat, and as Joule and others taught us how to measure the energy of an electric current. The term "energy" has thus become as important a conception for practical as it has been long recognised to be for purely scientific purposes. If the only power we use is manual labour or steam power, there exists a crude way of measuring both by the hands employed and the weight of coal burnt; but electrical power is not so exclusively dependent on a personal or material item, and thus it can only be measured by a system in which the several items of cost are reduced to a common term. It is through the wholesale introduction of the electric current as a practical agent that the thing called