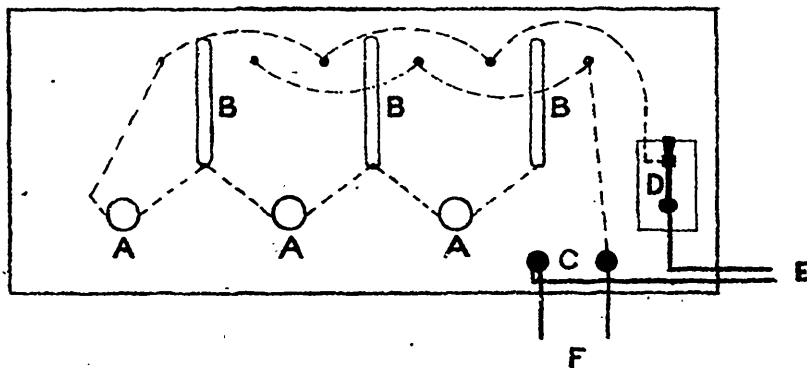


A CONVENIENT RESISTANCE FOR ELECTROLYTIC ANALYSIS. BY J. WATSON
BAIN, B.A. Sc.

(Read 10th February, 1900.

CHEMISTS, who employ electrolytic methods, are often annoyed by difficulties in obtaining a suitable current. Primary batteries are most unsatisfactory in many ways, requiring constant attention, and being subject to considerable variation in their current. Storage cells are very much more convenient, but the necessity of charging is a drawback, and detracts somewhat from their value.

By means of a suitable resistance, the direct current of the ordinary incandescent circuit may be used with great comfort; the variations which occur



are so slight as to be negligible, there are no cells to be kept in order, and the current is always ready for use. A convenient resistance for this purpose has been employed in the chemical laboratory of the School of Practical Science for more than a year, and a brief description of the apparatus, may be of value to those, who have not had time to experiment for themselves.

The arrangement is represented in the accompanying diagram in which *AAA* represent three sixteen-candle power incandescent lamps, with their sockets; *D* is a single throw switch; at *C* are two binding posts, to which are connected the wires *F* leading to electrodes in the solution under analysis;