

will be dependent upon the voltage, while the magnetic effect of the main current through the coil B of low resistance will depend upon the number of amperes passing. The mutual attraction of the coils

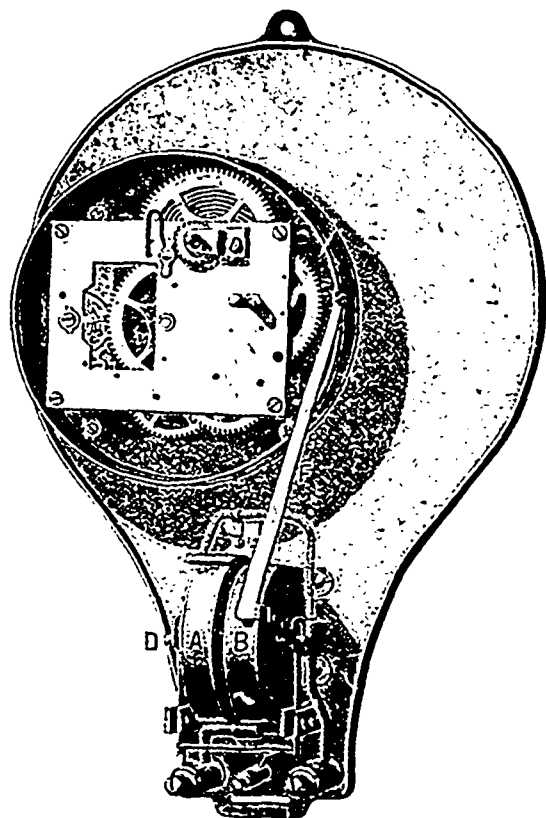


Fig 2.

will be the product of these magnetic forces and proportional to the number of watts.

The marking-arm F is attached directly to the knife edge spring supports of the movable coil and partakes of its motion, recording the variations of electrical energy on a uniformly revolving chart.

While the actual motion of the coil is quite small it will be seen that the angular motion of the pen-arm affords a sufficiently open scale on the chart without resort to ordinary multiplying mechanism which would introduce friction. As the only bearings in the instrument are the knife edge supports of the movable coil it is extremely sensitive to the smallest changes of current. The magnetic balance principle involved in the construction makes it possible to entirely avoid the use of permanent magnets.

The divisions on the chart shown are kilowatts with a total range of eleven kilowatts. The stationary coil is designed for a maximum current of one hundred amperes. For larger currents proportional shunts will be employed.

CAPTAINS OF INDUSTRY.

This department of the Canadian Manufacturer is considered of special value to our readers because of the information contained therein. With a view to sustaining its interesting features, friends are invited to contribute any items of information coming to their knowledge regarding any Canadian manufacturing enterprises. Be concise and explicit. State facts clearly, giving correct name and address of person or firm alluded to, and nature of business.

An addition is being made to the electric plant of G.K. Nesbitt's flour mill, Cowansville, Que.

An arc lighting plant will be installed at Goderich, Ont., by Robert Mainprize, of Wingham, Ont.

The Gibbs-Franchot-MacLaren Company, Ottawa, have been incorporated, capital \$50,000, to manufacture chemicals, etc.

The Dominion Compressed Food and Fodder Co., Barrie, Ont., are applying for incorporation with a capital stock of \$100,000.

A syndicate of American capitalists has leased four thousand acres of land from the Canada Company, three miles north of Thedford, Ont., and test wells for petroleum are being put down.

The Brockville Light & Power Co. are applying for the contract to light the new asylum building. If their application is successful they will require a new alternator of at least 2,000 lights' capacity.

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