

As shown in the accompanying illustration, the apparatus used by us consisted of an induction coil of moderate size and a Crookes' tube of special form.



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FIG. II.

*Northwest Medal Photographed through a Block of Wood.*

Crookes' tubes are made of glass, and were originally designed to exhibit properties of the electric discharge when passed through air at different pressures. The electric current is led into and from them by means of platinum electrodes sealed into the glass and carrying discs or caps of aluminium of different shapes to give variation to the form of the discharge.

When an electric spark is passed through a tube from which the air is being gradually exhausted, it presents a variety of appearances, each being characteristic of the vacuum obtained. At first it consists of a single line of light. It then breaks up into a number of irregular streaks, and this appearance, as the exhaustion goes on, gives place to a bluish colored halo between the electrodes. This halo then breaks up into a