

*Famous Electrical Engineer*

## **KÁLMÁN KANDÓ**

*Made Railroad History*

The outbreak of the first World War overshadowed a major invention by a Hungarian genius, Kálmán Kandó. It was in the Italian Alps that the first large-scale electrification was carried out according to his plans and the locomotives, made by the renowned Ganz Works in Budapest, even exceeded the dream of their modest creator.

Kandó was the one who introduced the three-phase high-tension current to drive the loco's enormous motors. Through his innovation, involving numberless intricate devices and hitherto unknown technical solutions, the earlier loss that occurred through the use of direct current was completely eliminated. The model railroads of Switzerland were also electrified following the Kandó plan.

In the United States the Pennsylvania Railroad's main line, between New York and Washington, justly boasting of perhaps the heaviest ballast anywhere in the world, was electrified according to a slightly modified Kandó system. The "Olympian" and other crack streamliners of the Milwaukee Road over the Rocky Mountains and Washington State are also a living memorial to Kálmán Kandó's contribution in the field of fast and economic haulage.

Though recent dieselization made the Kandó system of secondary importance, wherever cheap current may be derived from water power, the three-phase alternating locomotives are still tops — on any railroad!