ELECTRICITY, GAS AND COMPETITION

Wood served as the primary source of energy until the 1800s. Coal replaced wood in the mid-1800s. Gas use also rose quickly as cities and homes switched to gas lighting and gas heating. By 1900, Edison had created the General Electric Company and cities across the nation were being wired for electricity. By 1910, the electrical industry in the United States had adopted AC power as its standard. It could deliver electricity across the nation. It had also developed the ability to provide household appliances in great numbers.

Gas lights lit most of America's major cities beginning in the 1840s. Gas suppliers realized that they needed reliable, nation-wide delivery systems to compete with electricity. They built effective pipelines in the early 20th century and the use of gas expanded to home heating and cooking.

The first gas stoves were invented in the 1850s. By 1912, gas and electric stoves were in direct competition. The ability to provide immediate heat and sensitive temperature control gave gas stoves the early lead. In the 1930s, however, residential gas use began to decline and electricity use increased. This change was the result of an increased use of electrical small appliances.

Makers of appliances for gas stoves worked hard to compete with electrical appliances. The 1932 Simplex Patent "Quick Boiling" Copper Kettle is an excellent example of adaptation to new challenges. The bottom was improved to heat water faster and more efficiently. The addition of an inwardly curved external skirt that contained a heating coil lifted the kettle so that the hottest part of the flame was used. The coil also captured the radiant heat that would normally escape at the edges, thus adding more heat. The skirt contained a series of openings that allowed air into the open space under the kettle and provided for a more complete combustion. It is still on the market today and in high demand. It is an excellent example of innovation and adaptation to challenge and change.