MINE READER

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COPPER LEADS THE WAY IN INNOVATION

We've explored the crucial role copper plays in modern vehicles and hospitals in past issues of Mine Reader. This week, we look back in time and investigate how the metal made historical discoveries possible.

In 1750, experimenters began to test the use of copper sheathing on boats. This technique protected the underwater hull of a ship from salt water, sea worms and barnacles, which often destroyed the vessels. Usually, a boat's speed would be seriously reduced by barnacles attached to the bottom, forcing it to dock within six months. Copper sheathing proved so successful that ships with mineral treatment can remain in warm seas without being docked for two years!

Ten years after he invented the electric motor in 1821, Michael Faraday developed an electrical generator that converted mechanical energy to electrical energy using a rotating copper disc. He realized that by attaching two wires through a sliding contact to a copper disc, he could maintain continuous direct current, creating the first generator in history.

Shortly after the telephone cable was invented, copper wires replaced the iron and steel wires initially used. In 1884, an experimental long distance telephone line was set up between New York and Boston, Massachusetts, using a copper wire. Today, the majority of houses in the United States use telephone lines that connect to a junction box containing copper wires.

Copper has influenced the past in significant ways and continues to play a vital role in the future. As technologies advance, copper will be there every step of the way, impacting innovations and prompting discoveries.

Sources:
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