After many years of design and construction, the Large Hadron Collider (LHC), by far the world's most powerful particle accelerator, is finally ready for initial testing. The LHC was designed to probe the energy scale and distance scale characteristic of the weak nuclear interaction, a force less appreciated but no less important to our lives than gravity or electromagnetism. I will discuss the mysteries that motivated high-energy physicists to build the LHC, describe some of the challenges of operating it and interpreting its data, and examine its historical importance and scientific potential.