Five Most Significant Inventions

Since becoming bi-pedal, humans have been prolific inventors.
Today we are surrounded by those collective inventions and their offspring.

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Identifying just five crucial inventions since the dawn of modern hominids is quite a challenge. Sometimes we are initially unaware of the true significance of an invention until applied to disparate situations. Then, like a bowling ball smashing into pins, even more new inventions scatter in all directions. This may even be true of the inventions discussed below. To begin identifying inventions, I consulted my dictionary for a definition of 'invention':

> *"The act or process of finding how to make something previously unknown"*
> *Century Dictionary, circa 1900*

Armed with that definition, here are my five inventions in chronological order, not order of importance. You will notice that I've taken the liberty to reclassify some items historically called 'inventions'.

Fire

Circa: unknown. Longevity: Through modern times

More accurately, the *management* of fire. Fire is not a human invention; it is a planet-wide naturally occurring phenomenon. Our ability to harness and control fire to perform useful tasks (heating, cooking, etc.) is the 'invention' part. Many anthropologists and biologists credit the cooking of meat as responsible for our rapid brain development, resulting in increased energy from a diet including meat which allowed us to support energy-demanding larger brains.

Agriculture (Plant and Animal domestication)

Circa: 13,000 – 10,000 B.C. Longevity: Through modern times

This is an 'invention' buried within a natural occurring phenomenon. Warming temperatures as the Ice Age ended allowed a proliferation of various plants around the Northern Hemisphere during what is now called the Neolithic Age. The Neolithic 'Revolution' was the transition of hunter-gatherer humans to the development of agriculture and the creation of farming villages. Crops and animals were domesticated over time to provide a constant food supply, allowing others more creative tasks. This gathering of peoples was responsible for production of textiles, pottery, buildings, tools, metalwork and the eventual Bronze and Iron Ages.

Hydraulics

Circa: 6,000 B.C. Longevity: Through modern times

Waterpower was first used in Mesopotamia and Egypt for irrigation, and later in the Roman aqueducts. In the 1600's Pascal's principle eventually paved the way for the incorporation of hydraulics in transportation (think automotive brakes and power steering), construction equipment (enables ability to lift huge loads), aircraft, industrial machinery, gas pumps, and even your office chair.

Wheel/Axle

Circa: 3,500 B.C. Longevity: Through modern times

The wheel was probably invented somewhere in antiquity by our ancestors watching a boulder roll down a hill. But the wheel by itself has very limited use, it was the marriage of the wheel and the stationary axle that created a mechanism with wide-ranging applications. Gears (Chinese 2700 B.C., Romans 300 B.C.) are the direct consequence of the wheel/axle, and like the wheel, are ubiquitous in modern society.

Electricity Harnessed

Circa: 1800s A.D. Longevity: Today and the future

Electricity, like fire, is a natural occurring phenomenon, as proven by Benjamin Franklin's famous experiment. The 'invention' part of electricity was figuring out how to produce and control it at will. Faraday's work discovering the basics of electricity allowed innumerable scientists and inventors created new products and industries. Every part of modern life is touched in some way by electricity.

There are about fifteen other inventions that I initially listed but discarded, such as concrete, compass, steam engine, printing press, light bulbs, transistors, antibiotics, vaccines, maps, paper, paved roadways, refrigeration, etc., etc. Each of these is pivotal in their own right but also seem to be off-shoots of some greater works.