

THE EXTRAORDINARY HISTORY OF THE PIPE ORGAN

The organ is the oldest keyboard instrument. It was first mentioned in 300 BCE, and its invention has been credited to Greek engineer Ctesibius of Alexandria. It remained the only keyboard instrument for more than fifteen hundred years and is one of the only instruments designs of antiquity still making music today.

- **300 BCE** – *Hydraulis* (the organ’s predecessor) invented by Ctesibius. Wind to the pipes was supplied and controlled by water pressure. Played in sports arenas throughout the Roman Empire. Wide wooden keys (no ‘black key’ sets).
- **100 CE** – Inflatable leather bag introduced.
- **395 CE** – *Positive* organ first introduced, which was built to be portable and would be commonly played in sacred and secular music between the 10th and 18th centuries.
- **500-600 CE** – Bellows like a blacksmith’s began to be used to supply wind to pipes in the Eastern Roman Empire. Played during leaders’ dinner parties.
- **812 CE** – First chapel organ built for Charlemagne in Aachen, now part of Germany. It was based on one with leaden pipes that had been given his father, King Pepin the Short, by Byzantine Emperor Constantine V in 757 CE. The organ had already been played for over 1000 years before it was heard in a church.
- **1250** – *Portatives* (portable organs) with a laptop design, became widely used in Europe and had balanced, narrower keys. Still no ‘black key’ sets.
- **1200s** – Foot pedals that looked like stubs (nicknamed *mushrooms*) added. They held long bass drone notes, ‘pedal points’ over which melodic lines were played.
- **1361** – ‘Black keys’ added, marking the first chromatic keyboard. Short pedalboard also included some ‘black keys.’ First permanent organ installation in Halberstadt, Germany. Each key produced a blended sound from several ranks of pipes played in octaves or set intervals (usually fifths).
- **1404** – *Clavicimbalum* and *clavichordium* (harpsichord and clavichord) mentioned in the German poem ‘Der Minne Regeln.’ Both likely invented 100 years prior, in early 1300s.
- **1450** – Controls (early stops) developed that allowed ranks of pipes to be played separately. Individual sounds could now be heard one at a time or mixed.
- **Renaissance and Baroque eras** – the tonal colours were expanded to include sounds that imitated other instruments.
- **1600** – Builders expanded the range of the *pedalboard* until it encompassed two octaves-plus-a-fifth that became standard.
- **Romantic era** – Organs became more symphonic and capable of creating crescendos and diminuendos with the introduction of the *swell* expression pedal.
- **20th century** – electricity began to power the wind supply and digital controls were added to pipe organs. Completely digital organs were developed.

Sources: Several articles on Wikipedia, including: Pipe organ, Pedal keyboard, Positive organ, Portative organ.