HISTORY OF THE OFFICE CHAIR by Georgina Reed [Reed/Write]

The third President of the United States of America, **Thomas Jefferson** (1743-1826), invented the first *swivel* chair. Jefferson heavily modified the Windsor chair by using a central iron spindle between the top (seat & back) and bottom (base) parts, which enabled the chair to swivel.



Later 'castors' (the type used in rope-hung windows) were attached to the legs or base of the chair to give it mobility.



Charles Darwin the English naturalist and geologist best known for his contributions to evolutionary theory, was the first person to fit wheels to the chair in his study which made it easier for him to move around between his specimens.

Usually an office or *desk* chair, as they were then known, was used while sitting at a writing desk. The swivel chair, fitted with castors for mobility, was later fitted with an adjustable height handle. The chair's height could be moved up or down by turning a large screw/dial handle.



American inventor **Thomas E. Warren** (b. 1808), designed the Centripetal Spring Armchair in 1849 which was produced by the American Chair Company in Troy, New York. First presented at the 1851 Great Exhibition in London, these chairs had a combination of wrought iron framework and velvet upholstery, with some models including a wrap around skirt to cover the legs – to maintain modesty!

This design was possibly the earliest example of what we now refer to as a task chair.

Conceived at the beginning of the industrial revolution, the design was also adapted for use on railway carriages as the springing seat helped to absorb shock from the train's movement. It had most of the significant features that might distinguish a work (task) chair today including castors, head support, height adjustment and a rotating seat. The only thing missing was adjustable lumbar support.

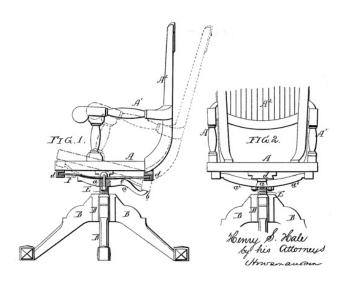
Victorian London in the 1850's did not take to this chair in the slightest! It was deemed to be "so comfortable as to be immoral"!



Isaac Singer designed the original Singer chair in 1850 for use with his revolutionary new invention, the sewing machine. These chairs were far more basic than the Centripetal model shown above, but served their particular purpose equally well. Generally made of wood on a metal base, they allowed the user to swivel but beyond that, they had little functionality.

Inventors and designers in the mid 19th century filed a flurry of patents, all attempting to improve on the 'desk' chair.

In 1875 **Henry S Hale** patented his "tilting chair". (see drawing) → Groups of engineers and doctors combined their expertise to design seating that amalgamated comfort with a healthy working environment. This was the beginning of office ergonomics.





Studies of human body movements were done in order to create chairs that made tasks like sewing, surgery, hairdressing and dentistry easier. This period saw the development of chairs with adjustable backrests, seat heights, seat-tilt tension and other features that would be recognised in ergonomic chairs more than a century later.

The first one-piece reclining barber chair with an attached footrest was patented in 1878 by the Archer Company of Saint Louis. By the

1890's, the 'Paragon' upholstered barber's chair could be raised and lowered, reclined and revolved on a hydraulic mechanism. This evolution would not be used in office seating until the *middle of the 20th century!*

Americans were more used to sitting in rocking chairs than their European cousins, so they found chairs that had adjustment and movement more acceptable than the Victorian (British) inspired belief that comfort was immoral.

Glasgow architect **Charles Rennie Mackintosh** designed high back chairs that were more in keeping with the aesthetics of a building's architecture than any considerations of comfort. His impractical, uncomfortable and sometimes illogical designs were most akin to artwork than for sitting.



American architect **Frank Lloyd Wright**followed on with the same abstract principles
when he designed the Larkin Executive chair to blend in with the
architecture of the Larkin Building designed in 1904 and built in
1906.

If you think this chair looks uncomfortable, consider the chair he designed for the secretarial staff. It had only three legs so both feet had to

be planted firmly on the floor in order to prevent the chair from falling over. If a typist should lean the wrong way they'd likely find themselves toppling to the ground!



Steelcase, the world's largest manufacturer of office chairs was founded in 1912 in Grand Rapids, Michigan. They have been responsible for many outstanding modern office chairs for over 100 years and continue to contribute to the advancement of ergonomic designs.





Steelcase designs old and new



In 1958 furniture designers **Charles and Ray Eames** introduced the "Eames Aluminium Group" and their task chair is an icon of office furniture design.

Introduced in 1959, the 'Time Life' chairs were designed for the ultra modern lobbies of the Time Life building in New York.

These chairs are now considered classics and are still specified today!

In the 1970s, ergonomics became an important design consideration for office chairs. One of the best additions was the gas-spring invented by Drabert Fritz in 1972. This allowed people to adjust the seat height of the chair easily and quickly for greater support and comfort.

Today most office chairs have adjustable seat and height (gas lift), seat tension and tilt, back and arm rests and back supports to prevent repetitive stress injury and back pain associated with sitting for long periods. Ergonomic chairs can be adjusted to suit individual needs using a synchron or multi-lever adjustment.

There are still many employers who only pay lip service to ergonomics because they don't realise that a poorly designed or badly made chair can cause discomfort, physical impairment and even permanent injury to the user. Hopefully with better education and improved knowledge they may come to understand that by providing staff with well-designed, quality office chairs, coupled with a comfortable working environment, they will reap the benefits of better staff morale and higher productivity.



The modern ergonomic KENZO Office Chair – by ChairPro