



PER HENRIK LING - PIONEER OF PHYSIOTHERAPY AND GYMNASTICS

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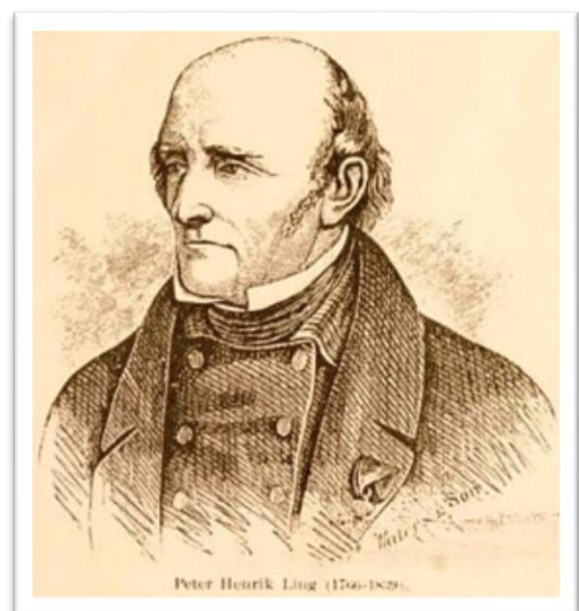
Abstract:

In the early 1800s, Peter Henry Ling (also known as Per Henrik Ling) was perhaps the first to notice what numerous others pioneers of physiotherapy have already observed in the past centuries: massage and physical exercises are critical for healing many chronic and acute forms of pain. Even in some way controversial, Ling is widely considered the "*Father of Massage*". Like many massage therapists and body workers today, he used his own knowledge and experience with pain and injury to craft methods and techniques that shaped the basis of his practice and, ultimately, of massage itself.

Keywords: Per Henrik Ling, medical gymnastic, gymnastic pioneer; Swedish physiotherapy, massage

Introduction

Per Henrik Ling (1776–1839) was a Swedish medical gymnastic practitioner. He pioneered the teaching of physical education in Sweden. Ling is often erroneously recognized as the father of Swedish massage, though that title actually belongs to Johann Georg Mezger.



Early life

Ling was born in Södra Ljunga, Småland in 1766. His parents were Lars Peter Ling, a minister, and Hedvig Maria (Hedda) Molin. On his maternal side, Ling was the great-great grandson of the famous Swedish scientist Olof Rudbeck (1630–1702), who discovered the human lymphatic system.

His family tree extends back to the sixteenth century and includes clergymen and peasants. His great grandfather apparently lived to 105 and had seventeen sons and two daughters. After graduating from the Växjö gymnasium in 1792, he studied theology at Lund University from 1793, completing his degree at Uppsala University in 1799. After that, Per Henrik Ling, worked as a tutor for several families for the next three years.

In 1800, Ling left Sweden, lived abroad, and traveled for seven years. It was a different kind of instruction for the accomplished scholar, and he was exposed to experiences that helped contour his academic research. He studied modern languages at the University of Copenhagen. He then traveled to Germany, France, and England. He took part in a naval battle as a volunteer on a Danish ship.

Ling studied Goethe and Schiller, the Edda and northern mythology, and composed original poems in Swedish, German, French and Danish. He learned fencing at a school of French emigres and noticed its benefits, and those of physical education, on the gout in his arm. Financial difficulties and rheumatism caused him to return to Sweden.

Ling had a passion for his newfound talent. Yet he realized that, though fencing was a valuable fitness exercise, it alone couldn't heal his body. Despite his youth, he was afflicted by physical problems such as rheumatism and lung disease, and had developed gout in his arm. He began doing a series of passive movements that involved stroking, pressing and kneading the body. Ultimately, he perceived that they had a positive effect on his health.

Educational career

He read Johann Christoph Friedrich GutsMuths' book *Gymnastics for the Youth*, and participated in the gymnastic exercises of the originator of Danish gymnastics, Franz Nachtegall. He returned to Sweden 1804 in order to establish a gymnastic institute.

After his return in Sweden, Ling began a routine of daily exercises, including fencing, and in 1805 was appointed as a master of fencing at Lund University. Having

discovered that his daily exercises had restored his health, Ling decided to apply this experience for the benefit of others. He saw the potential of adapting these techniques to promote better health in many situations and thus expanded his knowledge by attending classes in anatomy and physiology, and by attending through the entire curriculum for the training of a medical doctor.

Ling saw potential in these movements, which he called "*medical gymnastics*", and wanted to educate people on his "*suitable systematized exercises*." He felt that, by performing these movements, the body and the mind would feel and perform better.

He then outlined a system of gymnastics, exercises, and maneuvers divided into four branches:

- pedagogical,
- medical,
- military, and
- aesthetic, which carried out his theories and demonstrated the scientific rigor to be integrated or approved by established medical practitioners. Ling was the gymnastics instructor in the Military Academy at Carlsberg.

After several attempts to interest the Swedish government, Ling at last obtained government cooperation in 1813, and founded the Royal Gymnastic Central Institute for the training of gymnastic instructors was opened in Stockholm, with Ling appointed as principal.

Ling really cared about healing people, and dedicated the rest of his life to building on the system he had created. Like therapists, teachers and educators today who have spent many years in the field, he undertook his work because he recognized the value of touch. He never gave up on his values, and was dedicated to undertaking his study "*by the most careful and untiring analysis of details*."

He was praised for his personal qualities as well. Mathias Roth, one of Ling's students, wrote:

"Ling was a man of high moral tone, pious, sincere, honest in all his dealings with his fellow man. His intellectual powers were of a very high order; he loved with the same energy with which he worked, the objects of his home-affections, his friends, the poor, his country, and mankind."

In the 2010 edition of his book, "*Theory and Practice of Therapeutic Massage*", Mark F. Beck wrote:

"Per Henrik Ling is known as the father of physical therapy." He continues: "Per Henrick of Sweden developed medical gymnastics later known as the Swedish Movement Cure and the precursor to Swedish massage."

Ling invented physical education apparatus including the box horse, wall bars, and beams. He is also credited with developing calisthenics and free calisthenics.

Orthodox medical practitioners were opposed to the claims made by Ling and his disciples. However, by 1831, Ling was elected a member of the Swedish General Medical Association (*Svenska läkaresällskapet*), which demonstrated that his methods were regarded as worthy of professional recognition.

He was elected a member of the Swedish Academy in 1835. In the same year became a titular professor.

Legacy

When Ling died of tuberculosis in 1839, he had charged three of his pupils with carrying on his legacy. These pupils were Lars Gabriel Branting (1799–1881), who succeeded Ling as principal of the Institute; August Georgii, who became sub-director of the Institute; and his own son, Hjalmar Ling (1820–1886). These three, along with Major Thure Brandt, who from c. 1861 specialized in the treatment of women (*gynecological gymnastics*), are regarded as the pioneers of Swedish medical gymnastics.

Although Ling is sometimes credited as the father of Swedish massage, it was not a part of his Gymnastic Movements nor the curriculum of the Royal Central Gymnastic Institute founded by Ling in 1813. The "*Swedish massage*" techniques effleurage (long, gliding strokes), petrissage (lifting and kneading the muscles), friction (firm, deep, circular rubbing movements), tapotement (brisk tapping or percussive movements), and vibration (rapidly shaking or vibrating specific muscles) are largely credited to Johann Georg Mezger (1838–1909).

Some sources mention that Ling learned massage from a Chinese friend, Ming, but this was an invention of Ling's rivals, in an effort to discredit his work. Although Ling was probably aware of Chinese massage, he instead developed a system of integrated manual therapy, combining physical training and gymnastic procedures with knowledge of anatomy, physiology, and pathology.[8] He was the first to publish and popularize such a system with modern scientific knowledge.

Ling's system of medical gymnastics also influenced later institutions and systems. The Gymnastic Orthopedic Institute was founded in Stockholm in 1822 by Nils Åkerman, which from 1827 received a government grant. Around 1857, Gustaf Zander

developed a medico-mechanical system of gymnastics, known by his name, and started his Zander Institute at Stockholm in 1865. At the Stockholm Gymnastic Central Institute, qualified medical faculties have supervised the medical department since 1864.

Broadly speaking, there have been two streams of development in the Swedish gymnastics founded on Ling's beginnings, either in a conservative direction, making certain forms of gymnastic exercises subsidiary to the prescriptions of orthodox medical science, or else in an extremely progressive direction, making these exercises a substitute for any other treatment, and claiming them as cures for diseases. A representative of the latter, more extreme section was Henrik Kellgren (1837–1916), who had a special school and following.

Other accounts of Dr Ling's practice and philosophies were published: a "*Handbook of Medical Gymnastics*" (English edition, 1899) by Anders Wide of Stockholm represents the more conservative practice. Henrik Kellgren's system is partially based on Ling's, and is described in "*The Elements of Kellgren's Manual Treatment*" (1903) by Edgar F. Cyriax, who, before earning his MD at Edinburgh, had served at the Stockholm Institute as a gymnastic director.

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