Adjustive footcare was proposed and practiced by the founder of chiropractic (Palmer, 1910; Palmer & Palmer, 1906), and manipulation of all joints and tissues was similarly advocated by A.T. Still, founder of osteopathy (Still, 1910). Although Still's interest in footcare per se is unclear, at least one of his students at the American School of Osteopathy in Kirksville, Missouri would eventually pioneer manipulative footcare on the west coast. Indeed, much of the history of manipulative approaches to foot disorders in the U.S. must be credited to John Martin Hiss, D.O., M.D., an osteopath, orthopedic surgeon, and innovator in these methods.

By one account (Wheadon, 1991), John Hiss learned his manipulative methods for the care of the feet from A.T. Still. However, according to Rue Ticker, D.P.M., a podiatrist who worked in one of Hiss' foot clinics, Hiss had related Still's suggestion that he and Hiss should collaborate in studying and developing methods of diagnosis and manipulative treatment of foot disorders (Ticker, 19???). Either way, the Still-Hiss connection is among the earliest focused efforts on developing this field.

John Hiss was probably licensed initially as a "ten-fingered osteopath" under California's Drugless Practitioner's Act. He later (WHEN???) matriculated at Ohio State University, where he earned his medical degree and perhaps also diplomate status in orthopedics. In any case, he would in later years identify himself as an orthopedic surgeon (Hiss, 1949).

Hiss’ assessment strategies involved an elaborate system for the classification of feet, foot disorders, and pathologies, and evaluation of the ranges of motion of the various joints of the foot. He advocated testing of general foot mobility by stressing individual joints, what might today be identified as "motion palpation." He repeatedly emphasized the importance of functional joint play in the cuboid and other tarsals in the metatarsalphalangeal joints. Hiss believed that the forefoot should be freely moveable on the rearfoot (the forefoot should easily circumduct on the rearfoot) in order to achieve general foot mobility and relieve
pain (Hiss, 1949); his evaluation of this function he termed the "general foot mobility test". Hiss believed that a lack of general mobility explained why one patient with a great deal of radiographically visible degenerative joint disease might have little pain, while another without evidence of osteoarthritis but lacking adequate joint play would suffer.

Hiss' manipulative interventions were directed at restoring normal function (i.e., mobility), after which padding, strapping, an "off the shelf" orthotic device ("cuboid" stabilizers: soft to semi-rigid orthotics that cupped the heel for stability, added extra support under the calcaneal-cuboid joint, and had a built-in slight metatarsal "lift", similar to to a metatarsal pad), various arch supports, and occasionally medication might be prescribed. Hiss also pioneered in bunion surgery, about which he devoted a chapter in his classic text (Hiss, 1949). However, despite his formal medical training and interest in foot surgery, his primary methods of treatment were clearly manipulative.

Hiss established a series of specialty clinics in California for the diagnosis and treatment of foot disorders. Treatment rooms had a recessed round pit around which specially designed chairs were placed so that the clinician could easily move from patient to patient (see Figures 1 and 2). The clinics were often operated in association with shoe stores which sold footwear designed by Hiss to deal with various pathologies, such as bunions, hammer toes and metatarsalgias (Hiss, 1949; Wheaton, 1991). Hiss' "cubiod stabilizer" was dispensed in the shoe stores very frequently. For example, if Hiss prescribed for a bunion patient a shoe that was wide in the forefoot, he often recommended that the cuboid-stabilizer be added to fill up the wider rear portion of the shoe in order to stabilize the patient's heel.

This arrangement (i.e., clinics and shoe stores), plus the use of manipulative methods, and the fact that Hiss openly advertised his osteopathic credentials and collaborated with podiatrists and chiropractors, drew considerable hostility from the medical community, particularly orthopedists. According to podiatrist Charles R. Brantingham (1991), the chiropodists-turned-podiatrists who were trying to raise their status by distancing themselves from chiropractors, were also offended by Hiss' work. For his part, Hiss defended his customed designed and fitted shoes on the grounds that he, an osteopath and orthopedist who specialized in foot problems, was better qualified for this work than most of his critics (Hiss, 1949). In any case, the hostility he experienced apparently did not interfere with Hiss' surgical privileges at Temple Hospital in Los Angeles (Wheadon, 1991).

-------------------------
Figures 1 and 2 about here; from Hiss (1949, pp. 254-5)
-------------------------

In the 1950s and 1960s Hiss made extensive use of television advertising to market his clinics and shoe stores, thereby further alienating the orthodox medical community. According to Brantingham (1991), the inspiration for the coupling of Hiss' clinics and shoe stores came from a shoe company, which had noted the financial success of a Canadian physician, Dr. Locke, who had engaged in foot manipulation and the design of special
footwear. The spectacular business success of the Hiss clinics allowed Hiss and his staffs to become very skilled in the care of certain conditions. Exemplary was Morton's neuroma (which Hiss preferred to call lateral plantar neuritis). Hiss estimated that he had seen some 48,000 cases of this condition by the time the third edition of his text was published in 1949.

Much of our knowledge of John Hiss derives from the recollections of Mel Wheadon, a chiropractor who practiced in Hiss' clinics in the 1940s, 1950s and 1960s. Wheadon's role as a chiropractor in a multi-disciplinary health facility (which included medical doctors, osteopaths, and podiatrists) is rather unique for this time period, both in that a chiropractor was welcomed by these more "orthodox" practitioners, and that Wheadon limited his practice to foot disorders. Wheadon was born in 1915, attended Loyola University in Los Angeles for a year, and earned his DC from the Palmer School of Chiropractic (PSC) in 1936. His technique education at the PSC included the "hole-in-one" technique and full-spine adjusting, but provided supervised experience only in upper cervical interventions. His chiropractic training provided no instruction in adjustive/manipulative care of the foot nor other extremities, and he graduated with no awareness of D.D. Palmer's (1910) interest and extensive writings on manipulative care of the foot.

Wheadon, a fighter pilot ace at Guadacanal during World War II, met John Hiss around 1943-44 while stationed on the west coast. Hiss' initial impression of Wheadon was negative, owing to the stigma associated with chiropractic. After the war, however, the two became better acquainted, and Wheadon was invited to study conservative foot care under Hiss. Wheadon became a strong supporter of Hiss' theories, developed a close friendship with Hiss over the years, and was credited by his mentor in the 1949 (third edition) of Hiss' book. The chiropractor and osteopath/orthopedist provided for each other's health care, particularly spinal manipulation.

By 1948, Wheadon's chiropractic practice involved foot disorders almost exclusively. At one point he operated one of the "Dr. Hiss" clinics in San Jose (Wheadon, 1991), and typically saw 50-60 foot patients daily. Wheadon was not as likely to prescribe Hiss' cuboid-stabilizer, but often provided his patients with a cork and leather orthotic in addition to his manipulative care. Wheadon viewed the manipulative component of his care as the most important part of his intervention.

Wheadon's branch of the Hiss clinics included on its staff two "ten-finger osteopaths," two chiropodists, and two medical doctors, all of whom shared clinical information with one another readily (Wheadon, 1991). Wheadon sometimes covered for other staff doctors, and indicates that on one occasion he saw as many as 168 patients in a single day while covering for one of the osteopaths in addition to seeing his own patients. Wheadon recalls treating the wives of many MDs, and does not recall any outright, overt persecution.

Some of Wheadon's skill in padding, strapping and the use of orthotics was learned from Rue Ticker, D.S.C (Doctor of Surgical Chiropody), a dissenter among the podiatrists who was rebuffed in
his efforts to introduce manipulative methods to the curriculum at the California College of Chiropody (now the California College of Podiatric Medicine in WHAT CITY?). According to Brantingham (1991) and Wheadon (1991), Ticker’s efforts were roundly rejected; however, Ticker may have been responsible for placing Hiss’ book in the school’s library, where it was later discovered by Richard Brown, D.P.M.

Hiss himself donated *Functional Foot Disorders* to a number of chiropractic, osteopathic, podiatric, and possibly even medical colleges (Wheadon, 1991). Despite these efforts, and despite the interest in foot manipulation shown by a few in these professions (e.g., Palmer, 1910; Mennell, 1940; Dishman 19??), manipulative care of the feet remains a generally neglected art.

**REFERENCES**

Brantingham CR. Interview with J. Brantingham, D.C., January 10, 1991


Dishman RW. (Re: manipulative care of feet; see *Dynamic Chiropractic*


Palmer DD, Palmer BJ. The science of chiropractic. 1906, Palmer School of Chiropractic, Davenport. Reprinted by the Parker Chiropractic Resource Foundation, 1988

Palmer DD. The chiropractor's adjuster: the science, art and philosophy of chiropractic. 1910, Portland Printing House, Portland OR

Still AT. Osteopathy, research and practice. 1910, privately published, Kirksville MO

Ticker R. Interview with R.A. Brown, D.P.M., WHEN???

Wheadon M. Interviews with J. Brantingham, D.C., January 8, 9 and 16, 1991

**LEFT-OVER REFERENCES**


Gillet H. Belgium chiropractic research notes. 1980, ??Motion Palpation Institute, Huntington Beach CA??

Janse J et al. Chiropractic principles and technic. 1947, National College of Chiropractic, Chicago IL


Palmer BJ. The subluxation specific - the adjustment specific. 1934, Palmer School of Chiropractic, Davenport IA

Smith OG, Paxson MC, Langworthy SM. Modernized chiropractic. 1906, American School of Chiropractic, Cedar Rapids IA


Zarbuck MV. A profession for "Bohemian Chiropractic": Oakley Smith and the evolution of naprapathy. Chiropractic History 1986; 6: 77-82
February 4, 1991

Someone
Some Company
Some Street
San Antonio TX 78212

Dear Carl,

Thank you.

Sincerely,

Joseph C. Keating, Jr., Ph.D.
Professor