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Mahlon William Locke: "Toe-Twister"*

BARBARA CLOW

Abstract. Mahlon Locke was a Canadian physician who attracted international attention in the 1930s with an unusual therapy. Through a process of foot manipulation, popularly known as "toe-twisting," Locke seemed able to relieve many intractable cases of arthritis as well as a variety of related afflictions. Sufferers flocked to his clinic in Williamsburg, Ontario and, at the height of his fame, he was tending literally hundreds of people each day. Despite this spectacular public reaction, however, Locke is an obscure figure in Canadian history. People who lived through the Great Depression may remember the crowds lining the streets of Williamsburg or the media coverage of the clinic, but later generations are largely unacquainted with this unusual practitioner. One purpose of this paper, then, is simply to recapture and recount his story for the record.

At the same time, Locke represents more than just a curious episode in Canadian history; he inspired strong and divergent opinions and the study of these reactions can help us to understand the social and medical climate of this period. In this discussion, I have focused on the attitudes of Locke's orthodox medical colleagues with particular attention paid to the disparate reactions of physicians in Canada and the United States. Thus, the other aim of this paper is to suggest that, despite shared definitions of health and healing, Canadian and American doctors responded differently to Locke as a result of fundamental differences in the tradition and character of each medical community.

Résumé. Mahlon Locke était un médecin canadien qui, dans les années trente, attira l'attention du monde entier grâce à une thérapie peu orthodoxe. Il était capable, selon toute apparence, de soulager de nombreux cas d'arthrite réfractaires à tout traitement ainsi qu'un certain nombre d'affections similaires, par une technique de manipulation du pied populairement connue sous le nom de «torsion des orteils». Les malades arrivaient en foule à sa clinique de Williamsburg (Ontario) et, au sommet de sa gloire, le nombre des personnes qu'il traitait quotidiennement atteignait plusieurs centaines.

En dépit de cette popularité spectaculaire, Locke demeure une figure méconnue de l'histoire du Canada. Ceux qui ont vécu la Grande Dépression se souviennent probablement des files d'attente de patients dans les rues de Williamsburg, ou encore de la manière dont les médias de l'époque se firent l'écho de la clinique; mais les générations suivantes ignorent presque tout de ce

Barbara Clow, Department of History, University of Toronto, Toronto, Ontario M5S 1A1.

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praticien hors du commun. Le premier objectif de notre travail est de recréer et de raconter simplement la vie de Mahlon Locke, afin de la consigner par écrit.

Par ailleurs, cet homme constitue plus qu'une simple curiosité de l'histoire canadienne; il a suscité des opinions divergentes et bien tranchées, et une étude de ces dernières peut aider à comprendre le contexte médico-social de l'époque.

Notre analyse met en valeur les attitudes des confrères orthodoxes de Locke, mais en accordant une attention particulière aux réactions hétérogènes des médecins canadiens et américains.

Le second objectif de notre travail est de montrer que, nonobstant une définition commune des concepts de santé et de guérison, les réactions des médecins canadiens au sujet de Locke divergent radicalement de celles de leurs confrères américains en raison des différences fondamentales dans la nature et la tradition de chacun des deux corps médicaux.

During the 1930s, a Canadian physician and his unorthodox arthritis therapy became the focus of international attention. Through a process of foot manipulation, popularly known as "toe-twisting," Mahlon Locke seemed able to relieve many cases of this painful, crippling disease, and sufferers from around the world arrived at his clinic in Williamsburg, Ontario. At the height of his fame, he was tending thousands of patients each week. Locke's story is worth recounting simply because it is so unusual; Canadian historians have too often overlooked or neglected such colorful individuals. At the same time, Locke was also an historically significant figure because he inspired strong and divergent opinions. The curious and the crippled were enthralled with him but, generally, orthodox physicians were not: Locke was openly denounced by American doctors; his medical colleagues in Canada all but ignored him. This difference between the reactions of Canadian doctors and their American counterparts is especially interesting because it serves to highlight a fundamental difference in the character of each medical community.

Ideally, Locke should be studied within a variety of contexts. An examination of popular reactions to his work would help to uncover the nature of attitudes to health and healers among the general public in early twentieth-century Canada. It would also be worthwhile to assess his "toe-twisting" in relation to alternative medicine, for his treatment bore some affinity to bonesetting and its progeny, osteopathy and chiropractic, as well as to other alternative therapies such as reflexology. Further, the overwhelming response to Locke's treatment suggests that it may not be entirely appropriate to speak of a medical "monopoly" by orthodox physicians in the early twentieth century.[1] Rather, his case tends to support James Patterson's contention that a medical counterculture persisted and flourished in the twentieth century despite the legislative and numeric advantages achieved by the regular medical community.[2] It is not the purpose of

this article, however, to provide an in-depth analysis of popular attitudes or to provide a definitive account of "quackery." Consequently, these issues will be touched on in the following discussion only as they help to round out the portrait of Locke's life or to clarify the central comparison of the medical communities in Canada and the United States.

Locke was born on 14 February 1880, near Dixon's Corners, Ontario, the son of a farmer. He entered Queen's University in 1901 and four years later graduated from the Faculty of Medicine. Almost immediately Locke began a short apprenticeship in Brinston, Ontario with his stepfather. In 1906, he accepted a position in Sault Ste. Marie as company doctor for the Algoma Steel Corporation and practised there for the next year. After accumulating some savings and acquiring some experience, Locke decided to pursue post-graduate work in Britain. He spent a year in Scotland and returned to Canada in May 1908 as a licentiate of the Royal College of Physicians and Surgeons at Edinburgh and at Glasgow.[3] Shortly thereafter he purchased a practice in Williamsburg, Ontario—a village of about three hundred people not far from the family farm and Dixon's Corners.

For the next two decades, Locke led a very busy life as a country doctor. In addition to his local practice and his responsibilities as a father of four, Locke acted as the district coroner and established office hours in Prescott, Ontario—a community some 30 miles away.[4] During the same period, he began to develop his unorthodox arthritis therapy. The first patient to benefit from the treatment was Peter Beckstead, the village blacksmith. Beckstead approached the doctor in the spring of 1909 complaining of fallen arches. His discomfort was so great that he could not even walk, let alone ply his trade. "I had to go upstairs on my hands and knees," he said. "I couldn't bear the heft of the quilts on my feet."[5] Through his unusual manipulation technique, Locke apparently restored the correct position of the bones in Beckstead's arches and prescribed a series of exercises to strengthen his feet. He also commissioned the local shoemaker to fit "cookies"—rounded leather arch supports—into the blacksmith's shoes. These inserts served to maintain the alignment of the bones between manipulations.[6] Within six months, Beckstead claimed his recovery was complete. This success convinced Locke of the merits of his therapy and he began to administer foot manipulation to other patients.

Locke treated perhaps 15 of these special cases every day while his regular practice continued to claim the bulk of his attention.[7] After 1925, however, the pace of his practice accelerated dramatically. A succession of newspaper and magazine articles focused public attention on Locke's clinic and patients, some of them prominent individuals, began to arrive in Williamsburg from across Canada, from the United States, and from overseas.[8] By the late 1920s, the number of

sufferers queuing up outside the clinic had soared to 200 per day.[9] Grant Dexter, a journalist for *The Canadian Magazine*, wrote, "the world has sought out Dr. Locke, found him in his little village, beaten a pathway to his door."[10]

In 1932, Rex Ellingwood Beach, a novelist, was visiting friends in Ottawa when Locke's work was brought to his attention. Prompted by curiosity and painful arches, he decided to investigate the claims made for the therapy. Like many others, Beach left Williamsburg with his pain alleviated and his doubts quelled.[11] "After five treatments," he wrote, "I came away with my insteps arched like a cat's back and I now have the aristocratic feet of a duchess."[12] Attendance at the clinic reached new heights after Beach published an article about Locke in the August 1932 issue of *Cosmopolitan Magazine*. Contemporary estimates of the size of Locke's practice after 1932 vary between 1,000 and 2,500 people per day.[13] While these figures cannot be accepted uncritically, they are consistently high. Even without a reliable enumeration, there is no doubt that Locke was tremendously popular. By the early 1930s, Williamsburg had become the Canadian mecca for arthritis sufferers.

Not only was the therapy unusual in itself but also the operation of the clinic was completely unorthodox. Under normal circumstances, Locke would have tended his patients in their own homes or in his house, using a small consultation room and dispensary. But the phenomenal growth of his practice forced Locke out-of-doors; during the winter a converted shed served as a clinic while in the summer he simply treated patients on the lawn beside the house. The grass and garden were soon destroyed by the masses streaming into Williamsburg so Locke had the area paved for convenience. Eventually a wooden pavilion was erected to shelter the crowds.[14] Rising early in the morning, the doctor stationed himself in a revolving office chair in the yard while his patients—on stretchers, with canes, in wheelchairs—formed a dozen lines that converged on the chair. As each sufferer approached the inner circle, Locke would manipulate his or her feet, prescribe the frequency and duration of treatment, and spin on to the next patient. He paused only to tend local patients, to eat a meal, or to wind his revolving chair back up to its original position. In this way, he actually did manage to treat thousands of people every week for, according to Rex Beach, "twenty seconds usually sufficed for a complete manipulation"[15] (see Figures 1 and 2).

Locke's interest in foot manipulation began during his Edinburgh days. Along with the usual lectures, students were taught that certain deformities, such as fallen arches, could be corrected manually.[16] Unlike his colleagues, however, Locke came to believe that foot manipulation might be useful in the treatment of arthritis. His therapy was based on the theory that faulty foot conformation exerted pressure on

Figure 1
"The Circle": Patients await Locke's arrival.
(Photograph courtesy of Robert Jackson, M.D.)

Figure 2
Locke at work: "Twenty seconds usually sufficed for a complete manipulation."
(Photograph courtesy of J. T. H. Connor)

the posterior tibial nerve which, in turn, created a chain reaction of pain and posture problems elsewhere in the body.[17] The cause of incorrect alignment might be congenital deformity, trauma, or infection but often the arches would collapse simply because a patient had risen from bed too soon after a bout of flu. With the muscles and ligaments insufficiently toned to support the weight of the body, the arches were vulnerable to damage.[18] Locke reasoned that by restoring the correct position of the tarsal and metatarsal bones, pressure on the nerves and blood vessels would be eliminated and associated problems would disappear gradually.[19]

Locke's therapy did not consist only of "toe-twisting," however; his assistants regularly administered passive exercise to patients in order to tone muscles and break down adhesions. James MacDonald, editor of the *Williamsburg Times*, observed, "It is interesting to watch an assistant wind up a man's arms by a windmill motion."[20] Furthermore, Locke did not hesitate to prescribe drug therapy when necessary. The connection between arthritis and metabolic disorders, particularly hypothyroidism, was well-known and in such cases Locke administered his own medicinal treatment as well as manipulation therapy.[21] The provision of comfortable supportive footwear also remained an important feature of the therapeutic regimen. "Cookies," such as those prescribed for Peter Beckstead, continued to be recommended for certain patients, but Locke also designed a special line of footwear to complement his therapy.[22] He had some difficulty promoting the functional design at first, but eventually the shoes were manufactured by the Perth Shoe Company and marketed under the label "Lockewedge Shoes." Initially the footwear could be purchased only at the clinic or at an outlet in Brockville and patients often waited weeks for the proper model.[23] Gradually "Lockewedge Shoes" became available in department stores such as Marshall Field's in Chicago, Simpson's in Toronto, and Macy's in New York City. Each shoe bore the doctor's signature on the sole and a pair retailed for 10 dollars.[24]

The charge for Locke's services was one dollar per day. In return for this fee, each patient received one, two, or three treatments daily, depending on the severity of his or her condition. Several authors commented on the modest scale of Locke's rates but, given the size of his practice, he could not fail to accumulate wealth.[25] One patient even recalled that the doctor sent market baskets full of money to the bank each day.[26] Yet observers were almost invariably impressed with Locke's lack of interest in the financial side of his practice. He kept no accounts. He sent no bills. Even the money pressed into his hands during the treatment sessions was casually stuffed into the pockets of his trousers or thrown into nearby receptacles. Furthermore, when he might easily have commanded higher fees, Locke continued to charge

only 25 cents for local calls and anyone who could not afford to pay was treated free of charge.[27]

The public response to Locke, as expressed in the popular press of the 1930s, was unabashedly enthusiastic. With a single exception, every article extolled the virtues of the doctor, the treatment and the clinic.[28] Scores of arthritis sufferers claimed that Locke had restored them to complete health, while many others testified to the enjoyment of greater comfort than they had known in years. Popular testimonials were replete with accounts of other types of "cures" as well. Sleeplessness, poor eyesight, shingles, indigestion, varicose veins, gall bladder attacks, appendicitis, even eczema were among the diverse ailments that seemed to respond to foot manipulation.[29] Probably the most celebrated cure attributed to Locke was that of Jock MacDonald, son of the local newspaperman. James MacDonald had been working as a journalist in Unity, Saskatchewan when his son was stricken with arthritis. In 1931, Jock was brought to Williamsburg on a stretcher, with "his left arm solid to his side, his right badly crippled. He had arthritis in his left leg and his right was drawn up close to his hip. Any movement was torture."[30] The young man was on crutches by the time Joseph Rutledge chronicled his story for *The Canadian Magazine*, and after many more months of therapy his recovery was complete.

Even more remarkable than Locke's appeal to arthritis victims, however, was his popularity amongst the "healthy" public. One visitor to Williamsburg confessed,

> You know, there isn't a thing the matter with me. I just motored down from Ottawa with my husband for an outing. Lots of us do that every week. We think it is such fun to come down here, see the crowds and get a treatment. There's my husband over there, see—big grouch: he won't come into line and get a treatment, but he likes to talk to the people just the same.[31]

Writers, as much as the tourists, were intrigued with Locke and his clinic. J. Smyth Carter, a local historian, did not receive treatment yet he described Locke in superlative terms: "here multitudes congregate daily, while actively engaged in their midst, sits one picked out by destiny or genius to encourage or restore."[32] Joseph Rutledge's account of the physician was more prosaic but no less fascinating for his readers. "It would be hard," he wrote, "to picture Dr. Locke as anything else but what he is, a quiet, self-contained, unobtrusive medical man, going methodically about his work."[33] Locke even inspired a novel: *The Canada Doctor*. Two Americans wrote a story about several sufferers in New York City who made the trek to see a Canadian physician capable of curing arthritis. Though the authors claimed their tale was fictitious, Dr. Rocke of Johnsberg, Ontario was a thinly-veiled version of Mahlon Locke.[34] Clearly, the Canadian "toe-

twister" captured the imagination as well as the confidence of the public.

In contrast, most orthodox medical professionals were not enchanted with Locke. Contemporary journalists claimed that some regular physicians responded positively, referring difficult cases to him or securing his services for themselves and their families.[35] But if these reports were genuine, they differed markedly from the official attitude of the medical establishment as expressed in the medical press of this period; reticence or open hostility characterized their response to Locke.

The divide between vocal, vigorous opposition and virtual silence was the 49th parallel. South of the border, physicians scoffed at Locke and denounced him. In 1934, the editor of the *Journal of the American Medical Association*, Morris Fishbein, wrote, "The activities of Dr. Locke are a burlesque on the scientific practice of medicine. His promotion is a violation of every traditional, ethical tenet! Were not the results so lamentable, the comedy would be laughable."[36] In the same year, an article appeared in *Hygeia*, a popular health magazine published by the American Medical Association (AMA), that compared foot manipulation to faith-healing, complete with laying on of hands.[37] Though Locke was successfully treating cases that other doctors had deemed hopeless, the author insisted that foot manipulation was incapable of curing arthritis.

> Enough has been learned about the mechanism of the bones and the joints, the nerves and the blood vessels, to make it quite certain that no twisting of the foot will adequately control any type of arthritis involving the joints and bringing about permanent disability.[38]

In the eyes of the American medical community then, Mahlon William Locke was a quack, a charlatan who would eventually "pass into oblivion, but with his pockets well-lined."[39]

The Canadian medical community, on the other hand, was remarkably reticent about Locke. Despite the international attention he was receiving, the medical press in Canada contained few references to him. Only two articles have come to light thus far but the tone and content of both provide an eloquent contrast to the treatment of Locke by the American medical press. The first instance was an oblique reference in the April 1932 issue of the *University of Toronto Medical Journal*. Locke was not even named in the article, though his identity was unmistakable; the author, H. B. Anderson, described "a simple manipulative procedure for the treatment of rheumatic and other diseases [that] has recently gained wide notoriety for a village doctor in Eastern Ontario."[40] Anderson was definitely uncomfortable with Locke's practice of medicine, but his assessment of foot manipulation was much more generous than that of his American colleagues. Rather

than simply condemning Locke, he adopted a wait-and-see attitude: "Until trustworthy evidence is forthcoming the claims made on behalf of the treatment may be disposed of by the Scottish verdict: 'not proven.'"[41] This comment was by no means an enthusiastic endorsement but, in contrast to the American response, it did leave room for the possible vindication of Locke and his therapy.

The second reference appeared more than four years later in the September 1936 issue of *The Canadian Journal of Medicine and Surgery*. The author of the article, a doctor named Edward McCulloch, left no doubt about his opinion of the physiological effect of Locke's therapy. "The foot manipulation is mere eyewash," he asserted, "and is of no importance whatsoever in the treatment or cure of cases. I took four of these treatments myself and watched carefully the manipulation in five hundred other cases, and make this statement without fear of successful contradiction."[42] Indeed, McCulloch saw patients who had been attending the clinic for more than a year with no visible sign of improvement. Despite these observations, however, he did not condemn Locke or deny that patients benefitted from their visits to Williamsburg. McCulloch wrote,

> The greatness of Dr. Locke is his ability to create an atmosphere of hope, cheerfulness and optimism, his ability to make cross-grained, irritable, chronically sick people sit out in the open air for five, six or seven hours every day, rain or shine, hot or cold, and *like* it.... Every practising physician should make a point to spend a day at the clinic in Williamsburg. He will hear more candid expression of opinion on the medical profession than he ever dreamed of. He will learn how to handle people and cure them without pills or potions. He will come away a wiser and a humbler doctor. He will learn that the practice of medicine is the art of treating a sick patient—not that of doctoring a disease.[43]

American critics likewise charged that Locke's "cures" were purely psychological but, unlike McCulloch, they regarded this approach to illness as spurious. A report by the American Medical Association Bureau of Investigation, questioned not only the value of Locke's therapy but also the judgment of patients who claimed to have been cured by foot manipulation.

> By the law of averages, it is inevitable that a man treating a thousand patients a day by manipulation and in the psychologic atmosphere inseparable from such a shrine, must persuade many that they have been benefitted. In such large groups there must be many psychoneurotics whose inhibitions are lifted by the combined manipulations and psychic reactions of the surrounding circumstances, and who, until the end of time, will testify that they have been cured.[44]

In general, Canadian physicians were less likely than American doctors to comment on Locke's therapy in the medical press but when they did venture into print their evaluation of the man was much more positive.

The difference in Canadian and American attitudes toward Locke was especially interesting because the clinical approach to arthritis in both countries—as described in the national medical journals—was very similar.[45] The use of the medical press to assess the outlook of a medical community does raise methodological concerns, for the correlation between therapies described in journals and those utilized in practice is far from perfect; physicians may discuss treatments they would never use and continue to use those which have been discredited by the medical press. Nonetheless, it is virtually impossible to get a representative account of actual practice and we are interested here in understanding the *attitudes* of the medical communities in Canada and the United States. Articles in the journals may describe techniques which never come into general use but they also reveal the contours of legitimate or scientific medicine as orthodox physicians understand it. By implication, therapies which do not conform to the dominant vision of medicine, even at its outermost limits, are regarded as "quack" remedies. From the perspective of the regular medical community in the United States, Locke was a quack because his work did not fit the orthodox definition of medicine. Though Canadian physicians shared the same understanding of legitimate therapy, as we will see, they refrained from attaching the same label to Locke.

Howard S. Berliner has argued that one of the principal features of "scientific medicine" in the twentieth century has been "the use of invasive manipulation to restore the human organism to a statistically derived equilibrium point (health)."[46] An examination of orthodox arthritis therapies discussed in the 1930s tends to corroborate Berliner's interpretation. Infection was the most commonly cited cause of arthritis in this period; according to the focal infection theory, as bacteria multiplied in the body they produced toxins which predisposed the joints to arthritic changes. The obvious remedy was to eliminate the source of infection before an acute attack of arthritis became a chronic problem. Bacterial vaccines, such as streptococcus, staphylococcus, or even typhus were introduced into the body as inocula while shock therapy with foreign proteins, such as milk or insulin, was also considered effective. Physical, as well as chemical, invasion of the body was favored in the treatment of acute arthritis. Surgical excision of infective foci, such as teeth or tonsils, was prescribed routinely by regular doctors.[47]

Despite the best efforts of practitioners, however, it was not uncommon to see the acute, inflammatory stages of arthritis degenerate into chronic illness. One doctor commented that "chronic arthritis presents one of the major social and industrial problems of modern medicine."[48] Palliative treatments, such as splinting, massage, and therapeutic diets, were discussed in contemporary journals, but these relatively

mild therapies often occupied a secondary place in the medical literature while invasive techniques received much more attention. In many cases, surgery was the final heroic measure prescribed to ease pain or help restore mobility. A complete repertoire of surgical procedures was developed for the remediation of chronic arthritis. For example, a process of stretching the sciatic canal was conceived for the treatment of sciatica and lumbago. Once the patient was anesthetized, a warmed saline solution was introduced into the canal to eliminate abnormal pressure on the sciatic nerve.[49] In the same way, fasciotomy—a surgical procedure in which the fascia in the afflicted area is severed to enhance mobility—was performed on arthritic patients.[50] While extreme measures such as these were sometimes necessary to alleviate the pain and deformity arising from arthritis, they were also intense and invasive experiences for the patient. In addition, the changes wrought in the body as a result of surgery were often drastic and irrevocable.[51] During the 1930s, when a patient was rendered immobile or severely deformed, fusion of a joint or even amputation could become the treatment of choice.[52]

Faced with these kinds of treatments—and their cost—it is not surprising that some patients preferred Locke's manipulation therapy. The animosity of orthodox practitioners in the United States was also understandable, for though Locke's approach to arthritis was relatively innocuous it was also incompatible with their definition of "scientific medicine." The volume of his patients was alone sufficient to raise doubts about the authenticity of Locke's therapy. One doctor, talking with Rex Beach, observed, "How can there be anything in it if he sees a thousand patients a day? No physician could diagnose a quarter of that number of cases, much less treat them."[53] But of course Locke could and did treat this many patients precisely because his methods were not orthodox. He diagnosed ailments without swabs, without blood tests, without X-rays, even without case histories. Though he might pose a few terse questions, his assessment was swift and treatment was prompt. Locke undoubtedly left himself open to charges of quackery and it is all the more curious, for this reason, that Canadian physicians did not join their American colleagues in condemning his work.

The most obvious explanations for this difference, upon closer examination, reveal their limitations. In the first place, professional etiquette probably ensured that opposition from Canadian physicians would be muted. During the nineteenth century, negative reactions from the public to disputes between Canadian doctors had made orthodox practitioners realize the importance of professional solidarity.[54] The more they fought amongst themselves, the more their reputations were stained. By the twentieth century, therefore, regular

practitioners had come to regard collegiality as a valuable mechanism for protecting their social and professional status.[55] They were unlikely to engage in public criticism of another orthodox physician, such as Locke, because it would tend to undermine the regular medical community. Yet American physicians had suffered the consequences of public distaste for the squabbles of the medical profession in the nineteenth century and they had, like Canadian doctors, realized the importance of maintaining a united front. It is surprising, therefore, that they did not feel constrained by the dictates of professional solidarity when it came to Locke. It is true that Locke was not a member of any American medical society but he did belong, by virtue of his training and registration, to the larger community of orthodox physicians. A more measured response from doctors in the United States would not have seemed out of place. Professional etiquette may account for Canadian reticence but it does not explain the different reactions of the two medical communities.

Second, shrewdness seems to have played a part in the Canadian response to Locke; in other words, orthodox physicians were unwilling either to increase Locke's popularity or to jeopardize their own by attacking him. For example, in 1934, Morris Fishbein invited at least two Canadian physicians to become involved in an investigation of Locke's work under the auspices of the American Medical Association Council on Physical Therapy. Both doctors refused and R. I. Harris gave as his reason: "If your committee succeeds in discrediting him [Locke], there will be many thousands of people prepared to think he has been made a martyr."[56] Harris recognized that destroying Locke's reputation would probably not satisfy Fishbein's goals and might damage his own practice in the process. Later that same year, Fishbein approached the Canadian Medical Association (CMA) to propose a joint Canadian-American investigation.[57] Thomas C. Routley, General Secretary of the Association, rejected the suggestion just as Harris had done. He asked Fishbein, "Just what value do you think would accrue from such an investigation? The publication of it would probably do two things,—increase the scepticism of the medical profession on the one hand, and give the gentleman [Locke] just a little more publicity to the laymen, on the other hand."[58] But if self-interest was responsible for the restraint of Canadian doctors, it is difficult to understand why the American medical community was any less concerned about a popular backlash against its criticism of Locke. Shrewdness, like solidarity, does not provide a satisfactory explanation for the divergent reactions of Canadian and American doctors.

Third, financial considerations were responsible, to some extent, for American hostility to Locke. According to Arthur J. Cramp, Director of the AMA Bureau of Investigation, Locke's practice was a significant

source of competition for American doctors. "Since the repeal of prohibition," he wrote, "possibly nothing has led to a greater transfer of United States funds to Canada than the medical citizen of Williamsburg."[59] Indeed, Locke's clinic drew patients from across North America and his therapy was highly lucrative. Grant Dexter speculated that, even with low rates and repeated acts of generosity, Locke probably made as much as $65,000 per year in the midst of the depression.[60] Faced with this threat to their livelihood, American doctors tried to protect their market by attacking Locke. Yet, presumably, the magnetic appeal of Williamsburg was also disrupting the work of Canadian physicians. Self-preservation should have dictated a vigorous campaign against Locke but no real criticism found its way into the Canadian medical press. Clearly, we must look beyond factors such as etiquette and economy to explain the different reactions to Locke.

A more convincing explanation may be found by looking at the character of each medical community. Quite simply, the medical profession in Canada operated differently from its counterpart in the United States. When it came to making changes within the medical profession or reforming the practice of medicine, American physicians tended to take the initiative. They rallied professional and public support for their plans and brought considerable pressure to bear on legislators. In many cases, reforms and regulations were enacted as a result of agitation by the American medical community. Canadian doctors, on the other hand, were much more likely to rely on governmental regulation of medicine rather than to attempt a mobilization of professional or public opinion. This difference—between an energetic medical community and a quiescent one—becomes readily apparent if we consider the approach to unorthodox medicine revealed in the medical press from the onset of Locke's fame in 1929 to his death in 1942 (see Figure 3).

Seen from this perspective, the divergent reactions to Locke's practice become part of a larger pattern.[61] A tradition of activism in the United States predisposed American physicians to oppose unorthodox practice and to express their disapproval in print. In Canada, however, a habit of reliance on governmental regulation diminished the willingness, and perhaps the ability, of orthodox doctors to launch a coordinated public attack on irregular medicine.

The contrast between the two medical communities had its roots in the nineteenth century. Political sentiment in the United States, coupled with disputes between health practitioners mentioned earlier, had led to the elimination of medical licensing laws in the 1840s. Without effective regulation of medical practice, open competition prevailed amongst therapists of all kinds—to the detriment of orthodox practice and possibly public health.[62] These conditions

forced doctors to abandon their fractious ways and to collaborate with medical sectarians as well as other orthodox physicians for the improvement and protection of medical practice.[63] Medical societies sprang up across the United States and though they met with limited success in their efforts to reinstate medical licensing laws, they did create an alternative to government control of the profession. American physicians had learned the value of organization and lobbying techniques.[64]

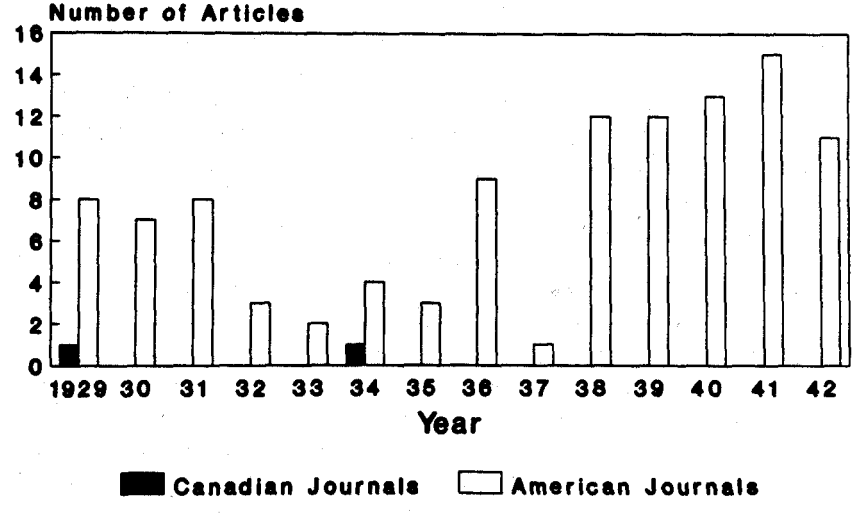

Figure 3
Articles on quackery in the *Index Medicus*

In contrast, medical licensing laws were never suspended in Canada. R. D. Gidney and W. P. J. Millar contend that, in the case of Ontario, "majority opinion in the legislature and in the press was not prepared to leave tests of medical competence to the free market and to the courts."[65] Consequently, Canadian physicians never experienced the unbridled rivalry that was characteristic of the United States and they had fewer incentives to overcome disunity or to organize medical societies.[66] They did not learn, at this stage, to act in concert as did their American counterparts. At the same time, orthodox practitioners in Canada failed to develop effective means to combat or channel government intervention. For example, in 1869, the Ontario government decided to streamline the system for granting medical licences by establishing one board to examine all candidates. Legislators eliminated the separate licensing and governing agencies for homeopaths and eclectics that had existed for the previous decade and established

the College of Physicians and Surgeons of Ontario to regulate practitioners: homeopaths, eclectics, and regular physicians. Some doctors probably welcomed this new arrangement, but the contact between regular practitioners and medical sectarians in Canada developed at the behest of the government, whereas collaboration between the same groups in the United States arose from professional initiative.[67] Thus, the relationship between governments and doctors in the nineteenth century established a pattern in each country. While the *laissez-faire* attitude of legislators in the US encouraged American physicians to take action and to speak out through their professional organizations, a tradition of legislative control and governmental intervention perpetuated dependency amongst Canadian practitioners.

The dissimilarity between the two medical communities persisted into the twentieth century. Following a reorganization of the AMA in 1901 the American medical profession became far more influential. Members of local medical societies were required to join the national AMA and to pay dues, and the result was a network of medical professionals with sufficient unity and authority to influence the public and the government.[68] Shortly after reorganizing, the Association launched an aggressive campaign against patent medicines and irregular practitioners; having staked out its professional territory, the AMA proceeded to defend it.[69] In 1905, the *Journal of the American Medical Association* was closed to patent medicine advertising. The same year, Samuel Hopkins Adams' influential anti-quackery articles were collected and reprinted by the Association under the title *The Great American Fraud*. This small volume sold over 150,000 copies in the following five years.[70] The AMA also set up the Council on Pharmacy and Chemistry to evaluate new drugs and established a separate bureau to investigate claims made for unusual treatments, such as Locke's therapy. The bureau was so active in its pursuit of quacks that by 1911 it had produced a whole book of reports. A second volume appeared within a decade.[71] The AMA campaign did not eliminate nostrums or quackery in the early decades of the century but it did expose some of the more flagrant abuses of medicine and led to the creation of limited governmental controls.[72] More importantly for this discussion, the campaign reinforced the lesson that agitation brought results. Consequently, when Locke's "toe-twisting" became popular, the American medical community was more than prepared to denounce a practitioner whose work seemed to threaten professional and public welfare.

In the early decades of the twentieth century, the Canadian medical community became more active as well, but in comparison to the AMA it was still conservative and apathetic.[73] For instance, the *Canadian*

Medical Association Journal was established in 1910, providing a national forum for discussion amongst doctors, but by that time the *Journal of the American Medical Association* had already been in existence for nearly 30 years.[74] Another example of the difference between the two medical communities was evident in their response to the medical sects that challenged the orthodox profession in the 1920s and 1930s. While American doctors openly attacked unorthodox therapies, Canadian physicians continued to rely on external control of medical practice. They did not attempt to organize public support for their opposition to irregular practice but, instead, appealed to the government to restrict the activities of osteopaths, chiropractors, and other irregular therapists.[75] Provincial legislators recognized the need for regulations but, as in the nineteenth century, they were unwilling to prohibit irregulars from practice altogether. In 1925, the government passed the Drugless Practitioners Act which allowed chiropractors, chiropodists, masseurs, osteopaths, and other drugless healers to work, but it forbade them to use the titles "doctor," "physician," or "surgeon."[76] In this way, patients could readily distinguish between orthodox and irregular therapists while still retaining the freedom to choose a specific therapy. The Canadian medical community grudgingly accepted irregulars on these terms and eventually turned the legislation to its own advantage. According to Elizabeth MacNab, the single restriction on titles "became one of the College's chief weapons in the fight against encroachments by the drugless practitioners."[77] In the case of Locke, however, the medical community could not invoke the law to restrict his activities; though his therapy was unorthodox, he was still a licensed physician with all the rights and privileges of that position. In a letter written to Morris Fishbein in 1934, Thomas C. Routley summarized the position of the Canadian medical community with regard to Locke: "This case has been reviewed in our Committee on Ethics, the last occasion being no later than one week ago, and they had no evidence before them on which they could build up any sort of case, so they dropped the matter."[78] With no legal grounds to oppose Locke and little experience with alternative methods of influence, Canadian doctors lapsed into silence.

The dissimilarity between Canadian and American physicians extended into the area of leadership as well. In 1909 AMA President Hubert Burrel declared that the individual holding the position of secretary, editor, and general manager of the *Journal of the American Medical Association* was "largely responsible for the policies of the Association."[79] During the 1930s, this influential post was occupied by Morris Fishbein. He also established and served on numerous professional committees, set up a number of public health and education programs and wrote on many subjects from quackery to biography. As

the editor of *Hygeia*, his ideas also reached beyond the medical profession to influence the general public. Fishbein was a very opinionated man and not always popular during his long tenure as editor of the *Journal*, but his efforts did help to shape the AMA "into a powerful organization able to affect strongly not only the patterns of U.S. medical practice but also much legislation bearing on medical practice or health matters."[80] Significantly, Fishbein wrote or had editorial control over the half dozen negative articles on Locke that appeared in the American medical press between 1932 and 1938.

Leadership of this type simply did not emerge from the Canadian medical community during the 1930s—or at least not with respect to unorthodox practice. H. E. MacDermot, in his history of the Canadian Medical Association, has credited Thomas C. Routley with a leading role in the strengthening of the medical society and the profession in the twentieth century.[81] Like Fishbein, Routley seems to have been a man of boundless energy. In addition to his 32 years as General Secretary of the CMA, he acted as Secretary for the Ontario Medical Association (OMA) and encouraged closer ties between all the provincial societies and the national medical association. He was involved in the creation of the Royal College of Physicians and Surgeons of Canada and, in the early 1920s, Routley was part of a CMA delegation that urged the federal government to establish guidelines for the standardization of drugs.[82] He served on a variety of international committees, such as the World Health Organization and the World Medical Association, and his efforts helped to maintain cordial relations with the American Medical Association.[83] Routley would have made an ideal candidate for leadership of the Canadian medical community; indeed, in 1955-56 he was elected president of the CMA. But during the 1930s, like so many of his colleagues, Routley refrained from criticizing Locke in public. Arthur Cramp wrote to the Ontario Medical Association in 1932 requesting information about Locke that would help him respond to the inquiries flooding into the offices of the Bureau of Investigation. In his reply for the Association, Routley declined to provide a formal evaluation of Locke's therapy but he did proffer his own opinion. "I venture to think," he wrote, "that, in his [Locke's] quiet moments, he must smile to himself to realize what a potent influence the Press can be; but, when the tumult and the shouting dies, he will, no doubt, like many another, pass into oblivion, but with his pockets well-lined."[84] The only time this critique of Locke appeared in print was when Cramp plagiarized it several months later for a Bureau of Investigation report. It is surprising that the Director of the Bureau did not simply quote Routley, for it would surely have been very damaging to Locke's reputation to be "exposed" by the Secretary of the provincial medical society. Perhaps Cramp was unwilling to risk a public rebuke from the

Canadian medical establishment since the official opinion of the OMA seems to have been conveyed in Routley's closing remarks: "Medically, we just have no opinion to express beyond what vague information you may pick out of this letter."[85] Whether we ascribe this reticence to tolerance or apathy, clearly the difference in the character of the Canadian and American medical communities helped shape their divergent reactions to Locke.

Mahlon Locke died of a stroke in February 1942, just seven days short of his 62nd birthday. His popularity had been waning in the years leading up to the war though the reasons for the decline are not entirely clear. Possibly his age, coupled with a diabetic condition, made it increasingly difficult for Locke to manage the large crowds of visitors and patients. Certainly, media coverage of the clinic dropped off toward the close of the decade. This change was due, partly, to the increasing amount of space devoted to international news but the first really negative popular article on Locke also appeared about the same time. Writing for the *American Mercury* in 1937, Robert Strunsky questioned not only the efficacy of Locke's therapy but also his motives. "Charm, atmosphere, even cleanliness have been sacrificed to convenience," he wrote. "But not to convenience alone. You quickly grow aware of the shrewd hand of economy at work."[86] And while Locke's proponents described him as shrewd but compassionate and a little shy, Strunsky depicted the doctor as brusque and uncommunicative, "with only the merest division of a neck."[87] The combination of less coverage and less appealing coverage may have contributed to declining interest in Locke's therapy. Further, it is perhaps not entirely coincidental that the years of Locke's greatest popularity were also the years of deepest economic dislocation in North America. As the depression began to ease toward the end of the 1930s, so too did interest in Locke. An examination of Canadian popular culture in the early twentieth century might help to explain the rise and decline of Locke's therapy, not to mention attitudes to the medical profession in general, but until more work is undertaken in this area we can only speculate on the connection between healers and heroes in the popular imagination.[88]

Ultimately, Locke's death was the decisive factor in the demise of his therapy for there was simply no one else to carry on his work. J. A. McGruer, Locke's brother-in-law, claimed that he and Locke's son, Parker, had been trained in the art of foot manipulation and he declared his intention to keep the clinic open.[89] But without Locke, Williamsburg no longer held the same attraction for sufferers or spectators. In 1942, the stream of visitors to the clinic ceased altogether and Williamsburg was reduced once more to a crossroads on the map. Locke's office in the white clapboard house remains almost

untouched. The pavilion and the concrete yard where the circle was conducted have been maintained by his widow, though the winter clinic serves as a garage now.[90] Only a plaque near the house, a gravestone in Brinston Cemetery, and the testimony of family and friends bear witness to the life of a remarkable man and an unusual episode in Canadian history.

NOTES

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1 Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, 1982); William Rothstein, *American Physicians in the Nineteenth Century: Sects to Science* (Baltimore: Johns Hopkins University Press, 1977); J. T. H. Connor, "Minority Medicine in Ontario, 1795-1903: A Study of Medical Pluralism and Its Decline" (unpublished PhD thesis, University of Waterloo, 1989). Historians, such as Starr and Rothstein, provide different accounts of the development of a medical monopoly in the United States but they agree that orthodox physicians dominated the profession and the practice of medicine by the early twentieth century. Connor offers a quite different explanation for the decline of medical pluralism in Canada but he also concludes that a medical monopoly had developed in this country by the turn of the century.

2 James T. Patterson, *The Dread Disease: Cancer and Modern American Culture* (Cambridge, Mass.: Harvard University Press, 1987), p. ix-x.

3 J. Smyth Carter, *Dr. M. W. Locke and the Williamsburg Scene* (Toronto: Life Portrayal Series, 1933), p. 83. For more details on Locke's early life see also James MacDonald, *Dr. Locke: Healer of Men* (Toronto: Maclean Publishing, 1933), and E. May Merkley, *Our Doctor* (Morrisburg, Ont.: Leader Publishing, 1933).

4 Merkley, *Doctor*, p. 49. Locke's widow, Blanche, confirmed these details about her husband's practice during an interview with the author in the summer of 1988.

5 Peter Beckstead, quoted in Frederick Griffin, "Miracle Man," *The Toronto Star Weekly* (22 August 1931): 6.

6 John F. Phifer, *Arches* (Morrisburg, Ont.: Leader Publishing, 1932), p. 23.

7 MacDonald, *Healer*, p. 27.

8 Mrs. D. Hugh Thompson, "Doctor Locke as Williamsburg Benefactor," *Williamsburg Tweedsmuir Village History* (Belleville, Ont.: Mika Publishing, 1984), p. 204. According to Thompson, Locke's visitors included Clare Booth Luce and Louis B. Mayer. In an article written for *Maclean's Magazine* in 1954, Doris Dickson featured a picture of Locke shaking hands with William Lyon Mackenzie King.

9 MacDonald, *Healer*, p. 29.

10 Grant Dexter, "I Nominate for Exalted Place Among the Men of Canada Who Have Won Enduring Fame, Dr. M. W. Locke," *The Canadian Magazine* (February 1931): 10.

11 Many popular testimonials reveal that Locke's patients experienced a period of doubt prior to their treatment. Disbelief seems to have been based on simple scepticism or on a patient's disillusionment with orthodox medicine. For example, in 1937, Mrs. W. D. Sporborg told Mary Hamman of the *Pictorial Review* that when her sister-in-law visited Locke she thought "it seemed odd to me that a member of my family, and one of its most conservative, should actually give credence to reports

about his wonder-cures" (p. 77). John Phifer's scepticism was based on his own experience with the failure of orthodox therapies. In *Arches* he wrote, "How could [Locke] by merely adjusting misplaced bones in my feet, which required but a few seconds, secure such marvellous results, when all the knowledge of medical science had failed?" (p. 11).

12 Rex Ellingwood Beach, *The Hands of Doctor Locke* (New York: Farrar and Rinehart, 1934), p. 27.

13 John Phifer, author of *Arches*, did a tally one Sunday afternoon in 1932 and claimed that Locke treated "427 patients in one hour and fifty-five minutes" (p. 13). Later the same year, an article appeared in *The Daughters of the American Revolution Magazine* which gauged daily attendance at 1,400. Beach's original estimate was a little more conservative; he thought that Locke saw 800 to 1,000 people a day in 1932. But by 1934, when he published a second article in *Cosmopolitan Magazine*, he believed the volume of patients had increased to between 1,200 and 1,800. E. May Merkley reported that Locke was treating more than 1,800 a day at the peak of his practice while Robert Strunsky, an author for the *American Mercury*, estimated that Locke tended 2,000 to 2,500 per day in 1937.

14 Thompson, "Benefactor," p. 205.

15 Beach, *Hands*, p. 16. It is not possible to determine an average duration of treatment from the popular literature. In some cases, such as Rex Beach's, the patient was "cured" with minimal attention. A woman from Regina told Joseph Rutledge that though she had been bedridden for two years, she spent only five weeks in Williamsburg and walked away. Jock MacDonald's treatment was probably the longest on record, involving months of therapy, but even Locke's widow could not tell me exactly how much time was involved. There is no evidence, however, that any of Locke's patients experienced lightning cures, throwing off crutches or leaping from wheelchairs. Improvement was always gradual.

16 Carter, *Williamsburg*, p. 79, and MacDonald, *Healer*, p. 16, 26.

17 Beach, *Hands*, p. 9-10.

18 Beach, *Hands*, p. 14-15.

19 MacDonald, *Healer*, p. 64-66; Merkley, *Doctor*, p. 53; and Phifer, *Arches*, p. 22-23.

20 MacDonald, *Healer*, p. 49-50.

21 According to Thompson, "Benefactor," p. 198, and Blanche Locke, the doctor's goitre formula was prepared by Parke Davis Company.

22 Phifer, *Arches*, p. 113. See also Griffin, "Miracle Man," p. 44.

23 Natalie Sumner Lincoln, "The End of the Line," *Daughters of the American Revolution Magazine* (October 1932): 636.

24 Morris Fishbein, "Foot Twisting and Faith Healing," *Today's Health: Hygeia* (November 1934): 969; Robert Strunsky, "Dr. Locke's 'Cure' for Arthritis," *The American Mercury*, 40 (January 1937): 34; and Thompson, "Benefactor," p. 203.

25 MacDonald, *Healer*, p. 23; Beach, *Hands*, p. 4; Carter, *Williamsburg*, p. 112; and Dexter, "Nominate," p. 10.

26 Mrs W. D. Sporborg as told to Mary Hamman, "Is It True About Dr. Locke?," *Pictorial Review* 38 (April 1937): 77.

27 Beach, *Hands*, p. 4.

28 Strunsky, "Dr. Locke's 'Cure,'" p. 26-36. This article was the only negative piece to appear in the popular press during the 1930s.

29 Beach, *Hands*, p. 24, 52; MacDonald, *Healer*, p. 34; and Phifer, *Arches*, p. 24-25.

30 Rutledge, "Miracle Man," p. 44. Details of Jock MacDonald's case were also described by Beach, *Hands*, p. 39.

31 Edward A. McCulloch, "Dr. Locke of Williamsburg," *The Canadian Journal of Medicine and Surgery*, 80 (September 1936): 76. This article was brought to my attention by Robert Jackson.

32 Carter, *Williamsburg*, p. 137.

33 Rutledge, "Miracle Man," p. 7.

34 Clay Perry and John L. E. Pell, *The Canada Doctor: A Novel of Today* (Boston: Hale, Cushman and Flint, 1933).

35 Beach, *Hands*, p. 9, and Rutledge, "Miracle Man," p. 44.
36 "Mahlon Locke—Foot Twister Extraordinary," *Journal of the American Medical Association*, 103 (13 October 1934): 1154.
37 Fishbein, "Foot Twisting and Faith Healing," p. 968-69.
38 Fishbein, "Foot Twisting and Faith Healing," p. 969.
39 "Bureau of Investigation: Mahlon W. Locke—The Latest Addition to the Miracle Man," *Journal of the American Medical Association*, 99 (19 November 1932): 1798.
40 H. B. Anderson, "Irregular Practice and Wonder-cures," *University of Toronto Medical Journal*, 9 (April 1932): 217.
41 Anderson, "Irregular," p. 217.
42 McCulloch, "Dr. Locke," p. 77.
43 McCulloch, "Dr. Locke," p. 77-78.
44 "Bureau of Investigation," p. 1798.
45 I have focused on two medical periodicals: the *Journal of the American Medical Association* and the *Canadian Medical Association Journal*. These two journals were used primarily because they offered the opportunity to gauge the national medical opinion about the diagnosis and treatment of arthritis as well as the reaction of each medical community to unorthodox therapies. The *JAMA* contained sufficient material on each of these topics to form an impression of the attitudes of the doctors in the United States but such was not the case with the *CMAJ*. Indeed, neither of the two articles on Locke that I was able to locate appeared in this journal. Therefore, I supplemented my picture of the Canadian medical community with information found in other journals, such as the *University of Toronto Medical Journal*, the *University of Toronto Medical Bulletin*, the *Canadian Journal of Medicine and Surgery*, and the *Canada Lancet and Practitioner*.
46 Howard S. Berliner, "Scientific Medicine since Flexner," *Alternative Medicines: Popular and Policy Perspectives* (New York: Tavistock Publications, 1984), p. 30.
47 B. Cameron Blackhall, "Rheumatoid and Osteoarthritis," *University of Toronto Medical Journal*, 12 (April 1935): 200-3, and W. Ford Connell, "The Causation and Treatment of Arthritis and Allied Conditions," *Canadian Medical Association Journal*, 29 (September 1933): 310-13.
48 A. A. Fletcher, "Chronic Arthritis," *University of Toronto Medical Bulletin*, 10 (January 1930): 7.
49 S. A. Wallace, "Lumbago and Sciatica," *Canadian Medical Association Journal*, 34 (February 1936): 175-77.
50 J. A. Nutter, "Fasciotomy for Chronic Sciatica and Backache: An Analysis of End-Results," *Canadian Medical Association Journal*, 40 (June 1949): 571.
51 J. A. Nutter, "The Deliberate Opening of Bones as a Treatment for Rheumatoid Arthritis," *Canadian Medical Association Journal*, 28 (March 1933): 311-12; see also "Treatment of Chronic Arthritis of the Hip," *Journal of the American Medical Association*, 99 (22 October 1932): 1459. Perhaps the clearest evidence of the invasive nature of the orthodox approach to chronic arthritis can be found in the experimental treatments described in the medical press. One article in the *Canadian Medical Association Journal* described the research of an Australian physician, Dr. J. Forbes Mackenzie. Mackenzie had noticed that one of his elderly patients reported improvement in her arthritis following a femoral fracture. Mackenzie hypothesized that the pain relief was connected to the break in the bone and he proceeded to test his theory by drilling three-quarter-inch holes in the bones of other patients. On the basis of a 19-case sample, the doctor concluded that "the making of openings in some of the large bones as a curative effect on the condition known as rheumatoid arthritis." A similar example appeared in the *Journal of the American Medical Association*. Arthritis of the hip was treated surgically by drilling holes in the femoral epiphysis and by introducing pegs of dead bone into the holes. According to the researcher, Dr. Graber, the 10 patients who received the therapy exhibited a marked decrease in pain and a noticeable increase in function. These examples serve not only to underscore the invasive character of orthodox medicine but also provide an

eloquent contrast to Locke's therapeutic perspective. Furthermore, editors felt these studies merited sufficient attention to approve their publication in the leading medical journals while Locke was either ignored or derided by the medical press despite the fact that he was treating literally hundreds of people daily with a success rate that any physician might have envied.

52 Blackhall, "Osteoarthritis," p. 205.

53 Beach, *Hands*, p. 8-9.

54 Colin Howell, "Elite Doctors and the Development of Scientific Medicine: The Halifax Medical Establishment and 19th Century Medical Professionalism," in Charles Roland, ed., *Health, Disease and Medicine: Essays in Canadian History* (Toronto: Hannah Institute for the History of Medicine, 1984), p. 112-13.

55 Connor, "Minority Medicine," p. 248.

56 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to Morris Fishbein, Editor, *Journal of the American Medical Association*, from R. I. Harris, Toronto, 9 October 1934.

57 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to Thomas C. Routley, General Secretary, Canadian Medical Association, from Morris Fishbein, Editor, *Journal of the American Medical Association*, 19 October 1934.

58 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to Morris Fishbein, Editor, *Journal of the American Medical Association*, from Thomas C. Routley, General Secretary of the Canadian Medical Association, 22 October 1934.

59 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to H. Wilberforce Aikins, Registrar-Treasurer, The College of Physicians and Surgeons of Ontario, from A. J. Cramp, Director, Bureau of Investigation, American Medical Association, 19 November 1934.

60 Dexter, "I Nominate," p. 10.

61 These results may appear skewed since the *Index Medicus* surveys dozens of American medical journals while sampling only four or five Canadian ones. Yet almost all the American articles on quackery appeared in the two organs of the national association, *Journal of the American Medical Association* and *Hygeia*, while the *Canadian Medical Association Journal* contained very few articles on unorthodox practice and none on Locke.

62 Joseph F. Kett, "American and Canadian Medical Institutions, 1800-1870," *Journal of the History of Medicine and Allied Sciences*, 22 (1967): 343-47.

63 Joseph F. Kett, *The Formation of the American Medical Profession: The Role of Institutions, 1780-1860* (New Haven, Conn.: Yale University Press, 1968), p. 165-80, and Starr, *Transformation*, p. 99-104.

64 Starr, *Transformation*, p. 94-111.

65 R. D. Gidney and W. P. J. Millar, "The Origins of Organized Medicine in Ontario, 1850-1869," in Roland, ed., *Health, Disease and Medicine*, p. 75.

66 Kett, *Formation*, p. 64-69, and Connor, "Minority Medicine," p. 211.

67 Gidney and Millar, "Origins," p. 75; Connor, "Minority Medicine," p. 211-12, 469; Kett, *Formation*, p. 178; and Starr, *Transformation*, p. 100-2.

68 Starr, *Transformation*, p. 109, and James G. Burrow, *AMA: Voice of American Medicine* (Baltimore: The Johns Hopkins Press, 1963), p. 107.

69 The regular medical community in the United States had cooperated with other medical sectarians during the nineteenth century because a united front amongst health practitioners was needed to convince politicians and the public that medical licensing laws should be reestablished. In the twentieth century, however, the

AMA's influence was such that it no longer needed the support of the medical sectarians and could attack unorthodox therapies, such as chiropractic.

70 Burrow, *Voice*, p. 109.

71 Bliss O. Halling, "Bureau of Investigation," in Morris Fishbein, ed., *A History of the American Medical Association, 1847-1947* (New York: W. B. Saunders, 1969), p. 1035, and Burrow, *Voice*, p. 110.

72 Starr, *Transformation*, p. 129.

73 Dan McCaughey, "Professional Militancy: The Medical Defence Association vs. the College of Physicians and Surgeons of Ontario, 1891-1902," in Roland, ed., *Health, Disease and Medicine*, p. 102, and H. E. MacDermot, *History of the Canadian Medical Association* (Toronto: Murray Printing and Gravure, 1958), Vol. 2, p. 1.

74 Connor, "Minority Medicine," p. 237, and Burrow, *Voice*, p. 13.

75 Elizabeth MacNab, *A Legal History of the Health Professions in Ontario* (Toronto: Queen's Printer, 1970), p. 46.

76 MacNab, *Legal History*, p. 48.

77 MacNab, *Legal History*, p. 48.

78 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to Morris Fishbein, Editor, *Journal of the American Medical Association*, from Thomas C. Routley, General Secretary, Canadian Medical Association, 22 October 1934.

79 Proceedings of the House of Delegates (79th Annual Session, June 1928), quoted in Burrow, *Voice*, p. 170, 50n.

80 Charles Van Doren, ed., *Webster's American Biographies* (Springfield, Mass.: Merriam-Webster, 1974), p. 345.

81 MacDermot, *Canadian Medical Association*, p. 1, 5, 19.

82 MacDermot, *Canadian Medical Association*, p. 131.

83 MacDermot, *Canadian Medical Association*, p. 108.

84 Chicago, AMA, Division of Library and Information Management, Historical Fraud and Alternative Medicine Collection, Mahlon W. Locke Files 0479-09 to 0480-02 and 0749-20 to 0750-02, Letter to Arthur J. Cramp, Director, Bureau of Investigation, American Medical Association, from Thomas C. Routley, Secretary, Ontario Medical Association, 8 August 1932.

85 Cramp to Routley, 8 August 1932.

86 Strunsky, "Dr. Locke's 'Cure,'" p. 29.

87 Strunsky, "Dr. Locke's 'Cure,'" p. 31.

88 Pierre Berton has touched on the heroic appeal of the country doctor in his account of Allan Roy Dafoe in *The Dionne Quintuplets: A Thirties Melodrama* (Toronto: McClelland and Stewart, 1977).

89 "Dr. Locke Clinic Will Carry On," *The Ottawa Journal* (10 February 1942): 7.

90 These observations were correct at the time I visited Williamsburg in the summer of 1988 but things may have changed by now.