Homeopathy and the Mind: From Alienists to Neuroscientists

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Hahnemann's Attitude Towards Mental Illness

Hahnemann was more enlightened than many of his contemporaries when it came to the mentally ill [1]. He described how, in the case of an aristocratic patient who was under his care, he initially spent some weeks in observation before deciding on the best treatment. Hahnemann forbade all kinds of violence, which were common practices in psychiatry at the time, saying "I never allow any insane person to be punished by blows or other painful bodily chastisement….These patients deserve nothing but pity, and are always made worse and not better by such rough treatment" [2]. Today, these principles are taken for granted (although they are still violated too often), but at the time they were rarely followed. Charles Cameron paid tribute to this aspect of Hahnemann's work in saying that "… homeopathy has made contributions to medical progress which have been neglected in the long view …. First, Hahnemann fought vigorously for modification of the treatment of the insane … he wrote and preached of the folly of attempting to overpower psychosis. He pled for an end to the floggings, to solitary confinement, to chains, to starvation rations. He went so far as to set up his own modest sanitarium where the mentally deranged were regarded as the sick people they were, instead of being exorcised." Cameron further acknowledged that Hahnemann was one of the earliest to advocate drug treatment of the mentally ill, "a principle which now – in the past five years – offers the brightest promise yet uncovered for the relief and rehabilitation of the mentally ill" [3]. It is therefore not surprising that Hahnemann's approach to psychiatric illness inspired many of his followers, who created and staffed a national movement of homeopathic mental hospitals that served the US population for over 50 years; seven were still functioning into the 1940s [4]. As will be described below, some solid research, high-quality teaching, and innovative treatment approaches took place in these hospitals. Thus, while Hahnemann shared with Pinel the distinction of being among the first to espouse humane care of the mentally ill, free from enchainment, he went one step further by inspiring a homeopathic asylum movement.

Hahnemann held that mental illnesses could derive from internal (physical) or external (environmental) causes, such as upbringing, beliefs, education, or bad morals; for the former, medicine was usually indicated, whereas for the latter, "sensible advice" was often enough [5]. In the homeopathic canon, utmost importance was placed on the mental influences in illness, for there was no division of body and mind, which were instead viewed as a seamless entity.

Kinship of Homeopathy and Psychiatry

A number of similarities have been noted between homeopathy and psychiatry [6]:

1. Variations of the therapeutic principle *similia similibus curentur*, or the law of similars, play a significant role in some forms of psychiatry, notably in cognitive-behavior therapy (CBT) with prolonged exposure (PE), where the symptoms are repeatedly evoked under controlled conditions in order that they eventually will disappear. In another example, an effective treatment of depression involves inducing deprivation of sleep, that is, a cardinal feature of the illness, in order to enact a cure. Similar to administering the kindred remedy, one "gives the illness" to the patient so that it can be removed by means of the body's adaptation process. Technically, this is most accurately referred to as *isopathy*, rather than *homeopathy*, in that the treatment consists of inducing the exact symptom, akin to treating pollen allergy with a low dose of pollen extract, rather than administering an agent that produces closely similar symptoms.
2. Homeopathy teaches that there is a self-correcting principle referred to as the vital force. So, in psychiatry, it has been posited that some symptoms may represent the body's attempts at self-correction or self-healing. Post and Weiss [7] have suggested that insomnia is less a primary symptom than an endogenous ("from within")

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counterreaction and that the same may hold true for certain biological alterations in depression that might be compensatory, like the increases in thyrotropin-releasing hormone (TRH). Post and Weiss characterize some symptoms of depression as the "good guys," emblematic of the body's attempt at self-regulation, and suggest there may be promise in developing treatments that promote internal self-corrective change (i.e., as opposed to treatments that suppress symptoms). This sounds little different from the homeopathic principle of an internal, self-correcting force.

3. Homeopathy holds that "less is more" when it comes to drug dose. Similarly, in psychiatry, the phenomenon of time-dependent sensitization (TDS) echoes this principle. Sensitization refers to the ability of a stimulus, such as a drug, to induce a response that can later be elicited by repeated presentation of the stimulus at a lower dose, or if repeated at the same dose, then the response is amplified. In other words, the system has become more sensitive to the original stimulus over time. Key factors behind TDS appear to include (1) the threatening ("unfriendly") nature of the stimulus and (2) its intermittent application. TDS perhaps can explain how it is possible to obtain a good response to low doses of the remedy when given only intermittently, as some homeopaths advocate. It is also a strong candidate to explain the development of PTSD (posttraumatic stress disorder). Further consideration of TDS is given in Chap. 16, where the work of Iris Bell, a contemporary psychiatrist, neuroscientist, and homeopath, is described.
4. Hering's law teaches that symptoms appear and disappear in a given sequence, with recovery being characterized by symptom disappearance in reverse order of appearance [8, pp. 16–18]. There has been reference to a similar phenomenon in psychiatry by Detre and Jarecki [9]. It is important to keep in mind that these observations were largely made when few treatments were at hand, and they reflect some astute clinical observations on the natural course of illness, many of which are self-limiting. In today's world, the clinical picture is complicated by the fact that patients may have received a treatment that has altered the expression of the illness, by inducing side effects like insomnia or weight gain. The opportunity to confirm such observations is now less likely to occur.
5. In both homeopathy and psychiatry, when a diagnosis is made, it is often according to "whole pattern" recognition, going beyond symptom expression alone. This approach can be contrasted with the use of a biological test, for example, diagnostic x-ray or blood test, or the use of a single measure, as in hypertension.
6. Psychiatry and homeopathy are alike in the amount of time that is set aside for the patient visit. Psychotherapy sessions typically last between 40 and 50 min, while shorter medication management often lasts between 20 and 30 min. As with homeopathy, in psychiatry the doctor spends considerable time listening to the patient. Evidently, both specialties attract professionals willing to give their clients plenty of time to talk and construct a comprehensive life story. This raises interesting questions about the personality traits of psychiatrists and homeopaths. In 1969, Walton [10] found that British students who planned a career in psychiatry were more reflective and had greater complexity (i.e., showed traits of open-mindedness, acceptance of novelty, and tolerance of ambiguity and measured by a 27-item scale) [11]. A person who scores high on complexity is not fixed in his way of viewing events and prefers new ways rather than old ways of doing things; complexity is associated with flexibility and tolerance of unusual conditions. It is therefore striking to find that a study conducted almost 50 years later found identical results among Norwegian homeopaths, in which Rise and colleagues [12] demonstrated a marked increase in openness to new ideas, as well as elevated levels of caring, understanding, and altruism. It is possibly for these reasons that homeopaths were better tolerated, or even welcomed, in American psychiatry during homeopathy's heyday. Noll has commented on the general lack of hostility within psychiatry towards the sect, in contrast to the prevailing attitude of other specialties [13]. The fact that both homeopaths and alienists were stigmatized by orthodox medicine might have also been a factor. Mental hospital professionals were held in low regard by their medical colleagues, and the asylum superintendents tended to keep themselves apart from colleagues in general medicine, while being attacked by neurologists for their lack of interest in medicine as a science. To many neurologists, asylum doctors were no more than custodians.
7. A number of psychiatrists have expressed discomfort in diagnosing patients, which to some is tantamount to labeling. While diagnosis will always be essential to medical practice, the need for individual assessment has also been recognized by leaders such as Adolf Meyer, who espoused the view that "… there is a plurality of causes, and that each case is highly individual and must, therefore, be studied not in the light of some preconceived concept of simple etiology, but rather in the light of the entire life history of the patient" [14]. Such a personal approach approximates the approach of homeopathy. Today, medicine is abuzz with the concept of "personalized medicine" – old wine in new bottles and repackaged in the language of genomics and epigenetics.

In 1961, the famous psychiatrist Sir Aubrey Lewis characterized psychiatry in a manner that could be applied to homeopathy: "Psychiatry, which may in many respects fairly be regarded as in much the same state as medicine was at the

end of the eighteenth century, cannot be presented to the medical student as an adequate theoretical system or as body of established and classified facts about causes, pathology, course and treatment of mental diseases." Lewis goes on to say that psychiatry lays itself open to the "system-maker, the empiric and the self-sufficient manipulator" and to somewhat diffuse forms of education and training. While this is less apparent now, it is the case that for much of the twentieth century, the system-making influence of Freudian psychoanalysis predominated in many circles [15]. The same might be said of homeopathy, the product of another system-maker, one who still casts a long shadow.

Influential Individuals

Having broadly compared homeopathy and psychiatry, attention will now turn to individual homeopaths whose professional lives were dedicated to treating the mentally ill. Of those selected, all but one were psychiatrists or alienists to use the nineteenth-century term. The exception was Bayard Holmes, a talented surgeon who spent much of his career searching for a surgical cure of schizophrenia and championing public awareness of the illness then known as *dementia praecox*. The diverse contributions of these men and women encompass the full range of psychiatry: opportunities for African-Americans (Fuller), administrative psychiatry (Overholser, Talcott), neuropathology (Fuller), child and community psychiatry (Klopp), psychiatric nursing (Overholser, Barrus), treatment innovations (Talcott), forensic psychiatry (Talcott, Worcester, Overholser), schizophrenia (Holmes and Boltz), laboratory aids to diagnosis (Fuller, Boltz), medical education (Paine, Richardson, Holmes), clinical practice (Menninger), administration of one of the earliest endowed academic research units in the United States (Richardson and Pollack), administration of state hospitals (Talcott, Williamson, Welch, Patterson), and the ability to overcome amazing odds (Cocke).

Charles Frederick Menninger: An Ambassador-at-Large from the Court of Nature

Dr. Charles Menninger (1862–1953) and his sons are known to almost all psychiatrists and, like the Wesselhoefts, represent one of medicine's more illustrious dynasties. Born in Tell City, Indiana, in 1862, Menninger was the child of German immigrant parents, his father being a lumber manufacturer (Fig. 6.1). His early education prepared him for a teaching position in 1882 on the faculty of Holton College, Kansas, where he was a professor of science and German. In 1887, he embarked on medical training. Partly influencing this choice was Menninger's own frailty, evidenced by his

Fig. 6.1 Charles Menninger, founder of the Menninger Clinic (Image in the public domain)

raillike 6′ 2″ physique and 115 lb body weight. A medical friend had told him that he should "get out of the schoolroom because you can't last very long" [16]. In 1887, he enrolled as a student at Hahnemann Medical College in Chicago and excelled so greatly in his studies that he qualified as an MD after 2 years. For approximately 20 years after graduating, Menninger practiced family medicine as a homeopath in Topeka and served first as secretary of the state homeopathic medical society for two terms and then as president. He then served as chairman of the national materia medica section of the American Institute of Homeopathy in 1902 and continued to be a dues-paying member of the institute until 1908 [8, pp. 124–125]. While history remembers Menninger for his contributions to psychiatry, the narrative would be incomplete if it ended there. As noted by Ullman, Menninger was a "Hahnemannian homeopath" of the orthodox faith: he found that the secret of successful homeopathic prescribing lay in careful, precise observation of symptoms and noting the effects of a minimum dose of the single remedy. Homeopathy was more than a brief way station in Menninger's career, for it has been said that he continued to prescribe homeopathic remedies throughout his life [17]. Dr. Menninger would make annual visits to Michigan, often spending several days at the Battle Creek Sanitarium, an eclectically oriented center operated by members of the

Kellogg family, where an array of integrative ("alternative") treatments were provided. Menninger wrote about homeopathy, and an 1897 publication on typhoid fever revealed his position about that system of medicine and why, in his opinion, it was but little better than allopathy in that disease. Among his numerous conclusions were that (1) homeopathy is wholly capable of satisfying the therapeutic demands of this age better than any other system or school of medicine, (2) there is an imperative need to exhaust the homeopathic healing art before trying other methods, (3) prescribing is based on the individual differentiating symptoms peculiar to the person rather than features that are supposedly pathognomonic of the diagnosis, and (4) results were less than optimal on account of a failure to grasp basic homeopathic principles on the practitioner's part [18].

Menninger was a man of wide-ranging scholarship, and his interests included horticulture, mineralogy, conchology, literature, civic affairs, and religion. For his deep understanding of the natural world, Menninger has been characterized as an "Ambassador-at-large from the Court of Nature" [19]. He became interested in psychiatry as the result of his friendship with Dr. B. D. Eastman, superintendent of Topeka State Hospital. From Dr. Eastman, Menninger learnt much about the mentally ill, and this newfound interest soon resulted in Menninger's first psychiatric paper, on *The Insanity of Hamlet*, which he read to his local literary society. In 1908, Menninger paid a visit to the renowned Mayo Clinic, where he met the Mayo brothers, with whom he shared his vision of a group practice akin to the model that had been developed at the Mayo Clinic. He returned home inspired to develop such a place, which would include his sons as partners. Such were the origins of the Menninger Clinic in Topeka, a center that was to achieve worldwide renown for clinical excellence in treating all types of psychiatric patient, including the more difficult ones who had not responded to usual treatments. After an abortive attempt in 1919 to establish a cooperative clinic with other Topeka doctors, Menninger proceeded with his son, Karl, and two other local doctors, to establish the clinic that was ultimately to bear the family name. Dr. C.F. Menninger specialized in internal medicine, his son in neurology and psychiatry, and other staff in general medicine, dermatology, venereal disease, and radiology. Psychiatric patients were at first treated surreptitiously in order not to alienate the local community and were even given disguised diagnoses. In 1925, the Menningers raised sufficient funds to create a psychiatric sanatorium, followed 1 year later by the Southard School for mentally ill children. After encountering initial skepticism in their venture, the Menningers were ultimately able to procure support from many in the Topeka community.

The clinic went from strength to strength, and by the 1950s it had become the largest psychiatric training center in the country. After World War II, Dr. Will Menninger (who was not a homeopath) became well known for his community lobbying on behalf of mental illness and, in the 1960s, provided compelling testimony to the congress and to President Kennedy that society was not doing enough for the mentally ill. Soon afterwards, Kennedy became the first president to speak out for mental health reform. The Menninger Clinic has continued to prosper and today commands great respect in the psychiatric community.

Rudolf Arndt

Rudolf Arndt (1835–1900) was an acclaimed nineteenth-century German psychiatrist who authored papers and a major textbook and who is best known for his observations on the relationship between dose and response, as in the so-called Arndt-Schultz law, a term that still appears in the literature.

Most of Arndt's career was spent at the University of Greifswald, where he attained the rank of professor and served as director of the local state asylum. Among his teachers was Heinrich Damerow, an influential psychiatrist who may have had some mild sympathy towards homeopathy [20, 21]. Arndt has been referred to as "a homeopathic physician" [22], but the actual evidence supporting that is slim [23]. However, unlike most of his colleagues, he was willing to engage in constructive dialog about homeopathy [24, 25]. Because Arndt's main link with homeopathy is his promotion of nonlinear dose effects, an idea later adopted enthusiastically by Hugo Schulz, he is discussed in more detail in Chap. 16.

Selden Talcott

Expert witness at President Garfield's assassination trial; advocate for baseball therapy; prescriber of heat, milk, rest, and a healthy diet; innovator of progressive humane treatments at a time when psychiatry still had one foot in the dark ages; author; hospital administrator par excellence; and a man "of imposing presence … and full beard in abundance" [26] – all of these characterize Selden Talcott, who was one of the most famous of homeopathic psychiatrists (Fig. 6.2).

Selden Haines Talcott (1842–1902) completed 3 years of service in the Union army during the Civil War and then returned to school, where he completed his undergraduate education, and then enrolled as a medical student at New York Homeopathic Medical School. In 1872, he graduated MD as class president and valedictorian. Nine years later, he completed a PhD degree at his old college.

Talcott earned national respect as a leading alienist. In 1877, he was appointed director of the New York State Homeopathic Asylum for the Insane at Middletown, where

Fig. 6.2 Selden H. Talcott. Superintendent of Middletown State Hospital, New York (Image from National Library of Medicine, who believes the image to be in the public domain)

he remained for 25 years until his death at the age of 60. While homeopathic medicines formed a cornerstone of patient management, Talcott ensured that a broad range of activities was offered to asylum inpatients. He authored a textbook *Mental Diseases and Their Modern Treatment*, which was published in 1901 [27]. Although the book was widely used in the homeopathic community, it received only a lukewarm reception in the main journal of American psychiatry, perhaps because of sectarian tensions or philosophical disagreements. A reviewer commented that the book may be commended to those desirous of greater familiarity with homeopathy, but for the "general student of psychiatry the book has no great value" [28]. The book was written from lectures to medical students. What Talcott writes about mental illness in general would have almost certainly have been found in other books, but the sections on homeopathy are unique.

Whatever one may think of Talcott's book and his eventual place in history, his creativity and reputation were undeniable. One obituary noted that he began his medical career as a homeopathic practitioner but broadened his practice and was an alienist of high diagnostic skill and fine administrative ability. Talcott was an active member of the American Medico-Psychological Association (a forerunner of the American Psychiatric Association) and was held in high regard as a forensic expert, giving expert witness testimony in the 1881 murder trial of Charles J. Guiteau, the assassin of President James Garfield (see below). Talcott made an interesting proposal for a type of insanity in farmers caused by early rising. In doing so, he took exception to the old adage that "early to bed, early to rise, makes a man healthy, wealthy and wise." Rather than it being the manifestation of insanity, Talcott held it to be the cause, related to disturbed circadian rhythms from occupational demands. His proposal sparked some interest, and a contemporary medical journal made the comment that "Medical psychologists have a true collector's enthusiasm for a new species, and we hope that what we venture to call 'matutinal mania' may find a place in the next classification of mental diseases that may be proposed" [29]. Things have changed little, and today, whenever a new psychiatric diagnostic manual appears, there is the inevitable scramble to include new diagnostic entities. As far as matutinal ("of the morning") insanity goes, the concept has not gained traction. However, occupationally induced disturbance of circadian rhythms can produce unique forms of mental derangement, and there is some merit to Talcott's observation, as recent studies have shown the benefit of treatment that restores routine sleep-wake cycle rhythms [30]. The 4th edition of the Diagnostic and Statistical of Mental Disorders (DSM-IV^{TR}) [31] contains a disorder known as circadian rhythm sleep disorder, which is caused by shift work or jet lag. Other features may include social, work, and family functioning, as well as alcohol and drug misuse. Whether or not it leads to severe forms to "insanity" is unclear. At the least, however, Talcott was farsighted in drawing attention to forms of psychopathology related to disturbances of circadian rhythm and linking them to occupation.

Baseball at Middletown

Middletown Asylum was one of several mental hospitals in the New York state system and remained homeopathic at least until the 1930s. Thereafter, it continued to serve the psychiatric needs of the state, employing conventional psychiatric treatments, until its closure in 2006. During its heyday at the end of the nineteenth century, Middletown was known as a progressive center for treating the mentally ill. One of Talcott's more unusual innovations was the establishment of a semiprofessional baseball team. Baseball had already been incorporated into the therapy programs of some hospitals, but Talcott took it to another level. He was convinced that participating in the national game could arouse a healthy interest in the depressed and mentally disturbed. In 1888, the hospital fielded a team composed of patients,

hospital employees, talented local amateurs, and semiprofessionals. Initially, the team called itself the "Asylum Nine" and later "The Asylums." Before long, the team had developed into a "semipro powerhouse in the lower-Hudson River Valley area … and thousands came to see its marquee games" [32]. Each year, the number of games increased, such that by 1890 they played a total of 25, winning 21. Not only did they play more games, but the quality of opposition became progressively tougher, and one notable victory was gained over the Cuban Giants, the first fully professional African-American team in the country. The Asylums team was self-supporting from attendance fees and cost the hospital little or nothing. An 1891 game against the New York Giants ended in a close 4–3 loss for the Asylums, who again played and lost two closely fought contests with the Giants in 1892. Professional squads signed up a number of Asylum players to the minor and major leagues. Perhaps the most famous person to have played in the "Asylum Nine" team was Jack ("Happy Jack") Chesbro, who joined the hospital staff as an attendant in 1894 specifically to play on the team. Chesbro went on to a stellar career in the major leagues, set a record for number of wins in a season which still stands, and was eventually inducted into the Baseball Hall of Fame. Chesbro gained his nickname of "Happy Jack" from a Middletown patient who was impressed by Chesbro's pleasant demeanor.

In due course, mental health policy changes in New York caused overcrowding of the state mental institutions, including at Middletown, and it was no longer possible to devote the resources needed for competitive baseball. Although the game continued on the hospital diamond for some years, a reunion game in 1905 appears to have been the last time the Asylums took the field. One mark of the affection in which Dr. Talcott was held was the decision by Wilbur Cook, the Asylums' team manager, and his wife, who was director of nursing, to name their son Selden Talcott Cook.

In his commitment to organized baseball as therapy for mental illness, Talcott stood out among his peers. It is not unreasonable to regard him as a pioneer in using team sport to engender recovery from major mental illness, and it is of interest that, in the 1930s, a similar program was subsequently developed using rugby football [33]. Recent work has shown how team sports such as football can produce a number of therapeutic benefits in psychotic patients, such as more openness, calmness, and an improved sense of being needed and valued by others in their community [34]. Others have reported how self-esteem and social connectedness, and a sense of safety, trust, and empowerment all improved secondary to the type of sport that Talcott believed in so enthusiastically, when these benefits had not been forthcoming from the use of other treatments [35].

Heat, Milk, and Rest

Dr. Talcott placed the highest importance on healthy diet, rest, and exercise for the mentally ill. In relation to diet, he wrote and spoke in detail about his ideas, advocating warm milk, grains, vegetables, and fruits, with only small amounts of meat. He was not in favor of fish, disagreeing with some other contemporary authorities on this point, believing that it was an inferior source of fat and phospholipids. Epidemiological findings 100 years later have shown that countries with high fish consumption may have lower rates of depression, so Talcott's statement that "Those nations whose component subjects subsist largely upon fish … do not develop great brain power or mental activity" seems wide of the mark, although his comments were quite general in nature [36]. In fact, fish oil appears to have antidepressant effects, as well as possibly protecting against suicide. Warm milk was preferred by Talcott as a source of fat and phosphates and also was used to help promote sleep in his patients. According to need, Talcott would prescribe milk with thick cream or skimmed milk. He said "… the amount of fat to be administered to a given patient may be regulated, by experience, to meet the actual necessities of each individual case" [36, p. 346]. As his patients gained weight from high-fat foods, Talcott instructed them to engage in exercise to build muscle mass. Talcott spoke passionately about his ideas, which he presented at a dietetic program in a meeting of the Association of Medical Superintendents of American Institutions for the Insane in Washington DC in May 1891. It was of the utmost importance, he believed, that state hospitals should budget sufficient funds to provide the best food, the preparation of which "should be made with the anxious care of a mother, the delicate tact of a sister, and the scientific skill of an accomplished chef. Those who prepare food for the use of human beings should be earnest students of physiological effects, as well as adepts in the aesthetics of cookery" [36, p. 348]. He further stated, "I believe that the American Association of Medical Superintendents should declare itself in favor of a generous and effective dietary for the insane, even though it costs much money," and that the diet should be administered by skilled nurses.

A special problem that sometimes occurs in mental institutions is the refusal of food by patients who are psychotic or deeply depressed, rendering it necessary at times to provide food involuntarily. In order to facilitate this difficult and sometimes hazardous task, one of Dr. Talcott's assistants, Dr. Nathaniel Emmons Paine (see below), devised a nasogastric tube for feeding patients in the supine position (i.e., lying on the back), thereby lessening the risk of regurgitation. So it is clear that among the many causes championed by Selden Talcott, the provision of a diet based on the best scientific standards of the time was close to his heart. Diet was individualized in a way redolent of today's personalized medicine and played a crucial part in comprehensive patient care.

Administrator and Educator

Talcott was active in various professional organizations, becoming president of the American Institute of Homeopathy

and member of the American Medico-Psychological Association and of the New York Medico-Legal Society. He was awarded honorary membership of the Royal Society of Medicine in Belgium. In 1889, he was appointed to the New York State Board of Medical Examiners. As chair of psychiatry at the New York Homeopathic Medical College for 16 years and lecturer at Hahnemann College in Philadelphia for 4 years, Talcott contributed to psychiatric education, and his textbook became a standard in this respect. According to Emmet Dent, MD, superintendent of the Manhattan State Hospital on Ward's Island, Talcott was one of homeopathy's "most brilliant stars" [37]. Talcott's skill as an administrator and leader quickly put Middletown in a sound financial position. He is believed to have been the first to fully demonstrate the successful application of homeopathy in the treatment of the insane. His successes at Middletown were described as "a showcase to the nation and the world" [38, p. 136]. When the prestigious superintendent's position fell vacant at Utica State Hospital, Talcott's name was on the short list. It is likely that the main reason he was not selected relates to the fact that his appointment would have necessitated a switch from the allopathic to the homeopathic system: a wholesale change that would have proved disruptive and contentious.

Expert Witness in the Trial of Charles Guiteau, Assassin of President Garfield

Charles Guiteau was an unsuccessful attorney and perpetually disenchanted office seeker, who often appeared at the White House and Republican Party gatherings, demanding a high-profile appointment, such as the ambassadorship to France, to which he felt entitled. After repeated rejections, he decided to kill President James Garfield and, on July 2, 1881, carried out his plan. Garfield did not die immediately and almost certainly would have survived the shooting had it not been for poor medical care, even by the standards of the time. After several weeks, however, the president died, and his assassin stood trial for murder.

The case of the United States vs. Charles J. Guiteau began on November 14, 1881. A phalanx of leading authorities was subpoenaed to give testimony as to Guiteau's sanity. Among these individuals were George Beard, a leading neurologist, best known today for creating the diagnosis of neurasthenia, and John Grey, superintendent of the Utica State Asylum, a foremost medicolegal expert and editor of the *American Journal of Insanity* (now the *American Journal of Psychiatry*). Beard was one of the few experts who believed that Guiteau was insane and even met later with President Arthur to appeal the harsh sentence. Among the 30 of so trial experts, at least two were homeopaths, Drs. Selden Talcott and Samuel Worcester (see below).

Talcott was initially subpoenaed by the defense, who were under the impression that Talcott considered the prisoner to be insane. However, after examining the defendant and observing his conduct in court, Talcott became convinced of the defendant's sanity, holding him responsible for the crime [26]. Having communicated this opinion to the defense team, Talcott thought he was now free to leave Washington and return to his practice, only to be detained with another subpoena, this time from the prosecution. In the witness stand, Talcott testified that Guiteau was sane: he expounded on his own thinking that insanity was a brain disease, the exact nature of which awaited better means of detection with technology that did not exist at the time but which he expected to be eventually developed [39]. Talcott proved more than a match for the weak case made by the defense and gave some instructive explanations as to the finer distinctions about insanity. After he had completed his testimony, Talcott received praiseworthy congratulations from many of the notable experts.

Samuel Worcester

Samuel Worcester (1847–1918) came from a medical family and followed his father into the profession. During the Civil War, he served in the Union army as a medical cadet. After the war, he entered Harvard University Medical School. He graduated MD in 1868 and joined the staff of the Butler Hospital for the Insane in Providence, RI. He later entered private practice in Vermont and held a faculty appointment as lecturer on insanity and jurisprudence at Boston University School of Medicine. He was active in several homeopathic societies and served as associate editor of the *New England Medical Gazette*.

Worcester was one of the first to propose establishing the Westborough Insane Asylum and authored a psychiatric textbook, *Insanity and Its Treatment*, in which he described some illustrative homeopathic approaches to treatment, emphasizing how much the remedy could vary within one diagnosis, based on presenting symptoms. For example, in postpartum psychosis, one remedy (*Aconite*) was indicated for fear of imminent death accompanied by tachycardia. A different remedy (*Hyoscyamus*) was recommended for fear of being poisoned, and yet another (*Lycopodium*) for attempting to escape. He also found room for allopathic remedies when homeopathic ones had failed. Although Worcester's book was well received by the homeopathic community, it was not favorably reviewed by the *American Journal of Insanity*, which described it as containing little of scientific value and as evidence of "how far a devotion to a dogma may lead its votaries" [40]. Worcester also authored a book entitled *Repertory to the Modalities*, based on Hering's condensed materia medica.

After the assassination attempt on Garfield, Worcester was retained by the defense in the ensuing trial. At first, Worcester believed Guiteau to be insane and felt that, as a psychiatric expert, he might be able to "save the American people from the disgrace of hanging an insane man, merely

because the man he murdered was our President" [41]. However, as with other defense experts, Worcester changed his mind after observing and examining Guiteau. Worcester subsequently explained that Guiteau's actions were not borne out of delusion, with an inability to distinguish right from wrong, but that "wickedness, and not insanity, stand out as the motive power prompting all his acts" [41, p. 152]. Worcester used the word "fanaticism" in a way that calls to mind the motivating force behind today's terrorists who are driven by the same force in their religious beliefs to justify acts of violence. As described in the *St. Louis Clinical Review* (1882), Worcester and Talcott "showed themselves as learned in their specialties as any of the Old School [i.e., orthodox] experts" [42].

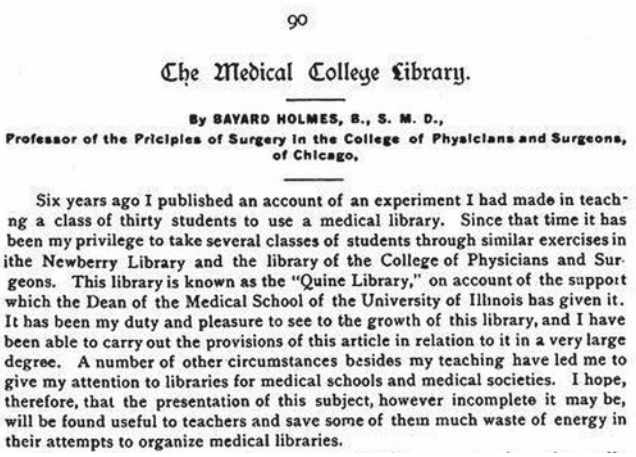
Bayard Holmes

Bayard Taylor Holmes (1852–1924) entered medicine relatively late in life, graduating from the Chicago Homeopathic Medical College in 1884 at the age of 32 (Fig. 6.3). While studying at the college, Holmes showed an early interest in bacteriology and, 1 year after graduating, attached himself to the famous surgeon and bacteriologist in Chicago, Christian Fenger, who had been the first to introduce antiseptic surgery at Cook County Hospital. Fenger was impressed by Holmes' aptitude and amazed at what he had already accomplished in bacteriology (as a medical student) at such an early stage of his career, largely through self-education. Not knowing how to culture bacteria himself, Fenger saw the need for assistance and offered Holmes a prestigious internship at Cook County Hospital upon graduation in 1884, where he remained for 18 months. To be offered such an appointment with a mere homeopathic degree was an impressive feat [43]. While serving as an intern, Holmes set up a small bathroom laboratory to investigate bacteriology and incurred ridicule from his fellow interns for what they regarded erroneously as high-potency homeopathic research [44]. Subsequently, homeopathy played little or no part in Holmes' career, although towards the end of his life, he published two resumés of his ideas about autotoxicity in the homeopathic literature [45, 46].

In 1887, Fenger and Holmes published a paper on antisepsis in abdominal surgery in the *Journal of the American Medical Association* [47]. At the time of his *JAMA* publication, Holmes was a medical student at the Chicago College of Physicians and Surgeons, from which he emerged with a second MD degree in 1888. Soon afterwards, he was called upon to teach the first bacteriology course in a Chicago medical school.

For many years, Holmes pursued his surgical and bacteriological career as professor at the College of Physicians and Surgeons, but branched out into other areas, including medical education, social reform, and politics. In the area of medical education, he oversaw the construction of a large laboratory building, an expression of his personal commitment to making medical training more laboratory based and less didactic. As secretary of the college, Holmes led its reorganization in 1891 and recruited some outstanding faculty to its ranks.

Chicago had no meaningful medical library, and to remedy this deficiency, in 1889, Holmes created the Medical Library Association. Starting from a small collection that he had assembled, Holmes secured cooperation from the Newberry Library, which pledged to create a medical section. In due course, this collection was taken over by the John Crerar Library, which continues today at the University of Chicago as one of the major American medical libraries.



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The Medical College Library.

By BAYARD HOLMES, B., S. M. D.,
Professor of the Priciples of Surgery in the College of Physicians and Surgeons, of Chicago.

Six years ago I published an account of an experiment I had made in teaching a class of thirty students to use a medical library. Since that time it has been my privilege to take several classes of students through similar exercises in the Newberry Library and the library of the College of Physicians and Surgeons. This library is known as the "Quine Library," on account of the support which the Dean of the Medical School of the University of Illinois has given it. It has been my duty and pleasure to see to the growth of this library, and I have been able to carry out the provisions of this article in relation to it in a very large degree. A number of other circumstances besides my teaching have led me to give my attention to libraries for medical schools and medical societies. I hope, therefore, that the presentation of this subject, however incomplete it may be, will be found useful to teachers and save some of them much waste of energy in their attempts to organize medical libraries.

Fig. 6.3 Bayard Holmes. Surgeon and advocate for research in schizophrenia. Medical Libraries 1899;2(May):90–94 (Image in public domain)

Holmes as Social Activist

Being moved by the destructive effects of industrialization on health, Holmes took to social activism. He came under the influence of Florence Kelley, and they worked together to improve health conditions of exploited garment industry workers. (It is of interest that Kelley held meetings of like-minded reformers at the Hull House community and that a number of her associates were homeopaths, such as Julia Holmes Smith and Leila Bedell, who gave talks on physiology and hygiene to the clients served by Hull House.) During this time, Holmes adopted ideas not so far removed from Marxism. He was outspoken in his attacks on conditions in the sweatshops, for which he received backing in the Illinois Factory Inspector's 1894 report. Holmes was also instrumental in establishing the National Christian Citizens League, an organization devoted to improving lives of the impoverished. Holmes became well known in Chicago for his activism and was persuaded to run for mayor in the 1895 election, finishing

a distant third. In his campaign, he was supported by followers of Eugene Debs and Henry Demarest Lloyd.

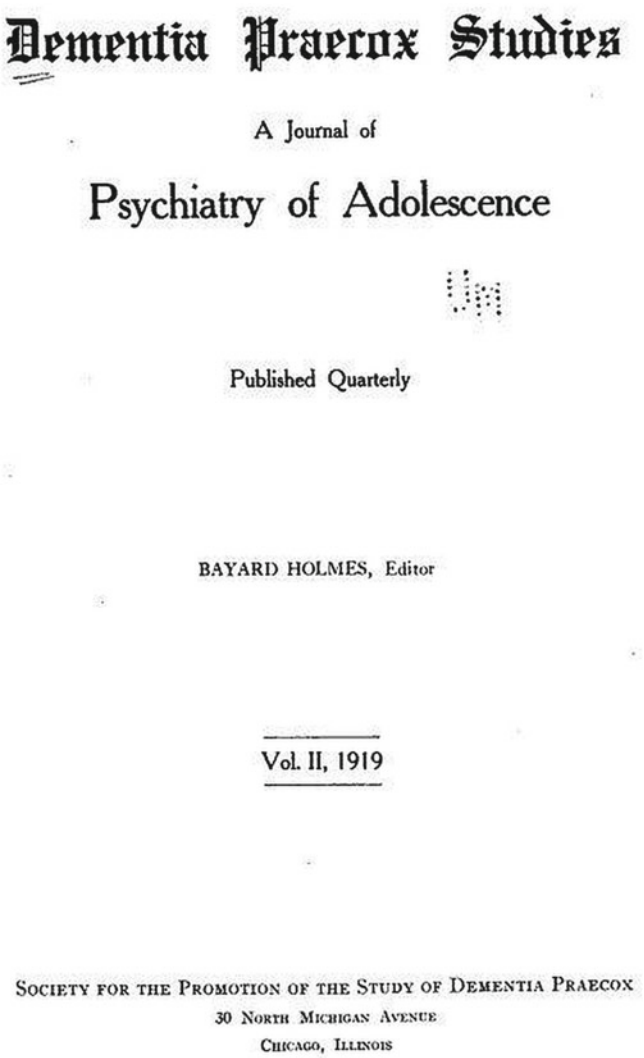
Holmes' ire was aroused by the power monopoly in the American Medical Association, a problem discussed in Chap. 17 in connection with George Simmons. He joined forces with other reformists in the organization who bucked against Simmons' autocratic exclusion of the rank and file from the workings of the AMA. It is of note that, in 1899, Holmes was one of four short-listed candidates for the position of AMA secretary, which was awarded to Simmons: perhaps there had been some lingering hard feelings, although Fishbein does not suggest it in his autobiography [48].

Schizophrenia: Searching for a Surgical Cure

A watershed occurred in Holmes' life when his second son, Ralph, developed schizophrenia while away in Germany in 1905. Holmes' experience in seeking help for Ralph left him disillusioned with psychiatrists, whom he concluded were cold shouldered and had little to offer. After a demoralizing hospitalization, during which Ralph was sedated by "pounds of sedatives" [49, 50], Holmes determined to learn more about psychosis and undertake a personal quest to discover its cause and treatment. Ralph's illness caused Holmes to forsake his academic activities in favor of mental illness research and advocacy. After visiting a number of mental asylums, where the conditions left him appalled, he published about the need for better institutional care of the mentally ill [51, 52]. To familiarize himself with the extant literature, Holmes assembled a bibliography of over 8,000 articles on schizophrenia (*dementia praecox*) and founded *Dementia Praecox Studies*, which is believed to have been the first journal to focus on a psychiatric disorder (Fig. 6.4). He edited the publication from its inception in 1918 until its closure in 1922, which came about because of Holmes' declining health.

In 1915, he obtained funding for a research laboratory and, by 1916, believed he had discovered the cause of *dementia praecox*, which he ascribed to accumulation of a toxin in the gut, perhaps from bacterial infection. The nature of the toxic substance, he thought, was either histamine or indolethylamine, both of which were derivatives of ergot. It was his opinion that accumulation of these toxins in the cecum was responsible and that the indicated treatment was to remove the appendix and leave an opening (appendicostomy or cecostomy) for subsequent colonic irrigation. To put his theories to the test, he began operating on willing subjects. Holmes' first patient, however, was his son Ralph. The outcome could not have been worse. Four days after surgery, Ralph died from abdominal complications. While this personal disaster failed to deter Holmes in his quest, he spoke about it to very few people and in his medical writings glossed over this misadventure by presenting his second patient as though it was his first. All told, Holmes operated on 22 patients between 1916 and 1918, claiming a number of good successes, as well as some fatalities. His record was better than that of Henry A. Cotton, who performed over 600 operations to treat schizophrenia between 1918 and 1932, at the cost of a more than 30 % mortality rate and precious few cures [50].

Bayard Holmes was never accepted by American psychiatry, largely because he was untrained in the discipline and, perhaps more importantly, because he looked askance at his psychiatric colleagues, of whom he wrote scathing essays and editorials. While there was much to admire about Holmes – his undeniable talent, dedication to teaching and research, reformism, and identification with the oppressed – his confrontational manner led to difficult relationships. Sadly, but understandably, he became so enmeshed with his son's situation that it affected his scientific objectivity and academic career. As far as his approach to schizophrenia


Dementia Praecox Studies

A Journal of

Psychiatry of Adolescence

Published Quarterly

BAYARD HOLMES, Editor

Vol. II, 1919

Society for the Promotion of the Study of Dementia Praecox
30 North Michigan Avenue
Chicago, Illinois

Fig. 6.4 Bayard Holmes. Editor of *Dementia Praecox Studies*. 1919 (Image in the public domain)

goes, it must be said in fairness that his belief in autointoxication was consistent with contemporary medical thinking – many famous surgeons in America and Europe were removing body parts to cure various diseases with the presumption that by so doing, a focal toxic cause was being removed. Even the venerable Emil Kraepelin, who delineated the features of *dementia praecox*, thought it could be caused by a toxin. In England, one of the most celebrated surgeons of the day, Sir Arbuthnot Lane, removed the colons of many patients on the unproven assumption that colonic infection gave rise to myriad conditions. As late as the mid-1920s and beyond, the British psychiatric establishment was very ready to accept the focal sepsis theory, to which it gave considerable attention in its journals and who fêted Cotton at its main meetings [53].

Although the outcome was not as he would have wished, Holmes may still be seen as a pioneer in biological psychiatry and early advocate for improved care and more accepting public attitudes towards schizophrenia: the need to stand up for these causes is no less today. Bayard Holmes is appropriately remembered in the words of a well-known contemporary social reformer, Graham Taylor, as a man who "had the courage not only of his convictions, but also of his sympathies. He was unafraid and not ashamed to think ahead of his time … or to stand alone and dare to fail … He served his generation by seeking the coming of the better day, and died not until he saw its early dawning" [43].

Before casting Holmes' ideas into the wilderness, we should keep in mind that schizophrenia takes a dreadful toll of people in the prime of life and remains challenging to treat. Autointoxication and focal sepsis are far from having been the only discarded explanations of the disorder. Since Holmes' time, other theories and treatments have come and gone. These include the application of brain surgery (leucotomy), insulin coma, dialysis, vitamins (orthomolecular treatment), and the taraxein theory. Even the psychotherapists had their field day of mistaken theories, such as the double bind. In case we rest satisfied that the antipsychotic drugs, which are today's standard of care, are the final answer, there is concern that their benefit-to-risk ratio is not as favorable as was once believed [54].

Was there some truth in Holmes' theories? The surprising answer is "maybe." Perhaps he will yet be vindicated, for in 2007, a team of Japanese doctors stumbled on the fact that minocycline, a tetracycline-related antibiotic, resulted in the improvement of schizophrenic symptoms in two patients who received the drug for concomitant infection. Upon stopping the drug after the infections had healed, psychotic symptoms returned, only to disappear again when the drug was reintroduced [55]. Further studies have confirmed this finding, and a large multicenter trial of the drug is now underway. It is not yet known how minocycline could work. Although it is believed to be related to the anti-inflammatory or neurotrophic effects of the drug rather than its antibiotic properties, Sir Robin Murray has opined that "infection or inflammation might be involved in a minority of people with acute psychosis and minocycline might counter this" [56]. The last word on sepsis in schizophrenia has not been written.

To the victor goes the spoil, while the loser may fade away ingloriously. But as was said of Holmes, he dared to fail. While his journey met with personal tragedy and he failed to reach the goal, his approach was courageous; the trail he blazed and the causes he championed remain alive today.

Emmons Paine

While not attaining the prominence of his teacher, Dr. Talcott, Emmons Paine (1853–1948) deserves mention in his own right. He was yet another homeopathic psychiatrist who became a respected member of the American Psychiatric Association, was active in education, researched the extent of psychiatric teaching in the US medical schools, and served on the Boston University Medical School faculty from 1887 to 1925. His knowledge about the history of the Association of Medical Superintendents of American Hospitals for the Insane was comprehensive, and he was much appreciated for his encouragement of younger generation psychiatrists. At the time of his death, Paine was the oldest member of the American Psychiatric Association and was eulogized as a "gentleman of the old school … progressive … socially minded … devoted to high standards in the care of patients, in education," and that "to have known him is an inspiring privilege" [57]. Noll has described Paine as one of the leading psychiatry teachers of his time, saying "Paine may have been one of the most enlightened instructors of psychiatry in 1893 … it is doubtful if medical students in other North American colleges received a better education in psychiatry" [13]. Paine was instrumental in creating a rotation for Boston University medical students at the outlying Westborough State Hospital, something of a rarity in those days, but which established a precedent that was eventually followed nationwide. His modification of the Nélaton rubber catheter, in 1879, to create a nasogastric tube with less risk of aspiration has been mentioned; this tube, which was widely used, was known as Paine's naso-stomach feeding tube [58].

Frank C. Richardson

Frank Chase Richardson (1858–1918) was raised in Boston; attended the BU Medical School, where he graduated in 1879; and earned a second degree 1 year later from the Hahnemann College of Philadelphia. Further training followed in New York and Vienna and twice at Harvard: impeccable credentials to be sure. He was then appointed to

the faculty at BU, where he served as professor of neurology and electrotherapeutics. Like many neurologists of the time, he practiced psychiatry and was known as one of Boston's most prominent neurologists and alienists. He was active in the American Institute of Homeopathy for many years, being a founder in 1905 of the section on neurology and mental diseases, serving as its president for a number of years. At one of the meetings, as conference chair in 1908, he presented a paper entitled *Prevalent Psychic-Therapeutic Quackery*: *A Menace to the American Intellect*.

An interesting publication by Richardson appeared in 1909 on the subject of executive stress, entitled *The Problem of American Business Neurosis* [59]. In coining a new term, Richardson drew attention to executive burnout – a problem that still arises today and which then, as well as now, results in excessive use of alcohol and tobacco, lack of exercise, and a diet overly rich in meat with saturated fat. His eminently sound prescriptions advocated emotional and physical balance, a healthy diet, exercise, relaxation, and taking control of one's work schedule. Richardson's report, which was originally presented at a regional neurology meeting, attracted attention of the mainstream medical press, being abstracted in journals such as *Medical Times* and *Western Medical Review*.

Perhaps Richardson's most significant achievement was as clinical director of the Evans Memorial Research Center, founded in 1910 with an endowment from Mrs. Maria Antoinette Evans. The Evans (as it is often called) was one of the country's earliest medical school research departments (Fig. 6.5). The center has grown over time and now occupies over 100,000 square feet of floor space as headquarters of the BUSM Department of Medicine. Its endowment, built up over 100 years from the initial Evans bequest, has grown into a multimillion dollar fund which currently serves as the school's research engine, supporting the mission of clinical investigation, and has turned out thousands of trainees and internationally recognized physician scientists. As intended by Mrs. Evans, the center continues to perform high-quality clinical research, teaching, and care. Richardson was its first director, holding office for 6 years until his death from neuritis at the age of 58.

How Richardson came to be appointed first director of the Evans Memorial Department of Clinical Research and Preventive Medicine is of interest. Richardson numbered some of Boston's wealthiest families among his patients, including Mr. and Mrs. Evans. After Robert Evans was thrown from a horse and sustained fatal injuries, Mrs. Evans was so impressed by the care she received at the Massachusetts Homeopathic Hospital that she arranged through Dr. Richardson to establish the new foundation.

Of homeopathy at the Evans, Richardson had this to say: "no effort had been made scientifically to investigate the merits or mistakes of homeopathy until it was taken up at the Evans Memorial. In that institution, efforts are being and have been made to determine the limits and efficacy of the therapeutic principle of homeopathy. It has been rather disheartening to find that the members of the homeopathic profession have displayed so little active interest in the very suggestive and constructive work which has already been done along those lines." Richardson believed that members of the Evans staff were "just as loyal to homeopathy as any members of this society [American Institute of Homeopathy]." He went on to state that "it is essential that the fallacies shall be cleared out in order that we may rid ourselves of deadwood and delusion" [60].

Fig. 6.5 Evans Memorial Institute, Boston University Medical Center

Richardson was a valued teacher and mentor, who had a profound influence on Winfred Overholser and Conrad Wesselhoeft (see below for both).

Henry M. Pollock

Following the death of Frank Richardson, Henry Pollock (c. 1875–1954) was appointed director at the Evans Institute. Pollock was trained in homeopathy at the University of Minnesota, graduating in 1897. In 1899, he

was appointed assistant physician at Fergus Falls State Hospital, which was one of the homeopathic psychiatric hospitals in the United States. He was promoted to the assistant superintendent position and, in 1904, left to become superintendent of the Norwich State Hospital in Connecticut, before joining Boston University Medical School in 1916 and becoming director of the Massachusetts Homeopathic Hospital. His term of office as director of the Evans Institute lasted from 1916 to 1930. He published an article in the *Boston Medical and Surgical Journal* entitled *Success in Medicine*, where he outlined the four main criteria behind success in the profession: good work habits, courage, knowledge/wisdom, and personality of the doctor. Much that is in the article is of a timeless quality which repays rereading, as it embodies fundamental principles relevant to the practice of medicine [61]. Later, Pollock became associate commissioner in the Massachusetts Department of Mental Disease and was well respected as a psychiatric and public health administrator.

Clara Barrus

Clara Barrus (1864–1931) is best known to posterity as the literary executrix of John Burroughs, essayist, naturalist, and early American conservationist, who was friendly with Walt Whitman, John Muir, and other eminent people of the time. Barrus met Burroughs in 1901, when she was 37 and Burroughs 64. Barrus became the love of Burroughs' life and eventually moved into his home upon the death of his wife. Less well known is Barrus the psychiatrist and her importance in the developing role of women in academic psychiatry. Her life and contributions to medicine are considered in Chap. 3 on women and homeopathy.

Henry I. Klopp

Dr. Henry Klopp (1870–1945) graduated from Hahnemann Medical College in Philadelphia in 1894 (Fig. 6.6). Deciding upon a career in mental health, he joined the staff at Westborough Homeopathic State Hospital, where he remained from 1895 to 1912. As a young psychiatrist, Klopp must have made quite an impression on the leaders of Boston psychiatry, for, along with his colleague Solomon Carter Fuller, he was invited to a major meeting at Clark University, held to commemorate the university's 20th anniversary. Klopp appears in the now iconic photograph of the psychology department's conference, standing next to Fuller in the back row at the far right of the picture. The meeting was a landmark in American psychiatry, as it was the first (and only) time Sigmund Freud visited the United States, and also drew other European luminaries such as Carl Jung, Ernest Jones, and Sandor Ferenczi, all of whom feature prominently in the photograph.

Fig. 6.6 Henry I. Klopp. Child psychiatrist and hospital administrator (Image by permission of The Historical Society of Berks County Museum and Library, Reading, PA)

In 1912, Klopp accepted a position as superintendent of the new Homeopathic State Hospital in Allentown, PA. Many of its medical staff had been recruited from the homeopathic ranks, with Drs. Charles Trites and CB Reitz having graduated from Hahnemann and Dr. Sara Adelman from Boston University. Allentown was to be the last of several psychiatric asylums that operated on homeopathic principles, bringing to an end the 38-year span of construction for these facilities. There were seven homeopaths and two allopaths on the staff. Under Klopp's direction, the hospital developed a strong reputation, particularly for its innovations in child psychiatry.

At Allentown, Klopp initiated programs of occupational therapy, physical therapy, music therapy, general medical and surgical care, and a research and pathology laboratory. He created a special department for tuberculosis patients, a network of community mental health clinics, and established productive contacts with the school and court systems. As

an academician, Klopp published in major psychiatric and homeopathic journals. He was professor of mental diseases at Hahnemann and received an honorary D. Sc. degree from Muhlenberg College in 1927. In 1937, he earned board certification from the American Board of Psychiatry and Neurology, later being elected as Fellow of the American Psychiatric Association, and served on the APA council. In addition, he was president of the Pennsylvania State Homeopathic Society.

Klopp is perhaps best remembered for the Mental Health Institute for Children. This was one of the first such units in the country and filled a vital need at a time when the only option for severely disturbed children in need of hospitalization was to admit them to the adult wards of large state mental asylums, scarcely the most therapeutic environment. Klopp's unit opened in 1930 and rapidly attracted the attention of some the world's leading child psychiatrists. For example, in 1932, Dr. Mildred Creek visited the Allentown Children's Institute on a Rockefeller award to learn about new developments in child care, as she set about creating similar services in the United Kingdom. In a review of twentieth-century influences on the development of child psychiatry services, Klopp is mentioned both for setting up his unit and for publishing his first paper in 1932 [62, 63]. At its peak, the institute cared for around 140 children and remained a significant part of the hospital's mission for a long time, before closing its doors in 1992.

Klopp's publications were by no means restricted to his work with children, and they will be reviewed briefly here.

In 1912, Klopp coauthored a publication with Solomon Carter Fuller, a rising star of the homeopathy community (see below). In this paper, the authors described a case of dementia that did not fully conform to the classical picture of Alzheimer's disease, and they discussed the variations of its presentation [64]. Fuller became internationally acclaimed as a pioneer researcher in dementia, while Klopp's career went in other directions, but the two men maintained contact, and Klopp appointed Fuller as consultant pathologist at Allentown.

In 1915, Klopp published a report on the need to create special teaching positions for occupational and recreational therapy in mental institutions. He used the term "occupational teacher," which would broadly correspond today to occupational therapy, recreational therapy, and vocational rehabilitation. He recognized that traditionally this had been the domain of the psychiatric nurse, an overworked figure who would often be pulled away from this task by other more pressing duties. However, Klopp urged that the occupational teacher work very closely with nurses and that in their training, each nursing student should be exposed to "a period of instruction in diversional occupation," thereby enabling her to continue playing a role in the delivery of these activities, under the supervision of the teacher [65].

In one report, Klopp addressed the important need to provide for the large numbers of patients in mental hospitals who suffered from tuberculosis [66]. In his paper, Klopp identified four groups of hospitalized psychiatric patient: acute care, severe cases needing custodial care, able-bodied with some capacity for rehabilitation, and, lastly, those with tuberculosis. He described the results of a national survey that he had conducted, finding that 3.1 % of all patients in 106 mental hospitals were diagnosed with the disease, as well as another study of 286 necropsies at Allentown in which the hospital pathologist found tuberculosis was the cause of death in 17 % of all patients. Klopp concluded his paper with some general thoughts about the therapeutic needs for patients with tuberculosis, including separate pavilions for housing of these patients. He surmised with good reason that the death rate from tuberculosis in mental hospitals had not declined in parallel with the national decline and that more concerted efforts were required by the local authorities, public, and legislators to deal with the problem.

Integral to Klopp's vision was the forging of links between the mental health sector and local academic facilities. Klopp saw Allentown as a place that could offer itself as a regional teaching and clinical resource for the large nearby communities. He arranged with the psychology department at Lehigh University for their students to attend lectures and clinics at the hospital and expanded this collaboration to include a rotation for pupil teachers attending the university extension summer school course. The Lehigh student teachers would spend 20 h attending lectures by Dr. Harry Hoffman on mental deficiency, psychosis, the role of nutrition in development, and the assessment and treatment of the main psychiatric syndromes. The students were also allowed to observe and learn in the clinic. Further connections were forged with biology students at Muhlenberg College and with the Allentown High School civic students. Klopp placed high priority on broadening awareness of mental health issues among school principals, students, and local education board, which he saw as part of an effort to prevent the development of more serious problems [67].

Klopp and War-Related Disorders

With his experience in clinical practice during and after World War I, Klopp was well positioned to describe the psychological problems that result from combat. In 1922, he wrote a penetrating report based on the examination and treatment of many World War I veterans [68]. In content and tone, it would hold its own against the many scholarly papers that appear in today's psychiatric literature about posttraumatic stress disorder. From reading his main paper, it is clear that Klopp deeply understood the disorder. He doubted that there was one single type of war neurosis or "shell shock," but acknowledged a subgroup with what is today called mild

traumatic brain injury (mTBI), where blast injury played a part, a possibility that has again been raised in recent times and for which there is some evidence [69]. He understood the historical continuity of PTSD, realizing that different generations tended to focus on different aspects of the condition and thus give it different names, such as "nostalgia" in the Civil War and "shell shock" in World War I. But all in all, he held that posttraumatic neurosis from civilian life and from war had much in common: "This group of functional nervous diseases presents no problems that are different from those which have been studied for many years. They do not differ in any essential from those met with after railroad or other accidents." He outlined four main groups of traumatic neurosis: concussion, neurasthenia (i.e., mental or physical fatigue after minimal effort), anxiety, and hysteria (more dramatic presentations such as deafness, paralysis, muscle contracture, stupor). Klopp was fully aware of the problems caused by compensation and its effect on the self-image of many veterans; he wrote on the characteristic symptoms that might be seen in "compensation neurosis."

For the treatment of traumatic neuroses, Klopp advised a multimodal approach, which began with a thorough evaluation "following the homeopathic mode of treatment," by which he meant not only to elicit the chief symptoms but also to understand their timing and nature of onset. He stated that for neurosis especially, "… no detail, however trivial, should be ignored." In addition, Klopp instructed that a full physical and neurological examination be performed. From this information, the physician could then pick the most suitable homeopathic remedy. He then provided a list of 18 of the more useful remedies. Other interventions included psychotherapy, recreational therapy, hydrotherapy, and work rehabilitation when possible. Even with the above, Klopp knew that the outcome remained variable: some cases recovered better than others. He concluded that careful assessment led him to the impression that he was "not always treating a disease but a personality – many of these cases of neuroses and psychoneuroses are due to lack of adaptation to life …. In treating the personality, one must adjust the individual to life in such a way that he can lead a healthy existence." These challenges remain the same today as we deal once more with the reintegration into society of those who have served in military combat.

Klopp wrote little about homeopathic prescribing in his papers, and it is unclear to what extent homeopathy was used at Allentown, although it did form part of his own practice approach. No doubt this reflected the age, for, as the twentieth century progressed, not only were more treatment options becoming available, but the image of homeopathy grew increasingly tarnished as its status sank lower and lower. We do know, however, that as late as 1929, many homeopathic remedies were prescribed at Allentown: there were a total of 2,295 different prescriptions given between June 1, 1928, and May 30, 1929. The most common were *Bryonia*, *Belladonna*, *Nux vomica*, *and Gelsemium*, with 3X, 1X, 6X, and 2X beginning the most frequent potencies – all low potency doses [38, p. 132].

Psychiatrists at Fergus Falls State Hospital

In 1885, the Minnesota state legislature commissioned a third hospital to alleviate overcrowding at the state's two extant institutions. This hospital, which was to be run as a homeopathic facility, opened its doors in 1890, under the direction of Alonzo Williamson. It gained a strong reputation for innovative and liberal approaches to treating the insane and, many years later, was a center of research at the dawn of psychopharmacology and modern psychiatry. The hospital was closed in 2005, but for over 100 years, it served the state of Minnesota in providing assessment and care to those with serious mental illness, drug and alcohol problems, and developmental disorders. Throughout most of its history, from 1890 to 1965, its clinical directors were all trained homeopaths. When it opened, Fergus Falls was considered to be something of a showcase asylum. The first director stated, "The entire theory and practice of this institution will be based on the fact that these [patients] are not criminals … but sick people – brain sick … They are just as much the subjects of disease as one who has (tuberculosis), and the treatment will be directed not to restraint and punishment, but to cure" [70]. While this now sounds trite, such views about mental illness were uncommon at the time. Even into the 1930s, American psychiatry was quite resistant to seeing psychosis as amenable to biological treatment [71]. Williamson further explained that "Good food, exercise, regular hours and habits – all these play as important a part in the cure of lunacy as they do in the cure of other diseases" [70]. The hospital went from stride to stride, and in 1901 the Fergus Falls Weekly Journal proclaimed that "Of the 15 or more public institutions in the state, the greatest, the most complete … is the state hospital for the insane in Fergus Falls" [70]. Despite eventually succumbing to overcrowding and its attendant consequences, the hospital generated some impactful research in the 1950s and 1960s, while it was still under the direction of a homeopathically trained superintendent. During the twentieth century, the hospital leaders were in the forefront of treatment innovation, for example, occupational therapy and shock treatment [72], and *Life* magazine featured the hospital's treatment program in an article on progress in the nation's state hospitals [73]. The department of clinical psychology developed instruments to measure behavior, to predict outcome from neurosurgery, to acquire normative data for the Minnesota Multiphasic Personality Inventory (MMPI), to assess the hospital's "total push" program for schizophrenia, and to test the effects of the first

monoamine oxidase inhibitor antidepressant drug. The first placebo-controlled trial of reserpine in disturbed chronic patients was conducted at Fergus Falls. Behind this very productive team was the administrative support of the hospital's third director, *William Patterson*, a homeopathic graduate of Boston University Medical School who was in charge of the hospital between 1927 and 1968. During his long administration, the hospital transitioned from the age of homeopathy and hydrotherapy into the era of Metrazol convulsive therapy, insulin shock, leucotomy, then into electroconvulsive therapy, and later still into the age of neuroleptic and antidepressant drugs, as well as the community psychiatry movement. According to Ralph G. Hirschowitz, a staff psychiatrist at Fergus Falls in the early 1960s, by that time, homeopathy had completely disappeared from the scene, and he has no recollection of any staff member ever discussing it. It was his recollection that by then Dr. Patterson had become something of a "shadow figure" [74], but his half century of service set the stage for many accomplishments.

Preceding Patterson were two other homeopathic doctors. The first, as noted above, was *Alonzo Williamson*, a graduate of Hahnemann in Philadelphia, who stayed a brief 2 years, before leaving for Minneapolis and then California. His approach was progressive, and like his teacher Selden Talcott, he adhered to the belief that hot milk was a key part of the diet: "Milk is the main special diet in this hospital and we prefer to give it hot … Next in importance is rest. All new patients are immediately placed in bed on admission. Through the complimentary forces of rest and milk, we have been able to largely dispense with every kind of physical restraint and we have not used one grain of any narcotic or chemical restraint whatever" [70]. In addition to his psychiatric qualification, Williamson obtained a doctor of law degree from the University of Minnesota, where he held a faculty position in the law department. Williamson affirmed that voluntary admissions should be permitted into state hospitals since it would allow for intervention at an earlier point in the disease process and render a better prognosis. Some years after his departure, in 1910, the law was indeed changed [75]. The second superintendent was *George Oakes Welch*, an 1887 homeopathic graduate of Boston University. Welch's term covered 35 years, from 1892 to 1927. During his administration, Welch had to deal with hospital overcrowding, but kept the ship afloat at a time when there were few major innovations in the management of serious mental illness. He presided over a period of expansion, during which the hospital grew from one building for 200 patients into a large community of 1,683 patients and specialized services. Following Welch, the four-decade long administration of Patterson took place.

After a period of downsizing, the hospital eventually closed in 2005. It is not known when the practice of homeopathy ceased at Fergus Falls. A great deal of what was achieved at there can be credited to the progressive philosophy and administrative skills of its first three superintendents, in partnership with state support, most notably of Luther Youngdahl, the state's reformist governor in the 1940s, and David Vail, director of medical services in the state department of public works.

The Life and Career of Solomon Carter Fuller: America's First African-American Psychiatrist

Solomon Carter Fuller (1872–1953) is remembered today chiefly for his research into the neuropathology of dementia and for opposing discrimination against African-American physicians (Fig. 6.7). However, these bare details conceal a remarkable story of triumph over adversity. Proper recognition of Fuller's work came late – long after his death in fact – and his critical and formative connections with homeopathy have been entirely overlooked. Today, Fuller is rightly honored as one of the great twentieth-century figures in psychiatry. In 1974, the Black Psychiatrists of America created the Solomon Carter Fuller Program for aspiring young African-American psychiatrists to complete their training. In the same year, his alma mater, Boston University School of Medicine, dedicated the Dr. Solomon Carter Fuller Mental Health Center, which forms a major element in that facility's training and service programs. Fuller's portrait now hangs in the headquarters of the American Psychiatric Association (APA), where a senior officer in the APA has described Fuller as "way ahead of his time" [76], a phrase that has been

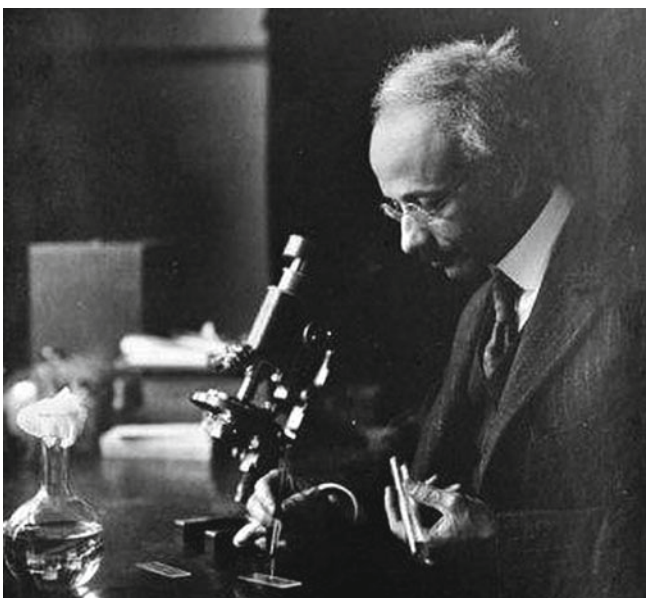


Fig. 6.7 Solomon Carter Fuller. Early leader in study of Alzheimer's disease (Image by courtesy of Boston University Alumni Medical Library Archives)

used in connection with others mentioned in this book. In 1969, the APA created an annual award named for Dr. Fuller, to honor contributions by an African-American that have benefited the quality of life for African-Americans.

Fuller's ability to overcome great odds through quiet determination and focus and to produce work of the greatest quality is inspirational. Strident protest and public militancy were not Fuller's style, although he could well have been justified in expressing himself in that manner: on countless occasions, he endured racial discrimination in his professional life. As Kaplan has expressed it, "Unlike his wife, Meta, Solomon had never been an outspoken activist for injustice and social change. His battles against prejudice were fought quietly and through academic excellence" [77, p. 18].

Fuller was born in Liberia, where in 1852 his grandfather, John Fuller, had emigrated after purchasing his freedom from slavery. The family prospered and established themselves in the upper echelons of Liberian society. Solomon's father, also named Solomon, owned large tracts of land and a coffee plantation. He died in 1889, when his son was 17. Three months afterwards, Solomon Jr. journeyed to the United States to pursue his life goal of becoming a physician. Fuller enrolled as a student in Livingstone College, North Carolina, graduating in 1893. The next year, he was accepted as a medical student at Long Island College Hospital, but later in that same year transferred to Boston University for reasons that remain unclear. At all events, it proved a good move, and he found Boston to be a stimulating place. He impressed his teachers, one of whom was Elmer Southard, a leader in the infant specialty of neuropathology and who inspired Fuller to follow the same path. This eminent Harvard neuropathologist paid tribute to Fuller as early as 1912, when saying at the opening of the Evans Memorial Institution: "In my annual reports [for the State board of Insanity] I find much to commend publicly in the Westboro work, and particularly the work of Dr. S.C. Fuller, pathologist at Westboro. No better enthusiasm prevails than that found in Fuller's laboratory" [78]. Southard, who was in charge of neuropathology training at Harvard, would later rotate his entire class to Fuller's laboratory at Westborough State Hospital. Another teacher, Dr. Edward Colby at Boston University, was equally impressed by Fuller's potential and, upon Fuller's graduation in 1897, recommended him for a position as intern in the new laboratory at Westborough, an appointment that Fuller took up eagerly. One of the duties of this laboratory was to complete postmortem specimens of brain tissue, acquired from patients who had died insane, mainly from syphilis, schizophrenia, manic-depressive insanity, dementia, alcohol poisoning, pernicious anemia, and other less common conditions. By then, the search to understand physical changes in the brain and relate them to clinical features of disease was an area of intense scientific activity. Thus began in 1897 Dr. Fuller's association with Westborough, a relationship that was to continue in one form or another until 1933. Fuller took to his responsibilities so well that when the laboratory director left Westborough only a few months later, Fuller was appointed to replace him just 1 year out of medical school. Two years later, Fuller was made an instructor in neuropathology at Boston University Medical School, thus becoming one of the first African-Americans to be appointed to any medical school faculty outside of the established Black institutions at Meharry and Howard Universities. To further his professional growth, Fuller took leaves of absence in 1900 and 1905, the former in New York and the latter in Munich, at the laboratory of Emil Kraepelin and Alois Alzheimer. As might be imagined, postdoctoral fellowships with these eminent psychiatrists were much sought after, and it speaks to Fuller's excellence that he was one of five foreign students selected to study in Alzheimer's laboratory. In making the selection, Alzheimer was influenced by Fuller's prior experience in the Westborough pathology laboratory. Fuller's sojourn in Germany lasted from November 1904 to August 1905.

Alzheimer's Disease or Fuller's Disease?

Alzheimer was the only neuropathologist in his laboratory; he had no funds to support his research and depended entirely on his students to perform the lion's share of the work. Alzheimer was self-effacing and ill at ease socially, but he established cordial relationships with his students, who were deeply appreciative of the experience and teaching he offered. Fuller found Alzheimer to be "a delightful, unassuming person who was a poor lecturer, but when you spent time with him in the laboratory and on the wards, you learned the stuff" [79]. Fuller was a conspicuously hardworking student, and it has been suggested that he examined more brain specimens than anyone else in the lab, apart from the chief himself. The extent of Fuller's contributions in Alzheimer's lab may never be known, but they are likely to have been substantial [77, p. 38] and Berrios has more than rhetorically posed the question of why the disease was eponymously named after Alzheimer and not Fuller or perhaps Oskar Fischer, a contemporary who observed the presence of plaques in senile brains [80].

Berrios' case may be briefly summarized. At a scientific meeting in Tübingen, November 1906, Alzheimer presented the case of Auguste Deter, a patient who showed a rapidly developing dementia in her late 40s, leading to death at the age of 51. Besides the many clinical features that are associated with dementia, postmortem findings showed nerve tangles in the brain (the so-called neurofibrillary tangles). Such tangles were already known to be a key characteristic of senile dementia, but were not believed to occur in younger adults. Alzheimer published the case in 1907 [81] and later described a second case. By 1910, more cases had been

described, leading Alzheimer's boss, Emil Kraepelin, to name this supposedly new condition after Alzheimer. Even Alzheimer was reluctant to give his full support to such a move. It is still unclear why Kraepelin took this step, apart from reasons having to do with academic prestige or professional rivalry vis-a-vis other European departments of psychiatry. Today, the term "Alzheimer's disease" refers to a type of dementia regardless of when it develops and not simply to early-onset dementia.

To appreciate the importance of Fuller's early work, we may note that in June of 1906, 5 months *before* Alzheimer's Tübingen presentation, Fuller presented certain findings at the annual meeting of the American Medico-Psychological Association. These findings were later published (April 1907) in the leading American psychiatric journal, under the title *A Study of the Neurofibrils in Dementia Paralytica*, *Dementia Senilis*, *Chronic Alcoholism*, *Cerebral Lues*, *and Microcephalic Idiocy* [82]. For many years, Fuller remained in no rush to jump on board the "new disease" train, as he was well aware of the preliminary and somewhat confused understanding about dementia. As Berrios noted, even by 1912, the 17 reports of cases referred to as having Alzheimer's disease showed many inconsistencies in their symptoms and postmortem abnormalities. Fuller's caution was well placed.

Fuller was the first to translate Alzheimer's work into English. He also made a number of original contributions, including a 1912 publication of the first American case of Alzheimer's disease, and reviewed the world literature of 12 cases [83]. In this review, Fuller stressed the many variations in mental symptoms and microscopy findings, as well as the small overall sample base, rendering it premature to confirm Alzheimer's paradigm. A second case of Alzheimer's disease from Westborough also did not entirely fulfill the criteria laid down by Alzheimer, leading Fuller and Klopp (1912) [84] to discuss further the divergence that existed in the field. In his publication with Klopp, Fuller again expressed doubt that Alzheimer's (presenile) disease was a separate clinical condition. Fuller did not believe that arteriosclerosis was the cause of the disease, as some had thought, and he also debated the significance of plaques and tangles as peculiar to Alzheimer's disease.

Further Contributions

Fuller's legacy reaches beyond his work in neuropathology. As noted above, he was invited to attend the Clark University psychology conference in 1909 and appeared in the iconic photograph of attendees at that gathering (Fig. 6.8). What was Fuller doing there, and how did he come to be at such a prestigious meeting? Fuller had previously come to the attention of the conference organizer, Stanley Hall, from one of Hall's departmental colleagues, Clifford Hodge, who was impressed by Fuller's autopsy work. Since the Clark faculty had worked only with animals, they requested Fuller to give lectures at Clark on his work with human pathology. It has been noted that Fuller gave a presentation at the meeting, entitled *Cerebral Histology, with Special Reference to Histopathology of the Psychoses* [77, p. 51], and a biographical sketch from Boston University indicates that "Because of his own stature in the field of psychiatry, Fuller was invited to present a lecture at Clark alongside Sigmund Freud and Carl Jung" [85]. However, the Clark records do not provide any support for Fuller giving a talk at the meeting, and it is perhaps more likely that he gave his talk on another occasion [86].

Fuller, Psychiatry and Psychoanalysis

For all his inclinations to neuropathology, Fuller identified enthusiastically with early developments in psychoanalysis. Although his abiding fascination with structural change in the brain did not diminish, Fuller readily took to the ideas of Freud, Meyer, and others, and for some years after the Clark conference, he continued to exchange ideas with Jung, Adler, and Meyer. In fact, Meyer recommended Fuller for a faculty position at Johns Hopkins Medical School, which at the time was arguably the leading center in the country. Sadly, the application was rejected because Fuller was a "colored man" [87]. Fuller embraced the ideas of Freud, Meyer, and Jung and incorporated them into his clinical practice, which he developed parallel to his career in neuropathology. In 1919, Fuller became America's first African-American psychiatrist. At this stage in Fuller's career, a typical workday would see him at the Westborough lab in the mornings, at Boston University in the afternoons, treating patients at home into the late evening, and then reading until sleep at 2 am [88]. Fuller and Hall also shared affinities, and Fuller became Hall's personal physician as well as, perhaps, his personal therapist [89].

Fuller was a man of eclectic tastes. Not only was he an active participant in homeopathy (as described later), but he attended William James' lectures at Harvard on spiritualism. The manner in which he practiced psychiatry serves as a model for all aspiring psychiatrists: he thought about brain disease in neuroanatomical terms and applied careful scientific observation and reasoning in the clinical setting when he saw his patients. At the same time, Fuller was attentive to the life stories that made each patient a unique individual and realized that many symptoms were brought about as the response to environmental stress, including shell shock, which had become a topic of special interest to Fuller during and after World War I. He attracted patients from all walks of life and would never turn anyone away for lack of money, class, or color.

Fuller's Academic Career in Boston

From 1897 to 1919, Fuller was on the staff at the Westborough Insane Asylum, where he developed the pathology laboratory. He resigned to take up an appointment at Boston

Fig. 6.8 Fuller and Klopp (*end of top row at right*) at the famous 1909 Clark University Conference attended by Sigmund Freud and Carl Jung (in *front row*) (Image in the public domain)

University School of Medicine (BUSM), where he continued his research and taught pathology to neurology and psychiatry students. He was the only African-American on faculty and drew no salary apart from a small stipend for teaching. Although Fuller served as acting chair of the Neurology Department for 5 years at the mid-level rank of associate professor, he was never formally given the title of chair nor was he promoted to full professor. In 1933, when a white assistant professor was promoted over Fuller's head to run the department, he decided to retire, saying "I thoroughly dislike publicity of that sort and despise sympathy. I regard life as a battle in which we win or lose. As far as I am concerned, to be vanquished, if not vaingloriously is not so bad after all" [88, p. 35a]. Fuller was eventually recognized with the title of emeritus professor of neurology at the place he had served with such distinction for 34 years. He continued the private practice of psychiatry at his home until the end of his life. Very belatedly, on the occasion of its centenary, BUSM recognized Fuller by the commission of a bronze sculpture (by Fuller's wife, Meta). One year later, in 1974, BUSM opened the Mental Health Center named for him through an act of the state legislature.

African-American Psychiatry

Fuller's work to advance the cause of African-American psychiatrists deserves as much recognition as his contributions to neuropathology. His personal life represents a triumph over racial discrimination yet, as he correctly yet understatedly characterized it, "With the sort of work that I have done, I might have gone farther and reached a higher plane had it not been for my color" [88, p. 35b]. A lower salary than white counterparts at Westborough, no regular faculty salary at BU, and job rejection at Johns Hopkins on account of his race – these were just a few examples of the discrimination

with which Fuller had to contend. It is astonishing that for such a distinguished person, the only award he received during his lifetime was an honorary Doctor of Science degree at his alma mater, Livingstone College.

Fuller encountered blatant discrimination when he offered his services to help in the war effort. During World War I, the surgeon-general's office created a neuropsychiatry division to assess and treat soldiers who were returning from battle with neuropsychiatric problems. Fuller was a member of Advisory Board 17, Boston Society for Psychiatry and Neurology, a regional component of this program. There continued to be pressing need for qualified civilian and military psychiatrists to assess the large numbers of veterans with psychiatric problems, and Fuller indicated his readiness to help in the cause. In response to his application, Fuller, who was by then well known, was told that because of his race, there was virtually no chance of promotion higher than captain but that, under those terms, the surgeon-general's office would be glad to put forward his name. Not surprisingly, Fuller declined.

Fuller devoted himself to creating opportunities for African-Americans in medicine. His involvement with the Tuskegee hospital is perhaps the best known in this respect. By way of background, the 400,000 African-Americans who had served in the US Armed Forces during World War I returned home to find themselves excluded from the new veterans' medical facilities that catered to whites. In response to pressure from black veterans, the Harding administration developed a plan to provide for the health needs of disabled black veterans and in 1921 established a VA facility in Tuskegee, Alabama. At first, the main role of this center was to treat patients with tuberculosis or neuropsychiatric disorders. The National Medical Association and the NAACP lobbied successfully for the hospital to be staffed by African-Americans. With an extremely short-time deadline, the government required a cadre of African-American doctors to be appointed to run the hospital. Qualified staff was scarce, due to discriminatory practices within the medical profession. Fuller was approached by the director of the Veterans Administration to serve as director of the Tuskegee VA. After declining, he was then asked if he would train a group of physicians in neuropsychiatry. Fuller engaged the cooperation of his colleagues at BU, particularly John P. Sutherland, professor of anatomy and dean of BUSM, and by November 1923, he had overseen the successful training of five graduates from the two African-American medical schools. These doctors duly took up their positions at Tuskegee, and some gained prominence in their own right. Dr. Toussaint Tildon became director of a facility, which, by 1929, had earned national recognition as "one of the best managed veterans hospitals in the country, both as to administration and to the scientific work done" [77, p. 65]. Dr. George Branche supervised training of several doctors who went on to provide psychiatric services to the African-American community. At Tuskegee, Branche became chief of neuropsychiatry and earned fame for discovering the value of quartan malaria to treat syphilitic patients who had generally been resistant to tertian malaria therapy. His paper on this matter at the 95th Annual Meeting of the American Psychiatric Association was hailed by Walter Bruetsch, a leader in the treatment of syphilis, as "one of the best contributions which has been made in recent years in the treatment of neurosyphilis" [90]. Branche's success in part was due to Fuller's inspiration and lifelong passion "both to teach and search out the causes of things" [91]. Specifically, Fuller's knowledge about syphilis had helped his trainees to diagnose the disease in veterans, a matter of great importance because it had been the custom of military doctors to misdiagnose syphilitic individuals as having behavior or personality disorders, which often led to dishonorable discharge and denial of military benefits.

Fuller and Homeopathy

Very little information can be found in the main literature about Fuller's contacts with homeopathy, which were in fact quite significant. In 1894, Fuller was accepted into Boston University School of Medicine, which had been founded as a homeopathic institution in 1873. Initially, Fuller had enrolled at the Long Island Medical College, but, perhaps for reasons of ambition, he visited Boston hoping that perhaps he could gain acceptance into Harvard. During the course of that visit, "as he strolled through the city, he found himself at Boston University, where he made his way to the administrative offices and introduced himself to the Dean" [77, p. 18] (Fig. 6.9). Either deans were not so busy attending meetings or fund raising in those days, or perhaps it just happened to be Fuller's lucky day, but whichever the case, the dean apparently recognized talent when it stood in front of him and offered a scholarship provided that Fuller would return to his native country for medical mission work. Fuller refused to enter the program on those terms and convinced the university to accept his personal note of payment, which he was able to honor by employment as an elevator attendant in the evenings and at weekends, while he worked his way through medical school.

Because of its orientation, the medical school at Boston University would have been connected to a national network of homeopaths, homeopathic societies, and professional opportunities. Given Fuller's strong interest in neuropathology, it is no surprise that he accepted an offer from the nearby homeopathic state psychiatric hospital at Westborough. One of Fuller's first publications, in 1901, appeared in a homeopathic journal, the *New England Medical Gazette*; it described four cases of pernicious anemia with insanity. Five years later, Fuller published a detailed account of the homeopathic proving of belladonna in animals [92]. This laborious

study took over one year and was performed gratis. It may well have been the first placebo-controlled homeopathic proving in animals and formed part of the larger report by Bellows of the entire belladonna proving project. Although it is unclear what lasting scientific payoff came out of the project, historically it was an important exercise for homeopathy and for clinical trials in general. The protocol required clear inclusion criteria, a double-blind placebo control, and agreement on the part of investigators at different sites on following a common procedure. In many ways, it was a forerunner of modern multisite clinical trials. The study also gave notice that homeopaths were prepared to conduct good-quality scientific research, the avoidance of which had often been charged against them by their opponents and also resisted from within. Fuller's significant participation in this study has largely gone unnoticed. Fuller joined the Massachusetts Homeopathic Medical Society, presented at a number of its meetings, published in the journal (a talk he gave on the clinical value of urine analysis in common diseases [93]), and provided service on the society's committee on dermatology, syphilology, and genitourinary disease. He retained a connection with the society throughout his life, attending its annual meetings until 1952 when, because of declining health, he wrote a letter to the society's president, Dr. Burt, on April 12, apologizing for his absence and expressing appreciation for the society's positive influence on his medical career [85]. It has to be concluded that homeopathy continued to exert an influence in Fuller's life, and he did not sever his ties with the homeopathic community, even if his participation remained under the surface, at least as his life and work are described in the literature.

Winfred Overholser: The Dean of Forensic Psychiatry

Dr. Winfred Overholser (1892–1964) studied medicine at Boston University (BU) and graduated with a homeopathic medical degree (MB) in 1915 and with a regular MD degree in 1916 (Fig. 6.10). As a student, Overholser was strongly influenced by two homeopathic psychiatrists at BU, Frank Richardson and N. Emmons Paine, especially the former, who played a significant mentoring role. This "outstanding" doctor (Richardson), as characterized by Moore, offered Overholser a 1-year residency position at the Evans Memorial Hospital [94]. Arguing for the progressive nature

Fig. 6.9 John Sutherland, dean of Boston University Medical School 1899–1923, who recruited Solomon Carter Fuller as a medical student. Bas-relief by Frederick Warren Allen (Image by permission of Christina Abbott (www.fwallen.com))

Fig. 6.10 Winfred Overholser. Psychiatrist and president of the American Psychiatric Association. Superintendent of St. Elizabeth's Hospital, Washington, DC (Image courtesy of National Library of Medicine)

of homeopathic training, Moore makes the point that BU was one of the earliest medical schools to send its students to the local state hospital for a psychiatry training rotation, a practice that was "emulated many years later by some other medical schools." Like Fuller, Overholser accepted a position at Westborough State Hospital, beginning duties there in 1917 and remaining on staff until 1924, with a 1-year leave of absence in 1918–1919 while he served in France as part of the US Army Medical Corps' neuropsychiatry section. At Westborough, Overholser gave notice of his creative approach to treating the mentally ill when he organized the first state hospital orchestra in Massachusetts. On his return, he was appointed assistant superintendent of the Gardner State Hospital in Massachusetts, while keeping his Westborough position. Overholser published a report on the cerebrospinal fluid in 108 cases of poliomyelitis [95]. For some years, Overholser remained active in the homeopathic community, presenting papers at homeopathic meetings and holding an associate editor position of the *New England Gazette*. He was an elected officer (secretary) of the homeopathic fraternity Alpha Sigma in 1920 [96]. In 1926, he spoke on the topic of sanitary science (public health) and preventive medicine at the 63rd session of the Homeopathic Society of Pennsylvania, held on September 14–16 at Bedford Springs [97]. He published a paper on nervous and mental phenomena of hyperthyroidism, in which he offered a comprehensive description of the physical and mental manifestations of the disorder, making the interesting observation that the stress of war could bring on Graves' disease (hyperthyroidism) in both veterans ("war neurosis") and civilians who were in fear of death or who had to be confronted with the corpses of dead family members [98].

Subsequently, Overholser's career took him into public health, forensic psychiatry, religion, and administration. He became assistant commissioner of the Massachusetts Department of Mental Diseases in 1924, a post he retained until 1934, as well as directed the Division for the Examination of Prisoners between 1924 and 1930. In these posts, Overholser had the opportunity to play an important part in implementing the Briggs law, which was passed in Massachusetts in 1921, the first legislation in the United States to mandate psychiatric examinations of certain criminal defendants, for example, those charged with capital offenses or repeat violators. Throughout his time in Boston, Overholser held a faculty appointment at BU as professor of psychiatry and lecturer at the BU School of Law. During 1933–1934, Overholser was president of the Massachusetts Psychiatric Society.

Controversy: Ezra Pound and the CIA

After 22 years in Boston, Overholser was appointed superintendent of St. Elizabeth's Hospital, a high-profile government-run institution in the capital city and the nation's largest civilian mental hospital. At its peak, it accommodated around 8,000 patients and employed 4,000 men and women. Among its more famous patients were Ezra Pound, who had been charged with treason in World War II, Mary Fuller (an early screen star), and William Chester Minor, a former Civil War soldier, who after release from hospital subsequently found his way to England, where he was incarcerated for murder, and who in jail helped create the Oxford English Dictionary. Three presidential assassins, or would-be assassins, have also been hospitalized at St. Elizabeth's: Richard Lawrence (Andrew Jackson), James Guiteau (Garfield), and John Hinckley (Reagan). St. Elizabeth's had a close relationship with the National Institute of Mental Health (NIMH) which, as an arm of the federal government, administered the facility until 1987, when it was taken over by city administration. NIMH continued its research at St. Elizabeth's, incubating an important program of basic and clinical research in schizophrenia. Under Overholser's leadership, much progress was made in this respect. However, his reign was not without controversy. Overholser's management of Ezra Pound has been characterized as "one of the earliest and most flagrant examples of the ongoing abuse of psychiatry in the American criminal justice system" [99, 100]. In essence, it was alleged that, because Overholser was an admirer of Pound's poetry, he disagreed with the supposedly clear-cut absence of psychotic features, thereby circumventing the justice system and protecting Pound from a potential death sentence. By judging Pound to be insane, it was possible to assure him a comfortable, even privileged, life in St. Elizabeth's, which is precisely what happened. Whether there is merit to this argument or whether Overholser simply had an honest difference of opinion from his colleagues is a question that may never be resolved, but the charges are serious ones. On the one hand, it may have been an instance of purposefully misdiagnosing someone as psychotic because of political or other reasons; on the other hand, it could be seen as a humane approach based on firm clinical opinion, albeit one that was not shared by others.

There was also the issue of Overholser's involvement in work with the Office of Strategic Security (OSS) and the Central Intelligence Agency (CIA). During World War II, the Office of Strategic Services (OSS), forerunner of the CIA, worked with Overholser to evaluate the effects of the so-called truth sera. The OSS had become aware that drugs like mescaline facilitated the ability of subjects to disclose information that would otherwise have been kept quiet, and they desired to pursue more extensive research into the use of drugs for this purpose. As reported by Stevens, "Under the guidance of Winfred Overholser, the director of St. Elizabeth's, Washington's famous mental hospital, an OSS drug squad had field tested a number of compounds, including mescaline and scopolamine. Their best luck had come with concentrated liquid marijuana … which they had injected into cigarettes.… But its most rigorous test came in a program designed to cleanse the armed forces of suspected

communists." Overholser's team was able to break almost every soldier they examined [101].

Forensic Psychiatry

Forensic psychiatry was a defining part of Overholser's life, and he was sometimes known as the "dean of forensic psychiatry." Overholser was an influence behind the DC Circuit Court ruling known as the "Product Rule" or "Durham Rule" [102]. This ruling liberalized the more restrictive McNaughten insanity defense, which required that to be judged legally insane, the accused must have been unable to either know the nature and quality of the act or know that it was wrong *at the time of committing the crime* [103]. The intent of the Product Rule was to liberalize the definition of insanity, which was then defined as being the result ("product") of mental disease or defect, thereby taking into account long-term factors, like the effects of chronic mental illness, rather than only the state of mind at time of the crime. Although hailed at the time as progressive, the rule was problematic to implement and was eventually removed from the statutes in 1972, except for New Hampshire, where it had been originally introduced in 1871.

Religion

Honors accorded to Dr. Overholser included presidency of the American Psychiatric Association in 1947–1948, doctoral degrees from George Washington University and St. Bonaventure University, as well as the French Legion of Honor. Overholser was a man of deep religious commitment, being an active member of the Unitarian Church, which elected him to its highest post, moderator of the American Unitarian Association, in 1946. He was interested in how religion and mental illness were related and proposed that sometimes religious conflicts were an outgrowth of mental illness. In this respect, he presaged American psychiatry's renewed attention to the overlap of religion and mental illness, with its later inclusion of a category known as "religious or spiritual problem" in the diagnostic manual. Beyond this of course, religious preoccupations can be symptomatic of other mental illnesses. One product of Overholser's religious writings was a collaborative venture with Albert Schweitzer on the psychology of Jesus, in which Overholser wrote an introduction to the English translation of Schweitzer's refutation against books claiming Jesus to be mentally ill and which had misquoted an earlier work by Schweitzer in support of these claims [104]. (Parenthetically, one little-known fact about Albert Schweitzer concerns his use of homeopathy. It has been reported [105, 106] that, in the 1950s, Schweitzer repeatedly purchased remedies from Laboratoires Homeopathique de France, through his French homeopathic colleague Leon Vannier, to treat malaria and other tropical diseases at his African hospital. Personal communication from Dr. Walter Munz, colleague of Schweitzer's and director of the Lambaréné Hospital, indicated that, although he had no direct knowledge about this, he stated that Schweitzer was always open-minded about different forms of medical practice and that he used the available medicines of his day.) [107]

Overholser died in 1964 at the age of 72 after a distinguished career. Every psychiatrist probably has his or her own prescription for mental health. For Overholser, it was "Don't take yourself too seriously. Be tolerant of the peculiarities of others. Try to do something worthwhile in your life and observe the Golden Rule."

Oswald Boltz: From Psychiatry to Homeopathy

Oswald Boltz (1895–1975) was trained as a conventional doctor and specialized in psychiatry. He was appointed to the staff at Binghamton State Hospital in New York, serving as director of Clinical Psychiatry. Extensive experience brought him face to face with the limitations of usual treatment, which he attempted to remedy by teaching himself homeopathy. As he said: "I soon discovered on reading a number of different homeopathic *Materia Medicas* that in many cases there was sharp relationship between the drug provings as described in the *Materia Medicas* and the clinical manifestations, which I observed in the varieties of schizophrenias, over many years" [108].

Boltz was well known for introducing the Boltz test to diagnose general paresis (neurosyphilis) [109]. Originally, he had developed this test to measure cholesterol but found that in patients with the aforementioned diagnosis, the fluid turned a characteristic lilac color which, he believed, was strongly suggestive of that condition; the more advanced the disorder, the more positive was the reaction. For the next decade, the test was used widely in the United States and Europe and stimulated a number of critical appraisals, which gave mixed results ranging from concluding that the test was valueless to being worthy of more investigation and carrying some utility [110–112].

Boltz was reputed to have been one of the earliest psychiatrists in the United States to use Metrazol™ convulsive therapy and insulin therapy for schizophrenia, both of which became extremely popular at the time [113]. In 1937, 59 cases of schizophrenia had been treated with insulin at Binghamton [114]. He was also interested in the concept of recovered schizophrenia [115]. Although schizophrenia usually carries a guarded to poor prognosis, full recovery can occur. Sometimes in retrospect it becomes clear that the original diagnosis was faulty, but not in all cases. Boltz was not alone in his interest in recovered schizophrenia: in 1924, Strecker and Willey [116] reported on 187 patients with the

diagnosis, finding that 13 % made a good recovery. The authors studied these 20 cases and reported that intact personality, a precipitating stressor that continued to influence the illness, and an acute stormy onset all predicted good outcome. It was due to the difficulties in treating schizophrenia that Boltz turned to homeopathy and reported his experiences many years later in 1968. His paper describes six cases who responded well to homeopathy, and it seems that these patients did indeed suffer from a condition that would be regarded today as schizophrenia-spectrum cases. Boltz was impressed at the ability of remedies like *Hyoscyamus*, *Pulsatilla*, *stramonium*, *sulfur*, *and Natrum muriaticum* in doses ranging from 3X to 200X, but mainly at the low potency end, that is, doses that had pharmacological activity. Remedies were generally selected on the basis of either the target organ or the patient's constitution. All patients had undergone conventional treatments before they received homeopathy. Although Boltz was well aware that recovery could have been quite unrelated to the use of homeopathy, he remained of the opinion that it was due to the remedies, a possibility that deserves more investigation.

James Cocke

James Richard Cocke (1863–1900) may have been one of the most remarkable physicians in nineteenth-century medicine. Cocke became completely blind at the age of 3 months (or possibly 3 days, according to source), after some acid had been administered to his eyes. This handicap did not prevent him from entering medical school at Boston University and graduating top of his class in 1892. Cocke is believed to have been the first blind person to qualify as a medical doctor. Although he was associated with homeopathy for a time, Cocke is best known as a practitioner of hypnotherapy and author of the book "*Hypnotism: How It Is Done; Its Uses and Dangers*." He wrote other papers on the subject, as well as authored an autobiographical novel entitled "*Blind Leaders of the Blind: The Romance of a Blind Lawyer*." Cocke was an accomplished musician, who composed a comic opera and played the piano. As a physician, he treated a large number of clients, including 1350 to whom he had given hypnosis by the time his book was published in 1894 [117]. Cocke was quite celebrated, and articles about him appeared from time to time in the main newspapers.

Cocke encountered considerable discouragement from friends and acquaintances to whom he shared his plans to become a doctor, yet this did not deter him. He paid his way through college, earning money by testing tobacco products for the Lorillard Company, as well as by conducting a massage practice in Boston. Cocke's stormy life was punctuated by bigamy, bankruptcy, three marriages, institutionalization for psychosis in a Boston psychiatric hospital, and eventual suicide by gunshot at the age of 30. This enterprising and remarkable man defied expectations, and his all-too-brief life was tragically cut short before he could unfold his astonishing potential.

Conclusions

The formative role of homeopaths upon psychiatry is more than a minor historical footnote. As this account demonstrates, the growth of psychiatry has been enriched by men and women who were trained as homeopaths. At least two (Fuller and Holmes) were acknowledged as "ahead of their time." Not many of the selected individuals actually practiced homeopathy, other than those employed in the asylums and the universities prior to World War I. This is hardly surprising as the old remedies inevitably gave way to newer approaches, and pressure to distance oneself from homeopathy was always there, especially as the homeopathic power base eroded. Nonetheless, as eminent a psychiatrist as Fuller continued to be an active member of his state homeopathic medical society to the end of his life, and Klopp was prescribing homeopathically well into his career; the same is true for Charles Menninger. As a presence in the history of psychiatry, homeopathy has punched above its weight, reaching into the following areas: child, adult, inpatient, forensic, community, training, research, rehabilitation, occupational therapy, the use of the laboratory for diagnosis, and the emerging field of biological psychiatry.

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