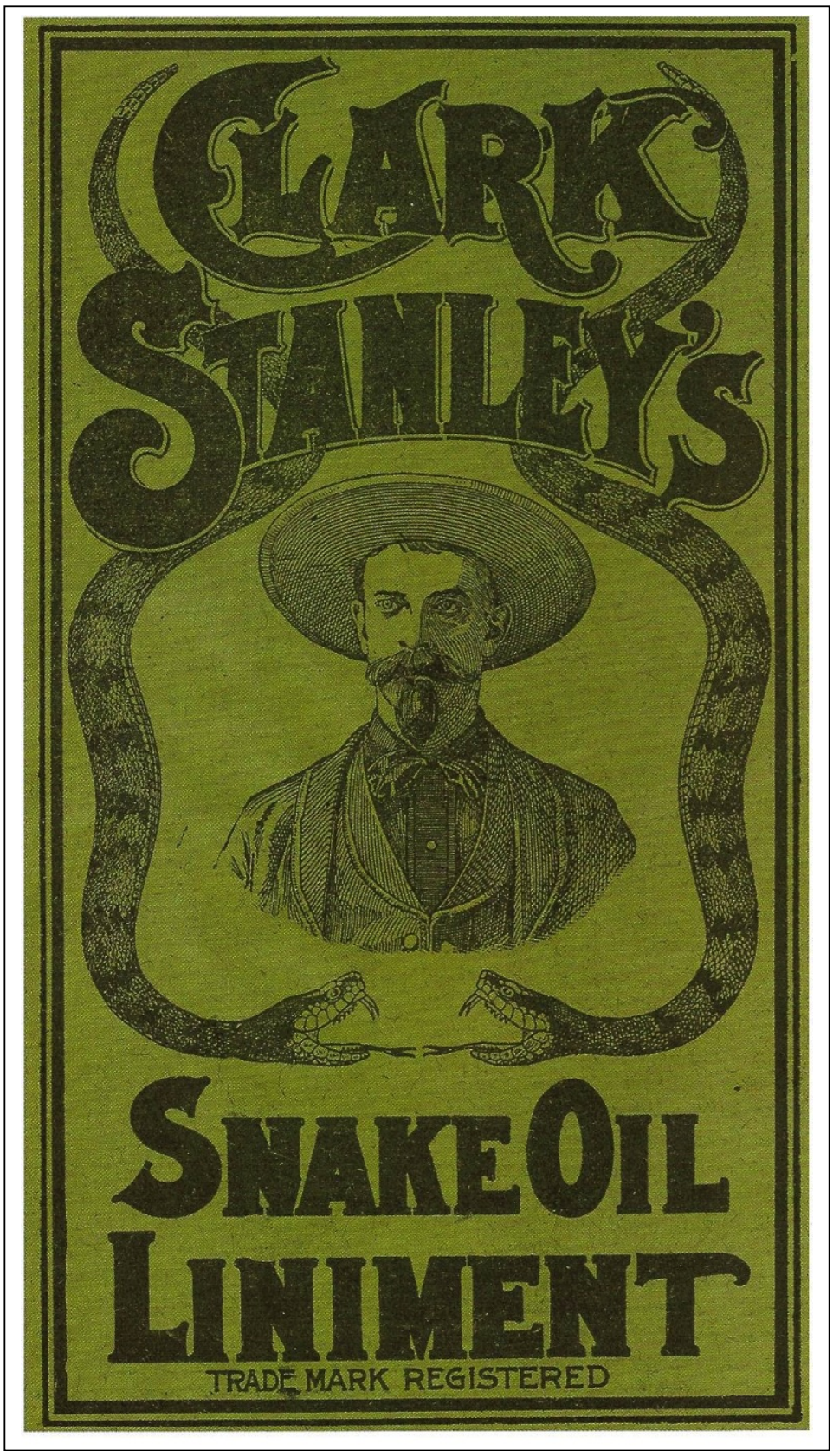

Clark Stanley's Snake Oil Liniment, 1906, An advertisement for the classic patent medicine (Reproduced with permission of William H. Helfand)
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James Harvey Young, PhD, (1915–2006)

Historian of medical quackery

James Harvey Young, 1999.
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James Harvey Young changed the perception of medical quackery from that of an amusing sideshow to recognizing practices that fleece the public and damage lives. He wrote,

> Quackery is important because through it vast numbers of our people have sought to bolster or restore their health and because it affords insight into an anti-rational approach to one of the key problems of life.[1pvii]

Clark Stanley's Snake Oil Liniment, 1906. An advertisement for the classic patent medicine.
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Young established the study of medical quackery as a scholarly discipline and was its leading exponent.

Although Young received numerous awards from historical societies and was described once as perhaps "the most widely read and influential medical historian alive," his work is little known by the medical community. His books and articles deserve wider recognition because they are essential to understanding the continuing popularity of alternative remedies, as well as the legislative and regulatory failures that allow them to flourish.

Young was born on September 8, 1915, in Brooklyn, New York. He received a BA from Knox College and, after receiving

a PhD in History from the University of Illinois in 1941, he joined the faculty of Emory University, where he spent his entire academic career. How he came to the study of quackery is recounted in an essay in his last book, *American Health Quackery: Collected Essays*.[2]

For his thesis on health and disease at the University of Illinois, Young read nineteenth-century newspapers, and his attention was drawn to the flamboyant advertisements for patent medicines. He placed his name on a Food and Drug Administration (FDA) mailing list that reported the agency's legal actions against "commercial wares for self-medication that revealed dangerous unlabeled ingredients and outrageously false therapeutic promises. These twentieth-century echoes of nineteenth-century deception put the latter in an ever-grimmer perspective."[2p6]

His commitment to the field that became his central interest resulted from attending a twentieth-century revival of the old-time traveling medicine show. Louisiana State Senator Dudley LeBlanc concocted a tonic called Hadacol that contained vitamins, iron, and twelve percent alcohol as a "preservative." It was promoted for treatment of a number of diseases and for its aphrodisiac properties. Like the nineteenth-century medicine shows, the sales pitch was preceded by entertainment provided by show-business personalities who sang the Hadacol theme song, "What Put the Pep into Grandma?"[2p63] Dr. Young was struck by the similarity between the show and the patent medicine advertisements in early Illinois newspapers. He wrote, "Here were two points on a time line that demanded tracing, and I set out seriously to do it."[2p7]

His book, *The Toadstool Millionaires: A Social History of Patent Medicines in America before Federal Regulation*,[1] was the first scholarly analysis of this colorful era in American health care. The title came from a comment by Oliver Wendell Holmes: "Somebody buys all the quack medicines that build palaces for the mushroom, say rather, the toadstool millionaires."[3p186] The book traces the evolution of patent medicine marketing, from the local distribution of broadsides and fliers in the early nineteenth century, to traveling medicine shows, billboards, and newspaper advertisements at the end of the century. The proliferation of newspapers and magazines after the Civil War stimulated the development of advertising agencies whose main business was writing copy for patent medicines. Claude Hopkins, a successful advertising executive at the turn of the century, wrote in his memoir that "the greatest advertising men of my day were schooled in the medicine field," and "Medicines were worthless merchandise until a demand was created."[1p101]

The Toadstool Millionaires ends with an account of the in-

A scholar converted to action by a traveling medicine show

Patent medicine bottles.
Credit: Young, James Harvey; The Toadstool Millionaires: A Social History of Patent Medicine in America before Federal Regulation. © 1961 Princeton University Press, 1989 renewed PUP. Reprinted by permission of Princeton University Press.

tense battle over regulation of food and drugs that pitted reformers and scientists against the manufacturers of proprietary medicines. The conflict culminated in passage of the 1906 Pure Food and Drugs Act, which established limited regulation of drugs and created the agency that became the FDA. Expectations that this Act would diminish the popularity of medical nostrums, however, were not fulfilled. Despite reform in medical education and licensing, and remarkable progress in medical science, quackery continued to boom in the twentieth century.

Young's second book, *The Medical Messiahs: A Social History of Health Quackery in Twentieth-Century America*,[4] dealt with the twentieth-century successors to the toadstool millionaires. *The Medical Messiahs* contains accounts of a number of notorious health frauds, but it focuses largely on the struggle to regulate unfounded health claims and the social context that fostered the persistence of belief in miraculous cures.

Despite the vigorous opposition of manufacturers and their supporters in Congress, federal legislation regulating medicines was gradually strengthened during the twentieth century. The Federal Trade Commission (FTC), established in 1914, designated exaggerated therapeutic claims as unfair trade practices. Two landmark laws were enacted in 1938. Because Congress was opposed to the more vigorous enforcement activities of the FDA, the Wheeler-Lea Act gave the FTC, rather than the FDA, jurisdiction over false advertising of food, drugs, devices, and cosmetics. After the deaths of 107 people from poisoning by an "elixir" of sulfanilamide in diethyleneglycol, public outrage resulted in passage of the 1938 Food, Drug, and Cosmetic Act. This act required labels listing all ingredients in medicines, and required manufacturers to perform safety testing of new medications. The Kefauver-Harris Drug Amendment of 1962, which put in place the current standards for the FDA regulation of drug licensing and advertising, was passed only after a near disaster was averted by the FDA's refusal to license thalidomide.

Despite the new laws, the promotion of miraculous cures persisted in the twentieth century, many vendors shifting from pitching cures for life-threatening diseases to more subtle emphases on nutritional products. The discovery of vitamins and requirements for minerals and essential amino acids provided the stimulus for a new marketing strategy. The new promotion was based on the concept that most diseases resulted from an inadequate diet, and that many common symptoms were caused by subclinical nutritional deficiencies. As Young wrote,

> The charlatan's ads often sought to induce sickness in the healthy reader by translating mild transitory conditions such as low spirits, mild insomnia, or spots before the eyes into harbingers of insanity and syphilis.[5p117]

The cure for these problems was "natural" foods and complex mixtures of vitamins and minerals, frequently in megadoses. To avoid regulation by the FDA and the FTC, these products were promoted by word-of-mouth in health food stores and by pyramidal organizations employing door-to-door salespeople.[2p171] Nutrilite, which used a sales force of 20,000 to sell its mixture of vitamins, minerals, alfalfa, and watercress, had sales of $26 million in 1956. Another company, Nutri-Bio, at one time had a sales force of 75,000, which outnumbered the employees of the FDA by forty-to-one. Enforcement actions by the FDA and FTC were hindered by their limited budgets and personnel, the lengthy procedures required by the Wheeler-Lea Act before the FTC could act, and the trivial penalties. It took the FTC sixteen years to compel the removal of the word "liver" from Carter's Little Liver Pills.[4p299] In 1950, the average fine imposed by for violations of food and drug regulations was $565.

Over several decades the FDA struggled to prevent manufacturers from making unfounded health claims for vitamins, supplements, and over-the-counter (OTC) medications. The 1962 Kefauver-Harris Drug Amendment gave the agency the authority to review their safety and efficacy. In 1972 the FDA appointed panels to review the many thousands of proprietary compounds, and it was estimated that by 1995 that the task was seventy percent completed. Ironically, as Young recounts, the long struggle to regulate health claims for herbal remedies, vitamins, and supplements was defeated by an industry backlash to an FDA initiative.[5]

Landmark laws of 1938 gave the FTC teeth

Struggling to review proprietary compounds in the 1970s

A Diet Supplement Task Force appointed by FDA commissioner David Kessler recommended new standards for evidence supporting health claims and accurate labeling. Based on this report and an FDA document, "Unsubstantiated Claims and Documented Health Hazards in the Dietary Supplement Marketplace," in 1993 the FDA announced new regulations. Supplement manufacturers responded by forming a new trade group, the National Health Alliance, which coordinated a massive advertising and grassroots letter-writing campaign misrepresenting the proposed regulations as an attempt by the government to deprive people of freedom of choice and access to vitamins and minerals. The lobbying was effective, and in 1994 Congress passed the Dietary Supplement and Health Education Act (DSHEA), described by the *New York Times* as "The 1993 Snake Oil Protection Act."

A step backward: Snake Oil Protection Act

DSHEA arbitrarily designated herbal medicines as "dietary supplements," i.e., as neither food nor medicines, and effectively freed them from regulation by the FDA. Manufacturers were not required to provide evidence of efficacy or safety, and were not required to report to the FDA severe adverse events. That placed the burden of proof on the FDA to identify dangerous products, and raised to a very high level the legal requirements for withdrawing dangerous products from the market. Following passage of DSHEA, sales of supplements rose from approximately $4 billion in 1994 to $20 billion by 2000.

In the 1990s, a center devoted to complementary and alternative medicine (CAM) was created within the National Institutes of Health (NIH). In response to this, at the age of eighty-two, Young published a detailed account of the political maneuvering behind the creation of the NIH Office of Alternative Medicine, and its successor, the National Center for Complementary and Alternative Medicine (NCCAM).[6] Over the objections of the director of the NIH and other senior scientists, the OAM was created by a congressional directive at the insistence of Iowa Senator Tom Harkin, chairman of the Senate Appropriations Committee, which has jurisdiction over the NIH budget. Harkin is a strong supporter of NIH research, but he believed that bee pollen cured his allergies, and that alternative therapies were being ignored by NIH. Although the stated purpose of OAM was to carry out rigorous studies of alternative medical therapies, it was clear to its critics that the agenda of its proponents was providing legitimacy to alternative therapies.

Office of Alternative Medicine at the NIH—useful or dangerous?

Despite the opposition of prominent scientists, in 1998 Harkin succeeded in replacing the OAM with NCCAM, an independent center with direct authority to appoint peer-review panels and award grants. Young cites a letter from Professor Allan Bromley of Yale, president of the American Physical Society, to Congressman John F. Porter in which he states, "It [the OAM] has bestowed the considerable prestige of the NIH on a variety of highly dubious practices, some of which clearly violate the laws of physics and more nearly resemble witchcraft than medicine."[6p297] The charter of NCCAM stipulates that twelve of the eighteen appointed members of its Advisory Council must be representatives of the CAM community, and that nine of these twelve should be CAM practitioners.

Young combined a clear and lively prose style with meticulous scholarship. For his book on the regulation of food, *Pure Food: Securing the Federal Food and Drugs Act of 1906*,[7] he read the transcripts of every congressional hearing dealing with the matter from the late nineteenth through the early twentieth century. His last book, *American Health Quackery*,[2] is a collection of his essays and articles, including the newer essays "Getting Into Quackery" and "AIDS and Deceptive Therapies." The essays are thoughtful analyses of the origins of quackery, the vulnerability of people to false health claims, and the challenges and limits of regulation.

Although Young was deeply troubled by the deception of the public, his tone was always civil and he never engaged in polemics. In a 1993 essay on "Why Quackery Persists" as a multibillion-dollar business,[8] he examines the roles of the four parties involved: the patient, the scientific practitioner, the quack, and the regulator who enforces anti-quackery laws. He sympathizes with the average person who may be confused by conflicting sources of health information, and with anxious individuals who embrace bizarre self-treatment "preventive" programs. He realizes that people who have an authority problem and "tend to reject the orthodox merely because it is orthodox"[8p459] often turn to untested remedies, as do people with incurable diseases searching in desperation for help. The shortcomings of the medical profession are not overlooked: a tendency toward smugness, prescription of too many drugs, and brusque treatment of patients. He also notes the antagonism of some people towards the medical establishment and its perceived self-interest.

In discussing quacks Young points out that "While phy-

sicians seek to help their patients if they can, they must sometimes confess that they cannot." [8p461] But "quacks can promise anything—tailoring their appeals to all the susceptibilities, vulnerabilities, and curiosities which human nature reveals." [8p461] During the twentieth century, regulations were enacted to assure the safety and efficacy of medicines, but enforcement was hindered by the vast extent of fraudulent health practices and the limited resources of the FDA and FTC. Effective regulation has been opposed under the banner of "freedom of choice." However, as he points out, "But freedom of choice cannot operate in a vacuum; the easier it is to market unproven health products, the easier it will be to mislead people into trying them. What quacks really want is freedom from government interference with their promotions." [8p463]

Young's passion for exposing fraudulent health practices remained strong throughout his long career. Although he noted that "Quacks never sleep," [8p464] he remained hopeful that "education and regulation can reduce the toll they take in wasted resources and human suffering." [8p464] His work remains relevant and vital because alternative medicine is flourishing in the marketplace and, sadly, in some academic institutions. As Oliver Wendell Holmes remarked presciently, "Quackery and idolatry are all but immortal." [3p367]

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