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Pioneer Medicine in the Midwest

About two years ago the Journal of the American Medical Association reviewed an unusual book that caught my eye as something out of the ordinary among the many volumes available on the history of medicine. The book is "The Midwest Pioneer, His Ills, Cures, and Doctors" by Madge E. Pickard and R. Carlyle Buley. The authors are both historians at the University of Indiana. Neither is a physician. They describe the book as a by-product of more extensive work in the field of middle western history. Perhaps the very fact that such an excellent account of the subject can be written by laymen is a revealing commentary on the unscientific status of pioneer medicine.

The period covered extends from the founding of the earliest settlements west of the Alleghanies about 1760 to the middle of the nineteenth century. Against the background of a picture of pioneer life in general the book describes the part played by the doctor in fighting disease and improving health. The drugs and herbs used by the doctors and also the "home remedies" used by the people themselves are enumerated in considerable detail. The superstitions and folk lore connected with health and disease are catalogued in a most interesting way. The early history of midwestern medical schools is a fascinating portion of one chapter. The growth of various cults of irregular practitioners is a colorful part of the story. While the book is devoted primarily to the midwestern scene, much of the medical practice described would be equally applicable to the states of the Atlantic seaboard at the same period.

At the present time most of us doubtless think of the Middle West as an essentially healthy place to live. The climate is temperate and nature has supplied a fertile soil that has led to the region being called "the bread basket of the world". The area is not now subject to epidemic disease. In pioneer days, however, conditions were vastly different. Epidemics of dysentery, cholera, malaria, erysipelas, and influenza were common. No one knew how to prevent these diseases and there were no specific cures. So many people were ill of fevers in the summer months along the rivers of Ohio and Indiana that all work stopped. The crops went untended in the fields. Even before the settlers came, soldiers in the scattered forts suffered greatly from such epidemics. In 1776 almost the entire garrison of Fort Kaskaskia was seriously ill at one time and many died. An early writer says of Midhigan that "as soon as the land was plowed up and the malarial gases set free, that country became very sickly. Crops went back into the ground, animals suffered for lack of food, and if the people had not been too sick to need much to eat they, too, would have gone hungry. The pale, sallow, bloated faces of that period were the rule; there were no healthy faces except of persons just arrived."

The book is very appropriately dedicated "To the Pioneer Doctor who boldly faced the Wilderness, and to the Pioneers who bravedl faced the Doctor."

There can be no question but that the pioneer doctor led a hard life. Living in a new and undeveloped country he had to do much more

than practice medicine, just to stay alive. He was a farmer, a hunter, perhaps a blacksmith of sorts, to some extent a jack of all trades. Along with the preachers and the lawyers, however, he stood out from the common people as a man of some learning. He could read and write and probably had a small library. A few doctors were even graduates of English or Scottish medical schools; a few more held diplomas from the medical schools of the Atlantic states. The great majority in the early days before 1820 had learned their medicine as apprentices in the offices of older doctors. Here they tediously prepared medicines, cleaned the office, cared for the doctor's horse, read his books, and soon went with him on his calls to learn the art by experience.

There is some question as to the degree of respect which these doctors commanded from the general populace. To the notion of many who made their living by manual labor, lawyers, bankers, preachers and doctors were a parasitic class. Also the constant wrangling indulged in by doctors of different beliefs did not help to raise their esteem in the public eye. However, in 1831 Dr. Enoch Hale wrote in the North American Review: "We believe that there never was a time when they were held in so high respect and confidence as at the present day; and probably in no part of the world is their confidence more generally felt by all classes of people, than among us". Fifteen years later, when leading physicians from the whole country met together to organize the American Medical Association, the first national organization of the profession, one of the most compelling reasons for the need of such a group was

stated to be the low esteem in which doctors were held. There were then no accepted standards, either of education or of practice. Many inferior schools poured out graduates who were ill prepared to do anything. Some were men of low character who brought dishonor to the profession.

When we now discuss the matter of "standards of practice" of medicine in 1800, we raise an interesting intellectual problem. How can there be standards when practice was a matter of opinion, of unproven, even fantastic theory, when almost nothing that was taught as medicine had a basis in scientifically demonstrable fact? From the days of the Greeks most doctors based their practice on the idea of the four elements in man--earth--, water, air, and fire. Corresponding to these were the four natural humors--melancholy or black bile, cold and dry (earth), Phlegm, cold and moist (water), blood, hot and moist (air); and choler or yellow bile (fire). The general theory was that man's normal constitution represented a balance among these natural humors, but that no excess of any one would lead to disease. Of course certain specific diseases were rexognized, even in the middle ages, such as leprosy and smallpox, but such recognition did not affect a belief in the four humors. Much later, in the 17th century Sydenham described measles, dysentery, syphilis, and gout, but no one seemed to see the incongruity of believing in the four humors and at the same time recognizing the existence of specific diseases. The answer is, naturally, that until the discovery of Bacteria and of the separate physiological systmes at work in the body, no real understanding of disease was possible.

Dr. Benjamin Rush (174501813), who was the most famous and influential American doctor of his day, stated to his students "there is

but one disease in the world". This being assumed to be true, the depletion treatment--blood letting and purging--was universally applicable. He believed that in bleeding a sick person, he removed the noxious cause of disease and thus enabled the person to make new and pure blood. The influential words of Rush were a force in American medicine for many years. It is staggering to think how much blood was removed on the strength of his advice. "Bleed to syncope" was advice to practitioners almost as inevitable as "pour into a well greased pan and bake until brown" is to the modern cook. The arms of the patients were often so scarred from repeated bleeding that locating a vein for another bleeding became a difficult task. An early book states "To bleed a patient who cannot be raised from his pillow without fainting, whose pulse is nearly imperceptible---at first view rash and unwarrantable--flows with difficulty--recourse should be had to the jugulars". One Indianapolis physician is reported to have been so sanguinary that he had a trough constructed to carry the blood of his patients from his office.

The equipment of the country doctor was simple: Mortar and pestle, a set of balances, some home made splints and bandages, a few drugs, a small assortment of instruments (knives, etc.) a pewter bed pan, a few syringes, and pewter or crockery hot-water bottles. By the late 1830's most of the better equipped doctors carried a stethescope, tooth forceps, and a few obstetrical instruments. He had a horse and saddle bags. Thermometers, blood pressure instruments, chemical and microscopic tests for urine were unknown. The doctor relied largly on his own senses. The sense of smell is said to have been highly developed--he could smell out a case of typhoid, measles, or "milk sickness".

A contemporary description of the life of a pioneer doctor is as follows: The doctor had to be his own pharmacist. He made his own pills and tinctures, compounded all his medicines, and generally carried all he required, as, with saddle-bags across his horse, he wended his way from house to house, administering to the sick and ailing, always welcome and often regarded as an angel of mercy, although his homely garb and rough appearance looked anything but angelic. His life was one of peril, toil and privation. The country was new and thinly settled, and his rides were long and solitary; his patients were scattered over a wide expanse of territory; his travel was mostly performed on horseback, and its extent and duration was measured by the endurance of himself and his horse. He struggled through almost unfathomable mud and swamps and swollen streams. He was often compelled to make long detours to cross or avoid the treacherous slough. His rest was often taken in the saddle, sometimes in the cabin of the lonely settler. From necessity he was self-reliant and courageous. Every emergency, however grave, he was generally compelled to meet alone and unaided, as it was seldom assistance could be procured without too great an expenditure of time and money. His fees were small and his services were often paid for in promises, seldom in money, of which there was but little. The products of the country, called by the people "truck", was the general and most reliable circulation medium, and with this the doctor was usually paid. But there is a bright side to this picture. The kindly life of a new country, and the dependence of its inhabitants upon each other, gave the doctor a strong hold upon the affection and gratitude of those among whom he had lived and labored. They loved him when living, and mourned for him when dead.

These early doctors were not well paid. A house visit was 25 or 50 cents, or one dollar if the doctor sat up all night. The Indiana law of 1816 set a fee of 12½ cents per mile of travel by day or double by night. The physicians of Springfield Ill. in 1840 charged $1.00 for a day visit in town, 50 cents for a dose of medicine, one dollar for vaccination, five to ten dollars for a labor case, etc. "In a day of scarcity of specie and small change, and prevalence of make-shifts, a Dr. Murdock of Brookville, Indiana, in 1825 issued script bills "good for one dose of medicine". These were known as "Puke Bills". Creditor patients rarely came back for the second dose."

The principal drugs used were mercurials, calomel, opium, niter, glauber's salts (sodium sulfate), Dover's powders, jalap, Peruvian bark. Doses were large and combinations were frequently given. Pills were often as large as cherries. Calomel was often given in doses of twenty to one hundred grains. I doubt whether I have ever given more than one grain of calomel in a dose, and that as part of a treatment for worms! So much calomel was used that salivation was expected and the teeth occasionally became loose and fell out!

A great advance in the treatment of the all prevalent malaria was made when the pure drug quinine was isolated from Peruvian bark. This was first done in Paris in 1820. Three years later a factory for the extraction of quinine was set up in Philadelphia, but the high price ($30.00 per ounce) and a lack of general knowledge of the drug limited its usefullness for several years. By the 1840's it was generally and extensively used.

In the light of present day knowledge there can be no doubt but that pioneer doctors frequently did their patáents more harm than good.

We know that bleeding is of value in only a few conditions such as hypertension and polycythemia. It is definitely harmful in most fevers. No one has ever seriously questioned the sincerity of our early doctors. They believed in what they did and they did well in the light of their own knowledge. Many of them deserve much praise for their surgical exploits. Minor surgical conditions were often well treated even by the standards of today. Extreme skill was occasionally shown in difficult emputations and in repair of various injuries. Since anaesthesia was not known, it was important for the patient's sake to work fast. A crushed leg might be amputated in a matter of seconds.

In general, the progress of medical practice in the west did not lag as compared with the East. Smallpox vaccination, for example, was done in Ohio the year after its introduction on the Atlantic coast. Local governing bodies shortly took steps to see that vaccind was generally available to all who wished to be protected. Ether and chloroform were in general use a year after Morton's original demonstration at the Massachusetts General Hospital in 1846. An interesting side-light on the use of "laughing gas" or nitrous oxide is the fact that this gas was given to a few individuals from the audience by travelling lecturers on science as early as 1821 in Ohio. Such public demonstrations were advertised in the newspapers and no doubt attracted a large crowd.

~~Ephraim McDowell of Danville, Kentucky in 1809 operated~~

a thrilling chapter in early american surgery was enacted when Dr. Ephrim McDowell of Danville, Kentucky in 1809 operated success-

fully for an ovarian tumor. Dr. McDowell examined the patient at her own home and advised the removal of the very large abdominal mass, but he insisted that the operation be done at his office, 60 miles away. Altho it was midwinter the pioneer wife rode a horse the entire distance, resting the tumor on the pommel. During the operation the patient gritted her teeth and recited psalms. Five days later she made her own bed. On the 25th day she rode a horse, to live 31 years longer. Again in 1813 and 1816 Dr. McDowell performed similar operations. In 1816 he wrote an account of the three operations for a Philadelphia medical journal, but he was not believed until he did two more to show his doubters.

In 1827 Dr. John Richmond performed the first recorded Caesarean section west of the mountains. He did the operation alone, late at night, in an unchinked log cabin, by the light of candles. The mother and baby both survived.

The surgeons of the west cut for stone in the bladder, repaired hernias, opened the skull for the relief of epilepsy, ligated arteries and sewed up fistulas. Their mortality figures in a day of no knowledge of asepsis are quite remarkable. Dr. Dudley of Lexington Kentucky lost none of his first hundred patients whom he cut for stone in the bladder!

As has already been noted, the earliest doctors learned the art from a preceptor under the apprentice system. The "liting-in" type of apprenticeship was gradually supplanted by the regular day-time instruction type. Since under the latter system board and room were not furnished and the doctor could not expect much in the way of labor from his apprentice, a regular fee was charged. This was frequently

$100.00 per year. The usual course was three years, at the end of which the preceptor would issue a certificate. The holder could then practice medicine after registering this certificate with the local clerk of court. The authors estimate that prior to 1840 about three fourths of the doctors in the Middle West received their education by this apprentice system.

The earliest medical college in the west was Transylvania Univ. at Lexington, Kentucky. The university was formed by the amalgamation of Transylvanian Seminary which had been chartered by the Virginia General assembly in 1780 and the Kentucky academy established by the Presbyterians in 1794. The Medical Dept. was instituted in 1799 with Dr. Samuel Brown as Professor of Chemistry, anatomy, and Surgery. The first course of medical lectures in the West was conducted in 1801 after the Addition of Dr. Frederick Ridgely, Professor in Materia Medica, Mid-Wifery and the Practice of Physic. A sum of $500 was granted for the purchase of books and equipment.

The school did not prosper nor attract many students until it was re-organized in 1818 under the presidency of Dr. Horace Holley. The faculty at this time consisted of five excellent men. By 1823 the enrollment had risen to 200. The most active period of the school was from 1817 to 1857. During this time 6400 students attended for a time; nearly two thousand were graduated. For many of its years the school occupied a high place in American medical Education. A number of nationally famous doctors, among them the great Daniel Drake, taught at Transylvania. But the school was not immune to the common ill of

medical schools of those days--dissension among the faculty. Sometime the arguments became quite heated and a pamphlet and even newspaper article was ensued. After such an outburst several members of the faculty would resign or be dismissed by the trustees and the school would start all over again. Finally, the medical department of Transylvania was abolished in 1859.

The second school of the West was in Ohio Medical College at Cincinnati which opened in 1820 under the leadership of Dr. Drake. Two years later, following a faculty outburst, he was expelled from his own school and went to Transylvania where he taught until 1827. He then did private practice in Cincinnati for four years before accepting a professorship at Jefferson Medical School in Philadelphia. Within a year he was back in Ohio with plans to start a rival school to Ohio Medical College. The trustees of the latter were so much impressed by the prospectus of the new school that they arranged a merger of the two schools--On Drake's terms. Because of conflict with Dr. John Morehead, Drake resigned a year later. These topys-turvy details are cited only to show the chaotic state of what should have been a dignified and stable profession, that of the teacher of medicine.

The other cities and states of the Mid West established medical schools in the following years. Louisville in 1837, Western Reserve in Cleveland in 1843, Kemper College in St. Louis in 1840, Rush of Chicago in 1843, Indiana in 1842, and Michigan in 1850. In addition to the schools which we still know, by their present-day descendents, there were many that had a brief existence in a small town and are now

forgotten by all except the medical historians.

To-day the establishment of a new medical school such as those now under construction in Alabama and the State of Washington means raiding several million dollars at the onset for buildings and equipment. The annual budget goes into six figures and is only partially met by students fees. But it was quite different in the early 19th century, when four to eight doctors could hand together, call themselves professors, obtain a charter either from the legislature or from some already established fresh-water college, advertise for students, hire a few second story rooms over a bank or a drug store, and call it a medical school. Students were graduated in one or two years. An ever-present problem of these schools was the matter of obtaining bodies for anatomical dissection. There were then no state laws which turned over the bodies of paupers or inmates of prisons for such study. Consequently the faculty and even students often found it necessary to obtain their own bodies. Midnight raids on the cemetaries, when discovered, sometime led to open war between the indignant townspeople and the school.

Because he was the outstanding physician and medical educator of the time a sketch of Daniel Drake's life is interesting. Born in New Jersey in 1785, he was brought to Kentucky at the age of two by his father, Isaac Drake. The father was poor of the poorest, having only one dollar, the price of a bushel of corn, at the time of his arrival in Kentucky. He did only fairly well as a farmer. Daniel's early education came from itinerant schoolmasters, wandering preachers, and what he could learn from nature in the woods and fields. At the age

of 11 he entered a country school for a while. At the age of 12 or 13 he had an opportunity to read in the medical books of his cousin, John Drake, who was apprenticed to Dr. Goforth of Washington, Kentucky. Plans were made for Daniel to study under John when the latter located in Mayslick near the Drake home.

At this point fate interveued to keep Daniel from the Obscurity of a small-town Kentucky practice. His cousin John died during his Apprenticeship and Dr. Goforth moved to Cincinnati, where, several years later, Daniel joined him as an apprentice. His medical diploma, granted by his mentor in 1805 was the first issued West of the Alleghanies. Daniel had the double distinction of also receiving a degree from a recognized medical school, the University of Pa. where he studied in 1805-1806 and later completed his course in 1816. For several years he practiced with Dr. Goforth as a partner but their practice was anything but lucrative. At various times in later years he taught in two schools in Cincinnati, at Transylvania, at Jefferson in Philadelphia and at Louisville. His private practice also prospered after the association with Goforth ended.

Drake's interests were much wider than medicine. He established a drug store in Cinn. in 1807 and nine years later fitted out in it the first soda fountain in the west. He helped to start the first Episcopal Church in Cinn, also a literary society, a debating society, a school of literature and art and a museum for the study of western antiquities. In 1810 he wrote a book, "Notices of Cinn., its Topography, Climate, and Diseases.

The great literary work of Drake's life was however, his "Diseases of the Interior Valley of North America". The two volumes, each of

1000 pages, appeared in 1850 and 1854. They contain a mine of information about the midwest--the people, animals, climate, plants. To gather information for this monumental work Drake travelled some 50,000 miles, by buggy, boat, railway, on foot and on horseback, from Hudson's Bay to Florida. In these early years Drake had already developed the very modern technique of acquiring information by sending out questionnaires. The questions which he asked of the doctors to whom these were addressed exhibit an inquiring and scientific point of view. He wanted to know when an epidemic began and when it ended, what people were affected and who were spared. Detailed questions were asked as to the influence of various treatments used. Altho he was a great blood-letter himself, his mind was sufficiently open on the subject to ask how frequently the proddedure was used in different conditions and with what results.

The first folume was reviewed favorably in the country and abroad and brought great fame to Drake. The second volume was published after his death.

Today, except perhaps in Southern California, the "irregular Practitioners"--chiropractors, naturopaths, etc. constitute only a narrow fringe about the edges of orthodox medical practice. But in the early 1800's the irregulars were almost as numerous as the regulars and frequently were more voluble. As Packard & Buley say: "The age-old tendency of unscientific ideas to attach themselves to, and operate within, the scope of a recognized science is perhaps best illustrated in the field of medicine. Around its periphery has ever hovered a mass

of thought and practice ranging from the merely illogical to the obviously crackpot and superstitious, from sincere assumptions to premeditated fraud and quakery". Seventeen different kinds of "doctors" were listed: eclectic, botanic, homeopathic, uroscopin, old Thomsonian, hydropathic, electric, faith, spiritual, herbalist, physio-medical, physio-electric, hygeotherapeutic, and "Travelling". More than three quacks to every regular were reported at one time in Wisconsin. Ohio was condemned as "a paradise of the incompetent."

Of these various sects the most prominent were the Thomsonians. In the early days they were largely unlettered "people's doctors" who used roots and herbs. Leter, schools teaching their tenets were formed and even prospered. They differed from the regulars in their great emphasis on vegetable and herb remedies and their refusal to employ the metallic "poisons" mercury, calomel, arsenic, antimony, etc. Also, more credit to them, they opposed blood-letting. The originator of this so-called "steam system" of Botanic medicine was Samuel Thomson who was born in New Hampshire in 1769. Raised on a farm, he interested himself from youth in the names and properties of all manner of plants and roots and he forgot nothing he ever learned. He particularly remembered an unpleasant contact with the emetic lobelia which in later years was the basic element of his materia medica.

Thomson had no formal education to speak of--in fact when he offered himself to study under a root doctor at the age of sixteen, he was turned down as deficient in education. He continued to experiment on his own, however, and found the members of his growing family

to be good subjects for his practice. In 1796 he tried his first "steam cure" on his daughter and saved her life from scarlet fever after the local doctors had given her up as gone. In 1805 he began to devote his full time to the healing profession.

He exponned his own theory of the cause and cure of disease most vehemently. In a state of health he felt that a balance was maintained among the various elements of the body; a change in any one of them upsets the equilibrium. "Cold, or lessening of the power of heat by the obstruction of perspiration, causes all diseases, for it is simple knowledge that no person dies of heat; he always gets cold first. Post hoc--to prevent death, one has merely to prevent the departure of the heat; to restore health one has to return heat to its natural extent. First he emptied and cleansed the stomach with an emetic. His "No. 2" prescription maintained heat in the stomach until the ~~HeHyX~~ Body could be cleared of obstructions". At this point in his cure, the patient was steamed by sitting undressed, covered with a blanket over a pan of water into which hot stones were put from time to time. After some 20 minutes of this the patient was washed with cold water and put to bed--which was perhaps a less harrowing experience than to be salivated with calomel and covered with an onion poultice!

In 1813 the U.S. Patent Office gave Thomson the exclusive right to administer 6 concoctions, No. 1, No. 2, etc. in the healing of specific diseases. I had never before realized the origin of the phrase "Patent medicine"--it really was patented! Thomson, with the aid of agents sold "family rights" to use his remedies and practice. He moved from New Hampshire to Boston. In 1821 and 1822 he wrote two

books describing his system of medicine. With the second book he enclosed an engraved certificate which entitled the buyer to use his medicine for himself and family. Altho the book sold for $20.00 it became a best-seller. From 1822 to 1837 Thomsonianism was more popular than any other of the unorthodox systems. Out of it came many divergent and quarrelling cults, each with some slightly different set of beliefs and cures. A number of periodicals were published, devoted entirely to the writings of the Thomsonians.

As an example of a specific case, consider Thomson's treatment of a child bitten by a spider: "I commenced by giving it, in the first place, a teaspoonful of bear's oil. I then administered an injection, prepared with Nos. 2 and 3, in which I put two tea-spoonsful of the Third Preparation of No. 1; immediately after I sponged it with No. 6 and Tincture of Lobelia. After waiting an hour and a half, I administered another injection, in which I put one tea-spoonful of the Third Preparation of No.1, and one of the Tincture. I then steamed it and gave it a tea-spoonful of the Tincture of Lobelia. The medicines failed to operate, and its fits continued hard, and became more frequent. Seeing that the medicine I had already given it failed to operate, I concluded that I would give it no more; but, being overpursuaded by the family, I administered a third injection, prepared like the second, steamed and sponged it again, and gave it another teaspoonful of the Tincture No 1 of Lobelia. Its system then became relaxed, and vomitting followed. Its fits ceased--it then being about midnight--by sunrise next morning, it could not have been discovered that the child had ever been sick, and has done well ever since."

An important reason for the widespread popularity of Thomson's teaching was his appeal to the common people that this was their medicine. It did not depend on the "book-larning" of the regulars and it had no truck with their Latin prescriptions. The spirit of the times, rampant Jacksonian Democracy, naturally encouraged such an attack on the "vested interests" of the orthodox profession.

One of the groups of practitioners who arose partly from the Thomsonian movement were the Eclectics. They believed in mixing their drinks--they would take a little here and a little there--the best from every system. In 1845 the ecelctics finally secured a charter for their school in Cinn. from the Ohio legislature. In this they were vigorously opposed by the regulars, one of whom was so satisfied with his professional state that he declared, "Medical science does not need, nor is it succeptible to further improvement, or form "This was 1845!

From 1840 to 1855 homeopathy took its place as the leading cult of the midwest. This system was expounded in Germany in the years from 1805 to 1825 by Samuel Hahnemann who had attended the medical schools of Vienna and Leipsic and had graduated from Erlangen in 1779. He developed three basic tenets: 1. Diseases are curable by particular drugs which produce similar pathologic effect upon the healthy body; that is, cinchona would cure malaria because it would produce in a person not infected with the disease symptoms comparable to those exhibited by a malarial patient. 2. The dynamic effect of drugs is increased by giving them in very small doses, diluted even to a decillionth of the original strength. 3. Chronic diseases are manifestations of a suppressed "Psora," which in society not too polite might be called simply an itch.

He spent years in studying the effects of these small doses of drugs on various healthy subjects. Every sensation that the victim noted in succeeding hours, or days, was attributed to the drug and was carefully written down. After painstaking research he found that the least powerful of his dosages excited 97 different symptoms and the most potent 1,491. Another careful research student produced upon himself 1,349 symptoms by administering one decillionth of a grain of salt.

Hahnemann taught that a single dose did not show its full effect in some cases until 24 or even 30 days after it was taken. Therefore homeopathy became a game of "watchful waiting" once the dose had been given, for he insisted that no change in medicine shoudl be made until the first should have its full time to act. Perhaps it was for this reason that it was said "the Patients of the homeopaths died of the disease, and the patients of the allopaths died of the cure". An unkind critic in Indiana in 1850 recommended the following recipe: Hang two starved pigeons in the kitchen window so that their shadow falls into a ten gallon pot on the stove. After the shadow has boiled ten hours over a slow fire, give to the patient one drop of the mixture in a glass of water every 10 days.

The first American school of homeopathy was founded in Allentown, Pa. in 1836. The present Hahnemann Medical School was founded in Philadelphia in 1848. It is still in existence, but no longer teaches homeopathy. The cult continued to command a large following thruout

the 19th century, but finally died out as orthodox medicine grew slowly into scientific medicine.

The early settlers did not always call a doctor to treat their ills. Home remedies were legion and were handed down from one generation to another, or perhaps, taken from almanacs and newspapers. For fevers were recommended sweating and snake root, with a purge of white walnut bark peeled upward, also sassafras, dogwood, willow or a glass of pearl ash and water. The breaking out in eruptive fevers, such as measles, was hastened by the use of sheep-dung tea, popularly known as nanny tea. For pleurisy, catnip or pennyroyal, or butterfly weed tea. For indigestion: rhubarb bitters or cayenne pepper in spirits applied to the stomach outside, and water and good old spiritous liquor inside. For "summer complaint" or dysentery would be prescribed a poultice of peppermint and tansy leaves, syrup of rhubarb with miter or slippery elm. A tape worm was treated with pumpkin-seed tea.

Rheumatism was treated externally with rattlesnake, goose, or bear oil and internally with a mixture of calomel, tartarized antimony, cayenne pepper, and gum camphor, or with a tincture of butterfly weed roots or ripe pokeberries in French brandy.

Among all of these exotic remedies it is refreshing to find as a cure for the itch, hot water and soft soap applied with a corncob, followed by a lotion of sulfur and lard. This would do the trick today.

No account of medicine in this period would be complete without some mention of the myriads of patent medicines with alluring names and accomplishments. Our newspaper and radio ads of today are not a whit more glamorous and enticing than the advertisements of the 1830's that

largely supported the country newspapers of that day. Consider Dr. Townsend's Sarsparilla, "The Wonder and Blessing of the Age, the most Extrodinary Medicine in the World" which created new blood and in a five year period cured 100,000 persons, including 15,000 incurables. There was Merchants Celebrated Gargling Oil for Man & Beast, popular in the cure of Spavins, Sweeney, Chapped hands, Cake Breasts, Sore Nipples, Piles etc. Memmbold's genuine Preparation of Highly concentrated Compound Fluid Extract of Buchnu was a "joy to the afflicted". There was Dr. Guyroth's Extract of yellow Dock, Boerhave's Holland Bitters and thousands of others. Some of them with herbs, flavors, and a fair amount of alcohol were relatively harmless; about the only difference between a powerful healing salve and a box of axle grease was that the latter smelled better. Others contained laudanum, opium, morphine, calomel, or other forms of mercury, digitalis, and other drugs, useful when given in proper doses for definite ills, but certainly harmful as administered by the store keeper or the self-dosing medicine addict. Remember that there were no Pure Foods or Drug laws in those days!

Superstitions played a large part in the lives of the more ignorant. The doctor was constantly confronted by these old beliefs and practices. A few of those dealing with infants and children follow: From prenatal days to the grave and even after, the life of an individual was hedged around by these practices and beliefs. Woe betide the pioneer baby, who in his anxiety to get into the rapid developing West, decided to enter society a month early. Only Seven-months premature babies were supposed to live. And should the powers that be defy the laws of nature by deciding that he shouldn't enter the world at all, twas said that drinking of water in which nine

eggs had been boiled would do the trick. Delayed entry could, of course, be expedited by quilling, but this was hardly a superstition. The rattle of a rattlesnake ~~xxxxxx~~ sewed in a black silk cloth and put in the hands of the parturient woman, provided she neither knew what the bundle contained nor opened it, was said to hasten delivery. Once the baby's arrival was satisfactorily explained to the other children--that he had been discovered in the spring, the creek, the cabbage-patch, or the midwife's apron--he began to run the gantlet of superstition and home cure.

Any birthmarks could be obliterated by rubbing them with the hand of a corpse or the head of a live eel for three successive mornings and then burying the three eel heads, tied together, beneath a stone under the eaves. If baby's face was washed in his baptismal water, he would be beautiful. If Mamma cut his hair before he was a year old, she thereby cut short his life; if she pared his nails before nine weeks, he was doomed to the life of a thief and would be forced to scratch for a living. Crawling through an open window or between the legs of tables or chairs--unless he crawled back the same way--would immediately stop his growth. If a child were "afflicated with short growth," the string which measured his length and showed it less than seven times his foot-length was looped, the child was passed through the loop three times while words were repeated, and then the string was twined around the grindstone. When the string wore out the child would be of proper length.

Should he look into a mirror before he was nine months old his life would be full of trouble. Were the empty cradle carelessly rocked, measures had to be taken immediately, else colic would result.

Scrapings from the table cover or a spoonful of baptismal water would be indicated. If croup threatened, the right front foot of a mole tied around baby's neck with a blue thread would prove effective. Relief could also be afforded by the sufferer's standing on the warm spleen of a freshly slaughtered beef until the spleen grew cold. Better still, a hair of the child's head taken from the crown, hidden in a hole bored in an ash or oak tree would prevent the ailment. (This preventive ceased to operate when the child grew to the height of the hole) If convulsions occurred, pouring baptismal water over the peony bush or covering the infant with his father's wedding coat would effect a cure. Since most of baby's fits were caused by worms, treatment with either specifics or charms might be used. For the more violent type (of fits) a little bag containing the let of a toad worn around the neck was known to be good. Almost as effective as this or "punkin" seed-tea was conjuring in the name of God. Were bedwetting baby's weakness, fried-mouse pie, burned-hog's-bladder powder, or spanking with a bake-oven mop was reputed to help.

It should be a little dampening to our present pride in the profession to consider that houses built in 1800 are still standing and may even be very good houses today, that law written in 1800 was good and sound law, that many other professions and trades have left lasting monuments to their sound principles and good workmanship, while on the other hand we must certainly blush at the sincere but mistaken physicians who let George Washington die of pneumonia in 1799.

It is always both difficult and dangerous to judge men living in a different age from ours. In medicine this is particularly true of the present time when we have the great advantage of a century or more of scientific progress between ourselves and our forebears. No one can doubt that these early doctors used many harmful drugs and procedures. This harm was done chiefly in obscure general diseases, where local pathology was not noted. Disease conditions that were apparent on inspection, injuries, and minor surgical conditions were handled well and even brilliantly in the light of the medical knowledge than available. It is very hard to be critical of those doctors whom we know by their writings to have been highly intelligent, thoughtful men, when we find them giving calomel in large doses year after year, or bleeding their patients with fevers and many other diseases, or using any one of several other strong drugs. These men must have had many opportunities to see that these drastic treatments did no good, but often harm. Surely there were some odd but stubborn patients who refused these procedures and who went on to get well anyhow. Could not the wiser doctors have learned by such happenings? One of the answers to this problem undoubtedly is that no one doctor had a wide enough experience to depend on his own findings. Many no doubt were fearful not to follow the authority of their teachers and of the great doctors of the past. Furthermore, we must remember that the true scientific spirit of inquiry, which is almost second nature to the trained men of today, was then present in only an occasional odd genius such as Ben Franklin. Medical minds just did not inquire!