

CHAPTER 10

“As large a proportion now live to seventy as lived to forty three hundred years ago. . . . We trust our generation may be marked by a still greater prolonging of physical life, a still greater advancement in the science of medicine.”

— Dr. Henry R. Baldwin, President’s Address, 1877

If medicine in the 1870’s was not yet reduced to an exact science, at least a new consciousness of public health was leading it in that direction.

In 1877, after twenty-five years of persistent effort by The Medical Society of New Jersey, the State Board of Health was formed by legislative act with Dr. Ezra M. Hunt of Metuchen at its head and five of the seven members drawn from the Medical Society.

At that time the mortality rate for New Jersey was 13.6 deaths per thousand population, and Dr. Hunt was determined that public health measures would help to bring it lower. (In 1960, it was 9.7 per thousand.)¹

Medical Society members appreciated Dr. Hunt’s compilation and interpretation of vital statistics. Dr. Charles F. Deshler of Hightstown, for example, said such information helped the medical profession in its efforts to improve health and prolong life.

A reporter for the Cumberland County Society in the same decade wrote, “It is curious to notice the reduction in the annual death rate where statistical observations have been made for many years.”

Gathering statistics was one of the forward trends also endorsed by the American Medical Association. New Jersey delegates at the annual meeting in St. Louis in 1873 were impressed by other advances, such as the introduction of visual aids, arrangements to secure phonographic reports of the discussions, and use of a magic lantern and screen to show “micro-photographs” during a lecture on cancer.

The A.M.A. believed a summary of reports on yellow fever would help solve some of the mysteries of this recurring disease. A New Jersey delegate, Dr. Samuel Lilly of Lambertville, who knew at first hand the look of yellow fever victims arriving on river boats from southern ports, called yellow fever “the most important and absorbing topic” at the 1879 A.M.A. convention. Many physicians believed that one way yellow fever was spread was on fabrics, and this theory was applied to other diseases, too.

New Jersey makes no race distinction

New Jersey delegates endorsed the A.M.A. proposals and offered some of their own. In 1870, Dr. Hunt returned from the convention in Washington, D.C. to report sadly that it had been too soon after the war for the national meeting to be held in the political center of the country. It was a time when equality of the white and colored races was a hot political issue. Some public sessions were “not harmonious,” he said, because of the seating of colored delegates. Dr. Hunt told members of The Medical Society of New Jersey,

“The medical profession does ill by itself when it establishes any criterion for membership to its national scientific body besides that of certified competency and character. We have enough to do to contend against the irregularities of pretense and quackery and false creeds of doctoring, without drawing ethnological distinctions.”²

Also in 1870, the New Jersey Society approved the A.M.A. plan for an annual register of all regular practitioners. Agreeing that it would be desirable, though there might be certain practical difficulties in its preparation, New Jersey asked each county society to begin its local registry at once. For some years the state Society had listed in the *Transactions* the county delegates to the annual meeting.

The A.M.A. proposal for Boards of Examiners in each state to examine all applicants for licenses to practice medicine, whether they were graduates of medical colleges or not, had been the idea of The Medical Society of New Jersey years earlier. It was abandoned only because state legislation made it a mockery in the 1850's by admitting to practice anyone who could show a diploma testifying to medical instruction. The New Jersey medical men went on record as having always regarded a Board of Examiners as one of the best methods to secure a well-educated body of physicians in the practice of the healing art; they said they would rejoice to see this method restored. But while they were ready to cooperate with the A.M.A., they “deemed it inexpedient” to attempt new legislation in New Jersey at the time.

With railroad companies, bank charters and others in mind, they added, “The legislature of New Jersey, by no means distinguished for its horror of real monopolies, has of late years manifested great apprehensions in regard to what they have considered monopolies of Science, and with respect to our profession have thrown open wide doors to ignorant pretension . . . and it is useless to expect a change for the better.”³

Members of the Society had reason to criticize the legislature's complacency toward “real monopolies.” Exclusive privileges amounting to a monopoly had been given to the Camden & Amboy Railroad Co. in a charter granted in 1832. In the previous year, the Delaware & Raritan Canal Co. had been consolidated with the railroad company. The joint companies acquired connections with shorter and intrastate transportation lines and so gradually extended over the entire state. By 1860, the revenue paid to the state by the joint companies was enough to meet all of the ordinary expenses of government, except for the school tax.

Recognizing the financial profits to the state and ignoring the dangers inherent in such monopolies, the legislators were vigilant in protecting the railroad interests. They were vigorously opposed, however, to delegating the examination of applicants for medical licenses to the members of The Medical Society of New Jersey lest this be granting the medical profession a monopoly!

Regular physicians bore the situation with whatever patience they could.

While there were few New Jersey delegates traveling to distant sessions of the A.M.A. in the early years, the founding of the American Public Health Association at Long Branch, N. J. in 1872 had in attendance New Jersey “charter” members from the Quarantine and Sanitary conventions of the

late 1850's. Dr. Hunt was there, of course, giving the quiet, far-sighted leadership which would bring him to the A.P.H.A. presidency in 1883. Also present were Dr. Elias J. Marsh of Paterson, the faithful Newark health officer Dr. Isaac A. Nichols, and county physician Dr. E. W. Buck of Jersey City.⁴ Some of them subsequently helped found the New Jersey Sanitary Association in 1874. These organizations, and the doctors who composed them, urged more specialized education and training for qualified public health officers. As such goals were achieved, physicians encouraged leadership in the A.P.H.A. by health officers.

Diseases spread by water

Individual practitioners as well as organizations were beginning to suspect that water and drainage made a villainous partnership in the spread of disease. Delegates returning from out-of-state conventions brought back reports to supplement the theories of local physicians. Members of the Medical Society, many of whom also belonged to the public health organizations, urged that the national A.P.H.A. and local public health authorities be given more power. Dr. Alexander Clendinen of Fort Lee, annoyed by political intervention, was convinced that a national congress of delegates from health boards of each state should formulate a sanitary code for the guidance of city, county and township officials, adding, "it is the only way to secure to the people the services and advice of those professional men who have neither time nor taste for comminglement in pot-house politics or patent job disinfectants or quarantine sinecures. Our State Board of Health deserves credit for labors and accomplishments — but it lacks power."⁵

Dr. Clendinen's agitation was justified. The preceding year (1878), in a study of endemic disease in the Englewood valley, he reported finding "vermicles" from patients' excrement and had traced the source to so-called wells. Proof of offal origin of a parasite was found too in shad, in the roe of salted herring, and in other fish taken from the creek that received the drainage of the town. The parasites were not found in fish from nearby brooks fed by gravel springs and mountain water.

Dr. Franklin Gauntt of Burlington declared that in twenty-five years of practice he had yet to see a case of enteric or typhoid fever that could not be traced to the use of defiled water.

Dr. David Warman of Trenton wrote, "We are a thriving city and yet our citizens would have us follow old tradition with regard to the removal of refuse, without as yet comprehending the new requirements our growth should bring about. . . . Garbage in some parts of the city is fed to pigs on the premises. From the more thickly settled parts it is taken away by swill women in baskets, pails and wheelbarrows. . . . The best sanitary improvement would be a complete system of sewerage, . . . with offal matter drained beyond the city limits . . . and the employment of carts to remove all other garbage from every house before it is allowed to putrefy or poison the air of the whole neighborhood."

Declaring "the whole public is interested in the question of sewerage, and it should be decided and carried out by public authority," Dr. Warman added, "It is true economy to spend a little of our earnings in the prosecution of sanitary works. Health is the capital of the laboring man. . . . To

allow [some] to perish by sanitary neglect is just the same as to take so many persons out of their homes and forcibly put them to death." ⁶

Members of the Medical Society in most New Jersey cities were just as outspoken in their efforts to persuade their townsmen to adopt local measures for the public good. Dr. J. M. Ridge of Camden, decrying the city's low-lying site and consequent poor drainage, pointed to culverts partially filled with earth and organic matter never thoroughly washed out. Thus, the inlets constructed for the purpose of draining off surplus water from the streets became the source of infection for zymotic diseases — with the source of water supply poisoned by the drainage of six large cities.

Dr. Frank Wilmarth of East Orange fumed that in Essex County new houses containing water closets and all the so-called modern improvements were being erected with cesspools and wells in close proximity. In 1873, Dr. John J. H. Love of Montclair, after encountering a few cases of typhoid fever, found it incomprehensible "in this day of enlightenment" that architects should plan and people build expensive houses with water closets, sewers and privy vaults whose foul emanations polluted the air and the water of the inhabitants."

In "many an elegant villa and beautiful country residence," he said, the stench from the pipes was so great the servants could scarcely endure to use the stationary washtub, and "the workers have intermittent fever, madam has neuralgia, the children have gastric fever and diphtheria, and a caretaker has typhoid." ⁷

Hygiene at home

It was clear that in order to protect public health, competent medical knowledge had to be brought to individual households at every economic level. To accomplish this, organized medicine — before it was so identified — joined hands within the state Society, the counties and local communities. At the top level, delegates from the New Jersey Medical Society recommended at the A.M.A. meeting in 1873 that the committee on Climatology and Epidemic Diseases be changed to one on Public Hygiene and State Medicine, with a delegate from each state.

Burlington's Dr. Gauntt, a New Jersey *Fellow* since 1872, asked for a statute to protect families, schools and public assemblies from scarlatina, diphtheria, variola and other preventable diseases. "They should be regarded as the relics of ignorance, superstition and barbarism," he said, "and their progress should be arrested by law." ⁸

The Board of Health was called upon by Dr. Thomas Ryerson of Newton, (1878). "I have frequently traced sickness to bad water," he said. "If drinking water is to be kept out of the category of causative agents of disease in the State of New Jersey, the Board of Health must inaugurate systematic examinations of all sources of supply everywhere."

Dr. Lott Southard of Newark knew that the physicians and the public health officers needed an aroused public, adding that there was already a willing and sympathetic press. He thought sanitary instruction even more essential than sanitary legislation and urged every physician to persuade his friends "that no expense is too great which returns health, strength and vigor for debility, sickness and death." ⁹

Country doctor

Keen medical observers from rural areas of New Jersey were active participants in Society affairs, too. Hunterdon, once the most populous county in the state, was far outstripped by others in the late 1800's. But nowhere was there a livelier practitioner than Dr. Cornelius W. Larison of Ringoes. His activities as physician, farmer, teacher, author, editor, publisher and exponent of phonetic spelling and obedient nursing care have been detailed by Dr. Harry B. Weiss in his book, *Country Doctor*.

Cornelius and his brother, George Holcombe Larison, began medical study at the Pennsylvania College of Medicine in Philadelphia in 1855. Cornelius soon realized a physician needed a good basic education; so he interrupted his medical study and went home to enroll for courses in Latin, Greek and English. By September, 1857, his ventures with a peach orchard and in school teaching enabled him to enter Lewisburg (now Bucknell) University as both a student and a teacher. After serving on the faculty at Flemington High School, he enrolled at Geneva Medical College, N. Y., where he received his M.D. degree in 1863.

A year later, he became the seventy-fifth member of the Hunterdon County Medical Society and in 1870 was elected its president. He made a rather spectacular debut in the Society. In 1864, within months of his acceptance as a member, he saved a patient from a premature arrival at the undertaker's. The man, later a prominent citizen of Easton, Penna., had been stricken with neuralgia of the heart. In Dr. Larison's absence, another physician was summoned who pronounced the patient dead. Dr. Larison returned while preparations for burial were under way. By prolonged, persistent effort, after most of the family and the other practitioner had left the room, Dr. Larison revived his patient and saw him live in good health for another half century.

In this case, and in a second instance when he himself was the patient, Dr. Larison was impressed by the hearing ability that continued after the individual was thought dead. He warned colleagues always to be discreet in their consultations at the bedside, even when they believed the patient to be totally unconscious.

One of his favorite treatments for fever was continuous applications of ice. In August, 1882, when he recognized his own symptoms as septicemia, probably resulting from a post-mortem examination he had performed on a partly decomposed body, he hurried to the bank to put his affairs in order, visited the patients most urgently needing his care, then drove home to attend to his own welfare. His experience with the nursing services of Mrs. E. A. Prall and her daughter Mary convinced him they would follow his directions in every detail, and he later credited these fine nurses with his recovery. He anticipated his rising temperature and ordered the women to place him in a wooden trough — tipped so that it would drain — and then to pile ice over his head and neck.

Seemingly, he was immune to pain. He regarded it as something that could be "easily and properly borne." He must have conveyed this belief to some patients. He amputated the hand (except for a finger and thumb) of a three-year-old girl without using chloroform and simply by inspiring her confidence in advance!

Long a faithful reporter to the Standing Committee of the state Society, Dr. Larison once observed that calomel, then dubbed by some the "Samson" of medicine, was the most objectionable drug ever carried by physicians. In another report, noting that spring in the Hunterdon valley regularly brought "vernal influenza," he wondered if it were not "the result of a blood poisoning generated by breathing an atmosphere infested with some organisms — vegetative or animal — of microscopic dimensions, which are annually called into active life at the ushering in of spring."

Dr. Larison, who was of course interested in plants and their effects, wrote in his phonetically correct *Jurnal of Helth* for August, 1891, "The tomato has come. And now many an old patient will cease his visits to the physician's office in quest of something to promote the activity of the liver, and the activity of the glands of the 'jejunum,' the colon and the rectum. For, under the use of tomatoes, the liver becomes toned up and active, the glands of the small and large intestines become active, the whole alimentary tract becomes active, constipation disappears, digestion and assimilation become active, flesh accumulates, the movements become more elastic, the body is nearer erect, the eyes are effulgent with animation and good nature, and he who so long has been a regular visitor to some celebrated physician's office, thanks to tomatoes, now begins to feel well."

Eccentric though he seemed, old-time residents, half a century later, testified to Dr. Larison's kindness and consideration. Some said they felt better from the moment they caught sight of him arriving in the two-wheeled cart with its enormous wheels, a broad-brimmed black hat shading his friendly, inquisitive eyes and full white beard, his black bag full of personally compounded medicines.

Another Hunterdon County physician of wide interests was Dr. George Newton Best (1846-1926) of Rosemont. He was notable for his studies of flora of the Delaware River Valley and became an authority on local herbs and mosses.¹⁰

Treatments in the 1870's

The colorful spectacle of Philadelphia's *Centennial Summer* was evoked for twentieth century movie goers to the strains of lilting music and appealingly fresh-faced actress Jeanne Crain. To the New Jersey physicians practicing in the mid 1870's, it was more like a nightmare in Technicolor with outbreaks of cholera, dysentery, diphtheria, and fevers so frequent that they came to be grouped in the minds of lay people as "Centennial sickness."

Alert to the possibility of an epidemic stemming from the Philadelphia gathering of thousands of people in a city ill-equipped to provide the visitors with adequate protection against impure water, poor sewage and other disease harbingers, the newly formed New Jersey Board of Health went into action immediately to warn of a possible cholera epidemic and to recommend precautions. State officials were impressed and grateful but nevertheless slow in delegating needed powers to the health officers.

Besides the so-called Centennial sickness, there were in the 1870's, as always, cases of whooping cough, measles, mumps, chicken pox, scarlet fever, unusual births and accidents. Medical men in every part of the state gathered at local, county and state Society meetings to discuss their work, effective treatments and, occasionally, their inventions.

Chloral hydrate was among the treatments recommended by several doctors in various county societies. Dr. E. W. Haines of Flatbrookville in Sussex used it only for nervous cases and suggested combining it with potassium bromide "where the hypnotic and anodyne effects are wanted . . . uniting the chloral hydrate with morphine." Salem doctors were divided on its effects in tedious labor, and Mercer physicians used it "less indiscriminately than at first." It was reported invaluable as an hypnotic at the State Mental Hospital.

Bloodletting was infrequently practiced by the middle of the century, and in 1864, Dr. John Blane of Perryville, two years a *Fellow*, remarked that "the lancet rusts in its case." Yet as late as 1894, Gloucester County Society President Dr. George C. Laws of Paulsboro labeled bloodletting "the remedy par excellence for pneumonia and apoplexy."¹¹

Dr. Stephen Wickes, writing in the 1870's about the many practitioners bearing the Blachly name, noted that an old man who lived to be eighty-five boasted of having been bled by five generations of Blachlys "with marked relief."¹²

A Bergen County physician, recalling his Civil War experiences, regretted that there was then no satisfactory apparatus for blood transfusions.

There was increasing interest in the French-invented hypodermic syringe, however. A Sussex reporter in 1874 wrote detailed instructions for the use of this device. He said he had heard of using it also, in an emergency, as an exploring trocar, but this he thought "would contaminate the packing beyond the possibility of certain cleansing and so expose the patient to the risk of septicemia."¹³

Dr. Alexander W. Rogers of Paterson, two years before taking the office of Society president in 1879, expressed the belief that counter-irritation had saved many a life and restored to health many an organ that otherwise would have been left disabled and imperfect. "From the mild sinapism over the stomach of the sick infant, to the open blister covering the side of the man ill with pleurisy; from the small vesication behind the ear of the teething child to the seemingly ugly issue on the chest of the pulmonary patient," Dr. Rogers believed they had all done good service, and croton oil was still his standby. "Counter-irritation," he explained, "invites the blood to the skin and sets up a new growth on its surface [resulting in] a proliferation of cells, which diverts the circulation from the diseased part and allows it to return to its normal condition."

The incandescent light

Dr. William O'Gorman of Newark, in his presidential address in 1876, was literally correct when he said science had recently thrown a flood of light on the structure, functions and diseases of the eye, ear, throat, and skin. It was in this decade that the marvels of the electric light as well as the telephone were revealed.

What impressed Dr. O'Gorman most was that science had made it possible to determine the ultimate structure of different tissues, and had placed in the physician's hands the instruments by which to determine how organs perform their functions.¹⁴

With the accumulated knowledge of wartime surgery and exchanged experiences, new techniques developed so that by 1878, Dr. P. A. Harris of Dover could report several instances of successful skin grafting operations.

Hayfever sleuth

Fifty years before "allergy" became a common word, Dr. Elias J. Marsh of Paterson was an acute observer of the miseries of hayfever. From childhood he had experienced all grades of its severity — from coryza to spasmodic asthma relieved only by chloroform. The disease was arrested by a sea voyage and visit to the Isle of Shoals. While he did not discover the cause of his misery for many years, he suspected its connection with vegetation.

About 1870, he heard ragweed mentioned as a possible source, and began experiments which within a few years resulted in his Society report, "Hayfever or Pollen Poisoning."

One plant was not the whole answer, he knew. He thought personal idiosyncrasies, susceptibility, and the influence of inheritance and occupation were to be considered, too. Twentieth century reports on pollen counts carried daily each autumn by television, radio and the press, and the energetic public health measures to destroy weeds in vacant lots and along country roadsides may be traced to this pioneering physician, public health officer and sympathetic sufferer.¹⁵

Forensic medicine

The introduction of ether in the operating room of the Massachusetts General Hospital, in the fall of 1846, launched a medical-legal relationship that led to whole new fields of jurisprudence. Although no one recognized them, the first signs occurred on October 18, 1846, two days after the initial experiment with the new vapor of sulphuric ether. On that day Dr. George Hayward of Boston removed a fatty tumor from the arm of a female whom he had placed under the "ethereal influence." The operation lasted four or five minutes, and the patient declared afterwards that she was not only entirely free from pain during the operation but also insensible to surrounding objects. Less than a month later, the vapor was administered to a female before a thigh amputation, and she later declared she was unaware that anything had been done to her.¹⁶

In 1847 chloroform came into use. To a clever but ill-informed and conniving wife, wearied of her policeman husband, that anesthetic must have seemed the means to a perfect crime. At any rate, she insisted that her husband had been murdered in bed beside her while she was "unaware of what was happening because of being under the effects of chloroform." She said she could only recall smelling something strange when she awoke.

But the plausibility of her account and all such future ones were thoroughly jolted by Dr. Peter V. P. Hewlett of Newark. He carried out a number of experiments and reported them to the other members of the state Medical Society, anticipating the day when they might be called to testify in a criminal case on the effects of chloroform.

"The popular impression that chloroform will produce instant insensibility when administered by a handkerchief suddenly thrust under the nose, shows an ignorance of its action — as well as the falsity of statements to that

effect," he said. "All such cases should be looked upon with the gravest suspicion."

Dr. Hewlett found that no adult in natural sleep could be given chloroform without his waking and that it could rarely be done even with children. The idea of displacing the air of a room in order to render an occupant insensible was "not founded on fact but was highly imaginative," he said. "The production of anesthesia at once by a handkerchief held near the mouth to a waking person without his knowledge, is an utter impossibility."¹⁷

As recently as the 1960's, the wife of a serviceman insisted that an Army doctor at a New Jersey military base had been guilty of improper conduct while she was anesthetized. Charges such as these were anticipated in 1880 by Dr. Hewlett when he said there was no question that dreams and erotic sensations occur during the inhalation of anesthetics. He cited frequent instances in which the patient charged the physician or dentist with improper conduct, although her husband or a parent had been present constantly and testified in the doctor's behalf.¹⁸

Dr. William Pierson, Sr. of Orange, in his presidential address in 1870, discussed other testimony physicians might be called upon to give, such as the degree of mental soundness involved in committing a self-abortion, and questions arising out of sexual disabilities such as sterility or impotence, particularly when rape was charged. He cited other problems such as determining the paternity of "surreptitious children," and accurate diagnosis of death by poison or other means. He concluded with the hope that his talk might lead to more attention to this long neglected subject and that it might prompt medical schools to establish chairs of medical jurisprudence.

Within a year, the bequest of Judge Ellis Lewis of Philadelphia permitted the introduction of such a course at the medical school of the University of Pennsylvania. But this was barely a start, and New Jersey physicians emphasized there was an equal need for lawyers to be instructed in asking appropriate questions.

Dr. D. M'Lean Forman of Freehold in 1875 warned physicians against positive determination of guilt by microscope. He reminded his colleagues that the red corpuscles of dogs were nearly identical in size with those of humans and that it was difficult to distinguish between the corpuscles, even with fresh stains. He said a microscopist could not affirm truthfully that a given stain was positively human blood and advised both physicians and jurists to use caution "lest society should run more risks from the scientific expert than from the criminal he is called upon to convict."¹⁹

Women and children

When the first young women with M.D. degrees appeared in gatherings of the A.M.A. and at the New York and Pennsylvania medical societies, New Jersey delegates could not fail to notice them. In fact, the women may have insured recognition of their presence by having something of interest and worth to contribute to the session.

Dr. Daniel A. Currie of Englewood, who had gone to Albany, N.Y., in 1877 as a delegate from the Bergen County Medical Society, reported there had been "a rare feature . . . a number of female doctors," and that one in

particular, Dr. Mary Putnam Jacobi, "gave the history of two interesting cases of convulsive disease without convulsions."*

"Women's diseases" were providing topics for the New Jersey Society also. The A.M.A. meeting in 1873 decided that in lieu of reports on Medical Education and Medical Literature, reports should be given on obstetrics and the diseases of women and children. In the same year, Dr. T. H. Studdiford of Lambertville addressed the state Society on nervous disorders in women.

Dr. H. A. Hopper of Hackensack, in 1877, devoted part of his address to gynecology. After noting that at least the uterine pathological phase of gynecology had developed within the last century, he wondered why scores of cases of uterine disease now existed where before they were almost unknown. It seemed to him that such modern refinements as furnace-heated homes and the "absurd style of female dress" were at fault.

He particularly blamed the fashionable dress "four times the weight our mothers were accustomed to wear" for dragging down from the waist and tearing the abdominal viscera; the shoes with heels so high they made it impossible to walk erect, and corset stays so tight that respiration had to be accomplished by the diaphragm. From all this, he direly predicted, uterine diseases might well be quadrupled.

With the new attention to women's diseases came greater concern for children, and in 1884, state Society member Dr. William P. Watson of Jersey City established another first for the state when he introduced a new journal, *Archives of Pediatrics*, the only publication of the time devoted to diseases of early childhood.²⁰

Dr. Leonard J. Gordon of Jersey City said that 55 per cent of the deaths in Hudson County in 1876, exclusive of accidents and stillbirths, were those of children under five years of age. Even so, Dr. Hopper felt strides had been made in reducing infant mortality. In the nineteenth century, he said, only 15 per cent of the babies died during their first year, compared with 26 per cent in the sixteenth century.

As early as 1851, the Society had won protective labor laws for children and in 1854 had asked for better schoolhouses. Dr. John S. Cook of Hackettstown, introduced a discussion of the communicable diseases of childhood, calling the large public schools "lazar houses" that had cost a fearful price in human life and intense bereavement. Dr. Cook's first recommendation was to keep a youngster at home for at least six weeks if anyone in his house had scarlet fever, diphtheria, measles or whooping cough. He also advocated placing a placard on any dwelling where there was infectious disease so that an effective quarantine could be accomplished.

Dr. J. B. Mattison of Chester offered a method of artificial respiration to start proper breathing in newborn babies. Dr. Samuel R. Forman of Bergen, who had been studying children's diets, provided an unsolicited testimonial when he wrote, "next to the pure milk from a healthy cow, comes *Borden's*

* The Fielding H. Garrison Lecture by John B. Blake on "Women and Medicine in Antebellum America," (*Bulletin of the History of Medicine*, Vol. 39, No. 2, March-April, 1965, pp. 99-123) describes the presentation on January 23, 1849, of the M.D. degree to Elizabeth Blackwell—the first woman to receive an American medical degree. By 1861, Penn Medical University of Philadelphia had conferred about sixty-five medical degrees on women. Some of these graduates were among the delegates to the A.M.A. convention in 1876 and henceforth.

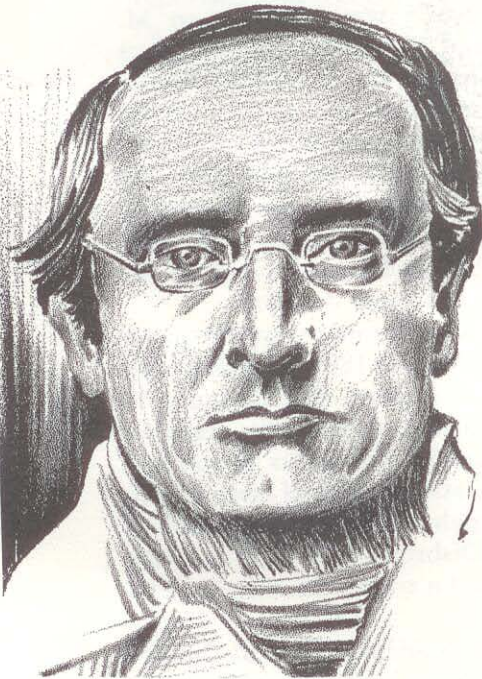
Eagle Brand milk." He suggested it might be slightly sweetened and rendered alkaline by one grain of sodium carbonate to the ounce.

Dr. Currie, also concerned with the artificial feeding of babies, found no two able to take the same food in the same quantities. He reminded his colleagues of his continuing success — when babies could not take cream — in nourishing them by inunction: olive oil and whiskey or brandy in equal parts applied every sixth hour liberally to the whole body, along with the administration of a few drops of cod liver oil, internally.

Clean food and utensils were important, too, and Dr. P. A. Harris of Dover, years before his time, insisted cows should be milked twice a day and the milk kept in vessels that were thoroughly cleansed in boiling water before each use.

At this time French chemist Louis Pasteur (1822-1895) was experimenting with a process now known as pasteurization. It involved the heating of foods — particularly milk — to a high temperature, followed by rapid cooling, in order to destroy disease-causing bacteria that might be present.

Dr. George Franklin Fort, *below left*, Governor of New Jersey (1851-54). Drawing based on a portrait in the State Capitol, Trenton.



Dr. William Augustus Newell of Allentown is credited with giving impetus for the founding of the United States Life Saving Service. He was Governor of New Jersey (1856-8); served for a time as physician to the family of President Abraham Lincoln, was appointed Governor of the Washington Territory and was active in promoting its statehood. He retired to Allentown, where he died in 1901 in his eighty-fifth year.

Ocean County Medical Society

When Ocean County was separated from Monmouth in 1850, the new county had only 10,032 residents and a budget whittled from \$2,000 to \$1,800 by seafaring men who were born to thrift and hard work.²¹

In January, 1861, the state Medical Society suggested that Drs. P. K. Hilliard of Manahawkin and R. L. Disbrow of Toms River, both members of the Monmouth County Medical Society, confer with other physicians in Ocean County for the purpose of instituting a medical society there.

The Civil War was uppermost in men's minds then, however, and it was not until 1874 that the state Society received an application for the organization of the Ocean County group. The applicants were Drs. Hilliard and Disbrow, plus Ephraim Marstard, J. C. Schureman, Amos Shaw, C. O. Gordon, and D. C. Chase. They were successful in organizing and are on record in 1876 as having forwarded \$18 to the state Society treasurer.

From then until 1895, there were usually Ocean County delegates seated at the annual New Jersey Society meetings. Then the Ocean County society suspended activities for eight years. In 1903, ten physicians applied and were approved to reorganize the local group. They were Drs. Irwin H. Hance, William G. Schaufler, V. M. Disbrow and E. C. Disbrow, George W. MacMillan, Harold Pittis, A. M. Heron, Paul T. Kimball, Frank Brouwer, and Ralph R. Jones.²²

The Disbrow name was familiar to patients in both Monmouth and Ocean counties. The first physician of the family was Dr. Stephen M. Disbrow. He was graduated from the College of Physicians and Surgeons in New York in 1832 and appointed superintendent of the Brooklyn Cholera Hospital. Although he was successful in the treatment and control of the disease, his own health was so impaired that the Brooklyn Board of Health voted him a special sum for his efficient services during the epidemic. He then moved to Howell Township in Monmouth County, regained his health, and continued to practice for sixty years. Epidemics seemed to be a specialty for him, since he was noted for his success in a scarlet fever outbreak in the 1860's and again when diphtheria raged within the same decade.

He was the father of nine children, five of whom became physicians. Of the four still in practice when their father died in 1894, Stephen and Vanderhoef M. were in Monmouth County and Lefferts and Clarence in Ocean County. Dr. Vanderhoef Disbrow was made an honorary member of the state Society in 1935 in recognition of his fifty-five years of medical service, including a number of years as chief of staff and chief obstetrician at the Paul Kimball Hospital at Lakewood, which he was instrumental in starting and developing. His son, Dr. Harold Disbrow, who died in 1936, was a surgeon on the staff of the same hospital and a trustee of The Medical Society of New Jersey.²³

Although Monmouth rightfully claimed Dr. William Augustus Newell of Allentown when he was elected governor of New Jersey in 1858, Ocean County medical men felt his political victory was partly due to his almost single-handed achievement in obtaining a lifesaving service for the entire New Jersey coast. They felt a special kinship with the eminent man because he had shared their frustration when viewing victims of shipwrecks.

Society evaluation

With the postwar adjustments over and new wonders of science appearing in every decade, history-conscious Dr. Stephen Wickes, modest for himself but proud for his state Society, took a look at its publications. For more than ten years, it had published its own *Transactions* and exchanged them with more than a dozen other state societies and boards of health. There had been one ticklish time when it became necessary to carry a disclaimer saying, "The Medical Society of New Jersey does not hold itself responsible for the sentiments expressed by the authors of papers; nor for the accuracy of the reports of clinical cases furnished by the reporters of the district societies."

Corresponding Secretary Dr. William Elmer had compared publications, and, except for the much larger proceedings from New York and Pennsylvania, he felt the New Jersey Society could feel justly proud that in size, interest and value, its publication far excelled those of all other societies. He felt the publication of the New Jersey Medical Society ranked favorably with those from the medical institutions of the country. "No other report has information from the different counties as does New Jersey," he said. This valuable data revealed at a glance the sanitary condition of the whole state for the past year regarding epidemics, general mortality and the exemption of certain parts of the state from diseases prevalent elsewhere.

The federal government evidently agreed with the merit in New Jersey's reporting and recognized it as the pioneer in the collection of vital statistics. In 1880, when a new national census system was established, all of New Jersey was included in the pattern-setting first reporting district.