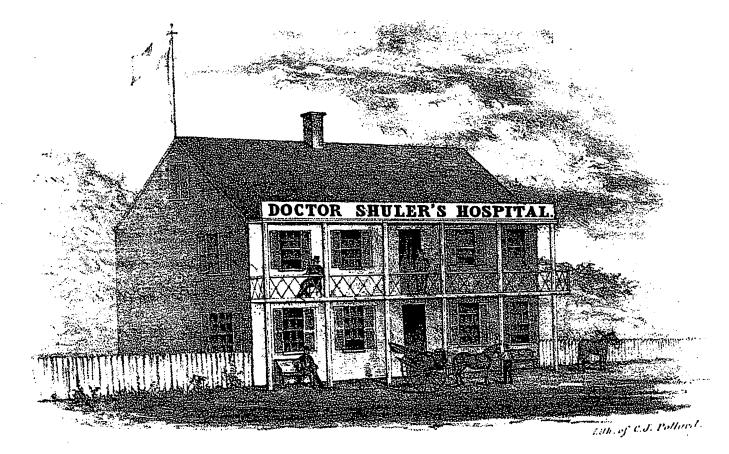
# VIGNETTES OF CALIFORNIA MEDICINE

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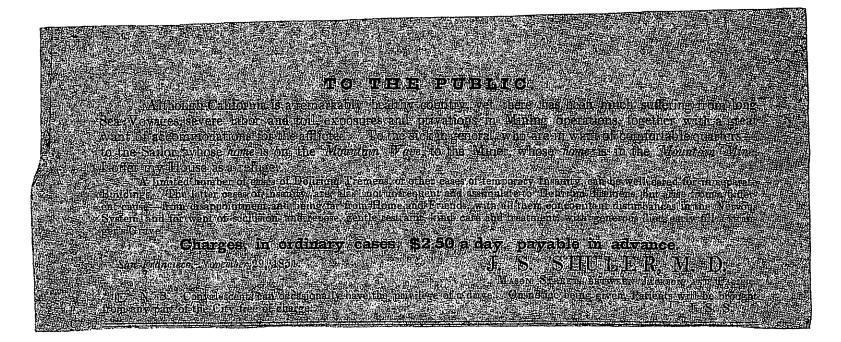
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#### ALBERT SHUMATE

### A PIONEER HOSPITAL IN SAN FRANCISCO



VIGNETTES IN CALIFORNIA MEDICINE/I THE BOOK CLUB of CALIFORNIA : 1977



This rare and interesting illustration from a letter sheet in the collection of Mrs. David Potter, member of the Board of Directors of The Book Club of California, recalls some of the problems encountered while the practice of medicine was developing in early San Francisco. Doctor John S. Shuler, whose hospital is depicted here, obtained his Doctor of Medicine degree from the University of Ohio, and was licensed in 1818 by the Medical Society of New York. Shuler first practised in eastern New York but in 1834 he moved to Lower Lockport, New York, where he remained until, infected with gold fever, he journeyed to California. By January, 1851, he had established his private hospital on the west side of Mason Street between Jackson and Pacific. Doctor Shuler died on February 20, 1854, at the age of 63, an advanced age particularly when compared to the extreme youth of most inhabitants of the Gold Rush city. Records indicate that his hospital did not long survive him.

Gregory Yale, who signed the affidavit, was a resident of Virginia until he became a 49'er. In 1860, he acquired a residence in exclusive South Park, thereby joining others of the "Southern artistocracy," to quote Julia Altrocchi. Yale became, as Robert Cowan stated, "an attorney of great ability." His 1867 Legal Titles to Mining Claims and Water Rights in California was long considered an authoritative treatise on mining law. Yale died at his South Park home in 1871.

In 1850, Nathaniel Gray, referred to in the letter sheet as "City Sexton," founded his undertaking establishment. This pioneer firm, the oldest mortuary on the Pacific Coast, continues to the present under the ownership and direction of Gray's descendants.

Doctor Shuler's letter regarding the three cholera victims also recalls that dreaded disease. Now virtually un-

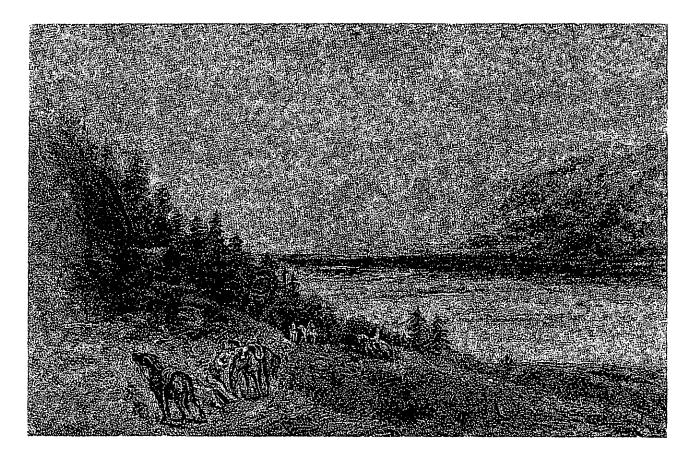
known in the United States, cholera was one of the major killers of the last century. Cholera spread throughout the world from India, where it had existed for hundreds of years, first appearing in the United States in epidemic proportions in 1832. The second deadly epidemic, which began in 1849 and persisted until 1854, raised havoc on the Overland Trail and the Isthmus of Panama, killing hundreds of Argonauts. As the cause was unknown, there could be no effective effort to prevent or treat the disease. When cholera reached California in 1850, five percent of San Francisco's population and fifteen percent of the Sacramento population succumbed to the scourge! An example of the disease's dreadful toll is reported in the Evening Picayune of November 12, 1850: "Cases since yesterday 23; deaths 17." During the epidemic, the city operated the Cholera Hospital, which flew a yellow flag. Associated with this hospital was the well-known Doctor Henry Gibbons, first of a distinguished family of San Francisco physicians.

Thus, the letter sheet recalls some interesting pioneers and their relationships to the fearful cholera epidemic. It also recalls the youthful city's attempts to care for its sick, and lastly, it recalls the sad fate of the three seamen, far from home and loved ones, who died unknown in a far away port. ALBERT SHUMATE, M.D., as a lecturer and author, is wellknown to all western hisorians. He has been a president of The Book Club and the California Historical Society, and is past president of the San Francisco Landmark Preservation Board.

This series of Keepsakes, issued by The Book Club of California during 1976–77, is under the general direction of Reinhard S. Speck, M.D., with the assistance of Albert Sperisen, Albert Shumate, M.D., Alfred L. Kennedy and Gaye L. Kelly. It is designed and printed by Kathy Walkup of Five Trees Press, San Francisco. Monotype Bembo set by Mackenzie-Harris. Copyright 1977 by The Book Club of California.

# RICHARD DILLON MEDICAL TOPOGRAPHY OF THE SACRAMENTO VALLEY





During the Gold Rush, the beautiful Sacramento Valley was, all too often, a 'Valley of the Shadow of Death.'

> Dr. James Davis Babcock Stillman was one of the most literate of California pioneers. His travel narrative, *Seeking the Golden Fleece*, published by Anton Roman in San Francisco (1877) from the press of premier printer Edward Bosqui, has become a minor classic of Californiana.

> But long before he laid aside his scalpel to take up a pen to contribute stories and articles to the Overland Monthly and to write his magnum opus, the literary sawbones contributed

a paper to the New York Journal of Medicine (New Series, Vol. III, No. 3, November, 1851). It was entitled "Observations on the Medical Topography and Diseases of the Sacramento Valley, California, in the Years 1849-50." It preceded any serious medical study of the then pestilential valley or, indeed, even the collecting of vital statistics by the infant state. One of his reasons for writing the essay, surely, was to set the record straight; Northern California's "plague" had been mis-diagnosed as Asiatic cholera by the *New Orleans Medical and Surgical Journal*. A copy of his essay, in the form of a rare "separate" or reprint, is held by the California Section, State Library, in Sacramento.

Stillman based his remarks on observations made in a passage up the Sacramento River in a 24-foot galvanized iron boat in the fall of 1849, from the tule jungles of the Delta to the dusty and pebbly plains of the upper river, 50 miles above Lassen's Rancho. This was the area which Lt. George Emmons, U.S.N., on his 1841 mapping expedition of the Siskiyou Trail, had described as the most worthless land he had ever seen.

Apparently heading for the Trinity mines, Stillman and his comrades gave up the idea near Cottonwood Creek. From the place where Lassen's Cutoff reached the Sacramento at an Indian fish weir, his party suffered much from fever. Stillman reported emigrants cursing Lassen's route because it had "cut off the lives of so many men." A Dr. Edward Hall told him that Reading's Springs, to the north, was little more than a fever hospital. By the time Stillman reached Deer Creek all nine men of his company were down with malaria, save the Negro cook; and quinine was selling there for a dollar a grain.

So Doctor Stillman returned to Sacramento with a bad case of diarrhea, chills and fever. However, unlike the men of Emmons's 1841 party or the Hudson's Bay Company trappers, who had viewed with horror abandoned Indian villages and hundreds of skeletons in 1833, he sought the reason for the Sacramento Valley's deadly reputation.

In the city of Sacramento on December 22, 1849, Stillman noted that there were 25 deaths that day, and not one from consumption (TB) or other pulmonary complaints. Every one was due to malaria or its "by-products," camp dysentery and diarrhea. The latter was coming to be called *the* disease of California. After a second attack of malarial fever with jaundice, Stillman wrote that autumn in California was a melancholy time; the season of death. Bitterly, he likened the yellowing faces of jaundice victims to the fall color of turning leaves in the East. Small wonder that he blessed the floods of January and later, which engulfed Sacramento but which halted the diseases.

Stillman guessed that one-fifth of California's argonauts died within six months of arrival. In April of 1850 he counted 1,000 mounded graves near Sacramento. But he did not lose his own ambivalence toward the changeable valley. Its blue haze of summer and fall tule and peat fires was washed away by winter's first sharp north wind, leaving transparent, pure and bracing air. Its summer deserts metamorphosed into wintry swamps and, in spring, into an inland sea from snowmelt, in which the only "islands" were the Sutter Buttes and the high levee protecting Sacramento itself.

One moment he would write, "Imagination can scarcely paint a scene of more enchanting beauty than these plains at this season, and sickness is almost unknown, under whatever exposure." The next moment he would warn, "The whole valley contains, in an eminent degree, the intermittent malaria; there can be no doubt; and that it will continue so until the greater part of its surface shall be renovated by the plough."

The doctor was puzzled by the presence of so much chills and fever, since the valley lacked the dense vegetation which was believed to sustain the "putrid miasm" of overflowed land. He was, of course, on the right track. Once dams, drainage ditches, plowed fields and even thirsty eucalyptus trees dried up the swamps, the disease faded away. (With an assist from mosquito abatement programs.) Stillman still believed in swamp miasmas as the cause of malaria; he had no idea that the bothersome mosquito was the vector of the disease.

Stillman not only proved to his own satisfaction the relationship between malaria and the bowel disorders which also affleted the '49ers, he was quite modern—almost holistic!—in his treatment of the sick. Rather than dosing them with alcoholic spirits, opiates and other drugs as did his colleagues, he offered his patients a healthy regimen instead. He admitted that quinine was well spoken of by other medics, but he made little use of it. And he spurned opium, believing that the indiscriminate use of the narcotic was a major cause of fatalities.

Convinced that malaria, dysentery and diarrhea were all caused, in part, by the exposure, fatigue, malnutrition and depression (homesickness, largely) of the '49ers, just as these ills were followed by emaciation, anemia, often delirium and sometimes coma and death, he prescribed rest and diet. Comfortable, warm and dry beds and plentiful food, especially boiled milk thickened with fine wheat flour, worked wonders with his patients.

Rhetorically, Stillman asked, "If the diarrhea of which I have been speaking has a similar origin with dysentery, is it from a distinct variety of malaria, or is it modified by collateral influences as yet inappreciable?" He answered his own question. "There is no doubt that hardships, the want of the customary comforts of home, more especially insufficient or unsuitable food, did much to predispose the system to the effects of malaria. But, of themselves, they do not appear to be sufficient to excite so incurable a disorder. . . . Malaria seems to be the only necessary element in the generation of this chronic diarrhea."

Again he waxed rhetorical. "Is the subject worthy of careful investigation?" And again he answered himself. "The conviction that has been gaining strength with me ... [is] that the disease which I have described is endemic, of malarious origin, in common with intermittent and remittent fever."

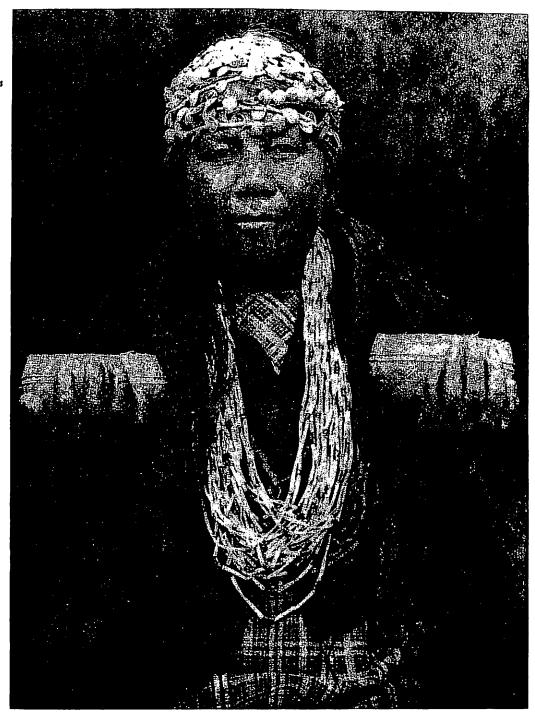
Having anticipated both preventive medicine and holistic treatment of ills, and linked malaria with dysentery and diarrhea, Stillman also recognized environmentally-induced diseases and the reason for the predisposition of Mother Lode miners and Sacramento Valley settlers to their ravages. "The immigrants were exposed to all the hardships of a camp, without the discipline of an army, and the comforts or conveniences which the foresight of a quartermaster provides, or the intelligence and care of a medical staff."

RICHARD DILLON is president of The Book Club of California, head of the Sutro Library in San Francisco and one of California's leading historians. In addition to lecturing and writing for numerous major periodicals, he is author of many award-winning books.

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# MICHAEL HARRISON NORTHERN CALIFORNIA INDIAN SHAMANS





Indian Shaman Woman

#### HUPA DOCTORS

The religion of the Hupa was on a higher plane than that of some tribes to the south of them. The dances were all of a sacred nature, and there were various religious customs practiced about the house. Thus, at night before going to bed, the men who smoked would fill their pipes and then blow upward from the plam of the hand the small residue of tobacco, and pray, "May we live well. Look after us, you who are above." Or, "We will have success in whatever we undertake. We will have much money, which will come to us from other places." Or, "Sickness, go away from us. Draw all the sickness away from us." These supplications were directed to Above-He-Dwells, who, however, was not addressed by name.

Shamans acquired their power by dreaming and dancing. A man, or even a youth, would tell dreams in which some spirit had given him songs, which he sang in his sleep. Unable to cease dreaming and singing, and having little desire for food, he would become very thin. He smoked much, and ate little. Then the people said, "He is going to be a shaman." During the day he had fainting spells. The people began to say, "We shall have to make a dance for this man. He cannot live this way always." So a dance was arranged for a certain night. Everybody attended, for such an occasion was greatly enjoyed. They sang all night in the sweathouse while the man danced about the fire as long as he was able, making gestures as if he were catching the "pain" out of the air and putting it into his mouth. This was done on ten nights, after which a feast was held in the house and again the man danced. This might all be repeated at intervals for a year. If he was to be a sucking doctor one of that profession was hired to train him. This shaman blew his magic "pain" into the novice's mouth or threw it into his body. If it passed through without causing sensation, the candidate could never become a shaman; but if it caused pain, that was a sign that he would be a good one. If the candidate did not soon become satisfied, that is, relieved of whatever was causing him to dream and sing, he went to the summit of *Tse-titmilkut* ("rock rolling-off"), Telescope Peak, near the present school, with two companions, one of whom might be a woman, and there he danced and prayed. Many shamans were women.

The so-called dancing doctors were not numerous. They pretended to have clairvoyant power, and would tell where lost people or lost property could be found. Called to a patient, they told where they saw the sickness in his body, and when and under what circumstances it had entered. They then advised the family to summon a sucking doctor.

#### KAROK DOCTORS

"There are two classes of shamans—the rootdoctors and the barking-doctors—the latter reminding one somewhat of the medieval spagyrics. It is the province of the barking-doctor to diagnose the case, which she (most doctors are women) does by squatting down like a dog on her haunches before the patient, and barking at him like that noble and faithful animal for hours together. After her comes the root-doctor, and with numerous potions, poultices, etc., seeks to medicate the part where the other has discovered the ailment resides. No medicinal simples are of any avail, whatever are their virtues, unless certain pow-wows and mummeries are performed over them.

"It will be perceived that the barking-doctor is the more important functionary of the two. In addition to her diagnostic functions, she takes charge of the 'poisoned' cases which among these superstitious people are very numerous. They believe they frequently fall victims to witches, who cause a snake, frog, lizard, or other noxious reptile to fasten itself to the body and grow through the skin into the viscera. In this case, the barking-doctor first discovers *secundum artem*, in what portion of the body the reptile lurks, then commences sucking the place, and sucks until the skin is broken and blood flows. Then she herself takes an emetic and vomits up a frog or something which she pretends was drawn from the patient, but which of course she had previously swallowed.

"In a case of simple 'poisoning', the barkingdoctor gives the sufferer an emetic and causes him to vomit into a small basket. The basket is then covered and held before the patient while he names in succession the various persons whom he suspects of having poisoned him. At each name mentioned the doctor uncovers the basket and looks in. So long as wrong names are mentioned the vomited matter remains; but when the right one is hit upon, presto! it is gone, and when the doctor looks in the basket it is empty.

"The Karok hold their medicines personally responsible for the lives of their patients. If one loses a case he must return his fee; more than that, if he receives an offer of a certain sum to attend a person and refuses, and the individual dies, he must pay the relatives from his own substance an amount equivalent to the fee which was tendered him. A shaman who becomes famous is often summoned to go twenty or thirty miles, and receives a proportionately large reward, sometimes a horse, sometimes two, when the invalid is rich."

#### THE TATU [HUCHNOM]

"Many varieties of medical practice are in vogue. For instance, Tep, a great shaman of the Tatu, will sit for hours beside a patient, chanting in the interminable, monotonous way of the Indians, and beating his knee with a bunch of rabbit-bladders filled with pebbles, ending finally with a grand flourish of the bladders in the air, and a whirring chatter of the voice, to exorcise the evil spirit. "Another and more sensible mode is as follows: A hole is dug in the ground large enough to admit the sick person, partly filled with stones painted with red and black stripes; then a fire is kindled in it and continued until the ground is thoroughly heated. The fire and stones are then removed, and a quantity of rushes with their joints painted with the sacred red earth is thrown in, followed by a wisp of damp hay or grass, for the purpose of creating a steam. First, the practitioner himself lies down on the hay and wallows his breast and back in it, probably to round it into shape; then the patient is laid on it, thickly covered with hay or blankets, and allowed to perspire freely.

"Still another method is to place the patient on his back, naked, stretch out his arms and legs wide asunder, plant four springy twigs in the ground at a distance, bend them over, and tie each to a hand or foot with a string. Then the physician, spirally painted like the devil above described, approaches with a coal of fire on a fragment of bark, and burns the strings in two, allowing the twigs to spring up one after another, whereupon the patient screams. The notion appears to be that the evil spirits lurking in the several limbs are somehow twitched out or burned."

HUPA DOCTORS: Curtis, Edward S., North American Indians, Vol. 13, pp. 27-8.

KAROK DOCTORS: Powers, Stephen, Contributions to North American Ethnology, pp. 26-7.

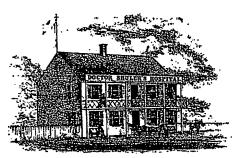
THE TATU [HUCHNOM]: Ibid, pp. 141-2.

MICHAEL HARRISON is a former president of the Book Club and a student of Indian affairs, having served fifteen years in the Indian service in New Mexico and California and in the National Park Service at the Grand Canyon in Arizona and in the Bureau of Reclamation in California.

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### DAVID F. MYRICK

## HUGH HUGER TOLAND: California Doctor & Pioneer Medical Educator



## ANNUAL ANNOUNCEMENT OF LECTURES

TOLAND HALL,

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# Medical Department

UNIVERSITY OF CALIFORNIA,

OF THE

SAN TRANCISCO.

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SESSION OF 1876.

SAN. FEANCISCO. CUIBRY & COMPANY, ROOF, DIAIN AND ORNAMENTAL JOR PRINTS The fourth of ten children, Hugh Huger Toland was born at Guilder's Creek, South Carolina, on April 16, 1806. His father's financial success as a planter and banker enabled him to send this son to Transylvania University in Lexington, Kentucky. After graduating in 1828, the young doctor practiced for two years but then spent two and one-half years in Paris engaged in further study. Well considered in the fields of surgery and medicine, Toland enjoyed a good practice, but the call to California was too much to resist.

Unlike most argonauts, he arrived in California with plenty of money and his own quartz mill and settled in Mokelumne Hill in 1852. After purchasing the Paloma Mine and working it for a time, he found it to be unremunerative so he sold out before exhausting his capital. The death of his wife shortly after their arrival at Mokelumne Hill probably helped to persuade him to leave the Sierra foothills with his stepson Charles and come to San Francisco. (The Paloma Mine was purchased by William M. Gwin in 1857 and under his ownership recorded a long record of production. Gwin was one of the first Californians to serve in the U.S. Senate.)

In San Francisco, Toland resumed his medical practice with offices and a pharmacy in the Naglee Building at the southwest corner of Merchant and Montgomery Streets. Morning hours were devoted to private patients but in the afternoon Toland conducted a free clinic. The key to his financial success was his drug store; all patients regardless of status made their exits through the pharmacy where their prescriptions were filled. That no one but his clerks could decipher the doctor's handwriting practically mandated patronage of his store. Dr. Toland also garnered a large mail-order business from people in isolated areas in California and Nevada who would write him describing their illnesses; the appropriate medicine would then be dispatched C.O.D. by Wells Fargo Express. Each prescription was pasted in a book which, when filled, joined the others on the upper shelves of the prescription room. Over the years, Toland dispensed 581,000 prescriptions; no wonder his annual income reached \$40,000, placing him at the top of the medical practitioners. When he died on February 27, 1880, he left an estate of almost \$2 million.

Tall and erect, the doctor's presence was always noted. Although best known as a physician, he was an accomplished bone surgeon he is said to have performed an operation the very last day of his life! His greatest contribution to medicine was the establishment of Toland Medical College, where classes began November 5, 1864, in Toland Hall. Situated on Stockton Street near Chestnut Street in San Francisco, the close proximity of the County Hospital may have been a factor in selecting this site on Telegraph Hill.

At the time Toland founded his medical school, the five-year-old Medical Department of the University of Pacific had begun to wane, so it joined forces with Toland. All went well for about six years, when a difference in policy split the ranks of faculty and students and Dr. Levi C. Lane and others resigned (the Lane Hospital was established in 1894). Toland reacted quickly, as well he might have with \$75,000 of his own money poured into the school, and was able to persuade many of the dissidents to return.

Meanwhile, the University of California had begun classes in medicine in 1869 and, perhaps tiring of the internal strife around his school, the following year Toland was amenable to entering negotiations with the university to acquire his organization. During the discussions, the doctor and the university disagreed on the continued use of his name to identify the medical school. As Toland refused to have his name cast aside by the younger organization, negotiations came to a standstill. Nothing transpired until 1873, when Toland settled for a chair named in his honor; the property was then transferred to the university. For many years prior to moving to the present location in 1898, the school was still referred to as Toland Medical College. Even today, in the maze of multi-story buildings on Parnassus housing the medical school, one important building bears the name "Toland Hall."

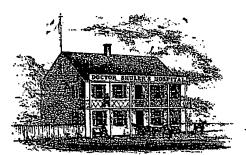
DAVID F. MYRICK, interested in Western history, has written books about Telegraph Hill as well as railroads and mines in Nevada, Eastern California and Arizona.

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### ANDREW T. NADELL

### Report of the Committee on MEDICAL EDUCATION,

Made to The Medical Society of The State of California by JOSEPH F. MONTGOMERY, M. D., of Sacramento



# REPORT OF THE COMMITTEE ON

# ANTERDICATE EDUCATION,

MADE TO 2

The Modical Society of the State of California,

Arthe Annual Session, Held of San Francisco, April 1876,

By Jos F. MONTCOMERY, M. D., of Sacramento,

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SAORAMENTO SAORAMENTO LIBADER PRINTING OFFICE 1876. Joseph Fauntleroy Montgomery, a Sacramento practitioner and active medical politician since 1850, wrote this speech in his sixtyfourth year. He was a graduate in medicine from the University of Virginia and also from the University of Pennsylvania, in 1834.

His is one of many contemporary calls from the well-educated for reform of American medical schools. Montgomery speaks with a prescience of the following decades in medical education, as well as of the problems still unsolved today.

He begins by commending the efforts of the American Medical Association during the previous twenty-nine years, in support of medical ethics and comprehensive education. He decries "the inferior order of medical colleges [established] by unworthy or misguided men who are and have been willing... to prostitute and degrade their calling."

But Montgomery's purpose is to challenge the A.M.A. to meet its own lofty goals. He dares it to ...

boldly and confidently . . . promulgate a system of education . . . prescribing the highest standard and the most enlarged curriculum . . . with the unequivocal and emphatic declaration at the same time that no teacher or graduate of any school not accepting or adopting it should be admitted into its sacred and exclusive fold.

In his zeal, he perhaps overestimates the nobility of his colleagues by then suggesting that "the great mass of the profession would enthusiastically rally to its support... as would, under like stress or incentive, the intrepid defenders of a holy faith."

While idealistic in his oratory, Montgomery was not impractical. He proposed that State legislatures limit and regulate medical schools and licenses to practice, in cooperation with local societies and the A.M.A. He compares medical curricula and qualifications of faculty members in continental and British schools with legitimate and proprietary American colleges.

He then offers a detailed proposal for change: eliminate apprenticeships to single practitioners, create what we now refer to as pre-medical college courses, and require four years of medical education, divided between basic biological sciences and clinical instruction. Like medical educators of the 1960s and 1970s, he is concerned that basic sciences-anatomy and chemistry-be "especially well taught in the most practical manner, because like favorable opportunities for such instruction would not probably be subsequently enjoyed." Careful attention to physical diagnosis is required, including the use of modern "ingenious contrivances." Predicting reforms of our time, he also allows for students to take an accelerated but complete course in three years instead of four. He endorses the teaching of psychiatry and "hygiene," the latter comprising sanitation and medical ethics.

However, Montgomery failed to realize that railroads and the telegraph would not solve the ancient problem of bringing medical care to rural areas.

Montgomery, among his numerous other appointments and honors, was Sacramento City Physician and thrice-elected Resident Physician of the Sacramento County Hospital. I regret that this intense, concerned and articulate man failed to suggest the teaching of the subject of which he himself is now most a partmedical history. He died in 1883.

ANDREW T. NADELL, M.D., is a member of the Book Club whose principal areas of interest in the book collecting field are medicine as a profession and as a social institution.

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### THOMAS W. CHINN

# HERBS, HERB DOCTORS

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An ancient drawing of a wrist which was used by Chinese doctors in times past to teach their students anatomy. Chinese doctors are expected to diagnose an illness by taking the pulse of a patient's wrist.



When more than 100,000 Chinese in California were put largely upon their own to minister to their sick or injured, how did they handle the problem? Specifically, what medications and methods were utilized in the 19th century?

In the beginning, few Chinese were willing to consult an American doctor in a strange country. The language barrier, the high fees, and the strange medications and methods were too much to assimilate, particularly when one's life was frequently at stake. So, the great majority relied upon their old-world, familiar, remedies.

The first Chinese to reach these shores undoubtedly had amongst his belongings a package of assorted herbs and other old-world "cures."<sup>1</sup> As more Chinese arrived, the first herb stores and herb dispensers appeared in San Francisco. Then, as other Chinese communities sprang up, the herb dispensers followed with their wares.

An herb dispenser acts in a capacity akin to that of the pharmacist: upon prescription of the herb doctor. If the ailment is minor, a person goes directly to the herb shop and asks the dispenser to "prepare for him a prescription of herbal tea," after first describing his ailment to the dispenser. If the ailment is of long standing, or serious, the sick man hurries to the herb doctor.

Nearly all patients receive a "pulse diagnosis," which consists of the patient's resting each wrist in turn upon a small cushion on the table. The doctor places three of his fingers lightly upon the wrist and notes the pulse-beat for several minutes. His concentration is deep. He may ask the patient's age, and his marital status, and once in awhile, a very few, seemingly irrelevant questions. (If the doctor were asked, he would say that the Chinese herb doctors believe that the condition of each of the vital organs is indicated by the pulse; that they define at least twelve different pulses, and claim to be able to distinguish them by the wrist-beat.<sup>2</sup>) Without further ado, the herb doctor renders his opinion on the nature of the illness, and the requirements necessary to effect a cure. He prescribes an herb tea and writes out a prescription.

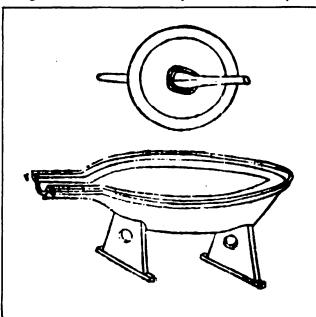
The prescription is then taken to the herb shop (sometimes within the same suite of rooms). There, the herb shop has on its shelves literally a hundred or more small drawers. They contain its more popular merchandise. A complete herb shop in China may have more than three thousand items classified and used as medicine, but generally only five to six hundred are in popular use. One prescription may contain from ten to fifteen varieties of herbs, barks, roots, gums, nuts, flowers, and other medically-used-for-centuries items. All of these are put in a pot with water, and brewed for the required length of time. Invariably, it is a bitter tea, and the patient drinks the piping hot tea immediately. (Early-day herb shops generally had facilities to brew the tea for their customers because these predominately male patients had no kitchen facilities of their own.)

The patient returns each day for further pulse examinations. The prescription may be repeated, or varied to a stronger or weaker tea, or a different tea. The results generally are good, and the patient would return to work praising his doctor's skill. Nor were herbs or consultations with herb doctors limited to the Chinese. Other nationalities started to use the herb doctors and his prescriptions also. Toward the latter part of the 1880's, and continuing to this day, goodly numbers of Caucasians began to consult the herbalist and to be treated by him.

In the beginning herbs were all imported from China, and with the exception of a certain special concoction of deer's antlers, few animal substances were used. These antlers were ground into powder and sometimes given with the herbs (the Chinese believing that it gave one greater strength).

Early in the twentieth century, herb shops and herb doctors were the subjects of close scrutiny for possible violations of California medical laws and practice, but successfully survived the ordeal.

Today, herb shops and herb doctors continue to provide the ingredients used so successfully for thousands of years.



A foot mortar used by pharmacists to grind or pulverize animal bones and shells used for medicinal purposes. <sup>1</sup>In 1964, Son Loy Company, Grant Ave., San Francisco, gifted the Chinese Historical Society of America with three sub-basements filled with personal luggage belonging to Chinese pioneers who had left them with this merchandise store for safekeeping during the turn of the century. Of the many boxes and trunks which were opened for examination, almost all contained some Chinese herbs or medicines.

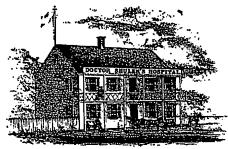
<sup>2</sup>Heinrich Wallnöfer and Anna von Rottauscher, Chinese Folk Medicine (Crown, N.Y., 1965), pp. 100–113.

THOMAS W. CHINN founded the Chinese Historical Society of America, is the author of many publications dealing with the Chinese in the United States and has received numerous awards. He received Presidential appointment to the national American Revolution Bicentennial Administration Advisory Committee on Racial, Ethnic and Native American Participation.

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HENRY MILLER MADDEN

### THE BAD AND THE GOOD





Among the some seventy members of the senior class of the Cooper Medical College in San Francisco in April, 1895, William Henry Theodore Durrant and Charles Alfred Dukes occupied adjacent seats in the lectures of Dr. William Fitz Cheney. The alphabet arbitrarily brought together a very bad young man, destined to die on the gallows at San Quentin, and

Minnie Williams

a young man who would live his biblical span in honor and some fame.

In the afternoon of Wednesday, 3 April, Dukes was taking notes on infant feeding. The seat next to his was vacant, because Durrant was in the Emanuel Baptist Church strangling Blanche Lamont, a fellow member of the church's Christian Endeavor. When this simple physical manipulation was finished, the twenty-four year old Durrant dragged his twenty-one year old victim up into the open belfry of the church.

While Blanche was moldering in the belfry, William Henry Theodore (he preferred the simple Theodore) continued to cut most classes for nine days. On Friday, 12 April, he was standing at the Ferry Building when Dukes and C. W. Dodge, another student, encountered him between three and four in the afternoon, as they were on their way to the ferry which would take them to their homes in Oakland. One of them ragged him, because of the concern he had so publicly expressed for his missing fellow church member, "Durrant, have you found that girl you ran away with?" His answer was not recorded. They might not have enjoyed such levity if they had known that he was waiting for Minnie Williams, also twenty-one and also a member of the Emanuel Baptist Church, to arrive from Alameda.

Minnie should have been warned by Theodore's behavior when he had escorted her on outings in the East Bay. She had told her employer's wife that he had "taken her for a walk and attempted to lead her astray; there would be no after trouble if she did as he wished, since he, being a medical student, would know how to take care of her." Despite this somewhat explicit showing of his intentions, Minnie had agreed to accompany him that evening to a church social in a private home.

Minnie did not arrive at the social, but Theodore, much belated, did so at 9:30. He was pale, disheveled, and his forehead glittered with sweat. After the social he returned to his home.

On the next morning, the Saturday before Easter, ladies of the church found the strangled and stabbed body of Minnie Williams in the church library. On Easter morning the police found the body of Blanche Lamont in the belfry. Excellent detective work had already brought Durrant into suspicion in the disappearance of Blanche, and a detective



Blanche Lamont

was on his way to arrest Durrant at his National Guard weekend encampment on Mount Diablo even before the corpse of Blanche had been found.

Durrant was tried only for the murder of Blanche Lamont, was convicted, lost appeals all the way to the Supreme Court of the United States, and was hanged on 7 January 1898. His histrionic final remarks included these words: "The crime was fastened on me by the press of San Francisco, but I forgive all. It is they who have forever blackened the fair name of California by putting to death this innocent boy."

Captain Thomas Duke of the San Francisco Police, recalling the case in 1910, wrote that he had "a photograph taken of Durrant at a picnic when he was only sixteen years of age, and the position in which he posed proves conclusively that he was a degenerate even as a child." Medical science today would benefit from such certain diagnosis.

And what of the good student, Charles Dukes? He had testified honestly in court that he could not recall if Durrant had been seated next to him on 3 April, even though the roll call had mysteriously shown him as present. At the prisoner's request, Dukes visited him in the county prison. Durrant besought Dukes to remember that he had been in Dr. Cheney's lecture. "I told him that I could not remember it and therefore could not do him the favor to state it as a fact."

Despite the turmoil of the investigation, Dukes was graduated from Cooper in the same year. He had been born in Iowa on 20 April 1872 and he was to pursue his career in Oakland. He was on the staff of Merritt Hospital from 1912 to 1934 and was chief of the surgical service in Highland and Fairmont Hospitals. His ability was recognized by election to the vice-presidency of the American College of Surgeons, and he enjoyed the usual paramedical perquisites—a directorship of the First National Bank of Oakland and membership in the Commonwealth and Claremont Country Clubs. His honest career came to an end on 13 May 1942.

Dr. Dukes' greatest contribution to society, as far as I am concerned, was his delivery of me on 17 June 1912 in Merritt Hospital.



Durrant in his cell

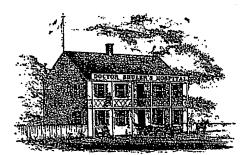
Line Drawings from The San Francisco Daily Report, Sutro Library, April 15 & 18, 1895.

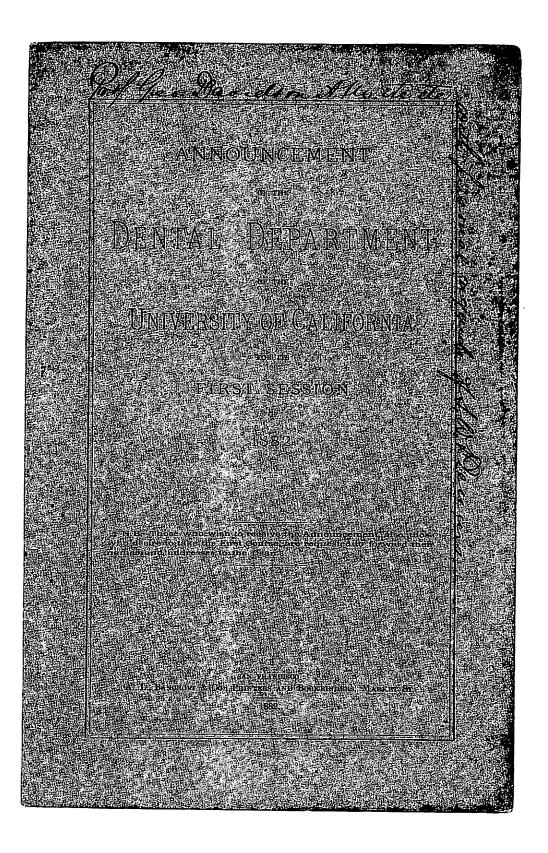
HENRY MILLER MADDEN, PH.D., is Librarian at California State University, Fresno. He is a member of The Book Club of California, and his principal interest in the book collecting field is in books in the German language relating to California.

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### ANDREW T. NADELL

# The Beginnings of DENTAL EDUCATION in San Francisco





Dentistry is an ancient calling. But unlike its sister profession of medicine, dentistry was not taught in schools until 1839 when the world's first dental school was established in Baltimore. Dentists were formerly trained by apprenticeship, as were the majority of American physicians.

This allowed the young state of California the opportunity to be an early proponent of professional dental education. There were only twenty dental schools in the United States, and none west of the Rocky Mountains, when the University of California created its Dental Department in 1881.

As the First Session Announcement hints, there had long been pressures for a dental school in San Francisco from dentists and civic leaders. Early plans for a dental school were made after an offer of a bequest to the California State Dental Association from a wealthy '49'er, Henry Daniel Cogswell, who had practiced dentistry until 1854.

Samuel William Dennis (1836-1907), who inscribed the copy of the announcement reproduced here, was a founder of the State Association. Cogswell's conditions were too severe for the Association, which declined the endowment. But Dennis was not so easily dissuaded, and after a first refusal by the Regents of the University of California also, enlisted the support of members of the Toland Medical College of the University. They wrote a letter to the Regents dated May 28, 1881, printed in the announcement, noting that the Cogswell Dental Department was "partially organized ... but ... no progress has been made toward perfecting the organization, and starting it into operation." They offered rooms and facilities for a new dental division, endorsing the previously appointed Cogswell professors, and promising prompt initiation of operations. This time the Regents acted favorably, creating the Dental Department "in connection with" the Medical Department.

Dennis was appointed Dean and first Professor

of the Principles and Practice of Operative Dentistry. Although an 1870 graduate in medicine of the University of Pennsylvania, he always practiced dentistry and devoted much of his life to advancing professionalism in his specialty. He served as first president of the Board of Dental Examiners of California and as president of the American Dental Association.

Dennis sent this announcement to "Prof Geo. Davidson A.M.," a member of the Board of Regents which approved the new department. Davidson (1825–1911) was a regent from 1877 to 1884. Born in Nottingham, England, he was for half a century a member of the U.S. Coast and Geodetic Survey. He arrived in California in 1850 and was in charge of all Pacific Coast survey work from 1868. Davidson was appointed Honorary Professor of Geodesy and Astronomy at Berkeley in 1870.

The first Preliminary Term began in April and the Regular Term ran from June 1 to October 30, 1882. Tuition was \$100.00, and the degree of Doctor of Dental Surgery was to be awarded after two years of study. Exceptions were made for those transferring from another school after one year, graduate physicians, and dentists "of seven years practice." An original thesis was required for graduation.

The school quickly achieved a good reputation. Doctor Kuhn, from the French Ministry of Public Instruction, visited the United States to assess the state of American dentistry. In his report, L'enseignement et l'organisation de l'art dentaire aux États-Unis, Paris: 1888, he chose to excerpt from the San Francisco school's admission examination "pour donner une idée de la valeur de cet examen."

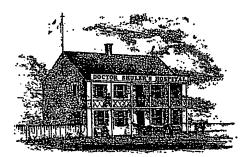
So seven years after its founding, we find the University of California Dental Department cited as a fine example in an articulate advocacy of university dental education in France. ANDREW T. NADELL, M.D., is a member of The Book Club whose principal areas of interest in the book collecting field are medicine as a profession and as a social institution.

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### **REINHARD S. SPECK**

# BRUCELLA AND THE HOOPER FOUNDATION



# Reprinted from THEY JOURNAL OF LEVEL THE DISASSES Vol 27 No. 3 Sept. 1920, op. 173-184

A COMPARISON OR THE MORPHOLOGIC, CULLURAL AND BIOCHEMICAL CHARACTERISTICS OF BE ABORIUS AND B MELITENSIST

STODIES ON THE OFN BRUCKLANNY GENGING

The problem dealing with the possible pathogenicity of Dr abortus (Bang)r to thinkin subjects investigated in the last ten years from examous points of view was placed in a new light when in 1918. Alies 1: Evaluat diamong medit by morphologic, purchamical, and surplogic Sudias declass relationship between the avgament responsible for inter-Hous abort figure domesticated animals and the so-called Microcoscu melliensis, the cause of the well-known undulant or Matta, or Mediter maneum feven an iman. Moreovers the peculiar datency in the best and the apparent titlero, and secon opic character of the two long rules in teather and goats, respectively, lend additional support to the above contention To the bacteriniceist however, who obtains his unformation menily from the meager descriptions and accounts given in the usual textboard instead of from a comparative study of subsentic curves in vitro and in vyo, this conclation of faurs appears impossible. We mention in this connection the conservative artitude of a minible of English bac. tenologists who place the causalive organism of Malta lever with the coccus group and fail to recognize the repeated of servation that this organism may appear in smears made from young entrures and even from cissue material as a typical short red. On the other hand, the small mitridises found in some forms of untections abortion have, since the classic studies of Bang and Scribol,? Been accepted as distinct roos which however, may occasionally appear in exudates as a "coccobacil-Furthermore, an analysis of the descriptions dealing with the ines onitural, and biochemical characteristics of the two organisms Under consideration reveals only differences of minor uniortance and adds considerable evidence to the conception of a close relationship of H Received for Publication May 94, 1920;577 The sense Buddhard in the sense of papers to the supervise sense Bruchland, by the supervise sense Bruchland, by  $\Lambda = E$  from the supervise Bruchland, by  $\Lambda = E$ 

Jour. Infect: Dis., 1918, 22, p - 580 Zuchr: 1. Three med., 1897, 11 (p) 284

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The object of reproducing the front of this scientific imprint is not to make an instant bacteriologist of the reader. It is to highlight the role of California in the recent history of infectious disease bacteriology in terms of two notable persons, an outstanding institution and an unusual event. The institution is the George William Hooper Foundation of the University of California, the persons Drs. Karl F. Meyer and Edward B. Shaw, and the event the naming of an important Genus of medically important bacteria.

In 1887 Sir David Bruce, working in Malta, showed that a disease called Malta Fever, highly destructive to the British Garrison on the island, was infectious. He found it to be caused by a bacterium from goats, transmitted in goat's milk, which he called Micrococcus melitensis. In 1897 Bernard Bang in Denmark showed that a contagious abortion in cows was infectious and caused by a bacterium, which he called Bacillus abortus. In 1914, J. E. Traum in the United States found a bacterium "resembling Bacillus abortus and causing a similar condition in swine." Over the next several years Dr. Alice E. Evans, working at the Hygienic Laboratory in Washington, D.C., showed similarities among these bacteria and noted their common ability to cause a disease in humans, which we now know as Undulant Fever. And this now brings us to San Francisco and the Hooper Foundation.

The George William Hooper Foundation for Medical Research was founded on the San Francisco Campus of the University of California in 1913. It was first directed by George H. Whipple, later to win a Nobel Prize. In 1914 a young but already experienced Swiss bacteriologist and experimental pathologist, Karl Friederich Meyer, was added to the staff. When Whipple left in 1921, Meyer was appointed Acting Director, an appointment made permanent in 1924. He was to remain Director until 1954, and an active Director Emeritus until his death in 1974, only three weeks prior to his 90th birthday.

Dr. Meyer, or K.F. as he was known to so many who worked with him or who knew him over so many years, was trained in Switzerland and Germany in the new sciences of medical bacteriology and experimental pathology by the immediate descendants of the founders of these sciences, Louis Pasteur and Robert Koch. His mentor at Bern, Professor Wilhelm Kolle, had been an outstanding assistant and pupil of the latter at his Institute for Infectious Diseases in Berlin. After a brief stay in South Africa and at the University of Pennsylvania, K.F. was called to the University of California, bringing with him the experience, objectives, and inspiration which he had gained at the European birthplaces of his sciences. And in no time he was involved in putting them into practice at the Hooper Foundation. From the time he assumed direction of the Foundation, it was set on its course to assume a position of leadership in these sciences, not only in the University and the state, but in the country and the world. He was concerned with infectious diseases of man and animal, especially in their relationships to problems of Public Health and to industrial food processes.

In the early 1920's outbreaks of botulism reduced the California canning industry to a state of panic. Dr. Meyer directed the Hooper Foundation into exhaustive studies of the situation, learning much about botulism, and developing essential methods for canning which rescued the California industry from disaster. Then he and his colleagues at Hooper went to work on the causes of paralytic mussel poisoning, on western equine encephalitis, parrot fever, bubonic plague, coccidiodomycosis, tularemia, — diseases which seem strangely associated with California, in part because they were here, and in large part because the Hooper Foundation and its team under K.F. did so much definitive work on them. He brought young sciences from their homelands to grow and mature in his new home of California. And in time his colleagues and students went on to notable careers of their own in these same sciences.

One of the earliest problems which K.F. was to take up on his coming to San Francisco was the same problem of Undulant Fever and its causes which opened this little account, and which was then being pursued in the East, as we have seen, by Dr. Alice E. Evans. And for good reasons, too, as the disease was one associated with milk transmission and the dairy industry. This coincided with K.F.'s interest in Public Health problems. The work was done in association with E. C. Fleischner and E. B. Shaw, and led to two papers. The first page of the first paper is reproduced here. It is noteworthy to recall at this point that Dr. Edward B. Shaw was at that time a medical student. He went on to become one of San Francisco's and indeed one of the country's outstanding pediatricians and Professor and Chairman of Pediatrics at U. C. San Francisco. He is furthermore outstanding among pediatricians for his knowledge, ability and teaching in the area of infectious diseases of children; and many are they who have had the pleasure and the honor of learning from him.

The paper illustrated here had another singular consequence, and for this reason it is noted as a Vignette in California Medicine. It finally showed the relationships between the three types of bacteria, described at the beginnings of this piece, and put them into a single group specified as a Genus. And it gave to this new Genus the name BRUCELLA, in honor of Sir David Bruce, the first to work on the cause of Malta Fever or Undulant Fever or what is now frequently known as Brucellosis. There are not that many genera of medically important bacteria, and so the naming of one is not that frequent an event. So when we look into Bergey's Manual of Determinative Bacteriology to the section headed: "Genus Brucella Meyer and Shaw 1920, 173," we can now recognize something which happened in California and the story and people behind it.

REINHARD S. SPECK is a Professor of Microbiology, University of California School of Medicine, San Francisco, and a Director of The Book Club of California.

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# REINHARD S. SPECK BUBONIC PLAGUE IN SAN FRANCISCO



"In May, 1907, a sick man, in a stupor, was taken to the United States Marine Hospital from a tug in the bay. The doctors that attended him had served in the Orient and recognized his case as plague...."

Bubonic plague scourged the Roman Empire in its latter days, reappearing in 1348 to mark the transition between the Middle Ages and the Renaissance. Europe was attacked repeatedly through the following centuries, until the notable epidemic in London in 1665, so accurately portrayed by Daniel DeFoe. It left Western Europe after this, but remained active in the East. One small outbreak in Marseilles in 1720 sent a chill through the spine of Europe. Outbreaks in Russia, Greece, Italy and Turkey as late as the early 1800's warned the rest of Europe that bubonic plague still lurked in the wings.

The origins of plague were always associated with the mysterious East. DeFoe opened his classical account with the observation that, "It was about the Beginning of September 1664, that I, among the Rest of my Neighbours, heard . . . that the Plague was return'd again in Holland . . . from the Levant among some goods, which were brought home by their Turkey-Fleet. . . . " And as late as 1878 there was plague in Russia. But otherwise the nineteenth century was free of the infection; cholera took its place as the Wrath of God.

Early in the 1880's plague broke out in the Yunnan Province of China, to begin the latest worldwide epidemic of this disease. It quickly reached Canton, a seaport, which guaranteed its rapid dissemination around the world. Its cause was discovered in Hong Kong in 1894 and named *Pasteurella pestis*, recently changed to *Yersinia pestis* in honor of its discoverer. The discovery that it was transmitted by rats and their fleas soon followed.

Such was the situation in March, 1900, when plague appeared in San Francisco's Chinatown. It was confined to twenty blocks, where it claimed 121 victims, mostly Chinese, of whom only eight survived. By February, 1904, this little epidemic was controlled, not without curious political sidelights. Mayor Eugene Schmitz refused to approve the printing of health reports and attempted to remove from office four members of the Board of Health, who insisted that plague existed in the city. A Federal Health Officer was arrested trying to do his duty as he saw it. The State Bacteriologist, who isolated the cause, was fired and deprived of back pay. "The public drew its inferences from the voluminous misinformation furnished by the disputants. Plague ... was an Oriental disease, peculiar to riceeaters. It was a Mongolian or Hindu disease and never attacked whites." But in spite of such hostilities, it was controlled under Dr. Glennan and his successor, Dr. Blue, who left San Francisco to concern itself with more earth-shaking events just over the horizon.

But as we were saying: "In May, 1907, a sick man, in a stupor, was taken to the United States Marine Hospital from a tug in the bay. The doctors that attended him had served in the Orient and recognized his case as plague, but he died without rousing enough to tell where he had been. They thought they would find out from other hands on the tug, but she had left port. The next they heard of her was that she was lost off the Mendocino County coast. Plague had come back to San Francisco, but nobody knew where to look for it." On August 12th another case occurred, and before the end of the month fourteen people had been attacked, with cases scattered throughout the city. In September there were 55 cases, and before winter set in there were over 160 cases reported with 77

# IMPORTANT MEETING

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> THE MORELANTS ASSOCIATION - C. MORINE SECTORING - EDARD OF TRADE - CESING SECONDS

THE MERCHANTS EXCHENCE T. D. Friddmidter Sterens deaths. These were almost all "white persons, many of them in a good condition of life, subsisting on generous diet and dwelling in houses that would commonly be called 'sanitary'." The last case sickened on January 30, 1908, as winter set in. But what about spring?

The civic response was now far different. Mayor Taylor made a direct call to President Roosevelt, who referred it to Surgeon-General Wyman of the U.S. Public Health Service. Wyman ordered Past Assistant Surgeon Rupert Blue to return and assume command with a corps of twenty-one officers. Early January, 1908, saw action. Dr. George H. Evans, President of the California State Medical Society, sent out at Dr. Blue's suggestion invitations to 600 leading citizens, of whom sixty appeared. From this rose the Citizens' Health Committee of twenty-five San Franciscans, including prominent medical and civic leaders, and a mass meeting to inform the public. Thus was launched the popular movement to rid San Francisco of the plague and the threat of plague.

The main activity was to free the city of rats and to make it rat-proof. This was the work of the spring and summer, mobilizing every resource, every profession, trade, business and civic and labor group, church and club, with fund raising and the distribution of hundreds of thousands of circulars to instruct the people. And to trap rats. The last infected rat was trapped the following October. No new human cases appeared. San Francisco was plague free, and undoubtedly the healthiest city in the world.

On March 31, 1909, the committee issued its report: "Eradicating Plague from San Francisco: Report of the Citizens' Health Committee and an Account of its Work, with brief descriptions of the measures taken, copies of ordinances in aid of sanitation, articles by sanitarians on the nature of plague and the best means of getting rid of it, facsimiles of circulars issued by the committee and a list of subscribers to the health fund. March 31, 1909. Prepared by Frank Morton Todd, Historian for the Committee, Press of C. A. Murdock & Co., San Francisco." This 313-page book in its red cloth binding lives up to its long-winded title in every respect. It is an exhaustive account of the whole plague program, a model of community action and cooperation, and a model of recording, reporting and preserving a record of that program-right down to the fact that Mrs. Silviera, The New San Francisco Loan Office, John J. Mazza, and V. Cassalli, among others, contributed their modest \$1.00 to the fund, while Southern Pacific Co. forked out \$29,250.00. This little volume is truly a monument to a community and a community effort.

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