

The Medical Voodoo

ANNIE RILEY HALE

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By ANNIE RILEY HALE

Author of "These Cults," " The Natural Way to Health," etc.

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New York 1935 The Medical Voodoo, Copyright, 1935, by Annie Riley Hale. Manufactured in the United States of America. To my son, Shelton Hale

"Theoretical immunology, now considered the newest branch of scientific medicine, is in reality the oldest clinical science. The medicine men of the Congo, and the jungle doctors of the Orinoco, have today an immunological theory that is more detailed and of wider clinical application, than the boasted immuno-science of Nordic medicine.

"There is not a fundamental deduction from presentday infections theory, that was not known, predicted or parodied, by the pre-dynastic Osiers of Ancient Egypt— 50 centuries before the 19th Century renaissance of the same deductions."

> Dr. W. H. Manwaring, Professor of Bacteriology and Experimental Pathology at Leland-Stanford University, Palo Alto, California.

FOREWORD

This book issues a flat challenge to so-called "scientific immunology," and is an arraignment of the crimes committed in its name. The arraignment is based on statistical facts of record, derived mainly from medical sources, and on wellauthenticated medical opinion. Only the bigots and fanatics of "regular" medicine will seek to discredit the ground-work of this indictment because it is prepared by a lay researchworker. Facts are facts—regardless of who brings them.

If to some readers the conclusions reached appear too harsh in some instances, I can only say: It is not I, but *the facts* which render judgment. Too many lives have already been sacrificed to a squeamish regard for the family doctor, who—if the truth were known—is in many cases also the victim of the same system of medico-political rule under which the "scientific immunology" is taking its frightful toll.

If the book shall serve no other end than bringing to public attention the much neglected though eminent medical voices—past and present—raised in dissent and protest against the vaccine-serum method of "disease prevention," it will have supplied a long-felt need. Very many persons do not even know that such dissenting voices exist; and if the matter must be settled for us solely upon medical authority, then surely it is only fair to the public having a vital interest in the settlement, to permit them to hear from *all the authorities*. "He who knows only his own side of a question, doesn't know *that* very well."

The book aims to present "the other side" of the *medical controversy* over so-called "preventive medicine" for those who never heard that there *is* another side.

A. R. H.

CONTENTS

CHAPTER		PAGE
I.	Where Seer and Healer Met	1
II.	The New Necromancy	7
III.	Natural vs. Artificial Immunology	16
IV.	Just What Is the Smallpox-Vaccine?	22
V.	Some Early and Later Fruits; Statistics vs. Statistics	32
VI.	Who's Who Among Anti-Vaccinists	45
VII.	Enter Pasteur with the Microbe	61
VIII.	The Death Trail of the Microbe Hunters	77
IX.	The Voodoo and the Cancer Riddle	98
Х.	The Voodoo and Vivisection—Animal and Human	108
XI.	A White House Interpretation of Child Welfare	120
XII.	Medical Jurisprudence Plus Medical Ethics	131
XIII.	Medical Voodoo and the Public Health	140
XIV.	Medical Voodoo and the Business World	152
XV.	Medicine, Religion and Government	157

CHAPTER I

Where Seer and Healer Met

When we consider the mysterious nature of the Life Principle—as great a mystery to the most learned physician as to the most illiterate layman—the hidden physiological processes, and the more or less psychic elements in all disease problems, it is not surprising that the earliest religious faiths of the world were inseparably linked with primitive notions about the origin and control of disease; and that the offices of priest and shaman (medicine man) met in the same person. The seer, the ecclesiastic, and the healer, functioned as one.

And although in succeeding ages these offices became distinct and separate professions—pursued by different groups, trained in different schools—the essential root-idea in the two callings persisted, and down' to the present day the doctors of the body and the doctors of the soul have much in common.

Their popularity rests on the most omnipresent human infirmity—fear. In all ages fear of pain and sickness has driven the human race into the arms of the doctor; fear of death and hell into the arms of the priest or parson. And in all ages learned clerics, mitred prelates, eminent physicians and surgeons—equally with the soothsayers and witchdoctors of primitive peoples—have not scrupled to make free use of the fear-appeal in the prosecution of their business.

Fear, ignorance, superstition and credulity have ever been the hand maidens of the sacerdotal and healing cults, modified in all times by the degree of civilized advancement and cultural development of their votaries.

Pre-historic man interpreted such natural phenomena as cyclones, cloudbursts, earthquakes and drought as the outward and visible signs of angry gods. The conception of power unaccompanied by the desire to use it malevolently, appears to have been beyond the primitive mind. Hence disease was likewise believed to be the work of demons and evil genii, or of an offended shade of the dead, or in certain cases it was traced to the malicious spell of a human enemy possessed of extraordinary powers—witchcraft and sorcery.

The remedy was, in the one case, propitiation of the offended divinity or shade—with burnt-offerings and sacrifice; or the punishment of the human disease-conjurer, with flagellation and death. Hence the barbarous practices of witch-burning and flogging of the insane—accused in savage superstition of "demoniacal possession."

"The common point of convergence of all medical folklore," says Dr. Fielding Garrison in his *History of Medicine*, "is the notion that spirits or other supernatural agencies are the efficient causes of disease and death... Ancient and primitive medicine, whether Assyro-Babylonian or Scandinavian, Slavic or Celtic, Roman or Polynesian, has been the same—in each case an affair of charms and spells, plant-life and psychotherapy, to stave off supernatural agencies."

According to another medical historian, Alexander Wilder, these medical superstitions are coeval with the earliest traditions on all other subjects. "Every country having a literature of ancient periods of its history," says Wilder, "possesses some account of a healing art, whose history is therefore as old as the history of the race; and properly speaking, we have no 'Father of Medicine' except in eponym."

The elder Pliny ascribed the origin of medicine as an art and pursuit to the Egyptians. Others traced it to Arabia, and others still to Chaldea. Inasmuch as the relative antiquity of the different countries is a disputed point, giving preference to any one of them in priority of the healing art is not important. But the superior knowledge and skill of the priestphysicians of Egypt, the *pastiphori*, as they were called, entitles them to special mention.

According to Garrison, their knowledge of chemistry went far ahead of any of their contemporaries. Indeed the word *chemistry* is derived from *Chemi*—the "Black Land"—the ancient name of Egypt, and chemistry in the early time was known as "the black art."

Garrison also accredits the Egyptian priest-physicians with unusual skill in metallurgy, dyeing, distillation, preparation of leather, making of glass, soap, alloys and amalgams; and says "in Homer's time they probably knew more about anatomy and therapeutics than the Hellenes."

The Egyptian reverence for a dead human body forbade its dissection as sacrilege; but it was from their extraordinary custom of mummification—an outcome of their religious regard for the body—that they acquired their knowledge of anatomy; and in perfecting their art of embalming the dead, the pastiphori also gained their knowledge of chemistry and became pioneers in that branch of medicine.

But with all their knowledge and skill in the secular arts, the ancient Egyptians were intensely religious. The pastiphori mingled prayers and invocations of the national gods with the compounding of their prescriptions, and the patients to whom they were administered were instructed to look to the appropriate divinity for the cure. Isis, "the Great Mother and Madonna," was also Goddess of the Secret Shrine and patroness of the healing art. Their god Thoth—called by the Greeks variously the "Egyptian Hermes" and the "Egyptian Apollo"—was the god of astrology and alchemy, and the tutelary deity of all sacred and sacerdotal learning. Six of the Books inscribed to him were devoted to medicine and surgery, and the various treatises were set forth as special revelations from Thoth.

Our knowledge of the status of medicine in ancient Egypt is partly derived from the works of Homer and Herodotus, partly from hieroglyphics on temple walls and monuments, but chiefly from the famous papyri, of which the best known and most complete are the Ebers translations dating from the earliest reigns.

From all these it appears that medical practice among the ancient Egyptians took on some of the features of modern procedure. According to Herodotus, they had specialists not unlike our moderns. He says: "Each physician treats a single disorder and no more. Thus the whole country swarms with medical practitioners, some undertaking to cure diseases of the eye, others of the head, others of the teeth, others again the intestines, while still others treated complaints which are not local—their maxims being even if but a small part of the body suffers, the whole body is ill."

In this respect ancient Egyptian insight into the fundamentals of disease appears superior to that of some medical men of our own time. For it is not uncommon to hear persons remark: "My doctor tells me I am perfectly sound except I have a bad heart, or weak bronchia"—or impairment of some other vital organ. Indeed we have seen it stated in perfectly orthodox and authentic medical literature, that "one reason it is so difficult to detect the early stages of cancer is that it frequently develops in otherwise healthy persons"!

Wilder's *History of Ancient Medicine* relates that the Egyptian temples were schools of learning wherein the priest-physicians (the pastiphori) "were carefully instructed in the various branches of knowledge by professors excelling in erudition. And when they attained their senior degree they were admitted to the dignity of Scribes of the Temple, and entitled to maintenance from the Royal Treasury."

Thus every temple had its staff of medical practitioners, and whoever required the services of a physician sent thither for him with a statement of the ailment from which the patient was thought to be suffering, when the chief of the medical staff would select the one he deemed best suited for the case. Wilder says further:

"Deriving their support from the lands of the priests and payments from the Royal Treasury, the pastiphori received no fee or honorarium from patients. Whatever payment was made in acknowledgement of their services belonged to the temple with which they were connected. They were obliged to attend the poor and to go on foreign journeys and military service without remuneration."

The earliest and most famous of these temple-universities in the ancient Kingdom by the Nile were those located at On and Memphis, and were built by Menes, the traditional founder of the first Egyptian Dynasty. After the expulsion of the "Shepherd Kings"—Hyksos—and the establishment of the 19th Dynasty under Seti the Conqueror, he resolved to build at Thebes an *Akademeia* which should rival the priestly seminaries of Lower Egypt.

Vast sums were expended on it, and the "House of Seti" became the largest of all the sanctuaries except the one built by the great Thothmes. In it were celebrated the services for the royal dead and the arcane rites of the gods. Here priests, astronomers, physicians and students of every branch of knowledge, were taught all the sacred and secular lore peculiar to that mysterious "Black Land."

There was an extensive library connected with the *Akademeia* to which the students had free access, and a paper factory for making the papyrus. According to Garrison, the famous Ebers Papyrus starts off with a number of incantations against disease. It then lists a number of maladies—describing them in detail—with their appropriate remedies to the number of 700. Garrison does not concede to the Egyptians any "special scientific advancement in the healing art" because of this extensive pharmacopoeia, however. He thinks "a few well-selected drugs, such as opium, hellebore, etc., employed by the later Greek physicians with skill and discrimination" show much greater therapeutic insight.

Garrison's preference for the Greek over the Egyptian skill in ancient medicine is further shown in the statement that "from the time of Hippocrates (460-370 B.C), Greek medicine advanced while the Egyptian remained stationary, and long before the Alexandrian period Egyptian civilization was at a stand-still, while in medicine Egypt was going to school to Greece."

The reason assigned for this by Garrison was that "later Egyptian medicine was entirely in the hands of the priests; while Greek medicine even at the time of the Trojan War would seem to be entirely free from priestly domination surgery in particular being often practiced by Homer's warrior-kings."

It may be remarked incidentally that surgery at the time of the Trojan War—and for many centuries thereafter—was not as closely bound up with *materia medica* as it is at present. But since another medical narrator, Dr. Charles Loomis Dana of Cornell Medical College and ex-president of the N. Y. Academy of Medicine, also claims in *Peaks of Medical History* (1927) that "Hippocrates separated medicine from jugglery and witchcraft; and the Alexandrian and Hippocratic periods marked the gradual separation of the healing art from priestcraft"; it may be interesting and instructive to inquire somewhat closely into the historic grounds for such claims.

This is the more incumbent in that two very recent research workers in this field, Richard Hoffman, M.D., of New York in his *Struggle for Health* (1929), and Professor Howard Haggard of Yale in his *Devils, Drugs and Doctors* (1930), both declare that modern medicine comes from Greek medicine, apparently on the assumption that the healing art in ancient Greece was more rational, more scientific, and freer from entangling religious superstitions than in the rest of the ancient world.

Wilder, who does not appear to share the superlative admiration for the Greeks evinced by the other medical chroniclers, says: "Perhaps few people received more from other countries than did the Greeks, and none appear to have been more tenacious of the pretence that all their attainments originated with themselves."

Although Wilder admits that "Greece had not in the historic period a caste of priests like the Asiatic countries," yet he says that "none the less there were ministrants at the various shrines, and the *Æsklepiads* (physicians) were the traditional sons of *Æsculapius*, the god of healing, and constituted a special class officiating in the sanctuaries of the divinity and obligated to preserve his mysteries intact. They claimed to have occult knowledge which had been imparted by *Æsculapius* himself."

And it is a fact mentioned by all the early chroniclers that Hippocrates was the son of one of these priests of Æsculapius, attached to the temple of the god in the Island of Cos, and that he received his training in the temple-school. Wilder relates further: "Æsculapius, the supreme god of healing among the Greeks, although the name as well as traditions imply a Pelasgic origin, really originated beyond the Mediterranean. His Asiatic character is indicated by the symbol or totem that always accompanied him—the serpent twined around his staff. In all the East—in Africa and in aboriginal America—the healing art was denoted by this sinister figure, the coluber, the royal asp, the hooded snake or the rattlesnake."

The story in Genesis featuring the serpent as ministrant at the Tree of Knowledge in the Garden is in keeping with all the mystic serpent lore of antiquity, and Moses lifting up the "brazen serpent" for the stricken Children of Israel to gaze upon, was a witness to the fact that the Hebrews also revered this healing myth. "In Greece every *Asklepion* (temple of Æsculapius) maintained a living serpent as the simulacrum of the god, and his daughter Hygieia (Health) was represented holding a bowl from which a serpent coiled around her body was feeding. . . . The Tyrians depicted the altars with serpents winding round them and emerging from beneath, and whenever a new shrine was dedicated, a serpent was brought from Epidauros, the stronghold of Æsculapian worship." (Wilder).

A Roman legend typical of the veneration in the ancient world for the wisdom of the serpent as the emblem of occult life, is related by Ovid. When the Romans—"who got along without doctors for 600 years"—finally yielded to the encroaching vogue of the healing art, they sent an embassy to Epidauros to fetch an image of the god and some Asklepiads to teach them all the occult tricks. One of the serpents attached to the sacred shrine—so the legend ran—was observed making his way from the Temple to the city, and going aboard the Roman galley brought for the expedition. Later the serpent was seen debarking at an island in the River Tiber, whereupon the whole company debarked and a temple was immediately erected and consecrated to the god of healing. This shrine was greatly celebrated and the Emperor Claudius decreed that all slaves healed at the place should become free. Such cures were recounted by Pliny, Galen and Ælianus.

Wilder says: "The Asklepiads continued in existence until the subversion of the ancient worship. The temples at Cnidos and Cos were closed by order of the Emperor Constantine." (He who forced Christianity on heathendom at the point of the sword.)

Wilder says further: "There is a tradition that Saint Hilarios destroyed the Æsculapian serpent at Epidauros. As the legendary lore of that period abounds with stories of Christian missionaries destroying serpents, we need only include this with the others—alike fictitious and alike engimatic."

Thus we are warranted in believing the age of Hippocrates (of whose character and teaching we shall say more in a later chapter), like all others in the ancient world, was marked by a mixture of learning and debased superstitions; and that astronomy and astrology, chemistry and alchemy, magic, divination, sorcery and soothsaying, arcane and religious rite met and mingled freely with a more or less respectable body of clinical knowledge in the practice of medicine.

The well-nigh universal belief among primitive peoples in the influence of the stars upon disease, made astrology a preferred study among the priest-physicians. Garrison related that "even as late as the Seventeenth Century, European doctors resorted to horoscopes before attempting an enterprise of moment—such as blood-letting, emesis and purgation. To let blood when the moon and tides were at full was bad practice in the Middle Ages." He says further: "Moonshine was supposed to be potent alike in causing lunacy, conferring beauty, or curing warts and diseases. Health, strength and sexual power were supposed to vary with the waxing and waning of the moon."

Wilder relates that "during the reign of Cheops—builder of the great pyramid at Gizeh—there was found in a sacred niche of the goddess Mut a formula for the treatment of wounds. *It was perceived in the moonlight* by a ministrant of the shrine and brought to the king as a precious discovery."

Sculptors on the temple-walls at Memphis showed the Egyptian pastiphori making use of animal magnetism in their work; and both Egyptian and Grecian temples were provided with sleeping chambers for the accommodation of patients while in "the hypnotic sleep." That all the early practitioners employed massage and some kind of manipulative technique, admits of no doubt.

With the coming of Christianity and the overthrow of the pagan religions, the bones and relics of saints and archbishops took the place of savage totems and crude emblems as curative agents. And the one was found to be as effective as the other, countless cures being ascribed to each, and upon as authentic testimony as is offered today for the curative claims of the various therapies of the healing art.

The voodoo idea in healing has persisted throughout the ages and, as we shall presently see, survives today in the most approved and acclaimed "scientific methods" of Nordic Medicine.

CHAPTER II

The New Necromancy

The subcutaneous injection of protein matter and animal disease-cultures as a means of warding off hypothetical maladies—something which might attack you in the future is called in modern medical nomenclature "preventive medicine." It marks the departure from the charms and incantations of the ancient healing rites to the modern voodooism instituted by Jenner and Pasteur.

The old-fashioned doctor with his pills and potions was trying—however misguidedly—to make the sick well. The new dispensers of "immunizing" vaccines and serums are bending their energies to the reverse objective of making the well sick. The good results which sometimes appear to follow this bizarre procedure rest upon a perfectly sound therapeutic principle; but since this is little understood, and the inoculators themselves do not recognize it, but ascribe their good results—as well as their disastrous ones—to other and quite different agencies, we will defer discussion of this to a later chapter, and consider first the history and analysis of this queer survival of an ancient superstition.

There are traditions of inoculation against smallpox being practiced in China and India centuries before Christ; and early African explorers relate a form of inoculation against the bites of poisonous snakes and insects, practiced by the natives, by mixing the venom with vegetables and rubbing it into an incision on the skin. But the earliest authentic records of smallpox inoculation come to us from England.

All the chroniclers agree that Lady Mary Wortley Montagu, wife of the British ambassador to Turkey in the early part of the Eighteenth Century, became the bright particular harbinger of "one of the greatest triumphs in the history of medicine," or "one of the greatest scourges of the human race,"—according to which side of the vaccination controversy you may have hitched yourself to.

Anyway the story goes that Lady Mary sent the glad tidings from the seat of the Ottoman Empire to a friend in London in a letter which ran as follows:

Apropos of distempers, I am going to tell you a thing that I am sure will make you wish yourself here. The smallpox, so general and so fatal among us, is here entirely harmless by the invention of ingrafting which they term inoculation.

There is a set of old women who make it their

business to perform the operation every Autumn in the month of September when the great heat is abated. . . People send to one another to know if any of their family has a mind to have the small pox. They make parties for this purpose, and when they are met (commonly 15 or 16 together), the old woman comes with a nut-shell full of the matter of the best smallpox and asks what veins you are pleased to have opened.

She immediately rips open that you offer to her with a large needle—(which gives you no more pain than a common scratch) and puts into the vein as much venom as can lie upon the head of her needle, and binds up the wound with a hollow bit of shell, in this manner opening four or five veins . . . The children or young patients then play around and keep in perfect health until the eighth day.

Then the fever seizes them and they keep their beds two days—seldom three. They have rarely more than twenty or thirty pustules on their faces, which leave no mark, and in eight days they are as well as before their inoculation . . . Every year thousands undergo this operation, and the French ambassador says pleasantly that they take the smallpox here by way of diversion, as they take the waters in other countries!

There is no example of any one having died in it, and you may believe I am very well satisfied of the safety of the experiment since I intend to try it on my own dear little son. . . I am patriot enough to take pains to bring this useful invention into fashion in England, and I should write to some of our doctors about it if I knew any one of them with virtue enough to destroy such a considerable branch of their revenue for the good of mankind . . . Perhaps if I live to return, I may, however have courage to war with them. Upon this occasion, admire the heroism in the heart of your friend! *

Anti-vaccinists will see a peculiar fitness in the picture of the old crone bringing the vaccinating virus in *a nut-shell*. Nevertheless Lady Montagu's efforts to introduce this queer oriental custom into her own country, though encountering some opposition in the beginning, resulted eventually in having the arm-to-arm inoculation for smallpox very generally accepted. Concerning its tentative stages Hoffman says: "Experiments were made on criminals who were promised pardon if they submitted. Then the method was introduced in the orphanages, and eventually the royal children themselves were inoculated. Heated controversies developed on all sides. Yet in spite of the fact that many people regarded inoculation with fear and suspicion, more and more were submitting to the practice."

Incidentally we note that the inmates of jails and orphanages have ever been considered fair game for medical experimentation, and while the criminals were "promised pardon if they submitted"—according to this historian—the orphans and foundlings received only the doubtful satisfaction of "making a contribution to science," and were rewarded in some instances with blindness, lameness and death.

* From Hoffman's Struggle for Health, 204.

The new method for conferring immunity against smallpox in England did not meet the strenuous opposition from the medical profession which its fair sponsor had anticipated. Perhaps they discerned what some of our more recent immunizers have discovered, that so far from curtailing their revenues—which was the ground of Lady Mary's fears—"prevention practiced to the utmost *will create more work for the physician*, and not diminish it . . . There will be more vaccination, more immunizing, more consulting and use of the physician. His services will be increased many fold . . . Less than 15 percent of all children would ever get diphtheria even under epidemic conditions, while 100 percent are prospects for toxin-antitoxin. The percentage who would ever get smallpox under present time conditions, is even less, but 100 percent are prospects for vaccination, etc." *

It cannot have escaped the observation of the 18th and 19th Century vaccinators—any more than the 20th Century "immunizers"—that everybody didn't come down with smallpox even in times of epidemics; but that practically everybody might be frightened into getting themselves vaccinated; and that the vaccination fees plus the physician's attendance upon the illness superinduced by the operation sometimes quite serious—would net the medical profession much greater revenue than accrued from ordinary practice upon those who would normally contract smallpox.

Hence we find the Royal College of Physicians in London in 1754 passing the following resolution:

The College having been informed that false reports concerning the success of inoculation in England have been published in foreign countries, think proper to declare their sentiments in the following manner: That the arguments which at the commencement of this practice were urged against it have been refuted by experience; that it is now held in greater esteem by the English and practiced among them more extensively than it ever was before; and that the College thinks it to be highly salutary to the human race.

Notwithstanding this high official endorsement however, it was becoming increasingly evident to thoughtful observers—both lay and professional—that the arm-to-arm inoculation was helping to spread smallpox. The more conscientious physicians were beginning to sense the connection between this form of inoculation and the more frequent appearance of other and worse diseases than smallpox, and a few courageous voices in the profession were outspoken in charging that such blood diseases as erysipelas, syphilis and tuberculosis were transmitted through the armto-arm inoculation.

The unpopularity of this practice paved the way for Jenner's entry upon the scene with his cow-pox prophylactic, which was welcomed on all sides as a grateful substitute for

^{*} From address by Dr. Mather Pfeiffenberger, president of the Ill. Med. Soc. before Annual Health Officers Conference at Springfield, Dec. 3rd 1926. Published in "Illinois Health News" for January 1927.

Lady Montagu's Eastern importation. According to a statement in the Journal of the Royal Sanitary Institute (Vol. XLVIII, No. 4), 1927, by Councillor W. Asbury, Chairman of the Health Committee of the Sheffield City Council, "It has been calculated that from 1721 to 1758 smallpox inoculation was responsible for the deaths of no less than 22,700 persons from smallpox in London alone. It is not therefore surprising that when Jenner proposed that smallpox inoculation should be given up and cowpox inoculation substituted for it—thus covering the retreat of the profession from an untenable position, his ideas were accepted by all whose interests were not inseparably bound up with the older form of treatment."

From this authority and from other historians of the period, however, we learn that the original cowpox used by Jenner was a filthy disease with loathsome characteristics; and but for the fact that two London doctors, Woodville and Pearson, modified it in a way to produce a milder strain, Jenner's invention might have gone the way of Lady Montagu's importation—and even more quickly.

As a matter of fact, Jenner cannot be accredited with original discovery in the matter of cowpox inoculation, since all the chroniclers name Benjamin Jesty—a Dorsetshire farmer—Plett, a teacher, and Jensen, a Holstein farmer, as "successful experimenters" in the field of cowpox vaccination several years before Jenner's first inoculation upon the 8year-old boy, James Phipps. And Dr. Garrison says in his *History of Medicine* (p. 374): "It had long been a countryside tradition in Gloucestershire that dairy-maids who had contracted cowpox through milking, did not take smallpox, and similar observations had been noted in Germany and France."

Garrison likewise names Jesty, Plett *et al.*, as Jenner's predecessors in the cowpox experimentation, but differentiates them in the words: "All these efforts were 'as an arrow shot in the air or a sword-stroke in the water.' The merit of Jenner's work rests upon the fact that, like Harvey, he started out with the hope of making his thesis a permanent working principle in science, based upon experimental demonstration, and he succeeded to the extent of carrying his inoculations successfully through several generations in the body, and above all in overcoming the popular aversion to vaccination."

Another medical historian, much closer to Jenner in point of time and location than Garrison, Edgar M. Crookshank, Professor of Comparative Pathology and Bacteriology at King's College, London, gives quite different testimony as to the scientific character of Jenner's work. On reading for the first time the paper which Jenner sent to the Royal Society entitled: *An Inquiry into the Causes and Effects of Variolae Vaccinae (Cowpox)*, Crookshank says: "I was so struck by the contents of this paper, and the small amount of evidence on which Jenner had first ventured to propose the substitution of cowpox inoculation or vaccination, for the old system of smallpox inoculation or variolation, that I was induced to look carefully into the life of Jenner as contained in Baron's biography, and in the correspondence and articles on the subject in contemporary medical and scientific periodicals."

The result of this "careful looking" into Jenner's life and work, was the publication of a two-volume work entitled *The History and Pathology of Vaccination* by Crookshank, which brought out so many incriminating facts against the cowpox immunology that it is very difficult at this day to find a copy. Medical libraries for the most part have ruled it off their shelves, and rarely may one stumble on it in an old private bookcase.

Yet Crookshank was one of the most outstanding bacteriologists and scholarly physicians of his time, and the authenticity of his facts of record cannot be questioned. In the preamble to his *History and Pathology of Vaccination* (1889), he says: "While attending at the National Vaccine Establishment of the Local Government Board, I was unable to obtain any exact details, clinical or pathological, of the source of the lymph which was employed there. From my experience of this and other vaccination stations I found that both official and unofficial vaccinators were completely occupied with the *technique* of vaccination, to the exclusion of any precise knowledge of the history and pathology of the diseases from which their lymph stocks had been obtained."

From other sources of information however—from the writings of such authorities as Sir William Collins, physicianin-chief to St. Bartholomew's Hospital, London, (1866); Dr. Edward Ballard, one of Her Majesty's Vaccine Inspectors in 1868; Dr. Chas. T. Pearce (1871), for many years Registrar-General of England; Dr. Charles Creighton, Professor of Microscopic Anatomy at Cambridge and author of *Epidemics* of Great Britain and of Jenner and Vaccination; a Queer Chapter in Medical History-Crookshank found abundant support for his own findings which identified cowpox with human syphilis more nearly than any other known malady. In his testimony before the Royal Commission—appointed to investigate vaccination in 1889, the year his History and Pathology was issued—Professor Crookshank stated: "We have no known test by which we can possibly distinguish between lymph which is harmless and one which might be harmful to the extent of communicating syphilis."

The connection between vaccination and syphilis, however, has ever been a red rag of controversy, and even the authorities who were agreed as to their concomitance, were at odds as to the real nature and origin of post-vaccinal syphilis. We will therefore defer the consideration of this interesting phase of vaccination till a later chapter, and resume for the nonce the historic thread of Jenner's discovery.

It is recorded that Edward Jenner, a country pharmacist and surgeon of Berkeley, accepted as the basis of his experiments the Gloucestershire legend that any one who had had cowpox would never have smallpox. With no clear knowledge of cowpox, he assumed that it was the same thing in cows as smallpox in people, and curiously enough, he traced both back to "horse-grease"—a foul, purulent affection of horses' hocks. He is accredited with having used for his vaccine stocks, cowpox, horse-grease, swinepox—any old pox, in fact, and with having inoculated his patients with matter from each indifferently.

Pathologists of Jenner's time—and much later—severely criticized the reputed founder of vaccination for his failure to differentiate these various disease lymphs; but since this was 75 years before Pasteur promulgated the "causative germ theory" as the one and only infallible means of differentiating diseases, it would seem that Jenner may be pardoned for his somewhat loose diagnosis in the matter of his vaccinating lymphs.

It is further related by historians of that period, that in May 1796, Jenner chanced upon a milk-maid named Sarah Nelmes who had contracted cowpox in the casual way, and from a pustule on her hand he took the matter with which he inoculated a small boy named James Phipps, described by the Jennerian chroniclers as "a healthy lad of eight years." This was the first authentic vaccination performed by Jenner, who thus linked with his subsequent fame the names of these two obscure individuals, and furnished another instance of Carlyle's observation: "By what strange chances do we live in history!"

The milk-maid, Sarah Nelmes, after contributing the precious contents of her pustule, fades out of the Jennerian picture; but James Phipps, the healthy small boy, reappears later—to point the moral of another sort of vaccination tale. Eager to witness the result of his experiment, Jenner inoculated this boy with smallpox lymph two months later, and when he failed to develop smallpox, this was acclaimed as proof triumphant of the immunity conferred by the cowpox inoculation.

This boy, James Phipps, became a sort of running target for the smallpox inoculators for a number of years it appears, until he died of tuberculosis in his early twenties. In Baron's *Life of Jenner*, (Vol. 2, p. 304), the author relates that while walking with his friend one day they passed young Phipps, when Jenner exclaimed: "Oh, there is poor Phipps! I wish you could see him. He has been very unwell lately and I am afraid he has got tubercles in his lungs. He was recently inoculated for smallpox, I believe, for the twentieth time, and all without effect!"

This was before the vaccination experiment had gone far enough for any extended observation of the cumulative effects of repeated inoculations manifesting as other forms of disease; and it was not to be expected that the founder of the new smallpox prophylactic should tie it up with pulmonary tuberculosis as cause and effect. The jubilant note of selfgratulation in his remark to Baron reflects his perfect satisfaction that he had prevented the Phipps boy from ever contracting smallpox, a disease which Thomas Suydenham who is accredited with being the first man to differentiate it from other eruptive fevers and give it a name—pronounced "one of the most harmless and easily controlled of diseases if it be uncomplicated with ignorant treatment by doctors and nurses."

And—if young Phipps, having been "saved from smallpox," *must* have tuberculosis after that, why that was just too bad—Jenner's skirts were clear. There is no reason, however, to doubt the sincerity of Jenner's faith in the truth of his invention, bearing in mind always Bernard Shaw's dictum that "faith may be manufactured in any degree of magnitude and intensity—not only without any basis of fact or reason, but in open contradiction of both—simply by a *fervent desire* to believe, coupled with *a personal interest in believing."*

Further evidence of Jenner's sincerity is afforded in the fact that several years before he experimented on the Phipps boy he had inoculated his own infant son—whom Hoffman tells us "he loved devotedly"—with swinepox, and with the same unhappy sequel, as—according to the same authority he lost this son at the age of twenty-one.*

This incident—Jenner inoculating his son with swinepox—has been preserved in bronze by later votaries of the vaccinating cult, and pictures of it are scattered throughout medical literature—coupled with the highest encomiums of Jenner and his "discovery." Thus Hoffman in *The Struggle for Health* says: "The most eloquent tributes to his memory are the lives that his monumental discovery has been instrumental in saving, and the principles that he advocated shall ever add luster to his name as a successful pioneer in the field of protective inoculation against disease, and as one of humanity's greatest benefactors."

Dr. Dana says in *Peaks of Medical History* (1927): "Of the great events in the 18th century, none was so laborious in its accomplishment, or so grand in total results, as the discovery of vaccination. . . . Through opposition, financial losses, misrepresentation and ridicule, Jenner bravely and at last triumphantly struggled, confident that through him a horrible and destructive pest would be removed from society. And he died with the nobleness of his character and the greatness of his discovery universally acknowledged."

And this from the latest champion of "preventive medicine," Professor Haggard in his *Devils, Drugs and Doctors* (1930): "The application of the facts presented in Jenner's pamphlet has probably saved more lives than the total of all lives lost in war."

Dr. Garrison—whose *History of Medicine* is handed out as standard in all medical libraries—while he affirms the orthodox medical faith in vaccination as a specific prevention of smallpox, is far more temperate in his praise of its historic founder than some of the other eulogists. Nevertheless, he

^{*} The Struggle for Health, p. 212.

accredits Jenner with "carrying his inoculations successfully through several generations in the body, and above all *in overcoming the popular aversion to vaccination.*"

Garrison likewise speaks admiringly of Jenner's kindness to James Phipps in his last illness—of his building a cottage and planting a rose garden for him; but he very carefully refrains from mentioning the nature of young Phipps's malady or any possible connection it might have with the numerous inoculations he had received.

At the time that Jenner lived and wrote, William Osier though an advocate of vaccination—had not sponsored the statement: "With the greatest care certain risks are present . . . A quiescent malady may be lighted into activity by vaccination. This has happened with congenital syphilis, also with tuberculosis." *

And it was a hundred years after Jenner's day that Dr. E. C. Rosenow, an experimenter at the Mayo Clinic, jotted into the *Mayo Collected Papers* (Vol. II, p. 920) that he found "the serums injected into guinea pigs tended to localize in the lungs"; and that the Surgeon-General of the U. S. Army innocently recorded (1918-19 Report) that "for all officers and enlisted men, Americans and native troops in all countries where United States troops were serving, tuberculosis of the lungs was the leading cause for discharge; and among American troops at home and abroad there were 31,106 hospital admissions for pulmonary tuberculosis, with 1,114 deaths, in the period of this country's participation in the World War."

As every one knows, the world has never witnessed such an orgy of vaccination and inoculation of every description as was inflicted by army-camp doctors upon the soldiers of the World War. Join with this the fact that the amazing disease and death toll among them occurred among "the picked men of the nation"-supposedly the most robust, resistant class of all, who presumably brought to the service each a good pair of lungs, since they must have passed a rigid physical examination by competent medical men. Add to these the further fact, that the highest death-rate from tuberculosis, and the greatest discharge from the army because of tuberculosis, were among American troops in the camps at home who never got across the seas and whose disabilities could not therefore be chargeable to gas-bombs and trench war-fare—and the case against the "immunizing" hypodermic as the author of their woes is pretty complete.

Jenner, who died in 1823, was happily spared this and the many other bleak facts which piled up to thwart and mock his theories in the century following his death. But the same powerful interests which in his day sensed the professional and commercial advantages in the fetish of vaccination, and rallied to its defense, are still on the job—as the above cited modern eulogists clearly enough indicate.

* Principles and Practices of Medicine, p. 330. 8th ed. 1918.

It may be interesting and instructive—and might be amusing were not the consequences so ghastly—to compare the early and later pronouncements by the supporters of the Jennerian cult. According to Crook-shank, "the facts presented in Jenner's pamphlet"—which Professor Haggard so recklessly opines had "saved more lives than the total of all lives lost in war"—when sent to the Royal College of Physicians, were so little convincing to that august body that they refused to print it in their *Transactions*, and returned the famous *Inquiry* to its author with the kindly admonition not to discredit his former papers on natural history with the absurdity of the *Variolae Vaccinae!* *

As soon, however, as he had collected 23 cases similar to the Phipps boy's, Jenner published his *Inquiry Into Causes and Effects of Variolae Vaccinae* independently as a pamphlet in 1798. By 1800, with the powerful assistance of the two London physicians, Pearson and Woodville, and aided by certain others, it is recorded that "33 of the most eminent physicians and 40 distinguished surgeons of the metropolis" had affixed their signatures to Jenner's declaration that "one inoculation of cowpox on the human frame will render the person thus inoculated secure from the infection of smallpox throughout his entire life; and that the operation is attended with the most perfect ease and safety." (It will be noted that this assurance of lifelong immunity and safety was made *within four years after the first vaccination.*)

With this high endorsement, things moved rapidly for the protagonist of cowpox inoculation. In 1800 the Duke of York introduced it into the Army, and in that same year the King granted an audience to Jenner. In 1801 the British Navy struck a medal in his honour, and he was given the freedom of London, Dublin and Edinburgh. He was elected mayor of his native town of Berkeley, and Oxford granted him an M.D. degree. In 1806 the Royal College of Physicians—after mature deliberation—endorsed the Jennerian idea they had previously scorned, and condemned the old practice of smallpox inoculation they had formerly blessed—in 1754.

Jenner sent his first petition to Parliament for a monetary reward in 1802, and the House of Commons—by a vote of 59 to 56—awarded him £10,000. In 1807 they gave him a further grant of £20,000—by a vote of 60 to 47 totaling nearly \$ 150,000 of American money. Governments and Royalty appear to have been peculiarly susceptible to enthusiasm for the new vaccinating therapy. France, Germany, Italy, Spain, Russia and the United States followed England's lead in sponsoring the Jennerian prophylaxis. The Empress of Russia in 1811 presented Jenner with a diamond ring, had the first child vaccinated in her empire christened "Vaccinoff," and ordered him pensioned for life! Kubler says that "the news of Jenner's teaching spread from land to land almost like a tempest."

* Hist. and Path. of Vac., p. 138.

The effect of all this was to lift the author of vaccination from the position of an obscure country surgeon into one of affluence and world-wide fame rather suddenly; and in the light of these undisputed facts of record, it is a bit difficult to understand Dr. Dana's melodramatic talk about Jenner's "brave struggle through opposition, financial losses, misrepresentation and ridicule," in his *Peaks of Medical History*.

Dr. Dana also essays to give a romantic and heroic touch to another episode in Jennerian annals, which according to Crookshank admits of quite a different interpretation. Dana says: "When his discovery had been laid before the world and its reliability nearly established, a London physician sent him word to come up to that city and make £50,000 a year... Jenner, though a poor country physician, refused this offer which meant essentially that he should sell his discovery."

Crookshank says Jenner's refusal of this tempting offer has a very different explanation, and he quotes a letter from Jenner to the friend who proposed it which proves that "Jenner preferred retirement in the country because *he knew that his theory would be rigidly tested in London,* and he was not prepared to face failures." *

In 1840 vaccination was made "free" in England to all who would accept it, or as they say in that country, "it was put on the rates." In that same year the old practice introduced by Lady Montagu—was forbidden by law. That which had once been hailed as a blessing, was now made a penal offence.

CHAPTER III

Natural vs. Artificial Immunology

Before pursuing further the subject of theoretical, artificial immunology and its effects on the human race, let us devote a little space to the physiological principle underlying both the artificial immunity, and the natural immunity which lends a semblance of truth to the former, and which has enabled it to become a permanent feature of regular, orthodox medical practice.

Every one has observed that after recovery from an acute illness—accompanied by fever of any kind—the recovered patient will often appear more robust than before, and for some time thereafter remain immune to a second attack. But not every one understands that this phenomenon rests on the physiological principle of "vicarious elimination"—resulting from a "toxemic crisis"—which is in every instance a cleansing, curative process.

To make this clearer: *Toxemia,* from two Greek words meaning "poison" and "blood," is the condition arising from an excess of toxins in the blood—normally resulting from

* Hist. and Path. of Vaccination, p. 142.

retained body wastes, rarely, it may be, from bacterial infection. When this toxemia reaches the saturation point, it is called, in the terminology of nature-cure, a "toxemic crisis" when there is precipitated the "vicarious elimination" which we know as "disease."

It is the friendly reaction of the Life Force inside of us, which, sensing the presence of danger in excess toxicity, is seeking to drive the poison out through some vicarious channel, different from the regular organs of elimination and depuration. And because it is an unusual, unaccustomed channel, the elimination is attended with discomfort—with pain, swelling, inflammation and fever. These are merely nature's house-cleaning signals—the outward signs of the inward purging—which doctors call "symptoms."

For thousands of years they have been directing their efforts toward correcting these *symptoms*, with scant attention paid to the underlying *cause*, which when properly understood rebukes such efforts as both futile and harmful. A proper knowledge of the cause of disease-symptoms—and primarily there is only one basic cause, *toxemia*—coupled with the desire and the will to *remove that cause*, is all that is necessary to restore the sick to normal health.

A little independent thinking by any intelligent layman capable of it, will convince him of the truth of this. We all know that the business of living, physiologically, is accompanied by manufacturing and expelling poisons; that in the ordinary processes of digesting and assimilating food, in the accumulation of cell-debris from daily wear and tear of the tissues—as well as in the indulgence of unhappy, negative emotions, like fear, worry, anger, jealousy and hate, very deadly poisons are liberated in the system, which if not promptly and thoroughly eliminated, will produce disease and probable death.

In any fair concept of health and disease, when our daily living habits are ordered in accordance with hygienic law; when the ordinary, every-day things like eating, exercising, breathing, bathing and thinking-are done intelligently in obedience to natural law, the elimination of body wastes is efficiently and sufficiently carried on through the four regular channels of elimination—bowels, kidneys, pores and lungs. But if through faulty living habits, enervating habits of overstimulation—whether in work or play, food or drink—these regular organs of depuration become clogged up and refuse to function, then the instinct of life-preservation within us what we might call the *physiological expression of the will to live*—makes an extra effort to hold on to its tenement of clay by selecting some vicarious channel—such as the skin or the mucous membrane—for getting rid of its toxic encumbrance.

Sometimes the vicarious elimination will take the form of an eruptive fever—measles, chickenpox, smallpox; again it may manifest as a boil, a carbuncle or a cancer; yet again as influenza, pneumonia, tuberculosis, or simply as a bad cold. The elaborate disease nomenclature of the medical profession is predicated on the various manifestations of the toxemic crisis, according to the part of the body which furnishes the outlet for the cumulative poison, and the degree of violence in the reaction of the Life Force.

But in every case of acute illness—regardless of what name the doctors may give it, or the etiological changes they may ring on it—the immediate, underlying cause, is *a crisis of toxemia*, whose outward expression by a vicarious exit is creating the unpleasant symptoms. *Remove the cause*, and presto! the unpleasant symptoms will automatically disappear.

But in disappearing by the natural, "vicariouselimination" route, instead of by the suppressive, paralyzing tactics of orthodox medicine, every acute malady becomes a cleansing, healing agent for the body afflicted with it. The aftermath of illness treated by natural methods is a state of *internal cleanliness* which is the only real prophylaxis—the only reliable immunity. But let it be clearly borne in mind, that *the immunity is provided by the cleanliness*, and whenever this is not maintained, but toxemia built in its stead by enervating living habits, there will come another "toxemic crisis" which will precipitate another attack of disease.

That branch of the healing art which arrogates most learning and scientific skill—the so-called "regular," allopathic school of medicine—is wont to treat with contempt and derision the system which relies entirely upon the restorative forces of the body and the natural methods most favorable to the free play of such forces. It is, of course, diametrically opposed to the orthodox medical conception of disease as an *entity*—something which invades the body from without, instead of *a condition generated from within*—and that it must be combated and "stamped out" with another entity—a drug, a serum, or a surgical operation.

Herein lies the essential, basic, irreconcilable difference between the philosophy and tactics of natural curing, and the theory and practice of regular medicine. One follows the body's lead to "throw the poison out"—and all its methods are eliminative; the other combats, aborts and thwarts the body's natural reactions—and all its methods are suppressive. Suppression is the antipode of elimination.

For example, one of the early bodily reactions in illness is distaste for food; and total abstention from food in such a crisis is a lesson we may learn from sick animals, whose natural instincts are a much more unerring guide in the matter than ours, which have been perverted by suppression. Fasting in illness until the worst symptoms subside and normal hunger appears, is, therefore, one of the first requirements of natural healing. The orthodox medical man, on the other hand, enjoins feeding the sick "to keep up their strength"; ignoring the plain physiological truth that it is not the mere presence of food in the stomach that gives strength, but its disgestion and assimilation. When the digestive organs—because of the general toxemia that pervades the system—go on a strike and refuse to function, manifestly an inert mass of food in the stomach, so far from contributing strength, becomes a source of weakness, for it simply lies there and putrifies, thus adding to the general toxic condition of the patient.

Again the exponents of natural healing see no cause for alarm in the pain, the swelling, inflammation and fever—or other distressing symptoms which inevitably accompany the "vicarious elimination" of systemic poison; and they never seek to abort or suppress them, but only to allay them to the toleration point—or below the danger line.

This may be accomplished by giving the patient absolute rest—physical, physiological, and mental, while waiting for the natural come-back of the Life Force. The body cures itself where there is any cure, and the only outside assistance it needs or can make use of, is supplied by the mechanics of good nursing. For physical rest, make the patient comfortable in bed, release all physical strain or tension; for physiological rest, stop all food-intake, to stop the further manufacture of systemic poison from that source, and allow the alimentary tract to assist in the work of elimination and detoxication.

Flushing the system with copious water-drinking is an excellent aid to the body's house-cleaning efforts, which we call "disease."

The "Nature Cure" precept to "do nothing, and do it intelligently," is frequently quoted derisively from a lack of understanding of its meaning. It may be interpreted as doing nothing to arrest or retard vicarious elimination until it has achieved its purpose of internal cleansing of the body; and by the application of such "simples" as above enumerated, as placing the body in the most favorable condition to effect its own self-regeneration.

Orthodox medical men on the other hand believe in doing every thing possible to retard and arrest the bodily housecleaning, by attacking the symptoms of disease. With a drug or serum they try to stop the pain, bring down the bloodpressure, and reduce the fever. By so doing, they not only hold up the vicarious elimination of systemic poison, but they add to it the poison of the drug or the serum, thus putting a double burden on the body's detoxicating organs. In the partial paralysis of nerve-centers by drug pain-killers, regular medical practice cripples another essential to healthy bodily functioning—the free play of nerve currents.

Hence we see the inherent conflict between the philosophy of natural healing and natural immunology, and the theory and practice of regular medicine. The latter attacks effects—symptoms—and disregards the cause; the former disregards effects largely, and goes after the cause. It is obvious that disease—which is only a symptom—cannot be its own cause; and it is equally obvious that if the cause is removed, the effects will disappear of themselves. The school of healing which is founded on this conception of disease as vicarious elimination and self-curative, took its rise in Europe—chiefly in the Germanic countries—about one hundred years ago, although the crucial idea in it is much older than that. It is the *vis medicatrix naturae* of the ancient healing world, and traces of this teaching are found in the works of Hippocrates, Paracelsus, Suydenham and Paré. Among moderns in regular medicine who have recognized and made use of this principle, are such men as Alexander Haig, Robert Bell, and Sir Wm. Arbuthnot Lane in England; and in America, Richard Cabot, Wm. F. Koch, Wm. Howard Hay, and Dr. Charles Page of Boston. Sir Arthur Keith of Aberdeen, Scotland, gave expression to it in a memorable formula: "Only Nature can repair the machines which Nature has made."

Yet while orthodox medical men do not as a rule recognize disease as "vicarious elimination," they unconsciously rely upon this principle in their vaccine-serum practice. For what is true of acute illness of natural incidence, likewise applies to artificially induced sickness through vaccine-serum inoculation. In each case the Life Force resents, as it were, the presence of poison in the system—whether it be generated from within or injected from without—and makes an extra effort to throw it out, either through the regular eliminative organs or vicariously through some unaccustomed channel.

In the case of injected vaccine or serum poison, if the Life Force is strong enough and the regular organs of elimination are functioning properly, the poison will be carried out of the system normally and there will be no visible effect. It is then they say "the vaccination failed to take," and the custom is to repeat the operation at intervals until the blood becomes so surcharged with poison that the body is unable to expel it through the regular channels and throws it out vicariously.

If this vicarious elimination of the vaccine poisoning is accomplished through the skin at the vaccination site, it will manifest merely as a sore arm under the most auspicious circumstances; or it may manifest—as not infrequently happens—in a general eruption all over the body, which last manifestation is variously named according to the diagnosing temper of the attending physician, but in any case it is then he says "the vaccination takes."

Dr. Makuna in his *Vaccination Inquiry* (published in 1883) says: "Of 384 replies from medical men that are published, there are recorded 53 cases of syphilis, 126 cases of erysipelas, 64 of eczema, 22 of erythema and 9 of scrofula, as a result of vaccination, according to the opinions of these doctors."

Other post-vaccinal symptoms named by medical men as immediate *sequelae* of vaccination, are: tetanus, jaundice, generalized vaccinia, boils, ulcers, glandular abscess, local gangrene, impetigo, sore throat, etc., which are listed in a standard text-book called *A System of Medicine* and edited by two eminent English professors, Dr. Clifford Allbutt and Dr. H. D. Rolleston (1896). More recently, diphtheria, cerebrospinal meningitis, infantile paralysis and encephalitis have been observed to follow vaccination in such close sequence as to leave little doubt as to their logical connection.

From the foregoing it is apparent that these various postvaccinal ailments are dependent on the individual's reaction to the injected poison; and that this individual reaction in turn depends on two things: the degree of toxicity of the individual's blood-stream and the strength of his vitality, both of which are problematical. In other words, the injector of these vaccine-serum poisons is gambling with two vital factors concerning which he has not—nor can have—any definite, positive knowledge.

It may happen—it frequently does happen—that these disease inoculations will have no immediate, outward ill effects. Indeed, if "the will to live" is strong enough to expel not only the inoculated filth, but along with it some of the body's own morbific accumulations, the resultant internal cleanliness will be a benefit instead of an injury; and there is an apparent justification of the vaccine or serum inoculation. The justification is more apparent than real, however, since the same good result would have been attained by reforming the living habits in a way to facilitate natural elimination; or, failing this, by waiting for the natural physiological reaction to the "toxemic crisis" which is sure to follow any protracted violation of hygienic law.

It is common-sense reasoning which any lay intelligence can grasp, that a human body can better take care of poisons of its own manufacture through natural physiological processes, than of some foreign protein matter extracted from diseased bodies of animals. The whole idea of inoculation is opposed to common-sense, sanitation, and physiological law. Nature does not put anything directly into the blood-stream from the outside. Anything to get into the blood naturally must pass through the mouth, the stomach—through the entire alimentary tract—and be strained through the capillaries before it becomes a component part of the vital fluids which build the tissues of men and animals.

For the counteraction of any toxicity generated within the body, Nature has provided the endocrine glands whose ductless secretions are the poison destroyers and stabilizers in metabolism. To shield the blood—upon whose integrity health metabolism depends—from outside contamination, it has been hidden away beneath the skin—"the body's first line of defence," in the words of a famous English physician. To pierce this outer defence and inject into the life-giving bloodstream the filthy concoctions of animal disease cultures is, in the language of the same authority, "blood assassination and like a murderer's knife; and this amazing act is the homicidal insanity of the medical profession." *

The claim of the inoculators that the injected vaccine or serum creates "anti-toxins or anti-bodies" to combat the

^{*} Dr. James J. Garth Wilkinson in Human Science, Good and Evil, p. 35.

systemic poison, which is based on Ehrlich's doctrine of the defending entities, is purely a medical hypothesis—unproved and unprovable. Dr. Walter Hadwen, a well-known English authority who lectured in the United States in 1922, said: "Nobody has ever seen the anti-toxins or anti-bodies at work. They have never been isolated or shown in a test-tube. 'Science' says they are there, and you must accept it if you can."

Among eminent medical authorities who refused to accept Ehrlich's theory and the immunology based on it, were Sir Lawson Tait and Dr. Beckingham, Sir Henry Maudesley, Dr. Henry Bastian, and all the later school of bacteriologists who followed Béchamp's—and rejected Pasteur's—teaching about germs. A prominent opponent of the Metchnikoff doctrine of the phagocytes in America was Dr. Thomas Powell of Los Angeles; and in England in recent years, Sir Almroth Wright disclaimed it.

The claim of the vaccinators that a mild attack of disease affords immunity for awhile from a more severe attack, is perfectly valid, and furnishes good enough proof of the contention that disease is merely "vicarious elimination" and therefore cleansing and curative in its operation. But the vaccinators have yet to show that the various manifestations of "vaccinia" can be classed as "mild diseases," and that they are not more deadly than the malady they are designed to avert.

Any one who doubts this should investigate the records of smallpox and vaccination in every country where the latter has been tried out. Medical records, if you please, because only medical men are permitted to compile vital statistics; and juggled as these have been in many instances to serve the vaccinator's needs, they still furnish the conclusive answer to the claims of provaccinists.

We will now take a look at the practical workings of vaccination in various areas of the earth since Jenner introduced it into England one hundred and thirty-nine years ago. The greatest ethical teacher of all times said: "By their fruits ye shall know them."

CHAPTER IV

Just What Is the Smallpox Vaccine?

In a previous chapter we quoted Dr. Crookshank, at King's College, London, as saying, "While attending at the National Vaccine Establishment, I found that both official and unofficial vaccinators were completely occupied with the technique of vaccination to the exclusion of any precise knowledge of the history and pathology of the diseases from which their lymph stocks had been obtained."

A generation later, William Osier in his *Modern Medicine*, said: "It would be of great scientific interest and some practical value, to have records of all vaccination strains. But as it is, manufacturers often do not know—or are unwilling to state—the source and nature of their vaccine supply."

In 1912, Dr. W. F. Elgin, head of the H. K. Mulford Laboratories near Philadelphia, was called as a witness before the Pennsylvania Vaccination Commission and asked: "What is the original source of the strain or strains of virus you use?" And he answered: "I do not know."

This same manufacturer, who described his plant as "the largest and most complete in the world—making the only vaccine awarded a medal in the World Columbian Exposition," sent the following letter to Dr. J. W. Hodge of Niagara Falls, N. Y.

Dear Doctor:

In response to your inquiry of the 22nd inst, we beg to state that Vaccine Virus, or its active principle, is a subject about which very little is definitely known...

It was thought by the founder of our establishment that he had discovered a case of spontaneous cowpox, and we have been using as one of our strains of seed virus, this source for nearly twenty years. It later developed, however, that the case referred to was evidently inoculated by a tramp having smallpox who slept in the stable.... We regret our inability to give you more definite

We regret our inability to give you more definite information on the subject, but trust the above may be of some value to you.

Very truly yours, Dr.M....&Co. per Manager.

There is little question about the "value" of the above cited admissions from such a source to the cause of the antivaccinists, among whom Dr. Hodge is conspicuous in this country. Equally valuable and illuminating is the following communication addressed to Mr. Chas. M. Higgins, wealthy manufacturer of Brooklyn, N. Y., and a consistent opponent of vaccination, who spent many thousands of dollars during a period of years in collecting data—at home and abroad, and particularly in England—with which to combat the practice:

> Biological Dept. Parke, Davis & Co. Detroit, Mich. March 27, 1905

Mr. Chas. M. Higgins, 271 Ninth Street, Brooklyn, N. Y. Dear Sir:

Your communication on the subject of vaccine virus has been received and contents noted. What you say about the confusion existing in the minds of the medical profession—as shown by medical text-books—regarding the origin of vaccine, is entirely true. No one seems to know positively the exact nature of this product.

It would seem to us however, that the theory that cowpox is but modified smallpox, is the most tenable one. Particularly does this seem true in view of the facts reported by Dr. Monckton Copeman, Director of the Government Vaccine Work in London, that he had been able to transmit smallpox virus to monkeys, from monkeys to heifers, and from heifers to man, the resulting vaccination on the human subject being identically the same as that produced by vaccine as ordinarily prepared.

Furthermore it was shown that the persons vaccinated with this virus when exposed to smallpox, were immune . . . The chain of evidence seems very complete, that by properly transferring the smallpox virus from man to animals of different species, it became so modified in the transmission that when applied to heifers it produced typical vaccinia, and was found to fill every requirement as a protection against smallpox when applied to unimmunized children.

On theoretical grounds, it seems to us that this is a very plausible explanation of the origin of vaccinia. During Jenner's time smallpox was very prevalent, and nothing could be more natural than for persons recovering from smallpox to transmit the disease to the udders of cows, producing an infection which on account of the difference in the species of the animal, modified the smallpox virus.

Regretting that we are unable to state more positively the exact relation between the two diseases, and the origin of the seed virus used by manufacturers, we remain

Very sincerely yours, (Signed) Parke, Davis & Co.

This letter, aside from the story it tells of the haziness surrounding the subject of vaccine lymphs, and the support it gives to the charge of the Antis that "no one can tell what blood taints are conveyed by vaccination," reveals an amazing ignorance of the historic beginnings of cowpox inoculation, on the part of one of its foremost advocates and traffickers in modern times. Had this manifesto issued from the shippingroom of the Parke-Davis establishment, it would be less remarkable than from its "biological department."

What Crookshank observed about London vaccinators being concerned only with "the technique of vaccination" with slight regard for the deadly disease taints they might be transmitting—apparently obtains in full force among American manufacturers and purveyors of these voodoo concoctions. And why not? It is the "vaccination technique" which creates the demand for the "biological products" of vaccine manufacturers; it is the "vaccination technique" which provides "more business" for a profession which, with a few honorable exceptions, has surrendered itself so unreservedly to commercialism in this country—upon the sorrowful admission of the few honorable exceptions.

However, for the enlightenment of those who may be curious to know more of the real nature and origin of the magical and more or less mythical cowpox, than its protagonists and defenders, we note that Dr. Charles Creighton, Professor of Microscopic Anatomy at Cambridge, was the first man in England to conduct an extensive research on the subject and that he recorded his findings in a book entitled *Cowpox and Vaccinal Syphilis*, wherein all the various theories and legends about the origin of this strange malady—together with their authors—are reviewed.

Dr. Creighton quotes Mr. Ceely of Aylesbury—who was reputedly the most painstaking and authentic of all the investigators of cowpox—as saying in 1839: "Cowpox as an infective disease arises in cow-houses here and there, and at wide intervals of time, out of a common physiological or constitutional eruption on some particular cow, usually a heifer in her first milk, very often in the Spring or at some other crisis of the year or of the animal's life history.

"It never arises except in milch cows, and occurs only on the teats or by infection on the adjoining parts of the udder. All the characters by which we know it distinctively as cowpox are associated with the fact of milking—with the inevitable traction on teats which are the subject of an otherwise unimportant eruption."

Creighton says the primary disorder as Ceely describes it "is an eruption of a few pimples which are made to bleed by the merciless manipulations of the milkers . . . The blood forms crusts that are dislodged every six hours, the indurated, phagendenic ulcers form on the sites of the original pimples. . . *Cowpox undisturbed by the milkers' hands, has no existence in the originating cow.* It is the persistent irritation that makes it a pox."

Creighton writing in 1891 apparently accepts Ceely's report as the most plausible and rational explanation of cowpox as it was known in England and on the Continent in the 18th and 19th centuries, and was traditionally believed to provide immunity against smallpox. Creighton says Jenner's only originality in connection with this dairy-maid folklore, "consisted in designating cowpox as smallpox of the cow and in tracing cowpox back to horse-grease."

According to another English chronicler of Jennerian annals, Jenner accounted for the presence of horse-grease in cowpox by saying that "in Gloucestershire cows were milked by men as well as women; and men would sometimes milk cows with hands foul from dressing the heels of horses afflicted with what was called 'grease,' and with this grease they infected the cows."

And according to this chronicler—Mr. William White, author of *The Story of a Great Delusion*—it was the "horsegrease cowpox" resulting from the aforesaid infection, that was pronounced by Jenner to have all the virtue against smallpox which the dairymaids claimed for cowpox. He says: "According to Jenner, the dairy-maids were right when the pox they caught was derived from the horse through the cow; but that they were all wrong about the prophylactic virtues of cowpox originating on the cow *without the horse"!*

White says, moreover, that this was the substance and purport of Jenner's famous *Inquiry* (published in 1798), "a treatise much more spoken of than read, wherein its author distinctly set forth that it was *horse-grease cowpox*—and not spontaneous cowpox—that had the protective virtue." From the same writer we learn that "the public declined to have anything to do with horse-grease cowpox. It was scouted as an intolerable origin. It was disgusting . . . Various attempts were made to verify Jenner's prescription by inoculating cows with horse-grease, but they ended in failure—fortunately, it was said, in failure; for as Dr. Pearson—chief among primitive vaccinators—observed, 'the very name of horsegrease was like to have damned the whole business.' "

The author of *The Story of a Great Delusion* offers the comment: "Just why a diseased secretion from horses' heels should be more repulsive than a similar secretion from cows' teats, was not explained." This writer, however, was a layman, and just as it requires a priest or a parson to justify the ways of God to the faithful, so must there ever be "a reputable physician" to justify the ways of doctors to the laity. It is recorded that Jenner's "horse-grease cowpox"—despite its unpopularity—found some takers among vaccinators both in England and on the Continent, the most notable being Dr. Sacco of Milan and De Carro of Vienna, who wrote to Jenner in 1803 that they "had used it so freely and successfully that it became impossible to say which of the citizens were *equinated* and which *vaccinated*"!

Jenner however, in the meantime, had found it expedient to keep still about horse grease, and to extol the merits of cowpox alone which in his *Inquiry* he had condemned. Thus in his first petition to Parliament for largess (1802) we hear no mention of the horse-grease prophylactic, and find only the remarkable assertion:—"That your Petitioner has discovered that a disease which occasionally exists in a particular form among cattle, known by name of Cowpox, admits of being inoculated on the human frame with the most perfect ease and safety, and is attended with the singularly beneficial effect of rendering through life the person so inoculated perfectly secure from the infection of Smallpox."

Later it appears—after the "discoverer of cowpox" had been rewarded with two governmental grants making a total of £30,000 of English money—he returned to his horse-grease propaganda, using it in his practice and defending it in his writings. In Baron's *Life of Jenner*, Vol. 1, p. 135, the reputed founder of the calf-pus cult is reported as remarking to his nephew as he pointed out a horse with greasy heels: "Lo, *there is the source of smallpox!"*

Yet when George Bernard Shaw—who is rarely caught tripping on historic fact—reminded the Jennerian heroworshippers of the present, that it was not cowpox nor calfpox, but horse grease, which Jenner had proclaimed as the specific prophylactic against smallpox, pro-vaccinists airly dismissed it as a characteristic Shavian quip.

Concerning these ponderous disputes among the early protagonists in the vaccination movement as to the relative protective virtues of cowpox, horse grease, and swinepox as smallpox prophylactics, comment seems superfluous. It is enough simply to call attention to them. In the philosophy of natural healing all these repulsive animal secretions are equally harmful, equally harmless, or—as it may happen in rare instances—equally potent in conferring temporary benefits when inoculated on the human frame, although none of them is capable of "rendering through life the person so inoculated perfectly secure from the infection of smallpox" or any other disease-such as Jenner claimed for his dairymaid prophylactic when he carried it to market. His willingness to use any of these secretions—although he sharply differentiated them in his own mind-for his inoculation work, points rather conclusively to the fact that Jenner had something to *sell* rather than something to *teach*.

The ease with which Jenner and his disciples were able to sell this vaccination superstition to a waiting world, can readily be accounted for by the popular dread of contracting a loathsome and dangerous disease in the absence of any exact and positive knowledge of its nature and origin. After more than 100 years of vaccinating against smallpox, the *British Medical Journal*, (July 5, 1902) stated: "The etiology of smallpox is still, in the practically unanimous opinion of the entire medical profession, an unsolved problem."

And what this medical organ says about medical ignorance of the cause of smallpox, may be said with equal truth of every other disease until Pasteur brought forward the "pathogenic germ" which provided a convenient scapegoat to carry medical ignorance of etiology into the wilderness of "more and more about less and less." But not even the allcomprehensive germ theory has been any help in tracking the cause of smallpox to its lair; for no stone filter has yet been devised of sufficient density to strain out a causative microbe for either smallpox or cow-pox. This much is conceded by the vaccinators themselves.

Yet while no smallpox or cowpox germ has ever been found associated with either of these eruptive disorders neither at the onset nor in later stages—bacteriologists freely admit that "all vaccine virus contains many varieties of bacteria, some of which may be pathogenic"; and Dr. R. N. Willson testified before the Pennsylvania Commission that he had found in virus purchased in the open market and ready for use, "all of the pus-producing organisms—including streptococcus, pneumococcus, and tetanus (lock-jaw) bacilli." *

Perhaps this explains why vaccination in practical operation is more deadly in its ultimate effects than smallpox. Dr. Charles Creighton, author of *Cowpox and Vaccinal Syphilis,* also of *Epidemics of Great Britain,* says "the risks of

^{*} See "Bacteria in Vaccine" in Encyclopedia Americana, Vol. 27.

vaccination may be divided into the risks inherent in the cowpox infection and the risks contingent upon the puncture of the skin . . . Cowpox infection may give rise to erysipelas, jaundice, skin eruptions, vaccinal ulcers and vaccinal syphilis."

Of all the various unpleasant manifestations of vaccinia, the last mentioned—vaccinal syphilis—caused most perplexity and apprehension to the vaccinators as well as to the vaccinated, although Creighton says: "In foundling hospitals—such as that of St. Petersburg—the erysipelas of vaccination has been the starting-point of disastrous epidemics of erysipelas affecting the inmates generally." He also cites an epidemic of jaundice following the re-vaccination of 1,289 workmen in a large ship-yard at Bremen in 1884.

Dr. Wm. J. Collins, head of St. Bartholomew's Hospital, London, writing in 1881, said: "In 1805 Dr. Moseley discovered that syphilis was communicable by vaccination, but it was not until 70 years later that the majority of the profession were convinced of the fact . . . Pathology has taught us that syphilis may be conveyed by infected blood or the secretions which are its offspring . . . Statistics complete the evidence by showing that the deaths from infantile syphilis per million births, under enforced vaccination (1867-1878), were 1,738, as compared with 564 per million under voluntary vaccination (1847-1853)."

Crookshank in *History and Pathology of Vaccination* (pp. 461-63), names Auzias Terenne, a French physician, as the first authority to point out that cowpox is analogous to syphilis; and another Frenchman, Philip Ricord, accounted the greatest authority of his day on venereal diseases, said in a lecture in the *Hotel Dieu*, Paris, (May 1863):

"At first I repelled the idea that syphilis could be transmitted by vaccination. The recurrence of facts more and more confirmatory caused me to accept the possibility of this mode of transmission, I should say with reserve and even repugnance. But today I hesitate no more to proclaim their reality."

By 1867 the French Academy of Science had accepted this view, according to Dr. Montagu Leverson, the American biographer of Béchamp, who says that Dr. A. H. Caron of Paris told the Academy in 1870, that he "had long since refused to vaccinate at any price because of the known risk of transmitting syphilis." Still another eminent French doctor, Dr. Charles Pigeon, declared at the Anti-Vaccination Congress in Cologne, Oct. 10, 1881, that "vaccination exposes the vaccinated to syphilis."

Professor Josef Hamernik of the Prague University, in the *History of Smallpox and Vaccination*, said: "A number of children in the neighborhood of Melnik got syphilis through vaccination and several died of it."

Dr. Robert A. Gunn, New York, in his work on *Vaccination, Its Fallacies and Evils,* page 13, says: "Every physician of experience has met with numerous cases of cutaneous eruptions, erysipelas and syphilis which are directly traceable to vaccination."

Dr. Brundenell Carter, F.R.C.S., and Surgeon to St. George's Hospital, England, writing in the *Medical Examiner*, May 24, 1877, stated: "Syphilitic contamination by vaccine lymph is by no means an uncommon occurrence, and it is very generally overlooked because people do not know when or where to look for it. I think that a large proportion of the cases of apparently inherited syphilis are in reality vaccinal; but that the syphilis in these cases does not show itself until the age of eight to ten years, by which time the relation between cause and effect is lost sight of."

Dr. Charles Creighton, in his article on Vaccination prepared for the Encyclopedia Britannica (9th ed. Vol. XXIV, p. 23), cites numerous outbreaks of syphilis following vaccination and re-vaccination among children and adults in various countries after vaccination became the vogue; concerning which he says: "In so far as experiment and casual experience can prove anything, these have been proven." The authorities gave various interpretations of the phenomenon, but no one denied the *actual occurrence* of post-vaccinal syphilis.

Even the Royal Commission on Vaccination and Smallpox—appointed by the Crown in 1889, and which sat for seven years taking testimony and compiling data—although overwhelmingly pro-vaccinist in its personnel, incorporated into its Sixth Report (page 617) a list of 1000 vaccino-syphilis cases submitted to them in evidence of a character they could not blink.

The theory most commonly advanced to account for the syphilitic sequelae of vaccination, was, that it had been transmitted through human contact in the arm-to-arm vaccination with cowpox matter which superseded the arm-to-arm inoculation with smallpox matter. The latter had been forbidden by law in England in 1840 when the cowpox inoculation was put on the rates. Cowpox, however, always a disease of rare natural incidence, became increasingly rarer with the improved sanitation practiced by dairy-farmers in the care of their herds. It therefore became necessary for the vaccinators to replenish their lymph stocks by artificial means. Thus they inoculated cows on the udder and other sensitive parts with smallpox, and the "cowpox" resulting was used as standard vaccine lymph in England for more than 50 years.

Creighton names Ceely of Aylesbury and Badcock, a dispensing chemist at Brighton, who obtained a lymph by inoculating a cow with smallpox which they claimed "was benign, non-infectious and highly protective." The vaccine stock used by Pearson and Woodville—the two London physicians who at one time threatened to take the glory of vaccination promotion away from Jenner—was believed to be some curious blend of smallpox with the bovine infection. But not even this provided sufficient vaccine material after the operation was made compulsory (1853), and hence they had recourse to the arm-to-arm lymph which continued in vogue until the question was raised whether this might not be chargeable with the out-breaks of syphilis, erysipelas, diphtheria, etc., observed to follow wholesale vaccinations. Creighton writing in 1891, said: In the first year of compulsory vaccination (1854), deaths from syphilis among infants under one year of age suddenly increased by one-half, and the increase has gone on steadily ever since."

The heavy disease and death toll from vaccinationculminating in the disastrous smallpox epidemic of 1871-1873—finally led to the appointment of the Royal Commission (1889) for a thorough investigation of the whole history of vaccination in the United Kingdom. When confronted with the actual proofs of the disease-breeding character of this "grotesque superstition"-to borrow Creighton's phrase—the provaccinist members of the Commission-who were greatly in the majority-endeavored to save the day for vaccination by charging all the trouble on the arm-to-arm vaccine matter, which in consequence was condemned by law in 1897 in England, which in that as in other vaccination fashions set the pace for the other nations. Since then the standard vaccine virus used in Great Britain, on the Continent, and in the United States, is obtained from calves.

According to reports from the Local Government Board (now the British Ministry of Health), a young calf—preferably an 18-weeks' heifer-calf—is strapped down to an operating board. The calf's belly and flanks, after thorough cleansing with soap and water, are smooth shaven and washed again. Then a number of incisions—from 100 to 120—are made on the shaven surface with a lancet, and a drop of smallpox-or cowpox-virus rubbed into each one. The calf is then harnessed up in a stall to prevent its scratching or licking itself-until the pustules resulting from the grotesque procedure are ripe for squeezing. The unhappy animal is again nailed to the sacrificial board, and the squeezing-out process is effected by means of separate steel clamps placed around the base of each vesicle which is further scraped with the edge of a blunt lancet. The revolting mass of pus, blood and skin is placed in "a clean, sterilized, nickel crucible," to which is added an equal quantity of glycerine. The mixture is then strained through fine brass gauze into an agate mortar, and after some further trituration, is ready for filling the tubes which supply the vaccine market.

In the vaccination propaganda put out for public consumption, great stress is laid on the sanitary precautions taken in preparing the calves to be used as vaccinifers, and the "clean, sterilized" vessels used for the reception of the purulent contents of the pustules on the body of the inoculated calf. These precautions, together with the addition of glycerine to the purulent mass, are supposed to yield "a pure vaccine-virus" which can be inoculated on the human frame "with perfect safety."

The argument that a healthy calf *before inoculation*, and sterilized receptacles for its pus secretions *after inoculation*, will insure the purity of the "biologic product," is much like saying that dipping muck from a sewer with a new silver spoon into a clean cutglass bowl, would transform the filth into—what shall we say?—apple-sauce! The object in mixing glycerine with the pus, is first, to increase the quantity, and second, to kill all extraneous disease-germs.

As usual, however, the authorities are divided on the question of glycerine acting as a germicide, some affirming that it is on the contrary a nutritive medium for the growth of putrefactive germs. Dr. Milton J. Rosenau, Professor of Preventive Medicine and Hygiene in Harvard Medical School and former director of the U. S. Hygienic Laboratory at Washington, in his book, *Preventive Medicine and Hygiene*, gives three forms in which the vaccine virus may be used: (1) fresh; (2) dry; and (3) glycerinated; and he says "the *Institut Vaccinale* at Paris *still prefers the virus freshly squeezed from* the calf's pustule and transferred directly to the arm of the individual."

This disposes of the claim sometimes urged, that "no alive bacteria are transmitted in the vaccine," and may very reasonably account for such vaccination sequelae as syphilis and tuberculosis—according to their own theories. The greatest medical authority on this phase of vaccination, Dr. Charles Creighton, however, denied that vaccinal syphilis was identical with venereal pox, although he says the effects were the same in both. He traced the post-vaccinal syphilis back to the primary seed virus of cowpox, and rejected the explanation advanced by some, that this had become mixed with venereal poison from the unclean hands of the milkers. In the Encyclopaedia article aforementioned, Creighton says: "Cowpox, horse grease, and venereal pox, when inoculated under the skin, produce the same kind of vesicle-quite unlike a smallpox pustule—and leave the same kind of indurated sore. . . . Cowpox, indeed, is parallel with the venereal pox, both in the circumstances of its becoming an infective ulceration—indurated or suppurating—and in its secondary constitutional manifestations as an infection in man . . . Mucous patches of the tonsils, tongue and lips are among the 'secondaries' of the primary vaccinal ulcer."

Crookshank who followed Creighton in the field of cowpox research, whose investigation was in fact inspired by Creighton's—to whose work he says his attention had been called by Sir James Paget—disagreed somewhat with Creighton's view about the origin and nature of vaccinal syphilis; but these two eminent authorities are in perfect agreement as to the futility of any inoculating virus to ward off smallpox or any other disease. Crookshank joins the chorus of dissent and condemnation leveled against the voodooism of vaccination by famous medical men of his day, in the words: "Inoculation of cowpox does not afford the least protection from the analogous disease in man—syphilis; nor do cowpox, horsepox, swinepox, cattle-plague or any other radically dissimilar disease, exercise any protective power against human smallpox."

And it is this practical side of the vaccination question, of course, which interests the lay world. Not the fine-spun theories or conflicting analyses of the various vaccine strains by the experts, will engage the attention of those seeking immunity from a dreaded disease. What they wish to know is: What has vaccination accomplished in the way of disease prevention or control, since Jenner shot cowpox into the venous circulation of sturdy little James Phipps in 1796, and thus dedicated him to early death from tuberculosis a decade or so later?

CHAPTER V

Some Early and Later Fruits; Statistics vs. Statistics

Jenner's claim that one vaccination would render the vaccinated immune to smallpox through life, was very soon repudiated by his successors, who began by shortening the period of immunity to fourteen years. Then it was moved up to seven, then five, then two, and in the Spanish-American War six months was made the limit of immunity. Various contemporary historians relate that Jenner himself realized the error of his life-long immunity claim for his prophylactic, and for two years before his death he re-vaccinated his own patients once a year.

Garrison's claim likewise—in *History of Medicine*—that Jenner succeeded before his death "in overcoming the popular aversion to vaccination," cannot stand up before the plain facts. Although free vaccination was provided for the masses in England in 1840—when it was put on the rates—popular aversion to the rite continued in such force after thirteen years' experience of its supposed benefits, that it became necessary for its advocates to enforce it with a governmental requirement in 1853. The bill was introduced by Lord Lyttleton—at the instigation of a medical organization called the Epidemiological Society-and passed the House of Lords without opposition. It also passed the Commons, but with one dissenting vote, and provided that all parents in England and Wales who refused—or failed—to have their children vaccinated within three months of birth, would be liable to a fine of 20 shillings and cost.

This failing to overcome the popular aversion to vaccination, the British Parliament proceeded to put more teeth into the compulsory law in 1867, with an Act which consolidated the previous Acts and embodied more stringent penal clauses. Under it the refusal of a parent to vaccinate his child was made a *continuous offence* from the age of three months to 14 years! The Board of Guardians were instructed to prosecute evaders of this law, and in the years following its enactment many persons accepted repeated fines and imprisonment rather than submit to its barbarous requirements. Others left the country to escape such persecution, though fugitives from the Medical Inquisition have been conveniently lost sight of in the efforts of historians to glorify the exiles from religious persecution.

A return presented to the House of Commons in 1889 showed that, in the decade preceding, the number of persons fined for violation of the vaccination laws in England and Wales was 11,408, of whom 115 went to prison. These conscientious objectors to vaccination, moreover, were treated like common criminals—cropped hair, prison garb and hard labor in some instances, were meted out to them. A letter dated February 18, 1883, and addressed to the British Anti-Vaccination League by one signing himself Charles W. Nye of Chatham, deposes:

I have been imprisoned nine times. Five times for one child, twice for another, and once each for two others. While I was in prison, my wife and children were sent to the workhouse.

At Ashford in Kent, another objector, Charles Hay-ward, was summoned more than 50 times in four years (1885-1888) and paid more than £50 sterling in fines and costs. As examples of the medical bigotry and intolerance rampant in England at that time, one London doctor declared that "a person had no more right to keep an unvaccinated child than to keep a mad dog"; and another said he "would take a child by force from its parents to vaccinate it"!

As usual, however, these prosecutions and exhibitions of intolerance, so far from overcoming the popular aversion to the practice, served only to strengthen the opposition to vaccination. The anti-compulsory vaccination movement was enlarged, and branches of the London Society were organized in various parts of the United Kingdom. *The Vaccination Inquirer*, established by Mr. William Tebb in 1879, was made the official organ of the London Society. The Vaccination Act of 1867 met with more opposition in the House of Commons than the former, and Sir Thomas Chambers (City Recorder of London) said on its third reading: "I am persuaded that when this Bill is passed, an agitation will commence which will never cease until the Act is repealed."

In 1871 a Select Committee of 15 M.P.'s—not one of whom was then opposed to vaccination—was appointed to inquire into the operation of the 1867 Act. They heard much evidence pro and con. Mr. Candlish, M.P., who appeared as a witness against the Act, cited numerous cases of repeated penalties and imprisonment, and declared that the law as it stood "provided perpetual imprisonment for conscience sake." The Committee reported briefly, on May 23, 1871, in favor of vaccination, but recommended that penalties for noncompliance with the law should be limited to two. This recommendation was embodied in a Bill which passed the House of Commons, August 15, 1871, but was lost in the House of Lords by one vote.

Thus by the vote of one peer, repeated penalties "for conscience sake" continued in force in England for a further 27 years, until the "popular aversion to vaccination" reinforced by popular indignation—forced a scared House of Commons in 1898 to enact a law which virtually repealed the compulsory feature of the existent law, by the insertion of a "conscience clause" under which a parent who made a formal declaration of his conscientious objection to vaccination, could have his children exempt from the operation.

This did not happen, however, until the Royal Commission appointed in 1889, had brought in its report (1896) embodying the ghastly record of "vaccination at work" for a hundred years in England and Wales, under the most ruthless compulsory regime during half of that time. This Commission composed of 15 prominent doctors and laymen nearly all of them advocates of vaccination—were obliged, nevertheless, under the watchful scrutiny of the few Anti-Vaccinationists among them, to take cognizance of, and to record, some very damaging facts against their pet theory.

In the first place it was shown from official records that smallpox had markedly declined in the early part of the 19th Century in most parts of Europe, when vaccination was negligible and scarcely touched the poor among whom smallpox was normally most rife. Yet so little were they disposed toward the cow-pox prophylactic, that it had to be handed them first on a "free rate" platter and then with a club before the poor could be induced to accept the blessings of vaccination for themselves and their children. This appeared from the sudden increase in the number of recorded vaccinations, which jumped from an average of 180,960 a year for children under one year of age, to 408,824 in 1854—the year the first compulsory law in England was put into effect.

Thus the Royal Commissioners—much as they would have liked to—could not give vaccination the credit for the lull in smallpox during the first half of the 19th Century. Even more disconcerting to the provaccinists, were the smallpox epidemics—with appalling death tolls—which occurred under compulsion. According to official reports, in the London epidemic of 1857-59 there were 14,244 deaths; in the 1863-65 outbreak there were 20,059 deaths; and in 1871-73, all of Europe was swept by the worst smallpox epidemic in its history, whose ravages extended to the United States of America. In England and Wales 44,840 persons are said to have died of smallpox in the 1871-73 epidemic, at a time when, according to official estimates, 97 percent of the population had been vaccinated.

These figures were brought to the Royal Commission by no less a personage than the English scientist, Alfred Russel Wallace, who had been invited to sit on the Commission, but he preferred to appear before them as a witness. He had made a special study of vital statistics as given in the Registrar-General's Reports, and in 1885 he put out a pamphlet entitled "Forty-one Years of Registration Statistics Proving Vaccination Both Useless and Dangerous." He showed that in the decade 1863-1873, while the British population increased 9 percent, the smallpox mortality increased 123 percent!

According to statistics furnished by Creighton (9th Ed. Encyclopedia Britannica), at the time the 1871 epidemic swept Europe, the following countries were living under compulsory vaccination: Prussia since 1835; Württemberg, Hesse and other German States since 1818; Sweden since 1814; Denmark since 1810; and Bavaria since 1807. Vaccination was compulsory in 10 of the 22 Swiss Cantons, and in France, Italy, Spain, Portugal, Belgium, Norway, Austria and Turkey, the compulsory law applied only to certain classes under Governmental control—such as soldiers, Government employees and public-school pupils. These classes however, were sufficiently populous to make compulsory vaccination a factor to be reckoned with in the incidence or absence of smallpox.

Creighton also cites the fact—in the above mentioned article—that "notwithstanding Prussia was the best vaccinated and re-vaccinated country in Europe, its mortality in that 1871 epidemic was higher than that of any other Northern State"—69,839 deaths from smallpox being accredited to Prussia in the mortality returns for that period.

To the ordinary lay intelligence, reasoning in an ordinary common-sense way, it would seem these disastrous smallpox epidemics in the well-vaccinated countries, would have aroused even in medical minds some suspicion of the protective value of the cowpox fetish. That it had this effect in certain quarters was evidenced in England in bringing into the ranks of the opposition such scientists as Alfred Russel Wallace, Herbert Spencer and Francis Newman; and such medical men as Charles Creighton, Edgar M. Crook-shank, William Tebb and James J. Garth Wilkinson. Popular dissatisfaction with the vaccination laws was likewise reflected in the English Parliament, where in 1872, 1877 and 1878, bills were introduced embodying a clause against repeated penalties.

All were rejected, the last by a vote of 271 to 82. In 1880 the Gladstone Ministry, fresh from the country, brought forward a bill of similar import, but dropped it at the behest of the British Medical Association. Then in June 1883, Mr. P. A. Taylor, M.P. for Leicester, offered the following resolution:

That in the opinion of this House it is inexpedient and unjust to enforce vaccination under penalties upon those who regard it as inadvisable and dangerous.

Through the same powerful medical influence, this motion was lost by 286 votes to 16, the minority favoring it being composed of English Radicals and one Irish member. Then the anti-vaccinists realized they must appeal from the Parliament to the people who made Parliament, and carry their fight to the hustings. The old mill town of Leicester gave a strong lead in a huge popular demonstration at which the Vaccination Acts were openly burned in the public marketplace. As a consequence, prosecutions were suspended in Leicester and the law was openly defied. It had been practically a dead letter in Leicester since 1878 when the town authorities determined to drop vaccination and try sanitation, in view of the object-lesson afforded by the smallpox epidemics under the compulsory law of its utter futility in curbing that disease.

Under its able and energetic Town Councillor and Sanitary Inspector, Mr. James T. Biggs, Leicester underwent a thorough house-cleaning and physical rehabilitation. Clean streets, clean markets and dairies, efficient garbage-removal, sanitary housing and a pure water supply, took the place of vaccination scars, with the notable result that in the 20 years from 1878 to 1898 the death-rate from smallpox in Leicester was less than 13 per million inhabitants, whereas in the much vaccinated and re-vaccinated British Army and Navy the death-rate was three times as high.

Two books were published to recount the benefits resulting from Leicester's change from vaccination to sanitation; one by J. T. Biggs, entitled: *The Leicester Experiment; Sanitation vs. Vaccination* (1910), and the other by Dr. C. Killick Millard, medical health officer for Leicester, entitled *The Vaccination Question in the Light of Modern Experience*, issued in 1914. Dr. Millard, a medical man and a pro-vaccinist, confirms Mr. Biggs' findings *in re* the Leicester Experiment, yet—as was to be expected—he expresses polite surprise that such should be the case. He devotes much of his book also to the findings of the Royal Commission on Vaccination, and expresses great satisfaction in that body's action in lifting the compulsory ban.

The gist of Dr. Millard's contribution to the vaccination controversy may be found in the following extracts from his work:

The two crucial and outstanding facts I wish to emphasize, are (a) The unexpected and remarkable experience of the town of Leicester which for thirty years has abandoned infantile vaccination, yet has shown an enormous decline in smallpox mortality.

(b) The fact that although infantile vaccination is falling more and more into disuse throughout the whole country yet smallpox, contrary to all pro-vaccinist expectation and prophecy, continues to decline and has almost disappeared.

... The striking facts that in Leicester without infantile vaccination, the decline has been greater than in most places, and that throughout the country smallpox has continued to decrease in spite of the falling off in vaccination, should surely be sufficient grounds for legitimate doubt.

... If it can be shown that sanitation thoroughly

carried out, is alone sufficient for the effective control of smallpox in this country—as in Leicester—why inflict upon the country universal vaccination with all its inseparable drawbacks? And what justification can there be any longer for compulsion?

It cannot be denied that vaccination causes in the aggregate very considerable injury to health, most of it only temporary, but some permanent. . . . During the last decade the deaths from vaccinia have several times outnumbered those from smallpox, whilst if we have regard to the amount of ill-health caused by the two diseases—and putting aside for the moment the question of the alleged effect in lessening smallpox—it looks as if vaccinia were becoming, so far as the community is concerned, the more serious disease of the two.

On page 27 of his *Vaccination Question*, Dr. Millard has this to say of the Royal Commission and its work:

The Royal Commission on Vaccination represents by far the most exhaustive inquiry ever held in connection with the subject of vaccination, and constitutes a landmark in the history of our subject.

It was indeed one of the most remarkable inquiries ever held in connection with any subject. Appointed in 1889, the Final Report was not published until 1896, seven years later. This delay is not surprising considering the enormous volume of evidence recorded.

The Commissioners held 136 meetings and examined 187 witnesses, the examination of certain individual witnesses occupying several whole days. In addition they caused important investigations to be made for their assistance. The total number of questions put and answered was over 18,000.

The Commissioners under the able chairmanship of Lord Herschell, certainly did their work with commendable thoroughness, and their reports constitute a veritable storehouse of facts relating to vaccination. Some idea of the mere bulk of the reports issued is obtained from the fact that the five principal reports, consisting of closely printed matter, together with the eight bulky appendices, weigh altogether more than 14 1b. avoirdupois!

In his apparent desire to extol the work of this provaccinist tribunal on vaccination, Dr. Millard on page 38 of his book says: "The Commissioners recommended a modified and much less stringent form of compulsion by recognizing and exempting the 'conscientious objector' *on certain conditions.* Two of those who signed the Majority Report, however, dissented from this concession; but on the other hand, two others joined the Minority Commissioners in objecting to the retention of compulsion in any form. So that in the final report there were two in favor of unrelaxed compulsion; seven in favor of a greatly modified and reduced compulsion; and four in favor of complete abandonment of three votes, to have secured a majority in favor of the entire abolition of compulsion." The two books on Leicester's experience with smallpox and vaccination, like Creighton's and Crook-shank's works and all the other anti-vaccination literature of the last century, are conspicuously absent from medical library shelves in the United States; and those who direct the destinies of public libraries—maintained at public expense see to it that the public shall get but one side of the vaccination question by very carefully excluding from their Reference catalogues, even so notable a work as Alfred Russel Wallace's *Wonderful Century*.

Hence it may be that the average American doctor never heard of the Royal Commission on Vaccination, and doesn't even know that such a body of medical big-wigs ever sat for seven years in England, compiling all those bulky reports for the enlightenment of every one except themselves! This is unfortunate for American doctors in some ways; for it should be highly gratifying to some of them to learn that 14 lbs. avoirdupois of contrary evidence hurled at the heads of the pro-vaccinist majority on that Commission failed to make a dent in their triple-plate conviction that in spite of everything *vaccination does prevent smallpox!*

For thus the Commissioners proclaimed in their final report in 1896, along with their recommendations, that "repeated penalties should cease to be inflicted"; that "persons imprisoned under the Vaccination Acts should no longer be treated as criminals"; and that "a conscience clause be inserted in the existing law whereby a parent *who could satisfy two magistrates* that he was a bona fide conscientious objector, could exempt his child from the operation of the law."

But even these meager concessions to the anti-vaccinists of England—comprising some of her most esteemed citizens were wrested from the Royal Commissioners only after their seven years of deliberations had been punctured with one smallpox epidemic and three elections in which the Government candidates were defeated largely because of their attitude on vaccination.

Finally in 1898 a bill embodying the Commission's above cited recommendations, was introduced into Parliament, and after some wrangling and filibustering, was enacted into law. As soon as the Act came into force, however, it was at once apparent that the phrase "who can satisfy two magistrates" was the "joker" in the bill which many magistrates turned into a weapon for the further oppression of anti-vaccinists. Popular irritation at the tyrannous behavior of magistrates in arbitrarily refusing applications for exemption under the 1898 Act, was greatly intensified toward the end of 1905 by the imprisonment of 27 parents in Derby for not vaccinating their children. This popular irritation made itself felt in the January 1906 General Election in an overwhelming defeat of the Conservative Government under which conscientious objectors to vaccination had suffered so much. The new Parliament changed the whole outlook for the anti-vaccinists,

and in April 1907 another bill was introduced which substituted "a simple statutory declaration of objection" in place of the previous clause which required the objector to "satisfy the magistrates" as to the integrity of his mental attitude. This bill was enacted into law in August 1907, and came into operation in January 1908. A similar measure was passed for Scotland, which came into effect the same day it was passed—August 28, 1907.

The effect of these Acts in increasing exemptions from vaccination was immediately apparent, and the official records showed a falling off in vaccinations in England from 97 percent of the total population in 1871 to less than 40 percent in 1921. This very effectually disposes of Garrison's assertion that "Jenner succeeded before his death in overcoming the popular aversion to vaccination."

Neither in Jenner's day nor in any subsequent period has popular aversion to vaccination been overcome, a fact which is attested by the plaint of medical health officers in America, that whenever and wherever the compulsory ban is lifted, the percentage of vaccinated persons to the whole population invariably declines. Some of these health officials have even confessed to resorting to "fright and pressure" for the purpose of "persuading the unvaccinated to accept the protection of vaccination." *

In every age and every country, thorough and wholesale vaccination of a people has been put over only by rigorous penal enforcement; and this fact alone, it would seem, is sufficient to discredit the practice. For if its efficacy in preventing or controlling smallpox—a disease dreaded by most people—had ever been demonstrated in all the 139 years since Jenner introduced it into England, it would not now be necessary to resort to compulsion to have it accepted. People would gladly avail themselves of such a "safe and easy" escape from a loathsome disease. This seems fairly axiomatic.

The crucial question in the vaccination equation, of course, is: Does vaccination protect the vaccinated from smallpox? If it does, without inflicting injury in other directions or entailing other and maybe worse diseases, then it is manifestly not only a duty but a privilege to submit oneself to so benign an operation. The outbreaks of smallpox in all the well-vaccinated European countries in the last half of the 19th Century, and especially the disastrous epidemics of 1871-73, attended with such frightful mortality in the two most thoroughly vaccinated States—England and Prussia would, it seems, forever settle the question in the negative for vaccination as a prophylactic against smallpox. Nor was there lacking specific, recorded evidence of the failure of vaccination to ward off smallpox in the earlier period of experimenting with it.

* Dr. John P. Kohler, City Health Commissioner for Milwaukee, in Wis. State Medical Journal, Dec. 1925. Dr. George William Winterburn, editor of the American Homeopathist and Lecturer on Clinical Medicine at the Manhattan Hospital, in his work on The Value of Vaccination; a Non-Partisan Review of Its History and Results, says (pp. 68-69) that even the "Royal Jennerian Society" in its second report in 1806, "admitted having seen a few cases of smallpox in persons who had passed through the cowpox in the usual way." He says further:

"In the same year the Royal College of Surgeons issued a circular letter to 1,100 of its members asking their experience with vaccination. They received 426 answers, with the information of 56 cases of smallpox in the vaccinated, *66* cases of eruptions, and 24 bad arms."

Winterburn quotes the London *Medical Observer*, in Vol. VI, 1810, which published particulars of 535 cases of smallpox after vaccination—the operation having been performed in some of them by Jenner himself—including their names and the authorities reporting them; and similar details of 97 fatal cases of smallpox in the vaccinated, with 150 cases of injury arising from vaccination, among whom were 10 medical men—with their addresses—including two professors of anatomy, who had suffered from the operation in their own families.

Winterburn cites further instances of the failure of vaccination to protect in the early period, in "a severe epidemic in Marseilles when 2,000 vaccinated persons were stricken with smallpox; and the epidemic of 1831 in Württemberg when 995 'protected' ones succumbed to the prevailing malady." These instances are given on the authority of the English and German health officials, Marson and Heim. Winterburn also gives the report of a French Army surgeon named Ducharme, of an outbreak of smallpox in his regiment a few months after it had been re-vaccinated, and when hygienic conditions as to space, ventilation and food were excellent, who recites the remarkable fact that in another regiment—"lodged in precisely similar barracks, situated in the same court, *but on whom no vaccinations had yet been performed*, not a single case of smallpox occurred"!

Although these earlier observations were known and recorded by reputable authorities, no thorough and critical investigation of the history of vaccination was undertaken until the wide-spread epidemic of 1871-73 caused some of the most devoted adherents of the prevention theory to pause and consider. Winterburn quotes the New York City Health Department as saying in its 1871 Report:

This extraordinary prevalence of smallpox over various parts of the globe, especially in countries where vaccination has long been efficiently practiced; its occurrence in its most fatal form in persons who gave evidence of having been well vaccinated; and the remarkable susceptibility of people of all ages to revaccination—are new facts in the history of this pestilence which must lead to a re-investigation of the whole subject of vaccination and of its claims as a protecting agent.

Incidentally it may be remarked that this New York City Health Report of 60 years ago is in marked contrast with the present policy of that city's Health Department, which is today one of the most insistent and powerful advocates of compulsory vaccination.

Curiously enough, pro-vaccinist statisticians invariably cite the example of the German countries to bolster up their contention, and certain well-worn figures *in re* smallpox immunity of the Prussian Army in the Franco-Prussian War have been repeatedly seized upon as the sheet-anchor of provaccinist discussion—and have as repeatedly been shown to be false. Thus Garrison in his *History* (pp. 376-77) relates: "Vaccination statistics of the Franco-Prussian War—1870-71—show the unvaccinated French Army to have lost over 20,000 men from smallpox, while the Germans who had been re-vaccinated within two years lost only 297."

Place over against this statement a news item carried in the *London Morning Advertiser* of Nov. 24, 1870, as follows: "The smallpox is making still greater havoc in the ranks of the Prussian Army which is said to have 30,000 smallpox patients in its hospitals." *

Place against it also Creighton's mortality figures for Prussia in the 1871 epidemic—69,839 deaths—together with the statement he quotes from Adolph Vogt, Chief Statistician at Berne University, that "the deathrate from smallpox in the German Army, where re-vaccination is the inexorable rule, was 60 percent higher than among the civilian population of the same age . . . The Bavarian contingent, which was revaccinated without exception, had 5 times the deathrate of civilians for whom re-vaccination was not obligatory."

Vogt's findings are confirmed by the German statistician, G. F. Kolb, Member Extraordinary of the Royal Statistical Commission of Bavaria, quoted by Winter-burn, as saying: "In Bavaria where no one for many years escaped vaccination, there were in the epidemic of 1871 30,742 cases of smallpox, of whom 29,429 had been vaccinated as shown by records in the State Department."

As to the "unvaccinated French Army" referred to by Garrison, Winterburn quotes Dr. Bayard of Paris as authority for the statement that "every French soldier on entering a regiment is re-vaccinated. There are no exceptions to this." Yet in the Franco-Prussian War there were 23,469 cases of smallpox in the French Army—all of them vaccinated, and the larger part re-vaccinated. Still the "Franco-Prussian Army immunity" plea persists in the pro-vaccinist repertory, and every once in awhile we get it over the radio, now that the profession which proclaims itself too proud to advertise, is condescending to use the air as a medium for enlightening the public.

* Winterburn in Non-Partisan Review.

When confronted by indisputable evidence of the failure of vaccination to "immunize"—such as the above cited official reports—the usual alibi offered by its defenders is that "the vaccination was not properly performed"; and that it is only to "efficient, successful vaccination" that immunity is promised. But the trouble seems to be in determining when the operation is "efficient"! One who should be able to speak authoritatively on the subject, Dr. Sydney Monckton Copeman—the reputed inventor of glycerinated virus—is quoted in the 11th edition of the Encyclopedia Britannica as saying:

It is somewhat unfortunate that *there exists no* official definition of what constitutes a successful vaccination, and it is open to any practitioner to use his own judgment in awarding certificates.

The Citizens' Medical Reference Bureau of New York City is authority for the statement, that American health officers are instructed by those higher up when reporting communicable diseases, to be guided in their findings "by the history of the case and *the appearance of the scar. If the patient has been recently vaccinated and carries a good scar, the presumption is against a diagnosis of smallpox,* and the malady must be given another name"!

From which it appears the incidence of a disease may be anything the diagnosing physician chooses to make it, and this probably explains the large increases in measles and chickenpox in modern times, and the virulent character of these hitherto mild diseases.

In general, the apostles and promoters of the calf-pus voodoo prefer to side-step all the damaging evidence and incriminating statistics piled up against their favorite "immunizer," and to rest their case almost entirely on a bald attempt to "steal from civilization" the credit which belongs to it for such freedom from smallpox as we enjoy in the present. Smallpox epidemics may have ravaged the countries in the 19th Century in spite of vaccination, they admit; but it was nothing by comparison with the smallpox scourges of the 17th and 18th centuries before mankind received the mitigating benefaction of Jenner's discovery.

Hence we find all the medical historians strangely silent about the disastrous smallpox epidemic of 1871 in Europe and America, with not even the barest allusion to the British Royal Commission on Vaccination, its findings and recommendations. They find it more to their purpose to give exaggerated accounts of smallpox mortality in pre-vaccination times, and then by contrast with its abatement in this sanitary age, they score an easy triumph for their calf-pus prophylactic in the minds of people who do not read history, but who can't avoid the vaccination propaganda which screams at them from bill-board and printed page.

Two outstanding examples of reckless exaggeration of pre-vaccination smallpox will suffice to illustrate this point: A few years ago, Dr. Charles Mayo, of Rochester, was quoted in the press as saying, "In the 18th Century before vaccination was discovered, 100 million persons died of smallpox in Europe." More recently (1930), Prof. Howard Haggard scales this down a bit by saying on page 221 of his *Devils, Drugs and Doctors:* "Queen Mary II of England died of smallpox in 1694. In the century following her death 60 million persons in Europe died of smallpox."

When men of such prominence in the medical world as the above quoted authorities put out statements of this character, the average citizen will naturally think they must know what they are talking about. But if Mr. Average Citizen will respect his own intelligence far enough to do a little arithmetic on some population figures to be found in Mulhall's *Dictionary of Statistics*—a standard work—he can very quickly demonstrate to his own satisfaction the gross exaggeration and utter absurdity of the medically sponsored smallpox statistics.

According to Mulhall, the total population of Europe in 1762 was 130,000,000; in 1778 it was 150,-000,000; and in 1800-the close of the 18th Century-it was 175,000,000, or only 75 millions more than the number who perished from smallpox in the 18th Century according to Dr. Mayo's mortality returns for that period! Now the mortality rate for smallpox in the 18th Century—as fixed by the Report of the Royal Commission, and confirmed by Dr. Charles Creighton in his Britannica article—was 18.8 percent of those affected with the disease. Vital statistics of that period were more loosely kept even than at present, the chief records being the old "Bills of Mortality" collected by Jurin and others; but such as they were, and upon the best information obtainable, 18.8 percent was the established deathrate from smallpox in prevaccination times. Creighton claims that figures taken from the records of English and American hospitals-mostly since 1870—prove that the mortality is not materially less than that now; the deathrate as given by those hospital reports being 18.5 per cent, as against 18.8 percent in the 18th Century.

Now then, taking this as the established rate, and the "60,000,000 deaths" quoted by Haggard, and working it out by the percentage rule, it would require 319,148,936 cases of smallpox in Europe to produce 60 million deaths; *and that would be 144,148,936 more cases of smallpox than there were people living in Europe at the close of the 18th Century* according to figures furnished by Mulhall's standard work on statistics! Apparently these high-placed pro-vaccinist statisticians do not bother to consult such hum-drum authorities as official records, and they gamble on the general public's ignorance of 18th Century conditions being equal to their own—a pretty safe bet in most cases.

But here are some smallpox and vaccination statistics which strike nearer home, and concerning which none need plead ignorance, since the official records are open to all: In the Philippine Islands, where since American occupation in 1903 compulsory vaccination had gone the limit, there began in 1918 an epidemic of smallpox which lasted three years and registered 163,044 cases with 71,170 deaths, according to the official Reports of the Philippine Public Health Service. In Manila and the surrounding province of Rizal—where vaccination and re-vaccination had been most thorough—the mortality was given at the unprecedented rate of 67 percent. The Reports showed further that in the 10-year period from 1911 to 1920 inclusive, 24,436,889 official vaccinations were inflicted upon "Our Little Brown Brothers"—numbering 10 millions approximately—and that in that period 75,339 of them died of smallpox.

These P. I. Health Reports were sent to America, but the U. S. Public Health Bureau very discreetly refrained from making them public until the *Masonic Observer* (Minneapolis), and the *Citizens' Medical Reference Bureau* (New York), which also received these Philippine Reports, called attention to them. Then the U. S. Health officials came forward with the same old red herring across the trail, with Dr. Victor Heiser (Philippine Health chief) supplying the prompting from the wings.

Bad as things were in the Philippines—for provaccinists—Dr. Heiser assured them it had been much worse before the coming of the Americans with their zealous methods of vaccinating. Prior to that, said Dr. Heiser, "it was estimated that 40,000 Filipinos died of smallpox every year"! Since the P. I. Reports stated that no records had survived the fires and disturbances incident to the American entrance, Dr. Heiser had presumably supplied this 40,000 estimate himself. He had also unwarily supplied some other figures on the Philippine situation which put him in the same bad hole as those 18th Century "estimates" spread for his distinguished colleagues—Messrs. Mayo and Haggard.

Writing in *Hygeia* (June, 1923), Dr. Heiser roughly estimated the Philippine population at about 7,000,-000 in 1900, and he says the customary smallpox death rate among them was "about 5 percent." At this rate it would require 800,000 cases to produce 40,000 deaths. Each year then there would be 800,000 either "immunized" or dead,—according to the theory that smallpox immunizes against smallpox—and in less than ten years—as a very simple arithmetical calculation—the only ones susceptible to the disease would be the new-born infants, and the Filipinos must either have wiped out smallpox or themselves some time before the Americans came to bring them the blessing of vaccination.

Just how great a benediction this proved to the inhabitants of the Islands, is shown in the steady march of smallpox after American occupation, through two epidemics each one worse than the preceding—to its climax in the 1918-20 catastrophe. Further emphasis of this Philippines tale of vaccination and smallpox is supplied by comparison with the figures for England and Wales in that same 1911-1920 decade, where vaccinations under the optional law had dropped to 3,645,311, as against the 24,436,889 vaccinations in the Philippines for the same period.

As the population of England and Wales is more than four times that of the Philippines, the number of vaccinations per 100 persons in the Islands was over twenty-six times that in England. Yet the total of smallpox fatalities in England and Wales for the whole of that 1911-1920 was only 140, or 14 for each year, as against a yearly average of 7,533 fatalities in the Philippines. Even "the way-faring man" needn't make any mistake in studying these figures.

CHAPTER VI

Who's Who Among Anti-Vaccinists

To very many persons—probably the majority—it is vastly more important to know *who* is saying a thing, than *what* is being said. With a keen appreciation of this human trait, the apostles and defenders of "the cult of Jenner" very astutely seek to divert attention from the repulsiveness of the calf-pus ritual, first by false claims as to what it has achieved in banishing smallpox, and second by belittling the character and personality of anti-vaccinists.

These are represented in medical literature as either grossly ignorant or feeble-minded, or failing to make these flattering categories, opponents of vaccination may be in rare instances "brilliant but erratic," and in general fall into the class of "eccentrics" and extremists. Among modern "intelligentsia" of the orthodox medical faith, there is a subtle attempt to discredit anti-vaccinists by yoking them up with religious fanatics. Thus both Hoffman and Haggard represent the clergy of Jenner's time as descanting from the pulpit in the following fashion:

"Smallpox is a visitation from God, but cow-pox is produced by presumptuous men. The former is what Heaven ordained, the latter is a daring and profane violation of our holy religion."

Like much of the medical testimony, no name is attached to this quotation, and the impression sought to be conveyed is that it marks the level of anti-vaccination intelligence. Even at that, in branding cowpox inoculation "a profane violation" of the laws of Nature which are supposed to be "the laws of God," it may well be questioned whether these 19th Century pulpiteers did not evince more scientific insight than some of their more pretentious critics.

The author of *Devils, Drugs and Doctors,* however, recounts with apparent satisfaction the endorsement of inoculation by one of the early New England divines—the Reverend Cotton Mather, who is given the credit for having introduced it to the Massachusetts Colonists. The Reverend Mr. Mather also believed in witchcraft—as some persons will recall—and what is more, *he believed in burning and drowning the witches!* Which clearly proves him possessed of the mental and spiritual equipment for standing shoulder-to-shoulder with those official vaccinators under the compulsory law in England, *who fined and imprisoned parents continuously for fourteen years*—until an *everincreasing number of anti-vaccinists* forced the British Parliament to repeal the law!

As to the strength and character of this opposition in England, we need only cite the thousands who accepted fines, imprisonment and exile rather than submit to compulsory vaccination; the bills introduced by two Home Secretaries, Mr. Gladstone in 1880 and Mr. Asquith in 1893 for softening its requirements; the open defiance of the law in Leicester, and the popular revolt reflected in the election of 1885 which returned 49 members to Parliament pledged to vote against compulsion and 6 pledged to vote for a "conscience clause"; the appointment of the Royal Commission (1889-1896), and the triumph of the anti-vaccinist forces in the 1906 General Election which forced the British Parliament to give heed to the Commission's findings and recommendations in the enactment of a law in 1907 which virtually ended the persecutions "for conscience sake" in re the vaccination question in England.

Further light on the nature of the opposition to vaccination, and the character of those offering it in England, is afforded by the witnesses who appeared before the Royal Commission to testify against the practice on humane and scientific grounds. First comes Dr. Charles Creighton, professor of Microscopic Anatomy at Cambridge, author of Epidemics of Great Britain, and of Cowpox and Vaccinal Syphilis, to tell the judges that while in his opinion the syphilis observed to follow vaccination in some cases was not *identical* with the venereal disease—meaning perhaps that they couldn't find the same specific germ in both-yet "the effects were the same." And the "effects" of any disease are all that concerns most people. Creighton testified to outbreaks of syphilis, jaundice, erysipelas and vaccinal ulcers, as sequelae of vaccination, and said "in so far as casual experience can prove anything, these have been proven."

No one stood higher in medical and epidemiological circles than Charles Creighton at the time he gave this testimony before the Royal Commission, and when he pointed out to them the record of the sudden increase in deaths from syphilis by one-half among infants under one year in the first year of compulsory vaccination (1854), and how the increase had been going on steadily ever since, the pro-vaccinist Commissioners were silenced though *not convinced!* He knocked the props from under the "protective" theory about vaccination by citing the records of the smallpox hospitals, which showed nearly 75 per cent of the cases admitted *had been vaccinated*—the majority showing "good scars." As a final clincher to the relative susceptibility of the vaccinated and unvaccinated, Creighton brought forward the fact that at Cologne in 1870 the first unvaccinated person to be attacked by smallpox was the 174th one in the order of incidence; while in one other German city that same year, 224 vaccinated ones succumbed to the disease before the first unvaccinated person was reached.

Next in importance, from the medical view-point, among the witnesses for the opposition before the Royal Commission, was Edgar M. Crookshank, professor of Bacteriology and Comparative Pathology in King's College, London. Crookshank had made a prolonged study of the history and pathology of vaccination, and had published a book under that title the year the Commission started its investigation. He acknowledged Creighton as the master in this field of research, and says his attention had been di- . rected to Creighton's work by Sir James Paget. Crookshank's testimony before the Royal Commission on Vaccination may be compressed into two memorable sentences:

We have no known test by which we can possibly distinguish between lymph which is harmless, and one which might be harmful to the extent of communicating syphilis.

And,

Inoculation of cowpox does not afford the least protection from the analogous disease in man—syphilis; nor do cowpox, horsepox, swine-pox, cattle-plague nor any other radically dissimilar disease, exercise any protective power against human smallpox.

Sir James Paget is one of the bright particular stars in the medical galaxy, whose portrait is seen on the walls of most medical academies; but medical historians of the Haggard-Hoffman pattern—special pleaders for "preventive medicine"—are discreetly silent about Paget and his antivaccinist leanings. They are more than discreetly silent about Creighton and Crookshank, whose very names have been erased from works of medical biography and even from the encyclopaedias under the control—as so many things are—of the powerful Medical Trust.

After the publication of Creighton's article on Vaccination in the 9th edition of the Encyclopaedia Britannica, and of his book (1891) entitled *Jenner and Vaccination; a Queer Chapter in Medical History*, this scholarly medical liberal and witness for the truth about vaccination suffered the usual professional ostracism meted out to the truth-tellers of orthodox medicine. He was ousted from his professorship at Cambridge, hounded and jeered at. by his medical brethren until his death, in poverty and obscurity, a few years ago. In the edition of the Britannica following the Ninth, Creighton's article was dropped, and one was substituted which was written by Dr. S. Monckton Copeman—the reputed inventor of glycerinated virus—who gave a roseate account of the fruits of vaccination—of course. From the many prominent medical witnesses against vaccination in England within the past 50 years, we select a few outstanding ones for the earlier and later periods. Dr. Edward Ballard, one of her Majesty's Vaccine Inspectors in 1868, testified: "It is in very truth implanting the seeds of disease." Dr. Charles T. Pearce, for many years Registrar-General of England, called it "the infliction of a disease transferred from the brute." Dr. Edward Haughton pronounced vaccination "quackery by Act of Parliament," and Dr. Walter Hadwen calls it "the most gigantic piece of quackery ever exploited among civilized people."

Dr. John Stewart, (in Vaccination Inquirer, Vol. IX, 123), said: "I consider vaccination one of the greatest humbugs ever foisted on human beings." Dr. W. J. C. Ward, M.R.C.S. at Harrowgate, among many others confesses to a change of heart on the subject. He says: "I believed that vaccination prevented smallpox. I believed that if it did not absolutely prevent in every case, it modified the disease, and I believed that re-vaccination if only frequent enough, gave absolute immunity. Experience has driven all that out of my head. I have seen vaccinated persons get smallpox, and persons who had been re-vaccinated get smallpox, and I have seen those who had had smallpox get it a second time and die of it."

And the venerable Archdeacon Colley laid this at the feet of the Royal Commission: "Vaccination mingles in a hideous communion of blood all the disease taints of the community. Every hereditary sewer is made to open up in the nursery. It pours every disease and sifts every lust and ventilates every uncleanness through the fragile bodies of our little children. How can we keep silent in the presence of this terrible evil forced upon us by law?"

Sir William Collins, a member of the Commission and who prepared the Minority Report of the dissenting members, told them: "If I had the desire to describe one-third of the victims I have seen ruined by vaccination, the blood would stand still in your veins."

The foregoing quotations are just a fraction of some antivaccinist testimony compiled by the Reverend James Wallace of Campsie, Scotland, who should be good authority for the Presbyterians. Nor are his witnesses for the opposition drawn entirely from England and Scotland. He quotes Professor Adolph Vogt, who held the chair of Vital Statistics and Hygiene in Berne University for 17 years, as saying:

After collecting the particulars of 400,000 cases of smallpox, I am compelled to admit that my belief in vaccination is absolutely destroyed.

He also quotes Dr. Carlo Ruata, Professor of Materia Medica at the University of Perugia, Italy, as authority for the following statistics from Japan:

Between 1886 and 1892, 25,474,370 vaccinations, re-vaccinations, and re-re-vaccinations took place in Japan, which means that about two thirds of the entire Japanese population, already well-vaccinated by the law of 1872, were re-vaccinated. And during that 7-year period—1886-1892—of thorough re-vaccination in that country, there were reported 156,175 cases of smallpox with 38,979 deaths.

The gravamen of this opposition testimony, however, was not so much the proven failure of vaccination as a prophylactic, as its active stimulation of other and worse diseases than smallpox. This is the conclusion drawn from a wide survey of anti-vaccination literature, the very titles in some instances indicating the ground of opposition. Examples of this are Vaccination a Delusion; Its Penal Enforcement a Crime, by Alfred Russel Wallace, the English scientist who shares with Darwin the co-discovery of the principle of Evolution; The Horrors of Vaccination, by Charles M. Higgins, publicist, philanthropist, and millionaire manufacturer of Brooklyn, N. Y.; and *The Crime of* Vaccination, by Dr. Tenison Deane of San Francisco, police surgeon, army surgeon, and one-time Assistant Professor of Surgery at the San Francisco Polyclinic. And these are only a few of the many eminent and reliable witnesses to the inherent dangers in smallpox vaccination.

Very significant and interesting in this connection is the statement of Prof. Haggard (page 220 of *Devils, Drugs and Doctors)*, that the main ground of active opposition to vaccination is "the personal inconvenience involved in the *individual participation"*!

If one tithe of the suffering and death entailed by vaccination as reported by these high authorities be true, one readily understands the objection to "personal participation" in the gruesome ceremony. With a singular ignorance—or disregard—of historic fact, the author of *Devils, Drugs and Doctors* continues (p. 231):

The Society of Anti-vaccinationists was founded in the year that Jenner published his work, and still continues actively. Its recruits come from that large class of persons who mistake fanatical opposition for intelligent criticism. Many of its members continue to confuse vaccination and inoculation. They still believe that vaccine virus is transmitted from person to person as it was in Jenner's early experiment.

Now let us check up a bit on the historic accuracy of this learned Yale professor. Jenner's "published work"—by which we presume is meant his famous *Inquiry*—was issued in 1798. The first publications in opposition—of which we have record—were two pamphlets, one called *Our Medical Liberties* by Mr. John Gibbs in 1854, and the other, *The Evils* of Vaccination, by his cousin, G. S. Gibbs, in 1856.

Neither of these pamphlets appeared until the first compulsory vaccination law went into effect (1854) and after Jenner had been dead for more than thirty years. It was 10 more years—during which ample opportunity was afforded to observe the effects of compulsory vaccination—before the Anti-Compulsory Vaccination League was organized in London in 1866. This society, enlarged and re-organized in 1880, was finally merged into the British National Anti-Vaccination League (Feb'y 1896) which name it now bears. Its headquarters are at 25 Denison House, 296 Vauxhall Bridge Road, London S.W.I. Its official organ is *The Vaccination Inquirer*, a magazine of authentic information, and the personnel of its directors and Executive Council comprises some of the most famous names in England—titled personages, Members of Parliament, engineers, inventors, authors, clergymen, jurists, and even medical men who write after their names the initials which signify "Member of the Royal College of Physicians and Surgeons."

The objects of this British National Anti-Vaccination League as advertised in its literature, are: (1) The entire repeal of the Vaccination Acts. (2) Repeal of all regulations for vaccination in the Army, Navy, Civil Service, Municipal and Educational Services. (3) Maintenance of the legitimate freedom of the public in matters of medical treatment.

That the reader may know just who are these British anti-vaccinists sponsoring the above enumerated objectives, and judge for himself whether they belong in Dr. Haggard's category of "the fanatical and unintelligent"—we herewith reproduce the list of the official staff of The National Anti-Vaccination League, issued from its headquarters in 1929:

> President-Lady Isabel Margesson Treasurer—J. C. Swinburne-Hanham Esq. J.P. Secretary—Miss L. Loat Vice-Presidents—The Countess of Donegall The Earl of Dysart The Duchess of Hamilton The Lady Maud Warrender The Viscount Harberton Lady Dorothy Lee Warner B. P. Allinson M.R.C.S., L.R.C.P. Major R. F. E. Austin M.R.C.S. M. Beddow Bayley M.R.C.S., L.R.C.P. W. J. Ellis Morgan M.R.C.S. Mrs. Alice Kerr M.D., L.C.R.P. C. H. Betts, LL.D. H. Fergie Woods M.D., M.R.C.S., L.R.C.P. Herbert Snow M.D. and H. Becker M.D. T. G. Vawdrey M.R.C.S., L.R.C.P. J. T. Biggs J.P. and John H. Bonner H. G. Chancellor and H. B. Knight Chorley W. P. Ellmore and H. G. Grimley Joseph Harrison and George Newman Rev. Lionel Lewis M.A. and John Brown Arnold Lupton M.P., J. E. Morgan J.P. Mrs. F. Pennington, Wm. Stebbings C. Stirling Saunder L.R.C.P. H. V. Knaggs M.R.C., L.R.C.P.

The Executive Council of this Anti-Vaccination League includes the names of 27 persons prominent in English professional and official circles, and its membership comprises many more—besides its officials—of like standing. It seems incredible that Dr. Haggard would charge persons of this caliber with being unable to discriminate between vaccination as now practiced, and the arm-to-arm inoculation of Lady Montagu's day, and which has been punishable by law in England since 1840.

Does Dr. Haggard really think to persuade us that men like Alfred Russel Wallace, Herbert Spencer, Charles Creighton, Edgar M. Crookshank, and the British Prime Ministers Gladstone and Asquith, didn't know English law, and that their opposition to vaccination was based on ignorance of its history and pathology? How does Dr. Haggard explain the action of the British Parliament in repealing the compulsory feature of the Vaccination Act upon the recommendation of a Royal Commission, after seven years' investigation of the practical workings of vaccination during one hundred years of its history? And why does he make no mention of this reverse vaccination legislation in England, nor of the work of that Royal Commission which—much against its pro-vaccinist inclinations—recommended it, in his *Devils, Drugs and Doctors?*

It looks a bit as if this Yale Professor of Medicine were an outstanding example of John Stuart Mill's famous saying that "He who knows only his own side of a question, knows very little of *that.*" If he would but study some of the evidence in the literature put out by Anti-Vaccination authorities in England and America, he might be saved from making his own work ridiculous by including such palpable errors as those above cited. Let him ponder, for example, these statements issued by the British National Anti-Vaccination League in 1929, and which are backed by all the reputable and responsible names it carries:

Infant vaccination was made compulsory in England and Wales in 1853 by the Act of a Parliament misled by false statements.

As soon as compulsion began, opposition began. Vaccination caused terrible illness, and as calculated from the Registrar-General's figures, it killed 14,000 infants a year and probably permanently injured 140,000 a year.

Parents were fined for refusing vaccination of their children, and imprisoned if the fines were not paid. Anti-vaccination societies were formed all over the country, and quite independently of the London Society and the National Anti-Vaccination League, they raised many thousands of pounds to help their suffering friends.

The contest has now gone on for 76 years (1929), and antivaccinists have gained the following points:—

(1) Repeated penalties for the same child are abolished. (2) The doctor must vaccinate at the parents' house if so desired. (3) Exemption from prosecution if the father signs a statement of conscientious objection in the presence of a Magistrate or Commissioner of Oaths, and delivers it to the Vaccination Officer before the infant is four months old. (4) Territorials are not obliged to be vaccinated. (5) Soldiers during the War were not obliged to be vaccinated, but now new recruits for the Army are required to be vaccinated. (6) The Board of Education does not require teachers to be vaccinated. (7) In the Post Office and Civil Service, conscientious objectors need not be vaccinated. (8) As a result of the 'Conscience Clause' (Vaccination Act 1907) less than 45 percent of children annually born are now vaccinated, and there are now (1929) in England and Wales about 6 million unvaccinated children under 15 years of age.

That an organized, systematized crusade for an idea, extending over three-quarters of a century, and being able to wrest from the strongly entrenched forces of Official Medicine such concessions as above enumerated, could be the work of fanatical ignoramuses—may commend itself as a rational assumption to a Yale Doctor of Medicine; but the average common-sense layman will reject it.

But perhaps these English voices are too far away to impress our medical patriots in America, who may be imbued with the spirit of the Neo-American movement to exclude foreign propaganda of whatever kind. So let us turn to the list of American anti-vaccinists—in the hope of arresting the attention of Messrs. Haggard, Hoffman, Dana et al.

We note first among medical men opposed to vaccination, Professor Robert A. Gunn of New York, already quoted in a previous chapter: Dr. Wm. Hycheman of New York, who after forty years' practice registered his protest against the calf-pus voodoo-ism in the words:

I have recently dissected the bodies of a dozen children whose deaths were caused by vaccination, and no smallpox—however black—could have left more hideous traces of malignant sores, foul sloughing, hearts empty or congested, than did some of these examples of State physic.

Dr. J. W. Hodge of Niagara Falls, N. Y., in the *Medical Advance*, July 1909, said:

The human race while groaning under the previous burden of its own diseases, is having added to its stock the diseases of the brute creation . . . Corpse lymph from human cadavers, and from diseased calves is making millionaires of vaccine manufacturers and corpses of our children.

Dr. Charles E. Page of Boston, pronounced vaccination "the supreme folly of the medical profession." The attitude of another Bostonian, Dr. Chas. F. Nichols, is indicated in the following statement:

In India, according to an official return presented to the British House of Commons by Viscount Morley, there have been during 30 years—1877 to 1906— 3,344,325 deaths from smallpox of persons presumably vaccinated, for vaccination is universally enforced in India. . . . In each and every community where vaccination ceases and strict sanitation is substituted, smallpox disappears. There are no exceptions to this.

Dr. Walter M. James of Philadelphia, says:

Vaccination does not stay the spread of smallpox nor even modify it in those who get it after vaccination. It does introduce into the system—and therefore contributes to the spread of—tuberculosis, cancer and even leprosy. It tends to make more virulent epidemics of smallpox and to make them more extensive. It does just what inoculation did—causes the spread of disease.

Dr. Haggard will please take notice that here is an American opponent of vaccination—and a medical man too who does not "confuse vaccination with the inoculation practiced in Jenner's time." Dr. Wm. Brady of Chicago, though an advocate of vaccination, gives some very pertinent anti-vaccinist testimony in the following significant statement:

No one knows what Vaccinia is, whether a 'take' gives the subject cowpox or a modified form of smallpox. No one knows whether cowpox is a distinct disease, or smallpox modified by passing thru the animal. *Nobody has discovered the germ or organism which we believe causes smallpox. No one can be absolutely certain that the virus employed for vaccination will not convey to the vaccinated some accidental infection as well as vaccinia.*

Dr. Alexander Wilder, editor of the *N. Y. Medical Times*, professor of Physiology in the U. S. Medical College of New York, and author of *Wilder's History of Medicine*, contributes this to the anti-vaccination symposium of medical opinion:

Vaccination is the infusion of a contaminating element into the system, and after such contamination you can never be sure of regaining the former purity of the body. Thus tainted it is liable to a host of ailment. Consumption follows in the wake of vaccination as certainly as effect follows cause.

Dr. George William Winterburn, in his *Non-Partisan Review,* thinks "the immediate danger from vaccination has been greatly exaggerated"; although he admits that he himself had compiled "a list of upwards of a thousand who had suffered permanent injury or death from the operation." But probably to very many people, more impressive even than these medical witnesses against vaccination, will be the names of certain prominent lay anti-vaccinists, whose opposition to this particular form of medical voodooism may not be so generally known. Bismarck in Germany; Voltaire and Victor Hugo in France; Gladstone, John Bright, Alfred Russel Wallace, Herbert Spencer—and more recently Premier Asquith, G. K. Chesterton and George Bernard Shaw in England, were—and are—avowed opponents of the cowpox guild.

In America, that grand triumvirate in the world of industry and applied science—Henry Ford, Luther Burbank and Thos. A. Edison, were known among their friends as antivaccinists. In the world of letters, Mark Twain, Elbert Hubbard, Robert Ingersoll and Wm. Dean Howells gave frequent expression to their anti-vaccination views by the spoken and written word. In the business world, the late John Pitcairn of Philadelphia, banker, railroad official and manufacturer on a large scale in various fields, was the first president of the American Anti-Vaccination League, organized in Philadelphia in 1908; and dying in 1916 he bequeathed his anti-vaccinist faith to his two sons, Raymond and Harold Pitcairn, Philadelphia bankers, who are now directing spirits—together with Chas. T. Root, head of a large publishing house, and Wm. D. Baldwin, president of the Otis Elevator Co.—in the *Citizens Medical Reference Bureau*, in New York City.

This is an organization of business men, formed for the purpose of combating the evils of compulsory vaccination and other forms of State-sponsored medicine, and to combat them with ammunition taken from Regular Medicine's own arsenals—facts and opinions derived from medical records and authorities. It keeps tab on medical literature, and issues bulletins exposing the falsities of medical propaganda and calling the turn on Public Health official crookedness. If anybody is libeled by statements issuing from this Reference Bureau, these gentlemen who are back of it are very financially responsible.

Another prominent anti-vaccinist in American business life was the late Chas. M. Higgins of Brooklyn, N. Y., who was also actively associated with many civic and philanthropic organizations. Mr. Higgins spent \$25,000 in gathering data from England and other countries, much of which he incorporated into his book, *The Horrors of Vaccination Exposed.* For several years Mr. Higgins carried a paid advertisement in one of the big New York dailies calling on the N. Y. State and City Health Departments to open their books, and he would undertake to prove from their own records—juggled as many of their reports were—that "there had been more deaths from vaccination than from smallpox in New York every year for the past 15 years." His challenge was never accepted.

A striking confirmation of Mr. Higgins' contention on this point was furnished by a survey made of vaccination casualties in the public schools of the rural districts and smaller cities of New York in 1914. This survey was undertaken by Mr. Jas. A. Loyster, editor of a newspaper at Cazenovia, N. Y., who purposely left out of his field of investigation the larger cities, such as Greater New York, Albany, Buffalo, Syracuse, etc., because of the difficulty of obtaining reliable data from these metropolitan centers. Mr. Loyster's interest in the matter grew out of the death of his only son, a sturdy, healthy lad of 11, which occurred as a sequence of vaccination in 23 days from the time of the operation.

Despite this tragic happening, the father says—in the preamble to his report—that he purposely refrained from reading any anti-vaccination literature before beginning his survey of the schools, in order that he might keep a free open mind for facts-and facts only. He had consented to the boy's vaccination, having been vaccinated himself in childhood and survived, and not even the boy's fate had wholly convinced him of the folly of vaccination. But he found as the result of his "painstaking inquiry"-and incorporated in his published Report—that there had been 27 deaths from vaccination, and twice as many cases of serious illness-followed in some instances by permanent disability—in this partial list of N.Y. school children in 1914, while in the whole State of New York for that year there had been but three deaths from smallpox! Not that the death certificates for these 27 victims of vaccination in the Loyster report named vaccination as the immediate cause of death. The guardians of the calf-pus ritual are much too wary for that. The assignable causes of death in these instances were variously distributed among the following diagnoses: infantile paralysis, spinal-meningitis, tetanus and diphtheria-although some of them read "following vaccination."

But since it was an undisputed fact that all of these children were in normal health until vaccinated and developed the aforesaid fatal maladies within from one to three weeks after vaccination, the Loyster report simply adds one more example of the "substitution theory of disease" taught by Creighton, and the changeful character of the disease-breeding hypodermic attested by other high medical authorities. Dr. Tennison Deane of San Francisco, in his *Crime of Vaccination*, tells a remarkable story illustrative of this truth.

Dr. Deane relates that he was summering in Northern California in the late 80's, near a wealthy ranchman who lived with his wife and seven children on a 10,000-acre ranch in a salubrious pine region, 15 miles from the nearest town and having no adjacent neighbors. With him on the ranch at that time was a negro foreman who also had a wife and five children. Until Dr. Deane appeared on the scene, none of these 16 persons—white nor black—had ever been vaccinated.

As a zealous young practitioner, very close to his medical school traditions, Dr. Deane quickly warned these ranchdwellers of their "unprotected" state and was able to persuade six of the sixteen—the farmer's wife and three children, the negro foreman and his 12-year-old son—to submit to the vaccinating operation. "A year later," writes Dr. Deane, "an epidemic of

sore throats broke out in this ranch colony *which developed into diphtheria in four of the vaccinated,* among them the farmer's wife, and one child died. The unvaccinated recovered rapidly from their sore throats, but the farmer's wife was paralyzed for a year and eleven years later died of cancer."

It seems that the San Francisco physician was so impressed by this unexpected turn of his well-intentioned vaccinating zeal, that he not only kept tab on the subsequent history of the two families on the northern ranch, but watched the connection between vaccination and other maladies occurring in his general practice. He learned that the other four persons whom he had vaccinated on the ranch all died either of tuberculosis or cancer within four to twentytwo years from the date of vaccination, while none of the unvaccinated in either family died within that period except the white farmer who, he says, "died of old age."

Dr. Deane relates that for many years after this early experience with vaccination on the Northern California ranch, when a patient came to him with any serious throat, bronchial or pulmonary trouble, he made a point of inquiring into his past history, and invariably he found a back-ground of calf-pus "immunization" against smallpox. Then when he felt he had sufficient data to warrant it, he published *The Crime of Vaccination* (in 1913), which brought down on him the wrath of his medical colleagues, and made his professional life in San Francisco so unhappy that he voluntarily withdrew from all medical assemblages and finally abandoned all medical practice except surgery.

A very significant pointer as to the strength of antivaccinist sentiment in America, is afforded by the vaccination laws of the various States of the Union. In only 9 of them, comprising 25 percent of the population, is vaccination enforced by law; in 6 others it is left to the discretion of local health authorities; whereas 28 States, comprising 60 percent of the people, have no vaccination requirement, and in four, compulsory vaccination is specifically forbidden.

It is worthy of note that the City Council of Chicago, the second city in size in the United States and the home of the American Medical Association, in January 1926 passed the following city ordinance:

The Board of Health shall pass no rule or regulation which will compel any person to submit to vaccination, or injection of any virus, or medication, against his will or without his consent; or in case of a minor or other person under disability the consent of his parent, guardian or conservator. And nothing in this ordinance contained, or in any other ordinance heretofore passed and in force in this city—shall be construed to authorize or empower any person or officer to so vaccinate, inject, or medicate, without such consent; or to authorize or empower the said board of health to adopt any rule or regulation requiring or authorizing any such vaccination, injection, or medication.

Ordinance Amending Sec. 1781 and Sec. 1783 of the Chicago Municipal Code of 1922. Jan'y 13, 1926.

It is worthy of note also, that the following year, the medical Health Commissioner for the City of Chicago, Herman N. Bundesen, M.D., wrote a letter to the editor of the Trenton, N. J., *Gazette, denying that Chicago had at any time passed an ordinance prohibiting compulsory vaccination against smallpox!* This letter is of date Feb'y 9, 1927, and a photostatic copy of it is on file and may be seen at the offices of the American Medical Liberty League in Chicago.

Equally illuminative of the intent to suppress authoritative and unimpeachable anti-vaccination testimony, was the striking out from Alfred Russel Wallace's *Wonderful Century*, its Eighteenth Chapter, called by the author "Vaccination a Delusion; Its Penal Enforcement a Crime," and the substitution twelve years after Wallace's death of a chapter of quite different import—extolling the "triumphs of modern surgery" and the benefits of "preventive medicine." Proof of this literary "grave-snatching" will be afforded any one who cares to compare the earlier and later editions of *The Wonderful Century*, which may be seen—if nowhere else in America—in the Congressional Library at Washington, D. C.

In view of the foregoing cited censorship of anti-vaccinist authorities and literature, it is small wonder that the average American—well-informed on other subjects—is sunk in abysmal ignorance of the history and pathology of vaccination. He accepts it unquestioningly on the *ipse dixit* of his family doctor, who in turn accepts it unquestioningly from his medical professor, unless he is more intelligent and better informed than his medical-school instructor, in which case he will side-step inquiries about the virtues of vaccination by simply affirming with an evasive shrug: "Oh, it is one of our traditions!" If the same effort had been put forth to suppress the facts of American history as has been made to suppress and distort the truth about vaccination and its well-attested fruits, the average High School pupil today would not know whether George Washington or Theodore Roosevelt had been our first president, and the battles of San Juan Hill and Bunker Hill would mingle in hopeless confusion in his mind.

As an outstanding example of this, take the suppression of the following official Report issued by the U. S. Bureau of Animal Industry in May 1909:

The recent (1908) outbreak of cattle plague or "Foot and Mouth Disease" in Michigan, New York, Pennsylvania and Maryland, started from calves used in the manufacture of smallpox vaccine virus thru a strain obtained from a foreign country, and which had evidently been contaminated with the virus of Foot and Mouth Disease. The main facts regarding the outbreak are, that the H. K. Mulford Company of Glen Olden, Pa., imported from Japan in 1902-3 a vaccine virus containing the Foot and Mouth infection; but that this was not discovered until Parke, Davis and Co. of Detroit—who had obtained some of it from the Mulford Co. in 1908—sent the calves which they used as vaccinifers back to the Detroit stock vards where they came in contact with shipments of cattle from other States as well as from Michigan. Some of these cattle were re-shipped to Danville and Watsontown, Pa., where the Foot and Mouth Disease first appeared, and later spread to the other States mentioned.

This Report was released for publication by the Bureau of Animal Industry on May 17, 1909, and appeared as a news item in a few metropolitan dailies in Washington, Chicago and elsewhere, but evoked no editorial discussion and widespread comment such as one might reasonably expect from a news item of such startling and momentous import. To the anti-vaccination zeal of a public-spirited citizen, Mr. Higgins, of Brooklyn, we are indebted for rescuing this official Report from oblivion. He has incorporated it into his book, *Horrors of Vaccination* (pp. 99-100), and says he obtained a copy of the Report from the Bureau at Washington, "where it may still be seen though it is now out of print."

Apparently it became "out of print" very shortly after its first issuance, as a number of persons who wrote to the Government for it were unable to obtain a copy. Yet it was based on the findings of Drs. Mohler and Rosenau, official investigators for the Bureau, and this was the Dr. Milton J. Rosenau who later became Professor of Preventive Medicine and Hygiene in Harvard Medical School, and wrote the book of that name before referred to in this volume. They explained the fact that the Mulford Company used the same virus for so long without transmitting this infection to outside cattle, by saying it was the practice in this firm "to kill the calves which they had used as vaccinifers"; whereas the Parke, Davis Company *"rented their calves and placed them again on the market shortly after the vaccine material was taken from them"!*

"Thus," said Drs. Mohler and Rosenau, "the disease spread from the vaccine stables of Parke, Davis & Co., but not from those of the Mulford Company, although it was the vaccine virus from the latter establishment that infected the former's cattle." But as Mr. Higgins very graphically points out in his book, the Mulford Company in using this virus on human beings and producing disease symptoms analogous to Foot and Mouth Disease in the animals, inflicted even greater suffering than among the herds, terrible as that was. The loss in the cattle epidemics could be estimated in dollars and cents—and it ran into hundreds of millions—but the loss in human life and misery was incalculable.

Senator Money of Mississippi, speaking in the U. S. Senate, February 25, 1909, on the Agricultural Appropriations Bill, was reported in the *Congressional Record* as saying *in re* the Hoof and Mouth plague:

This is an important question with respect to cattle, but it is very much more important to human beings in this country. . . . We now run the constant danger that has been manifested very unpleasantly in several localities, of vaccinating children and grown people with these imported vaccine points and communicating to them Foot and Mouth Disease which is as bad as smallpox."

Drs. Rosenau and Mohler who conducted the "Foot-and-Mouth-Disease investigation for the Government, and brought in a report which fastened the responsibility upon vaccine-virus, nevertheless attempted to save the practice of vaccination from disrepute with the following disingenuous statement:

No instance of the transmission of Foot and Mouth Disease to man thru vaccine virus has been recorded, and it is considered doubtful, in view of the tests made, if it is possible to reproduce the disease in him by the cutaneous inoculation commonly used in the process of vaccination.*

This medical voodoo propaganda seeps through to the public from the fertile fields of well-paid journalism, and from the snow-peaks of highbrow literary criticism. An example of the former is the dean of American newspaper columnists, who told the multi-million Hearst readers a few years ago, that "those who deny the value of scientific vaccination belong in the lower kindergarten grades"! Some one must have exercised unusual diligence in making the history of vaccination a closed book to Mr. Brisbane.

When the Scopes Trial at Dayton, Tennessee, 1925, focused the world's attention upon the narrowness of certain religious dogmatists, H. L. Mencken, easily chief among the scornful sitters-in-judgment on religionists of every variety while he swallows medical dogmas bait-hook-and-sinker took occasion to remark that these benighted Tennessee "fundamentalists" who preferred Moses to Darwin, were the same "homines boobientes" who reject and oppose "the scientific methods of orthodox medicine."

Yet strange as it may appear to this champion of "regular" medicine, it was these same trusting "boobientes" who wrote the anti-evolution law into the Tennessee statute books, who also wrote the compulsory vaccination law into them—or speaking more accurately, they permitted the Vaccine Industry and the Medical Trust to write it for them. The same order of faith that could accept without a tremor the rib story of Mother Eve, could quite logically accept the family doctor's dictum that calf-pus injected into a human blood-stream would frighten away smallpox.

But there were exceptions to this dual gullibility—even in Tennessee. While the Scopes trial was in progress—or shortly before—a refined, intelligent Tennessee mother was permitted to plead her own cause before Judge Malcolm R. Patterson, a former governor of Tennessee. She had been arrested with her husband for violating the Tennessee compulsory education law, after their children had been sent home repeatedly from school because of their parents' refusal to comply with the compulsory vaccination law.

After listening to Mrs. Allen's reasons for opposing vaccination, this wise, liberal Tennessee jurist said: "I quite agree with your views, my good woman. I made up my own mind about that vaccination business some time ago, and if I had my way, I would not permit it. But I am compelled to pass on this case according to the law, etc." Thus it appears, while one of Tennessee's "blue laws" sets Mr. Mencken quite * Official Report of Bureau of Animal Industry, 1909. apart from the despised "fundamentalists" and "boobientes," another—and by far the worse one—brings him into closest intellectual and spiritual affiliation with these objects of his scorn. Probably one of the few things left for him to learn is that perfect consistency in this matter can only be maintained, either by the acceptance or rejection of *both* the religious and the medical dogmas. Bernard Shaw who rejects both, and refuses to take orders from either preachers or doctors, yet believes the religious faith the more respectable of the two. He asks: "Which is the saner rite, bringing little children to be baptized of water and of the Spirit, or sending the police to force their parents to have injected into their blood the vilest social strain of which we have any knowledge?"*

Shaw apparently had accepted the opinion of the great authorities of the latter part of the 19th Century who held that cowpox was analogous to syphilis in man, and a recent exchange of letters between a London doctor and himself shows that he has found no reason to change his views on the subject. We commend this correspondence to Messrs. Mencken and Brisbane, should they chance upon this chapter. In July 1931 a certain Dr. Pabst addressed George Bernard Shaw as follows:

A few years ago I believe you stated that you were opposed to vaccination. It has been said that great men frequently change their minds, and I should like to ask whether you still condemn vaccination?

Will you forgive me if I ask whether you have ever been successfully vaccinated? The subject of vaccination is one that interests millions of persons, and is my excuse for asking these personal questions. With best wishes for a long, healthy life, I am,

Yours very truly

Chas. F. Pabst, M.D.

And this was Shaw's reply:

London, July 19, 1931.

Dr. Pabst:

I was vaccinated in infancy and had 'good marks' of it. In the great epidemic of 1881 (I was born in 1856) I caught smallpox. During the last considerable epidemic at the turn of the century, I was a member of the Health Committee of London Borough Council, and I learned how the credit of vaccination is kept up statistically by diagnosing all the re-vaccinated cases as pustular eczema, varioloid, or what-not—*except* smallpox.

I discovered a suppressed report of the Metropolitan Asylums Board on a set of re-vaccinations which had produced extraordinarily disastrous results. Meanwhile I had studied the literature and statistics of the subject. I even induced a celebrated bacteriologist to read Jenner. I have no doubt whatever that vaccination is an unscientific abomination and should be made a criminal practice.

(signed) G. Bernard Shaw.

* Preface to Joan of Arc.

No, Shaw wasn't a doctor, but he didn't need to be, to catch them cheating on the records.

CHAPTER VII

Enter Pasteur with the Microbe

One hundred and fifty years before Louis Pasteur, "the father of the germ theory of disease," was born, a Dutch lensmaker, Antony Leeuwenhoek, looking through one of his bits of ground glass, found microbes, first in rain water, and afterwards in many other places including his own mouth. He was the first of the "microbe hunters," according to their idealizing biographer, Paul De Kruif, one-time attache of the Rockefeller Institute—the "fountain head" of microbic wisdom in America.

Leeuwenhoek, it seems, did no more than discover these micro-organisms, called in his day and for many years thereafter *animalcules*—"little animals," and to uncover their tiny, wriggling, cavorting bodies to human observation through his own hand-made microscopes. He was content to watch them, to record their activities in various mediums and the changes wrought in them by the action of heat and cold, and finally to bequeath his findings to the London Royal Society when he died in 1723 at the age of ninety-one.

Never a word from this stolid, plodding old Hollondais delver into Nature's secrets about the "menace" of animalcules. On the contrary, it was even given to him in his latest researches to see them as helpful scavengers in Nature's scheme of animal economy—as when he squinted through his most powerful lenses at these sub-visible "beasties" devouring embryos in the bodies of oysters, as related by De Kruif. And this was nearly two hundred years before the wisest of modern bacteriologists expounded this rational, constructive view of the proper function of microbes, in opposition to the Pasteurian theory about them.

The next act in the bacteriological drama—as staged by De Kruif, the romanticist painter of microbe-hunting—was played by an Italian, named Spallanzani, who followed Leeuwenhoek next in line of apostolic succession among microbe-hunters. He was more fortunately circumstanced as to worldly goods than the humble janitor and lens-maker of Delft. His father, Spallanzani senior, was a well-to-do lawyer of Scandiano in Northern Italy, who was well inclined to give his son, Lazzaro, all the advantages for classical and scientific instruction furnished at the University of Reggio.

The Italian microbe-hunter combined with a brilliant intellect and daring ambition a crafty sense of intrigue and diplomacy, which led him to make friends with civil and religious authorities even while secretly scoffing at all authority and questioning everything excepting the existence of God—or some sort of supreme being. Before the age of thirty, Spallanzani got himself ordained a priest of the Catholic Church and made a professor at the Reggio University. Soon "his name glittered in all the universities of Europe," writes De Kruif. "The societies considered him the first scientist of his day; Frederick the Great wrote long letters to him, and with his own hand made him a member of the Berlin Academy; and Frederick's bitter enemy, Maria Theresa, Empress of Austria, put it over the great king by offering Spallanzani the job of professor in her ancient and run-down University of Pavia in Lombardy."

De Kruif relates how "a pompous commission came, a commission of eminent Privy Councillors weighed down with letters and Imperial Seals, and begged Spallanzani to put this defunct college on its feet." And after much haggling and bargaining about salary—"Spallanzani always knew how to feather his own nest," says De Kruif—he took the job of Professor of Natural History and Curator of the Natural History Cabinet of Pavia. And all this fuss and feathers over the Italian professor—according to De Kruif —because he had worsted a brother priest, Father Needham, in an acrimonious controversy over the nature and origin of microbes which Needham declared could be generated spontaneously in gravy or "any dirty mess." The thing which caused them to arise thus, Father Needham named the "Vegetative Force."

This Spallanzani vehemently denied, and sputtered and raged at the bare mention of "vegetative force" while he busied himself with his experiments to prove his assertion that "microbes must have parents"; and that except that they might stand the heat of boiling water in his sealed flasks, they were "really no different from other animals."

Then one day in his laboratory Spallanzani tricked one animalcule away from its fellows into a drop of pure distilled water on a glass slide by means of hair-fine instruments. When he turned his microscope onto the lonely inhabitant of the pure water drop to see what would happen, he was amazed and thrilled to see the little rod-shaped creature getting thinner and thinner in the middle until the two halves jerked themselves apart, and there were two "little beasts" swimming in the clear water where there had been but one. Presently he saw the two children of the first one form four by the same act of subdivision, and thus he learned the secret of microbe propagation.

To have been the first to "isolate a germ"—a commonplace in modern bacteriologic research—and to establish it as an individual procreated entity, this was Spallanzani's claim to distinction among microbe hunters, according to historian De Kruif, who apparently feels that this is sufficient to clear the Italian's name from some pretty foul blots which he himself places against it. For he describes him engaging in the most heartless and disgusting cruelties in senseless experiments upon frogs and other small animals; and while lauding him as "a superbly honest scientist," admits that he resorted to lies and low, cunning plots to obtain money.

Finally in his 70th year, in 1799, the second of De Kruif's "great microbe-hunters" died in a fit of apoplexy, after first bequeathing his diseased bladder to the museum at Pavia that they might learn something new about diseased bladders—and to the generation of microbe trailers who should come after him, this hastily drawn, ill-considered deduction: "A wee microbe always remains a microbe *of the same kind that its parents have been;* just as a zebra doesn't turn into a giraffe, or have musk-oxen for children, but always stays a zebra and has zebra babies."

One hundred and thirty-three years after this scheming, cocky Italian scientist was dead, leaving behind these "scientific" legacies for posterity, men and women—through ignorance of the laws of health—are still acquiring diseased bladders of their own; and the medical profession have advanced no further—in prevention or cure—than in Spallanzani's day, for their preferred prescription to date is still to "cut them out"! But certain bacteriologists of the present, wiser in their generation than the original microbehunters, have completely overturned Spallanzani's dictum about the unchangeable character of specific germs, by proving that these *do* lose their distinguishing characteristics, and take on entirely different ones, according to the medium on which they are grown and the temperature at which they are incubated.

Now a giraffe does not turn into a zebra merely by browsing on the zebra's preserves, neither does a horse become a cow when he chances to stray into the cow-pasture. These similes employed first by Spallanzani, and by all succeeding exponents of the doctrine of specific microorganisms performing specific functions, are completely knocked out by the latest discoveries of modern bacteriologic research. Purely as an academic, scientific question, this need disturb no one save the academicians who are entertained by wrangling over it. Microbe-hunting and the opposing theories of those engaged in it had no practical significance for the man in the street until one of the microscopists sounded the alarm—"microbes are a menace"! This was done by the man whose name is most familiarly associated in the public mind with the subject of germs—Louis Pasteur, a Frenchman.

All the biographers agree that he was the son of a tanner of Arbois in Eastern France, and that he was born in 1822. De Kruif supplies the romantic touches by making the tanner an old sergeant of the armies of Napoleon, and his son Louis an artistic, sensitive lad, who at the age of nine had furnished a sort of picturesque foreshadowing of his future connection with rabies, by being a frightened spectator of a crude cauterization in a blacksmith shop of a wound inflicted by a "mad wolf" on a neighboring farmer. Later we see him through De Kruif's limning—at the age of 20, sketching the river that ran back of the tannery, and painting portraits of his mother and sisters.

Few persons—save perhaps the hero-worshipers—will detect in the heavy jowl, dull, leaden eyes, and short, stubby beard of the Pasteur of medical portrait-galleries, any of the sensitivity belonging to the artist or poet—both of which according to De Kruif entered into the make-up of "the father of the germ theory"; or as he preferred to describe him "the Ulysses of microbe-hunters" and "a new John the Baptist of the religion of the Germ Theory."

To support these pretentious titles, the raconteur of "Microbe Hunters" accredits Pasteur with a long list of notable achievements, some of which the romanticist himself admits were borrowed from other and more modest investigators. Thus when Pasteur in 1856—while professor and dean of Sciences in the town of Lille—was appealed to by a local manufacturer of beet-sugar alcohol—M. Bigo—to tell him what was wrong with some of his vats—and found under his microscope the budding yeasts that turn sugar into alcohol, De Kruif triumphantly announced that Pasteur "had solved the ten-thousand-year-old mystery of fermentation"!

This chronicler had previously noted that another Frenchman, Cagniard de la Tour, "modest but original, poking round into beer-vats of breweries," had made this same discovery in 1837-almost 20 years before Pasteur's much heralded find. But as De Kruif naively testifies: "Cagniard was no propagandist, he had no press-agent to offset his modesty." Lest any one say that Pasteur was ignorant of this prior claim to the discovery of the cause of fermentation, his biographer reports his muttering to himself as he gazed through his microscope at the little sprouting globules: "Cagniard de la Tour is right. These yeasts are alive. It must be the yeasts that change beet-sugar into alcohol." But there is no recorded mention of even a gracious acknowledgment of Cagniard's blazing trail from the selfcentered and vain-glorious "Ulysses and John the Baptist of Microbe Hunters"! He arrogated all the glory of the discovery to himself, and he trumpeted it to the world—in letters to important personages, papers to the Academy of Sciences, and speeches to all and sundry—with all the blare of modern ballvhoo.

This much is attested even by his idealizing biographer, who says Pasteur "was too much of a child to be modest"; and that "the searcher in him turned showman" as he sought to "make the world gasp at this astounding news that French wine and German beer were not made by men, but by incessantly toiling armies of creatures ten-billion times smaller than a wee baby"! A less partizan chronicler would hardly have characterized as "childlike" Pasteur's crafty acceptance of the shrewd bargaining of the Lille beet-raisers and wine-makers: "Raise the sugar yield from our beets and give us a bigger alcohol output, and we'll see that you and your laboratory are taken care of." Nor dismissed so lightly his noisy and savage attacks upon the great German chemist, Liebig, who had explained the phenomenon of fermentation in terms of chemistry and was inclined to dispute the claims of the bacteriologists. Indeed, there is much in the career of "the father of the germ theory" which to a disinterested student of history might better justify a paraphrase of De Kruif's amiable apology in the truer statement that "the showman and moneychanger in Pasteur turned scientist," for revenue mainly.

His first—and according to much high medical opinion his only original contribution to science, was the discovery which he made at the age of 26, that there are four distinct kinds of tartaric acid instead of two. Concerning this crystal finding of Pasteur's, Dr. Walter R. Hadwen had this to say: "To a crystallographer this was of unparalleled importance; to a scientific chemist it was a matter of curious interest; to the man in the street it meant nothing at all." At the time this discovery was made Pasteur was working in his chosen field of chemistry, with no thought of becoming the "Ulysses of the microbe-hunters."

But this chemical adventure—insignificant as it may have been from a practical view-point—was destined to bear substantial fruit for the adventurer, and to set his feet upon the high-road to fame and fortune. For it so happened that in the group to whom this finding of two extra tartaric acids was "of unparalleled importance," was an aged crystallographer named Biot, a wealthy and influential member of the French Academy of Science, to whose attention Pasteur's discovery was promptly brought. Pasteur would see to that. And so it came about that the aged scientist took the young chemist by the hand, introducing him to the savants of the Academy and tried to have him elected a member of it.

He failed in this, nor was Pasteur able to attain the fellowship of the Academicians during M. Biot's lifetime. But it was through his influence chiefly that the future "father of the germ theory" obtained the post at Strasbourg, and afterwards became Dean of the Faculty of Sciences in Lille, where he found the beet-sugar distilleries as above related, and thus—in De Kruif's picturesque phrase—"stumbled upon microbes and immortality." For after announcing that the yeasts which he found in M. Bigo's good vats were alive and the cause of healthy fermentation, Pasteur turned his microscope on the sick vats which refused to make alcohol, since these were the primary cause of the distiller's perplexity and because of which he had besought Pasteur's aid.

No yeasts—or ferments—could be found in the sickly beet pulp which refused to yield alcohol; but after much peering and muttering over his experiments with what he did find there, Pasteur burst forth from his laboratory to tell M. Bigo and the world—with characteristic fanfare—that he had found another kind of "wee beastie" in the sick beet juice, a little rod-shaped animalcule which he declared to be the cause of the trouble: "Keep the little rods out of your vats, M. Bigo, and you'll always get alcohol." These "little rods," he also declared, made the lactic acid which causes milk left in the pantry over night to turn sour—a phenomenon which had puzzled many generations of house-wives.

And when his lactic-acid fermentations went wrong, as they did in some of his experiments, when "a nasty smell of rancid butter wafted up from his bottles," this most versatile of microbe-hunters met the difficulty by discovering and differentiating still another kind of "wee beast"—differing in some respects from the "little rods"—to account for rancid butter; and this last animalcule—the microbe of putrefaction—he held responsible for making meat go bad. But a German Doctor Schwann had published this fact away back in that same year—1837—in which Cagniard de la Tour had published his findings about "living, growing yeasts" being the essential, active principle in fermentation. And Schwann had said: "Meat only becomes putrid when subvisible animals get into it. Boil it thoroughly and exclude the air, and meat will remain fresh for months."

But as in the one case, so in the other, there was never a syllable of recognition or a scintilla of credit accorded these precursors in the same field of research by "the John the Baptist of the religion of the Germ Theory"! The aptness of this phrase—"the *religion* of the Germ Theory"—is very strikingly exemplified by the coiner of it, who freely recounts these and other plagiarisms by Pasteur, yet condones and excuses them—as well as his impudence in disputes with rival searchers, and his vulgar, ballyhoo methods of exploiting his egocentric vanity—all is forgiven—by the author of Microbe Hunters to the greater glory of having given to the world the very questionable postulate that "germs cause disease." This was guestioned in Pasteur's own time by much riper scholars than himself. It has been questioned and denied by certain thoughtful researchers ever since; and in the present it is entirely repudiated by an advanced group of bacteriologists who affirm the converse proposition, that germs are *not the cause*, but the *effect* of disease. We will revert to this more in detail later on.

De Kruif gives a detailed account *{Microbe Hunters,* pp. 80-83) of how Pasteur proved that "germs are air-born" another disputed point—by means of an experiment taken bodily from his friend, Professor Balard, a professor of chemistry in Paris; and of how a little later "at a brilliant meeting where the brains and wit and art of Paris fought to get in, Pasteur told of *his* experiment in rapturous words, shouting—'Never will the doctrine of Spontaneous Generation recover from the mortal blow that this simple experiment has dealt it"! With never a word of acknowledgment to Balard whose experiment it really was, and De Kruif's only comment on the incident was: "If Balard was there you may be sure he applauded as enthusiastically as the rest. A rare soul was Balard"! "And what a mean soul was Pasteur's," we think he should have added, to be willing to hoist himself into prominence on the fruit of his friend's invention without even a gracious gesture in his direction. But such, apparently, is the superstitious reverence in which the author of *Microbe Hunters* holds the causative germ theory of disease, which the world owes to Pasteur, that he would make it the allenveloping mantle for his hero's thefts of other men's ideas and labors, and also for his unfairness, insolence and vulgarity in dealings with his contemporaries. On page 76 of the *Microbe Hunters* we find this euphemistic apology for his plagiarizing:

As he went up in his excited climb toward glory and toward always increasing crowds of new discoveries, he regarded less and less what had been done before him and what went on around him. He re-discovered the curious fact that microbes make meat go bad. He failed to give the first discoverer, Schwann, proper credit for it.

But this strange neglect to give credit for the good work of others must not be posted too strongly against him in the Book of St. Peter, because you can see his fine imagination, *that poet's thought of his, making its first attempts at showing that microbes are the real murderers of the human race!*

A little further on in these remarkable memoirs De Kruif pictures Pasteur rising in his seat one day—"to the scandal of the entire Academy and the shocked horror of all the great men of France"—to deliver a bitter, savage attack upon the celebrated Claude Bernard after his death, because some one had published an unfinished work of Bernard's which contradicted Pasteur's theories. "Vulgarly he shouted objections at Bernard who could not answer him from the grave," says De Kruif, and continues: "He published a pamphlet about his dead friend's last researches—a pamphlet in the worst of taste, accusing Bernard of having lost his memory. . . . Vulgarly, by all this criticism, he left people to conclude that Bernard was in his dotage when he did his last work. Without any sense of the fitness of things, this passionate Pasteur jumped up and down on Bernard's grave."

But even this and all other enormities of Pasteur's behavior, what De Kruif calls "his bristling, impudent air of challenge, his way of putting, 'am-I-not-clever-to-have-foundthis-out-and-aren't-you-all-fools-not-to-believe-at-once' between the lines of all his writings and speeches," as well as his admitted purloining and meanness of spirit, are glossed over in the mind of the chronicler, and submerged beneath the great benefit he conceives to have been conferred upon the race by Pasteur's noisy proclamation of the pathogenic germ theory!

From finding microbes in putrid meat to finding them—or imagining them—in putrid diseases, was an easy step for Pasteur. A study of the diseases of silkworms—undertaken because of an epidemic among them in Southern France in 1865 which threatened to destroy the silk industry—tended to confirm his belief in the parasitic origin of disease. Through the influence of his old chemistry teacher, Prof. Dumas—who lived in the silk country—Pasteur was appointed by the Minister of Agriculture to investigate the silkworm mystery.

At the time the call came to him, "it is doubtful if Pasteur could have told a silkworm from an angle worm," according to De Kruif, who relates that Pasteur himself—with rare diffidence—protested to Dumas his ignorance of silkworms and their maladies—that he had never even seen one—and that he was very loath to go into the South country on the silkworm mission. It seems he sensed failure in the undertaking, "and above everything else Pasteur detested failure," says his biographer.

On the same authority, Pasteur's forebodings were realized in the failure of his first guess about the silkworm sickness. The farmers called it "pebrine"—the French word for pepper—because of the little black spots resembling pepper which appeared on the sick worms. But when Pasteur peered into their insides with his microscope, he found the "wee globules" which he had already decided were the primary cause of human ailments, and so "quickly he concluded that the globules were a sure sign of the disease." He called the Agricultural Committee together and gave them the following instructions:

At the season of egg-laying, mate your moths, and after the eggs are laid, pin the father and mother moths down to a little board, slit them open and take out a bit of fatty tissue under their skin. Put this under a microscope and look for those tiny globules. If you can't find any, you can be sure their eggs are sound—and you can use those eggs for new silkworms in the Spring.

But when the next Spring came, the worms hatched from the eggs thus carefully selected according to these instructions turned Pasteur's confident prediction into a fiasco. In the graphic language of De Kruif, "when it came time for the worms hatched from eggs supposedly free from globules to climb their mulberry twigs and spin their silk cocoons, they either shriveled up and died, or were languid, lazy worms who would not eat and hung around at the bottom of their twigs, not caring whether there was ever another silk stocking on the leg of any fine lady in the world."

The silkworm raisers both upbraided and jeered at "the father of the Germ Theory," who, confused and chagrined, continued his experiments but got no light on the puzzlepicture. For, says De Kruif, "he came on broods of silkworms which fairly galloped up the twigs and proceeded to spin elegant cocoons, yet under the microscope he found these beasts swarming with tiny globules. He discovered other broods that sulked on their branches and died miserably, in which he could find no globules whatever. He became completely mixed up and began to doubt whether the globules had anything to do with the disease, etc." It is further recorded, that after a few more unsuccessful experiments Pasteur became discouraged and quit; that his assistants became worried. Finally one of them, Prof. Gernez from the College Louis le Grand, went off to the North to study the silkworms of Valenciennes, and after a time Gernez returned with the exciting news that the silkworm sickness was caused by *a parasite which came from outside the worm!* To which De Kruif appends the still more remarkable statement that "it was six months before Pasteur was convinced that Gernez was right"—six months to convince him of his own doctrine proclaimed years before, that "all micro-organisms are air-born"!

De Kruif concludes his chapter on Pasteur's investigation of the silkworm diseases with a somewhat muddled account of how he patched up his first mistake with the farmerssummoning the Committee once more to tell them of his new discovery—his discovery, mind you, with no credit given to Gernez, as usual—that the "wee globules" invaded every part of the moth's body, and that it would be necessary to grind up the whole moth for microscopic examination in order to make sure which ones were free from globules. Doesn't sound like a very practicable scheme, nor does De Kruif's statement that Pasteur "went everywhere showing the farmers how to keep their healthy worms away from all contact with leaves that sick worms had soiled," carry deep conviction; although he closes the tale with a grand finale in which the restored prosperity of the silk raisers, "the tears of joy in old Dumas' voice," and a proposal to erect "a golden statue to the great Pasteur" in the town where his experiments were conducted—all mingle in brilliant incoherence.

Thus as in previous years Pasteur was permitted to usurp the credit for discoveries which it was claimed prevented the destruction of the wine and beet-sugar industries of his native country, so now in the silkworm disaster he is accredited with "having saved more money to the silk raisers than the war indemnity wrung from France by Germany after 1870." A little later he is featured rescuing the flocks and herds from the dread disease of *anthrax*, and still later he is acclaimed as the savior of mankind from mad dogs!

Seeing that Pasteur's chief biographers—before De Kruif took up the role of rainbow-painter for all the microbehunters—were his son-in-law, Réné Vallery-Radot, and his pupil Duclaux, whose fortunes were closely bound-up with those of the master juggler of microbian exploits, it is not surprising that there grew up during his life-time, and persisted for many years after his death, much popular misconception about the nature and scope of Pasteur's achievements.

Meanwhile in those slowly grinding mills of time there was brought to light in 1923 a mass of documentary evidence, which its compiler and publisher calls *A Lost Chapter in the History of Biology;* and which if we accept, completely revolutionizes the world's thought about Pasteur and his theory of disease germs. This book, entitled also *Béchamp or Pasteur?*, was the work of an English and American physician, Dr. Montague Leverson of London and Baltimore. And since it has received the endorsement of some of the ablest medical men of modern times—Dr. H. Fergie Woods, Chas. Stirling Saunders, and Reginald E. E. Austin, Members of the Royal College of Surgeons and Lecturers in the Royal College of Physicians, and the two leading English cancer specialists—Herbert Snow and Robert Bell—being just a few of those who might be named—a lay researcher of medical records can do no less than put before her readers the high lights in this "lost chapter," and leave to their discriminating judgment the comparative claims of these two microbehunters and their opposing theories.

It will bring to many persons their first knowledge of Pierre Jacques Antoine Béchamp, Professor of Medical Chemistry and Pharmacy in the Faculty of Medicine at the University of Montpellier from 1857 to 1875. For although he was the first man to give any rational explanation of the micro-organisms—both the ferments and the microbes—and to tell not only where the microbes come from and their proper function in the animal economy, but also what becomes of them after their work is finished, this greatest of all the microbe-hunters, Antoine Béchamp, has been strangely overlooked by medical historians; and De Kruif, seer of the heavenly microbian vision, and specially appointed bard of microbian epics, does not even mention him!

In the Lost Chapter, Béchamp or Pasteur?, rescued from oblivion by Dr. Leverson, and substantiated by official records in the French Academy of Sciences—from which the author draws copious excerpts and references—we see Béchamp, a contemporary of Pasteur and six years his senior, already a recognized figure in the scientific world—a master of pharmacy, a doctor of science and of medicine, which Pasteur never was—and a Corresponding Member of the Imperial French Academy of Medicine, at the time Pasteur made his lucky find of two extra tartaric acids and M. Biot.

From this well-documented and authenticated volume, compiled by Dr. Leverson and edited by the English writer, E. Douglas Hume, we learn also that most of the discoveries attributed to Pasteur—and upon which was built his apocryphal fame—really belonged to the quiet scholar and professor at Montpellier. For it is here shown that it was *not* Pasteur, but Béchamp, who "solved the 10,000-year-old mystery of fermentation"; and six months before Pasteur invaded the silk country to get his first look at a silkworm, Béchamp had sent to the Agricultural Society of Herault a full account of the pebrine trouble, its parasitic origin, and recommended the use of creosote in the treatment, which was found effective after much time and money had been wasted on Pasteur's remedy.

Concerning which, Dr. Lutaud, one-time editor of the *Journal de Médicine de Paris,* had this to say: "At the

commencement of the silk trouble in 1850, France produced annually about 30,000,000 kilogrammes of cocoons. In 1866-67 the production had sunk to 15,000,000 kilogrammes. After the introduction of Pasteur's 'preventive method,' production diminished from 8,000,000 kilogrammes in 1873 to so low a figure as 2,000,000 kilogrammes of cocoons in certain subsequent years.

"And that is the way," says Dr. Lutaud, "in which Pasteur saved silk culture!"

But far more important than any contribution to material science, was Béchamp's teaching about disease germs, which Pasteur is supposed to have "fathered"—and whose "fathering" has been attended with such fearful consequences to mankind as well as to the brute creation. In the Pasteurian concept, every specific, separate malady has its specific causative germ—microbe or bacillus—to account for the trouble, and which—to borrow Bernard Shaw's satirical language—"was duly created in the Garden of Eden and has been steadily propagating itself in ever-widening circles of malignancy ever since."

"Yet it must be plain to anybody who will stop to think about it," says Shaw, "that had this been even approximately true, the whole human race would have been wiped off the earth long ago, and every epidemic, instead of fading out as mysteriously as it rushed in, would have spread over the whole world."

Béchamp's explanation of the origin and behavior of germs, however, is much more reasonable and worthy of credence, and since it has been vindicated by more recent researchers, it affords an agreeable alternative to the gloomy deductions from the Pasteur pronouncements.

According to Béchamp, the microbes or bacilli sometimes—not always—found associated with certain diseases, are not "air-born" as taught by Pasteur, *but have been evolved from the microzymas*, the name given by Béchamp to the smallest constituent elements of the cells which form plant and animal tissues. The "microzymas," which since Béchamp's time have been variously called by other observers "micro-somes," "molecular granulations" and "scintillating particles," are as much smaller than the cell as the electron is smaller than the atom; but they possess the fundamental properties of all living organisms in that they take nourishment, they grow, reproduce themselves and change their attributes.

Béchamp taught that the "microzymas" secrete the ferments which assist digestion and assimilation; that they are "the builders of the cells and therefore the primal architects of life"; and that when they encounter morbific matter in the dead or dying tissues of plants and animals, *they evolve into bacteria* (microbes and bacilli), in which capacity *they act as scavengers,* to disintegrate and eliminate the morbific matter—resulting from unexpelled body wastes—changing it back to living elements, such as is seen to be their mission when converting manurial fertilizers into nutriment for growing plant life. Thus the ultimate effect of these germs is toward the restoration of a lost chemical and metabolic balance, and their function, instead of being hostile and murderous, is friendly and eventually compensatory, even though the symptoms attending the cleansing and readjusting process may be painful and constitute what is called "disease" in its varied manifestation.

Béchamp's theory, if accepted, solves the puzzle of bacteriologists as to whether the germs are of animal or vegetable origin, by showing they may be either, since they are the evolutionary descendants of animal or vegetable *microzymas.* It likewise solves the age-long mystery—what becomes of the germs after the patient gets well?—whether one inclines to their beneficent or malevolent role in disease processes.

According to Béchamp, after finishing their work of decomposing and eliminating the waste products and morbid taints of the body, the microbes resume the form and attributes of the *microzymas*, to function as before. According to this teaching, the germs of disease *cannot exist primarily* in the air we breathe, in the food we eat or the water we drink, since they must have arisen in a sick body; yet they might be conveyed to all these media through animal excreta or decayed flora. But in any case, the bacteria are not the primary *cause*, but rather the *effect*, of disease, and in a proper understanding of their true functioning one may lose some of the terrifying effects of the Pasteurian teaching. This aspect of it was very well expressed by Dr. Park L. Myers of Toledo, Ohio, when addressing an assemblage of his colleagues a few years ago: "With all the wonderful strides of our medical science in 100 years, we still have the public as abjectly cowed today before the omnipotent hosts of bacteria as it was by the evil spirits and ghosts and witches of a past century."

Perhaps the best antidote for the microphobia here noted by Dr. Myers, would be a careful perusal of the theories and teachings about micro-organisms by Béchamp, particularly his microzymian doctrine, all of which are very fully set forth in the aforementioned volume-Béchamp or Pasteur?---and to this the interested reader is referred for further information on the subject. It would be difficult to find two men more opposite in mentality and temperament than the two microscopists dealt with in this book. Béchamp, the quiet, student type of investigator, was content to record his discoveries and file them with the Academy of Sciences; whereas Pasteur's achievements—real or faked—were trumpeted to the four quarters of the globe. Small wonder that for one person who has heard about Béchamp, millions have heard about Pasteur-from milk stoppers if in no other way!

But there were dissenting voices to all this chorus of acclaim and adulation even in Pasteur's day. Sir Lawson Tait, eminent surgeon of Edinburgh, Sir Henry Maudsley and Dr. Henry Bastian, both professors at the University College of London, united in declaring Pasteur's germ theory to be "an assumption of causes, of the existence of which we have no evidence, to account for effects which they do not explain." Dr. Bastian, author of a book on the sub-visible creatures, entitled *Modes of Origin of Lowest Organisms*, very nearly accords with Béchamp's theory of them:

These micro-organisms, says Bastian, are never generated in the body until it has become already disorganized; they belong solely to the processes of decay, contributing to the promotion of corporeal disintegration, and we can as well accuse the worms or carrion-crows that devour a putrefying carcass of causing the creature's death, as to charge the bacilli with being the primary cause of inflammatory and febrile diseases.

But the sharpest challenge to Pasteur's causative germ theory of disease came from Germany—from Dr. Robert Koch, a challenger by nature of doubtful theses, a sort of professional "man from Missouri." He laid down four conditions that must be met before this theory could be scientifically proven: First, the germ must always be found where the disease is; second, it must not be found where the disease is not; third, you must be able to cultivate the germ in media outside the body; and fourth, this culture when injected into animals must produce a disease identical with that of the animal or human from whom the germ was originally obtained.

Not being able to combat these "Koch postulates"—as they were later called—Pasteur and his followers incautiously accepted them as reasonable, to their ultimate undoing, as upon this rock the pathogenic germ theory has been completely shattered. Each and every one of the "Koch postulates" is negatived by the most expert and reputable witnesses. Dr. M. Beddow Bayly, M.R.C.S. and L.R.C.P., writing in the London *Medical World*, June, 1928, said: "I am prepared to maintain, with scientifically established facts, that *in no single instance has it been conclusively proved that any micro-organism is the specific cause of a disease,"* and he quotes in confirmation from the Gaulstonian Lecture by W. W. C. Topley, M.A.M.D., Director of the Institute of Pathology, Charing Cross Hospital, delivered in 1919:

The very diseases which would afford the most favorable field for study, are just those in which the causal organisms are unknown, says Dr. Topley. Scarlet fever, measles, smallpox and chicken-pox, to mention only a few of the more outstanding examples, still await a satisfactory elucidation . . . During the world-wide influenza epidemic, we lost faith in one of our supposed causal organisms.

Loss of faith in the "causal organism" of influenza christened the "Pfeiffer bacillus"—appears to have rested on two counts: First, they failed to find it where it should have been, that is, associated with clinically diagnosed influenza; and second, it appeared unaccountably in the throats and sputums of perfectly healthy persons, not suffering apparently from any disease. This was demonstrated by a report of the Pneumonia Commission at Camp Pike, written long before influenza appeared in this country, wherein it was stated that "the sputums from 132 healthy and normal men were examined and analyzed, and the Pfeiffer bacillus was found in 35 percent of them." This report was given to the Journal of the American Medical Association (March 8, 1919) by Major Ralph A. Kinsella of the U. S. Army Medical Corps. Now for a micro-organism to be regarded as *the specific cause* of a disease, we may surely demand that it should fulfill the first two of Koch's requirements-that it shall always be found associated with the disease it is supposed to cause; and that it shall not be found in association with diseases which it is not supposed to cause. Yet if we are to believe the authorities quoted by Dr. Beddow Bayly, the influenza bacillus is not the only one to play fast and loose with these two Koch postulates. He says the diphtheria germ-with the hyphenated name, *Klebs-Loeffler*—is missing in 14 percent of cases of clinical diphtheria, according to the London Lancet (Sept. 1898); in 20 percent of them according to the Report of the Royal Commission on Vivisection (1912); while Osier reports it absent in from 28 to 40 percent of cases. On the other hand, upon the testimony of reliable pathologists, it is often found in the throats of healthy persons—in from 7 to 15 percent of them. Nor is this the whole story of the perverse behavior of the Klebs-Loeffler bacillus. It is apparently such "a good mixer," that it is found associated with 18 other diseases besides diphtheria—among them puerperal fever, pyorrhoea, eczema, leprosy and rabies—according to a list given by Dr. Bayly with authoritative references. And yet Osier states: "The diagnosis of the Klebs-Loeffler bacillus is regarded as the sole criterion of true diphtheria." But the Medical Health Officer for Northampton, writing in the Lancet, Dec. 10, 1927, claimed that of 772 cases admitted to the Birmingham Hospital, in all of which the bacteriological report was positive, 391-about 50 percent-showed no clinical evidence of diphtheria. The hopeless confusion to which the diagnosis of diphtheria has been reduced through its association with a germ, led the British Ministry of Health in recent years to issue the following instructions:

The notification of cases of diphtheria under the Infectious Disease Acts, should be limited to persons actually suffering from diphtheria, i.e., those exhibiting clinical signs of the disease, with or without bacteriological evidence of its presence.

And what was found to be true of diphtheria and influenza, has been repeated in the natural history of all the other so-called "infectious germ diseases." The "little bugs" assigned by the bacteriologists to the production of tuberculosis, syphilis, cholera, typhoid and pneumonia, have manifested the same temperamental irregularity of bobbing up where their presence was not "indicated"—and failing to appear when it was! The truth of this was strikingly exemplified in a baffling experience of the health authorities with an outbreak of typhoid in the California town of Santa Ana a few years ago.

According to a Report from the California State Board of Health, on Jan'y 2nd 1924 a large portion of the Santa Ana population fell suddenly ill with an acute gastro-intestinal disorder which disrupted schools and business. Attention was turned to the city water-supply and the official report read: "The city water-supply was immediately subjected to careful bacteriological and chemical examination, *but nothing could be discovered that would show the water to be the source of the out-break. Repeated bacteriological examinations of this water supply proved it to be of satisfactory quality and <i>definitely potable.*" (Italics

mine.)

Nor was this all. The State epidemiologist, Dr. Charles Halliday, hastened to the scene of the Santa Ana disaster and was presently joined by two other officials from the State Department of Health, who issued the further finding: "Complete bacteriological examinations of specimens from patients were begun immediately, with negative results for typhoid and with negligible results for dysentery."

The report went on to say, however, that "by the middle of January a number of attendant physicians were saying that the condition of their patients was 'clinically identical with typhoid.' *The bacteriologists were slow to accept this, because the laboratory examinations in the early days of the outbreak did not support this view."* (Italics mine.)

In other words, they did not find typhoid germs at the beginning of the disease—neither in the drinking-water nor in the excreta from the patients—which is where they should have been if they were *the cause* of the trouble; but they found germs aplenty *after* the fever was well under way, since the official report stated that "by Feb'y 1st there were 150 cases of typhoid *which were bacteriologically sustained."*

Meantime it was recalled that on the night of Dec. 27th, prior to the outbreak, there had been a terrific rain-storm which backed up sewers and lifted manhole-covers. A closer inspection of sewer pipes and water-mains revealed the fact that over-loaded sewer-mains had backed up sewage into an old forgotten drain which led directly to one of the wells which supplied the city reservoir. And, according to the official report, "it was estimated that following the night of the storm, from one-tenth to one-eighth of the water consumed in Santa Ana was pure sewage!"

An argument frequently advanced for giving doctors control of Public Health Service is that "they can guard the people's health by keeping tab on the bacteriologic count in the milk and water supplies. Yet here was an instance where the bacteriologists could not tell the people whether their water-supply was free from typhoid infection—neither before they fell ill nor afterwards; and had pronounced water heavily freighted with sewage to be "of satisfactory quality and definitely potable!" It will be noted also, that the true character of the malady in this case was discovered by the bed-side watchers—not by the laboratory observers.

"One swallow does not make a summer," but the Santa Ana episode is by no means a solitary instance where concentration on germs and test-tubes, to the neglect of sanitation and hygiene, has brought about disaster to the community. It occurs with sufficient frequency to lend support to the contention of the advocates for medical freedom, that if Public Health departments were controlled and directed by sanitary engineers and plumbers instead of by medical theorists, the health of the nation would be vastly improved.

The frequency of the inverse behavior of the "pathogenic microbe" has taught the wisest of the Pasteur disciples to cease dogmatizing about it. Thus when Sir William Power, British Medical Officer of the Local Government Board, was asked before the Royal Commission on Vivisection what he meant by "a definite specific organism," he replied: "A definite organism which will react always in a certain way to a certain series of culture tests." To the further question as to which diseases were associated with organisms for which such a test had been established, he answered: "*I cannot say that we have got to that stage with any one of them."*

Concerning the postulate requiring that the germ culture when injected into animals should produce the identical disease from which the cultural germ was derived, Dr. Beddow Bayly says: "There are probably few in the present who will deny the assertion that in no single instance has this condition been fulfilled." He then quotes Dr. Topley in the aforementioned Gaulstonian Lecture as admitting their "inability to convey to laboratory animals diseases as they occur in man."

We can produce lesions of a definite and specific nature in the majority of cases, said Dr. Topley, but not the actual disease in all its features; and among the features most frequently lost, *is that tendency to spread of infection which we should specially desire to study.*

It will readily occur to most people that if the bacteriologists could produce infectious diseases in animals, it would furnish the most convenient and economic method of rodent extermination—far cheaper and safer than rat poison! After the signal failure of Pasteur's rash effort to eradicate the pest of rabbits in Australia by this method, this particular "Koch postulate" has not been dwelt on very much by the adherents of the Pasteurian theory. Indeed they would like to forget all of the Koch requirements, since they have never been able to make that theory fit any one of them.

Koch himself was forced to repudiate them, as when he told the Congress on Tuberculosis which met in London in

1901, that tuberculosis in animals was very different to that disease in humans. But the deadliest blow dealt to the doctrine that "specific germs cause specific diseases," was the discovery that every type of bacteria experimented with including 2nthrax and tubercle bacilli—could be transformed into a different type within a short time, varying from a few hours to several days, merely by altering the character of its medium or environment—sometimes by exposure to ultraviolet rays.

Thus by every known test, proposed and accepted by the bacteriologists themselves, Pasteur's theory has been discredited, and it survives today solely because it was made the basis of the popular and lucrative practice of so-called "preventive medicine."

CHAPTER VIII

The Death Trail of the Microbe Hunters

Whether germs are the cause or the effect of disease, as an abstract proposition, has no more practical significance for the average man and woman than the age-old biological conundrum—which came first, the chicken or the egg? Nor would the announcement that "microbes are a menace," have caused more than a faint ripple in the workaday world which toils and spins and refuses to get excited over scientific discoveries, had the announcer been content to leave it at that.

It was Pasteur, the noisy acclaimer of bacterial marvels, who first threw the fear of man-eating microbes into the human heart and put them on the map as the subvisible, insidious assassins of man and beast. He had all Europe from kings and emperors to medical students and sheepherders—talking in awed whispers about his microbic terror long before there was any proof of it. Searchers of the Pasteur temperament are not particular about proofs. Hence it remained for the plodding, serious, more thoroughgoing German microbe-hunter, Robert Koch, to isolate and identify specific germs in association with specific diseases; and to furnish such evidence that the germs were *the cause* of the maladies in whose company they were found, as seemed to himself and his colleagues entirely adequate and irrefutable.

Koch who in the beginning had looked coldly on Pasteur's theory of the germs—perhaps because it came from the wrong bank of the Rhine—and had skeptically and craftily propounded the troublesome "postulates" which eventually became the stumbling-block for all the microbe-hunters including their author—was now in the decade from 1873 to 1883; the most zealous and assiduous of all the microbe trailers, and also made the best showing in results. He not only tracked down and identified the germ of anthrax—the disease which caused such havoc among sheep and cattle but also discovered and catalogued the *tubercle bacillus* as the motivating agent in tuberculosis, "which was causing one death in seven in Europe and America" at that time, according to De Kruif.

Koch is also accredited with finding the "comma bacillus"—described as "one of the most delicate, the easiest to kill, and yet the most terribly savage of all microbes" which was charged with being the instigator of Asiatic cholera, that had broken out in Egypt in 1883 and frightened the people across the Mediterranean. De Kruif dramatizes the race for the capture of this rare, elusive cholera germ between Koch and Pasteur; a race typifying a battle between France and Germany—fought out on Egyptian soil—with Koch conducting his research forces in person, and Pasteur sending his proxies, Roux and Thuiller, (the latter of whom lost his life in the fight) while he busied himself at home with mad dogs, to which he had turned his attention after his silkworm and anthrax fiascos.

Meantime, the Alexandrian epidemic faded out as mysteriously as it came—as epidemics have a way of doing without either the French or German microscopists succeeding in trapping the causative microbe, and without any assistance from any of them; although Koch reported to the German Minister of State that he had found a commashaped "suspect" which only awaited confirmation such as he might find in India—where cholera most abounds—to be duly baptized as the responsible agent in the production of that plague.

So Koch was sent to Calcutta where he found many dying of cholera in the miserable Hindu hovels, and he claimed he found the comma bacillus in all the dead bodies he looked into, and in the intestines of patients with the disease; but that he "never found this germ in any of the hundreds of healthy Hindus that he examined, nor in any animal, from mice to elephants." Armed with this knowledge, Koch sailed back to Germany, where we are told "he was received like some returning victorious general, and from the German Emperor's own hand he received the Order of the Crown with Star"—which no doubt meant a great deal to Germans in those days.

And probably the learned doctors gathered to hear Herr Professor Koch's report were tremendously impressed by his telling them that, "No healthy man can ever be attacked by cholera unless he swallows the comma microbe, and this germ can only develop from its like—it cannot be produced from any other thing, or out of nothing. And it is only in the intestine of man or in highly polluted water like that of India, that it can grow." But the average layman will not grasp the practical significance of these pronouncements, in so far as their bearing on the prevention or control of the disease is concerned; and lay skepticism about Dr. Koch's pathogenic cholera bug is strongly supported by the example of old Professor Pettenkofer of Munich who to show his scorn of the whole business, swallowed a tubeful of these cholera germs (sent to him by Dr. Koch) in the presence of his class one day, with no effect whatever except a slight nausea! This incident is related by various chroniclers, and even the heroworshiping De Kruif does not omit it. He says:

There were enough billions of wiggling comma germs in this tube to infect a regiment, but Pettenkofer only growled through his beard: "Now let us see if I get cholera!"

Mysteriously, nothing happened, and the failure of the mad Pettenkofer to come down with cholera remains to this day an enigma, without even the beginning of an explanation.

De Kruif preferred not to accept Dr. Pettenkofer's explanation, which was that "germs are of no account in cholera; it is *the disposition of the individual that is important!*" And Koch, disregarding the Pettenkofer demonstration, continued to reiterate parrot-like: "There can be no cholera without the comma bacillus!"

It is not recorded that Dr. Koch at this time—after identifying the deadly microbes associated with anthrax, tuberculosis and cholera, and joining them as cause and effect—had proposed any method for exterminating or warding off any of these invisible destroyers. Yet the compiler of microbian legends concludes his account of the cholerahunting expedition with the grave assurance: "It is thanks to these bold searchings of Robert Koch, that Europe and America no longer dread the devastating raids of these puny but terrible little murderers from the Orient—and their complete extermination from the world *waits only upon the civilisation and sanitation of India.*" (Italics mine.)

Seeing that "these bold searchings" had been conducted in India, and the final trapping of the "puny but terrible little murderers" consummated there, it occurs to some of us to ask: *Why* must India await the coming of "civilization and sanitation" to free her from the plague of cholera, unless it was these factors—and *not* Koch's "bold searchings"—that had banished it from Europe and America? Such questioning will, of course, be dismissed by the microbe-hunters and their loyal followers as mere lay impertinence, but nevertheless it may commend itself to the common-sense reasoning of other laymen not affected with microphobia.

In a similar vein of melodramatic bombast, the author of *Microbe Hunters* devotes 40 pages to the glorification of Koch's bacterial triumphs, for which four would have been adequate—stripped of metaphor and hyperbole—to cover all the facts, and still have allowed space for a proper tribute to the honesty, industry and singleness of purpose of the little German professor who appears to have gone about his microbe researches in a spirit of real scientific inquiry, and to have recorded his findings with pains-taking accuracy—however misguided and unwarranted his conclusions.

His disarming modesty and reserve about his achievements were in striking contrast to Pasteur's ballyhoo when stealing the credit for other men's discoveries; and if any one of the microbe-hunters deserved the hero's crown, it was Koch. For if the microbes were the deadly menace they believed them to be, surely no one of the searchers took such long chances with this invisible death as he, who poked into dead men's houses and dissected not only the carcasses of diseased animals, but the human victims of cholera and tuberculosis as well. It is related that he went to all the hospitals in Berlin to beg the bodies of men or women who had died of consumption; that he injected the sick tissue from their wasted bodies into hundreds of guinea-pigs, rabbits, dogs, cats, white rats, chickens and pigeons, washing his hands incessantly in bichloride of mercury as he toiled at his grewsome task.

Since Koch held that the tubercle bacillus gains entrance into human and animal bodies by being inhaled into the lungs, work with tubercular specimens was particularly hazardous, from his point of view.

"These little crooked rods—the tubercle bacilli were delicate and finicky about their food and feeble in size," says De Kruif, "but more savage than hordes of Huns, and more murderous than ten thousand nests of rattlesnakes!"

It is doubtful whether Koch would have endorsed this De Kruif extravaganza, but when he came to test his theory by one of his own "postulates"—the one requiring the artificial implantation of the disease into healthy animals—he evidently felt it necessary to take proper precautions. On page 136 of *Microbe Hunters* De Kruif gives a graphic account of Koch's ingenious device for spraying live, healthy animals with the "pure cultivations of the deadly bacilli" at a safe distance from the spray for himself. In a large box in his garden Koch put the unfortunate victims of his experiment mice, rabbits and guinea-pigs—and through the window of his laboratory he ran a lead pipe that opened in a spray nozzle inside the box.

Then for three days, for a half hour each day, by means of a bellows in his laboratory, he pumped "the poisonous mist of bacilli" over the little animals. De Kruif relates that in ten days the rabbits succumbed to the treatment, and in 25 days the guinea-pigs were all dead of tuberculosis. He doesn't tell us what happened to the mice, but presumably they also yielded up their lives to this weird and senseless experiment for which De Kruif supplies the heroic touch in his best rhetorical vein: "Koch told nothing of the ticklish job it was to take these beasts out of their germ-soaked box. If I had been in his place, I would rather have handled a boxful of boaconstrictors!"

Making all allowance for the difference between the mental effervescence of the man who describes this experiment, and the cool matter-of-factness of the experimenter; between the "poetic license" in De Kruif's type of writing and what actually happened; there can still be no doubt but that Koch believed that his researches were fraught with danger to himself—believed also that they might eventuate in averting danger from others, even though he made no out-cry about it. This is evidenced in De Kruif's ebullient comment: "What chances for making heroic flourishes were missed by this quiet Koch!"

And the pity of it all was, that this quiet, self-effacing German professor, this most efficient and sincere of all the microbe hunters, should have been misled—by the microbehunting fashion of the times—into bequeathing to posterity, as the result of his labors and sacrifices, instead of the boon to humanity which he dreamed of, that bacteriological joker known as "preventive medicine"!

At least to the medical and lay world in general, Koch is known as "the father of bacteriology" and the founder of "preventive medicine"—without which bacteriology would not be such a fascinating study for the medical profession although one of the latest exponents and defenders of "prevention," Dr. Haggard of Yale joins with De Kruif in declaring that to Pasteur belongs the honor—or odium, according to the point of view—of having laid the foundation of modern immunology in his experiments with chickencholera.

According to the story as related by De Kruif, "it was in 1880 that Pasteur was playing with the very tiny microbe that kills chickens"; and accidentally discovered that a stale culture he had made from the cholera bug, several weeks old, when fed to the hens, caused them to sicken, but not to die, as had those to whom he gave the fresh germ soup. The recipients of the stale culture recovered. Then some weeks later, so the story goes, Pasteur tried the experiment of shooting his cholera soup—swarming with virulent germs simultaneously into the birds who had recovered from the previous dose and also into some new ones. What followed, is described in De Kruifs best dramatic vein:

The next morning the impetuous Pasteur sent a hurry call to his two assistants, Roux and Chamberland, to come down into the laboratory where they found him pacing up and down before the chicken cages.

"Look!", he cried in great excitement. "The new birds we shot with the culture yesterday, are dead all right as they should be. . . But now see these chickens that recovered from the old culture we shot into them last month. . . . They got the same murderous dose yesterday as the others—but look at them—they are lively and eating happily."

Then Pasteur proceeded to chant the hymn of faith of all inoculators:

"Now I have found out how to make a beast just a little sick—so that it will get better from a disease . . . All we have to do is to let our virulent microbes grow old in their bottles . . . When microbes age, they get tame . . . they give the chicken only a little of the disease, and when she gets better she can stand all the virulent microbes in the world. We'll apply this to anthrax also to all virulent diseases . . . We will save lives!"

And De Kruif echoes this faith in the naive comment:

So it was that Pasteur ingeniously turned microbes against themselves. He tamed them first, and then he strangely used them for wonderful protective weapons against the assaults of their own kind.

He relates how Pasteur, elated over the success of this one small experiment, went to the Academy of Medicine and told the venerable doctors there assembled that his chicken vaccinations "were a great advance on the immortal smallpox discovery of Jenner," saying: "In this case I have demonstrated a thing that Jenner never could do in smallpox—and that is, that *the microbe that kills is the same one that guards the animal from death!"*

The savants of the Academy were not agreeably impressed by this revelation, we learn, and one of their number almost came to blows with Pasteur on the floor of the august assemblage and later sent him a challenge to a duel, which the "Ulysses of Microbe Hunters" prudently declined with an apology to the challenger—showing- that the impetuous Frenchman was not all impetuosity. The following year (1881), Pasteur was given the opportunity to try out the validity of his new theory of immunization in a spectacular demonstration staged for him by the Agricultural Society of Melun, who invited him to make a public experiment.

And Pasteur accepted their challenge, although De Kruif relates it was not made in good faith, but was intended as a trap for his hero, whom he therefore leads forth to the Melun experiment with all the regimentals of theatrical fanfare:

Pasteur did not fancy going up in balloons and he would not fight duels—but no one can question his absolute gameness when he let the horse-doctors get him into this dangerous test.

Other students of Pasteurian history would see nothing remarkable or daring in Pasteur's efforts to make good his boasting claims in practical application—seeing that only by convincing others of the efficacy of his vaccines, could he expect to profit by them in any way. Fortune was with him that June day in 1881 at Melun, we are told, when he tried the same experiment with anthrax vaccine on the 48 sheep, several cows and a couple of goats brought together by the Agricultural Society, that had worked so miraculously in the case of his cholera vaccine and the chickens.

It was a grand personal triumph—in front of a vast throng of people comprising not only farmers and veterinaries, but councillors, senators, and other dignitaries magnificos who only exhibited themselves to the public at the weddings and funerals of royalty. Nothing more clearly illustrates the parallel between medical faith and religious faith, than the verbal flight in which De Kruif commemorates the success of Pasteur's Melun experiment:

The Bible does not go into details about what the great wedding crowd thought of Jesus when he turned water into wine; but Pasteur that second of June, was the impresario of a modern miracle as amazing as any of the marvels wrought by the Man of Galilee, and that day Pasteur's whole audience—many of whom had been snickering skeptics—bowed down before this excitable, little half-paralyzed man who could so perfectly protect living creatures from the deadly stings of subvisible invaders!

It is further recorded that the news of Pasteur's diseaseprevention vaccines was wired by the correspondent of the London *Times*—who was present at the Melun demonstration—to his paper and to the rest of the world. More honors were bestowed upon Pasteur at home. France called him her "greatest son" and conferred on him the "Grand Cordon of the Legion of Honor." Far more significant from a historic and human standpoint, is De Kruif's statement, that

... agricultural societies, horse-doctors, poor farmers whose fields were cursed with the poisonous virus of anthrax—all these sent telegrams begging him for thousands of doses of the life-saving vaccine....

And that in response to these calls, "Pasteur turned the little laboratory in the Rue d'Ulm into a vaccine factory." He set all his aids to work brewing "tame, life-saving anthrax bacilli" in huge kettles that "bubbled and simmered with this bacillusswarming soup that was the vaccine." Afterwards they poured it—gallons of it—into little bottles holding only a few ounces which De Kruif says "had to be kept absolutely free from all other germs," etc., etc.

A marvelous thing about the inoculators, is their meticulous insistence on *clean receptacles* for their filthy concoctions!

And thus here in Pasteur's laboratory in the Rue d'Ulm, the vaccine-serum industry was born. Enormous as were the profits in the manufacture of Jennerian vaccines—wherein enough pus could be raised from two calves to vaccinate the whole population of a sizable state—it will be readily seen how paltry these are compared with the financial returns from the cultivation of microbe vaccines, both because of the relatively smaller cost of the raw material and the wider latitude in application.

The microbian fecundity which produces several generations of germs in a few minutes—whereas calves do take time to grow—and the multiplicity of diseases for which the microbe cultures can be prescribed, make very apparent the great advance—from a commercial stand-point—of Pasteur's immunizing scheme over Jenner's, which was specific only for smallpox. Given only facile diagnosticians with a flair for disease-nomenclature—giving new names to the same old symptoms and enterprising microbe-hunters to discover a "specific" bug to account for each newly christened malady as it emerges from the medical baptismal font—no one can fail to see the limitless possibilities for profits in Pasteur's method of "immunization."

He was now 60 years of age, and for more than a decade he had been partially paralyzed; but his biographer tells us that his microbe-trapping zeal was unabated, and the success of his vaccine experiments quite naturally added fire to his enthusiasm. Then something happened that disturbed the composure and gave some sleepless nights even to Pasteur:

"Gradually, it was hardly a year after the miracle of Melun," says De Kruif, "disturbing letters began to pile up on his desk; complaints from a dozen towns of France and from places in Hungary. Sheep were dying from anthrax—*not natural anthrax* they had picked up in dangerous fields, *but anthrax they had got from those vaccines that were meant to save them!*"

These complaints of the failure of the anthrax vaccine became so numerous and from such different quarters that Pasteur's biographer says he dreaded opening his letters and "shut his ears to snickers that sounded from around corners." He tells that the most cruel blow came "from the laboratory of that nasty little German Koch in Berlin," who sent "a cold, *terribly exact scientific report"* which "ripped the practicalness of the anthrax vaccine to tatters."

We should marvel at these frank and damaging disclosures from the romanticist compiler of microbian exploits, were we not lost in the greater marvel of how little the passionate faith of the microphobist is affected by what Huxley called "a nasty little fact"! We have here a repetition of the seriocomic drama of the British Royal Commission on Vaccination withstanding 14 pounds avoirdupois of evidence against vaccination in their report, even while they were forced by it to alter their laws!

Of Pasteur in this crisis, De Kruif writes:

There is no doubt that Pasteur lost some sleep from this aftermath of his glorious discovery, but God rest him, he was a gallant man. *It was not in him to admit either to the public or to himself that he was wrong...* What a searcher this Pasteur was, and yet how little of that fine selfless candor of Socrates or Rabelais is to be found in him. But he is not in any way to be blamed for that, for those two last were only, in their way, looking for truth, while Pasteur's work carried him more and more into the frantic business of saving lives, and in *this matter truth is not of the first importance.* (Emphasis mine.)

Verily, the defender of the microbe-hunting faith spoke more truly than he knew, or intended, in that statement. In the business of "saving lives" by these devious bacterial ways, "truth is not of the first importance." Only by turning one's back on truth, by disregarding ordinary commonsense and physiological law, could men ever expect to reap health by sowing disease.

Very typical of the microbe-hunter's search for scientific truth was the way the dispute between Pasteur and Koch over the anthrax immunization was disposed of—as related by De Kruif:

The French nation, even the great men of the nation, *patriotically refused to believe* that Koch had demoted their hero from the rank of God of Science what could you expect from a German anyway?—and they promptly elected Pasteur to the *Academie Française*, the ultimate honor **to** bestow on a Frenchman.

It is related further that even "the skeptical genius, Ernest Renan, the author who had changed Jesus from a God into a good human being," welcomed Pasteur to his place among the French immortals. For, argues De Kruif,

Renan knew that even if Pasteur sometimes did suppress the truth, he was still sufficiently marvelous. Renan was not a scientist, but he was wise enough to know that Pasteur had done a wonderful thing when he showed that weak bugs may protect living beings against virulent ones—even if they would not do it one hundred times out of one hundred.

"Renan was not a scientist" in the microbian sense, according to De Kruif. Then his "wisdom" in accepting the microbian theory of disease prevention rested—*not* on knowledge, but on *faith*—faith in the statements of men like Pasteur who he knew—and De Kruif admits—had been guilty of suppressing and distorting *facts*! Moreover, if the French "skeptical genius" could believe so implicitly the tenets and dicta of the microbe-hunting oracles, his blind trust in "things unseen" appears to transcend that of the average religious devotee, and can only be compared to the sublime act of faith of that Latin father who said: "I believe *because it is impossible!*"

And there is another phase of this disease-culture immunology that is persistently ignored by the immunizers, and that might very properly engage the attention of thoughtful laymen. Even a High School student of physiology knows that shooting germs into an animal's blood with a hypodermic, and taking them into the system with food or drink, or by inhaling them, are distinctly different and separate procedures—having practically no relationship. And since inhaling or ingesting is the natural way of introducing anything into the system from without; and the subcutaneous injection into the blood the unnatural or artificial way, what possible logical deductions about the natural incidence of disease—even admitting for the sake of argument that germs cause it—can be drawn from its artificial implantation via the hypodermic route?

Numerous experiments are reported in the literature by reliable bacteriologists, wherein the attempt was made to

produce disease in healthy persons by feeding them the supposedly causative germs in food and drink; and by swabbing the air passages of their throats and nostrils with the germ culture—and in no single instance did the disease develop. Dr. John B. Fraser, M.D., of Toronto, reported 45 such experiments with typhoid germs put into water, milk, bread, cheese, meat, fish, headcheese, butter, etc.; 19 experiments with pneumonia germs; a total of 40 experiments with diphtheria germs-which were not only given in food and drink, but millions were swabbed in the nose and throat, and every facility given them to develop; 19 tests with tubercle bacilli, 11 with germs of spinal meningitis, and 10 with mixed germs, but all failed to produce any effect. Dr. Fraser says: "These tests were made scientifically, and part of the germs were grown from stock-tubes furnished by one of the best known laboratories in North America. These are facts. not opinions."

Dr. Fraser's experience with these tests was repeated in attempts to transmit influenza to healthy and supposedly "non-immune" human subjects at the U.S. Quarantine Station on Gallupa Island near Boston in December 1918. The subjects of experiment were 68 volunteers from the U.S. Naval Detention Camp on Deer Island, Boston, and the experiments consisted of inoculations with pure cultures of the *Pfeiffer bacillus* (influenza germ), with secretions from the upper respiratory tract, and with blood from typical cases of influenza. Thirty men were inoculated by spray, swab, or both, of the nose and throat, and in no instance did influenza develop in any of them-not even when exposed to persons suffering from the disease. Similar experiments were made with 50 men at Angel Island, San Francisco, the same year; and a report of these experiments was published in Government Bulletins No. 57 and No. 123 by the Navy Department Bureau of Medicine and Surgery, Division of Sanitation.

These experiments, together with the fact that there is no escape from germs, that they are with us always—in us, around us, above and beneath us—should convince any reasoning intelligence that old Pettenkofer was right in saying that germs are not the important factor in disease, that "it is the disposition of the individual that counts."

Two years after the appearance of De Kruif's *Microbe Hunters,* wherein he speaks of Dr. Robert Koch's tubercular experiments as perilous as handling boa-constrictors, and of the tubercle bacilli as "more savage than Huns and more murderous than 10,000 nests of rattlesnakes," one of the greatest authorities on tuberculosis in America, Dr. Maurice Fishberg of the Bellevue Hospital staff in New York, writing in the *American Mercury,* February 1928, had this to say:

Fear of infection with tubercle bacilli is without foundation as regard adults. If they are to become tuberculous, the causes are not alone the tubercle bacilli, which every one has in his or her body, but other factors about which we know little or nothing . . . While all are born free from the taint, at 18 years of age over 90 percent of all human beings give unmistakable proof that they harbor tubercle bacilli within their bodies.

Dr. Fishberg says further:

Only one out of ten dies from tuberculosis, despite the fact that all the other nine have also been infected with tubercle bacilli. . . . In fact it appears the disease is the exception rather than the rule after infection. For practically every human being living in a city is bound to become infected before passing adolescence. This is but natural when we consider that the tubercle bacilli are ubiquitous, and in the opinion of those competent to render authoritative opinion, they can be eradicated only by killing all animals and all human beings who react to the tuberculin test.

Incidentally it may be said, that if the tuberculin test is no more reliable for humans than for dairy cattle—wherein its failure has been demonstrated over and over in practical operation—even the above suggested heroic measures would not rid the earth of tubercle bacilli. Dr. Fishberg's article in the *American Mercury* gives the lie direct to the claims of the American Anti-Tuberculosis Society, whose crusade against the tubercular germ—carried on in a vast outlay of time, energy and money—he does not hesitate to say "has been wholly barren of results."

Because, he says the Anti-TB Society has not concerned itself with palliative measures for those already afflicted with the disease. "Their aim was to *prevent* tuberculosis by preventing the entry of the tubercle bacillus into the human body," and in this undertaking they have failed 100 percent, according to Dr. Fishberg. He says: "We know very little about the reason why some become sick while most escape, *but we do know that these infections are salutary to the vast majority of humanity."*

In this last statement Dr. Fishberg appears to endorse the optimistic view of the micro-organisms set forth by Béchamp, and to discount the sensational scare-heads of the Pasteur school of bacteriologists. He says experience has proven that there is very little danger of communicating tuberculosis from one person to another, even in the closest of all intimacy, the marital relation. An extended survey among the poor of the East side in New York City, convinced Dr. Fishberg of the very slight danger of contagion in tuberculosis. He says, "Rarely have we found both husband and wife affected with the disease in clinical observation."

Yet how many millions of dollars—reaped largely from the sale of Christmas seals—have been spent in the mad, futile war on tubercle bacilli; to say nothing of the personal inconvenience, humiliation, and persecution in some instances, inflicted upon the unfortunate TB's themselves in the fatuous effort to herd them into quarantine camps. This movement for strict segregation of the tubercular has undoubtedly increased the death-rate among them, and imposed additional hardship on those less able to pay the exorbitant sanitarium rates. It was a matter of common observation—before the zealots of microphobia began hounding them from home and business—that persons with active tuberculosis even, when permitted to dwell among friends and cheerful surroundings, frequently lived for ten, twenty, sometimes thirty years in sufficient health to go about their usual avocations almost to the end.

I have in mind a frail little woman artist of Southern California, who for twenty-five years painted pictures between paroxysms of coughing, and finally died practically in front of her easel. Besides leaving behind her many beautiful paintings—the blue haziness of the California desert, mountain and canyon, transferred to canvas with inimitable delicacy of color and feeling—this little artist gave pleasure to thousands of visitors who came to catch the inspiration of her sunny temper and indomitable spirit. Shut up in a sanitarium, surrounded by *les miserables* of the Great White Plague, this woman would probably not have lasted more than five of the twenty-five busy, happy years she spent in creating beauty and dispensing cheer in Southern California.

Apropos of the claims put forth by the microbe chasers, as to the extent to which the death-rate from tuberculosis has been reduced by their efforts, Dr. Fishberg quotes Dr. Raymond Pearl, head of Biological Research of Johns Hopkins, as saying in 1922: "As a matter of scientific fact, extremely little is known about *why* the mortality from tuberculosis has declined." The same authority states that "no greater decline is shown in the diseases about which the health authorities have been most active in attempts to control, than in those about which little or nothing has been done."

Fishberg also quotes Karl Pearson, highest authority on biometrics, as saying: "Mortality from tuberculosis has been declining since 1838, long before any special measures for prevention or control were instituted." Certainly, this was 44 years before the German Dr. Koch found the "bug" which he charged with being the cause of the malady, and more than 50 years before the program for "prevention"—based on the Koch finding—was inaugurated, and which Dr. Fishberg proclaims such a dismal failure. Yet so strong is the Koch tradition, that even Dr. Fishberg apparently dares not contradict it openly, by declaring in so many words that the tubercle bacillus is *not* the cause of tuberculosis—even while he furnishes all the proofs that it isn't!

Seeing that the preponderance of evidence is on the side of those who affirm that filth and ignorance are the most fruitful causes of disease; and that the only prophylactic, as well as the only cure, is through hygienic living and optimistic thinking, Karl Pearson's statement that the decline in tuberculosis began in 1838 is very significant. For it was about that time that men's thoughts in Europe and America began to turn to sanitation, with the invention of plumbing and the appearance of the first bath-tubs. Another fifty years went by before the superiority of sanitation over vaccination in the eradication of smallpox had been demonstrated, and then only in isolated areas whose inhabitants could be persuaded to try cleanliness instead of blood pollution as a means of disease-prevention. Nevertheless, it is a fact upheld by the vital statistics of every country where they have been kept with any degree of accuracy that with the coming of sanitation—external cleanliness in public and private places-and better economic conditions among the masses of the people, which was chiefly the work of the labor-unions and the result of collective bargaining, the general health of the people began to improve; and in the exact ratio that sanitation and personal hygiene have been practiced while inoculations have been neglected, all diseases have notably declined.

Other factors conducive to better health conditions have entered into the equation in the past 50 years. The rise of the drugless schools of healing-Natur-opathy, Osteopathy, Chiropractic, etc.—together with the phenomenal popularity of Christian Science, have pulled nearly half the people of the United States away from the "regular" school, with its destructive drug-baiting, serumizing methods, and this upon the plaintive admission of the "regulars" themselves, who are not supposedly inclined to exaggerate their own waning popularity. The recognition of psychic forces and the power of thought in influencing bodily conditions, is another important factor in modern life, since such recognition occupies a distinct place in the credos of many cults, religious, semireligious and secular, with numerous followings in this country. Theosophy, Unity, Psychic Research, the Rosicrucian Fellowship, Astrology and Psycho-Analysis, have each hacked at regular medicine and taken their quota from its loyal adherents.

All these counter forces have served as palliatives, have tended to minimize, but could not wholly obscure nor off-set the disease-breeding effects of the noisome concoctions labeled "preventive medicine" and foisted upon a hapless world by Koch and Pasteur. Notwithstanding the rebuke and snubbing he administered to Pasteur because of his fake anthrax immunization, Koch himself, who should have known better, a few years later offered a "tuberculin cure" for consumption that wrought among human beings as great a shambles as Pasteur's anthrax vaccine wrought among the sheep.

Medical biographers in general are very reticent about this "tuberculin cure" advanced by Dr. Koch in the early 90's, and quickly suppressed when it was seen to despatch the patients much more rapidly than the disease. "An unfortunate experiment," "very disappointing," are the guarded phrases applied to this phase of Dr. Koch's work by the guardians of the inner medical circle. De Kruif admits that "the Death Fighter"—as he dramatically termed Koch in this tuberculin experiment "killed a considerable number of people"; *{Microbe Hunters,* p. 300) and that it was "a disaster, a tragedy that partly tarnished the splendor of his trapping of the microbes that murder animals and men with anthrax and cholera and tuberculosis"!

Although the tuberculin "cure" was speedily relegated to the scrap-heap, for the aforesaid reasons, the tuberculin idea has persisted in medical practice down to the present as a diagnostic test, to determine the presence of latent tuberculosis in animals and humans. It is used ostensibly for the purpose of detecting bovine tuberculosis in dairy herds, which is accomplished by injecting the tuberculin into the cows at stated intervals, and then pronouncing judgment according to the cow's reaction to the "test." In like manner it is used to detect latent or incipient tuberculosis in children, when it is called the "Calmette test," from the name of one of the original experimenters with it upon children.

Both of these so-called "tests" have proven as disastrous to animals and to children as the tuberculin "cure" was to Koch's adult consumptives; but for some mysterious reason known only to the inscrutable deliberations of medical councils, both these procedures still carry the official stamp of high medical approval and recommendation. Hidden away in the Archives of Internal Medicine—where the eyes of lay readers seldom penetrate-the occasional researcher encounters reports of experiments upon very young children with the Calmette test which resulted in blindness and death in some instances. These cases with their ghastly sequelae, are given over the signatures of the eminent physicians who made the experiments, and whose professional nonchalance in reporting the untoward results may be explained by the callousness acquired in the frequency of such occurrences. The average layman will receive something of a shock from reading about them.

The tuberculin-testing of dairy cattle has been a stormcenter of rancorous discussion—culminating in gun-play in some instances—between dairymen and cattle-owners on the one hand, and the Government-sponsored forces of Organized Medicine on the other, for the past 25 years in the United States, and the battle is still going on. Our hope is that the property rights affected by the health laws of microphobia in this instance, may prove to be stronger than the humane appeals offered on behalf of children and the poor tortured animals, have hitherto been.

After it had been scientifically demonstrated by the bacteriologists themselves, that one type of microbe can be changed into another, wholly different type—merely by changing the medium and the temperature in which it is grown—one might suppose they would have stopped talking about "specific germs for specific diseases," and that one kind of "germ soup" would have served for all purposes as an immunizing agent. As a matter of fact, this is physiologically true. For the inoculator's needs, one kind of vaccine or serum would suffice; but this would not satisfy the manufacturer of the "preventive" concoctions. His profits redouble every time a fresh "test," "immunizer," or "cure" is discovered and put on the market with the stamp of official medicine.

Hence it was not enough to load human bloodstreams especially children's—with calf-pus and tuberculin made from the rotting tissues of dead or dying consumptives; but to these have been added the witch's brew of antitoxin for diphtheria—poisoned horse-serum; Pasteur's "anti-rabic" fluid—an emulsion from decayed spinal-cords of rabbits who had died of artificially induced hydrophobia, or something resembling that; anti-typhoid vaccines, also derived from rabbits; and a hundred different "monovalent, polyvalent, prophylactic and curative anti sera" for everything, from common colds to pneumonia and meningitis, have been tried out on the quivering bodies of dumb creatures, and then emptied into the non-resisting veins of young children.

The result has been what might have been expected by any one ruled more by commonsense and less by fantastic theories than the "immunizers." In 1919 in Dallas, Texas, ten otherwise healthy children died from the effects of toxinantitoxin administered to "prevent" their having diphtheria. This serum had been furnished by the H. K. Mulford Laboratories near Philadelphia, and it was urged in the defense to the damage suits instituted by the parents and relatives of the dead children, that this particular lot of toxinantitoxin "had satisfactorily passed all the Laboratory tests at Washington." But the Government's approval of the serum did not prevent the Dallas court from rendering judgment against the manufacturers and in favor of the plaintiffs in amounts totaling about \$80,000. This can be verified from the Dallas court files.

Many fatalities from serum injections have been reported in the daily press from time to time, (though they are printed inconspicuously and never played up as significant happenings) and many more have occurred which were *not* reported, because of the ease with which those having both a professional and pocket-book interest in doing so can cover them up. When six children were killed, and forty others made desperately ill, with toxin-antitoxin inoculations in a school near Vienna in January 1925 the Austrian Government, acting on the advice of their Minister of Health, forbade the use of toxin-antitoxin anywhere within its domains "until further research had established beyond question its non-dangerous character." This was a momentous piece of news, and was doubtless cabled to every newspaper in the world with a foreign news service. Yet only one metropolitan daily in the United States-of all who received it-gave it space! A bit more publicity was accorded the antitoxin tragedy at Bundeberg, Australia, in January 1928, wherein twelve children were buried in one day as a consequence of the misguided zeal of the Health Department

and the City Council to "immunize" the school children against diphtheria. It was a pathetic instance of retributive justice that two of the victims were the sons of one of the town councillors who had insisted on the "preventive" dose. But even this tragic happening in the Australian town evoked no headline in the American press, but was quietly tucked away in an inconspicuous corner of the paper.

"Anaphylaxis," meaning quick poisoning of the nerve centers, is the high-sounding medical term given to these violent reactions to inoculated disease-cultures, and a book bearing this title was published in 1919 by Dr. A. Besredka, a professor at the Pasteur Institute in Paris, in which an ingenious explanation or apology is given of the phenomenon, and a very disingenuous remedy is proposed. An animal or human may be so "sensitized" by the first or second dose of the serum, say the inoculators, that the third injection—after a lapse of time—will produce the "anaphylactic reactions" that so often prove fatal.

But what about the many cases who collapse under the first shot? These were apparently already "sensitized" without previous dosage; but in any case, since the inoculators have no instrument for precise measurement of the subject's degree of sensitivity, why take this murderous chance with something that they cannot possibly calculate for, and which will inevitably right itself if left alone? One would suppose that after encountering these "anaphylactic reactions" to their immunizing efforts-Besredka relates that it was the frequent observation of them in his own practice and getting similar reports from his colleagues that led him to publish the book on Anaphylaxis—conscientious physicians would promptly discontinue the thing which they see to be causing them. But no, Besredka's only recommendation for the trouble, is to find a new kind of germ soup to inoculate for the anaphylaxis!

Thus that portion of the human race which looks to Allopathic guidance—still a considerable number—is being tossed on a continuous serological merry-go-round in a brief joy-ride to destruction. "But the vaccine-serum inoculation does not kill them all," some one may protest, and rightfully. The number killed outright by the "immunizers" may be small as compared with the whole number inoculated, or it may be considerable. There is really no way of arriving at a correct estimate, owing to the admitted inaccuracy of medical diagnoses, and the very human element present in a situation where the diagnosing and the compiling of vital statistics are left in the same hands. It should be comparatively easy to make the figures fit their theory.

However, the gravamen of the indictment of this form of medical voodooism does not lie in the number of quick deaths from anaphylaxis, large or small as that may be, but in the appalling aftermath from the slow, cumulative effects of residual poisons left in the trail of the "immunizing" hypodermic.

Take for example, the case of the anti-typhoid vaccination in the World War, which was tried out so thoroughly on the troops of all the countries with what dire results will never be generally known because of the systematic distortion and concealment of the real facts by those with a professional and pecuniary interest in making out a case for the vaccine practice. For of all the misleading and mendacious propaganda put out by ignorant or venal health authorities to serve the vaccinator's need, none appears to have gained such wide acceptance and so little contradiction as this wartyphoid fiction. Even some who have learned to discount the claims for smallpox and diphtheria immunization, will still insist: "But you have to hand it to them on typhoid vaccination. That *did* wipe out typhoid in the World War, as compared with the frightful epidemic in the Spanish-American War."

Yet the official figures furnished by the Army Reportswhich any layman may verify simply by turning to the records—prove the absolute falsity of any such claim. It is true, as every one knows, that there was much typhoid among the troops, both in the Volunteer and Regular forces, of the Spanish-American imbroglio. Most people know also that the pestilence was caused by the scandalous, unsanitary conditions: Cuban mud knee-deep, insects, intolerable heat and "embalmed beef" in the home camps. What the general public doesn't know, and what the Army typhoid statistics for 1898-1900 clearly establish, is that there was a marked decline both in the incidence and mortality of the disease, beginning in 1899 with the adoption of a rigorous regimen of sanitation and hygiene; that this decline steadily continued until in 1908 the typhoid incidence dropped to less than 3 cases per 1000 men, and the death-rate to .31 of a man per 1000. And not a single man was inoculated with the typhoid serum prior to 1909, and it was not made compulsory before 1911. Thus it is seen that typhoid in the American Army had dwindled to the vanishing point before the vaccinators got in on the job, and they had to hurry in order to claim the credit for something with which they had nothing whatever to do.

Likewise the claim that "there was no typhoid among American troops in the World War," is discredited, both by the shifting, unreliable character of medical diagnoses and by the official returns of the U. S. Public Health Reports for 1918-19. In one of these, Walter D. McCaw, chief of Army Medical Staff, complains bitterly of the carelessness of army officers "who neglected proper sanitary precautions in camp, *through a false reliance upon typhoid vaccination,* thereby causing a prevalence of typhoid, paratyphoid and dysentery among our troops in France."

McCaw said that "seventy-five percent of the men in the Chateau-Thierry region were afflicted with these diseases," and that at one time in the Argonne offensive "there were more than 300 cases of typhoid." He cited "a unit of 248 men from Camp Cody, New Mexico, which arrived in England in July, 1918, with 98 cases of typhoid of whom eight died"; and another contingent "which lost 10 percent of its typhoid cases." This was up to the highest percentage of loss in the Spanish-American epidemic, notwithstanding that all these World War veterans had been thoroughly "immunized" with the typhoid serum. Not only this, but according to figures furnished by Major Love, Army statistician, and guoted by Fred C. Kelly in *Current History* magazine for April 1923, "the number of deaths compared with the number of cases was slightly less in the Spanish War than in the World War." That is to say, once a man got typhoid, his chance for recovery was better before the serum was introduced! In the World War, in the French Army alone there were 113,165 cases of typhoid with 12,380 deaths up to October 1916, and antityphoid inoculations were made compulsory in the French Army in March, 1914-five months before the war broke out. These figures were supplied by Sir Thos. H. C. Goodwin, Director-General of Army Medical Statistics in his report to the Royal Society of Medicine. In the English Army, according to the same authority, there were up to December 1918 from the commencement of the war, 7,423 cases of typhoid with 266 deaths—all inoculated—and these figures do not include the unparalleled death and disease toll at Gallipoli and in Mesopotamia. A further interesting side-light on the armytyphoid is afforded by the report of an eminent French physician, Dr. Rest, which was published in the Journal of the American Medical Association, July 28, 1917, p. 267. Dr. Rest who made a special study of typhoid in the French Army, with reference to ascertaining the degree of immunity conferred by the serum, says:

The percentage of escape from typhoid because of the inoculation was exactly off-set by *the same percentage of increase in the paratyphoid cases*, this being true to the second decimal place.

In other words, just as many men were sick, but the doctors called it something different. Pretty soon they had two varieties of "paratyphoid," A and B, and they rang further changes on these with "intestinal flu"—after the wholesale drenching of the men's systems with vaccine-serum poisons of one kind or another had swamped the army camps with the deadly influenza. Curing one disease by superinducing another and a worse one, is the immemorial medical custom, and their time-honored refuge has been their exclusive dominion over diagnosis and nomenclature.

The zymotic diseases replace each other, and when one is rooted out it is replaced by others which ravage the human race indifferently whenever the conditions of healthy life are wanting. They have this property in common with weeds and other forms of life—as one recedes another advances.

These words were uttered more than 60 years ago by Dr. Farr, Medical Statistician of England for many years. Dr. Charles Creighton advanced this same "substitution theory of disease" in his *History of Epidemics in Great Britain;* and Herbert Spencer said that "vaccines in subduing one disease only increase others." *

It could not greatly matter to the soldiers or their bereaved relatives, whether they died of "typhoid" or "influenza"; but this fine diagnostic point would of course be of great value to the vaccine-serum laboratories and to the profession upon whose theories they thrive.

Although the post-war "flu"—of all the post-vaccinal sequelae—took, perhaps, the heaviest death-toll in the armies of the World War, it was by no means the only deadly manifestation in the aftermath of the army-camp hypodermic ministrations. In the *British Journal of Experimental Pathology,* August 1926, two well-known London medical professors, Drs. Turnbull and McIntosh, reported several cases of *encephalitis lethargica*—"sleeping sickness" following vaccination which had come under their observation. This led to the appointment of two Commissions, the Andrewes and the Rolleston, by the British Ministry of Health, to investigate the extent of such happenings in England and Wales. Their reports published in 1928 revealed 231 cases and 93 deaths.

Similar investigations yielded more or less similar results in all the war-scourged countries. The Holland Government, when 139 cases with 41 deaths were reported there, suspended its vaccination law which had been in vogue for nearly a century. Even the United States Public Health Bureau—extremely reticent in such matters—admits "85 cases of probable or proven post-vaccination encephalitis for the period of 1922-31."

Incidentally it is worthy of note that the majority—if not all—of the post-vaccinal cases of encephalitis reported—and there were numberless cases, of course, which were never reported—followed the typhoid vaccination for which such flamboyant claims have been made.

A notable instance of this was the outbreak of encephalitis at St. Louis in the late summer of 1933 following an epidemic of typhoid traceable, it was said, to a polluted water-supply superinduced by the drouth. It goes without saying that wherever there is an epidemic of typhoid, the doctors will insure a plentiful supply of typhoid vaccination whence the encephalitis which so puzzled them!

In an article in the March (1934) *Country Gentleman*, entitled "The Sleepy Death" by Paul DeKruif, even the romanticist defender of the microbe-hunting faith admits that the sleeping sickness—which doctors call *encephalitis lethargica*—is sometimes an aftermath of vaccination, and that such was the finding of the group of "scientists" whom the Government sent to St. Louis in the Fall of 1933 to study the problem.

These reported the *encephalitis* cases at St. Louis developed about ten days after vaccination, and that in all

* Facts and Comments, p. 270.

instances where death ensued—of which there were more than 100—vaccinia was indicated in the brain upon post mortem. Very significant in connection with these admissions, is DeKruif's statement that "encephalitis is a baby among the plagues that murder mankind," it having been first discovered in 1917 by a Dr. Economo of Vienna who reported 11 cases, five of whom died.

Thus it will be seen that this "enfant terrible" among the plagues came to life simultaneously with the wholesale vaccinations and inoculations that were made a routine procedure of army camp life in the world war. Very significant also is DeKruif's pronouncement in the aforesaid article, that "all that can be said scientifically about encephalitis, is that *microscopically* it is the twin of infantile paralysis."

But neither the dread of infantile paralysis nor the yet more dreaded *encephalitis* can stay the immunizing ravages of the inoculators—according to DeKruif who says: "You understand our *death-fighters* would not for a moment think of stopping vaccination"! Because, says Mr. DeKruif resorting to the usual trick logic of the "immunizers"—the post-vaccinal sleeping sickness occurs only at the rate of about one case for every 350,000 vaccine points sold yearly in the United States. Whereas—proceeds Mr. DeKruif—"there were 46,000 cases of smallpox reported in 1932 *through neglect of vaccination"!*

We note DeKruif doesn't say *who* reported the 46,000 cases of smallpox in 1932, nor *upon whose authority* these were chargeable to "neglect of vaccination." Manifestly when the diagnosis and the compiling of vital statistics are both left in the same hands, the *incidence* of any disease can be anything the medical health department chooses to report. But *the mortality* is a different matter. A death is a concrete happening, required by law to be reported and recorded. The diagnosis or cause of death may be matter for controversy but not the death itself. There can be no dispute about that.

Now if Mr. DeKruif had wished to be perfectly frank with the readers of his article on "The Sleepy Death," he could have told them that in that same year in which *post-vaccinal encephalitis* claimed more than 100 victims in the St. Louis area alone, *there were only 31 reported deaths from smallpox throughout the entire country!*

Nor does the encephalitis death-toll tell the whole story of the lurking dangers in the medical voodoo of vaccination. It is under strong suspicion of producing the epidemics of infantile paralysis which were unheard-of until the immunizers decided to add horse-serum, rabbit-serum, monkey-serum and other noxious witches' brew to the calf-pus of the smallpox virus. If DeKruif, who appears to be the accredited spokesman for the microscopists, is correct in saying that "microscopically" encephalitis and infantile paralysis are identical, it might occur even to the faithful to ask if "the changeful hypodermic" can cause the former, why not the latter? As a matter of clinical observation, infantile paralysis has followed vaccination and serumization in very many instances. And who of us would not prefer smallpox to either of these deadly maladies with their terrible aftermaths for the unfortunate survivors? Not that a malign fate has hung over our heads the inexorable choice of any of these. It is only the medical health officer holding over us *the fear* of them—for his own sinister purposes. It is quite possible to avoid one and all of these plagues, simply by using a little common-sense in the hygienic care of our bodies and keeping at a safe distance the "immunizers" with their poison-laden hypodermic.

Following the announcement from Philadelphia last August (1934) that Dr. John A. Kolmer had discovered "a protective vaccine" against infantile paralysis, Dr. W. Lloyd Aycock, director of the Harvard Infantile Paralysis Commission and called "one of the most distinguished experts in this disease," gave a statement to the press that "Nature does a better job of immunizing against infantile paralysis than the artificial methods" which he branded as "hazardous." He declared this disease to be of such rare incidence that "less than one in a thousand needs to be protected," and that "vaccinating everybody could hardly be justified *in the absence of guaranties of safety."*

The California doctor who recently killed one of his own children and narrowly escaped losing the second with this "protective vaccine," will no doubt concur in Dr. Aycock's view. But despite the Harvard savant's warning and the reported vaccine casualties, Dr. Wm. H. Park, head of New York City Laboratories, is advertising for "imported monkeys at |9 apiece" from which to brew the "protective vaccine" against paralysis, and trying it out on N. Y. school children with very gratifying results—to Dr. Park! Verily the ways of the "immunizers" are like the inscrutable ways of Providence and "past finding out."

And now the latest thing in immunological advertising to date, is the film picture of a stream-line express racing the much acclaimed "iron lungs" for the victims of the creeping paralysis to a stricken Colorado district at Boulder Dam. This is a companion picture to the spectacular race of the dog-sled, with Balto and the others—over the ice fields to Nome, Alaska, ten years ago, carrying the frozen antitoxin—"the magic stuff that saved Nome"—to the 22 cases of diphtheria reported there. Incidentally, the papers reported that the diphtheria cases more than doubled after "the magic stuff" arrived, and the wife of the doctor who had ordered it died after getting her "shot" of the life-saving dope.

But the financial returns from this picturesque publicity stunt to the Mulford Company which manufactured the serum used in it, were sufficient to enable them to award gold medals to all the participants—dogs and mushers—and to erect a statue to Balto in Central Park.

Incidentally also *in re* the "iron lungs" used in cases of paralysis, it may be very pertinently observed that if the

inoculators would only leave the children alone, they will get along much better with the lungs which God has given them than with any expensive iron contraption of the doctor's devising.

A most significant and authoritative witness on the substitution of more deadly maladies for those whose conquest is attributed to the Microbe Hunters, is Dr. Alexis Carrel of the Rockefeller Institute, N. Y., who writing in the *Scientific Monthly* for July 1925, said:

Although the adult individual today has much less chance of dying from smallpox, cholera, tuberculosis or typhoid, than he had 50 years ago, he surely has more prospect of being tortured by some form of cancer, afflicted with slow diseases of the kidneys, of the circulatory apparatus or the endocrine glands, and of going insane___Modern Medicine protects him against infections which kill rapidly, but leaves him exposed to the slower and more cruel diseases.

Please note, dear reader, this pronouncement from the Sage of the Rockefeller Institute, in connection with the rhapsodies of De Kruif's Microbian Fairy Tales, while we follow the death-trail of the microbe hunters into the following chapter.

CHAPTER IX

The Voodoo and the Cancer Riddle

Herodotus and various medical historians relate the story of Democedes, a Greek slave-physician and pupil of Pythagoras, who when called on one occasion to attend the King of Persia, "incidentally also cured his wife of a cancer."

But apparently the ancient Greek failed to give the formula to his fellow Æsculapiads, and took the secret of cancer-cure with him into the Plutonian shade. For myriads of cancer researchers since his day have pursued the *ignis fatuus* of a "cure" with hopeless eyes.

Twenty-two years ago a prominent lay spokesman for orthodox medicine, Samuel Hopkins Adams, wrote: "In this year of enlightenment, 1913, I put the question—'What causes cancer?'—to a tableful of experts, each with a nationwide reputation, and one after another replied 'I do not know.' " Nine years ago, at the Atlantic City Convention of the American Medical Association, one eminent authority in a heated debate with another eminent authority, exclaimed: "I admit that I know neither the cause nor the cure of cancer and neither do you, nor anyone else here!"

More recently, in the cancer hearings before the U. S. Senate Committee on Commerce at Washington, March 13, 1930, Senator Johnson of California queried Dr. Joseph Bloodgood of the Johns Hopkins staff as follows: "In the last few years, with the advance of science and the continued research that has been indulged in, have you gentlemen who are at the very head of the profession, been able to find a remedy or cure for cancer?"

And Dr. Bloodgood, one of the directors in the American Society for the Control of Cancer, and chief apologist for that society's failure to justify its name, was forced to answer: "No. We only have surgery first, and secondly radiation." In another part of his testimony, Dr. Bloodgood affirmed the faith of all cancer surgeons and radiologists in the statement, "Cancer is a local growth in a single spot of the body."

This is the teaching of the "local theorists" who hold that the trouble starts with the local manifestation—with the lump, tumor or lesion in visible evidence. This, they claim, if taken in time, can often be thoroughly eradicated by surgery or cautery of some kind; but that if it isn't so removed, it will send its poison down through the system, causing general toxemia and death.

Now if the local theorists are right in their major premise about the local origin of cancer, their local remedies are perfectly logical, and the cutting or burning when skillfully done should end the matter in the majority of cases certainly in half of them. But does it? The best authorities estimate that over 90 percent of the cases diagnosed as cancer, die of it, in spite of frequent applications of both surgery and radium. Dr. James Ewing, another expert witness at the Senate cancer hearing, admitted this, and further voiced the pessimistic view that he did not believe "there is any reasonable expectation of a great new discovery entering the cancer field in this age" that would improve the present situation.

The usual explanation given by the local theorists for the failure of their local remedies, is that the candidates for operation *didn't come in time*. Their slogan is "early and radical excision." Because, they say, if any portion of the cancerous tissue is left in the patient's body, it will furnish a nucleus for a new growth which will grow faster than the first. All authorities agree that irritation of any kind will greatly aggravate a cancerous condition. Dr. Leo Loeb, of the University of Pennsylvania, sometimes called "the father of cancer research in America," is quoted as saying that he learned early in his cancer practice that "merely drawing a silken thread through a benign, slowly-developing tumor would transform it into a malignant, rapidly developing one," and that "cutting with a knife had the same effect."

The most conspicuous exponent of the local theory of cancer in this country is The American Society for the Control of Cancer, which comprises about 500 of the leading surgeons and radiologists in the United States, together with 50 or 60 laymen. From its inception in New York City, May, 1913, this Society has industriously disseminated cancer propaganda based on the local theory of the disease, broadcasting thousands of lectures and distributing millions of pamphlets and posters—all ringing the changes on its central pronouncement that "early diagnosis and early operation are the only hope of the cancer-stricken!"

To this end the Society for Control conducts an annual crusade in various cities of the Union under the exciting call of "Cancer Week," whose announced purpose is "Instructing the laity how to detect the early symptoms of cancer," and to frightening as many of them as possible to the operating table.

In the literature passed out to the public during these Cancer-Week raids, are two bulky pamphlets labeled respectively "What We Know," and "What the Laity Should Know," about cancer. A critical inspection of these, however, does not disclose a great deal of difference between what the doctors know and what the layman might be permitted to learn. Yet on page 8 of the Doctors' Manual we encounter this very significant and disturbing paragraph:

It is a well-known fact that a considerable number of malignant tumors *are not recognized by the doctors themselves when the patients present the early symptoms of the disease.* The early diagnosis of cancer is the one factor of greatest importance in the successful control of the disease, but unfortunately *the early symptoms of cancer are not distinctive*, and serve only to arouse suspicion of the presence of the disease . . . In most situations, the dictum holds true that *the more certain the diagnosis, the less the probability of cure.*

So here we have the official admission from the savants of the Society for Control, that they had launched a campaign of education to teach the laity how to detect incipient cancer which they can't detect themselves! Not discouraged by this, however, the Society next directs the public's attention to "pre-cancerous symptoms"—such as warts, moles, birthmarks, and ugly scars—since both the doctors and the laity are able to recognize these when they see them. So these, listed as "danger signals" in lurid red lettering on separate dodgers, are widely scattered during "Cancer-Week" in libraries, drug-stores, parks and elsewhere, like hand-bills of the surgical trade.

When asked if there was not danger of developing "Cancerphobia" in the public mind by this scare-head publicity, Dr. John Gerster, chairman of the New York City Committee of the Society for Control, replied that "it would be a good thing if it did. Anything that would scare persons into going to a physician for a thorough examination, would be beneficial."

Such a pronouncement is quite understandable from the physician's viewpoint—professional and economic. But what the lay public is interested to know, is, "What has been the practical effect of all these 'Cancer-Week' campaigns on the cancer situation?"

There is a grim irony in the fact that every year since the American Society for the Control of Cancer was organized, there has been a steady rise in both the incidence and deathrate of cancer, which in the past 10 years has climbed from fourth to second place as a cause of death in the United States, according to the latest Census figures which now put the number of cancer victims in this country at 125,000 annually.

The late Dr. L. Duncan Bulkley, founder of the N. Y. Skin and Cancer Hospital, writing in the N. Y. *Medical Record*, February 19, 1921, and also in the N. Y. *Times* of approximate date, said: "In the year 1915—following the crusade of overzealous surgeons throughout the country, propagating ideas regarding the local nature of cancer and urging the immediate, radical excision of every blemish or lesion which they chose to call 'pre-cancerous' . . . *there was a rise in cancer mortality actually more than double the average rise during the preceding five years*, as shown by U. S. Statistics."

And Dr. Bulkley produced the official figures in confirmation of his statement. But the medical profession has always been "a house divided against itself" on all vital and therapeutic questions, and cancer is no exception. Dr. Bulkley belonged to the school of thought which denies the local origin of cancer and teaches the constitutional or blood theory, which holds that the trouble starts with a vitiated bloodstream, and that the local manifestation instead of being the beginning, is the end product of prolonged toxemia.

This constitutional—or as some prefer to call it— "biochemical" conception of malignant growth was the earliest conception of it, entertained by the ablest medical minds in ancient times; but it gradually gave way before the more popular local theory calling for local remedies. More popular, because the panic-stricken patients like to see the fearsome lump or tumor disappear quickly under the knife or cautery, and surgeons find it profitable to humor their fears in this respect. Cancer surgery is probably the most lucrative branch of modern medical practice since appendectomies declined in popularity.

Eighty million dollars a year for cancer operations alone—exclusive of hospital bills and physicians' attendance—is a conservative estimate of the rich harvest this portion of the sick world yields to "regular" medicine, when we consider the number of cancer deaths, the great majority of whom have been under the knife, many of them more than once. For the well-to-do the price of a cancer operation runs from a thousand to ten thousand dollars, and for the middle classes it is "all the traffic will bear," as a rule. It is true, operations are sometimes performed gratis by surgeons who feel themselves compensated by the opportunity for wider experience and the increased skill which practice brings.

Still the large returns from surgical practice in the cancer field may be somewhat gauged by the generous salary paid— \$10,000 a year, it is said—by the American Society for Control, to a high-powered lecturer to go all over the country proclaiming the gospel of the local theorists and their remedies. By this and other means, an enormous propagandizing machinery based on the local origin of cancer has been built up, and correspondingly the channels of publicity have been closed to the expression of any other view.

The few courageous voices in the medical profession raised on behalf of the constitutional nature of the disease and pleading for a more rational treatment, have been silenced or ignored. Among the outstanding exponents of the constitutional theory in England, we find such names as William Lambe, John Abernethy, Sir Astley Cooper, and Sir James Paget for the earlier period; and in more recent times, Herbert Snow, Alexander Haig, Robert Bell and Sir W. Arbuthnot Lane. Among Americans subscribing to this view, the most conspicuous are Willard Parker, L. Duncan Bulkley, Laureston A. Merriam and Horace Packard of Boston University, Dr. David H. Reeder of Kansas City, and Dr. Wm. F. Koch of Detroit.

The punishment meted out to the venerable founder of the N. Y. Skin and Cancer Hospital for his indiscreet utterances *in re* the disastrous consequences of widespread surgical propaganda, was to be thrown out of the hospital he had devoted 40 years of his life to upbuilding, and to be expelled from the American Society for Cancer Research of which he had been a lifelong member.

Dr. Robert Bell, head of the Cancer Research Department of Battersea Hospital, England, and vice-president of the International Society for Cancer Research, when confronted with the same vindictive spirit from the British local theorists, fared better than Dr. Bulkley in America. He sued the leaders of the British Medical Society for stigmatizing him as a "quack," and was accorded damages in a court action in the sum of 10,000 pounds. After that Dr. Bell pursued his constructive cancer work along constitutional lines at Battersea Hospital unmolested until the time of his death a few years ago.

In an article entitled "Cancer is a Blood Disease and Must be Treated as Such," published in the N. Y. *Medical Record*, Mar. 18, 1922, Dr. Bell wrote:

With reference to the treatment of cancer by local methods, it beats me to comprehend for a moment how one can expect to cure a blood disease—which cancer undoubtedly is—by attacking its local manifestation, and leaving the source of the trouble to take care of itself without making any effort to improve the quality of the bloodstream. For depend upon it, *every cell of the body is affected, and has been affected for a long period prior to the appearance of the local outcrop.*...In my view, cancer is the outcome of prolonged toxemia, and a vitiated blood supply affecting the nervous system and the efficiency of the endocrine glands, explains the absence of healthy cell-metabolism and the dire disturbance which we call cancer.

In another place Dr. Bell says:

Cancer is rooted in every drop of blood in the body, and we may as well expect to stop the growing of apples by picking them off of the trees, or stop the springing of dandelions by cutting off the blossom and leaving the root in the ground, as to expect to destroy malignancy in the human body by attacking the outward growth.

In this March *Medical Record* (1922) article, Dr. Bell cited six cases of malignant internal cancer—all so diagnosed and most of them recurrent after operation at one or another of well-known London hospitals, and then dismissed as "inoperable and incurable"—which he took charge of, and by a regimen of judicious fasting and dieting, together with small doses of thyroid extract, he had restored to normal health.

In July 1922, a woman lecturer of New York City, wellknown for her educational writings on health subjects, gave a 15-minute radio talk on cancer. Taking as her text Dr. Bell's article in the *Medical Record* and citing the other medical authorities in support of the constitutional nature of the disease, she urged the cancer-stricken to reform their dietaries and other daily living habits, with the view of building up the blood on a healthy basis, instead of rushing to the operating table for quick and futile relief.

The station over which this lecture, called "A Message of Hope to the Cancer-Stricken," was broadcast, was controlled by the Westinghouse Company, and located at Newark, N. J. A few days later, the vice-president of the Westinghouse Company at his New York offices received the following letter:

Dear Sir: I am very much astonished and pained to hear of some stuff that was put out recently from the WJZ station, where a female quack was allowed to do a lot of advertising, roasting the doctors, and making silly statements about cancer being curable by diet.

If any one of your officers wants to try that, he will as surely die as if nothing had been done for him. It is most unfortunate that this lecture should have aroused so much interest, and that a big concern like the Westinghouse Co. should have helped to spread such dangerous doctrine.

I can safely say there are 90,000 doctors in the U. S. who know that what this woman says is not true. If it were true, then cancer would be hopeless from the beginning; for if it is a blood disease, no operation could reach it. But any doctor knows that this is a lie.

I hope you will put a stop to any further broadcasting of this nature. Altho' the mischief is already done in this case, there may be other quacks who will want to put out similar dangerous statements. Very truly yours,

(Signed).....Director of Crocker Institute, Cancer Research, Columbia

University, N. Y. City.

This letter is noteworthy on several counts. First, because of its intemperate and disingenuous tone in stigmatizing as "a female quack" a highly intelligent and cultured woman who was not a practitioner of any school of healing, and therefore not in the category of "quacks" in any accepted sense of the term. Ignoring the high medical authorities she had quoted in support of the blood theory of cancer, the director of cancer research at Columbia University gives the Westinghouse official to understand that it rests on no other authority than "what this woman says," and adds that "any doctor knows that she is lying."

In this he showed himself ignorant of the history of his own institution. One of the most conspicuous exponents of the constitutional nature of cancer in America, was Willard Parker, who for 30 years held the chair of surgery in the Columbia University Medical School. Very pertinent to the director's fulmination against "silly statements about cancer being curable by diet" is the following quotation from Parker's writings in 1880. He said:

Luxurious living, and particularly excess in animal food, increases the waste products of the body, which if retained in the system have a tendency to produce abnormal growths.... Cancer is to a great degree one of the final results of a long-continued course of error in diet, and a strict dietetic regimen is therefore a chief factor in the treatment—preventive and curative. (Italics mine.)

Another authoritative voice on the relation of diet to cancer, is that of Dr. Horace Packard who in an address before the Homeopathic Surgical and Gynecological Society of Chicago in 1915, said:

Since a critical examination of the habits of life of civilized, cancer-plagued people, in comparison with the habits of primitive, cancer-free people, shows that the main difference between them is in a dietary poor in mineral salts among the cancer-plagued and a dietary rich in mineral salts among the cancer-free people, *the most logical and rational course is to adopt this as a keynote to cancer treatment.*

The very vital connection between diet and cancer is, of course, a necessary, inevitable corollary to the constitutional or blood theory of the disease, and the hostility expressed in this letter toward dietetic preachments to cancer sufferers, is perfectly understandable from the view-point of its writer—a well-known protagonist of the local theory. For it will be readily seen that these two theories are diametrically opposed and mutually exclusive, calling for radically different treatment.

This much is conceded by the Columbia director in the statement, "If it is a blood disease, *no operation could reach it.*" We note he doesn't say the trouble couldn't be reached by some other remedy, but only that "no operation can reach it," and to this pronouncement the blood theorists will undoubtedly agree. But the inference is plain, that "the dangerous doctrine" denounced by the local theorists means *dangerous to the surgical trade.*

No one need shrink from this aspect of the matter save those who idealize the doctor as one made out of finer clay than the rest of us. Those who know him to be swayed by the same impulses of professional jealousy and self-interest as men in other vocations will not fail to hear the snarl of outraged self-interest in the above quoted letter from the head of Cancer Research in one of our leading universities.

Its dishonest and discourteous implications toward the woman-lecturer in the case; its threat to Westing-house officials who might dare lend an ear to her message; and the high-handed attempt to muzzle a public medium of expression for private ends all should shed a revealing ray on the puzzle-picture of the cancer situation, for those who have eyes to see and ears to hear.

It is worthy of note that all the talk about the puzzling and mysterious nature of cancer, "baffling the highest medical wisdom and skill," emanates from the advocates of the local theory of the disease; for only by representing it as an unsolved and insoluble riddle, can they excuse their failure to find a remedy. Yet the evidence is overwhelming that, not only do they refuse to consider any viewpoint or any methods of treatment except their own, but they use their utmost endeavor to prevent the public and the world of cancersufferers from hearing about anything else.

In 1924, the J. Ellis Barker book on *Cancer; How It Is Caused and How It Can Be Prevented,* appeared in England and America. Although written by a layman, the son of an eminent English physician, the work abounds in quotations from well-known medical authorities and carries an introduction by Sir Wm. Arbuthnot Lane, consultant surgeon at several London hospitals and one-time physician to the Royal family, who said of the Barker book:

I know of nothing similar to it in medical literature, and I should not be surprised if professional and nonprofessional opinion would declare Mr. Barker's book to be easily the most important practical work on cancer existing in English or any other language.

Such a eulogy from such a source is the more remarkable in that the J. Ellis Barker book completely overturns all the traditions and stereotyped maxims of the local theorists. The book is dedicated "to all those men and women who do not wish to die of cancer," and while the author does not prescribe any specific cure—once the disease is established—he very definitely sets forth its cause and prevention, with a wealth of detailed information, both of statistical material and expert opinion in support of his position.

The cause of cancer he declares to be two-fold: "chronic poisoning and vitamine starvation." The poison may be introduced from without or generated from within. In the former class are aniline and paraffin fumes, deep burns of any kind—including X-ray and radium burns,—and arsenical poison, whether breathed in through the lungs or taken as medicine into the system through the mouth or by subcutaneous injection. Mr. Barker quotes various medical authorities, among them Sir Jonathan Hutchinson, F.R.S., to show that "the continued medical use of arsenic in extremely small doses may lead to cancer after 20 years or more, and after the discontinuance of the drug—in one case for 14 years." He also cites the case of Silesian miners in the cobalt mines of Schnéeberg, "who developed a most unusual form of cancer, cancer of the lungs, from breathing in arsenic after having been employed in the mines for more than 20 years."

All through this volume the author exhibits great deference to medical opinion and authority, and props his constitutional view of cancer with all the heavy medical timbers he can drag into position. Indeed he makes it quite clear in his preface that without the support and encouragement from the dissenting voices in the medical profession to the local theory of cancer, he could never have presumed to oppose it in such open fashion.

He dismisses trauma, irritation, and old age as primary causes of cancer, while admitting that a blow or constant friction may be a contributing factor where the cancer poison is already present in the blood. But the old-age theory of cancer is punctured by a fact emphasized over and over again in this book, that the cancer-producing poisons are *cumulative* in their effect, requiring as a rule twenty, thirty, and sometimes forty years for development before manifesting in a local outbreak. Mr. Barker says: "One might compare the genesis of cancer to that of a poisonous snake which must arrive at maturity before it can bite and kill the patient."

In other words, elderly persons who have kept their systems free from the poisons which generate cancer will not be attacked by it simply because they are old; nor will they be as liable to the disease as younger persons who have not maintained such internal cleanliness. This is certainly a much more cheerful as well as more rational view of the situation than the "old-age-cancer" spectre of the local theory.

Among the cancer-producing poisons, Mr. Barker gives first place to auto-intoxication resulting from retained bodywaste. Evidence of this is given in the fact that practically all cases of cancer exhibit a background of constipation. Very significant and illuminating in this connection, in what it reveals of the medical conception of disease, is Mr. Barker's statement that "until quite recently doctors treated constipation perfunctorily with a pill or a draught, *and considered it a triviality unworthy of their attention!*"

And with this blind-bridle outlook, the medical profession has been trying to solve the cancer riddle for 3,000 years!

Another flagrant example of blind-bridle medical tactics in handling disease, is the custom of inoculating human blood-streams with animal disease-cultures, starting in the 18th century with Jenner's "discovery" and continuing to the present with Schick-testing, tuberculin-testing, typhoid vaccination, etc., and ending with the latest thing in bloodletting—the blood serum drawn from infantile-paralysis convalescents. Although condemned by some of the foremost pathologists and epidemiologists as "blood assassination" and "grotesque superstition," this so-called "preventive medicine" continues in great favor with organized "regular" medicine today; and curiously enough, Mr. Barker omits any mention of vaccination and serumizing as instances of chronic poisoning by absorption, and therefore prolific sources of cancer-producing agents.

Indeed there is good ground for believing the doctor's inoculating hypodermic a more fruitful generator of cancerpoison than any of those listed by Mr. Barker. For besides introducing poison directly into the blood-stream, these animal "bio-products" *also introduce* products of *a new kind of cell*—different from the human cell—and one which normally reproduces itself much faster than the human. What more reasonable inference than that this foreign cell material should start up in the human body the too-rapid cell-proliferation which is the outstanding feature of cancer?

There are not lacking medical men of high standing to testify to the soundness of this conclusion. William Scott Tebb in his book, *The Increase in Cancer*, quotes a number of eminent authorities—among them Dr. Wm. Forbes Laurie, late medical director of the Metropolitan Cancer Hospital, London—as being "thoroughly convinced that continuous, persistent vaccination is an important contributing cause of cancer increase." Dr. F. P. Millard, a prominent osteopath of Toronto and president of the National League for Prevention of Spinal Curvature, says: "Abolish vaccination, and you will cut the cancer death-rate in half."

J. Ellis Barker could not have been ignorant of the eminent medical witnesses to the folly and wickedness of vaccination, nor of the statistical evidence of its futility afforded by official records in his own country: and it seems both contradictory and futile to proclaim cancer a blood disease, the slow outcome of blood poisoning by absorption, and at the same time condone a form of blood pollution holding the elements most favorable to cancer development.

Perhaps Mr. Barker did not feel strong enough to combat more than one pet theory of the "regulars" at one time; and perhaps it was his sensitiveness to "regular" professional approval that forbade his following his major premise of the constitutional nature of cancer to its logical condemnation, not only of blood contamination by vaccines and serums, but also of the approved, standardized medical remedies for psoric and venereal diseases.

Yet if arsenic administered to suppress psoriasis (itch) can cause skin or epithelial cancer; and arsenic breathed into the lungs of cobalt-mine workers can produce cancer of the lungs—as stated by Mr. Barker; then consider for a moment the limitless possibilities for cancer development in the agelong practice of shooting arsenic and mercury—neosalvarsan—into the blood-streams of real and suspected syphilitics! And in the light of all these known facts, how long, may we figure, will it take the medical profession to find a cancer cure while they keep up their cancer-producing practices?

Despite the deferential and conciliatory tone of the J. Ellis Barker book, its American publisher, E. P. Dutton & Co., is my authority for it that the American Society for the Control of Cancer threw every possible obstacle in the way of its circulation in the United States. At this Society's N. Y. headquarters I was informed that Arbuthnot Lane, the famous London surgeon who endorsed it, was refused audience before the American Society when he came to this country lecturing in 1925 because the "Society for Control did not approve of Dr. Lane's views."

The recent sensational "cancer discovery" at the University of California drew immediate fire from the citadel of organized medicine in Chicago, not because of the publicity it evoked as was claimed, but because the California discovery was based on the constitutional theory of cancer, as the treatment was administered subcutaneously and not at the site of incidence. This Eastern criticism of their local professors led the San Francisco Argonaut—usually the staunch defender of orthodox medicine-to charge in its March first (1930) issue that "two independent establishments which were treating cancer successfully, one in W. Virginia and one in Illinois, had been raided and put out of business by the A.M.A. in the past few years, the only offense of these sanitariums being that they were showing cancer-patients how to get well." Concerning the efficacy of the star prescriptions of the surgeons and radiologists, Frederick Hoffman, easily first among statistical authorities, said in 1927:

The cancer record for 1926 is a dismal indictment of the failure of modern efforts to check the ravages of this dreadful affliction. The more thoroughly familiar one is with the methods to be followed (surgery and radium), the more one becomes convinced of the utter futility of them, which rest chiefly on *claims for money and more money*, instead of upon more and more unselfish devotion to the underlying facts and conditions.

CHAPTER X

The Voodoo and Vivisection—Animal and Human

"It was to save babies that they killed so many guineapigs," exclaims the romanticist defender of the microbehunting faith, in writing of the frantic efforts of Roux, Behring, Loeffler et al. to discover a cure for diphtheria by the microbic route.

"To save babies" has been the vivisector's immemorial plea to defend the cutting, burning, boiling and poisoning of live dogs and cats, as well as the less-prized guinea-pigs, rats and rabbits that have furnished the experiment material for his cruel trade. The cruelty of vivisection is not usually denied by anybody, but it is condoned on the baby-immunity plea, with the further defense sometimes put forward, that the vivisecting is performed "with every consideration for the laboratory animals, who are anaesthetized against pain as carefully as the human subjects of surgical operation."

The fact that the vivisector's work is done behind closed doors for the most part, that only a few persons in the immediate neighborhood of the laboratories hear the cries and moans of the animals, prevents the lay public from getting any knowledge of the actual nature of these experiments except what comes from the vivisectors themselves or their paid emissaries—both of whom are interested in soft-pedaling the horror of the thing, of course. However, no softening the horrors is attempted in some instances, where one vivisector heart speaks to another under the seal of the medical confessional—"the literature," where profane inquisitive lay minds are not supposed to penetrate.

Take for example, the following published reports of experiments described in detail by the experimenters themselves, and the reader may decide for himself, or herself, whether such experiments could possibly be conducted without pain to the pitiful subjects of them, or under the deadening effects of any known form of anaesthesia: Dr. Blair Bell, an English vivisector of some renown, who was once entertained by his vivisection brethren in the United States, reported in the *British Medical Journal* a very unique experiment he had performed on the brain of a dog.

Opening the dog's skull, he had affixed a wax tumor to its brain and then closed the scalp wound. Ninety-eight days later he published a picture of that dog—a poor, wretched deformed creature, distorted in every limb, and presenting a horrible, piteous spectacle. Dr. Bell's excuse for this exquisite piece of work was that he was trying to discover something about the pituitary gland, though he failed to say what that valuable discovery was; and there is no reason for thinking this revolting episode produced anything except untold agony for the dog, and perhaps a certain sadistic satisfaction to the experimenter.

"There is in man a specific lust for cruelty," says Bernard Shaw, "which infects even his passion of pity and makes it savage. A craze for cruelty can be developed, just as a craze for drink or drugs. . . . Those who accuse vivisectors of indulging a passion for cruelty under the cloak of research, are therefore putting forward a strictly scientific, psychological hypothesis, simple, human, obvious and probable."

Only on some such "psychological hypothesis," can we account for the foregoing, and the following grotesque and ghastly experiments upon dogs: Sir John Rose Bradford, another British vivisector, confided to his medical colleagues—in "the literature"—that he had conducted experiments on 39 little fox terriers, by taking out one kidney and cutting away the other piece-meal, in order to see how long these intelligent little animals could live with as little kidney as possible!

When Sir John was asked before the Royal Commission on Vivisection in London, 1912, what he had learned from this, he, after some hesitation, replied: "Well, we did discover that dogs do not suffer from anything akin to human Bright's Disease"!

Even surpassing in revolting detail these British vivisectional procedures, are some by-plays of savagery hardly deserving to be called "experiments"—described by an eminent American vivisector, Dr. George W. Crile of Cleveland, Ohio, in his book, *Surgical Shock*. Here are some of the things Dr. Crile relates over his own signature as having been done by him to 148 dogs under his vivisectional care, "in order to ascertain the physiological effect of shock" to quote his own words. He tarred some of them over and set fire to them. He cut others open, took out their entrails and poured boiling water into the cavity. He held their paws over Bunsen flames; deliberately crushed the most sensitive organs of the male, and broke every bone in its paws with a mallet. In others, he poked out their eyes with a tool and then scraped the empty socket, etc., etc., ad nauseam.

Then we are asked to accept the testimony of vivisectors as to the humane conditions under which their operations are conducted!

"It is hardly to be expected," says Shaw, "that a man who does not hesitate to vivisect for the sake of science, will hesitate to lie about it afterwards to protect it from what he deems the ignorant sentimentality of the laity."

In other words, lying should come easy to men engaged in so much worse things, is the opinion of George Bernard Shaw, who speaking for himself says: "Personally, I'd rather swear fifty lies than torture a dog that had licked my hand." And it was Mark Twain who said: "I wonder that any one is proud to belong to a race which includes vivisectors."

Indeed it may well be doubted, whether even men blinded by the lust of cruelty would record such things as the above cited experiments for other vivisectionists to read, and take the chance of having them fall into unfriendly hands, did they not feel themselves secure from popular indignation and the fury of animal lovers under the sacred palladium of "science." So let us see what the scientists themselves have to say about it, the most significant witnesses being physicians and surgeons whose labors, it is claimed, are lightened and aided by vivisection.

Sir Lawson Tait, the most distinguished surgeon of his day, Fellow of the Royal College of Surgeons both in Scotland and in England, and Professor in Queen's College of Birmingham, said in the Birmingham *Post* of Dec. 12, 1884:

Like every member of my profession, I was brought up in the belief that by vivisection had been obtained almost every important fact in physiology, etc., etc___I know now that nothing of the sort is true concerning surgery; for not only has vivisection not helped the surgeon, but it has often led him astray.

Again in 1899, in the *Medical Press*, Tait said of the animal experimentation:

Such experiments never have succeeded, and never can; but they have—as in the cases of Koch, Pasteur and Lister—not only hindered true progress, but have covered our profession with ridicule.

Dr. John Richard Cowan, Gold Medalist in Surgery both in England and France, late Senior Surgeon to Kensington General Hospital, when speaking before an Anti-Vivisection and Animal Protection Congress held in Washington, D. C. in 1913, had this to say:

For more than 25 years I have practiced surgery, during which period I have performed some thousands of major and minor operations, both in hospital and private practice. Yet I can not recall one single instance in which I owed anything to the published results of vivisectional experiments. Therefore, after all these years, it is my deliberate, considered opinion, that vivisection as a method of research is wrong and misleading.

Search as we will, we cannot find that experiments on living animals, involving their mutilation and torture, has done anything at all to advance the science of healing. On the contrary, by leading earnest men along the wrong road of research, it has certainly retarded true scientific progress. The same efforts rightly directed must have effected results.

Dr. Henri Boucher, Chevalier de la Legion d'Honneur, and President of the S.P.C.A. at Paris, sent to that same International Anti-Vivisection Congress at Washington, the following message:

From remote antiquity the leaders of men have always tried to justify their most cruel and barbarous actions by putting them under the protection of a high ideal. In our day the vivisectors, to justify their barbarous practices, assert that they achieve remarkable results which enable science to benefit humanity.

Well, we are free to say that all these assertions are essentially false; that religious, judicial, or scientific torture never produced anything but pitiable results, and never amounted to anything but error, failure and disaster.

Robert H. Perks, M.D. and F.R.C.S. (England), states the case for the opposition to vivisection very clearly and succinctly in the words:

I condemn vivisection (1) because it is unscientific, and its results are therefore misleading, contradictory and useless. It also tends to cause neglect of the true scientific methods of clinical and pathological research. (2) It causes severe suffering to animals without any corresponding advantage to them or us. And (3) its effect on those who practice or witness it, is inevitably to develop cruel, callous tendencies which are a grave menace to society.

Dr. Charles Bell Taylor, Senior Surgeon to the Nottingham and Midland Eye Infirmary, and the most distinguished oculist of his time, left \$50,000 in his will to aid the cause of Anti-Vivisection. He left also this testimony in regard to the practice of vivisection:

The public would not tolerate vivisection for a day if they did not believe that the animals were rendered insensible; when the plain fact is, that in many experiments to render the animal insensible would defeat the object of the operator.

This was notably true in the case of Dr. Crile's experiments with the dogs, which he expressly stated were undertaken for the purpose of noting "the physiological effect of shock."

Dr. Taylor deposes further:

No good ever came of vivisection since the world began, and in my opinion no good ever can. The arrogance, the conceit and the sophisms of the so-called "scientists" of today are as like the arrogance, the conceit and the sophisms of the Torquemadas of old, as the physiological laboratory is like the Torture Chamber of the Inquisition . . . We have gotten rid of the one, and we shall get rid of the other . . . Animals have rights, and men have duties to them. For us to ignore the one or counsel neglect of the other, is simply to proclaim ourselves enemies of the human race and foes to progress.

If space permitted, these quotations from eminent physicians and surgeons could be multiplied manyfold; but unfortunately these fine men are not the ruling voices in the medical profession. They are the truth-tellers, but not the politicians and hierarchs of regular medicine.

One doesn't need to be an "expert," however, to grasp the obvious, commonsense factors in vivisection which proclaim the inutility, and therefore the criminality of the practice. First, the structural, physiological and mental differences between man and the other animals render any deductions from animal experimentation inconclusive and untrustworthy. Second, even if these differences did not exist, the abnormal conditions—intense pain and terror of the animals used for the experiments—destroys their physiological significance. And third, the fact supported by the logical inferences from the foregoing, and from the testimony of vivisectors themselves—that nothing has been learned from these experiments which they did not already know, or which could not be better established from clinical observation of human beings.

Needless and wanton cruelty inflicted on anything endowed with feeling carries its own condemnation. Yet reprehensible as is the laboratory vivisection upon the score of animal suffering, it is far worse from the human standpoint. The mental suffering produced in sensitive natures who happen to be specially fond of animals, by the thought of the laboratory crucifixions, is a phase of the subject that has been too often overlooked, or has been made the butt of coarse jests by the insensate and noncomprehending. Mr. George Jean Nathan, one-time editor of *Smart Set* and *The American Mercury*, once perpetrated the atrocious wise-crack that "an anti-vivisectionist is *a woman* who strains at a guinea-pig and swallows a baby"!

There are two dishonest implications in this puny epigram. First, that all opponents of vivisection are female; and second, that there is an inherent conflict between the rights of the baby and the rights of the guinea-pig—which show its author to be either densely ignorant of the subject he essays to be funny about, or else deliberately misleading.

Ignorance is the more likely explanation, since he reflects an ignorant popular notion about anti-vivisectionists as a lot of hysterical women—spinsters and childless matrons—whose natural impulses, denied normal expression, have been turned into abnormal love of animals. "The scientific world cannot be expected to turn from its high purposes because of the sentimental cackling of neurotic women!"

Granting that some of the opposition to vivisection comes from lonely women in whom frustrated instincts may have produced what modern psychologists term an "animal neurosis." Do the defenders of vivisection realize that the men who engage in *that business* are under the imputation of neurosis and perversion also? And will any one argue that it is better for a mental twist to take a cruel than a kindly turn?

The best refutation of this "neurotic-women" argument, however, is to call the roll of able and distinguished men aside from doctors—who have opposed vivisection in all ages and all countries. Among English men of letters, Dr. Samuel Johnson, Jeremy Benthem, Thomas Carlyle, Robert Browning, Edward Carpenter, Thomas Hardy, John Galsworthy, Charles Dickens, Oliver Goldsmith, John Lecky, Edward Augustus Freeman, Regius Professor of History at Oxford, Walter Savage Landor, Jerome K. Jerome, Robert Louis Stevenson, Tennyson, Ruskin, G. K. Chesterton and G. Bernard Shaw are some of those who denounced the practice of vivisection in terms that could not be misunderstood.

Among American writers who were proud to answer the roll-call of anti-vivisectionists were Mark Twain, Robert Ingersoll, Elbert Hubbard, Edwin Markham, William Dean Howells, James Martineau, Bolton Hall, James Oliver Curwood and Edmund Vance Cooke. Among literary celebrities of other countries denouncing vivisection, Voltaire, Victor Hugo, Maeterlinck, Maarten Maartens, Tolstoi and Richard Wagner, are a few outstanding examples. Concerning the attitude of the literary world, Bernard Shaw says:

From Shakespeare and Dr. Johnson to Ruskin and Mark Twain, the natural abhorrence of sane mankind for the vivisector's cruelty, and the contempt of able thinkers for his imbecile casuistry, have been expressed by the most popular spokesmen for humanity.

But perhaps literary characters, even though masculine, are too tame and pallid by nature to make them competent judges of this red-blooded, two-fisted business of torturing dumb animals? Many writers, we are assured, are under "scientific" indictment or suspicion of harboring neuroses. So let us turn to the list of statesmen, jurists, men of affairs and naturalists—real scientists—who have raised their protest against this form of cruelty in the name of science.

Among these protestants, we find such names as Bismarck, John Bright, Viscount John Morley, Lord Chief Justice Coleridge, Lord Chanceller Loreburn, Sir Frederick Banbury, Sir George Greenwood, Maurice Barres, the Marquis du Trevou, Admiral Dewey, Senators Henry W. Blair and Wm. E. Chandler, in the political world; while in the field of science, Alfred Russel Wallace—co-worker with Darwin, Baron Georges Cuvier, founder of the science of Comparative Anatomy, Auguste Comte, famous French naturalist, George Searle, lecturer in Experimental Physics at Cambridge, England, and Luther Burbank, the American "wizard of plant life"—are sufficient, singly or collectively, to discredit the "scientific" claims of the vivisectors.

Probably the root-source of most of the condemnation of vivisection by these distinguished men is the well-nigh universal man-love for dogs. An outstanding historic example of this is a recorded incident in the life of Senator George Graham Vest of Missouri. In the twenty-four years that he sat in the United States Senate, Vest was regarded as a keen and eloquent debater; but it may well be questioned whether his eloquence in debating any legislative measure was ever quite so effective, as when on one occasion in the Missouri courts he defended a claim for damages by a poor man for his dog—just an ordinary cur—which had been wantonly shot by a neighbor. The plaintiff demanded \$200 in reparation for the loss of his dog, and when Vest had finished speaking, the jury awarded him \$500 without leaving their seats! Mr. Nathan might well remember that these jurors were all men.

One does not need to be an extreme animal lover, however, to be repelled by the thought of animal torture. Even those hunter sportsmen who ruthlessly kill them for pleasure or gain will balk at the long drawn-out agonies staged in medical laboratories. And worse even than the sufferings of the animals, or the mental suffering of their friends, is the hardening, deadening effect of vivisection upon the vivisectors. The callousness superinduced by constant participation in, or witnessing of, cruel practices upon any sentient creatures, will inevitably be reflected in dealings with the human animal.

The truth of this is abundantly attested in reports in medical literature of experiments with "human material." These reports are given with a frankness of detail that clearly indicates either that the experimenters have attained that degree of callousness which renders them unconscious of any wrong-doing, or that they feel themselves safe both from the prying scrutiny of the laity and the condemnation of their own colleagues. Experience has shown that the confidence of the human vivisectors in both these respects is fully justified. Few laymen read medical books or journals, while the medical code of ethics enjoins that *individual* medical judgment and conscience must ever be subordinated to the professional necessity of throwing the palladium of silence around medical blunders or

crimes, to protect them from public censure.

The term, *vivisection*, meaning etymologically *cutting into* living tissues, is here used in its restricted sense of experimenting upon animals or humans-whether accompanied by cutting or not-for purposes of scientific investigation as distinguished from therapeutic treatment, such as surgical operations for the correction of pathological conditions. In other words, vivisection is undertaken to find out something of interest to the vivisectors, and not for the relief or benefit of the subject of the operation. Bearing this in mind, we herewith submit a few outstanding examples of human vivisection, performed by certain eminent members of the medical profession in the United States, condoned and endorsed by organized, official medicine, and in one instance publicly approved and honored by the President of the United States himself. In the Archives of Internal Medicine for Dec. 15, 1908, published by the American Medical Association, an article entitled "A Comparison of the Von Pirquet, Calmette, and Moro Tuberculin Tests and their Diagnostic Value," is signed by Samuel McC. Hamill, M.D., Howard Childs Carpenter, M.D., and Thomas A. Cope, M.D. It is an amazing story of experimentation upon 160 helpless children—mostly foundlings-by these eminent gentlemen, to determine the comparative diagnostic value of four different methods of administering the "tuberculin test."

In the above cited instance, four different methods were used in applying the test, three of them—the Calmette, the Von Pirquet and the Moro—taking their names from the doctors first prescribing them. In the Calmette test—also called the "Conjunctival test"—a drop of the tuberculin fluid is placed in the eye; the Von Pirquet method consists in scraping the skin as in vaccination, and applying the tuberculin to the scraped area; and Moro's method involves the use of an ointment containing the tuberculin which is rubbed into the skin. A fourth method, by subcutaneous injection, carrying no authoritative eponym, was apparently sponsored by the profession. The high points in this story of human vivisection are best given in the experimenters' own words:

"Practically all our patients were under 8 years of age, and all but 26 of them were inmates of St. Vincent's Home [in Philadelphia], an institution with a population of about 400 foundlings, orphans and destitute children," testified Drs. McC. Hamill, Carpenter and Cope in the above cited report in the *Archives of Internal Medicine*, Dec. 15, 1908.

It is plain, from the reported ages of these children used as experimental material by the authors of this report, that they could not have given any intelligent assent to these tests. Nor would any parent or guardian have either legal or moral right to consent to any test not intended strictly for the relief of the patient. The only justification for them then, was that they were known to be harmless and free from pain or discomfort. As to this, we quote from the experimenters' report:

Very few of the children complained of discomfort from the reactions, none from the cutaneous. In 14 of the ointment cases there was evidence of itching. In the conjunctival cases, complaint of pain in the eyes was made in six cases; photophobia and recurrence of joint pains in one case of rheumatism, and photophobia in 13 other cases... One patient who reacted positively to the sub-cutaneous test, complained of pain at the site of injection: another with chronic tubercular arthritis, had an access of pain in the joints and severe abdominal pain, while a third patient had enlarged painful and tender inguinal glands with pain at the point of injection.

There is here an apparent contradiction between the first and last statements in this report as to the discomfort inflicted by the various cutaneous tests; but the most serious results from these tuberculin experiments—recorded by the experimenters—followed the conjunctival or eye test. They report 8 cases of "severe reactions" to this test, one of which developed corneal ulcers, and another "a large central corneal ulcer." Concerning this last, the experimenters deposed that *"permanent disturbance of vision is sure to follow from the central scar, even if the associated lesion—which at present is in a very unpromising condition—should eventually clear up."*

The only apology offered for this ghastly business is given in the following statement:

"Before beginning the application of the conjunctival test, we had no knowledge of any serious results from its use. It is unquestionably much easier of application than the other tests, and it probably yields results a little more quickly; but it has the great disadvantage of producing a decidedly uncomfortable lesion, and it is not infrequently followed by serious inflammations of the eye, which not only produce great physical discomfort and require weeks of active treatment, but *which may permanently affect the vision and even lead to its complete destruction*... These results are by no means unique, many similar observations having been made by Webster, Kilpatrick, Schenck, Krause, etc.," these being just a few of a long list of experimenters with human "material."

As further evidence of the experimental and vivisectional character of this medical toying with the tuberculin test in the St. Vincent's Home for orphans and foundlings, the experimenters relate:

"The cases were *tested in routine by wards*, irrespective of the conditions from which they were suffering, and in the great majority of instances without any knowledge of their physical condition prior to, or at the time the tests were applied. *We purposely deferred the physical examination of these children until after the tests had been applied*, for two reasons: first, in order to be unbiased in our interpretation of the results, and second, in order to make ourselves especially vigilant in searching for tuberculous lesions in those who reacted." (Emphasis mine.)

Could any words make plainer the cold-blooded intent to use these helpless children—sick and well indiscriminately as experimental material, to gratify professional curiosity or-as the experimenters would put it-to enhance the "scientific value" of the experiments? In the published account of this affair *{Archives of Internal Medicine}*, tables are given showing the details of procedure and the results of these tests. From this showing it appears that 82 of the 160 children were subjected to all four methods, *i.e.*, they got a drop of tuberculin in the eye, had the skin scraped and some of the fluid applied that way; were anointed with the tuberculin ointment, and also received a subcutaneous shot. One hundred and thirty-seven children were subjected to three or more tests, and 152—all but eight—got the eye test whose disastrous consequences in some instances have already been told. Of the 160 children tested, according to this report, only 50 were pronounced tuberculous, or had "physical signs suggesting tuberculosis," while in the remaining 110 there were "no clinical evidences of the disease." But though they were free from tuberculosis, according to this expert finding, 52 of these 110 children had outward and visible signs of other ailments-including rachitis, anemia, whooping-cough, enlarged tonsils, arthritic rheumatism, with 12 cases of broncho-pneumonia and three cases of typhoid. Yet not even these poor sick babies were exempt from these torturing experiments. All three of the typhoid cases—including one little tot only two years old ("No. 109") and suffering also from multiple neuritis—were given the eye test, the skin-scraping test, and the ointment test.

It is only fair to the experimenters in this case to say, that when they witnessed the cruel effects of the "conjunctival test," they expressed regret for the mischief caused—pleading lack of prescience in the premises—and went on record as even condemning this particular form of tuberculin-testing. They are quoted as saying:

We are strongly of the opinion that any diagnostic procedure which will so frequently result in serious lesions of the eye, irrespective of the way in which it produces them, *has no justification in medicine*, especially since there are other diagnostic tests of equal if not superior value, which are applicable to the same class of cases, and not attended with the same disturbing results.

And yet despite these commendable sentiments, it is also a matter of record that Drs. Hamill, Carpenter and Cope went back to that St. Vincent's orphanage in Philadelphia for further experimentation upon its unfortunate inmates, but were denied admission this time by the Catholic Sisters in charge, who had apparently been advised of their mistake in admitting them in the first place. Thus indicating that the experimenters had carried out their purpose either by misrepresentation and deceit, or by imposing upon the trustful simplicity of the Sisters and their hapless little charges.

In the *Archives of Pediatrica* for January, 1909, we find "A Report upon One Thousand Tuberculin Tests in Young Children," by L. Emmett Holt, Professor of Diseases of Children in the College of Physicians and Surgeons, Columbia University, New York. The report reads as follows:

The observations included in the following report were all made at the Babies' Hospital upon ward patients, and nearly all were made within the past year. Few of the children were over three years of age, the majority being under two. . . . In the early part of the year, unless some positive contra-indication existed, some test, most frequently the eye test, was used as a routine measure, in order to determine whether, and under what circumstances, reactions were obtained in healthy children, or in those presumably nontubercular. During the latter half of the period the tests have been chiefly used when some grounds for suspecting tuberculosis existed. Routine tests proved of considerable value in revealing cases of tuberculosis not hitherto suspected. (Italics mine.)

Concerning the eye test used in his search for the "causative germ" of tuberculosis in "555 healthy, or at least presumably non-tubercular children," Dr. Holt says:

With proper precautions I believe the eye test to be quite safe, although an intense or prolonged reaction sometimes occurs which is not pleasant to see, and in pathological conditions, may be followed by disastrous results.... I am aware that serious results with the ophthalmic test have occasionally been reported by other observers.

Dr. Holt attributes his own success in avoiding "unpleasant results" to the extreme care given to his patients in this Babies' Hospital, but adds:

On account of the observation necessary, and the possible dangers connected with the eye-test, it is unwise to employ it indiscriminately as among the outpatients of a hospital.

And yet Dr. Holt used this eye-test, with its possible dangers in 615 cases reported in his article, 555 of which were "probably not tuberculosis," and nine of which were "extremely sick and dying children." Of what possible value could these tests have been to these little sufferers? Or even from the diagnostic viewpoint, as Dr. Holt testifies:

In no cases were positive reactions obtained in dying children, or those suffering from extreme prostration.

Moreover, Dr. Holt admits in the wind-up of his report, that none of these tests is conclusive; that no one of them is as conclusive as "the demonstration of the tubercle bacillus in the sputum, the cerebro-spinal fluid or elsewhere." And according to Dr. Maurice Fishberg, the presence of the bacillus in any of these is so far from being conclusive, that nine-tenths of the cases in which it is found are not, and will never be tuberculous; whereas it is known to have been missing in cases with every physical and clinical symptom of advanced tuberculosis.

Thus once more is demonstrated in practical operation the voodoo character of microbe-hunting, and the human vivisection involved in it is shown to be as futile and barren as the animal vivisection. In a 65-page booklet entitled *Human Vivisection and the American Medical Association,* Mr. John S. Codman, a well-known Bostonian, has given a detailed account of various kinds of human vivisection known to have been practiced by prominent members of the medical profession, together with the tabulated evidence of the defense of such practices by the American Medical Association.

But for the purposes of this work the two instances of the tuberculin-testing of children by Drs. Holt, Hamill and his associates, will suffice. The outstanding character of these experimenters and their subsequent careers, lend a peculiar piquancy to their efforts.

Further light on the Holt experiments is shed by the following editorial from the *N. Y. Evening Post* of April 17, 1914:

We print elsewhere a reply to the statement made in the *Evening Post* of last Friday by Dr. L. Emmett Holt in regard to charges made against him in connection with the experimental use of tuberculin upon infants. In an editorial of April 14, we censured the Vivisection Investigation League for what we deemed its recklessness in preferring these charges against a physician of Dr. Holt's standing. Further investigation now convinces us that we did that Society an injustice. It appears in Dr. Holt's own article in the Archives of *Pediatrics* for January 1909, that he did use the tuberculin test with dying children, or "those suffering from extreme prostration"-to use his own words. The majority of the 1,000 cases treated by Dr. Holt, wereby his own admission-"under two years of age." At the same time that these experiments were being conducted—or shortly before—three physicians of standing—as set forth in the *Archives of Medicine* of December 1908—declared that this tuberculin diagnostic procedure "which will so frequently result in serious lesions of the eye, has no justification in medicine." With this we close discussion of this unhappy incident, and leave to the medical profession the

question whether experiments of this kind upon dying children, shall not in the near future be tabooed.

And as before stated, as set forth in Mr. Codman's brief, neither in the near nor the far future has organized, official medicine uttered a syllable of condemnation or rebuke for these tuberculin experimenters of high degree. Their reports were read before the American Medical Association, and apparently approved—or at least condoned. Dr. Holt continued for more than twenty years to be the preferred "baby specialist" for the affluent and fashionable circles of New York Society; while Dr. Samuel McC. Hamill was reserved for wider, national preferment and distinction.

CHAPTER XI

A White House Interpretation of Child Welfare

One of Mr. Hoover's early acts as Chief Executive was to issue a call (in July 1929) for "A White House Conference on Child Welfare." The statement was given out at that time, that the President had received \$500,000 "from private sources" to start the enterprise, but the names of the private donors were withheld. How the further work of the conference was to be financed was left to the public's imagination.

The Conference did not assemble at Washington until Nov. 1930, but in the 16 months of preliminary organization and preparation, enough leaked out to the public to furnish a fairly accurate picture of the personnel of the body and the proposed scope of its activities. The heads of the various drugless schools of healing in the country—of which there are now at least five of recognized standing-viewed with disfavor and some alarm, the solidly medical complexion of the "1200 experts" selected for the 150 working committees of the Conference; and regarded with well-grounded distrust the appointment of Dr. Ray Lyman Wilbur, an ex-president of the American Medical Association, as chairman of the much acclaimed "White House Conference on Child Health and Protection." In the Spring of 1930, a large body of Eastern Osteopaths at their Annual Convention passed a resolution of protest to be sent to President Hoover against permitting his White House Conference to be so completely dominated by Allopathic counsels and Allopathic concepts of "child health and protection." The resolution set forth that the "regulars" held no patent royal on solicitude about the child life of the nation, nor on therapeutic methods for conserving it; and it politely, yet firmly, suggested that Osteopathy had something of value to offer the Conference.

But at the present writing and according to the best advices obtainable, three years after that protest was filed, no Osteopath was invited to sit in on the White House deliberations on child welfare sponsored by Mr. Hoover. A similar fate met the efforts of the National Chiropractic Association which in that same year, 1930, sent its officials to Washington to tell the White House conferees what Chiropractic could do for "child health and protection." After hanging around for some days on the chilly outskirts of the Conference, these Chiropractic ambassadors—their noses blue with White House frost—were about to leave in despair and disgust, when some one whispered into the presidential ear that Chiropractors are rather numerous in the country at present and are extraordinarily well organized. It lacked but two years until another presidential election, and after all Chiropractors *do vote!*

The effect of this was to halt the discouraged and departing Chiros, and usher them into the presence-not of the Chief Executive, but of his privy councillor in all health matters, and the "big boss" of the Conference, Dr. Wilbur. This dignitary suavely greeted the disciples of Dr. Palmer, and courteously informed them that if they had any suggestions to offer touching child health and protection, if they would kindly put them into writing and address the communication to him, he would be glad to submit it to the Conference where he had no doubt it would receive "most careful consideration." With this assurance the Chiropractic emissaries were forced to be content, and forthwith took their leave. And according to the latest advices, the White House conferees on child welfare are still "carefully considering" the Chiropractic recommendations and how they can best prevent their cutting any figure in the work of the conference!

This work as outlined by Chairman Wilbur in the complete Report of the White House Conference, published in 1931, is divided into four sections: (1) Medical Service; (2) Public Health and Administration; (3) Education and Training; and (4) The Handicapped. It will readily be seen from this outline, that Number (1) is the keynote to the whole White House program for child welfare; as was to be expected from the professional character of its principal guiding spirit, Secretary Wilbur, in whose therapeutic creed "health" and "regular medicine" are synonymous terms, naturally. Number (2) being entirely in the hands of regular medicine, is essentially the same as Number (1); and Number (3) is largely controlled and directed by medical policies through the medical domination of public health service. This is entirely true of the "education and training" furnished in our public schools, and to a great though lesser extent, it is true of that supplied in many private schools and colleges.

This leaves only Section 4, listed as "the handicapped" for our consideration, and apropos of this class I would call the reader's attention to certain facts, submitted herewith and in previous chapters, indicating the causal connection between the medical monopolistic control of the first three sections of Dr. Wilbur's child-welfare survey, and the very large increase in the fourth section. "Ten million defective and handicapped children" out of something over 45 millions of growing children in the United States, is part of the report of President Hoover's White House Conference. And here is a pointer on the connection between the handicapped and the medical control, taken from the Conference report of the committee on communicable diseases:

Nearly 3,000,000 cases of communicable diseases are reported annually in this country. There are, of course, many more which are never reported. . . The permanent disabilities resulting from communicable diseases may handicap the child throughout his entire life. . . . For instance, from 50 to 75 percent of our cripples owe their condition to infantile paralysis and tuberculosis; and blindness, damaged hearts and kidneys, and *increased susceptibility to other injections,* follow in the wake of communicable diseases among children.

"Increased susceptibility to other infections!" Why, we had been told that the basis of the inoculating "immunology" was that one attack protected the subject from subsequent infections! It depends entirely on one's point of view, of course, as to whether we think the "communicable disease," or the "preventive" dope used in the so-called "control" of it, is the cause of the permanent disabilities that are known to follow in its wake; seeing that under the complete medical domination of public health service, very few communicable ailments escape the ministrations of the "immunizing" hypodermic. Blindness and lameness have followed vaccination against smallpox in well-authenticated instances. Out of 27 deaths directly traceable to vaccination, reported in the Lovster survey of New York rural schools in 1914, nearly half were diagnosed as infantile paralysis; and the observation has frequently been made by competent authorities in this country and abroad, that not until the vogue of new "preventive" serums-especially toxinantitoxin—was inaugurated and established, did epidemics of infantile paralysis appear throughout the world.

Toxin-antitoxin was introduced in the United States first in New York, about 1915, and has been more extensively used there-both in the city and throughout the State-than anywhere else in the Union; and it is a notorious fact that infantile paralysis has been more prevalent and more virulent in that region than in any other part of the country. And along with these disastrous sequelae of antitoxin inoculation, have come reports from authoritative sources of its failure to curb or prevent diphtheria. It is common knowledge that diphtheria, like every other disease, declined after the introduction of sanitation and the wider popular spread of hygienic knowledge; and long before the invention or application of antitoxin. Figures given in a New York City Health Bulletin for February 1924, show a drop in the deathrate from 295 per 100,000 in 1875 to 163 per 100,000 in 1894, the year anti-toxin was introduced in Europe, and about twenty years before the toxin-antitoxin reached America. J. T. Biggs, in his Sanitation vs. Vaccination, says that the

apparent lowering of the death-rate in diphtheria after antitoxin came in, was effected by the statistical juggling to include every "benign sore throat" as diphtheria. Biggs quotes the hospital reports in various European countries, Sweden, Denmark, France and Germany, to show the futility of the serum treatment; and he cites the official reports of the *Metropolitan Asylums Board of London,* which takes cognizance of the largest number of cases of any health authority in the world, to show its worse than futile effects: "The most striking feature of the reports for 1895-1910, is the higher fatality rate in those inoculated with antitoxin when compared with the untreated cases. The highest death-rate for the injected patients was 28 per cent, and for the untreated ones the highest fatality was 13 per cent."

The first few years after the introduction of antitoxin into the United States showed an increase both in incidence and mortality of diphtheria in a number of cities, after which the figures fluctuated, and only by quoting selected statistics and ignoring others which tell a different story, are public health officials able to make out a case for antitoxin—and there is not perfect agreement even among the health officials. Dr. John F. Hogan, head of the Bureau of Communicable Diseases in the Baltimore Department of Health, was quoted in the *Journal of the A.M.A.* for April 8, 1922, as saving:

Performing Schick tests and immunizing school children with toxin-antitoxin, is of little value in the control or eradication of diphtheria; nor is it lowering the death-rate.

In the *Journal of the A.M.A.*, Nov. 4, 1922, Dr. Wm. H. Park, head of New York City Laboratories, made the admission:

On the other hand, we had the growing conviction that, wonderful as were the results of antitoxin, diphtheria could never be conquered by it. . . . Furthermore, vital statistics reveal that diphtheria morbidity and mortality had not decreased during the last five years; for in New York State in 1917, the mortality was 12.8, which in 1921 had increased to 16.8.

The N. Y. State Department of Health also in a 1924 bulletin, said:

Despite the general use of antitoxin, the MORTALITY from diphtheria during the past decade has not been diminishing to any appreciable extent, as compared with the previous decade.

In the *American Journal of Public Health* for February 1925, the Willard Parker Hospital, the largest of the New York hospitals for children, reported that "the diphtheria mortality among its patients under three years of age had been 33 out of every 100 cases for the years 1919 to 1923 inclusive, and that among all ages the mortality had been 16 out of every hundred." This was a much higher rate of diphtheria mortality than had ever obtained in preserumization times, and it goes without saying, that Schick-

testing, immunizing, and antitoxin inoculation were routine procedures in the Willard Parker Hospital.

Again in 1927, the *Citizens' Medical Reference Bureau*, which keeps very close tab on medical journals and healthboard bulletins, produced figures showing "an increase of more than 40 percent in diphtheria incidence in the first half of 1927 over the corresponding period of 1926 in 101 leading cities of the Union whose combined population was over 30,000,000 persons." In New York City in 1927—where the serum was first introduced, and where children had been more thoroughly saturated with it than any place in the country, the diphtheria cases had more than doubled, and were far in excess of those for the same period of any year for the past six. "Also," said the Citizens' Bureau, "there has been a pronounced increase in the number of fatalities from the disease in New York City."

Moreover, a bulletin from the New York State Health Department in 1924 had declared:

"It must be remembered that even three doses of toxinantitoxin will fail to immunize in from 5 to 25 percent of cases," an average of 15 percent of admitted failure. In an advertisement carried in *California and Western Medicine* in that same year, the largest manufacturer of vaccines and serums in the East claimed for his diphtheritic serum only that "90 percent of those immunized with it *who could be traced*, had remained free from the disease for six years."

Here was an admitted failure of 10 percent. But according to a U. S. Public Health Report for November, 1924, "the estimated expectancy of diphtheria for the entire population is only 1.30 per 1,000 persons." In other words, *the natural immunity* from diphtheria for *everybody* is greater than that promised or guaranteed by the manufacturers and users of the artificial immunizer. Then why take chances with the artificial immunizing agent, with all its attendant risks of paralysis and even death?

The statistical black-listing of the vaccine-serum therapy is further supported by high medical opinion. Sir Almroth Wright, F.R.C.S., and Director of Therapeutic Immunization at St. Mary's Hospital, London, condemns it in the words: "The whole of this body of beliefs—inoculation—rests, I am convinced, upon a foundation of sand." Dr. Robert Bell said of this practice: "The debasing influence of the virus injections upon the system causes a tendency to the development of cancer from any chance wound or bruise or local inflammation in after years."

This opinion of the eminent cancer expert, uttered some years ago, received fresh and striking confirmation in recent deductions made by the outstanding American authority in the field of bacteriological and immunological research, Dr. W. H. Manwaring, Professor of Bacteriology and Experimental Pathology in Leland-Stanford University, California. "Immunization to date" (1929), says Man-waring, "has been based on the Ehrlich theory that the inoculation of disease products in sub-pathogenic doses creates anti-bodies, or defending entities against any subsequent mass invasion... Not only is there no evidence of these 'antibodies' being formed, but there is ground for believing that the injected germ proteins hybridize with the body proteins to form new tribes, half animal and half human, whose characteristics and effects *cannot be predicted*... Even non-toxic, bacterial substances sometimes hybridize with serum albumins *to form specific poisons which continue to multiply, breed and cross-breed ad infinitum, doing untold harm, as its reproductivity may continue while life lasts."* (italics mine.)

Dr. Manwaring says further that "these poisons are sometimes specific to certain parts of the body and not to others"; and that "an animal serum injected into a foreign body can multiply at the expense of the serum of its host. Horse serum injected into rabbits has shown an actual increase of 200 to 400 percent within a few days, and one cubic centimetre of a bacterial product injected into a human body, can by the simple process of multiplication, grow and grow until the person receiving it will have far more serum develop within his body than was originally put there." And if Dr. Manwaring's premise about the cross-breeding of serums within the body be correct, it follows that the character of the new product may be very different from the one originally injected. At any rate, there seems no question about his statement that "the profound changes which go on inside the tissues can never be understood, for these changes are not within the field of experimental physiology"; nor about the corollary deduced therefrom, that "the entire matter is conjectural, comparatively unknown and unknowable-a matter of guess-work and observation of external symptoms."

Concerning the Ehrlich theory of the "anti-bodies," which has been accepted and endorsed by the medical profession, and made the basis of their disease-culture immunology, Manwaring says:

I believe there is hardly an element of truth in a single one of the basic hypotheses embodied in this theory. My conviction that there was something radically wrong with it arose from a consideration of the almost universal failure of the therapeutic methods based on it. . . . In spite of millions of dollars spent in research, and ten millions spent in commercial exploitation of a hundred theoretically logical, monovalent, polyvalent, prophylactic and curative antisera, 95 percent of them were thrown into the clinical discard. The same thing is true of vaccines. . . . And we call this scientific medicine! Twelve years of study with immuno-physiological tests have vielded a mass of experimental evidence directly contrary to, and irreconcilable with, the Ehrlich theory, and have convinced me that his conception of the origin, nature, and physiological role of the specific "antibodies" is erroneous.

Yet despite the high character of these dissenting voices in the medical profession, and the mass of contrary statistical evidence attesting the futile and harmful character of vaccine-serum immunization-practically every health officer in the country is advocating it, and public funds are being squandered by the millions to spread misleading propaganda regarding it. The obedient or credulous press lends itself readily to the designs of the immunizers, even printing scarehead cartoons in some instances to aid an antitoxin drive. In a "Handbook of Information How to Protect Children from Diphtheria," prepared and issued (1929) under the auspices of Dr. Shirley Wynne, Health Commissioner for New York City, the story is told of how 32 editors, representing every important newspaper in Greater New York, organized themselves into an "Editorial Consultation Board" to act in unison with Dr. Wynne's department for the dissemination of health-board propaganda.

The formation of this press-club for the popularizing of medical voodoo practices, was the outcome of a luncheon party given to the metropolitan press at the Harvard Club, January 11, 1929, by Mr. Thomas Lamont whose name is associated in the public mind with the "House of Morgan." In a little speech to his guests Mr. Lamont explained that Commissioner Wynne had besought his co-operation in "a diphtheria-prevention drive" he was launching for the city. Incidentally it was also a drive to sell large quantities of toxin-antitoxin, though this was not played up at the luncheon party.

Dr. Wynne knew—if he was acquainted with the records of his own department—that 93 percent of the decline in diphtheria mortality in New York had come about *before* they ever heard of toxin-antitoxin, but he didn't think it necessary to tell this to the editors, nor of the many fatalities from serum sickness since they started the "prevention."

The usual medical alibi for serum casualties, is that these are negligible compared with the whole number "immunized," and that all who are not killed by the immunization have been "saved from diphtheria"! This trick logic of the inoculators is based on the assumption that prior to the introduction of the serum everybody had come down with diphtheria at some period of their lives. This absurd premise is of course negatived by common experience and even by medical records. According to figures furnished by the U. S. Public Health Bureau in 1924 as to the "estimated expectancy of diphtheria incidence" for the whole community, the natural immunity from diphtheria is five times greater than that *even promised* for the artificial "prevention" by the manufacturers and users of it.

The "editorial consultants" gathered around Mr. Lamont's luncheon board knew nothing of these records and had probably never heard of Dr. Mather Pfeiffenberger and his reassuring address to the Conference of Health Officers at Springfield in December, 1926, afterwards published in the "Illinois Health News" for January, 1927.

"I am informed," said Dr. Pfeiffenberger in his speech to the health officers, "that only 15 percent of all children ever get diphtheria even during epidemics, whereas 100 percent are prospects for toxin-antitoxin. The smallpox percentage under modern conditions is even less, but 100 percent are prospects for vaccination. Scarlet fever and measles will soon come in each for its 100 percent, etc., etc.

"So that prevention practiced to the utmost, will not diminish *but create more work for the physician*. The full-time health officer will be educating his community constantly. *There will be more vaccination, more immunising, more consulting and use of the physician*. *His services would be increased manifold.*"

If Dr. Shirley Wynne knew about this illuminating address by the president of the Illinois Medical Society revealing the economic joker in the immunological woodpile he could not be expected to drop such a bomb into a harmonious philanthropic gathering called to inaugurate a toxin-antitoxin drive in New York City! And what was true of the trusting gentlemen of the press, was equally true of the list of distinguished New Yorkers whom the suave Health Commissioner had inveigled into forming themselves into a "Diphtheria-Prevention Commission"—to serve the economic needs of vaccine factories and doctors.

In the list of the "Diphtheria-Prevention Commission," we find such outstanding citizens as: Nicholas Murray Butler, Rev. S. Parkes Cadman, Rev. Stephen S. Wise, Frederic A. Juilliard, Governor Lehman, Cardinal Hayes, Bishop Manning, Wm. Church Osborn, Paul M. Warburg, Albert H. Wiggin, Ralph Pulitzer, Mrs. Courtlandt Nicoll, Mrs. Whitelaw Reid and others to the tune of fifty prominent names in the social, financial, political and educational life of New York.

Yet after all, what did any of these enthusiastic "diphtheria-prevention drivers" know about this subject except what they learned from Shirley Wynne and other interested witnesses? How many of them had ever examined the contrary evidence sustaining the darker side of the immunization picture? Their implicit faith in the healthboard fictions of course absolves them from guilty complicity in the conspiracy against the child-life of the community. But what of their responsibility to the ignorant, deluded parents of the victims of the disease-breeding and death-dealing hypodermic? Have these no rights in the premises?

Yet with every newspaper in Greater New York whooping it up for the "immunizers"; with 28 radio stations under the control of the medically bossed Public Health Service; with movie-films, theatrical producers and pulpit orators—all joining in the chorus of this medico-political propaganda; I ask you, Mr. Plain Citizen, what chance has the man in the street or his wife in the home to learn about the possible tragic consequences of these disease inoculations upon the life of their child?

And I appeal to thoughtful American citizens everywhere—whether of high or low degree, isn't it about time you looked at this complete medical cloture of the channels of publicity from some other angle than your sentimental confidence in your family doctor? Has the freedom of the press lost its appeal *in re* things medical?

When the newspapers announced in February 1931 that "President Hoover's *group of physicians"* were ready with their "Child Prescription for American parents," they not only disclosed to everybody's view the exclusive medical complexion of the much advertised "White House Conference," but likewise gave color to a charge freely made in anti-vaccination and anti-vivisection circles, that this spectacular child-welfare gesture had been staged in the interest of the vaccine-serum industry. For the keynote to the "Child Prescription" as given out by the Press, was "vaccination, serumization." A news dispatch from Washington some months later carried the headline: "DIPHTHERIA SERUM FIRST BIRTHDAY PRESENT FOR EVERY CHILD."

So! School children have been pretty generally at the mercy of the "immunizers," under the efficient direction of the A. M. A., for some time; but now the long arm of the "White House Conference"—carrying the poison-laden hypodermic proposes to reach out and gather into its deadly folds the preschool ages!

One does not need to question the sincerity of ex-President Hoover's faith in the medical voodoo, nor the purity of his motive in wishing to apply it to others, to condemn and denounce in unmeasured terms the use of the White House and the prestige of the great office of the Presidency, as aids to a bald, medico-political scheme to deliver the whole child life of the nation into the hands of the American Medical Association. Mr. Hoover has as much right to his faith in regular medicine as to his faith in orthodox religion—no more, no less; and so long as he restricts the practical application of his faith in medical procedure of any kind to his own person, or to the members of his own household, there could be no criticism from any source. But the White House Child Welfare project, manned exclusively by one school of healing, in a country where there are several otherslegalized, established and self-sustaining—is not only a disgraceful exhibition of medical bigotry and intolerance, but a gross imposition on the tax-payers.

Even if the scheme were to be financed throughout by private funds, as it was claimed the initial steps in it were, it would still be open to censure as an unwarranted use of the nation's House and the office of its Chief Executive to boost a private enterprise. But certain recommendations in the Conference Report, namely, "for improved educational facilities for nurses in hospitals, and medical schools for doctors, to prepare them for their tasks; for establishment of facilities for maternity cases in every community; and for improvement of hospital facilities for children"—all to be under medical supervision, of course—make it quite clear that this dramatic White House gesture of concern for "child health and protection" will inaugurate—perhaps on a larger scale—the same old medical looting of the public Treasury for private gain.

Some of the ex-President's apologists seek to soften the blame attaching to him in this matter by saving he doesn't know the harmful effects of these disease inoculationsmisnamed "immunization"—and that he was misled by the representations of his chief counselor, Dr. Wilbur. Ignorance touching a matter of such vital importance to the life and well-being of children, is a queer plea to make for the highest official in the Government, who might also be expected to feel some responsibility for the character of his advisers. Ignorance of the disease-breeding character of vaccines and serums is inexcusable in any one, seeing that the records which prove it-medical records at that-are open to all. Had President Hoover looked into the Journal of the A. M. A. for March 16, 1929, he would have learned that, out of 1261 physicians who had answered to that date a questionnaire sent out from North Dearborn Street, asking their experience with the "monovalent, polyvalent anti-sera" of "preventive medicine," only seventeen endorsed the "Child Prescription" written by his White House Conference, while the other 1244 had either never used them, or had abandoned them after using because of their futility or harmfulness.

Had he kept tab on public health bulletins, as might be expected of a President so extraordinarily concerned about child health and protection, he could have learned of the enormous increase in heart disease among children, as well as infantile paralysis and spinal meningitis since it became the vogue to pump their systems full of the various "anti-sera" of public health service. Even a cursory reading of the newspapers might have taught him something. The N. Y. *Evening World* for June 27, 1929, said in an editorial:

Last year diphtheria killed 642 children in this city, and brought serious illness to 11,000 others—*with grievous after effects in many cases.* (Italics mine.)

And this in a city where antitoxin and toxin-antitoxin had flowed like the "milk and honey" of the Promised Land since 1918.

Yet there was one incriminating feature of President Hoover's Conference on Child Health and Protection, of which he could not plead ignorance. When it became known—as it did in 1929—that Dr. Samuel McC. Hamill—one of the prime movers in the St. Vincent's Home tuberculin scandal—was to be the head of the Medical Section of the Conference, every Anti-Vivisection Society and every Humane Society in the country sent telegrams and letters of protest to President Hoover, demanding Dr. Hamill's removal and calling attention to his incriminating record in experimenting upon orphan children. After some months during which these humane protests were quietly ignored, a representative of one of these protesting societies called on Dr. H. E. Barnard, the official director of the Conference, to inquire what Mr. Hoover proposed to do about Dr. Hamill.

"Why any thought of dismissing Dr. Hamill is preposterous, of course," replied the Conference Director. "He is the greatest authority on child health and welfare in the world. He was on that account selected and invited to serve as chairman of the medical section of the Conference. One does not dismiss an invited guest," concluded Dr. Barnard with a smile.

When reminded of the St. Vincent's Home affair, the Director made an impatient gesture and said:

"Oh well, that was 22 years ago, and what of it? While those experiments were unfortunate in some respects, yet by means of them and others, Dr. Hamill perfected the tuberculin test for children until now it is absolutely safe and 100 percent accurate."

The date of this interview was February 1930. In the late summer and autumn of 1930, the news came over the wire from Lübeck, Germany, of the deaths of 76 infants-and many others permanently injured-caused by the administration of this same Calmette tuberculin test, which the director of Mr. Hoover's child-welfare Conference accredited Dr. Hamill with having brought to such a state of absolute perfection! Three famous German doctors and a woman laboratory assistant were placed on trial for this tragic happening, two of whom went to prison for long terms and one of whom committed suicide. A medical member of the Reichstag, Dr. Julius Moses, published a book on the affair entitled The Death Dance of Lübeck, in which occur the expressions: "The experimenting craze has devastated morals and decency.... The faith of the community is destroyed. Doctors who are innocent have to suffer with the guilty.... Eminent investigators—Greenwood of London and Rosenfeld of Vienna—have proven that Calmette's reports are false." Probably the difference between the German and American ways of dealing with the tuberculin experimenters on children may be attributed to the greater "German thoroughness"!

I have no desire to join the ranks of Mr. Hoover's critics on the score of the depression, the foreign debts, the bonus, the fake Prohibition laws, nor any other count in the long indictment brought against his private and official career. Because I feel that the "White House Conference on Child Health and Protection" places a blot against his name that obscures all others, and puts on him a burden of responsibility almost greater than any human being should be expected to bear.

CHAPTER XII

Medical Jurisprudence Plus Medical Ethics Only the Experts May Testify

There was a perceptible stir among litigants and spectators in the Justice's Court of the Southern California township as the clerk called the case of "Cravath *vs.* Orme."

Every one in the small town had heard of the death of the Orme baby, following a serum injection administered by Dr. Cravath, the attending physician in the case. This had happened in January, and now in the following May the Orme parents were defendants in a suit brought by the doctor to collect his fee, which they had refused to pay. It was said they based their refusal on their charge that the serumwhich had been given against the mother's wishes and over her protest-had caused the baby's death. It was claimedand later sworn to by both parents—that at the time the serum was injected the baby was convalescent from the primary ailment for which the doctor had been called; that the doctor himself had pronounced her out of danger and on the high-road to recovery; and that he had administered the serum—as he said—to prevent some possible future attack of pneumonia, which he said the baby "had very narrowly grazed" in her present illness.

Both parties to the suit had their sympathizers among the spectators in the courtroom that May morning, and the atmosphere was a bit tense as the plaintiff and defendants, with their attorneys, filed into position inside the bar enclosure. I had come to report the trial for one of the newspapers, at the request of the mother, Mrs. Orme, who had brought me her version of the baby's illness and death because of what she had heard of my interest in medical research. She thought I might have some statistics on the dangerous character of serum treatment that would have a bearing on this case. But her attorney, with whom I had talked also before the trial, assured me that the information I possessed would not be admitted as evidence unless uttered by a "regular, reputable physician" from the witness stand.

"You see," said the Orme attorney, "it must be *viva voce* testimony, so as to admit of cross-examination. On no account would the Court admit the introduction of this material by a lay witness, even though quoting medical authorities.

"Now if *a reputable Allopathic doctor* whose views coincide with these authorities you offer, would go into court and express them—with the statistics in support of them, the court would no doubt take cognizance of them. But no amount of *quoted authority*, offered by you or me, would influence its decision in the slightest—and we would not even be permitted to present it.

"It doesn't seem quite fair," he admitted, "but that is the rule and there is no getting around it. Only medical experts can testify in medical cases," he solemnly affirmed. And so with this previous line on the situation, I went to the trial, to witness the workings of justice under medical jurisprudence as it obtains in our courts today—a queer survival of an age which approved the "divine right of kings" to rule, and recognized the plenary authority of "established religions."

Empaneling the jury was the first step in the proceedings, and the test question put to each talesman was noteworthy. "Have you any objection to, or prejudice against the medical profession? If you were ill, would you call a regular medical doctor?" were the queries each man and woman selected for the jury was required to answer.

This was, in effect, making faith in *"regular medicine"* a primary qualification for jury service, and I seemed to recall something in the American Constitution which forbids making the acceptance of any creed a condition precedent for the performance of any public duty. For, mind you, the question put to the jurors was *not* "Have you any objection to, or prejudice against this particular medical man now on trial?"—which would have been legitimate and proper enough; but the test question was equivalent to asking: *"Do you accept the canons of regular medical faith and practice?"*

I could but reflect, as I sat there, if this were a Chiropractor or Osteopath on trial, whether the same care would have been exercised to select only his drugless partizans to pass on the case? Yet these and other systems of therapeutics have won both popular and legal recognition in most of the States in the Union; and there doesn't seem to be any better Constitutional ground for governmental discrimination between healing sects than between religious sects.

My ponderings on this subject were interrupted by Dr. Cravath's lawyer who opened the case for the plaintiff by saying the action had been brought to collect one hundred dollars due his client for professional services rendered during the illness of the minor child of the defendant; and that the only question involved was to fix the reasonable value of such services.

Every one however—including the doctor and his attorney—knew that more was at stake than the amount of the fee. That the doctor himself was on trial, and that his professional rating would be materially affected by the throw of the jury verdict. This was reflected in a certain nervousness of voice and manner when Cravath was placed on the witness stand. In response to questions put by his attorney, he testified as to the date of his first visit to the Orme baby, the seriousness of her illness, and the number of his visits. When pressed by the Orme attorney, Dr. Cravath admitted injecting the serum against the mother's wishes, but said it was necessary, and he felt in duty bound to make every possible effort to save the child's life. He likewise *stated under oath* that he gave the serum a day earlier than that fixed by the testimony of the parents—and before there was a turn for the better.

The next witness called for the plaintiff, was Dr. Sears, a baby specialist, called into consultation at the crisis of the Orme baby's illness, which, according to the parents' testimony, was about two hours after the serum injection. Dr. Sears testified as to the baby's condition at the time he saw her when called on the case, and what he understood from Dr. Cravath had previously occurred. For the rest he absolved the plaintiff from all blame in the matter and upheld his handling of the case in every particular—as was to be expected of an ethical doctor.

The testimony of the father and mother of the dead child, when they were called to the stand, was so chopped up with interruptions from the opposing counsel and prohibitions from the trial judge, that I could but wonder why they went through the formality of calling them as witnesses. Their testimony as I read it later in the court transcript of this case, presented an incoherent, unintelligible mass of half-spoken sentences interspersed with "I object your Honor" from the Cravath attorney, and "objection sustained" from "his honor on the bench."

When the father was asked by his attorney how the baby appeared to him early in the morning of the day on which the serum was injected, but before the doctor came and as the father was leaving the house, the doctor's attorney "objected" to the question as one which could only be answered by an "expert." The father was not even permitted to answer that his baby "appeared bright and cheery," or that "her eyes were bright and her voice stronger than it was before." All these were adjudged technical matters concerning which only "expert opinion" could be considered by the court!

Likewise, the mother's testimony that prior to the doctor's visit on that fateful morning—the date of which was in such sharp dispute—her baby had manifested all the symptoms of convalescence, was fretful and exacting, but that at the moment of the doctor's entrance she was sitting up in bed, happily playing with her doll—all this was ruled out as "incompetent, immaterial and irrelevant," because not uttered by an "expert"!

Of the two "expert" witnesses in this case, one—the consultant baby-specialist—gave hear-say evidence only as to what occurred before he was called in, and these were the main points at issue—the time of injecting the serum, the baby's condition at the time of injection, and what happened immediately afterwards. So that it was in effect one doctor's word against that of two intelligent lay witnesses, *not* about such supposedly technical questions as the nature of the baby's malady and the proper treatment therefor; but about *questions of fact,* concerning which—even in law courts, except when a doctor is on trial—lay judgment is conceded to be as good as that of professionals. Yet the judge in this case ruled that the mother was not even competent to depose that her own child, from an upright, playful posture when the serum was injected, had fallen back with a scream and gone into a comatose state from which she could be aroused with great difficulty, and then only for a moment, until she died in convulsions. These were matters to be determined by "expert opinion only"!

Let it be said that the parents in this case were prejudiced witnesses. Will any one contend that the doctorplaintiff, with both a professional and pecuniary stake, his supporting colleague—driven by the whip of medical ethics, and the medically minded judge and jury—were *unprejudiced?* Moreover, after the evidence was all in and both attorneys had "rested" their arguments, the judge charged the jury in the following words:

You are instructed, that in considering whether the plaintiff in his diagnosis, care and treatment of the minor child of the defendants, exercised ordinary care and skill, *you may not set up a standard of your own*, *but must be guided in that regard solely by the testimony of physicians.*

You are instructed that the degree of care and skill and diligence required of physicians and surgeons is that which is ordinarily possessed by the average member of the profession in good standing in similar localities, regard being had to the status of medical science at that time.

You are further instructed that the plaintiff's care, skill and diligence are not to be tested by the result of the treatment, and that the physician does not guarantee or insure his results.

When asked by his attorney if Dr. Cravath's competency would be admitted in the premises, the judge had replied: "I shall instruct the jury that he is an expert. If he has been given a certificate to practice by the State Board, I will say to the jury that he is competent to practice."

For the further enlightenment—or prejudice?—of the jury, this judge remarked: "I cannot understand what difference it makes whether parents make objections to treatment prescribed by attending physicians as to reasonable services rendered."

With these judicial pronouncements and the composition of the court, the jury verdict was a foregone conclusion. The doctor was vindicated and the stricken parents were ordered to pay the fee demanded for his "reasonable services." The verdict in this case appeared to establish the principle that laymen have no rights which a doctor is bound to respect once they call him on a case of illness; and that he cannot be held to account—no matter what the consequences of overriding their objections to certain treatments.

It also marks a distinct discrimination in the latitude permitted to lay intelligence—whether as witnesses or jurors—when dealing with *questions of fact* involving the professional conduct of medical men, and those touching all other classes of offenders. The customary charge to jurors in all other actions at law, reads: Though you may be ignorant of legal technicalities, you are as competent judges of questions of fact as His Honor on the Bench.

But when a doctor's reputation is at stake, not only the jurors, but witnesses, counsel, and "his honor on the bench," are estopped from putting their own minds to work on the points at issue, and may think and speak only by the medical card. Such a system practically permits doctors to try their own cases, and one naturally wonders why they—or their lay complainants—ever bother with the machinery of the courts at all. Presumably it is only done as part of the medical camouflage necessary to maintain the medical hold on the imagination of the populace.

Under this system of medical jurisprudence, a regular medical man walks into a sick room, or to the operating table, with a virtual guarantee that no matter what blunder—or crime—he may commit, it never can be proven on him, because of the "ethical oath" which compels his colleagues whose expert testimony alone is admitted in evidence—to gather around his inefficiency or criminal negligence, to protect him from the penal consequences. This is a privilege accorded no other class, while the evils inherent in all special privilege are magnified in this case by the unlimited power exercised by doctors over the sick lives entrusted to them.

The above related incident of the miscarriage of justice in the case of "Cravath vs. Orme," is not a fancy sketch. The main points of the trial-the pro-medical test for jurors, the judge's instructions to them, and the ruling out of the evidence of everything except the testimony of physiciansare all matters of record and may be verified by reference to the court files in the Los Angeles Hall of Records. The real names of the parties to the court action—withheld for obvious reasons—will be supplied to any one asking for them. The mother's version of what transpired in her rencontre with the doctor over the serum injection which cost her baby's life, while bearing all the internal evidence of truth, will never be known. The court would not listen to it, and no editor in America would dare print it—at least that is a fair inference after its prompt and unanimous rejection by the several "liberals" to whom I offered it for publication.

All the circumstances in the case of Cravath *vs.* Orme point to the accuracy of the mother's story. The doctor in this case had been on intimate friendly terms with the parents for years. He had officiated at this baby's birth, and he played golf with the father, who was a teacher in the Los Angeles City Schools. There is no reason to think that Dr. Cravath intended harm to the Orme baby in giving her the serum, though it did appear from the mother's account that he was considerably annoyed with her for presuming to question and oppose his professional judgment in the matter. He must show her that doctors know what they are about, and that their authority must not be questioned by ignorant laymen. That this is the usual professional attitude toward the laity, will be borne out by most lay observation, nor is it surprising in a class accustomed to so much deference and subjected to so little opposition as doctors. "No class of men need friction as much as physicians; no class gets less," said William Osier.

Mrs. Orme explained Dr. Cravath's subsequent behavior in bringing suit for his fee, by telling me that sometime after the baby's death she had written an account of the affair to the County Medical Society of which Dr. Cravath was a prominent member, "having heard," she said, "that medical societies have a way of disciplining their members, which is more effective than legal prosecutions." The effect of this was to bring a threatening letter from Dr. Cravath to Mr. Orme, saying if he did not stop his wife's "wild talk," that he would bring suit for his bill and also for libel. Otherwise, the bill might run indefinitely.

"I sent this letter also to the Medical Society," said Mrs. Orme, "and then Dr. Cravath started proceedings against us immediately. I felt he would not have done this, either through fear of losing his fee, or to revenge himself upon me for writing to his Medical Society, except from a consciousness of guilt and a feverish desire to have his professional standing vindicated by the court."

Mrs. Orme's surmise was no doubt correct on this point, and the outcome of the trial showed very clearly how surely the accused physician may depend on legal vindication under a juridical system which permits "only the experts" to testify. The conduct of the doctor throughout this case, as an example of individual wrong-doing, is not remarkable, and certainly not sufficiently significant and conclusive to be made the basis for indictment of a whole profession. For it is no more remarkable that an individual doctor when driven to extremities, should perjure himself, than a culprit of any other class similarly placed.

The significant, outstanding thing in the case of Cravath *vs.* Orme, is that *it illustrates the workings of a system* under which similar injustices may be daily perpetrated, without check or hindrance from any source, and with the public none the wiser. That it was not a solitary instance of the miscarriage of justice under our system of medical jurisprudence, goes without saying. Many such have come to light, and many more have occurred which never came to light.

"You would not believe until you had tried it," said the mother of the dead baby, "how impossible it is to get a medical man to testify against another in a court action. I approached about fifty of them with my story, and while some were sympathetic and censured Dr. Cravath, they balked at saying the same thing from the witness-stand. The majority said quite frankly that they could not do it, that it was against medical ethics, and that they would be severely criticised by their medical societies and made to suffer in various ways." Apropos of the claim put forward by apologists of the system, that though medical offenders may not be amenable to court actions, yet the higher type physicians force them to suffer at the hands of their medical societies, something over a year after the Orme trial, California papers carried a news item about the appointment of Dr. Cravath to the post of Assistant-Surgeon in the United States Public Health Service at Fort Leavenworth, Kansas. Thus they are "disciplined" for their sins against humanity.

But for their sins against the code—well, that is different! Here is a case in point: In 1927, Miss Elsie Prather, a 17year-old girl of Spokane, Washington, fractured her leg, and became the patient of a local physician named Downs. The fracture did not heal properly under Dr. Downs' ministration, and her relatives, alarmed by the symptoms of bloodpoisoning, called in Dr. Wm. W. Robinson of Spokane, who promptly operated and apparently saved the girl's life. Miss Prather then sued the first doctor for malpractice and improper care, and Dr. Robinson—in spite of warnings from his medical society—testified for her. She won a verdict from the jury in damages to the amount of \$12,500, but the trial judge set aside the verdict. Miss Prather sued again, and again Dr. Robinson testified for her. This time the jury gave her \$19,000.

Then the Washington State Medical Association expelled Dr. Robinson for "unethical conduct," and he in turn filed suit against the Association for \$100,000 damages, charging as he did so that: "For years the physicians and surgeons of Spokane have banded together in both the State and County Medical Societies for the purpose of discouraging and preventing all malpractice suits against any physician or surgeon of this city. . . . They agreed not to testify against each other in any malpractice suit, and for years no medical testimony could be obtained against any medical defendant."

This incident caused considerable stir in Spokane, the Spokane Bar Association taking a hand, and openly commending Dr. Robinson for his courageous course, and the story was carried in both the Washington and Oregon papers, but was not conspicuously featured in the press throughout the country. Nor has there been any further report of the outcome of Dr. Robinson's fight with his medical society. The case was exceptional.

And here is still another example of the practical working of the combination of medical jurisprudence plus medical ethics, which fell under my personal observation in the office of a woman lawyer friend of Los Angeles. There walked into her office one day a couple in early middle life, accompanied by a beautiful young girl, probably 16 years of age, who was introduced as their daughter. The story they gave my friend was as follows: Two years prior to this time, their young daughter had developed a very serious sinus trouble which had failed to yield to the treatments given by their family physician through several months. Finally, as the girl was growing steadily worse instead of better, and suffered considerable pain, the family doctor advised an operation as the only known means of getting relief in such cases. Not being a surgeon himself, the family adviser referred the parents to a well-known and reputedly skillful surgeon in Los Angeles. The operation was performed, successfully, as everybody supposed, but strange to say, it did not bring the promised relief. Within a few weeks the girl was evidently in a much worse condition than before the operation, was in constant pain, and lost weight until she was just a pale, pitiful wraith of her former self.

The now thoroughly alarmed parents, seeking help wherever it could be found, were fortunately led to a medical man who seemed to have a thorough understanding of the case. He was frankly mystified, however, when they told him of the recent operation, as he said: "All the symptoms point to the presence of pus in the sinus, and I've never known that condition to develop within such a short time after a frontal incision and drainage of the pus, which is what that operation was supposed to do."

"All we know about it," replied the father, "is, that *that* was what we were told had been done, and that is what I paid for—a good sized fee."

"Well, I can't see anything else to do except to open up that sinus again and clean it out," replied the doctor, who was both physician and surgeon. And permission being given, that was what he did shortly afterwards, when he discovered, to his horror, that the first operator had evidently made a miscalculation with his lancet, cutting deeper than he intended, and becoming frightened, had hastily closed the wound, leaving the pus-filled sinus untouched as he found it, with a jagged, bony edge perilously close to the brain.

All this the second surgeon, who was apparently both capable and honest, explained to the girl's parents after he had repaired the mischief done by his bungling predecessor, and put his patient in a state to recover her health—which she did very soon. And now, what her parents wanted to know of the lawyer, was, whether they had any redress in law for the gross deception practiced on them by the first surgeon in her case, as well as for the needless suffering inflicted on their child—even endangering her life—and for the fraudulent taking of their money?

To all of which my lawyer friend returned a very emphatic affirmative. She told them they had an excellent case for damages against that surgeon, not only on the ground of malpractice of a peculiarly grievous nature, but on the ground of fraud—amounting to plain theft. She felt confident the court would award them almost any amount asked for when they heard the story. The only thing necessary to obtaining such a verdict would be to have the second surgeon—the man who discovered the damage and the fraud—go on the witness stand and testify as to the conditions he found when he examined the child's head. So these parents departed hopefully to tell their new medical friend what was required for the successful prosecution of their action for damages. To their surprise and consternation, the second surgeon told them he was "very sorry, but that the medical ethical code would not permit a reputable physician to testify against a medical colleague. To do so, would be to destroy public confidence in the medical profession," he said.

So then, according to this, medical practice is a confidence game, dependent for its successful functioning upon hoodwinking the people into a false belief in its efficiency, and on covering up its defects and crimes!

In a book entitled *The Medical Trust Unmasked*, published in New York in 1929, its author, an ex-service man, gives an outline of the medical "Group Insurance Plan" whereby medical practitioners protect themselves from the penal consequences of malpractice. With what appears to be well-authenticated evidence, he claims that the members of 32 State Medical Societies—embracing nearly 70,000 physicians—have entered into secret agreements and contracts with the Insurance Companies and with each other, to defend members against suits brought against them for maiming or killing their patients.

On pages 64-65 of this book, occur these statements:

Twenty-eight of these thirty-two States grant this defense as part of the regular benefits derived from being a member of the American Medical Association. Membership alone is sufficient to insure the physician that he will be defended by the whole closely banded fraternity, should he ever be sued for malpractice.

And again:

Out of these 32 State Medical Societies, 21 pay all expenses necessary to defend the accused physician. This includes lawyers' fees, witnesses, costs, appeals, etc.

Still more significant is this paragraph:

Twenty-four of these medical societies *furnish expert witnesses to testify on behalf of the accused.* Eighteen of these societies pay all expenses incurred by such witnesses, *as well as special remuneration for testifying favorably,* some of it running as high as \$50 a day!

In this connection the author cites a confidential report submitted by the Board of Trustees of the American Medical Association to its electoral body at its Dallas Convention in 1926, wherein they were assured that the A. M. A. was "still seeking to eradicate malpractice suits."

"It cannot be too strongly insisted," reads this report, "that the prevention of claims is the objective sought, and not merely the adjustment of such claims as arise, or the indemnification of physicians against loss."

"What can the American Medical Association do to reduce the number of malpractice suits?" asks a letter sent to the various State societies, and the chief answer gathered from the responses was:

"Make the physicians adhere closer to the principles of ethics"! One suggestion reads:

Have some provision whereby, if it can be shown that a physician encourages or incites parties to institute suits, it would result in expulsion.

Another ran:

Impress upon members *their duty to one another*. Bring them in closer contact, and make them realize what some disparaging remark about treatment or operation may mean to another member.

Still another advised:

Urge group insurance, and encourage medical defense *through medical organization* rather than through commercial organization.

Under such a system, what chance has the sick public?

CHAPTER XIII

Medical Voodoo and the PUBLIC HEALTH

On the floor of the Annual Convention of the American Medical Association held in Los Angeles in the summer of 1911, Dr. W. A. Evans, one-time Health Commissioner for the city of Chicago, gave out the following memorable statement:

As I see it, the wise thing for the medical profession to do, is to get right into and man every great health movement; man health departments, tuberculosis societies, child and infant welfare societies, housing societies, etc. *The future of the profession depends* on keeping matters so that when the public mind thinks of these things it automatically thinks of physicians, and not of sociologists or sanitary engineers. *The profession cannot afford to have these places occupied by other than medical men.*

This Convention pronouncement by the Chicago Health officer was later published in the *Journal of the A. M. A.*, Sept. 16, 1911, and marks a distinct epoch in the history of official medicine in the United States. Just how wholeheartedly the Evans recommendations were received by his colleagues, and how thoroughly they have been carried out in the 24 years since they were offered at the Los Angeles Convention, is sufficiently attested by a survey of the Public Health Service throughout the country which reveals every branch of it completely manned and dominated by the exponents of "regular medicine."

Practitioners of the newer schools of healing, such as Homeopathy, Osteopathy, Naturopathy, and Chiropractic are entirely excluded from such tax-supported institutions as health-boards, public hospitals, army camps, state prisons, workmen's compensation bureaus, and homes or asylums of every kind where the care of the sick is indicated. Here and there it may happen—as it has occasionally happened—that one of these public hospitals will let down the bars to one or other of the irregular healing "cults"—as a large impressive gesture of "liberalism"—yet on such galling terms of discrimination that the self-respecting cultist is glad to withdraw. A concession very generally made to the Christian Science practitioners—after their "cult" became sufficiently numerous to be reckoned with as a factor in politics—was to admit them as spiritual advisers to any of the medically controlled hospitals, much as priests and chaplains are admitted; but in no sense is the Christian Science practitioner permitted to take charge of a hospital case, dismiss the medical regimen and inaugurate his own therapeutic method.

The expressions in the above cited Evans resolution—that "the future of his profession depended" on getting the whiphand in Public Health Service, and that "the profession could not afford" to forego the political advantage accruing from such monopoly—will be interpreted by some as a virtual confession on the part of regular medicine that it either realized it had nothing of therapeutic value to offer the sick world, or that it had despaired of winning the sick patronage by fair means and must therefore have recourse to political intrigue.

However it may be interpreted, here we have the recorded evidence of a deliberate plan by organized official medicine, openly declared in convention assembled, to monopolize a great public agency like the Public Health Service—affecting all the people and paid for by all the people—to the utter exclusion of other healing sects legalized under existing laws.

The effect of the adoption and vigorous prosecution of this Evans resolution, has been inevitably greatly to enhance the political power of organized regular medicine-whose official name is the American Medical Association-and to enable the "regulars" to hamper, harass, and where possible to suppress their therapeutic rivals—in other words destroy therapeutic competition. Yet stifling or destroying competition in any given business is precisely what the Sherman Anti-Trust law was designed to prevent, and thus the A. M. A. in carrying out the Evans program has taken on all the offensive features and oppressive overlordism of a swollen commercial "trust," and should be subject to the operation of the Anti-Trust law, but it isn't. For if monopoly is a bad thing when applied to the interchange of material commodities, how much greater menace to life and liberty it is when it restricts the free play of remedial agencies for the relief of human suffering, and the saving of human lives.

Yet in all the political fulminations—in and out of Congress—against the trusts—"great combinations in restraint of trade"—no whisper of criticism is ever heard against the most colossal of all monopolies, the most relentless pursuer of competitors, and the closest of all "close corporations"—the American Medical Association. A partial exception to this is noted in a resolution introduced into Congress in 1928 by Senator Glass of Virginia, for an appropriation to investigate one of the Medical Trust's activities—the tuberculin testing of dairy cattle. The Glass resolution was based on a personal rencontre with the State veterinaries on his own premises by the Virginia Senator, who when not occupied with affairs of State at Washington, amuses himself with a dairy farm of thorough-breds near Lynchburg, Va.

The resolution, with the report of the incident on the Glass farm which led up to it, was presented to the Congress in April 1928, and was ordered to be printed as "Senate Document No. 85." It comprised an amazing story of official injustice, arrogance and insolence on the part of the Virginia Livestock Sanitary Board in connection with the tuberculin testing of two thoroughbred heifers in Senator Glass's herd, that reads more like a chapter from Russian annals under the old Czar, than anything that could possibly happen under a supposedly free government.

The Virginia senator's long legal battle with the medical autocrats on the State Board-extending over six years at a cost of \$12,000 and resulting in a complete triumph for the owner of the mistreated heifers-is given in detail in "Senate Document No. 85." Other dairy-farmers and live-stock owners had suffered similar outrages in the past, and pocketed their losses in silence. Senator Glass was the first one with enough means and enough pluck to challenge the authority of the State veterinaries and put up a fight against the wanton destruction of dairy herds at the behest of state-sponsored medicine. His course was amply vindicated in Virginia, for he not only won his court battle against the State Livestock Board, but the Virginia Legislature upon petition of other exasperated dairy men and livestock complainants, abolished this board and transferred its functions to the State Board of Agriculture. The offending State veterinarian whose obstinate, arbitrary conduct had caused all the trouble, was summarily dismissed and a new one appointed.

During the prosecution of the Glass case through the Virginia courts, there was brought into evidence and written into the file record the findings of an Illinois Legislative Committee, appointed in 1909 at the request of dissatisfied Illinois dairymen to investigate the whole subject of tuberculin testing, its scientific aspects and practical fruits, and report to the Legislature. This Committee, composed of four members of the upper house and six of the lower house of the Illinois Legislature, whose chairman was Judge E. D. Shurtleff of Chicago, extended its inquiry over a period of two years, during which time testimony was submitted by every class supposed to know anything about the milk industry physicians, veterinarians, pathologists, bacteriologists, dairymen and health officials. Among the witnesses examined were such outstanding authorities as Dr. Austin Peters, head of the State Animal Bureau of Massachusetts; Dr. George Adami of Cambridge, England, and Montreal, Canada; Dr. James Law of Cornell University; Dr. Theobald Smith of Boston; Dr. Lawrence Flick of Philadelphia; Dr. Henry G. Piffard of New York City; Dr. Bernard Bang of Copenhagen, and Dr. James E. Egan, secretary of the Illinois State Board of Health. And it was the unanimous verdict of these expert witnesses that "the tuberculin testing of all dairy cows and the elimination of reactors is *unnecessary, useless and wasteful";* and that "a proper and sufficient *physical and clinical examination,* and *the elimination of those cows visibly affected in the udder or mammary glands, was quite enough."*

When this was reported to the Illinois Legislature, it resulted in the enactment of a law overwhelmingly approved by the Legislature in 1911—(Chapt. 8, Sec. 105 Ill. Statutes)—which reads as follows:

An Act to prohibit the establishing and enforcing of the Tuberculin Test for Dairy Animals, by any city, village, incorporated town, county or other Corporate Authority in the State of Illinois.

This Illinois legislative investigation into the nature and operation of the Tuberculin Test for dairy animals, was the first, last, and only official inquiry into the matter ever ordered or undertaken in this country; and its ultimate effect—in the resultant prohibitory law—should have been of lasting benefit to the dairy industry, in protecting it from the assaults of medical voodooism operating through the police power of the State. Yet such was, and is, the tremendous political power of organized regular medicine in the United States, that the thorough, scientific work of this Illinois Legislative Committee—in 1909-1911—was completely nullified, and the benefits accruing from it to the dairy industry, not only in Illinois but in all the States, completely lost.

The first manifestation of this medico-political power in this instance, was the disappearance of the 11,000 copies of the Shurtleff Report which had caused the passage of the Act forbidding the tuberculin requirement. These valuable reports, containing the expert testimony of all the great veterinarians in the country, and published at considerable expense to the State, suddenly vanished from public view. No single copy could be found in any public library, nor among the files of State Law or Agricultural Colleges, until finally the American Medical Liberty League in Chicago was able to obtain a copy from a member of the original Shurtleff Investigating Committee, and published a number of reprints of this important official document in 1925.

Meantime the Illinois law prohibiting the compulsory test, had become virtually a dead letter, through the ceaseless agitation and bullying tactics of the medico-politico-bund, and in 1930, nearly twenty years after its passage, the law was repealed. The report of the Illinois Investigating Committee on which the law was based, however, still serves a useful purpose in educating the people as to the truth about tuberculin-testing, and it was useful to Senator Glass in his fight with the Public Health bureaucrats in Virginia. Since he incorporated its most salient features—and the expert testimony of the big medical authorities therein quoted—into his "Senate Document No. 85," which he later submitted to the Federal Congress, one can but wonder why this information failed to impress the solons at Washington as it had the civil authorities—the judges and legislators—of Virginia? Not only was the full history of the Carter Glass episode in re tuberculin-testing laid before his colleagues in the Senate-together with the complete vindication of his side of the contention by the Virginia courts and Legislature-but other data was deduced showing the graft and terrorism practiced by "the system" of state-sponsored medicine. An incident was cited in connection with the trial, of a professor of veterinary science in one of our largest universities, who was retained by Mr. Glass to act as expert adviser to his attorneys.

This professor had definitely expressed his opinion that "there have been many errors in making the intradermal test of cattle for tuberculosis," and had definitely cited instances in which "numerous valuable, pure-bred cattle had been condemned under this test when a stay in action was obtained and the retest made clear that the first test was inefficient." He had explicitly told Mr. Glass and his attorneys that "the records of New York State, where he resided, showed numbers of instances wherein reacting animals were retested and found without blemish, and their restoration to accredited herds even after they had been branded as reactors." "But," he added significantly, "I would like to see you or anybody else get access to those files." And the Glass attorneys realized the truth of this later when their efforts to see those files were stoutly resisted. This professor of veterinary science had definitely agreed to repeat his statements and opinion that "the tuberculin test was largely wrong, unreliable, and should be radically revised," in a sworn deposition for the Glass case and to prepare hypothetical questions for the opposition witnesses. A day or two before the time appointed to take his deposition, however, this eminent scientist in one of our famous universities, although paid a part of the fee charged for his professional services, evinced a reluctance to proceed. He said he had been "warned to have nothing to do with this case." He did not modify his previously expressed opinions in the slightest. There was no change in his professional attitude, but he showed plainly that he was frightened, and he advised an adjustment of the case out of court. When told by Mr. Glass's attorneys that the only adjustment out of court they would consent to would be a retest of the two condemned heifers, he expressed confidence in his ability to bring this about, and to have the retest made by two impartial veterinarians of acknowledged skill—one to be appointed by Dr. Mohler of the

U. S. Bureau of Animal Industry, and the other by Dr. Munn, State Veterinarian of Penna.

He was told that while Mr. Glass had no compromise to propose, he would cheerfully agree to, and abide by, such a retest. The efforts of this distinguished veterinarian to bring about his proposed adjustment proved futile, however, to his manifest chagrin and disgust; whereupon he begged to be let off from testifying in the case, while reiterating his previously expressed opinions. Finally one of the Glass counsel put the issue up squarely to the professor of veterinary science:

I gather, Doctor, from what you say, that you differentiate scientific truth from the professional attitude of veterinarians, and from the system officially adopted to eradicate tuberculosis.

In other words, while it is your professional judgment and the consensus of opinion among veterinarians, that the tuberculin test is often ineffective and mistakes are frequently made altogether out of accord with actual scientific knowledge, nevertheless, these veterinarians and officials have resolved, as a matter of propaganda, and as an essential protection of the system itself, and to make its operation less troublesome, to insist upon the processes which now prevail.

And to this exact and startling summing-up of the situation *in re* the tuberculin test, the veterinary scientist returned the equally startling answer: *"You have exactly stated the case. That is right."* Then he was asked:

And yet, Doctor, notwithstanding your opinion just given, you are unwilling to go on the stand and so testify under oath?

When with equal frankness the expert veterinarian replied:

Yes, I am. Should I go on the stand and tell the truth under oath, my usefulness as a veterinary scientist would be destroyed.

At this point Mr. Glass took a hand in catechising the expert:

I infer, Doctor, you find yourself in the same position as my local veterinarian, who frankly told me he did not believe my two heifers were in the least infected, but that he could not retest them because if he did, the State Veterinarian would destroy his livelihood—and he had a wife and children to support.

To this the professor readily assented, and confessed to being in the same humiliating position as the local veterinary on Mr. Glass's farm, with respect to the official over-lords of the Public Health Service. He said he had 30 years longer to live, in the natural order, and that if he should testify to the truth of his professional knowledge, "these people would make it hard for him." He was excused from testifying, and the Glass attorneys notified the opposing counsel that *this man's deposition would not be taken because he had said he was*

unwilling under oath to testify to the truth, for fear of being professionally ruined by the veterinary officials of State-Sponsored Medicine!

All of which is a matter of record in the Virginia court files, and all of which was laid before the Congress of the United States in 1928 along with every other incident of the court battle centering around the "tale of two heifers" on Senator Glass's Montview farm. In what it tells of official corruption and terrorism in a branch of the Public Health Service affecting the lives and property rights of millions of American citizens, we naturally suppose it would have engaged the immediate attention of our national lawmakers; and that the recital would have led to a prompt adoption of Senator Glass's motion for a Federal investigation of the practice of tuberculin-testing for dairy cattle.

In addition to the important material submitted by Senator Glass, the Congress had before it the minutes of a hearing before the House Committee on the District of Columbia Affairs in 1922, when Dr. W. C. Fowler, Health Officer for the District, was urging the passage of a billprepared by himself—for the exclusion from the District of all milk from herds that had not been tuberculin-tested. The facts elicited at this hearing, were enough to discredit that test-alone, without the cumulative evidence of the Glass Report. Fowler, after the manner of his kind, was attempting to claim the drop in the death-rate from tuberculosis in the District from 294 per 100,000 in 1900, to 112 per 100,000 population in 1920, was largely due to the tuberculin testing of dairy cows. Two members of the Committee who happened to have the figures, called the Health Officer's bluff in this by reminding him that the reduction of the TB death-rate had been just as great in cities which did not have the tuberculin test-notably New York and Chicago.

A fact which should have further discounted Fowler's claim—and which may have been unknown to him or to the Committee—was that tuberculin testing of dairy herds was not inaugurated in the United States until 1917, did not get well under way until 1918, and could not have had any appreciable effect on the decline of tuberculosis by 1920. When Dr. Fowler was asked by a member of the Congressional Committee the direct question:

Do you know of any instance where bovine tuberculosis was communicated to a human being? Is there a case on record anywhere in the world, to show that tuberculosis has been communicated to a human being through the medium of milk?

the discomfited Health Officer, who had so confidently attributed the decline of tuberculosis in the District of Columbia to the condition of the milk, was forced to make answer:

"I will ask Dr. Schroeder to answer that. Dr. Schroeder is better posted on that than I am."

"Do you personally know of a single instance?" mercilessly pursued the Congressional interrogator.

And again Dr. Fowler was forced to answer:

"Personally, I cannot cite one instance, but I will leave that to Dr. Schroeder to answer."

But Dr. Schroeder, for 25 years Superintendent of the Experiment Station of the U. S. Bureau of Animal Industry, when called to testify before the District Committee, proved a very bad witness for the tuberculin testers. Asked if bovine tuberculosis could be transmitted to a human being, Doctor Schroeder would go no further than to say that "it might be done"; but stated as his firm conviction that *"infection could not be communicated except through a diseased udder."* In his own words to the Committee:

I have drawn milk, and had milk drawn from tubercular cows over and over again under aseptic precautions, in order to ascertain whether tubercle bacilli would be present in it in the absence of udder tuberculosis, and I have never in a single instance succeeded in getting tubercle bacilli from milk of that kind. So that in my own writings I have stated that I do not believe tubercle bacilli are expelled from the body of a tubercular cow *through an uninfected udder*.

And it goes without saving that if the milk is never infected, nor capable of communicating infection, except when the udder of the animal is visibly diseased, no tuberculin test is needed to ascertain that! Now when to this mass of expert testimony as to the unreliability and futility of the tuberculin test in discovering tuberculosis in animals, there is added the fact-attested by Theobald Smith of Boston, and by Robert Koch of Berlin, the reputed discoverer of the tubercle bacillus and the inventor of tuberculin-that tuberculosis in animals is a wholly different malady from tuberculosis in humans, and actuated by a different "bug," the fraudulent absurdity of the whole tuberculin-testing business is laid bare to any unprejudiced mind. Further proof of its fraudulent character is afforded in the fact that the condemned "reactors" to the test are sold to meat packers, and their flesh—*tubercular*. according to the test-is passed on as "prime beef" for the market by Government inspectors!

All dairy farmers cannot follow their condemned cows to the slaughter pens, but some of them have done so, and their testimony has been given and approved by competent tribunals, and much testimony of this kind was adduced in the Illinois investigation and included in the Shurtleff Report. There was incorporated in its findings also, the testimony of the best veterinary authorities to the effect that "there are seven different causes for apparent reactions in dairy cows under the tuberculin test," yet the average ignorant or indifferent inspector who does the testing insists upon ascribing the reaction to tuberculosis alone.

In his brochure addressed to Congress, Senator Glass said:

We hear a great deal about "the terrific ravages of bovine tuberculosis," but there are nowhere discoverable any data or statistical information in proof of such talk. I have made it a point to ask scores of stock-breeders and dairymen if they had ever lost by natural death a cow definitely ascertained to have died of tuberculosis; and I have yet to find a single breeder or dairyman to admit any such loss. The U. S. Bureau of Animal Industry, while it has no statistics on the subject, yet puts out the general statement that "dairy cows rarely die of tuberculosis. They will depreciate and go down in their production, but very seldom die from tuberculosis."

Continuing his testimony on this point, Mr. Glass said:

In the absence of credible data or statistics of any kind as to the extent of such losses—deaths from tuberculosis in cows—at most it must be inconsequential, and mere guesswork. But the extent of slaughter under the tuberculin test, and the consequent pecuniary loss to farmers, are not guesswork. The record shows that nearly 1,500,000 animals have been slaughtered in the past 10 years under the system of tuberculin testing. Conservatively, this means a loss to the stock-breeders and dairymen of the country of nearly \$150,000,000. The incidental cost of this terrific slaughter in the same period to State and Federal governments has been \$119,551,888, a total cost to cattle owners and governments of \$269,551,888.

Figures showing the steady increase in this costly business of slaughtering dairy cattle merely on the *ipse dixit* of a controverted medical theory, were submitted by Senator Glass:

Operating expenses have progressively increased from \$75,000 in 1918 to \$1,107,480 for 1929. Federal indemnity increased progressively from \$1,000,000 in 1920 to \$4,621,130 for 1929, and State indemnity increased from \$2,000,000 in 1919 to \$14,000,000 for 1929.

"And yet," said the Virginia Senator, "in the face of these tremendous expenditures of money, upon the theory of protecting animal and human life, and this slaughter of nearly 1,500,000 animals upon the supposition that they were infected with bovine tuberculosis, the legislative bodies making these appropriations of the taxpayers' money, seem never to have paused long enough to inquire whether the theory upon which the expenditures are made is sound, or whether the expenditures have been judiciously made, or whether the tuberculin test in practical operation results in the destruction of inconceivably more dairy cows than would die a natural death, or whether it would not be better to return to the practice recommended to the Illinois Legislative Committee by the leading veterinary scientists of the country, that 'a proper and sufficient physical and clinical examination of dairy cows and the elimination of those obviously affected in the mammary glands or udder, was quite sufficient' to insure healthy cows and pure milk.'

And then having laid before his colleagues all these proofs of the dishonesty and futility of the tuberculin test, together with the enormous property losses entailed by it, Senator Glass entered his motion that the Congress of the United States which had been appropriating tens of millions of dollars to conduct these tests and to slaughter the property of American farmers, "should appropriate a few thousand dollars to appoint a commission of courageous scientists in conjunction with legislators of practical sense, to investigate the whole problem and methods of tuberculin-testing." As a tip to his fellow dairymen he says:

This Congress would do, if the American stockbreeders and dairymen would cease being terrorized by the professional "system" which largely profits by the prevailing processes. One has only to read the necessarily hurried hearings held by Congressional Committees which pass upon these appropriations, to note that the chief witnesses for the system may be catalogued as the beneficiaries of the "operating expenses."

Legislators, in misplaced confidence, accept in good faith the unsubstantiated statements of persons who are supposed to know everything, but who in reality know little, if anything, about the problem. For these reasons the stock-breeding and dairying business of the country has been wickedly harassed for years—instead of helped—and the costly restrictions are becoming more and more insufferable each year.

And Senator Glass concluded his presentment of the tuberculin abuse, by exhorting his associates in the stockbreeding and dairy business to "organize a real fight for the reformation of the system," and to secure respect for their property rights. But apparently Senator Glass's Congressional colleagues were more afraid of "the system" than of the scattered, disorganized hosts of stock-breeders and dairymen whose ability to strike back at them was not so much in evidence.

For the final outcome of the Virginia Senator's efforts to have the Federal Congress take action on his report by ordering a thorough investigation of the tuberculin evil in the cattle industry, was to have his resolution killed in committee, and even his printed report—with all its valuable tabulated evidence—has been allowed to lapse into the "outof-print" category. The war between individual dairymen and stockbreeders—organized into "dairy farmers' protective associations" in a few States—on the one hand, and the medically directed State veterinarians on the other, is still going on in certain localities; while in others, through the ignorance, sloth, or political collusion with the medicopolitico-bund on the part of the live-stock men, this dangerous and disease-breeding tuberculin test is accepted without protest.

Another famous court trial hingeing on the tuberculin test was tried out in the State of Iowa (Mitchell County) in 1926-1929. A petition was filed in the District Court, October term of 1926, by a dairy farmer, M. J. Loftus, against M. G. Thornburg, State veterinarian, asking for a temporary injunction to restrain the latter from subjecting the plaintiff's cattle to the tuberculin test, asking also that on trial and hearing the injunction be made permanent. The case came to trial in June 1928, and on the 31st day of May 1929, Judge M. H. Kepler, the trial judge in the case, after hearing and reviewing all the evidence, pro and con, and the arguments of counsel for both parties to the contention, found in favor of the plaintiff, and declared the application of the tuberculin test unconstitutional in principle and unjustified in practice.

And here are some of the notable findings in this case which influenced this Iowa judge to render this decision:

The court finds from the evidence in this case that many cattle passed by the tuberculin tester as clean and free from tuberculosis, afterwards when slaughtered and inspected, are condemned as tuberculous and adjudged by the inspectors at the packing plants to be so diseased as to be unfit for food and fit only for the tank... Again the court finds from the evidence, that some cattle which were claimed to react to the test, and therefore adjudged tubercular, were found after being slaughtered to be entirely free from disease, and that this was established by microscopic examination.

The court finds from the evidence introduced, that from 90 to 95 percent of the cattle condemned as "reactors," are from outward appearance among the healthiest and most vigorous ones in the herd; and that on slaughter, from 90 to 92 percent of the cattle reacting are by the inspectors pronounced generally healthy *and their flesh is used for food.*

Upon the foregoing, the Iowa Court appears to have based its judgment that the tuberculin test was unreliable and useless; and upon the further finding that "the payment to the owners for cattle slaughtered as reactors is less than the appraised value of such cattle," rested its decision that the practice was a violation of the Constitutional guarantee to citizens that they shall not be deprived of property rights without sufficient cause and "without due process of law."

Summing up the evidence on these points, the Iowa decree reads:

Based on the evidence in this case, the Court finds that the tuberculin test as used as a diagnostic agent to determine whether or not bovine animals have tuberculosis, is *not* a reliable, efficient or economic test; and does not accurately point out the presence or absence of tuberculosis in the cattle tested; but that it is inaccurate, uncertain, and does not as applied in Mitchell County and in Iowa, protect human or bovine health, and does not conserve or protect the property of cattle owners.... As to losses and damage caused by the tuberculin test other than the slaughter of the animals tested, the Court finds from depositions taken in Ohio, Wisconsin and Pennsylvania, and from the testimony of witnesses sworn and examined before the Court, that the owners of herds are damaged in their property rights by this test, in that it—in many instances-causes cows which do not react, to abort and lose their calves; to become sterile, to give offensive and

stringy milk unfit for food; to dry up and fail to give milk and to lose the use of portions of the udder. . . . In some instances cows so tested gave milk which caused severe sickness in children and sickness in calves. . . . In some instances the test caused cows which failed to react to produce weak and abnormal calves, to give a diminished milk supply and in other ways affected the health of the cows and their property value. . . . One who is not prejudiced, and who is unaffected by a decision in this case, cannot read the testimony of witnesses and the depositions taken without reaching the conclusion that in many instances abortion in cows is caused by the tuberculin test.

And thus on every count, the Iowa judge in this case ruled against the tuberculin-testers, and granted the plaintiff's petition for a permanent restraining order, at the same time ordering the defendants to defray the cost of the court action. The verdict in this case put new life into the recalcitrants against the test, and since its publication there have been various conflicts between the dairymen and the cattle inspectors, accompanied in some instances with gun-play. In this same year, 1929, counsel for the Ohio Farmers' Protective Association gathered and put into pamphlet form some official figures regarding the milk industry of the country which shed additional light on the puzzle picture of the tuberculin test. First he deduced figures taken from the Year Book of the U.S. Department of Commerce, Volume 1, 1928, which showed an increase in the number of cattletaking the dairy and other cattle together—in the United States in the ten-year period from 1910 to 1920 of more than 9,000,000 head, practically a million head increase a year.

From 1920 to 1928—during which period the tuberculintesters got in some of their finest work—there was a yearly drop in the number of cattle until the figure given in 1928 showed a decrease of more than 13 million head for the period of eight years. The significance of this falling off in cattle production under the tuberculin regimen, in sharp contrast with its increase in the decade preceding the inauguration of tuberculin-testing, must be apparent to all save the willfully blind. At a hearing before the House Appropriations Committee in the first session of the 70th Congress, 1929, Dr. Mohler, chief of the Bureau of Animal Industry, asking that an appropriation for tuberculin-testing be included in the Agricultural Bill, inadvertently bore witness to the destructive effects of the test upon the cattle industry. On page 128 of the Hearing, we find Dr. Mohler's testimony:

"In 1925," said Dr. Mohler, "we had 11,000,000 cattle under supervision (meaning under the tuberculin test). At that time there were 66,000,-000 head of cattle in the country. In 1926 we had 15,000,000 cattle under supervision. At that time the cattle population had decreased to 60,000,000. In 1927 we tested and had under supervision 18,975,000, or practically 19,000,000 cattle, when the number of cattle in the country had declined to 58,000,000." Here we have the recorded admission from this high authority, that under tuberculin-testing there was a drop of 8 million head of cattle in two years! Although the dairy industry is perhaps the most outstanding example of the destructive effects of medical voodooism in the business world, it is by no means the only one.

CHAPTER XIV

Medical Voodoo and the Business World

No special argument is needed to show a business man that disease epidemics are a great detriment to local trade. That goes without saying. But so long as these periodic visitations of communal illness are regarded as "acts of God"; or so long as the public can be inveigled into believing that the "preventive" hocus-pocus of the medical man has any part in abating or warding them off, the business world is disposed to accept these epidemic plagues philosophically and pocket its losses in silence.

Since the beginning of complete control of the public health service by medical theories-following the adoption of the Evans Resolution in 1911—however, there have been authentic instances of faked or manufactured epidemics by medical health officials that somewhat disturbed this complacent attitude of the business world. The first of the made-to-order epidemics to be given nation-wide publicity, was pulled off in New York City in 1920 by Royal S. Copeland, at that time Health Commissioner for the City of New York and later United States Senator from N. Y. State. His representations to the City Board of Estimate and Apportionment that the country was threatened with epidemics of smallpox, cholera, black-plague and what not, induced that body to turn over to him \$200,000 as an extra "emergency" fund—over and above the regular Health Department appropriation—with which to combat the "imminent" plagues which according to Health Department records did not exist outside the Health Commissioner's imagination.

Having obtained the emergency fund—on this trumpedup charge—Dr. Copeland next applied to the Municipal Civil Service Commission to waive the Civil Service requirement for a competitive examination for employees of the Health Department, to enable him to employ at will extra help for "stamping out" his alleged epidemic. He claimed that the "emergency" was so acute that he couldn't wait for the usual Civil Service certification of his helpers. It is recorded that the Civil Service Commission of N. Y. City proved as compliant to the Health Commissioner's wishes in this respect as the Board of Estimate and Apportionment had been in granting extra funds. And thus Commissioner Copeland was permitted to employ and carry on the public payroll 169 persons uncertified of Civil Service for a whole year, and at the end of that time, upon his assurances that "the emergency" in the public health still continued, the Board of Estimate duplicated the funds and the Civil Service Commission continued its authorization of the irregular employment of the "169 uncertified persons."

Then the Citizens' Union and the Civil Service Reform Association of New York City came into the picture when Mrs. Ellen Shaw Barlow, a vice-president of the Civil Service Reform Ass'n brought suit to restrain the City Comptroller from paying the salaries of these 169 employees of the Health Commissioner, listed by him as "special experts," but characterized by Mrs. Barlow's attorney, Eliot Kaplan, as "political heelers in the various Assembly Districts throughout the city," to serve the political fortunes of the future Democratic Senator from New York. At any rate the manner of appointment of these "emergency" public health employees was illegal, and on this ground the restraining order was sought. The court decided in favor of the Civil Service petitioners and against the Health Commissioner, who thereupon appealed the case to the Appellate Division of the New York Supreme Court, which in March 1925, after the customary law's delay, sent down a unanimous decision confirming the verdict of the lower court that the employment by the Health Department of 169 persons without selection from Civil Service lists "was without warrant of fact or authority either under the Civil Service Law or the rules of the Municipal Civil Service Commission."

But this decision was not rendered until Health Commissioner Copeland, who had instigated the whole emergency frame-up which ultimately cost the City of New York over \$800,000, was safely seated on the Democratic side of the United States Senate. The money had been spent, the irregularly appointed "special experts," seeing no epidemic to subdue and inspired by a laudable desire to earn their salaries, had no doubt contributed their share to the consummation of their chiefs political ambitions; and the adverse court decree could do no more than brand the whole proceeding as grossly "irregular and in contravention of law." For confirmation of the main points in this narrative, see the decision rendered by the Appellate Division of the Supreme Court of New York in the case of "Ellen Shaw Barlow, Vice-President of the Civil Service Reform Association, vs. Charles L. Craig, City Comptroller and others."

Another example of the power of medical officialdom under "the system" to manufacture epidemic scares at will, was furnished in Kansas City, Missouri, in the Fall of 1921, when it appears the Jackson County Medical Society, at a time when business was very dull in doctors' offices, met and created a smallpox epidemic by "resolution"! The facts in regard to it were brought to light by the "Advertisers' Protective Bureau" of that city, a quasi-public institution whose declared purpose is "to protect the public from fraudulent and misleading advertising."

From a circular issued by the Protective Bureau after the affair had blown over, we glean the following excerpts:

While the medical interests of Kansas City were busily endeavoring to cope with the sudden big demand for vaccination and preventive treatment; and while the public generally was hovering between fear and terror as to the extent of the scourge; the business interests of Kansas City were struck a blight as serious as it was sudden.

The circular declares that prior to the meeting of the Jackson County Medical Society and the passage of its "recommendation" to the Hospital and Health Board early in November,

the health of the city had been unusually good. According to Health Department records, during February, March and April, there was an average of 115 cases of smallpox per month, but no epidemic was declared. Very few cases were reported for the summer months—in July only five. 213 cases were reported for November, *but not in the beginning of November when the scare was started.* After the epidemic was declared a number of cases which in the absence of the scare would have been classified as something else, went to swell the smallpox total.

"But even if there were 213 genuine cases for the whole of November," the report continues, "that was nothing unusual for a city of this size, and fewer than the number of cases reported in other localities where no epidemics were declared."

Then follows the Advertisers' report of the Jackson Medical Society's "recommendations" which brought about the epidemic, and are very interesting as illustrating the different types of technique employed by the creators of called-to-order epidemics:

Motion made and seconded, that a recommendation be made by this Committee to the Board of Health, *that an epidemic of smallpox be declared to exist in the city at the present time.* Moved and seconded that all employers and employees of all industries, department stores, public buildings, hospitals, theatres, movingpicture shows, hotels and rooming houses, be *vaccinated at once,* or show to the satisfaction of the Board of Health that they have had a successful vaccination.

Moved and seconded that all employees of restaurants and cafeterias, and all persons handling food products of any kind, and all vendors of any articles serving the public, *be vaccinated at once unless they can show a successful vaccination scar.*

Moved and seconded, that a day be set aside, to be termed VACCINATION DAY, on which physicians will be stationed at every public school, public building, hospital, clinic and dispensary of the city, to vaccinate free of charge every one applying—child or adult. It is further recommended, that the above motion be given wide publicity, that placards be placed in all public places, drug stores, street cars, etc. stating that quarantine is not a preventive of smallpox, but that vaccination is, and urging the absolute necessity of vaccination for every one.

From all which it appears that the Jackson County Medical Society didn't slight anybody in its recommendations for the vaccination orgy of Kansas City in 1921, and if any recalcitrant citizens escaped at that time, they must have felt as lonesome as the "few righteous persons" who fled from the destruction of Sodom and Gomorrah.

The Advertisers' Protective Bureau continues its report as follows:

The facts seem to be that just before the epidemic was declared, health conditions were exceptionally favorable. Hospitals were running at less than 50 percent their usual attendance. Health Department records showed a small list of contagious diseases, and the Health Commissioner, Dr. E. H. Bullock, had felt it an opportune time to be away on his vacation. We learned also that medical practitioners had fewer cases and were not overrun with calls.

The sudden calling of the epidemic with the accompanying ballyhoo, changed all this. Every medical man in the city had his hands full with vaccinating patients, both at his office and in the homes.

Unofficial estimates place the number of paid vaccinations—exclusive of "free vaccinations" at schools and health centers—at 200,000 for which fees from 25 cents to \$5 were charged. An average fee of \$2.50 for those who paid would yield a half million dollars to the doctors in vaccination fees alone. The many who suffered from the after effects of vaccination—requiring medical attendance in some instances over a period of months—also added to the medical harvest of gain, besides those who from reading about the epidemic sought the doctor's aid for imaginary symptoms.

Meanwhile, the position of everybody except the doctors in Kansas City was very unfortunate. Merchants who had been hopefully anticipating holiday business, following the slack summer months, saw their expectations go glimmering. But they patriotically swallowed their losses, and co-operated fully with the movement to eliminate what they believed to be a raging smallpox epidemic. This Bureau's investigation, however, showed that other places about the same time had far more smallpox proportionately than Kansas City, without being placed under the ban of an epidemic.

Had these "patriotic" Missourians exhibited some of their traditional astuteness in asking "to be shown" about the voodoo rite of vaccination, they could have saved themselves not alone from money losses, but from the disease-crop worse than smallpox—which invariably follows an orgy of wholesale vaccinations. That the logical sequence is lost to the average citizen, is due to the confusing diseasenomenclature supplied by the medical profession to cover up their disease-sowing tracks. Suppress one manifestation of a toxemic crisis, and when a later and worse one appears, give it a different name. Such has been the immemorial medical custom.

In Pittsburgh, Pa., in the Summer and Fall of 1924, the business world received another sharp object-lesson as to the disastrous effects upon trade conditions of the medical voodoo in practical operation. This time the trouble grew out of a drastic and arbitrary ruling by Pittsburgh's Health Director, Dr. C. J. Vaux, that all school children who had not been vaccinated during the preceding two years, be revaccinated; and commanding all persons of all ages in Pittsburghresidents and visitors—to be vaccinated under penalty of fine and quarantine in their homes and places of business. Both these orders were shortly withdrawn, upon appeal to the mayor, but not until great numbers were coerced into being vaccinated. The story of "Pittsburgh's Vaccination Scourge in 1924," and its direful effects both upon the health and business life of the city, is given in a report by Andrew G. Smith, legal counsel for the well known "Pittsburgh Health Club," an organization which is described as "sponsoring no school of doctors nor sect of religion, but all of whose members oppose compulsory vaccination of persons whose conscience or judgment revolts at the practice." According to this report, the Pennsylvania law while it makes vaccination a condition of school entrance for children, carries no re-vaccinating requirement; and Dr. Vaux had no other basis for his drastic re-vaccination order than his own personal opinion about its necessity, "he being a two-year man," according to the Health Club's attorney.

"Yet according to figures furnished by his Department," reads the report, "there had been no deaths from smallpox in Pittsburgh during the nine years from 1915 to 1923 inclusive when there was no revaccination, and hence no immunity—according to Vaux—except for school children under eight years of age."

And how much smallpox did Pittsburgh have in 1924 as a ground for all this vaccinating frenzy which resulted in 1,000,000 vaccinations in the city and its environs, as per the official statement of the Health Director? From the same source the Health Club's attorney took the statement in his report that "from Jan'y 1, 1924 to Oct. 1, 1924, there were 111 cases of smallpox and 22 deaths, half of the deaths occurring among Negroes, and all of the deaths occurring between June 1 and Oct. 1 when the vaccination campaign was in full swing—although it was started in Jan'y."

But while the smallpox death-toll was slight in this Pittsburgh doctor-made epidemic, the vaccination fatalities and disabilities were much more serious. The Health Club report cites 10 deaths from vaccination, giving names, ages, addresses and duration of illness—accompanied by photographs of the victims—and declares there were many more which their attorney was unable to verify because of the Health Director's refusal to give him access to the records. Eight of these 10 deaths were among children, ages ranging from 10 months to 12 years, and duration of illness from two weeks to two months, but in every case the report read: "In perfect health until vaccinated."

The direct money loss to the city of Pittsburgh by this vaccinating raid in 1924 was \$3,069,616, of which the doctors received more than \$2,000,000 according to the Health Club attorney's estimate, and he said further that

"this does not represent the indirect loss to merchants, hotel keepers and others. . . Many of the merchants deserve to be losers, however, for they joined in coercing their employees to be vaccinated . . . People were afraid to come to Pittsburgh lest they be forcibly vaccinated. The Christian Endeavor Society, for example, failed to meet expenses at their Convention, and was short \$11,756 because 1500 out-of-town delegates were frightened away by the vaccination bugaboo."

One may not reasonably claim that three or four faked epidemics prove all health officials knaves; but they are quite sufficient to show that under "the system" of complete, absolute and irresponsible control of public health service by one school of healing, the foregoing cited instances may be multiplied indefinitely, and the public be none the wiser. The factors are all present which make such exploitation of the public health and the public purse possible, whenever a medical health officer may be found who is sufficiently corrupt or sufficiently fanatical, to set the machinery in motion for their accomplishment.

CHAPTER XV

Medicine, Religion and Government

Time was when archbishops and hierarchs arrogated the right to do the people's religious thinking for them, and the State enforced the edicts of ecclesiasticism with appropriate penalties—rack and thumbscrew. When this became intolerable the people rebelled, and took up the cry of Separation of Church and State, which ultimately brought religious freedom to all.

Today the exactions of the Medical Trust—as manifested through the octopus ramifications of the American Medical Association—are stirring a similar revolt, which is finding expression in the demand for a Separation of Medicine and State. The modern medical inquisitor is so far worse than the religious one, in that the latter at least stuck to his text, whereas the former crucifies us today for what he himself will send to the scrap-heap tomorrow. Moreover, the medical overlordism extends its sway over a much wider area than the church ever did in its palmiest days-reaching out far beyond the therapeutic field to include every phase of social, educational, economic and political activity of the community.

For through its domination of every branch of the public health service, regular medicine likewise dominates the public schools, public libraries and public charities, colleges and churches to a great extent, the press and the radio, chambers of commerce and women's clubs, and finally maintains a strangle hold on the Federal, and most of the State Governments. Regardless of what may be one's personal attitude toward the therapeutic side of regular medicine, it would seem that these far-reaching monopolistic activities of any special-privilege group—and where else does the perfect flower of special-privilege bloom so luxuriantly as in the medical profession?—might awaken serious concern in the breasts of all thoughtful citizens.

Under the by-gone ecclesiastical rule, the priests sold indulgences and immunity from sin and crime to the believing multitude. The principle of selling immunity from sin was, of course, vicious and degrading; and the monstrous traffic became so notorious that the decent sense of mankind rose against it. In a more enlightened religious age, the churches—Catholic and Protestant alike—are preaching to their members that the only way to purchase immunity from sin is by living a good life. The job of the modern minister or priest is to explain to his congregation how to tune in with the laws of Nature—which are the laws of God—in order to live that good life.

But the doctors of the body have not kept pace with the doctors of the soul in this respect. Instead of teaching the newer knowledge of nutrition and health mechanics, and that the only prophylactic is correct, hygienic living—the modern priests of medicine are out selling wholesale "immunity" from every imaginable ill, from colds to cancer, through the black magic of filthy vaccines and serums and unnecessary surgical operations.

The very effective machinery for carrying out the wholesale program of selling disease immunity by organized, commercialized medicine, is the medically controlled and medically directed public health service—the full realization of Dr. Evans's 1911 vision. Public health officials, carried on the public pay-roll as servants of the people, yet holding secret and "ethical" commissions from the American Medical Association, have become virtually sales-agents for the manufacturers of vaccines and serums. Through the medically dictated Public Health Bulletins, and the medically inspired "Health Columns" of the daily press, whole communities—even to the new-born babes—are urged to buy holy serum "immunity."

Even the Insurance Companies have been induced to join in the general serological chorus. One cannot pick up a popular magazine nowadays without being confronted with a cleverly disguised advertisement, extolling the products of the serum laboratory but sponsored by an important Life Insurance Company. A beautiful young mother is depicted holding a healthy-looking infant, and underneath is the legend carrying the Insurance Company's supposedly disinterested advice: "Mothers protect your children from diphtheria with toxin-antitoxin."

Few among the laity know that this vaccine-serum propaganda is emanating from *doctors* employed in the office of the Insurance Company; and few know of the secret compacts existing between insurance companies and the medical profession under the "group insurance" plan which binds the two in closely-knit, co-operative business interests. Hence few are equipped to combat the specious argument that insurance companies, having a direct, pocket-book interest in prolonging the lives of actual and prospective policyholders, would surely not advocate the use of something known to be inimical to life and health.

"Something *known* to be inimical," no. But where do the insurance heads get their information about the immunizing value of vaccines and serums? From their medical advisers in the office and in the home, of course; and like all the tribe of true believers—whether in medical or religious dogma—they accept without question whatever falls from the doctor's lips. The well-nigh absolute control of all channels of publicity press, pulpit, radio and movie-film—by the Medical Association, prevents the average individual from getting any other line on serum therapy than that given out by the inoculators, whose professional and pecuniary interest in the practice is self-evident.

Not only can they charge more for a serum injection than for a drug prescription, but the former is much more effective than the latter in "making us sick and keeping us sick"—in providing future disease crops to serve the needs of the doctor's calling. Witness Manwaring's statement, that "not only is there no evidence of these antitoxins or 'Anti-bodies' being formed, but there is ground for believing that the injected germ-proteins hybridize with the body proteins to form new tribes, half animal and half human, whose characteristics and effects cannot be predicted."

Concerning the disease-breeding character of the serum immunization which the Life Insurance Companies and others feel they can so confidently recommend to the mothers of young children, Manwaring says further:

"Even non-toxic bacterial substances, apparently harmless, sometimes hybridize with serum albumins to form specific poisons which continue to multiply, breed and cross-breed ad infinitum, doing untold harm, as their reproductivity may continue while life lasts."

In "Public Health Reports," October 30, 1931, the Metropolitan Life Insurance Company testifies that "the upward trend in the diabetes death-rate, observed since 1924, is still unchecked.... The rise in 1931 bids fair to exceed any year-to-year increase recorded for several years." Again in the Public Health Reports published by the U. S. Bureau of Public Health, February 19, 1932, the Metropolitan Life Insurance Company further testifies: "Diabetes also recorded a new high death-rate. The rate was 14.4 per cent higher than in 1930, and 61 per cent higher than it was twenty years ago."

A system of healing which after 5000 years of "trial and error," is still talking about "the future progress of medicine," and describing itself as "a science in the making," whose proudest showing to date is, that it has enabled the race to swap off smallpox for cancer and typhoid fever for diabetes and insanity, may still be worthy of credence and patronage by its devoted followers. But what possible justification can there be, for *putting the whole power of the Government back of such a system,* and the public treasury at its disposal, to spread misleading propaganda about its own peculiar doctrines and methods, to force them on the helpless?

Matters of faith are not arguable—whether in medicine, religion or lovers. For "faith may be created in any quantity and to any degree of intensity," says George Bernard Shaw, "not only without any basis of fact or logic but in open contradiction of both, simply by a desire to believe coupled with a personal interest in believing."

Life insurance companies, profiting largely by their medical contracts, and protected against loss by the "ethical" provisions which insure abundant "expert" testimony on behalf of its accused clients, find it as easy to credit the medical theories about vaccine-serum immunization as any other self-interested believer in a traditional creed.

And what is true of the medical collusion with the insurance companies is equally true of medical collusion with the Government, and the same specious argument put forth by the "immunizers"-that their nefarious trade is sanctioned by the Government, means only that it is approved by the Medical Association which is in control of the Government. When ten otherwise healthy children were killed by a "preventive" dose of toxin-antitoxin-and a number of others made desperately ill—in Dallas, Texas in 1919, the alibi offered by the H. K. Mulford Company which furnished the serum, was that "it had been favorably passed on by the Department at Washington." The public is not informed that these official O.K.'s of things medical emanating from Washington are really affixed by doctors operating inside the governmental circle, or by the lay henchmen of the American Medical Association. "The profession cannot afford to have these places occupied by other than medical men," truly said the astute Dr. Evans.

Occasionally the powerful A.M.A. will strike a snag in the rendering of a court decision by an independent judge—as m the Iowa tuberculin-test case. But in the main the rule of the doctor in government is made secure by the simple expedient of filling all elective offices with those only who are thoroughly imbued with the idea that "health" and "regular medicine" are synonymous terms. To achieve this end, the medico-political machine is non-partizan in its activities, contributing campaign funds to both the major parties, but throwing the preponderance of its influence to the one more often in power.

The dominant party since the Civil War has been the Republican, but the American Medical Association has not scorned the Democrats. Here could be found abundant and ready-to-hand material, suited to its purposes: Inherited and traditional beliefs in allopathic wisdom and superiority. The usual crop of pin-head politicians and opportunists, waiting to attach themselves to any powerful ally with perquisites to dispense. Thus when Senator Carter Glass of Virginia brought to the attention of Congress the wrongs of dairy farmers, inflicted by the tuberculin test, together with the documentary, scientific proofs of the worthless character of the test, it was his own Democratic colleague, Royal S. Copeland, a senator from New York, who led the fight against his proposal for a Congressional investigation.

Health Commissioner Copeland having proven his worth to the medical hierarchy by his ability to extract funds from the New York City treasury with which to combat imaginary epidemics would be invaluable in the United States Senate. What mattered it whether he enrolled as a Democrat or a Republican, so long as he kept guard over the hierarchy's interests? He has so far vindicated their trust in him in every particular, and to facilitate his usefulness to them, he has secured positions on the two most important committees for its purposes—the Senate Committee on Commerce and the Senate Committee on Appropriations.

Then there were those two faithful servants, Senators Wm. J. Harris of Georgia, and Joseph Ransdell of Louisiana, whose loyalty to the party of Jefferson was above reproach seeing it was of that true-blue "solidified" brand of Democracy which obtains South of Mason and Dixon's Line. Whether their willingness to take orders from a Northern Republican organization like the A.M.A. was due to the fact that these orders fitted in with their own personal views about regular, orthodox medicine—which seems the more likely explanation—or for some other reason, is not important. The net result of their actions on the community was the same.

On March 13, 1930, there was held at Washington a socalled "Cancer Hearing" before a subcommittee of the Committee on Commerce of the U. S. Senate, pursuant to a resolution offered in the Senate by Hon. Wm. J. Harris of Georgia which read as follows:

Resolved, That the Commerce Committee or a subcommittee thereof, is authorized and directed to make a thorough investigation of the means and methods whereby the Federal Government may aid in discovering a successful and practical cure for cancer; and to report to Congress as soon as practicable the results of such investigation, together with its recommendations for legislation and appropriations. The Public Health Service, the National Academy of Sciences, and all executive departments and independent establishments of the Government are requested to cooperate with such Committee in carrying out the purposes of this Resolution, Sen. Res. 79.

And as was touched on before in this book, the "thorough investigation" herein authorized and undertaken by the Senate, consisted in listening to certain hand-picked members of the "American Society for the Control of Cancer," who came to re-thrash the old straw and explode the old chestnuts about cancer being "a local disease" of mysterious origin and hopeless termination, *except* those rare cases fortunate enough to be overtaken "in the early stages" by surgery or radiation.

All exponents of the constitutional or blood theory of cancer, even such a prominent one as Dr. Wm. F. Koch of Detroit, were rigidly barred from this Senate hearing, and the "searching investigation" by the Government for new light on the cancer problem ended in the Committee's recommendation to Congress to give more money to surgeons and radiologists.

The fine scorn of the "regulars" for "cancer cures" of every kind has placed a stigma against the term, and has discouraged research along lines which might lead the cancerstricken to some sort of hope. This was fittingly illustrated at the Senate hearing in the uncompromising attitude of Dr. James Ewing, director of cancer research in the Memorial Hospital of New York, and dean of the watch-dogs in the "Society for the Control of Cancer Propaganda." "More than 90 percent of all persons afflicted with real cancer, die of it," stated Dr. Ewing, while holding out the bait that this frightful mortality *might* be cut down to 70 percent "in the three or four best cancer clinics of the country"—in which class he rated his own, of course—*if the Congress would be sufficiently generous with its appropriations.*

But Dr. Ewing openly scouted the likelihood of "a cancer cure," either in the near or the far future, and the timid Berkeley professors who had come all the way from the University of California to tell the Senate Investigating Committee about their cancer discovery, became more timid in the presence of so much embattled Eastern skepticism and pessimism. Besides the New York Doctors, Ewing and Little, there were Joseph Colt Bloodgood of Johns Hopkins, and Hugh S. Cumming, Surgeon-General of the U. S. Bureau of Public Health at Washington.

It is doubtful whether the California professors could have held up their heads in that company at all, had they not been under the protective wing of their own Senator Hiram Johnson, a member of the investigating committee, and been further upheld by the heartening words of the bland Senator from New York, Dr. Copeland, also a member of the Committee, who served as introducer for the first California speaker, Dr. Coffey. "I assume we have no thought at all of passing upon any cure or alleged cure, or theory," began the wily New York Senator. "I know Dr. Coffey so well, that I know he will appreciate what I am saying. He has made a long study of this subject, to my knowledge, over many many years, and out of that study he must have developed ideas... *He is not here to exploit any cure that he has.*

... I know the embarrassment of a professional man who has been dragged from his professional seclusion into the limelight by these heralded cures, and that sort of thing.... The doctor is an eminent member of the profession, and is recognized by the legitimate and ethical profession, as well as the outstanding members.. .. He is here merely to aid us, so that we may advise our colleagues in the Congress about the matter before us in this hearing.... I want the Committee to appreciate that when Dr. Coffey testifies, he testifies as an outstanding member of the profession." (Italics mine.)

Thus primed and adjured, with the stage all set for him, the first California witness did not disappoint his sponsors. With that sort of introduction he could hardly be expected to bring to the attention of that audience anything so disgraceful as a "cancer cure." It would not have been "ethical." So Dr. Coffey modestly related to the Senate Committee—with its entourage of medical overlords—how he and his associate, Dr. Humber, over a long period of experiment and observation, had found something they believed might be of value in the treatment of cancer. This he explained to be an extract derived from the suprarenal glands of animals, which when injected under the skin of a cancer patient, had proved its power in a number of cases to arrest the malady by destroying the cancerous growth.

"But in no sense," protested Dr. Coffey, "have we claimed to have a cancer cure, and in no single instance have we used this treatment except on patients bringing a certificate from their own physicians that *the case had been pronounced inoperable*... If a case comes to us which, from our years of experience, we think can be operated on, or that radium might benefit, we refuse to inject our extract... We follow usage and the scientific use of the knife, X-ray or radium."

When heckled by Senator Jones of Washington, one of the Committee, as to why his treatment should be restricted to the extreme, moribund cases of cancer, and whether his refusal to use it in the early stages was due to his fear of its action, Dr. Coffey replied: "No, we have no fear about its action in the early stages, but we follow the custom of scientific men, and if we wavered from that we would be very severely criticised."

It may well be doubted whether the real significance of these canting phrases of medical ethics uttered by the California professor seeped through the gray matter of the senators conducting this cancer hearing. It was enough for the peace and harmony of the meeting that the guardians of surgical and radium preserves there present, understood that there would be no invasion of their field by the California investigators. No immediate invasion, at least, but to make assurance doubly sure, some months later, there was issued from one of the largest cancer-research departments in the East, a published statement to the effect that "the much advertised Coffey-Humber 'discovery' was absolutely worthless in cancer treatment."

It is no part of the purpose of this recital to vindicate the worth of the Coffey-Humber cancer treatment, except in so far as it is predicated on the constitutional or biochemic theory of cancer—which we hold to be the scientific concept of the disease. But the point to be emphasized in this cancerhearing episode at Washington, is, that no matter how valuable the Coffey-Humber contribution to the problem may have been, its value was nullified and the accruing benefits to cancer sufferers completely lost by the "ethical" ban which debarred its use in the early stages of the malady. For here alone could its value be fairly tested.

The Senate "cancer hearing" at Washington was a typical example of the baneful effects of the influence of organized medicine in government, though by no means a solitary example. Not only did nothing of value to the world of cancer sufferers emerge from that hearing, but it added to their burdens, as well as to those of groaning taxpayers, by taking huge sums from the public Treasury to hand over to the men who had battened off the miseries of the cancer-stricken for ages, and who had consistently blocked every movement for a more rational consideration and treatment.

Nor is the net purport of these facts in anywise altered by the further fact—freely conceded—that probably most, if not all, the actors in the Senate Cancer-Investigation comedy, *believed* they were acting in the best interests of the community. If sincerity of intention is to be the test of Tightness, probably Tomás de Torquemada—in all the ranks of bigotry—is most deserving of a crown of righteousness.

"Of all the classes in the community, the two who should never be entrusted with autocratic power," said Wm. T. Stead, the English journalist, "are the priest and the physician; and of these two, the doctor is most to be feared." Under the old regime of religious tyranny, the church autocrat said to the non-conformist recalcitrant: "You can be saved by this formula, or you shall be damned." Under the modern medical regime, the alternative offered is: "You may be cured by the regular allopathic method, or you shall die, or stay sick"-which is worse. That the medical threat carries more terror than the ecclesiastic ban, rests on two counts. First, more persons are concerned about their bodies than about their souls; and second, while the power of the church either to save us or damn us, is accepted only by the believing few, the ability of the doctor to keep us sick and kill us, is not questioned by anybody.

The pity of it all is that the Fathers of the Republic who saw so clearly the abuses that would arise from permitting a man's political conduct to be influenced by his religious adviser, and very carefully provided against that in the Federal Constitution, did not at the same time foresee the greater abuses inherent in a system which permits the conduct of public officials to be influenced—not to say dictated—by their family doctors. Thus the door was left open for the institution of state-sponsored medicine with all its attendant evils, which, since the adoption of the Evans resolution has become a dominant political power in government. So insidious has been its approach, under the guise of protecting the public health, that few persons realize the absolutism of organized, official medicine, in Federal, State and Municipal Government today.

Some notion of its financial resources may be gained from a statement given to the press in the winter of 1927 by Dr. C. C. Burlingame of New York City. Dr. Burlingame, who is listed as "an eminent psychiatrist who is also a business efficiency expert," said at that time: "If the United States Steel Corporation and the United States Telegraph and Telephone Companies were to pool their holdings, their combined capital would not equal the sums invested in hospital properties in the United States today."

Dr. Burlingame did not differentiate the public from the private hospitals in this huge total estimate, but a conservative guess would place at least half of these hospitals in the class of those built and maintained by the tax-money contributed by all of the people. In this class would be all the State, County and Municipal hospitals, "homes" and asylums of every kind for the physically or mentally handicapped, and the Government hospitals specializing in the care of disabled veterans of the Army and Navy. To say that these taxsupported institutions belong to the people is a truism supported by our cardinal American doctrine of "no taxation without representation"; and their monopoly by the practitioners of any school of healing, to the exclusion of others licensed to care for the sick under State laws, is a plain violation of the Sherman Anti-Trust Act carried on our federal statute-books for more than a generation.

The Government hospitals for veterans especially should be open to any type of healer called for by the inmates. For if there is one class of invalids more than another entitled to receive the kind of treatment they prefer, it is these broken men in Army and Navy hospitals. Apropos of this is the following true story: While in Washington in February 1930, I received a letter from some ex-service men in San Jose, California, asking to have a bill introduced to permit disabled veterans in Government hospitals who desired them, to have the services of osteopaths and chiropractors instead of the medical attention furnished by the Hospital. The letter explained that some of the men felt their present disabilities were chiefly the result of the army-camp doctor's over-zealous hypodermic, and his ill-judged surgical operations. Their request seemed all the more reasonable in that the Government after the war had provided training in some of

these manipulative schools for certain ex-soldiers who had requested it.

With this in mind, I made the round of the California delegation in Congress who one and all promptly "passed the buck" to Director-General Hines of the Veterans' Bureau, saying, "We can not sponsor any legislation pertaining to veterans that has not first been approved by the Bureau." From one of these California congressmen I learned that he was at that very moment pleading the cause of three exservice men before the Bureau, two of whom had been made totally blind by an army vaccination against smallpox, and the third had been driven insane by an anti-typhoid vaccination followed by a spinal puncture. He said the Bureau was fighting the compensation claims of these disabled men because it was unwilling to admit their disabilities were caused by the army-camp treatments, although the evidence in all three cases was clear and inescapable.

Nevertheless, Director Hines, when approached with the San Jose proposition, responded in a way that reflected the perfect control of the Bureau by the A.M.A., and the Director's perfect faith in the "regulars." His letter reads as follows:

Dear Madam.—The Bureau has a responsibility to its beneficiaries which it is endeavoring to meet in a conscientious manner . . . You will understand that the average patient would not be a competent judge of the proper therapy for the condition from which he is suffering. . . Therefore it remains for the administrative head of the service to arrange for the treatments which these veterans shall receive.

In its medical service to veterans the Bureau utilizes solely the methods of the regular school of medicine, which is not only the largest numerically, but its methods are conscientiously believed to be the most modern. . . . It would be administratively inadvisable to attempt to recognize the therapeutic practices of these other groups. Once any particular cult was recognized, there would be application for equal recognition from Osteopaths, Christian Scientists, mechano-therapists and others. . . You will therefore understand that in view of the above statement of existing conditions, I am unable to recommend any change in Bureau regulations relative to the treatment of its beneficiaries.

> Yours very truly, (signed) Frank T. Hines, Director.

From figures given in the Surgeon-General's Army Reports (1918-19), the fair inference may be drawn that more American soldiers were killed and disabled by the army-camp doctors' ministrations than by German guns and gas-bombs. Perhaps Director Hines was ignorant of this Army Report showing, and surely did not have in mind the blinded and crazed clients of the California Congressman, when he spoke of "the Bureau's feeling of responsibility toward its beneficiaries." It is a fact that any civilian who has the price—even a moron—may select his own system of healing; but under this iron-clad ruling of a governmental department, "the nation's defenders" must continue under the one which is responsible for their sufferings, and all because Director Hines "conscientiously believes" it should be so! Could any state-imposed religious dogma work hardships comparable to this?

Somewhat indicative of the revolt stirring among exsoldiers is the following resolution recently drawn up and unanimously adopted by a group of San Jose veterans:

RESOLUTION FOR CHIROPRACTIC ADJUSTMENTS FOR VETERANS.

Whereas, 42,420 war veterans have died during the fiscal period of February 1932, and 45,000 are in hospitals; and

Whereas, 28,000 war veterans died during 1931, with 35,000 in Government hospitals; and, Whereas, most of these men could have been saved and returned to their homes had the Director of the Veterans' Administration permitted them to have Chiropractic adjustments, Therefore Be It RESOLVED, that San Jose Chapter No. 11, Disabled American Veterans of the World War, request such adjustments for those disabled veterans who desire the same. Be it further Resolved, that a copy of this Resolution be sent to the State Department, the National Commander, and to the Associated Press. Respectfully submitted,

(signed) S. E. Vanancy, Junior Vice-Commander, San Jose, California.

In the closing weeks of the second session of the 71st Congress, 1930, two bills designed greatly to augment the financial and political strength of organized medicine in the nation, were put through both the House and Senatewithout even a roll-call—and signed by the President. They were listed as the "Jones-Parker Bill," for Co-ordinating all Public Health Activities under one official head, the Surgeon-General of the U.S. Public Health Bureau, whose official status and official salary were to be raised to those of the Surgeon-General of the Army; and the "Ransdell Bill," for a million-dollar "Health Institute," which was also to be under the direction of this same Public Health potentate—with his new military status and salary—since the bill provided that it was to be run in connection with the "Hygienic Laboratory" which is an integral part of the U.S. Bureau of Public Health. Needless to say, all the research conducted by the new "National Health Institute," will be along the same old standardized medical lines and any research innovator threatening the stability of the ancient gods of voodooism, would be rigidly excluded. That is the essential feature of every monopoly. You can have all you want-and more than you want-of that one thing, but you can't have anything different.

Curiously enough, while the statesmen recognize this objection to monopoly in every other field, they seem to be blind and deaf to the dangers in medical monopoly. When the Jones-Parker Bill and the Ransdell Bill, after being rushed through Congress in 1928, were brought before Calvin Coolidge, however, that silent gentleman, after looking them over, stopped them with a presidential veto, and gave as a reason for his act that "these bills give a military status to men supposed to be engaged in scientific research." The militarization of medicine—just what would that mean? It might mean the firing-squad for medical dissenters and recalcitrants, who in the past have faced nothing worse than fines and jail sentences.

With Coolidge safely out of the White House, the medical militarization bills were quickly placed on the 1930 calendar, when they encountered no hitch from his successor after their rapid transit through Congress. President Hoover signed them with alacrity, and then returned this strong lead of the Medical Trust with a large trump-card of his own—the "White House Conference on Child Health and Protection." Occupied with the details of this, and the hope of re-electing their valuable White House ally, the medical overlords have not yet struck their militaristic stride. That could wait. But can we, the friends of medical freedom, and the responsible defenders of children's bodies, afford to sit idle until the medico-political net envelops us entirely?

During that same 1930 Washington sojourn, I succeeded in getting six U. S. Senators—four Republicans and two Democrats—instructed by their constituents "back home" to introduce a resolution I had drawn up calling on the Surgeon-General of the U. S. Public Health Bureau to transmit to the Senate certain information touching some of its activities. The Resolution was innocent enough, if the Public Health Service would bear inspection, but charged with dynamite if there were truth in the charge, frequently made, that there was a venal connection between our public health officials and the vaccine-serum laboratories in the country.

Apparently the senators preferred to stay on the safe side of a possible explosion, as not one of the six whom I approached with my resolution would consent to introduce it—not even "by request." Even Senator Dill of Washington one of the instructed six—asked to be excused, although he had protested against the use of the spinal puncture on veterans in Government hospitals on one occasion from the floor of the Senate, in May 1924, when the Veterans' Bureau was under investigation, as reported in the Congressional Record, Vol. 65, pp. 106, 107-8.

What then can be done to abate this evil, and halt the march of the medical overlordism so rapidly approaching absolutism in government? Manifestly the only thing to do, is to keep up a continuous barrage of fact-finding publicity, until the public is educated and aroused to a sense of its own danger from the monopolistic rule of the most powerful and vicious of all the "combinations in restraint of competition," the most to be feared of all "vested interests"—*the men with the vested interest in disease.*

Since most of the political power of organized medicine as well as a large portion of its revenues—is derived from its control of the Public Health Service, the first step in constructive reform is a popular demand for a complete change in the personnel of health boards.

To divorce medical practice from the sanitary functioning of these boards—whose only legitimate reason for existence is to maintain sanitary conditions in public places—it would only be necessary to retire the medical theorists now in control of them, and substitute sanitary engineers and plumbers. These are the men who know how to give us clean streets, efficient garbage disposal, clean markets and dairies, sanitary housing and a pure water supply, and the proper heating, lighting and ventilation of public buildings. These things have no connection with *materia medica*, and should never be placed in the hands of men with a professional and pecuniary interest in diverting them from their pure, clean purposes, to the business of injecting disease-breeding poisons into human bloodstreams.

The health-board functioning, in other words, *is not a doctor's job.* Not any kind of a doctor, either drug or drugless, should be in control of this important branch of governmental service. The law should be so amended as to read: "The Public Health Commissioner, whether Federal, State, County or Municipal, shall be in every case, a trained, sanitary engineer, *who is not a graduate of any school of healing.*" This change would at least abolish the present anomalous custom of putting the men whose incomes are predicated on disease, in complete, arbitrary, and irresponsible control of the Public Health Service.

But there is another arm of the Public Health Service, the public hospital, dispensary or clinic, where the care of the sick is indicated, that may properly come within the purview of the doctor's calling. But this does not justify the monopoly of these publicly maintained asylums for the sick by any one school of healing, in a day when there are several others recognized in law and supported by popular demand. This branch of the Public Health Service could be brought more into conformity with the Constitutional rights of the

sick and the taxpayers, and into fuller accord with the theory of American government, simply by reorganizing the administrative end of it. Every such tax-supported hospital should be governed by a layman's board of regents, whose duty it should be to keep on its staff of attendants one or more practitioners of every school of healing licensed under the State laws, and leave to the free choice of individual patients—or their guardians—the kind of treatment to be furnished in each case.

This would be democracy in the healing art, which while it might not work out any better in actual achievement than democracy in other fields, would at least remove from the individual the irritation of compulsory treatments for his own body, and from a supposedly free Government the odium of permitting any special-privileged group of guessers and theorists to enforce with a club what in 5000 years they have been unable to win by the fair means of persuasion and logic.

Under such a system of free choice of therapies, no one would be deprived of medical attention who wished it, but the medical man would be deprived of the power to force his methods on those who didn't want them. The older, so-called "regular" school of healing would only be required to stand on its own two feet and compete with the newer schools for sick patronage on an honest basis of competition—without any unfair advantages in the way of governmental preference and sponsorship. Seems a bit remarkable, doesn't it?, that this oldest school of healing, with all its accredited skill and learning, with all its cumulative wealth and prestige, should require to be subsidized by the state to enable it to compete with "quacks"!

Under a more rational system of public-health control, with a more equitable representation of all the healing cults on hospital staffs, there would not be the same opportunity for such abuses of power as now obtain under monopolistic medical rule. During the World War, in addition to the wholesale inoculations which were routine procedure in all the armies, many of the soldiers were forced to undergo major operations, under penalty of court-martial proceedings—at the discretion or whim of the army-camp surgeon.

Some such cases were reported by the surgeons themselves in the Journal of the American Medical Association, and there were press reports—a few only because the press is very loyal to the medical dictatorship—of soldiers who refused to be vaccinated being court-martialed and imprisoned. There was one outstanding case of an American who held an especially honorable war record, and was of unblemished character. Yet because he had his own views about vaccination and refused to submit to the blood pollution demanded by the army officials, he was stripped of all his war decorations, made to forfeit all pay and condemned to 25 years' hard labor in Fort Leaven-worth prison!

A letter from the office of the Judge-Advocate-General at Washington, addressed to Mr. Charles M. Higgins of Brooklyn, N. Y., in reply to an inquiry by Mr. Higgins and admitting the facts in this case, was shown to me by Mr. Higgins in 1923; and in the summer of 1926 I met in Los Angeles some gentlemen who knew of this man's case, and who had written to their California delegates in Congress to use their influence for his release. An attache of the Medical Corps at Camp Dix during the war is authority for the statement that "they carried out soldiers' tonsils by the pailful from the operating rooms." Tonsils being the natural filters and buffers against outside impurities for bronchia and lungs, these wholesale tonsilectomies were no doubt a contributory factor—along with inoculations—in the amazing amount of tuberculosis developed among American troops"the picked men of the nation"—in the brief period of America's participation in the World War.

What would be thought or said in this enlightened age, I wonder, if governments should force upon their soldiers certain religious rites which some powerful sect in their midst—backed by a section of the population—believed essential to their "soul's welfare"? Yet such a procedure would be far more logical-and far less harmful-than the enforced vaccinations and surgical operations now the army-camp vogue. Seeing that soldiers on the eve of battle should feel more concern about their souls, which may be all that is left to them when the battle is over, than about the bodies that may have to be cast away altogether, or else emerge so broken and mangled as to be no further source of pride or joy to anybody. And the one procedure has no more scientific basis than the other for the government which orders it. Both rest on the bureaucrats' unquestioning acceptance of a medical or religious dictum.

The peculiar menace in state-sponsored medicine centers in the fact that medicine is *a self-controlled profession* to a degree not realized by any other professional group. "Any selfcontrolled profession is a conspiracy against the laity," says Bernard Shaw, and the conspiracy in the case of the medical "close corporation" is heightened by the fact that it cloaks crimes against both life and purse. Every other sort of hold-up artist will give his prey a choice of "your money or your life." The medical conspirator is the only one of that class who takes both.

A striking example of the working of the medical conspiracy in the United States was furnished some years ago (1910), by the publication of a book entitled *Medical Chaos and Crime* by Norman Barnesby M.D. This book was an indictment of the medical Code of Ethics as it was then and as it is today—a virtual conspiracy against the life and health of the laity—by "one of their own," a graduate of Rush Medical College in Chicago and "a regular" of the straightest pattern.

He appears to have been impelled—as a reputable, responsible physician, jealous for the honor of his kind—to cry out against a code which imposed silence and concealment upon hospital attendants—internes, nurses and associate physicians—concerning surgical blunders and crimes, as well as egregious graft and common theft enacted behind hospital walls. As a staff physician on various American hospitals the *United States Marine*, the *Washington Heights, New York Hospital*, and others—Dr. Barnesby was in position to get first-hand knowledge of the things whereof he wrote. He mentioned no names, in turning the seamy side of hospital life outward to the public gaze, and he made it quite clear, that no individual doctor or surgeon, but *the system* was at fault; and he called on his colleagues more in sorrow than in anger to act in a collective capacity for its sorely needed reform, and to "save an honorable profession from the laymen's wrath to come."

Organized Medicine's reaction to Dr. Barnesby's appeal only added his name to the list of misguided ones who thought the medical system could be reformed from the inside. He was denounced by medical societies, expelled from the inner circle of the A.M.A., and after a few years' continuance in private practice on an obscure New York street, he abandoned medical practice entirely for commercial pursuits. In a review of *Medical Chaos and Crime* carried in *Medical Brief* at the time it was issued, the reviewer admits the justice of its charges in the main, and the probable accuracy of the hospital horrors depicted in its pages. "But what possible effect could the publication of such things have—except to shake public confidence in Dr. Barnesby's profession?" asks the reviewer.

This view of Medicine as "a confidence game," and its practitioners bound by an "ethical oath" to keep up the popular credulity at all hazards or costs, gives point to the assertion often made that "all real reforms must come from the laity." The following excerpt from a magazine article on the question of medical control in government, written by Clarence Darrow, voices a disinterested and intelligent lay opinion from a distinguished source:

"The efforts of the medical profession in the United States to control the treatment of human ailments," says Darrow, "is not due to its love of humanity. *It is due to its love of its job*—which job it proposes to monopolize.... It has been carrying on a vigorous campaign all over the country against new methods and schools of healing because it wants the business, and insists that nobody shall live or die without its services.

"Whether it cures more or fewer people than the schools which do not use medicine, or whether it cures anybody, are debatable questions which I shall not attempt to discuss. I stand for every one's right to regulate his own life so long as it doesn't infringe other people's right to do the same; and if a man wants to live and die without the aid of the medical profession, he should be permitted to do so. If he hasn't that right it is pretty hard to tell what rights he should have."

In the same article Darrow continues:

"Now I would have no quarrel with the medical profession if they would leave me alone. I am willing that they should advertize their wares, but I object to being forced to patronize them. They have specifics to prevent one from taking almost every disease, yet not one of them can explain how prevention is brought about—nor can he prove that it does prevent. They are not content to vaccinate those who apply to them, but they ask the State to compel everybody to be vaccinated. *I might as well ask the State to compel everybody to hire me to try their cases !*

"Sometime if they keep on—and they will keep on if the people give them the chance—they will be able to vaccinate us for everything and we shall be compelled to submit.... I have watched this medical profession for a long time—and it bears watching—and I know that there is not a single thing affecting human life that they will not lay their hands on if we give them the chance."

Like all tyrannies, however, the medical overlordism doesn't bear very heavily upon men of Mr. Darrow's position. Not upon the rich and powerful who as individuals are generally able to fend for themselves. It is upon the helpless classes upon school children, upon working men and women in factories, stores and other industrial plants; and upon the most tragically and ironically helpless class of all—our socalled "national defenders" in the Army and Navy, that the brunt of medicine-in-government—with all that the term implies—falls with most disastrous effect.

It is a fair inference from figures furnished by the 1918-19 Reports of Surgeon-General Ireland, and by Colonel Leonard Ayers' *Statistical Study of the War with Germany*, that more American young men were killed and disabled in the World War through the army-camp doctors' hypodermic and illconsidered surgical operations, than by German guns and gas-bombs. According to these official figures, there were among enlisted men in the various countries where American troops were stationed in 1918, *almost as many hospital admissions for disease as there were men in the Army*—977 sick for every 1000 men!

In the A.E.F., where a small division of troops landed in the late Spring and early Summer of 1918, 300,000 hospital beds sprang up from nothing, of which 195,000 were occupied at the time of the Armistice. Among American troops serving at home and abroad, there were 112,649 discharges from the Army because of disease, and in the wind-up of the casualties, the Surgeon-General reported 57,460—nearly half—*had died* of disease!

Now the question arises—what made them sick? These were "the picked men of the nation," admitted to the service only after a rigid physical examination by "regular, reputable" medical examiners. They were supposedly the most robust, resistant class of all. How came it that these able-bodied young men succumbed by the thousands to such children's diseases as measles, scarlet-fever, diphtheria and mumps? It is a significant pointer—which might shed some light on the puzzle-picture-that the greatest mortality from illness, as well as the highest rate of discharge from the Army because of illness, occurred in the army camps of the United Statesamong men who never got across the seas at all-and housed in well-appointed cantonments on which the Government had expended 1200,000,000-about half the cost of the Panama Canal—and in which the private soldier, in the matter of food, clothing, etc., was better conditioned than the average civilian during the period of the war.

It speaks rather eloquently to the point at issue, that the men who suffered most severely through American participation in the European conflict were those furthest from the seat of war, but closest to the mischief which Satan found for the army doctor's idle hands—inoculations and tonsilectomies. Further significant testimony on this head was given in a letter I was permitted to read, which was written by a soldier inmate of a California military camp and addressed to a prominent Osteopath of Pasadena:

"We were being given the serum as routine procedure," the letter ran, "and the men were dying like flies. Then the order came to stop the serum injections, and almost immediately there was a change for the better and there were no more deaths. The doctors must have learned something, as the serum shots were dropped altogether. But for God's sake keep this under your hat. I should be court-martialed for giving it out if it were known."

Shortly afterwards the Pasadena doctor learned that the writer of this letter had died of influenza in camp, and was beyond the reach of court-martial proceedings at the time I saw the letter.

These are some of the baleful fruits of state-sponsored medicine as it manifests itself in army and navy circles; but civilians also may not escape its arbitrary rulings and direful consequences in their different spheres. One of its most oppressive manifestations is based on the "germ carrier" theory, which has furnished a convenient alibi for the failure of the causative-germ theory of disease to meet the Koch postulate that "the causative germ must only be found associated with the specific disease it is supposed to cause."

Unable to make this fit into the frequent appearance of the "deadly bacillus" where the specific disease to which it was assigned was conspicuously absent, the microphobists met the difficulty by declaring that the healthy bodies found harboring the germs were favored habitats for them—"germ hatcheries," so to speak, and peculiarly dangerous sources of infection. These they named "carriers," capable of carrying and transmitting the disease to others while remaining free from it themselves; and upon this irrational medical assumption—unproven and unprovable—innocent and harmless persons have been arrested and imprisoned, deprived of their liberty and the privilege of earning a livelihood, solely on the arbitrary ruling of an ignorant, bigoted or venal Health Board from whose decrees there is no appeal.

The value and practicability of the "carrier" idea in public health service, may be partially gauged by the testimony of the carrier theorists themselves. Major Ralph Kinsella of the Army Medical Corps said in the Journal of the American Medical Association (March 8, 1919):

"The report of the Pneumonia Commission at Camp Pike—made long before influenza appeared in this country—recited that an analysis of sputum from 132 normally healthy individuals discovered 35 percent of them harboring the Pfeiffer bacillus." (The "Pfeiffer bacillus" was the bug most strongly under suspicion of causing the "flu.") Dr. William Park, head of the New York City Laboratories, is quoted in a N. Y. Health Department bulletin, (March 15, 1919), as saying:

> "About one percent of the people of New York harbor virulent diphtheria germs in their throats, and it is not possible to use cultures on a sufficiently large scale to discover all carriers in a community, or to affect the general incidence of the disease."

Dr. Charles E. Simon of Philadelphia, in his book, *Human Infection Carriers*, names cholera, typhoid, diphtheria, meningitis, pneumonia and a few other maladies among "those susceptible of being spread by carriers." He estimates the number of typhoid carriers in every large city at about 4 percent of the population, and affirms "there are an average of ten carriers for every case of meningitis."

Now to pursue the "carrier" isolation on the basis of these expert calculations to its logical conclusion: If 35 percent of the people are harboring "Pfeiffer bacilli," it would mean the isolation of over 35 million persons as a protection to the others against influenza; if one percent of them are carrying diphtheria germs, that would send over one million more healthy persons into retirement—along with more than four million spreaders of typhoid infection, as many more carriers of spinal meningitis and what not. And since carriers beget carriers—even if each one infected only one extra person a week, and as in every hysterical movements the zealots quickly pass from actual offenders to suspects—it is plain as a matter of simple arithmetical computation, that within the space of a few months, we would all be in quarantine as a protection against each other!

And the worst of this is that the "immunizers" claim that *they create "carriers" with their immunizing serums.* The absurdity of such a claim is humorously brought out by a contributor to *Life*, who writes:

Dr. Chapin of Providence, R. I. and Dr. Whip-pie of the University of California have each stated that "carriers" are manufactured by doctors through the injection of "immunizing" doses of antitoxin and other serums.

Of course this is pure brag. How could a dose of serum give a microbe such a head that it would refuse to eat or drink until it had left the scene of last night's spree as far behind it in proportion to its size as several times through the diameter of the earth would be to a man? Nor is this all. We are asked to believed that the account of the terrific effects of the doctor's magic potion is handed down so vividly by tradition through hundreds of generations of microbes, that they voluntarily abstain from all nourishment throughout their lives!

Only those whose prodigious energy causes them to emigrate ever get a square meal or any blood that is fit to drink. What a disappointment it must be to a microbe, after walking a billion times its own length on an empty stomach—his wife and a thousand hungry children tagging after him, the last hundred in her arms squalling for food—to see the person who looked so tasty and tempting from a distance stuck all over with signs saying "Beware! Saturated with Dr. Soakum's Serum"!

The practical, net result of this ridiculous medical theory of "carriers" is no laughing matter, however, to the helpless victims of it. There was the case of "Typhoid Mary," a maidservant of the better class in New York City, who in the summer of 1907 during the absence of her regular employer, was working temporarily in a place where several cases of typhoid fever developed. Because Mary did not fall ill with the fever though in contact with the patients, the only explanation the "medical science" which controls health boards could offer for such a phenomenon, was that the woman was "a typhoid carrier." There was absolutely no proof of it except the health officer's guess, and much contrary evidence was offered by Mary and her friends. She was arrested, charged with being "a menace to the public health," branded as "Typhoid Mary" in the newspapers, and imprisoned in the Isolation Hospital on North Brothers Island, where she remains to this day—a feeble, muttering old woman, the victim of morose melancholia after twentyeight years of solitary confinement.

In the Fall of 1928, a news item in one of the papers reported 12 other "carriers" apprehended and imprisoned by the New York Health Department, and there was a famous "Typhoid Harry" in the annals of the San Francisco Department of Health. But curiously enough, although there is a prevalent notion that microbes are no respecters of persons and millionaires as a class should carry more and probably worse germs than workingmen as a class, no one has ever heard of a millionaire being in quarantine as "a disease carrier." There are no "Typhoid Rockefellers" or "Diphtheria Morgans."

With all the cumulative wealth and prestige attaching to regular medicine today, and the power it wields through the superstitious hold it still maintains over the minds of perhaps half the population, quite enough damage would ensue from the voluntary acceptance of the voodoo practice of vaccineserum immunology. But to put behind it the full force of the Government—the public funds and the police powers of the State—to enforce these destructive and disease-breeding inoculations upon the unwilling and the defenceless, constitutes a form of tyranny in modern times which shames most of the despotisms of the past.

The right of the sick to get well by any method they choose—the most elemental of human rights; and the right of the grown-up man or woman to accept or reject any kind of medication for his or her own body—without which right they are in effect chattel slaves. Shall these fundamentals of human freedom be denied under a government like ours whose Federal Constitution makes a specialty of individual liberty?

The medical voodoo" is a flat challenge to so-called "scientific immunology" it is an arraignment of the crimes committed in its name, says Author Annie Riley Hale. "Too many lives have already been sacrificed to a squeamish fanatic," If the book "The Voodoo" shall serve no other end than Medical bringing to public attention the much neglected though eminent medical voices-past and presentraised in dissent and protest against the vaccine-serum method of "disease prevention," it will have supplied a long-felt need. Very many persons do not even know that such dissenting voices exist; and if the matter must be settled for us solely upon medical authority, then surely it is only fair to the public having a vital interest in the settlement, to permit them to hear from all the authorities. "He who knows only his own side of a question, doesn't know that very well." The book aims to present "the other side" of the medical controversy over so-called "preventive medicine" for those who never heard that there is another side, A. R. H.



Annie Riley Hale was an American teacher, author, and social critic.

In her lifetime she was known for her criticism of Theodore Roosevelt and her anti-suffrage and anti-vaccine activity.

In December 1913, Hale addressed the U.S. House of Representatives Committee on Woman Suffrage speaking against women's rights to vote.

