Address.

THE PHYSICIAN A POPULAR EDUCATOR.1

THE ANNUAL DISCOURSE BEFORE THE MASSACHU-SETTS MEDICAL SOCIETY, JUNE 11, 1884.

BY JOHN CROWELL, M. D., OF HAVERHILL.

THE attitude of the public in regard to the management of Contagious and Infectious Diseases is often at fault, and it is here where the timely interference of the physician is of vital moment.

Notwithstanding the rules and restrictions of Boards of Health, the grossest carelessness prevails, and exposure to diseases accounted contagious is encouraged by this easy-going negligence. Take, for instance, that much dreaded malady, diphtheria. Dr. Elisha Harris, of New York, in his report of the investigations made by him of the epidemic that occurred in Vermont in 1879, makes the following practical suggestions:-

"No other disease in our Northern States has been more generally regarded as unpreventable, and none more capricious and fatally obstinate in its mode of prevalence, than diphtheria. Its apparently, and very probably, sporadic origin in numerous instances; its invasion of the most salubrious as well as the most insalubrious quarters; its variable malignancy, and its rapid fatality in numerous cases wherever it prevails, have furnished ample occasions for the unsettled opinions and sanitary regulations which prevail in regard to this destructive malady. Medical men no longer reject the conclusion which experience has taught concerning the personally contagious attribute of diphtheria; but as this attribute is variable in its intensity in different cases and on different occasions, apparently, sanitary precautions and regulations adopted to extinguish or wholly control the virus of this disease are only occasionally applied and enforced." 2

This condition of things in relation to this disease, so carefully and so cautiously stated by high authority, has resulted in a deplorable looseness among all classes. Because the contagion of diphtheria differs from that of other well-known diseases in the character of inception and development, the public mind becomes indifferent to the suggestions of sanitary authorities, and in many localities we find an almost open defiance to all precautions. There is often no system of isolation during the prevalence of an epidemic; there is gross neglect in the use of such disinfectants as are sanctioned by the best authorities; there is but little attention paid to the cleansing of houses, bedding, and clothing; and, worse than all, there is a reckless disregard for the safety of the living in the disposal of the bodies of those who have fallen victims of the disease. Numerous instances could be cited where public funerals have been held, and the body of the dead child, bedecked with floral emblems in an open casket, has been followed to the grave by a procession of school This dangerous expression of sentiment finds encouragement too often by clergymen, teachers, and even parents, especially when the victim of the malady is a favorite child and very generally beloved. People need wholesome rules from the physician in the conduct of this disease, and, in the absence of local sanitary authority, his word must be potent in its explicitness, and with a savor of authority in its practical application.

There is another question growing out of contagious diseases that is engrossing no little attention. to Vaccination.

The public mind is somewhat divided as to the efficacy of vaccination as a preventive or modifier of smallpox, and also as to the danger attending the operation in transmitting certain loathsome diseases, more to be dreaded than the pest against which the prophylactic treatment is directed. In every little community, in every rural school district, there will be found men who will rebel at any attempt at compulsory vaccination, and oftentimes family feuds and bitter personal strife are the disagreeable results of an order for a general protection during a visitation of small-pox. Čertain newspaper writers keep up the controversy, and sometimes a member of our profession widens the breach by the authority of his assertions, or by the sophistry that lurks in isolated statistics, and in the glamour of semi-professional nomenclature.

We frankly admit that the process of vaccination has been subjected to abuse, and that grave evils have resulted from the carelessness of the operator; for vaccination, like every other operation on the human body, demands care and skill in its performance. evils of pyæmia and syphilis, which have ensued in certain cases, have been due either to the use of a foul lancet, or of lymph, which, from remaining too long in the vesicle, had begun to decay, or from employing lymph mixed with the blood of a diseased subject. The evils of vaccination, then, can be easily avoided, and the remedies are very simple, — a clean lancet, and pure lymph unmixed with blood or any other secretion. And since such ample facilities are afforded to procure virus from the cow, there need be no fear on the ground of vaccino-syphilitic inoculation.

And yet compulsory vaccination meets with stout opposition at home and abroad. The law in England demands that all children shall be vaccinated within four calendar months of birth; but this provision is so imperfectly fulfilled that, according to official reports, "the public defences against small-pox are in great part insufficient and delusive.8 During the last session of the British Parliament the whole matter of compulsory vaccination came before the House of Commons by a resolution introduced by Mr. P. A. Taylor, member for Leicester, as follows: "That in the opinion of this house it is inexpedient and unjust to enforce vaccination, under penalties, upon those who regard it as unadvisable and dangerous." This resolution was supported by a speech of great vehemence, in which the whole system was denounced not only as dangerous, but utterly useless, and, without taking the trouble to produce facts, Mr. Taylor dogmatically asserted that as "a factor in national mortality small-pox is nowhere at all.

It was for Sir Lyon Playfair to reply to these assertions, which he did by a masterly array of facts, too convincing to admit of controversy, and which are worthy of reproduction. A military surgeon testified before the committee of 1871 that of over one hundred and fifty thousand soldiers vaccinated, not one instance was on record of the transmission of disease by the operation. And of the 17,000,000 children vaccinated within the last thirty years, Sir Lyon challenged any one to produce four authentic cases that had been poisoned by a syphilitic taint.

And in further elucidation of his position he pre-³ Fifth Report of Medical Officer of British Privy Council, page 6.

Concluded from page 76.
 Annual Report of the National Board of Health, page 291.

sented a concise array of facts showing the beneficial results of vaccination. These facts are so succinct that they are of practical value in meeting popular errors upon this vital topic.

In forty years after the introduction of vaccination into England the death-rate from small-pox had fallen from 3000 per million to 600 per million, and after gratuitous vaccination had been ordered in 1841 the average mortality was brought down in thirteen years to 305 per million.

Again, when vaccination was made compulsory, in 1871, the ratio of fatality was reduced to 223 per million; while in Scotland, in 1882, the rate was only six per million. Remarkable results are also observed in the late Franco-Prussian war. The year before the war 40,000 French soldiers and 216,426 Prussian soldiers were re-vaccinated. There was not, however, time to re-vaccinate a large number of recruits who entered the French army from Brittany, where smallpox was prevalent. And the physician-general of the French army, Dr. Leon Colin, records, "That the different armies, raised in haste and placed in the field without time for re-vaccination, were exposed both at their places of gathering and in their marches to the attack of the epidemic. The result was, that while 23,499 French soldiers died of small-pox, the mortality among the Germans did not exceed 263 deaths."

In London the deaths of the protected and unprotected are relatively 90 and 3350 per million, while in America the deaths of the unvaccinated are fifty per cent. in Boston, sixty-four per cent. in Philadelphia, and fifty-four per cent. in Montreal, and among the vaccinated the mortality is from fifteen to seventeen per cent.

At the conclusion of his argument, Dr. Playfair moved the following amendment to the resolution: "That in the opinion of this house, the practice of vaccination has greatly lessened the mortality from smallpox, and that laws relating to it, with such modifications as experience may suggest, are necessary for the prevention and mitigation of this fatal and mutilative disease." 1

And this resolution was sustained by the remarkable vote, three hundred and two, while the anti-vaccination party mustered only sixteen votes.

It would seem, then, to be an easy matter to convince even the most skeptical that vaccination is a necessary means of defense against a terrible disease, and with Jaques, in As You Like It, the physician can confidently exclaim, with reference to this scourge of mankind:—

"Give me leave
To speak my mind, and I will, through and through,
Cleanse the foul body of the infected world,
If they will patiently receive my medicine!"

What better service can the profession render to the community than to assert a well-defined polity against Superstition, Empiricism, and Quackery?

The medical world has been more or less under the sway of superstition from the time of the early Egyptians to the latter part of this nineteenth century. During the highest period of Grecian civilization the disciples of Æsculapius depended upon feasts, fastings, and religious ceremonies for the cure of disease. The Romans combated the plague by incantations to the gods in the temple of Jove. The early Christian church believed that the power to cure disease lay

¹ From Parliamentary Report published in the Boston Daily Advertiser, July 4, 1883.

wholly with the bishops and elders by the use of a miraculous power, independent of remedial agents. In later times kings and queens of England and France claimed the power of curing disease by the laying on of hands. Queen Anne touched the king's evil of Dr. Johnson, who was brought by his mother in his infancy for royal treatment by recommendation of a distinguished physician of Lichfield. And this kingly prerogative which prevailed through the Stuart dynasty was afterward assumed by those of less note, who passed through all the stages of wonder-working power possible to a diseased imagination.

Of the multiplied forms of superstition that have come down to us as a legacy, some are too trifling and harmless to deserve attention. Let the Dr. Johnsons remain happy by always putting forward the left foot on entering a room, and allow the college student the luxury of wearing a nutmeg strung around his neck as a talisman against disease. But when the foolish myths of an ignorant age are perpetuated and made to environ the pathway of a pregnant woman, and subject her footsteps to a succession of pitfalls and spring-guns; when the life of a young mother is made wretched by the old wives' fables of the dangers attending every period of lactation and dentition, it is well to challenge these miserable maxims and "call a halt."

Quackery does not always appear in the rôle of a mendicant who practices his base arts upon the unwary and the ignorant. It does not always flaunt its filthy rags and display the tawdry show of its stock-intrade to the gaping crowds in the streets. It has other artifices and other devotees. It sometimes assumes the air of a gentleman and rides in a gilded coupé. It finds too easy access to the home of affluence and fashion, and the doors of the library and the boudoir open to its persuasive knock. It can adapt itself to all moods, and patiently lies in wait for the weakness and duplicity of suffering humanity. It is in such lurking and subtle form and garb that this foe to science and to humanity is most to be feared. And do we not sometimes find it seeking refuge behind the protecting seal of a piece of parchment?

It is a grim satire upon the pride and glory of medical science that the confidence of the great public in the power of specifics, as curative agents, remains as strong as in the former days of alchemy and astrology. Perkins's tractors and Bishop Berkeley's tarwater are perpetuated in the long list of patent nostrums that come in like a flood and threaten to overwhelm the land. Colossal fortunes are amassed from the sale of vile concoctions, whose virtues are set forth with all the glaring allurements of cheap art, and the convincing logic of those grateful people who, in turgid rhetoric, tell the suffering public of their ready relief from maladies which "regular physicians" had tried in vain to cure. What a piece of patchwork is man, with his garniture of liver pads, lung protectors, electrical belts and jackets! How is he guarded from all pulmonary ailments by alternate trials of stuffing and starving! How is he led captive by the invitations and warnings that confront him in painted characters upon every available rail-fence or rocky cliff in the land! How does the poor long-suffering stomach run the peptonized gauntlet, and barely escape destruction in the dreadful ordeal! And will not mercy cry out in pity for the helpless babies in their struggles with many of the preparations of artificial food? Denied the nourishment that nature so bounteously pours out, these poor victims of mercenary greed are stuffed with an ever-varying round of compounds that vie with each other only in the differing grades of worthless-

Empiricism not unfrequently appears in the itinerant lecturer, who, with an airy grace, exhibits his credentials, and unfolds his manikins and his skeletons to the applauding public. And, having prepared the way by a generous course of free lectures, he plies his specialty with lucrative success, and then leaves his victims to wonder why they are not cured, while he is "over hills and far away" with his ill-gotten gains. And before the old-fashioned family doctor has finished making repairs on mutilated eyes and scarified organs of generation, or has found time to remove the pessaries and supporters, and liver pads and electric belts, the annual visitant again appears, and finds new victims to his devices with a generous patronage from his old dupes.

Massachusetts is far behind many of her sister States in the enactment of laws regulating the practice of While nearly every other State and Territory have done something, more or less effective, in this direction, our own State is unprotected, and quackery in every form is practically unhindered in its imposition upon the public.

The State of Illinois has done noble service to science and to humanity by empowering the State Board of Health to regulate the practice of medicine, and this has been done so wisely and so efficiently that quackery and empiricism find but feeble foot-hold within its jurisdiction. From the admirable and exhaustive report recently prepared by Dr. John H. Rauch, the able secretary of the Board of Illinois, we gather valuable information upon the whole subject of "Medical Education, and the Regulation of the Practice of Medicine in the United States and Canada." In the long list of States that have enacted laws of various degrees of force and effectiveness the name of Massachusetts does not appear, while those States possessing good laws are North Carolina, Alabama, West Virginia, Illinois, Missouri, Minuesota, New Mexico, Wyoming Territory, Mississippi, and Louisiana.

The Illinois Board of Health did important service in the exposure, in November, 1882, of the fraudulent "Bellevue Medical College of Massachusetts," which issued medical diplomas under the protection of a law relating to "Manufacturing and other Corporations." And the officers of this "bogus" college contended that they had a legal right to issue diplomas and confer degrees without any restriction on account of study or professional attainments. The United States Commissioner, before whom the trial was had, held this plea to be valid, and dismissed the case with the following remarks: "The State has authorized this college to issue degrees, and it has been done according to legal right. The law makes the Faculty of the College the sole judges of eligibility of applicants for diplomas. If the Faculty choose to issue degrees to incompetent persons the laws of Massachusetts authorize it."

Such an outrageous possibility, under a law of Massachusetts, has been canceled, and the State saved from further disgrace in this direction, by the passage, June, 1883, of an act forbidding any corporation organized under the law referred to from "conferring

medical degrees or issuing diplomas, unless specially authorized by the Legislature so to do.'

Why should Massachusetts lag so far behind other States in the enactment of laws so wise, just, and humane? Laws not primarily intended to protect the medical profession, but to stand between the public and the horde of vampires that feed upon the life blood of their ignorant, superstitious, and deluded victims.

Is it not the duty of the members of our profession to educate the popular mind into a right appreciation of this vital question, and so to enlighten our legislators as to induce them to enact laws that shall redeem the good old Bay State from the contumely of fostering, by her legislation, the basest kind of frauds upon her citizens?1

Such, then, Mr. President and Fellows, are some of the methods by which the physician can render service to the public. It may be unrequited service; it may be called drudgery, but it is the drudgery that comes from ministration and sacrifice. It is the service essentially belonging to the highest ideal of the medical profession; a profession which makes the most profound problems of scientific research subservient to the wants of suffering humanity; whose noblest teachers and specialists are found wherever misfortune and woe have sown the seeds of disease.

It is a service scattered broadcast over the land. The same in the country doctor who toils among the hills of Berkshire, or along the sandy reaches of the Cape, as in the city practitioner who threads his way, not only among the homes of affluence, but also through the lanes and alleys - the "Ghettos of the poor." In the eloquent words of "Hyperion," the physician is the servant of the public, "toiling much, enduring much, fulfilling much; and then, with shattered nerves, and sinews all unstrung, lies down in the grave and sleeps the sleep of death, and the world talks of him while he sleeps! And as in the sun's eclipse we can behold the great stars shining in the heavens, so in this life-eclipse does he behold the lights of the great Eternity, burning solemnly and forever."

APPENDIX.

LAWS REGULATING THE PRACTICE OF MEDICINE IN THE UNITED STATES AND CANADA.

Extracts from a Report presented before the American Academy of Medicine at New York, October 10, 1883, by RICHARD J. DUNGLISON, M. D., and HENRY O. MARCY, M. D.

THE excellent laws now in force in West Virginia and Illinois have been taken as models, and although it has been found impossible to imitate them exactly, on account of local obsta-cles and local prejudices, the wedge has been entered, and some good results must inevitably attend the enforcement of the law. A letter recently received from Dr. Millard, the Secretary of the State Board of Minnesota, a State which has adopted restrictive enactments since the last annual report of your committee, summarizes the general aspects of the best of these laws; and we may quote his remarks upon their provisions as particularly appropriate in this connection, especially as he has given

ularly appropriate in this connection, especially as he has given the subject of medical legislation close study and attention:—
"I think," says Dr. Millard, "the law or 'Acts' now in force in West Virginia, Illinois, Minnesota, and Missouri the best, by far, extant in any of the States. These four States are governed by virtually the same law, and have a constituency of at least 15,000 physicians. Each Act gives the Board the power of deciding the diplomas of what schools they shall recognize, and of revoking the certificate of any practitioner for unprofessional conduct; also the power to grant licenses to non-graduates by passing the necessary examination to test their fitness. You will observe that the main features of the law of these four States make the Board the Censors of the different medical

1 See Appendix.