The rapid means of transit at the present day, the inter-state and international commerce and travel which exist and will continue to increase, while they tend to establish the brotherhood of mankind and to advance the cause of civilization, must nevertheless bring along with their blessings many of the plagues of distant peoples to curse the communities to which they come with wretchedness, sickness, and death, unless some systematic and well recognized legal enactments are authoritatively interposed for mutual protection. How best to secure this protection from the ravages of epidemics, has already, and for some time to come must, engage the attention not only of this association, but medical men and health officers throughout the country.

An intimate acquaintance, experience, and practice during two epidemics,—one of cholera in 1873, the other of small-pox in 1882-'83-'84 (at Nashville, Tenn., during the latter, as the Davidson county health officer),—enables me to recount from a practical standpoint many of the difficulties that lie in the way of the health officer, as well as to look in the only direction whence adequate power to combat successfully all epidemics can be possibly derived, to wit, state or national legislation, one or both. But while the power and authority for medical officers to act must come from the congress or legislature, the wholesomeness and efficiency of any law must first and can best be determined by sanitarians, or the men daily engaged in the study and practical work of the health department of the country. Their experience and knowledge, by virtue of their calling and labor, must, will, and ought to be the guide for legislators, and the basis of all sanitary law. The old adage, that "necessity is the mother of invention," applies with as much truth and force in the formation of sanitary laws as in other departments of life. The stubbornness and destructiveness with which plagues have invaded different communities in this and other countries, and the inability of health officials to prevent, suggest the only possible remedy for our ills to be, power to act conferred by legislation. The extent of this power, the nature of the law, to whom entrusted for execution, which for the good of the people are questions which, by the rights of labor, experience, and expert knowledge, primarily belong to the medical and sanitary workers and counsellors of this country. It is but fair to pre-
sume, as we would have a right to expect, that any sanitary measure, well digested and approved by this great public health association, would meet with favor by any law-making power in the land. A concert of action among sanitarians is a *sine qua non* to the derivation of power. For communities to wait until an epidemic is upon them, and then be compelled to rely upon county courts, or suddenly improvised boards of health even, composed as are all courts with laymen, and many boards of non-medical men, is to subject the people to the dominion of ignorance without the aid of science and experience, in instituting measures having for their object the preservation of human life and the protection of property. Therefore, at the will of this association, and to medical health boards and health officers of this country, should ample sanitary laws be formulated to protect the people against all forms of epidemic disease, so far as possible, and to aid in their judicious management, which by proper committees should be brought before the legislatures of such states for enactment into law as would be deemed necessary.

An allusion to the experience to which the people of Nashville and Davidson county were subjected from 1882 to August 5, 1884, as to small-pox, may serve to illustrate the necessity of vigorous statutes bearing upon this class of diseases.

Although Tennessee can boast of a state board of health composed of gentlemen eminently fitted for their responsible trusts, and who have accomplished much for sanitary medicine, and the city of Nashville of an efficient board of health, and Davidson county of a court which have been generous in the expenditure with the city of about $125,000, still, notwithstanding all efforts to suppress it, it persistently remained in our midst for nearly two and a half years. Hospitals were opened, and well appointed, with food, bedding, fuel, nurses, medicines, and physicians: still, only about two thirds of the afflicted could be induced to enter their portals to partake of this charity of the county. Nine hundred and sixty-four persons, mostly colored, however, were admitted for treatment, many of them entering reluctantly, notwithstanding they left miserable huts in the alleys and lanes of the city, with scantiest supplies of the necessities of life. In their ignorance and superstition, they feigned to believe that they were wanted there to be poisoned or killed by having water poured upon them, or made to drink it till they were dead; that they were forced to be vaccinated with small-pox virus. Thus the fears of many negroes were aroused, and extended to others. No amount of persuasion could induce them to go, and thus the disease spread in the community.

The negroes have but little fear of small-pox, believing it to be a God-given disease. The more superstitious of them regard it as an evidence of religious courage, mortification of the flesh, and acceptance with God, to bravely face it, as well as a direct visitation of Divine Providence. Hence they firmly believe and say, when the vaccinator proposes to protect them by the operation, "Go 'way from here wid your scratch pins. You can't keep off small-pox. God gib us dat, and you can do no
good wid your baccinate. If I's gwine to hab de small-pox, I's gwine to hab it.” Some affect to believe that the doctor vaccinates with small-pox matter, or some poisonous substance, which gives them disease, and kills. So a large per cent. of the lower class of negroes, and many of the same class of whites, have never submitted to the operation, and never will. It is frequently the case, when small-pox appears in a family, and all the other members are unvaccinated, that they refuse to heed the admonition of the doctor, and be protected. Hence the contagion spreads from one to another.

Another reason why the disease has been so difficult to manage is the refusal of the afflicted families to maintain isolation of cases. So, from ignorance and superstition mainly, a large portion of the sick people refused to enter the hospital, or to be vaccinated or isolated, and so its ravages were continued for more than two years. All these means, together with what virtue there was in guarding small-pox cases, though by persuasion only, were as effectually tried by local authorities as possible; and while we can but believe that much good was done, still the results were not satisfactory, chiefly because it was not believed by the authorities, and they were so advised at last by distinguished lawyers, that they had sufficient power granted them by the statute of Tennessee to forcibly send any one against his or her will to the small-pox hospital, or be vaccinated—the two most essential and effective methods of preventing and controlling the disease. It can hardly be doubted, had the health officers of Tennessee been clothed with adequate power to vaccinate, and send patients to hospital, but that a few weeks only would have marked the career of the disease when first introduced; but in the absence of such recognized power, ignorance, superstition, and fear have consigned to death, suffering, and sorrow hundreds and thousands of our people.

The question arises, Should not this association, state boards, and sanitarians throughout the country, arise to renewed individual and collective efforts for the public weal, and formulate and have enacted by the states a wholesome and efficient code of sanitary laws, properly empowering state boards, local boards, and health officers, so that all infectious, contagious, and epidemic diseases may be met and grappled with by the strong arm of civil law?

To show the efficacy of even supposed authority in suppressing small-pox, I will relate an occurrence coming under my observation at Nashville. Small-pox had prevailed in that community from March, 1882, to August 5, 1884, with varying severity. I often conferred with the state board of health on the subject, and asked for such authority as they possessed and could confer upon me. The nearest thing to a direct command in the law was, that the county health officer “should carry into effect such rules and regulations as they might prescribe, having for their object the stamping out and restricting of such epidemic diseases as exist in or threaten his county.” The president of the board did not feel that this warranted him at first, and for nearly a year, to direct that
people should be quarantined, vaccinated, or sent to hospital. In the meantime the disease spread with increasing virulence. However, on March 11, 1884, I was directed by him to vaccinate, flag premises where the disease existed, and send those afflicted with the disease to the hospital. I embodied all this, and more, in a circular, including a clause of the law bearing more particularly on the yellow fever epidemic of 1878, which made the violation of any rule or regulation a misdemeanor, and finable from "$50 to $500, and imprisonment at the discretion of the court, one or both." The disease had steadily increased from October, 1883, especially in the thirteenth district of the county, to March, 1884, when sixty-four cases developed. On the twelfth of this month the circulars containing the above instructions and penalties were scattered broadcast throughout the community. The people read, believed, feared, and obeyed instructions, ceased to tear down flags, isolated themselves, remained in their own houses, kept their friends away, or went when sick to the hospital,—in fact, stopped communication, so that the number of cases was reduced from sixty-four in March to seven in June, 1884, on the 17th of which we had our last case; so that in about two and one half months, under the fear of violating the law and suffering fine and imprisonment, the disease, which had been in the county outside the city limits of Nashville for more than two years, disappeared from our midst. It is due the city health authorities to state, that by aid of the police department, and a general belief among the citizens that the city had the power to enforce obedience, they were enabled to rid themselves several times of the disease, only to wait but a short time to see it reintroduced from adjacent districts, when the weight of the law was not for a time so sensibly felt. "This corroborates the position, that to properly manage small-pox, or any kind of epidemic disease, sufficient power must be lodged in boards or health officers. The result of the order to me from our state board of health, in ridding the people in about two and one half months of small-pox, demonstrates at once its wisdom and utility, and is an assurance that to such organizations the sanitary interests of the states ought and can safely be entrusted. I agree fully with the distinguished sanitarian of Washington, D. C., Smith Townshend, m. d., as to the management of this disease, when he says, "An efficient health department should stamp out the disease within, at farthest, four times its incubatory period."

If I shall have succeeded in calling the minds of sanitarians to pause for a time upon the importance of securing by legislation ample powers for the health departments of this country, to whom it chiefly belongs, to the end that the people may be protected from the desolation of plagues, I shall feel that the full object of this paper has been attained.