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Addresses

TROPICAL DISEASES—AMERICA'S OPPORTUNITIES AND OBLIGATIONS *

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The race for empire from its beginning has suffered more from disease and pestilence than from the implements of war. This fact has furnished many examples of stimulation to medical research. None is more striking than that given to the study of the diseases of warm climates as a result of the struggle of the nations for the possession of the tropics.

The close of the nineteenth century found the work of the colonizing powers practically at an end, in that nearly all of the available territory of the earth had been entered on and occupied. With these acquisitions, however, the mother countries realized that their work had but begun. To bring these great tracts of earth under the dominion of civilization, to develop their abundant resources, to give peace and prosperity to their fertile soils, they wisely realized that another foe had to be conquered—realized that they must learn the causes, nature, and means of prevention of the diseases which have always formed the greatest barrier to the colonization of these countries.

On August 27, 1897, after ten years of laborious research, under the most disadvantageous circumstances, success crowned the efforts of a hero and scientist—a success which well might inspire his poetic nature to sing:

"This day relenting God
Hath placed within my hand
A wondrous thing; and God
Be praised. At His command
Seeking His secret deeds
With tears and toiling breath
I find thy cunning seeds,
O million-murdering Death.
I know this little thing
A myriad men will save.
O Death, where is thy sting,
Thy victory, O Grave?"

The discovery of Ross that the mosquito is the intermediate host of the malarial parasite, and its confirmation and extension by other distinguished scientists may be said to have stimulated renewed interest in the onslaught on tropical diseases.

With the dawn of the twentieth century we see special institutes established and commissions formed and sent out for the study of these diseases. At the close of the first decade of this work, which has resulted in epoch-making discoveries which vie with those of Jenner and Pasteur; at this meeting, when the American

Medical Association is honored by the presidency of Colonel Gorgas, it seems not inappropriate to speak of "Tropical Diseases and America's Opportunities and Obligations" toward the same, notwithstanding the fact that the subject has been dealt with in several excellent addresses recently.

Sir Patrick Manson has pointed out that the "peculiarities of tropical diseases are etiologic rather than pathologic." Passing those conditions, such as insolation, heat-syncope, siriasis and tropical neurasthenia, which are the direct result of climatic and meteorologic influences found in warm countries, certain diseases are encountered which are the result of toxic substances taken in with the food, peculiar to these climates. As example of these may be mentioned ergotism, lathyrism, pellagra, and possibly beriberi.

It has also been customary to include, conventionally, in the list of tropical diseases certain bacterial infections, such as Malta fever, bubonic plague, leprosy, bacillary dysentery and cholera, because here are found social and hygienic conditions which are conducive to their prevalence. These diseases, however, can flourish in any climate and, therefore, have no real claim to be regarded as strictly tropical diseases.

The most important factor which determines the geographic distribution and limitation of tropical diseases is the fact that "certain pathogenic agents either require high atmospheric temperature for their successful passage from host to host or require an animal intermediary which flourishes only in high temperatures" (Manson). As examples of the former may be mentioned uncinariasis, amebic dysentery and certain parasitic skin diseases; of the latter, malaria, trypanosomiasis, African tick fever, filariasis, yellow fever and possibly dengue.

While this fact of high temperature is found at its best in the tropics, these diseases are by no means confined to the equatorial zone, extending around the earth between the tropics of Cancer and Capricorn. The same condition is found in subtropical regions, and in the temperate zone during the summer season. Our increasing knowledge of these diseases is demonstrating their prevalence in these regions.

So keen has been the interest; so great have been the achievements in tropical diseases during the last decade, that it will manifestly be impossible for me to do more at this time than to call attention to some of the more important advances which have been made in this domain of medicine.

The report of the hitherto unsuspected occurrence of pellagra in the United States has excited widespread interest here in this disease, which has proven and still proves a veritable scourge in Italy and other European countries. In these countries pellagra is described as a chronic disease characterized by an erythematous exan-

* Oration on Medicine, before the Section on Practice of Medicine, at the Sixtieth Session of the American Medical Association at Atlantic City, June 8-11, 1909.

them, gastrointestinal phenomena and nervous and psychic disturbances. It is generally regarded as an intoxication due to the using as food the products of unsound Indian corn. "Possibly the specific toxic products are formed by the action of some bacterium on maize which has been cut while immature and stored in damp condition" (Novy). In view of the extensive use of the proverbial "hoe-cake" as food in the South, it is rather surprising that pellagra should have so long escaped the notice of physicians. The report of its endemic occurrence in Alabama, North Carolina, South Carolina, Georgia, Mississippi, Florida and Texas, makes the study of the disease a matter of great importance.

Notwithstanding the immense amount of work which has been done on beriberi, the specific cause of the disease remains unknown. The micro-organismal and food theories each still have their advocates. It may be noted that Frederick Pearce, from clinical and pathologic observations on epidemics of beriberi and epidemic dropsy in Calcutta and Howrah, strongly suggests the identity of these diseases.

The clinical syndrome which is commonly known as dysentery has been shown to be due to three distinct diseases; amebic dysentery, due to *Entamoeba histolytica*; bacillary dysentery, due to *Bacillus dysenteriae* (Shiga, Flexner and Kruse); and catarrhal dysentery, due to the action of one of several bacteria which produce a catarrhal condition of the large intestine (Strong). This knowledge has furnished the basis for the more intelligent prevention and treatment of these diseases.

Studies on Malta or Mediterranean fever have shown that this disease, capable of producing an immense amount of invalidism, has a wider distribution than was formerly supposed. Mainly through the researches carried on in 1904-05-06 by a commission appointed under the auspices of the Royal Society of London, our knowledge of the disease has been distinctly advanced. It has been shown that the *Micrococcus melitensis* is constantly present in the blood of patients suffering from the disease; that it escapes from the body chiefly through the urine; that it is found at times in the urine of perfectly healthy individuals. It has also been demonstrated that domestic animals (chiefly goats) are frequently infected and that the disease is largely if not entirely acquired by the use of the milk of these animals as food. A distinct advance in the therapy of the disease has been claimed by Bassett-Smith from the use, in chronic cases, of a vaccine prepared from cultures of the organism isolated from the spleen during life.

The march of the "black death" has advanced throughout the civilized world, and at the beginning of this decade we see it lodged in Asia, Africa, Europe, Oceania, North and South America. Fifty-one countries of these continents have been infected and millions of lives have been destroyed. Hence it is that the brilliant achievements with respect to the conveyance of the *Bacillus pestis* should rank with the epoch-making discoveries of this period.

Bannerman has pointed out that Simond in India was the first to suggest the flea as the carrier of the disease. His work, however, was discredited by the first plague commission. Captain Liston, an assistant to that commission, seeing the possibilities of this theory, continued investigations along this line, so that when the second plague commission was sent out in 1905, this method of transmission seemed the most

worthy of investigation. Their carefully planned experiments and painstaking execution of the same have resulted in the following conclusions:

1. "Pneumonic plague is highly contagious, but being rare (less than 3 per cent. of all cases) plays a very small part in the spread of the disease.
2. "Bubonic plague in man is not infectious and is entirely dependent on the disease in the rat.
3. "The infection is conveyed from rat to rat, and from rat to man, solely by means of the rat flea.
4. "Plague is usually conveyed from place to place by rat fleas brought by people in their baggage or on their persons" (Bannerman).

The outbreak of plague on the Pacific coast in 1907 was suppressed by the efficient work of the United States Public Health and Marine-Hospital Service under the direction of Dr. Rupert Blue. Still, in view of the difficulties in certain areas attending the destruction of rats and rat fleas, the question of protective inoculation against plague has been the subject of extensive investigations. The researches of Strong in Manila has resulted in the production of a vaccine from attenuated plague bacilli which promises to be of great practical importance.

One of the most far-reaching results which has come about as a result of the increased interest in tropical diseases is the importance which attaches to protozoology and helminthology as fundamental medical sciences.

The researches of Laveran, Theobald Smith, Councilman, McCallum, Ross, Dutton, Novy and others stimulated men like Calkins, Minchin, Stiles, Mesnil, Nuttall, Schaudinn, and Grassi to study more carefully the protozoa. Great principles have been announced, the influence of which on medicine it is difficult to estimate.

By study of these organisms Hertwig has been able to announce the Kern plasma relation theory, Goldschmidt the chromidial apparatus, Schaudinn the nuclear dimorphism—theories and principles which offer much toward the elucidation of the long vexed questions of the physiology and pathology of the cell. Weissman's doctrine of the immortality of the protozoa has been overthrown by the fact that sexual reproduction is necessary at some period of the life cycle to rejuvenate these organisms "depressed" by vegetative activity or otherwise.

A knowledge of these life cycles has been shown to be necessary for a proper classification of these organisms, and has established close relations between phyla heretofore supposed to be widely separated.

Of greater importance in so far as tropical diseases are concerned are the results of the study of protozoa and helminths as pathogenic agents. Indeed, Sir Patrick Manson has said that in the study of tropical diseases "the student's attention is confined almost entirely to protozoa and helminths, to the special vectors or media of these organisms, to their pathologic effects, and to the prophylaxis and treatment of the diseases they give rise to."

The observations of Lösch, Kartulis, and Councilman and Lafleur had long ago established the etiologic relationship of amebas to a characteristic form of dysentery prevalent in tropical and subtropical regions and frequently associated with abscess of the liver. These observations have been confirmed by numerous observers. Much confusion, however, has existed as to the nomenclature and taxonomic position of these organisms, and even some skepticism as to their pathogenicity. Cassi-

gandro and Barbigallo had shown that the amebas occurring in man and fresh water amebas presented sufficient difference to justify placing the former in a separate genus—*Entamoeba*.

In 1902 and '03 Schaudinn from morphologic and biologic differences, as well as from their effect on animals, was able to separate them further into two species—*Entamoeba coli*, a harmless commensal of the intestinal tract, and *Entamoeba histolytica*, the pathogenic agent of amebic dysentery. In 1904 Stiles summarized the various views as to the relationship of disease and amebas found in the intestine of man justifying the nomenclature of Schaudinn for those who believe in a harmless and pathogenic species. In 1908 Craig, after a most exhaustive study of the subject, wholly confirms the views suggested by Schaudinn.

It must be noted that there are still some observers who hesitate to accept the division of the *Entamoeba* into pathogenic and non-pathogenic forms. These differences of opinion would seem to emphasize the desirability of relying on the full life cycle of these organisms under natural conditions rather than morphologic differences observed *in vitro* for purposes of classification.

Among the most interesting advances of this period are the discoveries which have removed trypanosomiasis far beyond the mere economic importance which it heretofore had maintained. The discovery of a peculiar, wormlike, actively motile body in the blood of a patient by Forde in 1901 and named *Trypanosoma gambiense* by Dutton stimulated investigations with respect to this organism as a pathogenic agent. The first result was the discovery of a trypanosomatic fever of man, which came about through the investigation of Dutton and Todd in 1902, under the auspices of the Liverpool School of Tropical Medicine. Shortly afterward the discovery, by Castellani, of this organism in the cerebrospinal fluid of a patient suffering from sleeping sickness led to the discovery by Bruce and others that this disease is caused by the *Trypanosoma gambiense* and that trypanosomatic fever is the first stage of sleeping sickness.

The *Glossina palpalis* has been shown to be the chief agent by which the organism is transmitted. In spite of efforts to show that the trypanosome undergoes biologic development in the tsetse fly which would be expected from what is known of the life-history of other hematozoa, the insect intermediary seems to be only a mechanical vector. Of other advances made in trypanosomiasis, the successful cultivation of these organisms *in vitro* by Novy and his associates is of importance as furnishing a method of studying these organisms. The early diagnosis of sleeping sickness by gland puncture is of the greatest importance for purposes of prophylaxis and treatment.

The rapid spread of the disease is a striking illustration of the "disseminating influence that modern travel and means of communication have on diseases formerly confined to limited areas." Advances have also been made with respect to the prophylaxis and treatment of the disease. As a result of the work in Zambesi in 1907 and 1908 by Allan Kinghorne and R. Eustace Montgomery the following means for preventing the spread of the disease have been suggested—control of native movements, segregation of cases, removal of villages from dangerous zones, clearing, education of the natives, personal prophylaxis, destruction of the tsetse flies, their larvæ and pupæ. Koch further suggests the destruc-

tion of crocodiles, inasmuch as the tsetse flies subsist almost entirely on the blood of these reptiles in the neighborhood of the lakes. Atoxyl, an anilid of metarsenious acid, supplemented by antimony, promises to be of service in the treatment of the disease.

The spirochetes, a genus closely allied to the trypanosomida, have been the subject of much study both from the academic and practical side. The discovery that African relapsing fever is caused by a spiral organism which is conveyed from one individual to another by means of the tick *Ornithodoros moubata* (Murray) and the spirillæ of American fowls conveyed by a species of argas, as well as the already known relation of a spiral organism to European relapsing fever, and its possible conveyance by an arachnid, raised the question whether or not these organisms should not be included among the protozoa.

The brilliant researches of Novy and Knapp and Breinl would seem to clear up to some extent the confusion which has existed with respect to the spirochetes. It seems to have been shown that these spiral organisms, the *Spirillum duttoni*, and the *Spirillum recurrentis* are different species belonging to the bacteria and giving rise to different kinds of relapsing fever in various parts of the world.

These studies have aroused much scientific interest, as at first glance they would seem to furnish an exception to the general law enunciated by Stiles in 1901, that "those diseases which are dependent on insects or other arthropods for their dissemination and transmission are caused by parasitic animals." It does not seem conclusively proven that these arthropods are biologic transmitters of these diseases; that they are not necessary for the development of the spirilla, as are the anopheles for malaria or the *Stegomyia callopis* for the hypothetical organism of yellow fever. The work of Ricketts on Rocky Mountain Spotted Fever is also interesting in this connection, in addition to being a work of great merit.

Malaria, of all tropical diseases, is the most widespread, the most disastrous in its effects, and the one concerning which our knowledge was most complete at the beginning of this period. Hence it is that the application of this knowledge in the prevention of the disease has attracted the most attention. It should be noted, however, that the introduction of eosinated methyl azure stain and thick dehemoglobinized smears have facilitated the diagnosis of malaria. Schaudinn's discovery of the parthenogenetic cycle of the macrogametocyte in the blood of the vertebrate host furnishes a long desired explanation of the relapses which so frequently occur in this disease. Craig's more recent work on latent malaria should also be noted.

Much work has been done in various regions on the epidemiology and prophylaxis of malaria. Worthy of special notice are the researches and efforts of "The Society for the Study of Malaria in Italy." Professor Celli, in a report on this work, concludes that the campaign against malaria should include two methods concurrently—the one directed to destroy, or at least render inoffensive, the mosquito which inoculates man with the parasite; the other directed to destroy with specific means and with general means these parasites in the human blood.

The recent excellent articles of Deaderick of Arkansas well present the present state of our knowledge as regards blackwater fever. While the results of investigators in various parts of the world seem to show the

relation of malaria and quinin to the disease, the immediate cause of the condition which determines the increased hemolysis remains to be found out. The results of the researches of the medical commission of the United States Army to investigate the cause and mode of transmission of yellow fever are well known. And the application of this knowledge has been successful in the control of many outbreaks of the disease.

The work of E. H. Ross in Egypt, and Craig and Ashburn in the Philippines, would seem to indicate that dengue is dependent on the mosquito for its spread, and, therefore, another trophy is added to the war waged against these insects.

It has been shown that the presence of intestinal parasites has a marked influence on the mortality of other diseases, and the advances with respect to helminths as pathogenic agents are scarcely less notable than those with reference to the protozoa. Of the long list, time permits reference only to ankylostomiasis. This disease has been shown to be of wide distribution in all tropical and subtropical countries and wherever found is of the greatest importance from the economic as well as from the standpoint of public health. New hookworms have been discovered, their mode of infection has been determined, and much has been added to our knowledge of their clinical and pathologic manifestations. The ankylostoma duodenale has been shown to contain a hemolytic substance, and efficient methods of prophylaxis and treatment have been worked out. With all this, however, the work on hookworm disease may be said to have only begun.

This short and imperfect review serves to emphasize the great interest which has been manifested all over the civilized world in the study of tropical diseases during the past decade; to emphasize how vital the thorough study of these diseases is to the progress and art of medicine. There is already abundant cause for praise of the results which have been achieved, but it would seem that they are only evidence of what is to follow.

Without disparagement of the work of every and all nations concerned, we can with pleasure note the prominence of the influence of English thought in this as in other branches of medicine, and may be permitted to contemplate with pardonable pride the triumphs of America in this field.

The philanthropic spirit which moved the United States to engage in war to relieve a down-trodden people from the consequences of despotism was also sufficient to stimulate efforts to overcome a more formidable tyrant; to free these people from disease and pestilence. The establishment of a biologic laboratory in Manila as a part of the government laboratory and the high class of work which has emanated from this laboratory have reflected great credit on American medicine. The record of ten years of sanitation in the Philippines, of the scientific methods by means of which diseases have been combated, reads like a romance and justifies the statement of Musgrave that "America has made Manila one of the cleanest and healthiest and most attractive cities under the flag."

The discoveries with respect to yellow fever by the commission under the auspices of the War Department ranks as the greatest triumph of modern medicine since the discovery of vaccination against smallpox. As regards the triumph of America in the canal zone, it has been said that "of one credit history can not rob the United States. Among much good and evil it must re-

cord that it was under the American administration that the knowledge and resources of modern medicine were applied to the hygienic redemption of the once noisome isthmus. Such fruits of labor in this direction have already been gathered that they promise to rival as a worthy monument of American achievement the canal itself." Leigh.

It is proper that we recognize the ability, revere the heroism and extol the genius of those who have brought about these and other triumphs. The names of no greater heroes will be recorded in the annals of American history than the names of Reed, Carrol and Lazear. Carlisle has said that genius is "infinite capacity for taking infinite pains." Measured by this standard the work of Colonel Gorgas in Cuba and Panama must stamp him as a genius whom we are proud to honor.

While we felicitate ourselves over this foreign missionary spirit and rejoice in the inestimable benefits which it has developed, we are led to inquire if the conditions are not such as to offer opportunities and impose obligations to increased activity in the field of home missions? If we consider only the great economic losses, the suffering, deaths, and race deterioration which amebic dysentery, malaria, and uncinariasis visit on this country, there can be but one answer. Unfortunately the vital statistics do not give a proper conception of the prevalence of amebic dysentery in the United States. Its wide endemic occurrence is, however, well known through the writings of Harris, Dock, Jelks, and others. Professor Osler says, "It is the most common variety of dysentery throughout the United States. It is endemic, the cases sometimes increasing to such an extent as to form an epidemic." Boggs states that the records of the Johns Hopkins Hospital show 182 cases in that institution from 1889 to 1908, the vast majority coming from the state of Maryland. He also points out that the large number of cases of abscess of the liver in the records of some southern hospitals would indicate its wide prevalence. The economic importance of amebic dysentery, its chronicity, its resistance to treatment, as well as its tendency to serious complications, furnish a rich opportunity for investigation.

The prevalence of malaria is too well known to require discussion. Attention has often been called to its economic importance to a large section of this country. Woldert has shown that it cost the state of Texas in 1900 in loss from labor alone \$533,320. Glenn W. Herrick, some years ago, in writing on the effect of malaria on agriculture, has convincingly shown the enormous losses which the disease entails on the South. More recently Howard, in a bulletin on the economic losses to the people of the United States through insects that carry disease, estimates on a very conservative basis that malaria produces 12,000 deaths and 3,000,000 cases of fever annually. He further states: "Accepting this as a basis and including the loss through death, the cost of medicine, the loss to enterprises in malarious regions through the difficulty of securing competent labor, and other factors, it is safe to place the annual loss to the United States from malarial disease under present conditions at not less than one hundred millions of dollars." To say nothing of the physical suffering and deaths, the losses from this disease alone make that from hog cholera, Texas cattle fever, and the boll weevil combined look exceedingly small. The above estimate of Howard does not include the retardation to development of certain regions on account of malaria. No region on earth more urgently invites the "triple

alliance of the doctor, drainage and agriculture" than the great Mississippi Valley designated by one of its most gifted sons as "the cornucopia of the world." History, ancient and modern, furnish ample evidence of the baneful influence of malaria on mental and physical development.

Through the researches of the United States Public Health and Marine-Hospital Service, of the Porto Rican Commission, as well as of practitioners in the endemic areas, we have learned of the great economic importance of the hookworm disease. According to the report of Surgeon General Wyman, the recent researches of Stiles have shown that 12.6 per cent. of the employés of the cotton mills of the South are affected with uncinariasis; that of this class 13. to 18 per cent. of those of maternity age are in a condition which prevents them from properly nourishing babes; 5.8 to 20 per cent. of the males of possible military age are in a condition which would materially decrease their military efficiency; 48.1 per cent. of the children are suffering from an anemia-producing disease which would naturally inhibit their usual capacity for study. These figures serve to emphasize the truth of the statements of Allen J. Smith, who, writing on this subject in 1904, said, "All through the districts of our southern states infested by the American hookworm there exists a class of persons notorious for their unprogressiveness, lack of ambition, application and effort, thin, sallow, unhealthy look, cadaveric appearance, and uniform poverty in the midst of natural fertility and plenty." He further states: "These families are usually prolific, but with parents of the type mentioned there are bound to arise numerous causes for fatality among the children. Probably many in childhood die from direct and indirect effects of uncinariasis. Of those who live a large, proportion suffering in some degree short of fatality from the same parasite, grow up stunted in mind and incapable of physical effort, without incentive, hopeless, unequal to real exertion, branded as lazy and wearing the mark without care or shame. These pallid, spindle-legged, pot-bellied, and always dirty and unkempt children grown to manhood and womanhood may scarcely hope to breed a stronger race than themselves; and thus, generation after generation, from originally strong and virile progenitors, families recede and eventually die out."

These are but examples of the opportunities afforded in tropical diseases at home. To these may be added the menace from bubonic plague, the ever-constant danger from yellow fever, and the probable endemic existence of other of these diseases which increased knowledge is demonstrating. Our increasing commerce with the tropics and the better facilities for communication with the same must inevitably increase these opportunities.

It follows as a natural corollary that these present and growing opportunities for the study of tropical diseases must impose the obligation of affording better facilities for teaching them and research work in them. If they are of such importance as we have indicated, it would seem that more time should be given to them in the curricula of our medical schools than is at present devoted to them. Even with this, the time has arrived when to keep in the front rank of the armies which are moving on these common enemies to our health and prosperity, the obligation rests on us to follow the examples of England, Germany, France and other countries in the establishment of an institute for the study

and teaching of these diseases, Dr. E. N. Tobey, of the Harvard Medical School, has, in recent articles, successfully answered the objections which have been urged against this necessity.

The need for a special institute for the study of tropical diseases is in no sense a reflection on the magnificent work which the Bureau of Public Health and Marine-Hospital Service has done and is doing. The sharp eye which this service keeps on our ports to prevent the entrance of exotic disease, the magnificent service which it has rendered in the suppression of pestilences, the importance which the hygienic laboratory has assumed as a center of research in contagious and infectious diseases, the pioneer work which it has instituted with respect to the study of leprosy amongst other labors, compels us to agree with Seaman when he says that "the United States Public Health and Marine-Hospital Service is the one department of which Americans have most reason to feel justly proud."

The growing sentiment in this country of the obligations of the federal government to the public health is propitious, and this sentiment needs the fostering care of physicians more than any other class. The importance which we to-day assign to tropical diseases in this country demands our best efforts in the extension of the authority of this service and in the securing of appropriations to render it still more efficient.

Let us hope that these opportunities will impel the performance of the duties which they impose.

THE PRESENT STATUS OF STOMATOLOGY

CHAIRMAN'S ADDRESS BEFORE THE SECTION ON STOMATOLOGY AT THE SIXTIETH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, 1909

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It is my pleasurable duty to address you in welcome to the Sixtieth Annual Session of this Association. Our able and untiring Secretary has prepared the feast, and it promises to make this year's meeting second to none which we have had.

At this time it is in order to look back, with what complacency we may, on the progress in our profession during the past year, and to outline some of the hopes and aspirations for the future.

There are two great incentives to the profession to grow and develop. One is the desire of the true physician to increase his power to prevent or heal suffering—to keep abreast of the world's progress in general. The other, to gain for his specialty that recognition in a social way which will satisfy the hearts of those already in practice and offer to the youth contemplating a life work a profession in the practice of which there shall be nothing incompatible with the highest self-respect.

While new and increased attainments in the first case help to some extent, in the second it is by no means proportionate, and I doubt very much whether, even with all knowledge, with every practitioner a doctor of medicine, we should find our condition improved otherwise than in the direct satisfaction in our hearts over our increased efficiency. Perhaps if we faced the condition squarely and honestly we should more easily and readily find the cure.

I venture to say that we suffer much from the term "dentist" and if we could shake that off, even as the surgeon has shaken off his original appellation of "barber," we could more easily claim the recognition to which