The Tobacco Problem.

(Abstract)

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In going over a large mass of notes on the Tobacco Problem, I arranged them for convenience of classification into periods of my own life. After 1900 notes are grouped under papers published since, such papers forming "nest eggs," so to speak. In practically every paper I have had before this Academy during the last fifteen years the tobacco problem can be read between the lines. Here I intend to go over the subject very briefly in the light of observations and work done, merely a note here and there.

As a boy I saw others smoke and tried it myself, with the usual result—an acute tobaccosis. Should a teacher use tobacco and set a bad example? Practically all my boy friends smoked and a few years later I became a pipe smoker—influence of example. At the age of seventeen years there was a change of environment; I came in contact with boys and young men who did not smoke, and so I quit and bought books: Again influence of example.

Then came a year in the southern mountains in which I saw many things; others I did not see then but "saw" that is, understood, later. For instance, why the mountaineer can use tobacco and alcohol with seeming impunity. He takes these in pure air, without an admixture of infection of all kinds.

Next came college days. At that time few of the instructors set a "horrible example" by smoking. Students with few exceptions, did not use tobacco.

Then came medical college days in a large city under horribly bad air conditions, due to the many sick and diseased who visited the clinics. Here for the first time I saw the vicious circle that exists between bad air and tobacco, and, I might add, alcohol and sedatives and narcotics generally. The building was gloomy and dirty; artificial light was used all day long. Patients spat on the floor; students reacted more or less; they got relief by the use of tobacco, and in turn spat on the floor and thereby set a bad example to the patients who did not hesitate to add their catarrhal and tubercular

sputum. The students reacted still more and chewed and smoked more; more filth meant less care on the part of the patients. And so on, you can readily see this vicious circle.

I myself soon reacted, I felt bad; fellow-students advised the use of tobacco. Instead I frequently bolted lectures and took open air vacations. While sitting on the benches I formulated a theory regarding my own ills and of those about me; I thought I saw why I felt bad and why I felt so well in the mountains a few years before, without having usual winter colds. I saw too why the mountaineers are so healthy and live long in spite of alcohol and tobacco. In the course of time this theory was elaborated; a brief account was given before this Academy in my paper on Coniosis, in 1911.

The following year was spent in a smaller and comparatively clean medical college, and I got along very well. Next came observations on hospital and dispensary cases, noting the influence of enviornment: How poor people taken from the heart of the city promptly recover under good sanitary surroundings. I clearly saw that in order to reduce the ills of a city more hospitals was not the remedy—clean up and stay clean.

Then came one or two minor periods, followed by a prolonged period of observation among the insane, especially at the Northern Indiana Hospital for Insane. Did time permit I should like to tell of efforts made to keep buildings and wards in good sanitary condition. Even the insane with few exceptions can be taught not to spit on the floor. When you see a man so greedy for a chew of tobacco that he will take a quid out of a cuspidor and rechew it with a relish you begin to realize what a hold tobacco has. The same may be said regarding alcohol when you consider the stories of English sailors draining the casks in which bodies of dead English sailors and soldiers were sent home. In cities gutter snipes can be seen picking up stubs, and there are women who apparently inhale tobacco smoke of others with pleasure, at least they make no objection. Suppose Aristotle, Plato, Socrates, or old Hippocrates came back and could see our men smoking and meeting under bad air conditions, what would they say? Has the world gone tobacco mad? Should a hospital physician smoke and set a bad example?

During a year in Europe I acquired a stock of comparative data. It was a surprise not to see any tobacco juice on sidewalks. The only time I saw a splotch in Continental Europe was in front of the medical school at

Vienna—evidently some American student had left his mark.* Moreover men smoked slowly and in moderation and spat very little. Any of you who have travelled in the Old World know the difference in cleanliness between European cities and our own. On getting back home I saw things I never really had noticed before, especially the sort of air we breathe habitually.

In 1900 I took up a systematic study of dusty air and prevalent ill health, and gradually enlarged the scope of inquiry to the domestication and urbanization of man. What this means can in a general way be seen from my various papers before the Academy. This period from 1900 to 1915 may be divided into subperiods:

The period from 1900 to 1906 may be characterized as one of disgust and contempt for the tobacco user, in the light of the harm he does to others, especially to women and children. I held to the old belief that men smoked (and drank) because they wanted to. But I found that to neglect the tobacco users means to get little data, and beginning with 1906 I gave some men and boys considerable attention, trying to find out why tobacco had such a hold and why some could readily discontinue the habit and others only with the greatest difficulty, if at all. Naturally one is apt to pity the man who sees the harm the tobacco habit does to others and yet can not quit, to whom tobacco is a sedative. Some of these men found that by using it "medicinally" a very small quantity sufficed. I believe if there were a high tax on tobacco it would be used very sparingly; old habitues could get along with a small quantity.

Up to the close of 1905 I had been accustomed to call patients who reacted to bad air Dust Victims. Then a bright woman said, "Why not call them Tobacco Victims? The tobacco user is the one who is responsible for air pollution, directly or indirectly." I kept a record for the year 1906 and at least every other patient was what may be called a Tobacco Victim. This included those dust victims who used tobacco, who had ill health on account of infected air. I trust you see the distinction.

In time one gets all sorts of data and all sorts of reasons why a man uses

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*How do you know it was an American student? I was asked after the paper was read. I did not know; I only inferred, for I had not seen a single continental medical student chew and spit. A few days later I spoke to an observant German physician about this. The moment I mentioned "in front of the medical school," he interrupted, "Some American student did that; German students don't chew tobacco; the man who would chew and spit would be ostracized." He thus confirmed my own opinion.

tobacco. In such a study there is the eternal Where, When and Why. If a man says he feels better through the use of tobacco, then the question arises, Why do you feel bad? Why do you feel bad in the winter time, during the closed door season, and feel comparatively well in the summer? Why do you feel well when you leave the city and go on a vacation to the country or spend a winter in the South, where you do not care for sedatives, neither tobacco nor alcohol and can readily do without them?

Where a man smokes and drinks, and one might say eats, is an important question. One realizes it after keeping individuals under observation for a long series of years, particularly men and women who are willing to keep a daily record.

As long as tobacco is used sparingly and produces no evil results, neither in the user nor in those about him, there is no occasion to speak of a Tobacco Problem; the same is true of alcohol. Men who drink sparingly and "can leave it alone" do not create an alcohol problem. But the man who uses tobacco or alcohol sparingly may still be setting a bad example to those who can not use them, that is, in moderation and without injury to themselves and others.

I shall now briefly comment on some of my papers presented before this Academy. This is not a medical paper; remarks will be along the line of Coniosis.

MOSQUITOES AND MALARIA. 1900. The chief reason for writing that paper was to clear the field of work of an affection frequently confounded with malaria, an affection very common in our State, under various names, such as False Malaria, Atypical Malaria, Latent Malaria, a Touch of Malaria, Mal-aria, and others, including "bilious attacks" and "auto-intoxication".

This paper could be re-written, by one who has access to all the old literature, under the title, Indiana: A Redemption from Malaria. It would be appropriate for the Centennial next year. As a companion volume the man with ample leisure could write a volume on False Malaria, that is, dust infection.

Real malaria, that is malarial fever, is transmitted through the bite of the anopheles mosquito; false malaria, or Coniosis, is transmitted through infected dust. The proper season for malaria is late summer and autumn; that of false malaria from autumn through the winter to late in spring,

in other words, throughout the closed door season. In early days malaria dominated everything; there was comparatively little other sickness. Agricultural communities as a rule were healthy if there was no malaria about. Today false malaria dominates wherever people are massed, as indicated in my cases for 1906. The student who desires to study malaria will find little opportunity in Indiana today. I have not seen a case for about thirteen years. But for material for a study of False Malaria Indiana can not be excelled.

Just as malaria has disappeared by cleaning up the breeding places of the rural anopheles mosquito, so false malaria will also disappear when we begin to clean up generally, when we get clean air to breathe. When once an overgrown town begins to become a real city by putting in sewers, paved streets, getting filtered water and a clean high school, a sort of civic center, you can readily see why people become less tolerant of the chewer and spitter and in time of the smoker. The smoker, it should be noted, is usually also a spitter.

If I had time I should like to review briefly several medical papers in which I developed the theory of dust infection or coniosis, and show how one can distinguish between other affections and diseases. One can treat the subject from two viewpoints, medical and biological. Medically, coniosis can be considered as a disease; biologically, coniosis is a reaction. Regard it as a disease and at once there come to mind treatment, medicine, remedy, cure. Regard it as a reaction, then naturally there comes to mind prevention. From the physicians' standpoint, there are two classes of people, those who Take Something and those who Do Something. Some when feeling bad will take all sorts of drugs, including tobacco and alcohol. Others will take a change of environment, of occupation, or of residence. The latter are the wise; there will be more of these when the relationship of cause and effect is once properly understood.

The second viewpoint, the biological, is to regard coniosis or false malaria as a reaction. Now how can a reaction be cured in the constant presence of a cause? Why are there so many isms and pathies, so many pseudo remedies and new ones constantly arising? Looked at in this light you knock the props out from under the patent medicine man and the symptom-prescribing doctor and quack.

COLD AND COLDS. 1903. It is scarcely necessary to comment

on this paper because the tobacco factor stands out all over.* The inhalation of tobacco smoke, especially in those wholly unaccustomed to it, produces a depressed circulation; it may be expressed as "reduced vitality," allowing the germs of infection, of colds and various inflammations, to take hold.

CITY DUST, CAUSE AND EFFECT. 1904. This paper was aimed to bring out the relationship between infected dust and the size and number of patent medicine ads. in newspapers, how the number and size of these depend on the amount of infected dust in the community. Such ads are indicators. In the light of later observations, the list of "dust ads" should be enlarged to include other ads, notably health food ads and ads relating to teeth and skin, similarly tobacco ads.

Tobacco along with alcohol must be considered a sedative. Both give ease. The Chinese get ease through opium; the East Indian through hasheesh. People the world over use certain drugs for ills that accompany life under unsanitary house and town conditions. They are pseudo remedies. The proper remedy is to clean up. This can not be over-emphasized.

Did time permit here should come a review of tobacco ads, how they can be classified. It is interesting to study these. Some are sensible, they are worth studying; on the other hand some are downright drivel, evidently written by old men in their dotage. Which are "the best" tobaccos, cigars and cigarettes? Men who must use tobacco find less need for smoking or chewing constantly if strong brands are used. I could tell how men who used two-for-a-quarter cigars and smoked constantly changed to "tufers" and smoked less, and at a greatly reduced cost.

I could tell of men who "came back," men who had lost health, perhaps not so much by the use of tobacco itself as through the infected air they inhaled while using it. I have in mind men whom I advised to get ease by the use of good air rather than attempt to get ease through tobacco. In other words, offset bad air by good air and reduce the reaction and thus reduce ills. (Tables to show how this works out were given in my paper on The Alcohol Problem, last year.)

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*Those desiring further details can be referred to a number of my papers, such as the Anti-Spitting Ordinance, in the Bulletin Indiana State Board of Health. (August, 1901.) Dust, A Neglected Factor in Ill Health, in the Proceedings of the Indiana State Medical Association for 1904, and to Atypical Cases and Dust Infection in American Medicine for October, 1904.

On the other hand I could tell of women who did not object to the husband smoking, in fact enjoyed tobacco. When you consider under what conditions some women spend their time, perhaps in a flat with bad air, with visits down town, to theatres or clubs or shopping, living under "high tension", which often though not necessarily means a high blood pressure, you can readily see why they get ease from inhaling the smoke of others. It is only one step further for them to take up smoking. Such homes are usually childless; if there is a child the physician may be called late at night to find an acute attack of tobaccosis, especially after a friend has visited the father and they have "smoked up" and filled the house, to which those not accustomed react acutely. The anaphrodisiac effect of tobacco and its influence on divorce and on race suicide can not here be discussed.

THE CHRONIC ILL HEALTH OF DARWIN, HUXLEY, SPENCER AND GEORGE ELLIOT. 1905. This was an attempt to interpret, through their biographies, the ill health of those no longer living, in the light of a study of living people who seemed to have similar ill health. What can the living learn from the lives of the dead? I shall refer to this again.

Parenthetically I might refer to a paper, vintage of 1905, on NEURASTHENOID CONDITIONS, in other words, American Nervousness, presented before the American Medical Association, at Portland, Oregon. On that trip I saw all sorts of people and noted the environment under which they lived, from the simple Indian in the open air to John Chinaman in Chinatown. The Indian in former days, and still in isolation and away from the white man, uses tobacco sparingly. People living under slum conditions use sedatives to excess. John Chinaman at home smoked opium, but since occidental pressure has practically forced him out of that, he has taken up tobacco. From the standpoint of coniosis, that is worse, for the tobacco user is a greater germ distributor than the opium smoker.

1906. At this place I would have to review my Presidential Address on the EVOLUTION OF MEDICINE IN INDIANA. I could amplify the five pages on Malaria into many chapters and similarly the five pages on Tuberculosis. The tobacco habit and the chewing habit are referred to but I did not like to mention these too frequently; it rather grates on the ear. Malaria has practically disappeared from Indiana by cleaning up the breeding places of the anopheles mosquito. Tuberculosis will disappear when our cities are clean. Today one in every seven or eight of us dies of tuberculosis. This rate should be enormously reduced, not by erecting more

hospitals and putting them in charge of doctors who chew and smoke, but by teaching the people the necessity, the importance, of clean air.

The ills of civilization call for more civilization. The man who is constantly seen with a cigar in his mouth or whose clothes reek with tobacco surely does not represent the highest type. The people have suffered much at the hands of the tobacco using doctor, usually a robust individual who uses tobacco because he gets ease. He does not understand the ills of his patients, and so they apply elsewhere; as a consequence he has all sorts of competitors. There are all sorts of isms and pathies, with new ones springing up.

Here should come a review of several papers relating to high blood pressure, a very interesting subject, especially in the light of coniosis. What causes a rise in blood pressure, and how can it be reduced? Why do seemingly robust men drop off suddenly and prematurely? I have at times discussed these things with physicians who smoke and who in their ignorance advised me also to smoke or to become accustomed to bad air conditions, to become acclimated, or, to put it in still another way, to develop an antitoxin, an antitoxin that will enable one to live under unsanitary conditions.

A physician constantly speaks of Case Reports.* In the course of time some of my own short case reports have developed into biographies. They cover a series of years. At first one may be greatly in doubt as to interpreting facts, but in time one sees the reason. For instance, I have in mind a physician who for a number of years practised in a small country town; he made long drives; he had perfect health; he did not use tobacco nor alcohol, had no desire for either. Then he removed to the heart of a medium sized city, that means he exchanged good air for bad air. He began to feel bad; the symptoms of dust infection appeared, finally to such an extent that he was almost disabled. I advised him to get out; others advised him to stay and become accustomed, become adapted. We use the term adaptation to a great extent, but if you look at it properly adaptation comes about in the race, phylogenetically, not ontogenetically. The unadapted are constantly killed off. This doctor concluded to follow the advice of the many rather than of the one. In time he did develop an "anti-toxin." He even took

*To quote illustrative case reports in a short paper is not satisfactory; one cannot go into details and there is a danger of a reader drawing wrong conclusions in the absence of details. Often brief case reports are worse than none, and one may hesitate to give any at all.

up smoking and enjoyed a roomful of tobacco smoke. He did not know until I examined that he had developed a high blood pressure. When I tell you that my own pressure under good air conditions runs from 100 to 110 m. m. while his under bad air runs about 200, you will realize that the life of such a man hangs on a mere thread and that at any time he may break a blood vessel, resulting in an apoplexy, or, if that does not occur, the kidneys will give out. Such men die suddenly as a rule and prematurely.

But the most interesting phase of the subject is the mental reactions, especially such as go under the terms irritability, nervousness and overwork. The efforts some men make to feel better are pathetic. For instance, I have in mind a captain of industry who did his planning in the early morning hours, usually from four to five, in bed. He saw things very clearly at that time. Then he would go down town and soon begin to feel dull and irritable, but would feel better by smoking, and he smoked one cigar after another. The single evening cigar and the postprandial cigar in time increased in number (as the blood pressure went up) until he wanted to smoke all the time. If alcohol were not taboo he would of course use that. When I examined I found he had a blood pressure of nearly 200 m. m. I pointed out that his pressure was due to the life down town, and that if he would reduce that to a minimum, and offset bad air by good air, likely he would have twenty-four hours a day for mental work, so to speak, rather than only one or two hours in the early morning, and that instead of tobacco being a stimulant to him during the day, which enab'ed him to think, it really did nothing of the sort; what it did was to lower the tension and the mind no longer ran riot. It enables him to pick out thoughts and ideas that he had seen very clearly in the early morning, after he had had no tobacco at all for a number of hours.

The newspaper cartoons, such as of "Abe Martin" and "Roger Bean," are interesting. The one might represent the low pressure type in the country with a family of children; he is seen only occasionally with a cigar. The other, Roger Bean, might represent the high pressure city man, with a cigar in his mouth almost constantly and usually childless. Race suicide and the use of tobacco under crowded conditions go hand in hand.

In early days Uncle Sam was represented as a lean, lank country man. The cartoonists nowadays are filling him out, in other words, making a hearty, robust Uncle, one is almost inclined to say grandfather. To the initiated he is a "high blood pressure case," with attendant ills, including race suicide.

THE INFLUENCE OF ENVIRONMENT. 1907. This paper appeared in a brief abstract; it took up in detail some of the things here mentioned. I repeatedly refer to John Chinaman who is adapted to live under slum conditions, who thrives in large city slums where even the white man can not live. Now if we look at it from the proper angle, we may conclude that our educators are reducing us to the condition of John Chinaman. They give no attention to the air conditions under which children live and meet. Instead of having teachers who react and who can tell by their own senses whether air conditions are good or bad, who are living barometers or thermometers, our schools are supplied with teachers of the robust kind (but who nevertheless react and readily use tobacco, as a sedative, to get ease, to feel less irritable). Under unsanitary conditions the susceptible are constantly weeded out, killed off, and what remains? In the end the John Chinaman type survives, a type which thrives bodily but at the expense of mentality; all the energy being required to ward off infection, leaving nothing for the brain.

Indiana today is stationary in population, as I attempted to show a year ago. It is due mainly to bad air conditions which lead to the use of sedatives and narcotics. As long as a country is thinly settled, alcohol and tobacco can be used with impunity, but under massed conditions these become racial poisons. The individual who reacts wants a sedative and (as I attempted to show a year ago) there are many that can be used. The most universally used today is tobacco. Tobacco leads to the spitting habit, alcohol not.

Here I shall not take up the statistics of our sedative and narcotic bill, the cost of tobacco and alcohol, and opium and patent medicines, and the various expenses that accompany life under unsanitary conditions, including needless doctor bills, the increased expense for fuel required to feel comfortable under bad air conditions, the desire for "overheated" houses, public buildings, railway coaches and trolleys, etc. . It must suffice to say the cost runs into the billions of dollars annually in our country.

FLORA OF CASS COUNTY. 1908. I mentioned in the beginning that the tobacco factor can be traced into practically every paper I have given before this Academy. Does that apply to the flora of a particular region? People who feel bad want ease, they want relief from distressing symptoms; they will experiment, they will try anything and everything. An old belief was that every plant has a use, particularly a medicinal use, if we could only discover it. Today we know this is not true, that very few

have any medicinal properties at all, and that practically none cure; at best they can give but transient relief. Relieving is not curing. Our native plants are chiefly remarkable in what they will not cure. The man who gets the most benefit is the one who gathers them. Some of you may recall O. Henry's story.

BIOGRAPHY AND THE INFLUENCE OF ENVIRONMENT. 1908. Short case reports there cited have been continued into biographies. You will readily understand that the longer a history, a biography, is continued the more valid the conclusions that can be drawn. Two of the individuals mentioned have since died, and died just as predicted, not to them however. The value of a theory is in enabling one to predict. By the way, Case 3 was a man who could not do without tobacco. He had used it all his life. He readily saw my reasoning, how, if he did not harm himself, he at least harmed others. He attempted to quit but found it impossible; he had to use a little tobacco, shall one say medicinally?*

THOUGHT STIMULATION. 1909. The reference to tobacco is very brief, but there is a relatively long mention of high blood pressure. This is a very interesting phase of the tobacco problem, especially to those who use their brains rather than their hands to make a living. Under what conditions can a man work at his best and when is he disabled? What will tide him over? I have already referred to this.

Years ago I had a discussion with a physician who did more or less surgery. He was a warm advocate of tobacco; even advised me to use it—the old story of "Take Something" in place of "Do Something." Whenever he did work under high tension tobacco soothed him, he said. When he had an unusual case he would be under high tension, very nervous, and tobacco would steady his nerves, he asserted, or, in other words, steady his hand when he operated. On investigating I found this state of affairs:

Ordinarily he was not under "high tension," but this was produced when he locked himself in a small room full of dusty books for several hours, looking over the latest literature regarding such operations, and at the same time filling himself with infected dust. Then his mind would run riot during the night, he was sleepless, of course thinking about the operation in the morning.

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*Coming down on the interurban with me was an old patient. We had a discussion of dust victims and tobacco victims. He is a low pressure man. His observations bore out my own. The advantage of discussion over a printed paper is that one can answer questions and make obscure points clear.

He would be practically unfitted for work but for the steadying effect of tobacco. It acted as a sedative. Why not prevent the reaction and make the use of tobacco unnecessary? When you point out these things you knock the props from under the tobacco argument. Doctors are notorious smokers. When they meet, especially at a banquet, the air is usually full of smoke, so full that you can not see across the room. Naturally those who do not smoke stay away, as they do from other "smokers."

In a general way in youth and up to middle age individuals may be grouped under three classes according to the blood pressure—low, medium or high, under unsanitary city conditions. At middle age and after there are really only two groups, those with a low pressure and those with a high pressure. Ordinarily we speak of the action of tobacco on man; in reality it is the reaction of man to tobacco. When the low pressure individual is exposed to tobacco smoke his pressure declines still more, his pulse may become imperceptible, he feels bad, and he gets out: He is a victim of tobaccosis. On the other hand is the high blood pressure individual: To him tobacco smoke may act as a sedative, it lowers the tension, he feels better. He is the one who attends "smokers;" he does not object to tobacco. But as a rule he does not realize the significance of high blood pressure and the danger he is in, how his very life hangs on a thread.*

Moreover mental changes are marked. The low pressure man is stupefied by tobacco smoke, he can not think. The bright things he might have said come to him the next day. On the other hand the high blood pressure man whose mind is constantly running riot is steadied. Such a statement taken without the context might be considered as a plea for the use of tobacco!

How do these two classes, the high and the low pressure, react from the standpoint of coniosis under infected dust conditions and without tobacco effects, say in the poorly ventilated church, as during the closed door season when some leave early because they feel bad? As a general rule those who leave "deathly pale" are low pressure with the pressure still further reduced, while those who go out with flushed face are high pressure, with the pressure heightened. We thus see the two-sided effect of bad air, air with infected dust.

*In my search for original data I have questioned many physicians, including both smokers and non-smokers, as well as an occasional chewer. Strange to relate I have met men whom I suspected to have a high blood pressure who refused to have the pressure taken—they preferred to live on in ignorance and smoke. The average physician knows as little about the effect of tobacco as the man on the street who has no education and in whom one does not expect any matured opinion.

The subject of thought stimulation is intimately connected with the subject of the Air of Places, a subject on which Hippocrates wrote 2,500 years ago, but that was long before the days of bacteriology. The old chemical standard for purity of the air was based on the amount of carbonic acid gas. From the standpoint of coniosis it is the amount of infection in the air that counts. Need I again refer to the role of the tobacco chewer and spitter and smoker?

PLANTS AND MAN. 1910. This was a paper made up largely of analogies, tracing living conditions between plants and their "ills and diseases" and of man and his ills and diseases, and the need of clean air, need of placing a man under good surroundings.

Today we hear much of eugenics, of the influence of heredity. It is a very important subject. But still more important is euthenics, the influence of environment, because we have little control over heredity but we have a far reaching influence over our environment. If a man does not feel well, is ill at ease under a given environment, he should change it; instead of getting drugs, or advice about the use of drugs, he should understand the situation so he can Do Something rather than Take Something. But because people are unwilling to pay a doctor for his time but are willing to pay for his medicine, you readily see the result. The less a physician tells his community about unsanitary conditions, the smoother his sailing, and the better for his purse. (Naturally when a physician offends and antagonizes chewers and spitters they stay away, ditto the man who smokes and drinks; when they do apply they may be so far advanced in actual disease that the student of ill health can do little for them, he may have in mind the opinion or verdict of the mechanical engineer: Not worth while, consign to the scrap heap; but he does not say that aloud.)

Where the medical man keeps still and says nothing, the newspaper reporter is apt to run wild. From simple statements "The health of the city is good," there soon appear claims, at a time when there are few cases of "contagious disease" and few deaths, of "The healthiest city in the State." At the same time a city may be "full of ill health," of people who complain, who are neither actually sick and yet are not at all well. The newspaper itself may be full of patent medicine ads, for ills that are indicators of unsanitary city conditions. Patent medicine men are shrewd, they advertise only where there is a demand for their wares, for their nostrums.

To the physician and especially to the student of prevalent ill health there

are all sorts of symptoms of diagnostic import: Does an applicant for professional service use sedatives and narcotics (alcohol, tobacco, opium, etc.) and use them to excess, or, on the other hand, does he use stimulants (notably coffee and tea)? What does such use indicate? The statement is sometimes made that tobacco is the poor man's friend, that after a hard day's work he enjoys his pipe; it calms him. But when you study the poor man and the conditions under which he works, you can see that the great trusts may well make an effort to keep tobacco as cheap as possible. Offering Mr. Common People a cigar, especially one with a colored band, only too often makes him tolerate what are really intolerable conditions. Men working for some of the great trusts twelve hours a day, seven days a week, may be even too tired to smoke. Tobacco is also a great solace to the soldier in the trenches; it makes him contented, it dulls his mind and keeps him from thinking.

CONIOSIS. 1911. As already mentioned, this paper is a general statement of the dust theory. My time limit is running to a close and I must refer you to the paper itself, which among other things treats our Triad of American Diseases (catarrh, dyspepsia, and nervous prostration) as reactions, similarly regarding blood pressure changes. The term disease at once brings to mind treatment, medicine, while reaction brings to mind prevention.

CONIOLOGY. 1912. This paper was a plea for a new science and the need for an institution for working out problems. The dust particles emitted by the tobacco smoker are included.

In 1913 I was unable to present my paper on RACE SUICIDE, in which the subject was also traced into the schools. There I asked, as this paper has already asked, regarding the use of tobacco by the teacher: Is he justified in using it? If he feels cross and irritable, shall he take something or do something—seek better air conditions, the proper construction of school buildings and proper ventilation and general cleanliness? Child mortality today is enormous. It should be greatly reduced, many bright children who now die could be saved to a life of usefulness. There is much truth in the old saying, The good die young.

THE ALCOHOL PROBLEM IN THE LIGHT OF CONIOSIS. In my paper for 1914 the Tobacco Problem comes up on every page, and I believe after the remarks I have made you will readily see it. I mentioned how on entering medical school I found horribly bad air conditions. The drinking water was equally bad; it was raw muddy river water. A number

of students contracted typhoid fever. Some who had never used beer resorted to clean beer; which is the greater evil?

The first duty of the prohibitionist should be to give the people clean water; it is useless to argue with people who are compelled to drink muddy water. The next step is to give people clean air. That takes away the craving for a sedative, be that tobacco or alcohol or opium.

This paper properly should close with a questionnaire, asking for more data, especially from men who lead a mental life. Why do you use tobacco? Why do you not use it? Under what conditions do you demand it? When do you not care for it? Are you keeping down a high blood pressure by the excessive use of tobacco? Can you stop long enough, under bad air conditions, to find out what your real pressure is?

It is difficult to get good data; observations should cover at least one year. I am not inclined to draw conclusions from case reports which cover a period of less than a year, and as already mentioned, the longer the series of years, the more valuable data become.