

THE ALCOHOL PROBLEM IN THE LIGHT OF CONIOSIS.¹

ROBERT HESSLER.

The alcohol problem is a very important one, so important that it has entered politics. Men vote wet or dry, and women are seeking suffrage. If women vote and vote "dry", will we have prohibition? Will the passing of a prohibition law free the State from the alcohol problem?

There are all sorts of factors that enter into the question, and there are all sorts of problems connected with the alcohol problem. Here I desire to call attention to one that is usually neglected, the dust problem or the bad air factor. (How to develop the subject in a 20-minute paper is in itself a problem. Technical details must be omitted.)

The study at first was one of individuals and then one of the family, and finally of the entire relationship. I shall show a number of charts. Some represent several hundred individuals and are so full of details that it would require considerable time to go over them. Most of these charts will be referred to very briefly in order to give as much time as possible to the deductions or conclusions.

A word regarding the charts that were shown: On account of the difficulty of reproducing them properly in colors they are omitted here; only one is given to illustrate the general idea, how the data were diagrammed. Perhaps the few references to charts will be understood in the light of the diagrams. In the original charts, or genealogies, males were indicated by blue lines; females by red lines. Black lines represented members whose sex was unknown. Short lines indicated individuals who died young. The children, sibs, are given in the order of age, beginning at the left.

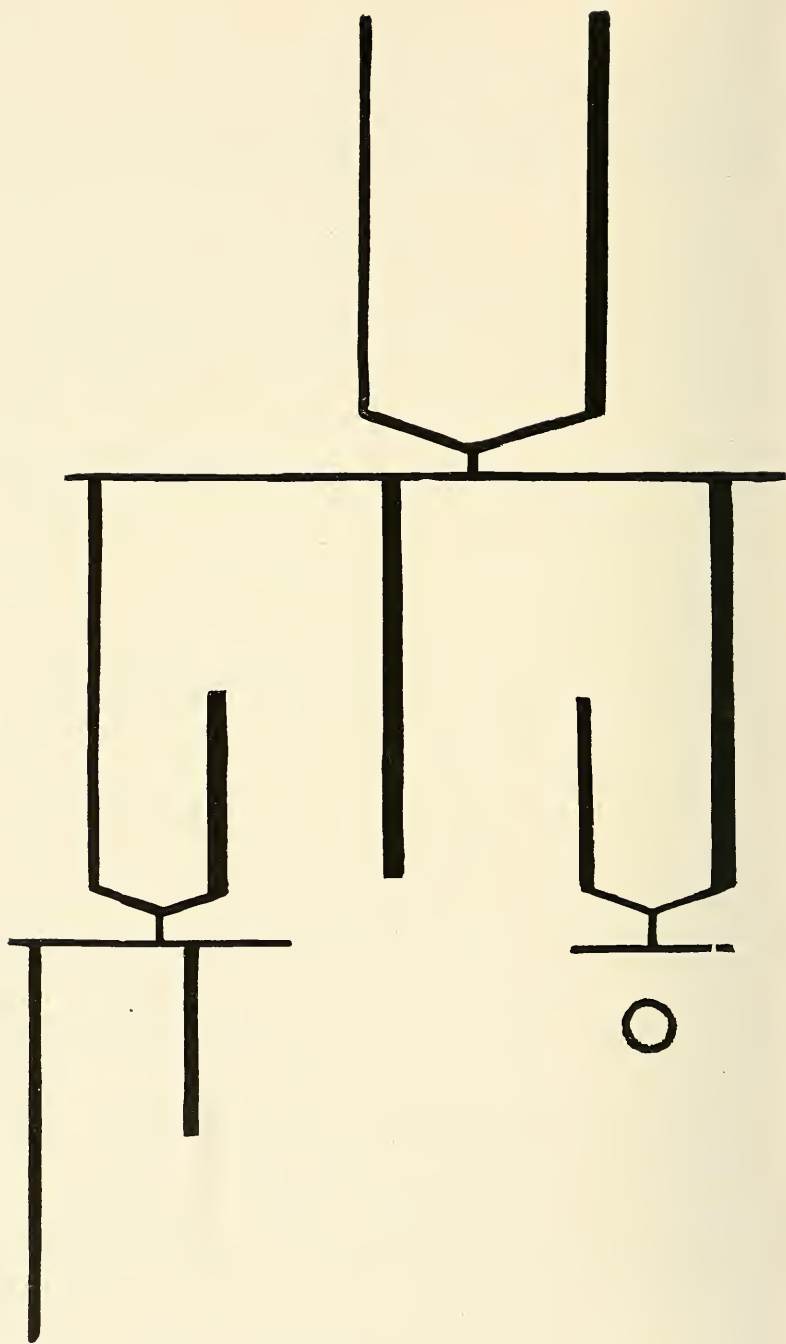
Intermarriages are shown by short lines, drawn upwards.

No offspring (that is, race suicide,) is indicated by a circle.

The accompanying diagram represents three generations.²

¹Coniosis. For an explanation of the term and of the theory of Coniosis see Proc. Ind. Acad. Science, 1911.

²The original blue lines (males) are here represented by light lines, and the red (females) by heavy black lines.



1. A father and a mother.
2. The three children: a son married (with one son living and one son dead); a daughter, unmarried; a daughter married but childless.
3. The young generation.

A number of charts were shown, some of five or six generations and representing several hundred individuals. As a rule those living under simple life conditions, as in the Northwest, still have old time fertility, while those living in towns and cities show a gradual decline and even total extinction.

Among charts shown may be mentioned that of a family where for several generations, after coming to America, the sibs of each generation numbered about twelve. The parents being two, a family of twelve children of course means a six-fold increase. The moment the more recent descendants began to live under town and city conditions, the death rate increased, many did not reach maturity at all, and some of the living have no offspring, race suicide appeared with a vengeance: also narcomania, i. e., the desire for strong drink and narcotics.

Why do men drink? There are all sorts of reasons. The three chief classes of drinkers are:

Social drinkers, keeping up old-time customs.

Habit drinkers, some think they require an appetizer; others, something to settle their dinner, to aid digestion, etc.

Relief drinking, as where a man feels bad but feels better, or thinks he does, after a drink or after several in succession. It is with this class that this paper is mostly concerned. Such men as a rule "pour it down." they are not particular about flavor or taste, they drink for the effect; they do not take strong drink as a "stimulant," just the opposite, as a sedative. Writers usually speak of this sort of drinking as "Misery drinking." Relief drinking is a better name in most instances.

We must constantly ask of the man who drinks or who drinks to excess, Where, when, why?

The man living in isolation, the moonshiner, or the farmer, who can drink alcohol with impunity, may find it a powerful poison when he removes to the city. Alcohol and infective matter in the air (and of course also in water and food) make a bad combination. The body may be unable to overcome their combined influences.

Reliable data concerning people who use narcotics are difficult to ob-

tain. If one asks directly many become offended. Some hesitate to speak of the "black sheep" in the family; and the black sheep themselves may magnify the failings of others. Often black sheep are not as black as painted. Without knowing the facts in the case, we should not be too severe on the man who drinks or the man who requires the use of tobacco for his well-being, as he believes.

A large chart was shown of six generations since the original English immigrants, the relationship now consisting of several hundred, but only a few branches are more or less known.

Here we are at once in the midst of things. There are all sorts of deteriorating factors, including narcomania. The alcohol problem crops out all over one-half of the chart.

Some remember the days of "free whiskey" when everybody drank and when it was no disgrace to be drunk. Today there is a different sentiment and one may well ask, Why does an apparently sensible man drink and drink to excess? Why does he drink to excess occasionally or not quite to excess at all times? To say a man drinks because he wants to is not a satisfactory reply.

Many patent medicines are full of alcohol and their effect on the body is that of alcohol. Some men who are ashamed to go into a saloon, or to call for plain whiskey, use nostrums that are compelled to pay the whiskey tax. Such preparations are used because they give ease; the man or woman using them "feels better". As in the case of plain alcohol, the dose must gradually be increased, or more frequently repeated, to get the desired effect, that of a sedative.

Many of the subjective complaints of the men and women who use alcohol are similar to those of neurasthenics and hysterics, so called. Many complain of "fear, moods, depression, sleeplessness, restlessness, tremors, general weakness, tearing pains, anorexia, palpitation, etc." According to my observations many individuals who are regarded as neurotics or neuropathics are dust victims, and because narcotics give relief, they use them. A study of the chart will show this.

Red squares in the chart indicate a victim of narcomania. At times the habit of using alcohol or morphia or even aspirin was acquired through a doctor's prescription. Physicians nowadays are careful for whom they prescribe narcotics; they fear habit-forming drugs. Many physicians themselves are said to be victims; long and irregular hours, loss of sleep,

etc., including attendance on patients living in unsanitary homes, even their own ill-ventilated offices, may lead a doctor to seek relief.

A green square indicates country life, or good air life, in contrast to the yellow, or polluted city air life. The half and half squares at the bottom mean that some members are living in the country, others in villages, town and cities.

Black lines indicate no definite data regarding individuals.

There are eleven children in the first generation in this country. Today the descendants of one seem to outnumber those of all the others; this was a man who married a strong-minded German catholic. The chart showed that these lead mainly a simple country life, with large families and a practical absence of narcomania.

TIME SPENT IN GOOD AND IN BAD AIR.

Primitive man	0/24	0/7	0/365	
Hunter and trapper	0/24	0/7	x/365	
Squatter	0/24	0/7	x/365	
Farmer	0/24	x/7	x/365	
Villager	x/24	x/7		{ 8 hours of labor. { 8 hours of recreation. { 8 hours of sleep. Under what air conditions?
Townsmen				
Cityman				
Slum dweller	24/24	7/7	365/365	

This chart (table) is an attempt to express in a general way time spent in good and in bad air. At one extreme is the savage, living say in the mild tempered South Sea Islands, with good air at all times; at the other extreme is the slum dweller with 24 hours of bad air, 7 days a week, 365 days a year.

Air conditions under which people live can not be considered collectively: each individual must be studied separately. Ordinarily we assume that a farmer is leading the good air life, but when the farmer comes to town every Saturday, or perhaps daily in spring and fall, and loafs for hours on street corners, with clouds of infected dust blowing about, he may carry home enough infection to last him for days.

The ideal of the union labor man is the eight-hour day. But we must question where? Under what air conditions—good, bad, indifferent—

are the eight-hour periods spent? Is the recreation time spent at home in the suburbs making garden or in outdoor air; or is the time spent in the heart of a dirty city, in a saloon, pool rooms, or loafing on the dusty street corners? The five-cent theater habit is only too often accompanied by the bad habit of "going out to see a man" and chewing a clove after it. In short, the time spent in recreation under bad air may be the real factor for inefficiency and premature breakdown and not the work in a clean and well-ventilated shop.

Eight hours of sleep: In what sort of bedroom? With good air, free ventilation? Or closely housed and with perhaps no daylight coming into the room at any time?

The slum dweller of course represents the worst conditions in all respects. Naturally the weeding out process is actively at work. To see the end results at their best one must turn to the overcrowded cities of China and India—with bodily adaptation at the expense of mentality. Our unsanitary cities in time produce a class of people little different from John Chinaman, with all that that implies, including the use of narcotics and sedatives, if not opium then tobacco and alcohol, or cheaper coal tar preparations.

THE WHERE, WHEN, WHY OF DRINKING.

A question, or rather several questions, a student must constantly ask is, Why do men drink? Why does an apparently sensible, decent sort of man have a craving for strong drink? Why do some demand it more or less constantly, some periodically? Under what conditions is the craving most marked? In short, Where, When, and Why do men drink?

Here are a few representative cases. The figures are of course only relative; one can not express the complex life of a man mathematically, there are too many exceptions.

GOOD AND BAD AIR AND THE DESIRE FOR DRINK.

Mr. W., farmer	0/24	0/7	4/365	(4 times a year to town = sick)
Mr. H., farmer	0/24	1/7	75/365	(visits to church and town)
Mr. X., professional	8/24	6/7	290/365	(15 days in wildwoods)
Mr. X., businessman	8/24	6/7	300/365	($300 \times 8 = 2400$ out of 8760 hours)
Mrs. X., the wife	x/24	1/7	75/365	($75 \times 2 = 150$ out of 8760 hours)
Mr. B., mechanic	24/24	7/7	365/365	("Always thirsty")

Explanations of the chart (table) must be brief.

Mr. W. leads a quiet isolated life on the farm; has retired from active work; is well-to-do. He lives in good air twenty-four hours a day. In the summer when doors and windows are open he attends a country church; in winter when doors and windows are closed he remains at home; says he can not bear close air. In recent years he comes to town about four times a year; formerly he got sick on or after every trip, "would get faint and dizzy and feel like falling," and friends only too often offered him a drink of whiskey, to which he was opposed. When it was pointed out to him that he was a marked dust victim he in time learned how to guard himself; he no longer comes to town when dust clouds blow about and spends little time in dusty buildings.

Mr. H., an active farmer, lives in good air twenty-four hours a day, that is as far as infection, found in city dust, is concerned. Sundays he attends a village church. Occasionally he comes to town, perhaps fifteen times a year; his absences from home he thinks amount to about seventy-five a year, varying from an hour or less to several hours. Formerly when he came to town he had an almost irresistible craving for strong drink, i. e., on dusty days, as I soon found. He felt bad, was miserable; he learned that one or more drinks made him feel good, and only too often the one or two drinks increased to a sufficient number to make him drunk; and then there was great remorse and he vowed never to drink again. But until he learned *why* he had such a craving, how it depended on inhaling infected dust, he only too often could not resist the use of alcohol. In the country when he was tired and would "spit cotton," water would quench his thirst, but the phlegm due to spit dust required something stronger "to cut it."

Mr. X, a professional man, works in the heart of a city eight hours a day for six days in the week. He wants to smoke all the time and frequently wants a drink; at times he is on the verge of being drunk. The desire for strong drink is almost irresistible "when there is strong mental strain", as he supposed, but as a matter of fact it was at times of close confinement to ill-ventilated offices and public buildings. Now the most interesting phase in this man's history, the where, when and why, is this: For two weeks or so every year he goes off to the northern wildwoods; then he has no desire for strong drink, scarcely touches it, and there is little desire for smoking, that is, there is no excessive smoking.

Mr. X, a business man, working, as he believed, "under high pressure."

Certainly he was always "steaming up," constantly smoking and many times a day taking a drink. He did not give me an opportunity to study him fully but I found he had a blood pressure of over 200 mm., nearly twice the pressure an open air or pure air man carries. To such men alcohol gives relief: their drinking must be looked upon as "relief drinking." When he came to understand the danger from a high blood pressure he wanted to know what to do. The proper thing is to reduce hours indoors, offset bad air influences as much as possible by good air influences. But he was the sort of man who took something rather than do something. Is there any drug that will keep down the pressure that can be taken in place of alcohol? Why yes, a host of them. The question here arises: To what extent shall a physician recommend the substitution of one drug for another? Is any drug at all harmless? To depress the bodily activity, to depress the blood pressure artificially is not good medical treatment.

In connection with this business man should be mentioned his wife. She had chronic ill health when she first came to me. She was "low pressure," "could not keep up steam" in fighting off infection. She now lives up to *good* air advice and has reduced her ills, her reactions, her symptoms, to a minimum. There are perhaps seventy-five annual "exposures," as by going to church, shopping, theater in summer, etc. If the average length is two hours, there would be about 150 hours of more or less polluted air inhalation in a year.

The husband stays at home Sundays in good air, but his eight hours of weekday exposure amount to at least 2,400 hours a year, out of a total of 8,760 hours.

Mr. B. is a mechanic, almost a "mere laborer," who works with his hands; little mentality is required. He lives in the heart of the city over a store where rent is cheap. He works in a dirty shop. He gets bad air, air contaminated by infection, twenty-four hours a day for seven days a week and for nearly the whole year, the only time he gets good air is when four times a year he and his family visit "the old folks on the farm." This man is "always thirsty;" he "always needs something to cut the phlegm." Many patent medicines full of alcohol serve the same purpose as alcohol in the form of whiskey, brandy, gin, etc. His only objection to beer is "It takes too much to get relief." Such a man will scarcely listen to a physician who tries conscientiously to help him. The

evolutionist will say nature still weeds out those who can not resist using alcohol excessively.

There are all sorts of reasons why men drink. I am here only calling attention to a neglected factor. Alter the environment or remove a man from the abnormal environment and, unless he has deteriorated too far, he will likely cease to drink or to drink to excess.

Many of you are teachers. Apply the formula to yourselves: Under what air conditions do you spend your time? How good or how bad is the air under which you work, and must work, and the air at home and on your vacations? The teacher has a limited number of hours a day at school, with two days of rest a week, with holidays now and then and an annual vacation of several months—time for lymphatics to empty themselves, ready for the next season's work.

At what time do you feel "fagged out?" At what time do you feel the need or the desire for a sedative (tobacco, alcohol, opiate, coal tar preparations, etc.)? When is there a call for a stimulant (coffee and tea especially)?

Today we hear much of efficiency. Under what conditions is a man most efficient? To what extent is the air factor considered in estimating efficiency? The above formula might perhaps be of service in working out some cases; and similarly in the matter of longevity. How many reach a possible hundred out of the many born in country, village and city? Is a relatively short "high pressure life" of forty-five or fifty more desirable than a longer life under less strenuous conditions? Is fifty years (or often much less) better than "a cycle of Cathay?" Is the attempt to become adapted to dirty cities worth while—when it is at the expense of mentality?

In a study of the alcohol problem and its evils one is constantly reminded of the fact that man is an outdoor animal and that he thrives poorly in houses and cities. Geologically speaking it was only day before yesterday that he attempted to live in houses; yesterday in cities; and today he is undergoing the weeding out process as never before. Man of course will not die out, there will not be complete race suicide.

Man afflicted by the ills of domestication and urbanization seeks relief. There are two methods:

Take something, usually some drug that gives temporary relief.

Do something, alter an unfavorable environment, or if that is not feasible, remove to a better one.

Only the physician knows how prone people are to take something and how they hesitate to do something.

The history of medicine itself is one long search for panaceas, for "cures." We are only beginning to realize that the search is futile. We more and more see that the proper method of securing survival of the best is to annihilate the pests and parasites that prey on us. Just as weeds and pests do not thrive under clean culture, in the same way disease germs do not thrive in a clean city among clean people; quack remedies are as useless in the city as they are useless on the farm.

There are always some who will survive most adverse conditions: this can be seen in the crowded unsanitary cities of China¹ and India, and in our own slums. But such a type is not what the believer in a better humanity has in mind. People who constantly battle with infection have so little mentality left that they are but little above unreasoning brutes. Fittest to live under an unsanitary environment, abnormal in the light of man's past history, does not mean best mentally.

Man in his search for cures in time has found means for relief. He has discovered a series of substances that give ease: they may be grouped under the name of narcotics.

Many plants have such properties, from the poppy with its opium and codeine and morphine, down to mild ones like hops. In time man has learned to prepare alcohol, varying in strength from mild, as in fermented milk and fermented honey and fruit juice, up to distilled alcohol in its pure form.

Alcohol is an old remedy. It constantly appears in new disguises, under the fanciful name of some nostrum or patent medicine. Recently a number of so-called synthetics have come into use, made from coal tar. Their number is constantly increasing. An individual in search of ease soon learns which suit best: unfortunately many are of the habit-forming kind.

NARCOTICS OF THE METHANE SERIES.²

Hydrocarbons: Pentane, Octane.

Hydrocarbons, unsaturated: Amylene, Pental.

Alcohols: Methyl, Ethyl, Propyl, Butyl, Amyl. Amylene hydrate.

¹Even the supposed adapted or immune Chinese have their ills and their means of transient relief. Now that the opium trade is imperilled they will likely resort to the white man's remedies, alcohol and tobacco and synthetics.

²This list was compiled from Cushney.

Ethers: Ethyl, Ethyl acetate, Ethyl nitrite. Amyl nitrite.

Aldehydes: Paraldehyde, Methylal, Acetal, Sulphonal, Trional, Tetronal.

Ketones: Hypnone.

Esters: Urethane.

Acids: Butyric, Bromacetic, Chloracetic, Formates, Propionates, etc.

Halogen Substitutions: Chloroform, Ethylene chloride, Ethylidine chloride, Chloral, Buthyl or Croton Chloral, Chloretone (Trichlorpseudo-butylalcohol), Chloralamide, Chloralose, Bromoform, Ethyl bromide, etc.

Ethyl alcohol is the alcohol used for drink in the various alcoholic preparations. Chemically and pharmacologically alcohol is in suspicious company, among chloroform, chloral, ethers, and so forth. Some preparations are solids, as chloretone, whose chemical name ends in alcohol.

There is an almost endless variety of synthetics and new ones are constantly appearing "Made in Germany"—and we are the best customers.¹

One can scarcely speak of any as real "cures," but they are palliatives; they give ease from the ills of civilization. The more people are massed under unsanitary conditions the greater the demand for them, indeed the sanitary condition of any community can be estimated by the demand for such remedies.

In connection with this Methane series should be mentioned the Aromatic series; among the chief are: Terepene, Menthol, Guaiacol, Resorcin. Phenacetin, Lactophenin, Sedatin, Phenocoll, Salicylic acid, Salicylates, Salol, Aspirin, Salophen, Analgen, Antipyrine, Salipyrine, Hypnal, Cocaine, Eucaine, Novacaine, Holocaine, etc.

These have a reputation for relieving pains and aches variously referred to as rheumatic or neuralgic, including many forms of headache. Although some are obtained from plants, the great majority are synthetically prepared from coal tar: new ones are constantly appearing.

As already mentioned, individuals differ greatly. Those who do not

¹Twenty years or so ago, when engaged in work among the insane, I tried many of these preparations. At times sheriffs who brought in new patients preceded me in experimenting, as where alcohol was given to make obstreperous lunatics tractable; more than once patients were "dead drunk" and of course offered no resistance.

Chloral, paraldehyde and sulphonal, etc., were used when patients were restless and sleepless; some readily acquired habits and demanded a "nightcap." Chlor form and ether were of course used in surgical cases.

One of the most interesting of the series is Amyl nitrite a vasodilator much more effective than alcohol, acting almost instantaneously. Among the insane it was used in cases of continued epileptic convulsions, often with doubtful results.

get the desired relief or ease from alcohol, or who have enough pride not to resort to its use, or who fail to get relief from opiates, or who fear taking such on account of habit-producing effects, may find a suitable remedy among this Aromatic series.

That some acquire the aspirin habit has already been mentioned. There are all kinds of dope fiends and new ones appear every now and then.

I have not looked up the statistical aspects of this matter. In the case of the most commonly used narcotics or sedatives we all know that the annual bill for alcohol and tobacco in our country is enormous.

It appears that in 1912 the United States used 135,826,000 gallons of distilled spirits, and 1,925,367,000 gallons of beer.

There may be some justification for the use of beer, a mild alcoholic drink, but there is little to be said in favor of strong alcohol, of which only a few ounces can be consumed by the body in 24 hours. It seems some European countries have diminished the consumption of strong alcohol, while in our own country the amount consumed seems to be increasing. With increasing sanitation in old world cities there is less demand for strong drink, less need or demand for relief or misery drinking. Although there is a greater consumption of alcohol in our own cities, there is less actual "drunkenness," using the term in its old significance, i. e., being completely overpowered.

A chart with hundreds of individuals was shown where race suicide was strongly operative, and, although there was narcomania, there were practically no individuals who drank to the point where they would fall into the hands of the police.

Although at times a family may be reduced to one individual, that individual may be worth more to the community than half a dozen in the slums. The fable of the fox and lion applies.

In contrast to the last chart was shown a large one of a family which is in the main still rural, and yet there is gradual disappearance of the old colonial stock. There are all sorts of factors for race suicide. The bad air factor is usually overlooked. Domestication and urbanization and consiosis are usually not considered.

The botanist constantly speaks of "naturalized plants." In the case of annuals it does not require many years of observation to determine whether a plant is really naturalized, that is, whether it can continue itself successfully year after year.

From a study of many family histories, one may question whether the white man, the European, is truly naturalized in this country.

How the use of alcohol and opiates crops out in biographies, also the matter of race suicide, is an interesting subject. In the light of my study of people who drink it is not difficult for me to understand why a man like Poe drank.

The family chart of Herbert Spencer is interesting (chart shown). He was a dust victim, and so were his parents; he was the single survivor out of nine children. He experimented more or less with narcotics and sedatives in his search for relief from symptoms of ill health.

THE EVOLUTION OF DRINK AND NARCOMANIA.

Hunting and Fishing Stage:

- "Home life" very simple.
- Absence of fermented drink.
- Use of vegetable narcotics at ceremonials and festivals.

Pastoral Stage:

- Nomadic tent life.
- Use of leather bottles and fermented milk, a weak alcoholic drink.
- No special desire for "stimulants" under simple life conditions or by outdoor people.

Agricultural Stage:

A fixed home implies domestication, the ability to live under indoor conditions for successive generations.

Domestication means:

- Re-breathed air
 - Soil pollution
 - Water pollution
 - Stored food
- } Attended by "ills of domestication."

Many "incurable ills" or "diseases" are preventable reactions.

Invention of pottery and fermented drinks from fruit juices and grains, wine, cider, beer.

Use of alcohol for relief from disagreeable symptoms. ("Symptomatic treatment" survives today).

Additional use of various narcotics: Opium, henbane, hasheesh, etc.

Handicraft Stage:

Town and city life means urbanization.

Great increase in house and town ills.

The "ills of civilization" are reactions, largely preventable.

International commerce and introduction of cosmopolitan diseases, that is, specific diseases of definite etiology.

The search for remedies or "cures" for ills and diseases incident to house and town life.

Discovery of distilled spirits.

Alcohol regarded as a panacea, first by physicians, then by the people.

Names used: Aqua vitae, Au de vie.

The role of religions, favorable or unfavorable to alcohol.

Severe weeding out and adaptation of humanity to unsanitary city conditions.

Tobacco (introduced into Europe about 1586) a factor of increasing importance in prevalence of ills and diseases and race suicide.

Industrial Stage:

Cities and manufacturing towns the graveyard of man.

Constant need of fresh country blood.

Overcrowding and lack of sanitation = prevalence of specific diseases

Daily and constant exposure to dusty air = prevalence of coniosis.

Excessive use of strong drink and "dope" = narcomania.

The Alcohol Problem a serious one in dirty cities and complicated by the tobacco habit = the "Tobacco Problem."

The tobacco habit produces a "spitting habit" and sets a low standard of cleanliness.

"Spit Dust" is responsible for the prevalence of so-called "American Diseases."

Catarrh, dyspepsia and nervous prostration are mainly reactions to an abnormal environment to "bad air."

Speeding automobiles an important factor; make clouds of dust.

Blood pressure an important factor in the ultimate fate of the individual.

Alcohol, sedatives and narcotics give relief and lead to "relief drinking," to inebriety and drug habits.

Such a chart could be extended indefinitely; here are some additional observations:

Pure air people are temperate people.

People living in good air do not crave alcohol or dope, not even a cathartic pill.

The number of saloons, tobacco shops, drug stores, of patent medicine advertisements in newspapers and of doctors, shows an unhealthy state of affairs. Another sign of national decay and race suicide is the reversion to primitive beliefs, faith and mind cures—a mode of treatment resorted to by people when in despair at the medical profession failing to cure or benefit. Many ills are incurable, they should be looked upon as reactions, not diseases.

Narcomania is exceedingly prevalent in our cities and towns, but men who are reeling drunk are less and less in evidence. The vicious are rapidly eliminated.

"A sound mind in a sound body" fails to consider the influence of environment, how an abnormal environment weeds out the best mentally. The robust teacher fails to understand the delicate child that reacts to an abnormal environment. The best barometer or thermometer for a school-room is a teacher who is not too robust. The best physician for prevalent ills is the one who himself is not too robust, not too immune.

Survival of the fittest does not mean survival of the best when applied to unsanitary city conditions. If this were true the people of crowded Chinese or Indian cities would head civilization.

It still holds true that "the good die young" on account of unsanitary life conditions. Many are killed off by alcohol and narcotics. Many a young man of promise finds his death in the cup.

Several charts were shown to illustrate how the tobacco habit and the spitting habit are related to the alcohol problem, and in turn to the race suicide problem, how unsanitary air conditions lead to prevalent ill health and to terminal infections that kill. Charts were shown based on the census reports, from which it appears that in our State today the rate of decennial increase is constantly diminishing, and likely at the next census there will be a deficiency, in other words, the loss will be greater than the gain. In Northern Indiana only a few counties have gained in population, those with industrial cities.

Industrial cities, like unsanitary cities, have been compared to huge parasites that drain the country of its best blood. Such cities have little use for a man over 45 or 50. Yet such cities may point with pride to their low death rates. The explanation is of course simple: Worn out men go away to their old homes, to die.

Some cities, really overgrown villages, have a bad water supply, and the brewers advertise their clean or pure beer; yet the Prohibitionists are making little or no effort to get good water. Is it any wonder that many cities vote "Wet?" The first effort of the Prohibition advocate should be to give the people clean water and clean air. Fresh water does not necessarily mean pure water, nor does fresh air mean clean air. Saloons flourish in proportion to their unsanitary surroundings and the patronage of low grade laboring men.

The solution of the Alcohol Problem depends upon education and cleanliness—clean people, clean homes, clean cities, clean streets, clean water, clean air. In the light of Coniosis the greatest of these is clean air.

