JOHN HARVEY KELLOGG (1852-1943)

Lectures, Speeches, Notes, and Articles, ca. 1890-ca. 1943
(undated by topic)
Race Betterment/Eugenics
A Proposed Scheme For Race Betterment.

It is a fact that the world today needs a new aristocracy; not an artificial, blue-blooded aristocracy, created by wealth or official authority, but a real aristocracy made up of Apollos and Venuses and their fortunate progeny. Instead of such an aristocracy we are actually building up an aristocracy of lunatics, idiots, paupers and criminals. These unfit persons already have reached the proportions of a vast multitude: 500,000 lunatics, 80,000 criminals, 100,000 paupers, 90,000 idiots and 90,000 epileptics. And we are supporting these defectives in idleness like real aristocrats, at an expense of one hundred million dollars a year, and this mighty host of mental and moral cripples is increasing, due to unrestricted marriage and other degenerative influences at a much more rapid rate than the sounder part of the population, so that they are bound in time to constitute the majority unless some check is put upon the increase. Every one of these lunatics possesses the right to vote, even in States where women are not given the right of franchise.

The carefully prepared lists of twenty-seven of the greatest names which history records, reveals the fact that ten, or more than one-third, of these master minds came from one small area not larger than Patterson, N. J. In less than a century the little city of Athens produced more men of surpassing intelligence and genius than were developed in all the rest of the world during a period of two thousand years.

Now modern scientific discovery had made possible the development of a civilization, the glory of which might far outshine that of the ancient Greeks, which, from lack of knowledge which we possess, was destroyed by that ancient enemy of human progress, the anopheles maculipennis. But within recent years, such rapid progress has been made in so-called public sanitation that the field
A Proposed Scheme For Race Betterment -2.

seems to be almost worked out. There is, at least, every prospect that in the not remote future, typhoid fever, cholera, malaria and other infections which may be controlled by the organized application of scientific knowledge, will have been practically wiped out. In attempting to call attention to some of the things which may be done to stop race degeneracy and to prevent the development of insanity and other nervous disorders, I shall only endeavor to point out some of the preventive measures which at present, if in operation at all, are employed only in a partial and desultory way, and which, it seems to the writer, ought to be set into efficient operation as speedily as possible.

A Health Survey

1. There should be made in every community, under official supervision, a thoroughgoing health survey at least every five year. At the present time, civilization in the United States is so little advanced that the rather crude system of registration of births and deaths in vogue reaches only a little more than one-half of the population of the country. A thoroughgoing health survey of every city, town, village and rural district in the United States should be required. In this survey, notes should be made of all particulars relating to water supply, milk supply and other public matter which might influence health, but especially with reference to the existence of degenerative disorders and chronic infection, especial insanity, epilepsy, feeble-mindedness, cancer, goitre, tuberculosis syphilis, etc. Whatever obstacles may present themselves at the start will rapidly disappear as the public become enlightened in relation to the objects sought by the survey, and the advantages which individuals, as well as communities, may gain therefrom.
Free Public Dispensaries.

2. In connection with the interests of health, there should be provided, at convenient points, dispensaries at which any citizen who desires may have the benefit of an expert medical examination with every facility for the most thoroughgoing investigation of morbid conditions, including up-to-date bacteriological and chemical laboratories and an efficient x-ray outfit. The expense of equipping and maintaining these free medical dispensaries would be covered many times over by the saving of human lives. The lowering of the death-rate so little as two per thousand, or a little more than ten per cent, would mean a saving of two thousand lives in every million inhabitants, or two hundred thousand in the whole United States. At five thousand dollars each, this would mean an aggregate annual saving of one million dollars. If we place the cost of examination of each individual at the liberal sum of five dollars, the total cost would be one million dollars, showing a profit on the investment of one thousand to one.

School Inspection

3. Regular systematic health inspection of schools, school buildings and school children should be made one of the conditions under which public funds should be granted for educational purposes. In places where this work has been conducted, it has been clearly demonstrated that in practically all communities fifty to seventy-five per cent are in need of medical attention. To neglect this duty to the child is scarcely less than a crime. Health inspection of schools ought to go much further than the cursory examinations which are ordinarily made. The persons charged with the making of such examinations should be experts who have been specially trained for the work, and should be qualified to note the effect of the
A Proposed Scheme For Race Betterment

methods of instruction and discipline employed by teachers. Multitudes of children are made neurasthenic by wrong methods in education, especially by the neglect of physical development and by improper discipline in the school or in the home.

A System Of Health Education.

4. The state should organize and carry on continually a thoroughgoing system of health education. Too large a proportion of attention at the present time is given to the mere facts of physiology and anatomy, without reference to their practical application. Children require training even more than instruction in health habits. They should be taught and trained in the proper mastication of food. Teachers should become intimately acquainted with the dietetic habits of children under their care. Of the very highest importance is instruction and care of children in regard to bowel action. We are only just beginning to appreciate the enormous influence upon health of constipation. It is more important for the individual child that the teacher should know that his bowels move properly three times a day, than that he should obtain high standing because of his knowledge of the three "R's."

The educational campaign should not stop with the school, but should be carried into the home. Parents' schools---and especially mothers' schools---are needed at the present time quite as much as schools for children. Health missionaries are needed, in every civilized community. An educational campaign, to be effective, must not stop with the cities and towns, but must give special attention to rural districts, in which at the present time the conditions of hygienic life are so much neglected that in certain well-regulate cities where advanced hygienic knowledge has been applied, the death rate has actually been reduced below the average rural death-rate
A Proposed Scheme For Race Betterment -5.
notwithstanding the evident advantages naturally offered by rural
life.

Training In Posture

5. The twenty million school children who for nine months of
the year are now crowded in dusty, poorly ventilated, poorly lighted
schoolrooms, compelled to sit upon seats which deform their bodies,
and restrained from responding to the natural instincts which call
for almost constant activity in the young, should be turned out-
doors and taught in fresh-air schools, and thus be given as good an
opportunity for the preservation of their health and the development
of resistance against disease as we are now beginning to give to
tuberculous children and those who show marked evidence of sub-
nutrition. If diseased children profit by these outdoor opportunitie
healthy children would profit still more. School boards will supply
play-grounds, swimming pools, open-air schoolrooms and other fresh-
air opportunities just as soon as the people become sufficiently intell-
gent to demand this protection for their children. Fresh-air
schoolrooms, playgrounds, and the outdoor life, in general, are as
potent means of combating nervous disorders in the young and the old
as in the prevention and cure of tuberculosis.

Control Of Drug Sales

6. The sale and use of habit-forming drugs of every descrip-
tion must be controlled by law. The relation of alcohol to nervous dis-
orders, and the necessity for a vigorous and determined effort to
suppress the evils arising from the use of this drug are now univer-
sally recognized by the intelligent and sober-minded people of the
country; but less consideration has been given to the still wider us
and spread of the highly insidious habit of tobacco using in its
various forms. Multitudes of boys become nervous wrecks before they
reach the high school through the use of the cigarette, and a still
A Proposed Scheme For Race Betterment -6.

greater multitude of boys and professional men are victims of chronic functional and nervous disorders as a result of the habitual use of the cigar and the pipe. Tea and coffee and their congeners, the various so-called "cola" preparations, which are purveyed at soda fountains, exercise a baneful influence which reveals itself in the aggravation of nearly all forms of functional neurosis, and help to swell the burden of nerve-destroying toxins which the average citizen is carrying, to his enormous detriment.

Experimental Health Stations

7. Nearly every state maintains an experiment station in which a considerable number of scientific experts devote their energies to the study of plant and animal nutrition and the laws of heredity as related to plants and animals. As a result of this experimental work the material wealth of the country has been so greatly increased that no one questions the wisdom of the great annual expenditure of money and effort involved in these researches.

Why should not the same or even greater attention be given to the problems of human nutrition and heredity? The greatest possible good would result from the establishment of properly equipped State laboratories, in which chemists, bacteriologists, biologists, skilled cooks and eugenic experts might co-operate in solving some of the gravest questions which concern the welfare of the human race. We are well informed about the feeding of domestic animals, but in the great questions pertaining to human diet there are almost no accepted standards. The vital question of human nutrition is a closed book to the average man. University graduates know little more about what to eat or general bodily care than the ditch-digger or the hod-carrier. State laboratories should apply to these questions the same methods of research which have won triumphs in the plant and animal
A Proposed Scheme For Race Betterment

8. Improved marriage laws may possibly accomplish even more than segregation or sterilization. The facility with which the unfit and the potentially unfit are now able to obtain a marriage license, and the greater fecundity of this defective class as compared with the healthy families, is a menace to society and to the race, not only through the propagation of brain and nerve defects, but through the transmission of a great number of other tendencies and blemishes. The interest of the race and of society must be protected by proper regulation of the marriage institution.

A Health Registry.

9. The tax-roll, in which is recorded the name of every holder of real or personal property, and the estimated value of the same as essential for the collection of taxes, the chief source of revenue to the State, is guarded with zealous care, and the accuracy of its records is verified by painstaking inquirers. We seem to have overlooked the fact that taxable property is not the only nor the most valuable of the resources of the State. The actual money value to the State of the average human being, taking the lowest estimate offered by economists, is so great as to give the population of any State a far greater money value than any other of its resources.

This fact alone will justify the maintenance of a health registry, on which should be recorded the results of annual health inspection made by a bureau established and maintained by the States for the purpose. The establishment of such a registry will be one of the most effective means of arousing an interest in health as a personal asset. Such a registry would be invaluable in connection with the operation of restricted marriage laws. Of course, a great education work must be done for the general public before such a registry would
A Proposed Plan For Race Betterment

be appreciated or even tolerated; but as the people become more intelligent in relation to the value of health as a factor in personal efficiency, and a means by which the physical welfare of the individual and of the race may be promoted, a health ambition toward bodily perfection will be developed, and in time health as an asset will come to be esteemed as more precious than gold.

The possessor of clean blood, of a sound body free from blemish and taint of disease, will feel a just pride in his record, in an erect, vigorous carriage, an elastic step, clear skin, clean breath, power to endure fatigue and resist disease, the ability to appreciate to the fullest the joy of life and to discharge in the highest manner the duties and obligations of a twentieth-century citizen.

A Eugenics Registry.

10. One important means of race betterment is the promotion of a eugenics registry. Its purpose will be to accomplish in behalf of race hygiene what the health registry would seek to do for personal health. What the world needs at the present time more than any other thing is a new race of men. That the creation of a new and superior human race is possible is not doubted by those who have made careful study of the operation of Mendelian principles when applied to the human being as well as to other races of animals.

Animal breeders have demonstrated that it requires only four generations to make a thoroughbred. Mr. Burbank assures us that it is possible to make as much improvement in the human race as he and other plant breeders have shown to be possible in plants, and that such a new species of man may be created in not more than six generations.

A New Race

A Eugenics Registry would be the beginning of a new and glorified human race which some time, far down in the future, will have
A Proposed Plan For Race Betterment

so mastered the forces of Nature that disease degeneracy will have been eliminated. Hospitals and prisons will no longer be needed, and the Golden Age will have been restored as the crowning result of human achievement and obedience to biologic law.

When Drummond so exquisitely told us that Love was "the greatest thing in the world", a thoughtful physician asked a group of friends "Did you ever see a healthy man or woman---one with a strong soul and a sane mind in a sane body---who was not amiable, kind-hearted, loving?" No one in the circle could remember that he had, and while such a trinity of health is not found on all sides, still it is so common for us all to recall people overflowing with health and good nature that we are tempted to say that health is the best thing in the world, and that with it go cheerfulness, optimism, attractiveness and power.
Mr. Chairman, ladies and gentlemen, I assure you it is a very
great pleasure to me to meet you here this afternoon and it was a still
greater pleasure as I came up the hill last evening to see the lights
shining out from this new building. I said, there is one more light
planted on a conspicuous hill-top from which the gospel of physical
righteousness can shine out, and it is in a particularly useful place,
for in this particular locality, this particular spot of America, there
are more sick people and sinners to the square mile than in any other
part of this beautiful country, this being the most thickly settled part
of the United States, and the oldest part feels the hand of degeneracy a
little harder and a little heavier than any other part. The burden
on my soul all the time, every day and every night when I am not asleep,
is what can be done to save this splendid world, for it is a splendid
world, from going down hill. What can be done to save this splendid
race of ours from going down the hill of physical degeneracy to race
extinction for that is where we are bound, and this institution which is
being dedicated here to-day, which is making its first public appearance,
stands, first, as a protest against the influences that are leading us down,
and, second, as a beacon in pointing a better way that may lead us up. But
I should perhaps explain a word further on this point. How do we know
we are going down? As I picked up a paper on the way here yesterday, I
found a few statistics about the State of New York. The statistics
recently published in relation to the insane of the State of New York
show that five million dollars is spent every year in taking care of the
lunatics of New York. There are eight million people in the State of
New York and five million dollars is spent every year to take care of the
lunatics of the State of New York. That is not all, for there are just
about as many idiots in New York as there are lunatics and maybe more.
The number of lunatics to the million and the number of idiots to the
million are about the same. There are a few more idiots than lunatics.
In 1892, 14 years ago, according to statistics, there were in the state of New York 17,000 lunatics. At the present time there are 27,000 lunatics in the state of New York alone with a population of 8,000,000.

A tremendous increase! The increase in the number of lunatics was more than 33% faster than the increase in the population. Now in the whole country the same thing has been going on. During the last fifty years the statistics of the whole country show that there has been an increase in the number of lunatics from about 500 to the million fifty years ago, to more than 1700 to the million, almost 300% increase in fifty years. Now at the rate New York is going on, you can see that it is really a little worse than that, so we find that this rate of increase is accelerating. It is not diminishing but it is actually accelerating year by year.

Suppose we keep right on at this rate. At the present time we have 17,000 lunatics to the million and some 5,000 idiots to the million in the whole United States put together. So we have pretty nearly 3000 to the million, as a matter of fact, more than 3,000 to the million. Now in fifty years more, increasing at the same rate, we will have 10,000 to the million. That would be 7%. In fifty years more it would be 3%; in fifty years more it would be 2%; in fifty years more it would be 0%. If we went on fifty years more it would be 243%, but that is too many. We could not go so far as that. We would have to stop. We could not get 243 to the hundred.

In about 265 years from the present time, if we keep right on at the rate at which we are going, we will all be lunatics or idiots, but we shall have to stop before we get so far as that. Society will be broken up.

When we go through a political campaign, we can pretty nearly believe we are almost there, but we have not quite got there yet. It takes a strong exponent to get the whole population off their feet at the present time but we are not chronically insane; we only have an acute attack of it. Now what we want is to find out what are the causes of this degener—
If we look about we see the same thing going on in all phases of human life. Normal degeneracy goes right along with it. It always keeps pace with the physical degeneracy, with mental degeneracy, with brain and nerve degeneracy. There were 9,000 murders in the United States in this country alone last year. Three or four years ago in one year there were 10,000 murders in this country alone. There are more murders in this enlightened country to the thousand or to the million people than in any other country in the world, civilized or heathen. The number of murders in this country is twice as great as in India, a heathen country. Yet we are sending missionaries to India. Is it to be wondered at that India is beginning to send missionaries to us? There are some things are better in India than here. At the present time a man's life would be safer in India jungle than in the slums of New York or Chicago. You know that. All of you would be far safer. The wild beasts of India of the thickets and forests of India or of Central Africa are not to be compared with the wild beasts of our great cities in ferocity and dangerous character. We have another evidence of this degeneracy. Look at the death roll last year alone. 416,000 people died of pneumonia last year. 413,000 died of consumption last year. Nearly half a million of pneumonia and nearly half a million of consumption alone. Think of it! 144,000 people died of apoplexy. That means they died of beef steak.

Mr. Edison says we are food drunk and he proved it by keeping sober on an economical diet. He cites Cornaro. He is imitating Cornaro. He finds that Cornaro was right; that a man can live and work hard on a Cornaro diet. I know it for I have tried it myself. I had a letter this morning from one of the most eminent political economists in the United States, a professor in one of your great universities and head of a department. He tells me he has tried Edisons scheme of diet, living on a very spare diet and doing well on it. In fact I had a telephone message from him this morning saying he is getting along splendidly on a very small economical bill of fare. So small you would think you would starve to
We only need a very small amount of protein in the food we eat, but the need for muscle protein in the body is much greater. When we work and exercise, our muscles do not work as hard as they should if we do not eat enough food. We can only get the protein we need from meat, milk, eggs, and other food sources. It takes a lot of work to make muscle protein, and we must use it in the body to repair the muscles and the body must be able to use it for the repair of the tissues of the body. The muscle protein is used to build the muscles and to repair the tissues of the body. It is important to have enough protein in the diet to ensure that the body has enough muscle protein to work properly.

When we eat meat, the fat in the meat provides the energy to make the protein in the body work properly. The fat is not used to make the protein, but it provides the energy that is needed to make the protein. The protein is used to build the muscles and to repair the tissues of the body. It is important to have enough protein in the diet to ensure that the body has enough muscle protein to work properly.

In their journey through life, the muscle cells are not in a good state compared with what happens if they are left too much. They are weakened by the hard work of carrying around extra burdens. We are not used to the extra burdens of life and we do not do any particular farm because that is what is done around extra burdens. We are not used to the extra burdens of life and we do not do any particular farm because that is what is done around extra burdens. We are not used to the extra burdens of life and we do not do any particular farm because that is what is done around extra burdens.

We eat twice as much as we need and that extra quantity we eat, especially if it is meat, is manufactured into poisons. It is not so bad if it is bread because then it is converted into fat and we can work the extra plumminess off by a little work. If we eat around extra burdens, we get a woman the other day who was carrying around extra burdens and she was not so bad. She was a woman who had a little extra butter that does not do any particular farm because that is what is done around extra burdens.
deadly character, and these poisons circulate in the blood, disturb the arteries and the arteries become tense, then hard and rigid and chalky.

I met a woman the other day in my office and I said to her, "Good morning, madam, you have recently arrived I believe." She replied, "Yes I just came two or three days ago." Her doctor came in with her. I said, "From what state are you, madam?" She said, "Let me see, Doctor, what state did I say I came from?" The doctor said, "You stated you came from Georgia." "Oh, yes, from Atlanta, Georgia." Now why did not she know the state she came from? I said, "You were born in Georgia?" "No but I have lived there nine years." She had lived there nine years and could not recall the name of her state. I suspected right away what was the matter with that woman. I felt her pulse and her artery was as hard as a pipe stem and it was like a broken pipe stem, it was chalky. I said, "You never used snuff, I suppose?" "No," she said, "I have never taken snuff." "You have never used tobacco in any form, used beer or alcohol?" "Oh, no, nothing of that sort. I am a temperance woman." I had doubts about that. The next question I asked her was, "Have you eaten a good deal of meat I suppose?" "Oh, yes, I have almost lived on meat. That is the principal part of my diet." I did not wonder about the arteries, but I asked her another question. "Have you used tea or coffee?" "Oh, yes." "Strong coffee?" "Yes pretty strong. You know my husband likes his coffee very strong. He is an Englishman and he likes things good as all Englishmen do." I said, "How much coffee do you use?" "Well I make three cups every morning and take a cup full of strong ground coffee, Mocha and Java mixed." I said, "I suppose your husband takes two cups?" "Oh, no," she said, "He only takes one, I take two." "Well how many times a day do you take it?" "Well we have coffee for breakfast and dinner and tea at night." I figured that up and I found this lady had been taking between twenty and thirty grains of caffeine every day. Twenty grains is a deadly dose for a cat and a cat has nine
lives you know. Twenty grains of caffeine will kill and this woman had
been taking between twenty and thirty grains every day. Caffeine is
equivalent to uric acid. Practically the same thing. Chemically in
the body uric acid and caffeine are exactly the same thing so that woman
was eating beef steak, eating a lot of uric acid that way, fourteen
grains to the pound and then was using this caffeine besides which was
so much more uric acid that she was taking into her body; so she was tak-
ing altogether practically about thirty or forty grains of uric acid
every day of her life. The body eliminates only six grains normally.
There are only six grains ordinarily to be found in the excretions each
day in a normal person living on a normal diet. That was the trouble with
this woman arthritis. When you hear that a certain man has had a stroke
of apoplexy, has had one side paralyzed or has suddenly lost the power of
speech, you know what the matter. The trouble is with the arteries.
They have become brittle and have finally broken loose.

And 144,000 people died of apoplexy alone last year; 150,000 died
of cancer. That may be a beef steak disease too because beef steak
materially lessens the resisting power of the body. 76,000 people died
of diphtheria. That is a low resistance disease, many persons who are
strong and vigorous are not so apt to get this disease as feeble babies.
So it is with typhoid fever and with lagrippe. People get the grippe
because they are not strong enough to resist it. You never heard of a
man who is a prize fighter, a man just ready to go into a pugilistic con-
test having come down with the grip and having to call the fight off be-
cause he had the grippe. A man who is able to meet Fitzsimmons or Corbet
need not be afraid of the grippe. You never hear of such a man coming
down with pneumonia just before he was going to have a fight and declar-
ing the fight off because he had gotten pneumonia; because a man who is
able to meet the strongest man on earth, he is able to meet any germ on
earth and need not be afraid of them in any natural encounter.

About 20,000 people died of diabetes, another disease that comes
from food intemperance, too much sugar, over-eating generally.
25,000 people died of scarlet fever, 21,000 died of appendicitis, and 19,000 people died of malaria fever. We will have to charge malaria fever to mosquitoes. We are not sure whether beef steak is to blame for this or not. I had malaria fever once myself so I do not say much about that. There were 14,000 people died of rheumatism. That is a beef steak disease. You do not have rheumatism unless you eat it and the same thing is true of gout. If you are going to have gout you have to swallow it first. Now here are a million of people who died last year of diseases which are absolutely preventable. Everyone of them preventable. Nobody need die of pneumonia, nobody need die of consumption. Everybody knows consumption is a preventable disease. Nobody need die of apoplexy, at least anything short of 130 or 130 years of age. A man might be excused for dying of apoplexy at 130 years of age, but not before that time. There was old Parr, you know. Over his tombstone in one of the isles of West Minister Abby, I walked down the isle looking for it and I found it; over his tombstone is the inscription which reads: Here lies Thomas Parr who died at the age of 152 years and nine months. John Harvey, the great physician who discovered the philosophy of the circulation of the blood, examined him after he died and found there was not a single hardened artery in his body. No evidence of degeneration, no reason why he might not have lived twenty or thirty years more. He died of overeating. He went up to see the king and the king spread out a kingly feast for him and he ate it and for two or three weeks he was there and finally he had a terrible fit of indigestion and died of indigestion after he had lived 152 years a simple life, the out-door life. It is because of our own wrong habits of life that we are degenerating, we are doing wrong. We live in-doors too much. We shut ourselves up, especially in cold weather. I have seen people who protected themselves against fresh air as though it were poison. I went into a house the other day and the people who let me in slammed the door very quick behind me, and as I looked back I saw some cotton stuck in the key hole, actually
protected against fresh air. People shut themselves up in such close places that would kill a North American Indian or a South American monkey inside of six months. Yet they live. Why? Because they become sort of immune just as smokers do. Smokers take every day doses of poison that would kill sixteen persons. You see people doing that thing right along year after year; because they have become immune to a certain degree. Now this institution stands as I said, as a protest against these health destroying habits; against all these death-dealing agents that are certainly undermining, deteriorating, and destroying the race as nothing else can possibly do. Only a short time ago this race deterioration had become so apparent in England that everybody began to see it. Passing along the streets of London one can not escape from the many examples of race degeneracy going on in the streets. People with one side of the face not matching the other side of the face; people with an ear of a certain shape on one side and a different shape on the other side; with eyes of different shapes; heads flattened on one side; wizened looking folks. In East London the streets are fairly swarming with these poor, deformed, imperfect looking human beings. The English commissioners appointed by Parliament to investigate this matter, to ascertain if they could the causes of race degeneration discovered that the race was degenerating. There was no question about that; and they have in a preliminary report, said the thing is being agitated very widely in England what can be done to stop this race deterioration. Now what is true in Old England is also true in New England. It is just as true here as it is there. It is not quite so marked, but we have many evidences of it in this country. Come down here and see the people in Boston. Most of you are small. I lived in New England 200 years before I went West. That is what is a matter of me. I grew up in the West, but did not go West quite quick enough. I ought to live been born there for a couple of hundred years; the
then I would have been tall like some of the folks in Nebraska. Go out in Nebraska and you see the boys and girls grow out there tall, thick chested, broad shouldered. Splendid men and women grow out there in the country. Down here you are mostly city people, and wherever you find a city population, you will find a deteriorating population, a degenerating population. Conditions of city life necessarily involve degeneration. It is impossible to avoid it in the present conditions of our city life. You have come here to-day, not to see a new thing but Dr. Nicola and his colleagues have been showing you about bringing you in contact with old things. Some years ago, centennial year, in 1876, at the time of the great fair at Philadelphia, I stood in a mint one afternoon and I saw a couple of men from India who were looking at a display of coins. There was a very large coin from three or four inches in diameter and it was explained underneath this very ancient coin that this coin was found in old Philadelphia and it was nearly two thousand years ago that it was gotten. One of them said to the other, "Indeed, is Philadelphia so old as that? I thought Philadelphia was a new city comparatively." He evidently was not posted in Greek history so he supposed it was modern Philadelphia and that the Philadelphia he was visiting was two thousand years old. So it is in this case, the things you see here are not new things. They are here in Massachusetts. This is a new country. This is a new Sanitarium but the things you find here are old things, things which have been carried from the idea in a certain sense. The methods of treatment that are presented here are not new. They are all old. The doctor has shown you some baths. The bath tubs are new, but the methods are very old. I am sure that the instinct to bathe is as old as the race, as old as creation. I was talking sometime ago with a doctor telling him about the wonderful things accomplished by water sometimes and by physiological methods, how warm water would put a man to sleep, and cold water would wake him up, and hot water relieves pain and cold water would stimulate, and various other things, and he said, "Doctor,
The basis for these lectures has been provided by field studies made among fourteen primitive races in different parts of the world. Wide varieties of environments have been included ranging from the Arctic to the tropics and from Equatorial jungles to the high Andes and other mountain groups.

The data obtained have been recorded each clinically, photographically and by physical measurements of individuals. Chemical analyses have been made of foods involved. The data besides being published in book form (NUTRITION AND PHYSICAL DEGENERATION, A Comparison of Primitive and Modern Diets and Their Effects, published by Paul B. Hoeber, Inc., Medical Book Dept., Harper and Brothers, New York), are now assembled in this series of visual education lectures with descriptive texts provided in manuals synchronized to the numbered illustrations. A synopsis of the book is also provided. This lecture series is developed under the general title LIGHT FROM PRIMITIVE RACES ON MODERN DEGENERATION. The individual lectures have been assembled under the following titles:

1. SKETCH OF THE PRIMITIVE RACES STUDIED
   60 illustrations

2. HOW PRIMITIVE RACES HAVE PREVENTED TOOTH DECAY
   72 illustrations

3. HOW THE FACES OF PRIMITIVES WERE MORE BEAUTIFUL BEFORE THAN AFTER MODERNIZATION
   71 illustrations

4. FACIAL BEAUTY LOST IN ONE GENERATION and GREATER INJURY TO LATER BORN CHILDREN
   47 illustrations

5. ANIMAL DEFECTS FROM FOODS OF PARENTS and MUTUAL RESPONSIBILITY OF BOTH PARENTS
   36 illustrations
6. LIGHT FROM PRIMITIVE RACES ON HOW MENTALLY BACKWARD AND DELINQUENTS CAN BE PRODUCED

7. SPECIAL FOODS OF PRIMITIVES FOR PARENTS-TO-BE and RACE REGENERATION BY OBEEING NATURE'S LAWS OF LIFE

8. AMERICAN INDIANS, PRIMITIVE, SEMI-PRIMITIVE AND MODERNIZED

In order to make the material most easily available and widely adaptable the illustrations will be provided in three forms; namely, film strips on 35 millimeter film, two by two glass slides and three-and-a-quarter by four glass slides. A very highly efficient form is the double frame, 35 millimeter film prepared for use with the Society for Visual Education, 300 watt, Tri-Purpose projector. (100 East Ohio Street, Chicago, Illinois) This projector has very high efficiency while being very light in weight, only six pounds and two ounces. It is so easily used that any teacher or pupil, social worker or lecturer can operate it. While the films can be had in single frame, the illumination is so much greater in the double frame used horizontally that I strongly recommend this form. The expense for the film strips is only a fraction of the cost of slides. The difference in cost would provide two projectors. Some teachers who have used the projector in their classrooms have reported that the illustrations were better than they regularly obtain with their large projector using three-and-a-quarter by four glass slides. Used in the film strip form the illustrations cannot get out of sequence which is important both in connection with the descriptive text provided in the accompanying manuals and for the proper development of the subjects.

The price of the film strips averages Three Dollars each. The cost of the first seven of the series with manuals is Twenty-One Dollars.

The following are some comments on the value and applicability of this new teaching material for university, college, high school, child welfare and parent-teacher association work.
From the Foreword to "Nutrition and Physical Degeneration" by Earnest A. Hooton of Harvard University:

"...So I consider that Dr. Price has written what is often called "a profoundly significant book." The principal difference between Dr. Price's work and many others so labelled is that in the present instance the designation happens to be correct. I salute Dr. Price with the sincerest admiration (the kind that is tinged with envy) because he has found out something which I should like to have discovered for myself."

From a teacher:
"During the last few days of this past semester our science department made use of your strip films on LIGHT FROM PRIMITIVE RACES ON MODERN DEGENERATION arranged for school use. I think you will be interested in knowing our opinion regarding the use and value of these films. Five series of strip films were shown, using a small Tri-Purpose Projector. We all agreed that the projection lantern itself was entirely adequate, and a class room of ordinary size does not have to be entirely darkened while the slides are being shown. The manuscript, which is well adapted for junior and senior high school age, can very easily be followed as the pictures are being shown. It was the general opinion of the teachers of these classes, that the showing of the films had been decidedly worth while and of value to the pupils. The reaction of the children showed that they understood there is a definite need for study to assure good health for themselves and healthy children of the next generation. We all feel that a general use of these films in the science department next year would give results that would mean a forward step in education."

From a State Department of Health:
"These strip films are truly wonderful and will accomplish more than all the other teaching aids combined in promoting a genuine active interest in dental health in the junior and senior high school age groups."

This visual education lecture series can be obtained from Dr. Weston A. Price, Dental Research Laboratories, 8926 Euclid Avenue, Cleveland, Ohio.
Proposed Resolution to be adopted by the Race
Betterment Foundation.

WHEREAS, this corporation, the Race Betterment
Foundation, has been designated as trustee in the Last
Will and Testament and codicil of Ella Eaton Kellogg,
ceased, and it has duly qualified by the filing of a
bond as such trustee, and received letters of trusteeship,
and whereas, a certified copy of the order assigning
the residue of said estate to this corporation has
been duly recorded in the office of the Register of
Deeds of Calhoun County, Michigan, in Liber 277 of Deeds,
on page 300, whereby the title to lots 73, 74, 75,
76, 77 and 100 of Walters Addition to the city of
Battle Creek, Michigan, and the balance of personal
property, has been passed on record to this corporation
as trustee, for the purposes indicated in said Will.

Now, therefore, be it resolved that this
corporation shall proceed to the execution of said
trust as follows:

First, It shall hold title to said lots under
the terms indicated in subdivision Second of the
Will of said Ella Eaton Kellogg and pay the taxes
thereon in due course.

Second, That the personal property assigned
aggregating an appraised value of $5,230.72 shall
be liquidated and that from the proceeds thereof
there be paid to Ervilla E. Eberhardt the sum of
One Thousand ($1000.00) Dollars, less the inheritance
tax against the same $60.60.

Third, That arrangements be made at once with the
Alfred University, Alfred, New York, looking toward
the founding of the scholarship indicated in said Will
and that the same be consummated by the use of said
sum of One Thousand ($1000.00) Dollars, less the amount
of inheritance tax against the same $60.59.

Fourth, That the sum of One Thousand ($1000.00)
Dollars, less the sum of $60.60 Inheritance tax,
be paid to the Seventh Day Baptist Missionary Society,
a corporation of the state of Rhode Island, to be
used by said society for Foreign Medical Missionary
work.
Fifth. That the sum of Five Hundred ($500.00) Dollars, less inheritance tax thereon $30.29, be paid to the Board of Trustees of the Seventh Day Baptist Memorial Fund, a corporation of the state of New Jersey, for the purpose indicated in said Will.

Sixth. That the sum of Five Hundred ($500.00) Dollars, less inheritance tax paid, $30.29, be paid to Ellis Bryan McPherson.

Seventh. That the balance be set apart in a fund for the care and treatment at the Sanitarium, of mothers in indicated in said Will, provided said Sanitarium shall vote to comply with the request of deceased in that regard.

Eighth. That any and all sums received from royalties and incomes from books as indicated in subdivision Four of said Will be set aside in a fund for the purpose therein indicated.
The Aristocracy of Health.

Race Degeneracy

The civilized man has been poisoned, infected and perverted until he has become weakened, and weakened, disease-ridden and degenerated to such a degree that race extinction stares him in the face and many distinguished scientists have come to regard the great catastrophe as inevitable, and indeed, almost in sight.

Thousands of races of animals have degenerated and disappeared from the earth because of changes in their environment. Man, the most complicated of all animal organisms, and hence the most likely to be injured by unfavorable conditions, finds himself at the present time subjected to an environment more dissimilar from that to which he is naturally adapted than that of almost any other race of animals.

Naturally an out-door dweller, freely exposed to the sunlight and bathed in pure air, has become a house dweller, excluding himself from the sun and air and smothering himself with clothing. Naturally a low-protein feeder, like the chimpanzee, the orang and other primates, he has in recent years adopted a high-protein diet, the diet of the dog and the lion, whose digestive machinery is adapted to it, but which is hostile and damaging to the human constitution.

Naturally fleet of foot, agile and muscular, supple and enduring, by sedentary habits civilized man has become puny, rheumatic, gouty, short of wind, hobbled by flat feet, and is beginning to lose his toes.
Lack of exercise has diminished his chest capacity until he has lost two ribs and is losing others, and has become an easy prey to consumption, pneumonia and other lung diseases. Through neglect to use his teeth he has begun to lose them. His third molar is practically gone and other teeth are often lacking while all are subject to early decay - a certain evidence of race degeneracy.

At the International Eugenics Congress held in New York in November 1921, Professor Davenport, leading eugenist of the United States, declared his belief that the human race will ultimately become extinct, and Major Darwin, one of the world's most eminent economists, the son of Charles Darwin, declared that if our present civilization continues, it will be because the United States saves it from destruction by the degenerative forces that are everywhere at work. There is abundant evidence that our civilization needs amending, that our haphazard adaptations need readjustment.

Dr. John Harvey Kellogg of the Battle Creek Sanitarium believes "that the human race may be improved by the same means that have given us finer domestic animals, more beautiful flowers, and more productive grains. Civilization is sick and is breaking down under the load of unwholesome habits, perversions, and soul and body destroying vices. The remedy for race degeneracy is Race Betterment."
Race Betterment

The causes of race degeneracy are known. There are many thousands of men and women who recognize the evils which must be eliminated and who recognize the necessity for returning to the simple habits of our primitive ancestors. To do this, we need not become savages, but we must learn how to modify the conditions of our civilized life so as to permit us to possess the health, vigor and stamina of the savage while at the same time enjoying the culture and refinements of civilized life. The science of eugenics, or race hygiene, and the science of eugenics, or personal hygiene, applied with liberal intelligence, will save mankind from destruction which race degeneracy threatens.

During his address of welcome, Dr. John Harvey Kellogg, superintendent of the Battle Creek Sanitarium, which acted as host for the Third Race Betterment Conference, pictured the possibilities of a new race, saying, "Why may we not do as much for ourselves as we have done for our domestic animals and our farm crops and garden products? We have fleeter horses, finer cows, more industrious hens, more delicious fruits, more wonderful flowers than the world has ever known before. Why not, through the same means that have produced these marvelous betterments, applied by tactful and subtle methods adapted to human conditions, not only stop the downward trend, but start an upward trend, which by small increments accumulating through many generations may create a new race of men as much superior to the finest representatives of the race to-day as our highest types are above those lowest in the scale?"
The Aristocracy of Health

Some forty years ago, the late Mrs. Mary F. Henderson, a leader of society in Washington, D.C., and a woman of wealth and influence and a friend and adviser of presidents and members of Congress, through attending a lecture given by Dr. John Harvey Kellogg in Washington, became interested in biologic living and race betterment. Mrs. Henderson was the wife of Senator John B. Henderson, the author of the Fourteenth Amendment, and was in close touch with foreign ambassadors whom she frequently entertained at banquets in her home. Mrs. Henderson became so thorough a convert to biologic ideas and ideals that she at once changed the character of her banquets, omitting wines and meats of all sorts. She became a teetotaler as well as a flesh abstainer and also discarded tea and coffee, and not only publicly announced her change but verified it by publicly emptying her casks and bottles filled with costly old wines with which her wine cellar was well stocked, in the presence of a great crowd of citizens who had gathered to see the sacrifice.

Mrs. Henderson remained consistent to her ideals to the day of her death six years ago, and in a will left to the Battle Creek College a handsome legacy, totaling with previous gifts several hundred thousand dollars, to be used for promoting race betterment, especially in the promotion of an Aristocracy of Health, the idea which she had pioneered in a work bearing the same title which she had published more than thirty years ago.

The task of organizing a group of health-minded people to form the nucleus of the Aristocracy of Health was left to Battle Creek College, an institu-
tion conducted in affiliation with the Battle Creek Sanitarium, which is a continuation in more developed form of the Schools of Nursing, Home Economics and Physical Education for many years conducted by the Sanitarium.

The purpose of this organization is the enrollment of intelligent health-minded persons who desire authentic and up-to-date information about health and are willing to cooperate in efforts to spread information about right living and race betterment. The organization being well endowed, no fees of any sort are required of members. They are, however, expected to cooperate heartily and actively in spreading among their friends and acquaintances the valuable information they receive by circulating literature and in such other ways as may be suggested and which they find feasible, such as the formation of local clubs, parlor health talks and readings, lectures, biologic banquets, dinners and picnics, health hikes, health exhibitions, health perfection contests, and so forth.

Well equipped laboratories for chemical, nutritional, physiologic and bacteriological research already in operation are actively cooperating with the association. Among these may be mentioned the Pavlov Laboratory of the Battle Creek Sanitarium, in charge of the eminent physiologist, Prof. W.N. Boldyreff, formerly assistant to the late Prof. Pavlov of Leningrad, Russia; the chemical laboratory of the Battle Creek College, the modern food laboratories of The Battle Creek Food Company and the excellent nutrition laboratory carrying on researches by animal experimentations.
in charge of Dr. Thelma Porter, Professor of Physiology of Battle Creek College, an investigator of many years' experience; and physiological and bacteriological laboratories in charge of Drs. Roth, Roderick, Lewis and other experts of long experience.

Through affiliation of the several laboratories with other laboratories in this and foreign countries, the association will be supplied with up-to-date information concerning all the progress being made the world over in the direction of health promotion and race betterment.

The Good Health Magazine has been selected as the organ of the society. In it will be found each month, reports of the work of the association, invaluable articles on practical health topics, editorials on current topics with comments and such a digest of health progress as is not to be found in any other publication.

The Biologic Code

A little manual embodying a code of Rules for Right Living is sent gratis to every member, with the expectation that each recipient will carefully read the booklet and with confidence that the suggestions made will be followed in whole or in large part with the certain knowledge that the more fully and circumspectly these simple, well-tested health rules are observed, the greater will be the improvement experienced in mental and physical efficiency and comfort.
To live biologically is simply to treat one's body in a natural or physiologic way. What more sensible thing can one do than to cherish and develop and make wise use of all his physical powers, in other words, become a health enthusiast and in time a real health aristocrat?

Major-General Sir Robert McCarrison, celebrated surgeon and nutrition authority, who has served many years in the British Army in India, made the following statement which is quoted from the British Medical Journal, "No other factor, neither race, nor climate, nor endemic disease, has so profound an influence as food in determining the level of physical efficiency among the Indian races."

In a series of three lectures on "Nutrition and National Health", delivered before the Royal Society of Arts, Dr. McCarrison drew upon his study of dietary habits and physique in India to sustain his thesis. Describing the processes concerned in the function of nutrition and the pathological changes brought about in the organs and tissues by faulty food, he declared that the root of the whole matter was the nourishment of the individual cells, which in countless millions constitute the mechanism of the human body. Man is made of what he eats. He is, indeed, created out of the earth, and according as the earth provides, by way of plant and animal life, the materials needed by his body, so is the body well, ill or indifferently made and sustained.

Nutrition is the process or series of coordinated processes, whereby the nourishment of the body is effected and the structural integrity and
functional efficiency of every cell maintained.

Nutrition is effected adversely by a number of factors, such as imperfect oxygenation, insufficient rest and want of sleep, overwork and fatigue, but by far the most important factor is food of improper constitution. A knowledge of nutrition helps to bridge the gulf between physiology and pathology, and is the foundation of national medicine.

All things needful for adequate nourishment of the body and for physical efficiency are present in whole cereal grains, milk and milk products, legumes, root and leafy vegetables, with eggs occasionally. What is eaten besides these is more a matter of taste than of necessity. The diet must be complete in every essential. It is not to be expected that by substituting wholemeal bread for white bread, health would benefit, unless the substitution completely restores the balance of an ill-balanced diet; nor that by adding bottled vitamins or mineral elements to a faulty diet, its faults would be remedied unless they were confined to such vitamins and elements.

Dr. John Harvey Kellogg, as the results of his lifelong inquiry into "What is biologic living?", briefly sums the following propositions, which may be termed "The Code of Health":

I- Live, work, play and sleep in the open as much as possible, and secure an ample amount of outdoor air when indoors.
2- Eat and drink for health and strength, that is, eat biologically, giving preference to natural foods, and evacuate the body wastes at least three times a day.

3- Exercise sufficiently each day to induce perspiration and moderate fatigue. Walk more, ride less.

4- Hold the chest up when sitting, standing, walking, and, so far as possible, when at work.

5- Take proper rest by change of occupation and recreation, and endeavor to sleep eight hours daily.

6- Keep the skin clean, and harden it by exposure to the sun and air and by daily cold bathing.

7- Avoid poisons.

8- Avoid infections.

9- Dress comfortably and seasonably.

10- Cultivate calmness and contentment, and avoid worry and depressing and exhausting emotions.

11- Treat the body as a delicate and nicely-balanced machine and in all things avoid excess.

12- Live the simple life. It pays to be good to yourself.

Battle Creek- The Center of Movement

That there will sometime be a new human race, a race far superior to the present, is believed by many scientists. It is within the power of every man to so modify his environment and so to control the evolutionary forces
that are working upon him as to eliminate degenerative and destructive tendencies and to promote, encourage and intensify the forces making for race betterment.

Thus he may improve desirable qualities and eliminate defects and undesirable characteristics, and in time produce a race of human thoroughbreds that will be as much superior to the average existing man as is the thoroughbred horse to the average horse of the farm.

The greatest problem before the world today is how to save the human race from extinction. The one hope is in biologic living; that is, a straightforward and thoroughgoing regulation of our life habits in harmony with the known facts of human physiology. A new program of right living is needed; a program based on physiology and biology. A scientific conscience must be developed. Respect for the human body and the noble human race must be cultivated. Eugenics, race hygiene, and eugenics, individual hygiene, must be made a religion, or rather, a supplement to all other religions.

For more than fifty years the Battle Creek Sanitarium has been the center of a movement which has for its purpose the creation of a group of health enthusiasts. Of the more than half million persons who have visited the institution as guests or patients, a large proportion have carried away with them advanced ideas of rational living and of the fundamental principles of race betterment which are the heart and soul of Battle Creek philosophy and regimen.

Hundreds of nurses, dietitians, and physicians have been trained and
sent out equipped with training and information which made them the heralds of a new gospel of health, efficiency and longevity for the individual and the race through biologic and eugenic living. By these thousands of living messengers, as well as by millions of publications, large and small, Race Betterment ideas have been broadcast throughout the world, and millions of men and women in America and other English-speaking countries and many in every civilized land, have become converts to this biologic philosophy.

The time seems to be right for an effort to concentrate and unify this world-wide interest by associating together in an Aristocracy of Health those who are interested in improving themselves and saving the race.
TENDENCIES TOWARD RACE DEGENERACY.

A tendency toward race degeneracy implies a tendency toward race extinction. The extinction of a race of animals or even of a race of useful plants, is a distressing thing to contemplate; but the degeneracy and ultimate extinction of the human race is a catastrophe from which the mind shrinks with sickening horror.

It will be impossible in the brief time allotted for this paper to discuss in all its bearings the question of race degeneracy. I shall only undertake to present a few statistical data and observations which I trust may be deemed worthy of consideration. The facts and arguments which I shall present will be grouped about the following propositions:

1. Man belongs to the most highly organized class of mammals, a group of living forms which the history of animal life as revealed by the study of the earth's crust shows to be the most prone to degenerate and ultimately to become extinct as the result of changes in environment and departures from normal conditions of life. A large number of the highly organized animals which were coeval with primitive man have already disappeared. It is accepted as an established principle that the more highly organized an animal the more susceptible it is to the destructive effects of changes in its environment. The oldest forms of animal life, if I am correctly informed, are those possessed of the simplest and least differentiated organisms. The oyster, for example, has a history extending back long ages beyond the first traces of man. The fact that man appears to be one of the most recent arrivals among the members of the animal world is, however, no guarantee of a long future, since the extraordinary development which elevates him so far above all other animal forms necessarily implies extraordinary susceptibility to destructive and degenerative influences.
2. While thus an easy prey to the causes which have produced degeneracy and finally extinction in other mammals living in essentially the same environment, civilized man has in recent times, by the adoption of the conditions peculiar to civilized life, subjected himself to a number of subtle degenerative influences in addition to those which he has suffered in common with other mammals coeval with him.

3. There is at present time a decided trend toward physical decay and race degeneracy among civilized nations. Indeed, when we put together the two facts that man is perhaps the most susceptible to degeneracy of all mammals and that he is at the same time, through the artificial conditions of life which civilization has forced upon him, the most exposed to degenerative influences, we could expect nothing less than that the results of degeneracy would be apparent. For more than fifty years men whose studies or experiences have given them special opportunities for observation have been calling attention to the signs of degeneracy and the possibilities of the ultimate extinction of the human race unless preventive measures were adopted.

Galton Declared We Have Already Nearly Reached the Grade of "Trained Idiocy".

The great Galton, whose genius and generosity have in recent times created the new science of eugenics, says: "Our race is overweighed and likely to be drugged into degeneracy by demands that exceed its powers. With the deterioration of the condition of the masses, their organizations and functions, there will be plenty of idiots, but few great men; and hence under the miserable conditions in which the masses of the people live the general standard of man is but little above the grade of trained idiocy." Such a statement as this, from a source less wise and less authoritative, might be regarded as sensational; but as the sober conclusion of a well-trained and profoundly informed and well-balanced mind, it must be accorded weight.
The British Inter-Departmental Committee
on Race Deterioration.

A few years ago the English government created a commission charged with the duty of investigating the question of race degeneracy in England. This committee, known as the Inter-Departmental Committee on Physical Deterioration in Great Britain, made a very exhaustive study of the subject, taking the testimony of physicians, scientists, sociologists, magistrates, and people of all classes who had had opportunity for extensive and accurate observation, and published a voluminous report of their hearings. While the summary of this report is to a considerable degree inconclusive and non-committal, many of the facts brought out in the several hearings were in the highest degree significant, as will be shown by a few representative extracts.

On page 177 of the report we read:

"In England, degeneration is especially manifest in Manchester and other manufacturing districts. The police force is largely recruited from country districts, it not being possible to find enough men who are large enough in Manchester and Salford."

This is a most appalling statement. In a great section of England, comprising a population nearly equal to that of London, the people have been so deteriorated by the conditions of life to which they have been subjected that, in the words of the committee, "it was not possible to find enough men who were large enough to serve as policemen."

A recruiting officer testified that 60 per cent. of those who offered themselves as volunteers for military duty are rejected because of physical unfitness, and this notwithstanding the fact that the standard of requirements has been considerably lowered. For example, in 1845 (according to A. Watt Smith) the standard for admission to the army was 5 ft. 5 in. In 1883 it was lowered to 5 ft. 3 in. In 1908 it was lowered still farther to
5 ft. In 1901 no fewer than 593.4 per thousand were under the old standard height of 5 ft. 6 in., and 511.8 were under the chest measurement of 34 inches, which was the minimum in 1883. Notwithstanding this lowering of the standard, amounting to 6 inches in height, the total rejections were not decreased, and the decreases which were noted had relation to the measurements in which the standard had been lowered. ("Physical Deterioration, Its Causes and the Cure", by A. Watt Smith).

Statistics gathered by the British Association on the height of adult men between the periods of 1874–5 and 1899 to 1902 showed a decrease of one inch. A committee of the British Association for the Advancement of Science showed that the average height of boys between 11 and 12 in the different schools was 55 inches; in industrial schools, same age, 50 inches. The difference in stature between adults of the same classes was 3 1–2 inches.

Sir William Taylor, Director-General of the army medical service, makes the statement that "the rising generation of all below the artisan class includes a vast number of men of a very low standard of health and physique."

Mr. Gray, a member of the Anthropological Institute, noted a deterioration of physique in a portion of the population of Edinburgh and in the population of the west of Ireland. Within recent times attention has been drawn to the great number of defectives among school children. For instance, a Scotch committee which made an extensive study of this subject found 70 per cent. of the children in the public schools of Scotland more or less abnormal. The condition in this country is no better. The New York Bureau of Municipal Research published the results of the examination of 1500 school children in three city schools in which they found 93 per cent. to be defective.
The Human Race Becoming Toothless.

We are rapidly becoming edentulous. The German authorities report that 90 per cent. of the children of the public schools of that country have defective teeth. In Cambridge, England, a recent report of an examination of the public schools showed less than one per cent. of the children eleven years of age or over whose teeth were sound. Indeed, disease of the teeth has become epidemic throughout the civilized world. This fact was made particularly clear by the investigations of the commission appointed by the British Parliament. Professor Cunningham, the great English anatomist, testifying before this committee, said: "It is an obvious fact that the teeth of the people of the present time cannot stand comparison in point of durability with those of the earlier inhabitants of Britain. Those who have the opportunity of examining ancient skulls cannot fail to be struck with this."

An eminent English dental surgeon, W. H. Dolamoore, L.R.C.P., M.R.C.S., L.D.S., testified: "If we go back to quite ancient times, we find undoubtedly that the teeth were very much better than they are today. Thus in ancient British skulls not only is the arrangement good, the jaws well developed, and the teeth placed in a normal arch, but caries, if present, is of slight extent, indeed mere specks." Teeth taken from a plague pit (200 years old) were found to be "distinctly worse in arrangement and in extent of the caries than was the case in the ancient British skulls; but, on the other hand, they are better than what we look upon as the condition of to-day."

Dr. Young, Member of the Royal College of Surgeons, testified before the English committee as follows: "With regard to the evidence of deterioration, we find there is rickets, malformed heads, muscular atrophy, malformed mouths, imperfect dentition, facial appearance of age instead of youth, a decrease in population."
An Alarming Decrease of the Birthrate in Civilized Countries.

Another evidence of deterioration is the diminishing birthrate. The birth-rate in England has fallen from 35.3 per thousand in the five-year period 1876-1880, to 26.6 per thousand in 1906-1910. Each period of five years shows a material decrease from the preceding period. The Registrar-General of England says in his annual report for 1907: "The fact is also significant that at the last census period, 1900-1902, the fertility of English wives was lower than recorded in any European country except France."

The birth-rate is decreasing in nearly all civilized countries, as shown by the following table; the only exceptions being Spain, Austria and Ireland:

DECREASE OF BIRTH RATE BETWEEN 1880 AND 1902.

<table>
<thead>
<tr>
<th>Country</th>
<th>Decrease per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>30.6</td>
</tr>
<tr>
<td>South Australia</td>
<td>28.0</td>
</tr>
<tr>
<td>New Zealand</td>
<td>24.5</td>
</tr>
<tr>
<td>Victoria</td>
<td>24.2</td>
</tr>
<tr>
<td>Western Australia</td>
<td>23.9</td>
</tr>
<tr>
<td>Queensland</td>
<td>23.2</td>
</tr>
<tr>
<td>United States</td>
<td>20.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>19.3</td>
</tr>
<tr>
<td>France</td>
<td>19.7</td>
</tr>
<tr>
<td>England and Wales</td>
<td>17.7</td>
</tr>
<tr>
<td>Scotland</td>
<td>12.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>9.8</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>9.5</td>
</tr>
<tr>
<td>German Empire</td>
<td>8.4</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6.4</td>
</tr>
<tr>
<td>Norway</td>
<td>3.7</td>
</tr>
<tr>
<td>Italy</td>
<td>2.5</td>
</tr>
</tbody>
</table>

The rates shown in the above tables are calculated on the number of married women between the ages of 15 and 45 years. It is a matter of more worthy note that the birthrate is diminishing more rapidly in the United States than in any other part of the world except Australia and New Zealand. The
fertility of American wives is decreasing at the rate of one per cent. a year. If the capacity for motherhood continues to diminish as rapidly as at present it is plain that in the year 1912, no children will be born, and in the year 1917 there will be no children under five years of age. Long before that time the death rate will far exceed the birthrate, and indeed, the process of depopulation has already begun in certain parts of the United States. A recent census report shows the average number of children borne by native-born New England wives to be 2.7 and of foreign born wives living in the same section, 4.4.

A member of the Royal College of Surgeons, who testified before the English Committee, called special attention to the increase in barrenness of women as a sign of race deterioration.

An Increasing Number of Incompetent Mothers.

Another evidence of degeneracy of a kindred sort is the increasing inability of women to nurse their children. According to the testimony of Dr. Jones, an eminent English physician, before the British Commission, only one in eight of the infants born in Sheffield is brought up at the breast. According to Dr. Kelly, Bishop of Ross, Ireland, the practice of suckling is fast dying out. According to Dr. Holt, "In New York at least three children out of every four born into the homes of the well-to-do classes must be fed at some other fount than the maternal breast." Within the last few years an enormous business in the manufacture of infant foods has been built up in this country because of the inability of American mothers to nurse their infants, a fact which is in itself a most striking evidence of the progress which race degeneracy is making in this country.

The number of incompetent mothers is increasing rapidly among civilized people everywhere. This fact has become so conspicuous that the eminent Professor of Entymology of the University of California has become convinced
that the human race, like many other animals which develop the social instinct, has evolved a sort of neuter type corresponding to the worker class of bees and of some species of ants. The learned professor has discovered that women are in increasing proportions losing the instinct and the capacity for motherhood, and he predicts that a few generations will suffice to develop in the race a large class of women for whom marriage will be interdicted and who will be by society as well as by nature set apart as a working class. Whatever may be the value of this theory, the fact remains that the maternal fount is rapidly drying up, and the capacity for motherhood is depreciating at an extremely rapid rate. Race suicide or race degeneracy of which President Roosevelt has spoken so frequently and so emphatically is an actuality, and constitutes one of the unmistakable stigmata of racial degeneracy. There is no doubt that certain parts of the United States decay of the native population through diminished fertility is already far advanced, though the actual condition is for the present somewhat obscured by immigration and the large families of the newcomers.

**Appalling Increase of Insanity, Idiocy and Imbecility.**

The increase of insanity and idiocy has become so marked in recent years that a note of alarm is frequently heard from alienists on both sides of the Atlantic. Dr. Forbes Winslow, one of the world's greatest authorities on mental diseases, recently stated in a public utterance published in the London Times that in his opinion the entire race is destined to become insane. The superintendent of the State Insane Asylum at Austin, Texas, in his last annual report called the attention of the people of that great State to the portentous fact that insanity is increasing so rapidly in Texas that unless something is done to check it, it will not be many years before the insane will outnumber the sane, and, as the superintendent said, "will break out of the asylums and put us in."
And other parts of the United States are far in advance of Texas in mental decadence. For example, in 1867 the proportion of the insane in New York and in New England was about 1 to 1600 of the population. At the present time the proportion of insane in New York is 1 to 200 of the adult population. In a pamphlet by Homer Folks and Everett Elwood, issued by the State Charities Aid Association of New York, it is stated that there are in the hospitals of New York alone 32,657 insane persons—more than double the number in 1890, an increase of 104 per cent. in twenty years, while the population in the same state has increased only 52 per cent.

This number, great as it is, by no means represents the entire number of insane or of mental defectives in the State of New York, since the statistics of the hospitals show that about 25 per cent. of all persons who are committed to the insane hospitals are discharged within a year as cured, at least temporarily, and 25 per cent. more are discharged not cured but improved sufficiently to be thought not to require asylum restraint; from which it appears that there must be outside of the hospitals at least one-half as many people who are either partially insane or who have once been insane. There is also a very considerable number of persons who are more or less disturbed mentally but who, because of the harmless character of their mental aberrations, are not thought to require asylum treatment.

Reports of the various insane hospitals of the United States show that we have an insane population of 150,000 who are under restraint, and unquestionably at least as many more who are at liberty. Insanity is increasing even more rapidly in the British Isles than in this country. The English commission on race deterioration in its summary states: "There can, it is feared, be no question that insanity is on the increase in Ireland." (Par. 404, Vol. 1).

The number of insane in 1902 is put down by the committee as 1 in every 170 of the population, while fifty years ago the number did not exceed 1 to 750, which
means an increase of 300 per cent. in fifty years. In this country, the increase has been nearly as great, or about 300 per cent. in the same time.

Beside this great army of lunatics, there is an equally large army of idiots and weak-minded persons, constituting a group of defectives which reaches not less than 300,000. Professor Davenport, head of the Department of Eugenics of the Carnegie Institute, recently informed me that a study of defectives in the State of New Jersey shows that the feeble-minded class has doubled in that State in a single generation, that is, the proportion of this class to the whole population is twice as great as a generation ago. The proportion is now 1 to 250 of the total population. In Ireland, an older country, the proportion is 1 to 147. Evidently there are lower levels of mental decay which we have not yet reached, and toward which we are hastening. We now have one mental defective (insane or feeble-minded) in every 150 of our population. Ireland has 1 to 77 insane or feeble-minded. At the present rate of deterioration we shall be in the sad position of Ireland long before the middle of the century, and Ireland will have a lunatic or a feeble-minded person in every seventh family. These terrible facts demand attention. We are creating a lunatic and idiot population which threatens to be a majority within a few short centuries.

The tract sent out by the State M'Cities Aid Association, from which I have already quoted, calls attention to the fact that nearly 13 per cent. of the total number of insane are paretic, and that all probably owe their condition to syphilis, the social ulcer which every year is eating deeper into the constitution of every civilized race.

That insanity is a disease of civilization is shown by the extreme rarity with which this condition has been observed among the North American Indians, and the fact that while in England there are found 6 recognized insane persons to every 1000, among the less civilized of the Slavonic races the proportion is only one-tenth as great, or .6 per 1000.
Rapid Spread of the Cancer Plague.

Another degenerative malady characteristic of civilization is cancer. Williams has shown that this disease is practically unknown among the wild races of men and of animals; that it is found most common in the most highly civilized communities and among domestic animals. Cancer at the present time kills 5 per cent. of all the people dying in the United States. Its prevalence has increased 500 per cent. in sixty years. The disease is advancing more rapidly in the cities than in the country, a statement which applies to chronic diseases in general. In many cities the mortality rate from cancer is more than double, the average reaching nearly 200 to the million annually. Cancer is a chronic disease, and the death of 75,000 from this disease in the United States annually in spite of the best efforts of modern surgery means that not less than 300,000 are suffering constantly from this most loathsome malady. At the present rate of increase, by the middle of the century at least 1 in 40 of the entire population will be suffering from this disease, and 25 per cent. of the mortality will be due to it.

Of the women who died in 1909 between the ages of 45 and 55 years, 1 in 6 died of cancer. The disease is increasing rapidly among women, but still more rapidly among men. Thirty years ago this malady took off twice as many women as men. At the present time the mortality among men is three-fourths as great as that among women.

The statistics of the London and Berlin hospitals for sick animals show that 8 per cent. of the sick dogs are found to be suffering from cancer, and 7 per cent. of the cats. Among non-flesh eating animals—horses, cattle, sheep—the proportion is a small fraction of 1 per cent. The records of the London hospitals show a proportion of 12 per cent. of the sick received into their wards.
It has recently been discovered that cancer is epidemic among the fish of some of the fish hatcheries of the United States Fish Commission, and no doubt every fish hatchery in the United States is more or less infected with cancer.

Ross of Liverpool has recently shown that cholin and other poisons resulting from the disintegration of animal flesh produce abnormal cell growth, and this is the probable cause of cancer.

Increase of Eye and Ear Defects.

Eye and ear defects are decidedly on the increase. Dr. Graham Bell pointed out long ago the fact that the asylum treatment of deaf mutes and the very natural intermarriage resulting was creating a deaf mute variety of human beings.

The increase of eye disease is so rapid that the time seems not far distant when the use of glasses will be universal. Twenty per cent of the children in the public schools of England have defective eyes. Among the volunteers for the Boer War the number of persons with eye defects was found so great that it became necessary to accept them as soldiers, contrary to all previous practice, and to fit them out with glasses in order to keep the ranks of the army filled.

THE MORTALITY RATE FROM CHRONIC DISEASE HAS DOUBLED IN 30 YEARS.

Chronic diseases and degenerations of all sorts are increasing, and at a very rapid rate in recent times. Careful study of the mortality reports of the United States Census Bureau makes this fact very clear. These reports show, for example, that the mortality from arteriosclerosis, a disease of the blood vessels, has increased from 6.1 per 100,000 in 1900 to nearly 21 per 100,000 in 1909, an increase of 241 per cent; that is, more than three times as many people die from disease of the blood vessels to-day as ten years ago.
The mortality from diabetes, in spite of all the discoveries in metabolism and improvements in dietetics, has increased nearly 50 per cent. in ten years; and the mortality from appendicitis, notwithstanding the best efforts of able surgeons, has increased more than 20 per cent.

During the same time, the mortality from heart disease has increased over 50 per cent. Mr. Rittenhouse, late president of the Provident Savings Life Assurance Society of New York, has recently called attention to the fact that there has been an increase in the mortality from Bright's disease throughout the United States of 131 per cent., and in Chicago of 167 per cent. Mr. Rittenhouse goes on to show that the mortality from chronic diseases in general has doubled in less than thirty years, and that the mortality between 40 and 50 years has increased 34 per cent., between 50 and 60 years 22 per cent., and between 60 and 70 years 25 per cent. The expectancy of life after forty years has decreased because chronic disease finds most of its victims among persons past middle age.

Chronic disease kills half the people who die in the United States, or about 750,000 persons annually. Half of these, that is, 375,000, would not die if the public health were as good as it was thirty years ago. This enormous increase in the mortality rate from chronic disease has escaped the attention of sanitarians because of the notable decrease in the general death-rate, as the result of a decrease in deaths from acute disease so great as to more than balance the increase in the deaths from chronic disease.

This great improvement in the general death-rate has increased the average length of life more than fifteen years in a century, and this fact has been accepted as satisfactory evidence that we are making rapid progress in race improvement. This is a grave error. It is important to recognize the radical difference between acute and chronic disease.
The poet Watts sang:

"Diseases are Thy servants, Lord;
They come at Thy command."

This hymn was intended "For sick bed devotions", and is found in all the old hymn books. It represents the old philosophy of disease, which led a certain pope in the Middle Ages to anathematize the Turk, the pestilence, and the comet. Modern enlightenment has shown us that disease is not an evil of human production. Acute diseases we take from our neighbors; chronic diseases are a home product, the result of erroneous habits, often of poison habits acting through long years and producing a gradual degredation, and degeneracy of the tissues.

**Notable Increase of Crime.**

When we turn from the contemplation of physical disorders to the consideration of moral maladies, the picture is darker still. Crime is increasing at a rapid rate. There are 10,000 murders, and 16,000 suicides every year,—one murder in every 9,000 of the population annually, and one suicide in every 5,800. The proportion of murders to the whole population is reported to be twice as great in this country as in India, a country which we are trying to help civilize and Christianize.

Within twenty-three years the number of suicides in Great Britain has doubled. This crime is increasing in the United States at about the same rate.

In France, according to the *Revue de Paris*, crime is increasing rapidly, especially juvenile crime. There are 400,000 highway robberies in France annually. A criminal type of men and women is developing, and has already reached large proportions in all civilized countries. A bulletin recently sent out by the Eugenics Record Office of the Carnegie Institution tells of a family with 319 members, only 42 of whom were normal; and the proportions, we are informed, have since been increased to 600, with only 50 normal.

**Centenarians Rapidly Decreasing in Number.**
Another evidence of the pernicious influence of the one-sided hygiene which simply preserves the unfit while doing nothing to cure their unfitness appears in the marked depreciation in the proportion of centenarians to the whole population which is going on in all civilized countries. The real measure of the physical vigor of a race is not the age at which the average man dies, but the proportion of individuals who attain to great age. Cholera, yellow fever epidemics, and other plagues in former times weeded out the weaklings, drunkards, debauchees and other classes of the unfit. By keeping these alive through quarantine and public sanitation, the average longevity is increased, while both the actual number as well as the proportion of centenarians has been steadily diminishing. We have been making ourselves believe that the tree was flourishing because of the great number of young sprouts about the bottom, while the main trunk is dying at the top.

Statistics of all highly civilized countries show a steady falling off in the number of centenarians. We have in this country at the present time less than 4000 centenarians, or 1 in 25,000 of our hundred million. Bulgaria has 3,000 centenarians in a population of 3,000,000, or 1 in every 1,000—25 times as many in proportion. Older civilizations are worse off than we are. In France, the proportion of centenarians is 1 in 190,000 of the population; in England, 1 in 200,000; and in Germany, 1 in 700,000. In these countries decay has extended so far down the trunk that it has nearly reached the level of the young shoots.

Senility and youth are approaching each other, and the time seems not far distant when the time which intervenes between youth and second childhood will disappear, and childhood will be met by second childhood. A Philadelphia doctor reported a youth of 28 years whose arteries were as hard as pipe stems, and a German authority reported a similar case in which the patient's age was 17 years. Men and women of 40 who present all the evidences of advanced senil-
ity are rapidly increasing in number. The responsible cause is the same as that which produces the increasing mortality from Bright's disease, heart disease, and pneumonia. Degenerated kidneys, hardened arteries, fatty heart, are simply old kidneys and arteries, and senile heart.

New and Abnormal Varieties of the Human Face.

Evidently we are developing a number of defective varieties of the genus homo. We are losing our teeth. The jaw, not properly used in mastication, is becoming so short there is no room for the last molar. The wisdom tooth comes in late, and after making no end of trouble for two or three years, dies prematurely through lack of a proper blood supply. I possess the skull of a mound-builder taken from a mound on Roberts Island in San Francisco Bay, evidently that of an old man, yet each jaw contains sixteen well-worn teeth, not one of which shows the slightest evidence of decay.

We are losing our sense of smell, the result of disease and of almost universal disease of the nose from low vital resistance and infection. And we have found no compensation for the loss of this most important sense.

Then we have the myopic man, and the hypermetropic man, the astigmatic man, who can see nothing straight, and the insane type of man, who thinks astigmatically; the epileptic type, the criminal type, the consumptive type, the neurotic type, the inebriate type, the senile man, the weak-footed man, the feeble-minded man, the dyspeptic type, the neuter type of woman; and all these and numerous other pathological varieties of human beings are, through the inexorable law of heredity, multiplying and intermingling, thus intensifying old defects and creating new ones and leading on down the hill of race degeneracy. The late Senator Hoar remarked that we need less to be concerned about civilizing the heathen than about how to get the heathenism out of civilization.
Some of the Causes of Race Degeneracy.

There is evidently something the matter. It is the duty of sociologists and sanitarians to find out the causes and the remedy. Some thirty years ago my duties as a member of the Michigan State Board of Health led me to make a somewhat careful study of public health laws and administration, as a result of which I reached the conclusion that public health regulations of all sorts were detrimental and dangerous to the welfare of the race unless supplemented by more thorough-going measures which would reach the personal life of the individual. It seems to me obvious that public health regulations and quarantine restrictions would serve to keep alive a large number of weakly infants whose infirmities and deficiencies through the operation of heredity would effect and weaken the race. The eminent Professor Cunningham, in his testimony before the English committee on race deterioration, referring to the lowering of the death-rate through improved hygienic measures, and the preservation of the weak and unfit, remarks: "There can be little doubt that the addition of these to the population must have tended to lower the general physical average of the people of these countries."

Public sanitation preserves the unfit instead of securing the survival of the fittest, and the unfit contaminate the fit. This explains the fact to which Mr. Rittenhouse has called attention, that notwithstanding the increase in the average longevity within the last century, the mortality after forty years has notably increased.

W. H. Dolamore, L.R.C.P., M.R.C.S., L.D.S., in testifying before the British Commission, attributed the great prevalence of decay of the teeth in young children to the preservation alive of a great number of feeble infants in recent times. He remarked: "If you take a primitive condition of society, it is perfectly obvious that most sickly children would die off. For instance,
take as an extreme instance, the children that Darwin met with while in Patagonia where he noted that the newly born child was carried about naked by its mother, and the rain froze on it as it fell. It is perfectly obvious that every sickly child would be killed off and therefore only those that were vigorous would survive.

Here, then, is a fundamental cause in operation in every civilized community which must tend to race deterioration and possibly ultimate extinction, unless counteracted by attention to the personal habits of each individual, so that the unfit who are preserved alive may, so far as possible, be made fit, and general race deterioration be thus prevented.

The preservation of the unfit, while humane and altruistic, is nevertheless a menace to the race and but lends a helping hand toward ultimate race destruction, unless we do something more. If we are to save alive the unfit, we must heal them of their unfitness, and prevent the multiplication of their defects through heredity; otherwise our altruism to the individual becomes homicide to the race.

A brief glance at some of the conditions universally prevalent among civilized people shows how wide a departure has been made from normal conditions of life. The first men were born out of doors. Native to the tropics, primitive man required neither house nor clothing, but climatic changes compelled him to seek shelter in a cave, and he has been living in a hole ever since. Tuberculosis is a house disease. Monkeys, antelope of all sorts, even lions and other carnivorous animals, die of tuberculosis when shut away from the fresh air and the sunshine. Dr. Evans, health officer of the City of Chicago, turned the monkeys of the zoological collection out of doors in dead of winter, and they got well. Tuberculosis is unknown among these animals that live in the open air. The tuberculous type of man will continue to multiply until we learn to cultivate the out-of-door life and to sleep in an out-
of-door atmosphere. Colds, catarrhs, pneumonias, general low resistance, the mother of all maladies, are the natural outcome of our adherence to the example of our cave-dwelling ancestors.

The artificial habit of wearing clothes enfeebles the skin by overheating, retains the poisonous excretions to be re-absorbed, polluting the blood and giving rise to various skin maladies. Absence of the vitalizing rays of the sun playing upon the skin and of the tonic influence of the contact with the moving air, the wearing of shoes, hats, restricting bands and other garments, are all prolific sources of debility, systemic weakness and lowered resistance, which open the door to numerous grave and vital maladies and general race decay. We can not dispense with clothes, but we must counteract the evil effects of clothing by frequent cleansing baths, daily cold water and air baths, swimming, work in the gymnasium, wearing of light and porous clothing and frequent change of underwear.

Women are degenerating more rapidly than men, for the reason that they are more indoors. Their clothing is more restrictive; their habits more sedentary. The savage woman is often stronger, or even stronger, than the savage man. The civilized woman has but half the strength of the civilized man.

This fact has been positively shown by the comparative tables of muscular tests made with the Universal Dynamometer, an instrument used by the United States Government in the examination and training of men for the army and navy. Averages of many hundreds of cases were made and the data compiled with care.

The bad conditions of school life kill nearly 90,000 children in the United States every year. The out-of-door school, cold air, school gymnastics at the end of every period, practical school inspection, and the daily and hourly inculcation by teachers of respect for the body and the principles of healthful living, are necessary reforms.
A swimming pool and an open-air gymnasium should be connected with every public school system. The basis of education must be changed. The development of a sound body must be the first desideratum, rather than the training of the brain in mental gymnastics while the body is left to fall into decay.

Diet is a factor of primary importance in the biologic development of the race as well as of the individual. Each race of animals selects by instinct the food best adapted to it. The human race, at least the civilized portion of it, seems to have lost its guiding instinct, and has wandered far in its dietetic practices from the normal and physiologic way of life. He has gradually added to his natural diet the bills of fare of nearly all other creatures, and with most disastrous results.

The chimpanzee still adheres to the original bill-of-fare which nature provided for primitive man and his relatives. The big apes of the London Zoo are wholly content with a diet consisting of lettuce, oranges, bananas and bread, with now and then coconuts and a handful of monkey nuts.

Man discovered fire which has enabled him through cookery to feed upon roots, dry grains, and the flesh of animals. Cookery has rendered the race invaluable service, but has unquestionably been the means of leading us too far away from our primitive dietary. The great hopes raised by the application of Pasteur's discovery to destruction of the germs in milk were only in part realized before it was discovered that infants fed on cooked or sterilized milk became rickety and developed signs of scurvy. It has been definitely shown that the cooking process breaks up and destroys many enzymes and delicate compounds which are essential to complete nutrition. No farmer would think of feeding his horses, pigs, or cattle on an exclusive cooked diet. Something uncooked should be eaten daily to preserve the integrity of the tissues. A Western pioneer told the writer that when shut in for three months in the San Joaquin Valley during the winter, he felt so bad that he ate the first fresh-leaf lettuce which came from the garden.
Sierras, he escaped the scurvy, from which all of his comrades suffered, by following the example of a mule, who dug away the snow and ate the grass underneath. Dr. Lauder Brunton tells us that one reason why we lose our teeth is because we do not get lime enough in our food. Bunge of Basil, and Sherman of Columbia have pointed out that half the civilized world is suffering from lime starvation through the use of food stuffs which contain little or no lime. The body loses daily 13 grains of lime in the excreta. This must be replaced. If it is not replaced by the food, the bones and teeth are robbed of lime and thus softened. The lime content of foods varies greatly. A pound of wheat or Graham flour contains four grains of lime; a pound of fine flour but one grain; a pound of meat half a grain; a pound of potatoes a mere trace; a pound of sugar none at all. A pint of milk contains fourteen grains of lime; a pint of cream three-fourths as much; a pound of butter almost none at all. Peas and beans contain eight grains of lime to the pound.

It is thus evident that sugar, although a carbohydrate, is no substitute for the carbohydrate of cereals; and lean meat, although rich in protein is not a proper substitute for the protein of vegetables; because, in both instances the lime which is by nature associated with the carbohydrates and proteins in the proper proportion has been separated, in one case by an artificial process and in the other by the natural process. The corn which the hog eats contains an abundance of lime, but when assimilated the lime is separated, going to the bones, while each other food principle goes to its proper tissues—the protein to the muscle, the starch and oil to the fats. When the hog is eaten, the bones are left behind, and the lime with it.

The annual average per capita consumption of meat in the United States, including fish and fowl, is 240 pounds, or two-thirds of a pound a day for each man, woman, and child. The per capita consumption of sugar is over eighty-two pounds, or about four ounces a day. With the addition of butter and other
foods, these items furnish three-fourths of the nourishment of the average citizen of the United States, and supply practically no lime. Here is abundant reason for decay of the teeth, and the depreciation of stature.

The marked change in diet which has occurred in the last half century, may be in large part responsible for the great increase in chronic disorders which has added 350,000 to the annual death roll in thirty years. The mistake of the earlier students of human nutrition in placing the protein ration at a figure at least twice the real requirement encouraged a mischievous increase in the use of flesh foods, the disadvantages of which have been demonstrated by Professor Chittenden of Yale, by Dr. Hindehade in Denmark, and by numerous physiologists in various countries. The unusable surplus of proteins resulting from the free use of meat and eggs is converted into poisons producing a condition commonly known auto-intoxication since the discoveries of Bouchard, and now recognized as the real cause of most chronic diseases and degenerations, many of which were formerly attributed to other causes more or less vague and mysterious.

The ordinary dietary, consisting largely of meats which are always in a more or less advanced state of decay, promotes intestinal putrefactions which Metchnikoff, Bois, and others have shown to be the cause of premature senility and many other degenerations. The high protein dietary in the writer's opinion has played a very large part in producing modern race degeneracy.

Of all animals man is the only one that spoils his food before he eats it. Every other creature takes it from the beneficent hand of nature as it has been provided for him. Man not only burdens his own simple, rather puny stomach, with the bills of fare of all creation, but deliberately, under the guise of cookery, damages wholesome food stuffs by various pernicious processes which render it indigestible, and by the addition of poisonous substances called condiments. Recent researches have shown that extracts of mustard, pepper,
and other irritating condiments, when injected in small quantities into
the blood vessels of animals, in a few months produce atheroma or hardening
of the arteries and other changes characteristic of senility. Bois of Paris
has shown that pepper and other substances are even more active than alcohol
in producing cirrhosis of the liver and other visceral degenerations.

Pawlow's discoveries have made clear the enormous mischief which is
daily done to the digestive organs by the use of baking powders and alkalis
in other forms.

Overeating is probably doing much more harm than underfeeding among
civilized people. Bright's disease, cancer, and decay of the teeth are found
to be more common among the well-to-do than the poor. Cancer, in particular,
is a rich man's disorder,—the result of high protein feeding and sedentary
habits.

Poison habits are increasing, both in the number of enthralling drugs
and the proportion of victims. Alcohol, tobacco, tea, coffee, cocoa, cocaine,
and opium are yearly destroying new armies of victims, and through heredity
sending their baneful results down to posterity. According to data furnished
me by the Census Bureau, the people of the United States consume every year
amazingly 1,935,000,000 gallons of alcoholic liquors, 400,000,000 pounds
of smoking and chewing tobacco and snuff, 7,500,000,000 cigars, 5,500,000,000
cigarettes, 111,000,000 pounds of cocoa and chocolate, 1,000,000,000 pounds of
coffee, 100,000,000 pounds of tea, 400,000 pounds of opium, and 30,000 ounces
of that most subtle of all enslaving drugs, cocaine.

The per capita consumption of these various poisons figures out as
follows: alcoholic liquors, 176 pints, or half a pint a day for each man,
woman, and child; tobacco, according to the Tobacco Journal, 10 pounds for
each man, woman, and child living in the United States; tea, coffee, cocoa,
and chocolate, 15 pounds; opium, 30 grains. Essential poisons are contained
in these several drugs in the quantities taken annually per capita as follows:
Pure alcohol, 120,000 grains; nicotine, 2,100 grains; caffeine, 2100; opium
30 grains— a daily dose of 356 grains of alcohol, enough to kill a child
if taken in concentrated form and at one dose; 6 grains of caffeine, a poison-
ous dose for a cat, and a medicinal dose for a man; 6 grains of nicotine, enough
to kill 50 cats, or 6 men not accustomed to the use of tobacco; and one-half
grain of opium; aggregating 368 grains of poison.

With this amount of deadly poisons circulating daily and nightly
in the veins of the average American, it is no wonder that signs of degeneracy
are making their appearance. To the above list of poisons must be added a
vast amount of miscellaneous poisons swallowed under the guise of patent and
proprietary drugs, especially certain coal-tar products, the tendency of which
to produce degenerative changes is well known, and even a new class of soda
fountain drinks to which Dr. Wiley and the Agricultural Department has recent-
ly called attention.

The recent studies of Andriasen, Tuke, Dodge, and others have shown
how these drugs destroy a man soul and body, by producing degeneration of the
delicate fibers by means of which nerve cells communicate with one another,
thus isolating the individual units of the cerebrum and so destroying memory,
co-ordination, will and judgment, and wrecking the individual physically,
mentally, and morally. Poisons which effect the consciousness such as alcohol,
tobacco, opium, cocaine, tea and coffee, act first to depress and paralyze
the highest faculties, those that develop latest in life, viz. the judgment,
the conscience, the sense of propriety and fitness, respect for the rights of
others. Under the influence of alcohol, for example, the adult becomes a
child in judgment and emotional excitability, yielding to every impulse, a
prey to every emotion. The brakes are removed from the mind, self control is
gone, conventional usages and sanctions are ignored. The man is insane. After
many repetitions, the condition becomes permanent. Degeneracy has resulted from
the chronic poisoning, and this condition may be passed on to posterity.

A most striking example of alcoholic degeneracy is afforded by the study of 117 alcoholic families by Dr. Albert Gordon. In 90 of these families, there were 200 children, all of whom showed the stigmata of degeneracy. 150, or three-fourths of the whole, were epileptic. Of 73 children found in 20 families whose parents and grandparents were both alcoholic, 35 were imbeciles and 25 insane.

William McAdam Eccles, M.D., F.R.C.S., testified before the Royal Commission appointed to study race deterioration in Great Britain, that alcohol is a cause of sterility in women. (Par. 1079).

Professor Bunge, the world's most eminent authority in the chemistry of nutrition, has shown by carefully studied statistics that the inability of mother's to nurse their children is one of the hereditary results of alcoholism.

Recent experiments have shown that a high protein diet (a flesh diet) causes sterility in rats and fowls. An eminent English physician (Dr. Watson of Edinburgh) has called attention to the fact that the birth rate has decreased in England in proportion as flesh-eating has increased.

From every distillery and every saloon, from every tobacco factory and every cigar stand, and from every brothel, there is pouring out a stream of degenerative influences which is more destructive than all others which it has encountered during its long history. Man has managed to survive the most terrific terrestrial upheavals and cataclysms; he has fortified himself against climatic changes; he has overcome the monsters of the forest which preyed upon him; and now he is conquering one by one, his microscopic enemies, but in spite of all this, his voluntary departures from normal conditions of life, the damages which he voluntarily inflicts upon himself by poison habits and other vices, are slowly but surely destroying his racial stamina, and in the end will certainly accomplish his ruin unless the danger of such widespread departures
from normal conditions of life is recognized and the evil averted by a return to natural ways of life.

The rapid increase in the proportion of city and country population within the last half century is without doubt a very active factory in modern race degeneracy. The dust and infections of the city, the noise, stress, excesses, and other abnormalities, create a degenerate type of man. The city population in England is three times as great in proportion to the whole as fifty years ago. The same may be said of this country.

In summing up its report the British Committee said on this point:— "In regard to certain classes in Dublin, Sir L. Ormsby was convinced that there was evidence of progressive deterioration, and Sir Charles Cameron seemed to share the same belief. It is not only that the effect of migration into the towns is to make the next generation of a weaker type, but, in Sir L. Ormsby’s opinion, the people who come into the towns from the rural districts are of a weaker type to start with and therefore more vulnerable to the noxious influence of urban existence. From the facts that came under his knowledge, the Bishop of Ross was likewise of the opinion that there was physical deterioration amongst the people". (Par. 407.)

That the human race is degenerating is becoming evident to all intelligent students of sociology, and the cause and cure of this deteriorative tendency are being made the subjects of frequent research and discussion. A late number of the British Medical Journal (October 9, 1909) contains a summary of interesting researches recently carried on by Ethel M. Elderton, a Galton research scholar, for the purpose of determining which is the dominant influence in this degenerative tendency,—heredity or environment. Miss Elderton’s study inclines her to the opinion that heredity is decidedly the most influential factor. She finds that weakly and defective children are the offspring of weakly parents, and that the deteriorating type of human beings is increasing much more rapidly
than the stronger types. These facts were elicited as a result of the study of many thousands of families.

Professor Carl Pearson, an authority in sociology, recognizes the rapid increase of "unfit" types of human beings. It can no longer be said that race degeneracy is simply a bugaboo created by pessimists and alarmists. Pessimism is unquestionably a paralyzing force which has no place in a progressive age, but excessive optimism may be equally as detrimental to progress. The marvelous discoveries in relation to the causes of disease and the means of prophylaxis which have been made within the last half century, and the great improvement in the average length of life which has been shown as the result of the practical application of these discoveries have led to a feeling of security and satisfaction in relation to the physical well-being of the race which is not justified by the real facts which are revealed by the deeper examination of the question.

Ex-President Roosevelt has frequently called attention to the danger of race suicide. In an article in the Outlook for April 8th on Race Decadence Mr. Roosevelt says: "We can say that, if the processes now at work for a generation continue to work in the same manner and at the same rate of increase during the present century, by its end France will not carry the weight in the civilized world that Belgium now does, and the English-speaking peoples will not carry anything like the weight that the Spanish-speaking peoples now do, and the future of the white race will rest in the hands of the German and the Slav."

The fact that the skull of Pithecanthropus, the antique skull from Java, approaches in type the skull of the ape, and that the skulls of cave dwellers have similar characteristics, have made us complacent in the thought that we are steadily advancing; but the discovery of the skeleton of the Galley Hill man supposed to be 170,000 years old gives the question a new aspect. A careful examination shows this ancient skull to possess characteristics identical
with those of the modern Englishman.

In his haste to become civilized man has neglected to provide compensations for the departures from normal conditions of life which civilization necessarily involves. We need not return to savagery to be healthy, but we must see that the air we breathe is as clean as that which the savage breathes, that the food we eat is as wholesome and pure as the water we drink. We must give our pale skins more contact with sun and air, and must keep the inside of our bodies as clean as the outside. We must cultivate clean blood, instead of blue blood. Society must establish laws and sanctions which will check the operation of heredity in the multiplication of the unfit. Eugenics and eugenics must become dominant matters of study and concern. We must cultivate health instead of disease, as we have been doing for 6000 years or more, and must rally the social forces of the world to labor earnestly for race regeneration. Thus only may we hope to stay the tide of degeneracy which is rolling in upon us and avert the race extinction which is staring us in the face.
What's the matter with Young America?

Evidence that Young America is deteriorating physically.
Evidence of mental deterioration.
Evidence of moral deterioration.

Old Greeks' motto, "A sound mind in a sound body." This belief also held by the Romans--Caesar.

Descent of man began with the decline of Christianity in the early centuries of the Christian Era.

Describe ancient Roman baths and their destruction--conversion into churches.

Rome filled with churches built of material stolen from the baths of Caracalla, and others.

Darkness of the middle ages.

Darkness still exists in countries where there is the least Christian enlightenment.

Attachée of the English Legation at Madrid--"Englishmen so dirty they have to take a bath every day."

Broader Christianity includes the Gospel of health, which should be preached from every pulpit, not left to the doctors and a few sanitary officials.

Moses was a great health teacher.

Christ commissioned his disciples to heal the sick as well as to preach the Gospel.

God has given us our bodies,--his divine masterpieces--to make the most of them.
Our duty to preserve and make the most of them.

Causes of physical deterioration.

Lack of attention to physical development.

No necessary relation between manly vigor and ungodliness between hard muscles and hard hearts. This notion cultivated by namby pamby story books.

The muscular Christian who possesses the ability to not only to instruct the sinner but to chastise him, possesses an advantage not only in the greater respect which he is able to command but in the greater power of mastery which he possesses.

A good physical balance is the best foundation for a good mental and moral balance.

One of the things most necessary for the uplifting of the young men of the present generation is to give them better bodies.

Every Young Men's Christian Association gymnasium a missionary agency.

Bicycle clubs, athletic associations, and similar organizations have in them an element of good, but unfortunately the Devil generally captures these Societies, and through the use of tobacco and alcohol renders them more effective for evil than good.

Physical training without moral culture may make a Sullivan, but not such a man as Scott Sker, whose strength was as the strength of ten because his heart was pure.

John Sullivan well illustrates the truth of the Scripture Proverb: "Greater is he that controlleth his own spirit than he that taketh a city." (Look up Text.)
Sullivan won many a victim in the ring, but was always beaten at the bar.

The young man who in the strength of his vigor imagines himself to be complete without religion, will do well to listen to the words of Minister Lowell, who, after listening to the remarks of some scoffers at a public dinner in London, at which a number of irreligious noblemen were present, arose and said:

(Quote from Man the Masterpiece:)

The young man of to-day needs both strength of morals and strength of muscles to enable him to meet the moral emergencies of the times and the physical demands of our rapid age.

Another thing the matter of Young America is he has a weak stomach.

Americans a nation of dyspeptics.

The remark of a London Doctor.

The cause of American dyspepsia not climate, not business, but bad eating.

"As a man eateth, so is he."

A man who eats fried eggs, soda biscuit, griddle-cakes, and coffee for breakfast, and who swallows turtle soup, beefsteak, lobster salad, mince pie, Edam cheese, Pate de Foi gras, ice-cream for dinner at a gulp, will be swallowing pills for indigestion and dyspepsia bitters before he is 25.

Americans cultivate dyspepsia.
4.

We invite indigestion by the monstrous masses we put into our stomachs.

Rich sauces, indigestible pickles, greasy dishes we swallow are as unfit for making muscles, bones, or brains, as for entering into the structure for of a jewel case or a plank.

Condiments:

The story of the boy who ate horseradish.

Story of the Indian who ate mustard.

Charles Lamb's cheese story.

Story of the Spanish officer and German eating Limberger.

Alcohol and tobacco habits.

Heredity.

Personal purity.

Miscellaneous Memoranda.

The influence of bad example--Young man at the Mission.

The bondage of Habit.
MINISTER LOWELL ON SKEPTICISM. — "I do not think it safe. I am formulating no creed of my own; I have always been a liberal thinker, and have, therefore, allowed others, who differed from me, to think also as they liked; but at the same time I fear that when we indulge ourselves in the amusement of going without a religion, we are not, perhaps, aware how much we are sustained at present by an enormous mass, all about us, of religious feeling and religious conviction; so that, whatever it may be safe for us to think,—for us who have had great advantages, and have been brought up in such a way that a certain moral direction has been given to our character,—I do not know what would become of the less favored classes of mankind if they undertook to play the same game. I wished only to enter the protest of one in whose veins runs the blood of Calvinistic ancestors, against the way in which Calvinism has been spoken of, and also to remind one of the speakers that the saint whom he quoted was the same who said, 'The greatest of these is charity.' Whatever defects and imperfections may attach to a few points of the doctrinal system of Calvin,—the bulk of which was simply what all Christians believe,—it will be found that Calvinism, or any other ism which claims an open Bible and proclaims a crucified and risen Christ, is infinitely preferable to any form of polite and polished skepticism, which gathers as its votaries the degenerate sons of heroic ancestors, who, having been trained in a society, and educated in schools, the foundations of which were laid by men of faith and piety, now turn and kick down the ladder by which they have climbed up, and persuade men to live without God, and leave them to die.
without hope. The worst kind of religion is no religion at all; and these men, living in ease and luxury, indulging themselves in the 'amusement of going without religion,' may be thankful that they live in lands where the gospel they neglect has tamed the beastliness and ferocity of the men who, but for Christianity, might long ago have eaten their carcasses like the South Sea Islanders, or cut off their heads and tanned their hides like the monsters of the French Revolution.

"When the microscopic search of skepticism, which has hunted the heavens and sounded the seas to disprove the existence of a Creator, has turned its attention to human society, and has found a place on this planet ten miles square where a decent man can live in decency, comfort and security, supporting and educating his children unspoiled and unpolluted, a place where age is reverenced, infancy protected, manhood respected, womanhood honored and human life held in due regard,—when skeptics can find such a place ten miles square on this globe, where the gospel of Christ has not gone and cleared the way, and laid the foundations, and made decency and security possible, it will then be in order for the skeptical literati to move thither, and there ventilate their views. But so long as these very men are dependent upon the religion which they discard for every privilege which they enjoy, they may well hesitate a little before they seek to rob the Christian of his hope and humanity of its faith in that saviour who alone has given to man that hope of eternal life which makes life tolerable and society possible, and robs death of its terrors and the grave of its gloom."
MILLIONS IN IT.-- Furthermore, it is the duty of every human being to make the very most of himself, and nothing is more important to a young man preparing himself for his life-work, than that he should make the most of his life, by preserving the highest possible degree of health. There are millions in it, -- millions of happiness, usefulness, even of wealth. A man without health, even if his burglar-proof safe contains the wealth of a Rothschild or a Vanderbilt, is poorer than the ragged news boy who clarion voice resounds with robust health, and whose rosy cheeks tell of a richness of the vital fluid in his brain; or the Italian peasant boy whose daily toil gives him a vigorous appetite for the handful of chestnuts upon which he dines.

The millionaire is rich in cash, but often poor in comfort. He has a heavy-pocketbook, and a heavier heart, a table spread with costly dainties, but no appetite; a palatial abode, and a pained racked body in it. The hydra-headed monster dyspepsia, glares at him from every savory viand at the dinner table. When he ventures out to walk over his domains, a vexatious rheumatism causes him to make wry faces at every step. If in his magnificent turnout he seeks invigoration in the morning air, a veritable fiend, which the doctors have named tic-douloureux, drives him back to his overheated chamber writhing with pain. When he lies down upon his luxurious couch, he sleeps not the sleep of health and physical soundness, but rolls and tosses restlessly about until a horrid nightmare settled down upon him, and holds him in its deadly grip. The glorious morning sun beams not with joy and gladness upon such a one. He rises languidly from his couch of torture, and begins another wretched day. The woodchopper
with his brawny arm, his magnificent digestion, his sound rest, his ignorance of "nerves," nightmares, and neuralgias, is the envy of the millionaire and justly so; he is a richer man of the two. The one has golden wealth, the other glorious health, and finds millions in it, though his pocket-book thin and his bill of fare a crust.

The highest type of morality requires obedience to all laws, ready recognition and acquiescence to their requirements, and sturdy adherence to the right because it is right. The highest type of Christian will include in his creed the religion of the body as well as that of the mind and heart, and should accept for his rule of action a decalogue which recognizes every law essential to the physical and mental as well as moral welfare of a human being.
Young America—What's the Matter With Him?

General decadence of vigor.

Xerophyllic, Italian soldiers, 50 miles a day, 200 lb. bread, varied fruit.

Frasier, champion run and jump from springboard 23 ft.

Washington 24 ft.  Base Ball throw, 400 ft.

Washington, Silver dollar, 600 ft.

Mauritanian wood choppers, roasted meal broth and fibre bread.

U. S. Senator and Chief Justice Coolidge—Dollar went further in those days.

Lack of Spontaneous vigor.

Young man—flat chest, lop shouldered, flabby cheek, dull eye, bad teeth, bad breath

Increase of defectives—many varieties of human beings.

Causes—Heredity, Education, Habits.

HEREDITY.

Felicity to be well born—stage coach—phenomena of heredity.
Facts, chests, waists, stomachs, livers, nerves, drunk and tobacco using fathers, tea drinking mothers.

His mother was an invalid.---corsets, neglect of physical culture.

EDUCATION.

Haphazard---grow up like Topsy---Come up like weeds.

Habit in neglect.

Horse education---horses educated, boys neglected.

Pigs improving, boys deteriorating.

One sided---classics---trained to memorize and imitate, not to think.

A Boy's Essay on Breathing.—The following extract from a small boy's composition on "breathing," is a sad commentary on the physiological teaching which the majority of children receive in our public schools: "Breath is made of air. We breathe with our lungs, our lights, our livers, and our kidneys. If it wasn't for our breath we would die when we slept. Our breath keeps the life a-going through the nose when we are asleep. Boys that stay in a room all day should not breathe. They should wait until they get outdoors. Boys in a room make bad, unwholesome air. They make carbonicide. Carbonicide is poisoner than mad dogs. A heap of soldiers were in a black hole in India, and a carbonicide got in that there hole, and nearly killed every one before morning. Girls kill the breath with corsets that squeeze the diagram. Girls can't holler or run like boys, because their diagram is squeezed too much. If I was a girl I'd rather be a boy, so I could run and holler, and have a big diagram."
Physical culture neglected.

Advantages of physical training and of strength.

Alexander the Great---Aristotle---Julius Caesar and Athlete---Gladstone.

Your feet Oak in after-noon.

What Training will do? Rowell 150 miles in 24 hours. Famous courier sent back to bring up Spartan soldiers---148 miles in 48 hours.

HABITS.

Influence of habits---mental, moral and physical.

Tyranny habit.

Habits in relation to health---duty to do well---advantages of health.

Nature intends us to work---heart, muscles, bones, joints, all work---do something.

Tobacco, alcohol, diet, and sexual habits.
The Race Growing Old.

The editor of the *British Medical Journal*, the leading medical journal of the world, discusses in a recent number, the question of the physical deterioration of the race, remarking, "We have somewhat suddenly awakened to the fact that physical degeneracy means danger to the nation in the present as well as in the future." The editor quotes Dr. Hyslop, an eminent English authority, who from physical, geographical, ethnological, and psychological consideration, asserts that "mankind is not only approaching the summit of attainment, but also possible growing old." "Civilization brings with it evils which render decay inevitable."
The Inexorable Facts Of Heredity.

"I have drunk whisky every day for thirty-five years," remarked a gentleman of sixty, rather proudly, "and I don't see but I have as good a constitution as the average man of my age; I never was drunk in my life." He was telling the truth, but to learn the whole truth, you would have to study his children. The oldest, a young lady, had perfect health; the second, a young man, was of a remarkably nervous and excitable temperament, as different from his phlegmatic father as possible; the third, a young lady of seventeen, was epileptic and always had very poor health. Did the father's whisky drinking have anything to do with these facts? The instance may be duplicated in almost every community. Think over the families of your acquaintance in which the father has long been a moderate drinker, and observe the facts as to the health of the children. The superintendent of a hospital for children at Berne, Switzerland, has found by careful observation that only 45 per cent of those whose parents used intoxicating liquors habitually had good constitutions, while 82 per cent of the children of temperate parents had sound bodies. Of the children of temperate parents, only 6 per cent were healthy. Can any man "drink and take the consequences," or must his children take the consequences?
Environment, Health and Heredity.

Mr. Luther Burbank has recently given us this very happy phrase: "Environment is the architect of heredity." Nor is this merely a happy phrase—-it is a profound observation. The history of the human race, as also of animals and plants as found in fossil remains, proves the truth of Mr. Burbank's statement. Race after race has sprung up, developed, then decayed and finally disappeared. Today there exists but a small proportion of the hundreds of thousands of the species of animal and plant life that have existed at various times in the history of the world.

These species of animal and plant life have not disappeared through any fault of their own, but rather through the fault of environment. They did the best they could under the circumstances—-circumstances which constituted their environment.

How important a part this environment may play may be observed every day in the cases of plants that need sunshine. If hidden in a dark corner of an ill-ventilated room, the plants become stunted and pale. Observe them further, and you will find that they keep themselves turning constantly in the direction of the windows. Turn the plants about and in a very short time they will of themselves turn again toward the window. They are merely struggling for existence. But finally, if not given enough light, they lose out in the struggle.

Man a Victim of Environment.

Now what takes place in a potted plant in a poorly lighted room took place, in one way or another, in the case of the extinct species of animal and plant life that occupied the earth in previous ages, and is even now taking place in the case of man. For man is the victim of his environment. He is not yet extinct, but
he is deteriorating at a rate that in the end can mean nothing short of extinction. One sign of this condition is the shortening of human life. Instead of the many score of years which man should naturally live, he is living at most a few tens of years. Not that we lack power to live a long life, but we waste our energy through bad environment and through the habits which we adopt. We come into the world with a sufficient amount of latent energy to meet the demands made upon the body by normal activities during a hundred years or more. Most of this energy is wasted in struggling against unnatural conditions and habits.

The body contains a surplus amount of energy with which to meet extraordinary demands. This surplus energy is what may properly be called the body's "factor of safety." It is a surplus for emergencies, and is not designed for use in fortifying us against the evil effects of bad habits. And yet we use our reserve vitality in just this way. We saturate our body tissues with poisons contained in tea, coffee, alcoholic liquors, tobacco, and other injurious substances. At first we notice no harmful results, but just the same, the body is being slowly poisoned. As a result the body's reserve force is drawn upon, until this also is exhausted, and the result is premature death.

The extent of this safety margin may be seen in the fact that an individual possesses ten time as much lung power as he ordinarily needs; likewise one's liver capacity is ten times as much as one normally requires, while the poison-destroying and eliminating power of the kidneys and skin is vastly greater than is demanded by our ordinary activities. Also the heart has a tremendous reserve of energy that is never called on except in case of emergency. Likewise the blood-vessels are so resistant that they can withstand a pressure fifty times greater than they are normally exposed to.
This reserve of vital energy is not given us to consume in dissipation, in harmful habits of eating and drinking. Many people live as if the one thing to do is to get as much pleasure out of their bodies as possible; to treat themselves as harps of a thousand strings upon which to play as many tunes as possible. The body, treated in this way, soon wears out. On the contrary, the aim of every man and woman should be to reserve this factor of safety.

We are very careful to keep our property fully protected. We watch the expiration of our life and fire insurance policies, never failing to renew them. In the same way musicians take the utmost pains to keep themselves in training. It is said that Paderewski, on crossing the Atlantic, spends hours daily practising on a dummy piano in order that his fingers shall not lose any of the skill and deftness which years of hard work has given them. It is not less important that we cultivate health daily. When the writer assured a patient that she might expect to live twenty years more, she said, "But doctor, I am not certain I want to live as long as that." Yet when the twenty years are up she will not be ready to give up that precious thing called life. Indeed, our natural instinct is to cling to life, but we are prodigal with it, and forget to cultivate it by means of the little things we can do every day toward maintaining our life reserve—the "factor of safety," that capital of constitution that we inherit from our parents.
A Proposed Scheme For Race Betterment.

It is a fact that the world today needs a new aristocracy; not an artificial, blue-blooded aristocracy, created by wealth or official authority, but a real aristocracy made up of Apollos and Venuses and their fortunate progeny. Instead of such an aristocracy we are actually building up an aristocracy of lunatics, idiots, paupers and criminals. These unfit persons already have reached the proportions of a vast multitude: 500,000 lunatics, 80,000 criminals, 100,000 paupers, 90,000 idiots and 90,000 epileptics. And we are supporting these defectives in idleness like real aristocrats, at an expense of one hundred million dollars a year, and this mighty host of mental and moral cripples is increasing, due to unrestricted marriage and other degenerative influences at a much more rapid rate than the sounder part of the population, so that they are bound in time to constitute the majority unless some check is put upon the increase. Every one of these lunatics possesses the right to vote, even in States where women are not given the right of franchise.

The carefully prepared lists of twenty-seven of the greatest names which history records, reveals the fact that ten, or more than one-third, of these master minds came from one small area not larger than Patterson, N. J. In less than a century the little city of Athens produced more men of surpassing intelligence and genius than were developed in all the rest of the world during a period of two thousand years.

Now modern scientific discovery had made possible the development of a civilization, the glory of which might far outshine that of the ancient Greeks, which, from lack of knowledge which we possess, was destroyed by that ancient enemy of human progress, the anopheles maculipennis. But within recent years, such rapid progress has been made in so-called public sanitation that the field
A Proposed Scheme For Race Betterment.

seems to be almost worked out. There is, at least, every prospect that in the not remote future, typhoid fever, cholera, malaria and other infections which may be controlled by the organized application of scientific knowledge, will have been practically wiped out. In attempting to call attention to some of the things which may be done to stop race degeneracy and to prevent the development of insanity and other nervous disorders, I shall only endeavor to point out some of the preventive measures which at present, if in operation at all, are employed only in a partial and desultory way, and which, it seems to the writer, ought to be set into efficient operation as speedily as possible.

A Health Survey

1. There should be made in every community, under official supervision, a thoroughgoing health survey at least every five years. At the present time, civilization in the United States is so little advanced that the rather crude system of registration of births and deaths in vogue reaches only a little more than one-half of the population of the country. A thoroughgoing health survey of every city, town, village and rural district in the United States should be required. In this survey, notes should be made of all particulars relating to water supply, milk supply and other public matters which might influence health, but especially with reference to the existence of degenerative disorders and chronic infection, especially insanity, epilepsy, feeble-mindedness, cancer, goitre, tuberculosis, syphilis, etc. Whatever obstacles may present themselves at the start will rapidly disappear as the public become enlightened in relation to the objects sought by the survey, and the advantages which individuals, as well as communities, may gain therefrom.
A Proposed Scheme For Race Betterment -3.

Free Public Dispensaries.

2. In connection with the interests of health, there should be provided, at convenient points, dispensaries at which any citizen who desires may have the benefit of an expert medical examination with every facility for the most thoroughgoing investigation of morbid conditions, including up-to-date bacteriological and chemical laboratories and an efficient x-ray outfit. The expense of equipping and maintaining these free medical dispensaries would be covered many times over by the saving of human lives. The lowering of the death-rate so little as two per thousand, or a little more than ten per cent, would mean a saving of two thousand lives in every million inhabitants, or two hundred thousand in the whole United States. At five thousand dollars each, this would mean an aggregate annual saving of one million dollars. If we place the cost of examination of each individual at the liberal sum of five dollars, the total cost would be one million dollars, showing a profit on the investment of one thousand to one.

School Inspection

3. Regular systematic health inspection of schools, school buildings and school children should be made one of the conditions under which public funds should be granted for educational purposes. In places where this work has been conducted, it has been clearly demonstrated that in practically all communities fifty to seventy-five per cent are in need of medical attention. To neglect this duty to the child is scarcely less than a crime. Health inspection of schools ought to go much further than the cursory examinations which are ordinarily made. The persons charged with the making of such examinations should be experts who have been specially trained for the work, and should be qualified to note the effect of the
A Proposed Scheme For Race Betterment - 4.

methods of instruction and discipline employed by teachers. Multitudes of children are made neurasthenic by wrong methods in education, especially by the neglect of physical development and by improper discipline in the school or in the home.

A System Of Health Education.

4. The state should organize and carry on continually a thoroughgoing system of health education. Too large a proportion of attention at the present time is given to the mere facts of physiology and anatomy, without reference to their practical application. Children require training even more than instruction in health habits. They should be taught and trained in the proper mastication of food. Teachers should become intimately acquainted with the dietetic habits of children under their care. Of the very highest importance is instruction and care of children in regard to bowel action. We are only just beginning to appreciate the enormous influence upon health of constipation. It is more important for the individual child that the teacher should know that his bowels move properly three times a day, than that he should obtain high standing because of his knowledge of the three "R's."

The educational campaign should not stop with the school, but should be carried into the home. Parents' schools—and especially mothers' schools—are needed at the present time quite as much as schools for children. Health missionaries are needed, in every civilized community. An educational campaign, to be effective, must not stop with the cities and towns, but must give special attention to rural districts, in which at the present time the conditions of hygienic life are so much neglected that in certain well-regulated cities where advanced hygienic knowledge has been applied, the death-rate has actually been reduced below the average rural death-rate
A Proposed Scheme For Race Betterment -

notwithstanding the evident advantages naturally offered by rural life.

Training In Posture

5. The twenty million school children who for nine months of the year are now horded in dusty, poorly ventilated, poorly lighted schoolrooms, compelled to sit upon seats which deform their bodies, and restrained from responding to the natural instincts which call for almost constant activity in the young, should be turned outdoors and taught in fresh-air schools, and thus be given as good an opportunity for the preservation of their health and the development of resistance against disease as we are now beginning to give to tuberculous children and those who show marked evidence of subnutrition. If diseased children profit by these outdoor opportunities, healthy children would profit still more. School boards will supply play-grounds, swimming pools, open-air schoolrooms and other fresh-air opportunities just as soon as the people become sufficiently intelligent to demand this protection for their children. Fresh-air schoolrooms, playgrounds, and the outdoor life, in general, are as potent means of combating nervous disorders in the young and the old as in the prevention and cure of tuberculosis.

Control Of Drug Sales

6. The sale and use of habit-forming drugs of every description must be controlled by law. The relation of alcohol to nervous disorders, and the necessity for a vigorous and determined effort to suppress the evils arising from the use of this drug are now universally recognized by the intelligent and sober-minded people of the country; but less consideration has been given to the still wider use and spread of the highly insidious habit of tobacco using in its various forms. Multitudes of boys become nervous wrecks before they reach the high school through the use of the cigarette, and a still
A Proposed Scheme For Race Betterment -6.
greater multitude of boys and professional men are victims of chronic functional and nervous disorders as a result of the habitual use of the cigar and the pipe. Tea and coffee and their congeners, the various so-called "cola" preparations, which are purveyed at soda fountains, exercise a baneful influence which reveals itself in the aggravation of nearly all forms of functional neurosis, and help to swell the burden of nerve-destroying toxins which the average citizen is carrying, to his enormous detriment.

Experimental Health Stations

7. Nearly every state maintains an experiment station in which a considerable number of scientific experts devote their energies to the study of plant and animal nutrition and the laws of heredity as related to plants and animals. As a result of this experimental work the material wealth of the country has been so greatly increased that no one questions the wisdom of the great annual expenditure of money and effort involved in these researches.

Why should not the same or even greater attention be given to the problems of human nutrition and heredity? The greatest possible good would result from the establishment of properly equipped State laboratories, in which chemists, bacteriologists, biologists, skilled cooks and eugenic experts might co-operate in solving some of the gravest questions which concern the welfare of the human race. We are well informed about the feeding of domestic animals, but in the great questions pertaining to human diet there are almost no accepted standards. The vital question of human nutrition is a closed book to the average man. University graduates know little more about what to eat or general bodily care than the ditch-digger or the hod-carrier. State laboratories should apply to these questions the same methods of research which have won triumphs in the plant and animal
A Proposed Scheme For Race Betterment - 7.

worlds; and the knowledge thus gained should be made available to every member of the community.

8. Improved marriage laws may possibly accomplish even more than segregation or sterilization. The facility with which the unfit and the potentially unfit are now able to obtain a marriage license, and the greater fecundity of this defective class as compared with the healthy families, is a menace to society and to the race, not only through the propagation of brain and nerve defects, but through the transmission of a great number of other tendencies and blemishes. The interest of the race and of society must be protected by proper regulation of the marriage institution.

A Health Registry.

9. The tax-roll, in which is recorded the name of every holder of real or personal property, and the estimated value of the same as essential for the collection of taxes, the chief source of revenue to the State, is guarded with zealous care, and the accuracy of its records is verified by painstaking inquirers. We seem to have overlooked the fact that taxable property is not the only nor the most valuable of the resources of the State. The actual money value to the State of the average human being, taking the lowest estimate offered by economists, is so great as to give the population of any State a far greater money value than any other of its resources.

This fact alone will justify the maintenance of a health registry, on which should be recorded the results of annual health inspection made by a bureau established and maintained by the State for the purpose. The establishment of such a registry will be one of the most effective means of arousing an interest in health as a personal asset. Such a registry would be invaluable in connection with the operation of restricted marriage laws. Of course, a great educational work must be done for the general public before such a registry would
A Proposed Plan For Race Betterment - 8.
be appreciated or even tolerated; but as the people become more intelli-
gent in relation to the value of health as a factor in personal efficiency, and a means by which the physical welfare of the indi-
vidual and of the race may be promoted, a health ambition toward
bodily perfection will be developed, and in time health as an asset
will come to be esteemed as more precious than gold.

The possessor of clean blood, of a sound body free from blemish
and taint of disease, will feel a just pride in his record, in an
erect, vigorous carriage, an elastic step, clear skin, clean breath,
power to endure fatigue and resist disease, the ability to appreciate
to the fullest the joy of life and to discharge in the highest manner
the duties and obligations of a twentieth-century citizen.

A Eugenics Registry.

10. One important means of race betterment is the promotion of
a eugenics registry. Its purpose will be to accomplish in behalf of
race hygiene what the health registry would seek to do for personal
health. What the world needs at the present time more than any other
thing is a new race of men. That the creation of a new and superior
human race is possible is not doubted by those who have made careful
study of the operation of Mendelian principles when applied to the
human being as well as to other races of animals.

Animal breeders have demonstrated that it requires only four
generations to make a thoroughbred. Mr. Burbank assures us that it
is possible to make as much improvement in the human race as he
and other plant breeders have shown to be possible in plants, and
that such a new species of man may be created in not more than six
generations.

A New Race

A Eugenics Registry would be the beginning of a new and glori-
ified human race which some time, far down in the future, will have
so mastered the forces of Nature that disease degeneracy will have been eliminated. Hospitals and prisons will no longer be needed, and the Golden Age will have been restored as the crowning result of human achievement and obedience to biologic law.

When Drummond so exquisitely told us that Love was "the greatest thing in the world", a thoughtful physician asked a group of friends, "Did you ever see a healthy man or woman—-one with a strong soul and a sane mind in a sane body---who was not amiable, kind-hearted, loving?" No one in the circle could remember that he had, and while such a trinity of health is not found on all sides, still it is so common for us all to recall people overflowing with health and good nature that we are tempted to say that health is the best thing in the world, and that with it go cheerfulness, optimism, attractiveness and power.
Sponsored by the Race Betterment Foundation, Battle Creek, Mich.

To Be Launched in high schools and grammar schools in Michigan

1. Enlist Eldon Geyer and Floyd Hazel in Battle Creek, and through them seek the approval of the M. E. A., the high and grammar school principals associations, etc.

2. Perhaps Dr. Leffler could also extend the movement among Michigan's colleges.

All students to be enrolled without cost.

Each Member to Receive

1. A red, white and blue button with Victory Club insignia.

2. Membership Card (in duplicate) with objects of club

3. Regular issues of Victory Club bulletin

Each School to set up a Victory Club with

1. President and secretary

2. Board of directors consisting of 7 members including president, secretary, faculty-advisor.

Objects of Victory Clubs

Each member agrees so far as within him lies

1. To participate in the purchase of defense stamps and bonds

2. To participate in salvage and anti-waste campaigns

3. To plant Victory gardens when and if circumstances permit

4. To develop and maintain a vigorous and healthy body through right living, an adequate diet, the non-use of alcohol and tobacco, and by regular exercise and recreation.

5. To engage in Civilian Defense work where need of his services exists.

6. To be a killer of rumors inimical to the nation's war effort.

7. To report to police authorities any suspected subversive activities on the part of Axis sympathizers and agents.

8. To participate when opportunity and need present themselves in war time community activities, such as the Red Cross, the U. S. O., etc.
9. To hold firmly the conviction that the democratic way of life is in every way preferable to the dictatorships we are fighting, and therefore that no service nor sacrifice is too great in order that the American way of life can be preserved.

10. To believe that right is might; that ultimately right shall prevail.

**Time of Launching**

Begin to lay plans, confer with school authorities, and get printed materials worked out this spring.

Have entire setup ready to launch in September when schools open for Fall Term.

**Personnel**

Three full time men (or women) will be needed to put this program on in Michigan alone, for personal appearances will have to be made before every student body, before faculty groups, etc.

Owing to fact that all travel will have to be done by bus and grain contacting the schools of Michigan will be a big job.

Suggest one person for Upper Peninsula, one for Southwest Michigan, and one for East Michigan.
VICTORY CLUBS

PURPOSE

To inspire and help the youth of Michigan to attain the super health needed to successfully meet the future which today faces and menaces America and Christian civilization.
"RELATION OF PUBLIC HEALTH TO RACE DEGENERACY"

Read before the General Sessions, American Public Health Association, Colorado Springs, Sept. 1913

Reprinted from American Journal of Public Health
4: No. 8,

ONLY ONE COPY OF REPRINT AVAILABLE

In Folder:

Tendencies Toward Race Degeneracy
New York Medical Journal, Sept. 9, 1911.

Relation of Habits to Life Expectancy
Good Health

Needed - A New Human Race
Reprinted from Proceedings on Race Betterment,
Read at First National Conference on Race Betterment
Battle Creek, Michigan, January 8-12, 1914.

Copy of letter to Dr. Reginald M. Atwater, American Public Health Association,
New York City, dated 11-1-43
possible without the Golden Rule. But the Golden Rule is obsolete, an anachronism.

Intellectual and moral standards have fallen. Man has lost his capacity for self-government. Every nation in the world today is ruled by dictators, by force, not by reason and righteousness. A few, like Italy and Germany, by single individual dictators, the rest by party dictatorship, the tyranny of a majority over a minority.

Ask a physician and he will answer, "No. Civilization is sick unto death. Many acute maladies have been mastered, but degeneracy is rampant. The young live longer, but the old die sooner. Centennarians are disappearing. Civilization is dying at the top."

Ask the theologian, the preacher. "No," he will tell you. Christianity has lost its hold. So-called Christian nations are doing their best to destroy one another. Christian Germans are fighting Christian French and English with more fierce and pitiless ferocity than savages ever fought. Christian missionaries have inoculated heathendom with deadly civilization, but have made no progress toward Christianizing them. The World War destroyed all future hope for foreign missions as a Christianizing force. The Prince of Peace is welcome nowhere.

Force rules the world. Lunatics have seized the reigns of government! There is less hope than ever for world peace based upon world understanding and unity.

Call up the father of eugenics, the great Galton, and ask him if there is any hope for the human race and he will
tell you, "Yes." There is hope in eugenics. Make a religion of genetics. Make a cult of pedigree. Teach every man and every woman to reverence, respect, protect and if possible improve his germ plasm, the precious endowment of race life which has been committed to his care with the power through heredity to pass it on to succeeding generations. Witness the miracles which genetics has wrought for fruits and flowers, field crops and domestic animals within the last 50 years.

Call up Mr. Burbank, the plant wizard, and ask him, "Can homo sapiens and his boasted civilization be saved?" and he will reply, "Certainly it may be saved." Look at the Shasta Daisy poppy and a long list of glorious creations which have astonished the world as they have one by one come out of biologic laboratories and experiment stations within the last few years. Read the story of maize, our greatest food plant, in its rise from teosinte, the Mexican weed, where it started.

Six generations will create a new type of the genus homo as much superior to the average man of today as the finest Belgian draft horse is superior to the poor drudge of the farm.

Ask Good Health, "Can civilization be rescued and saved from the shipwreck pictured for the ship of state with all the passengers on board and the jewels which represent the age-long accumulated achievements?" Good Health will answer, "Yes, civilization may be saved through race betterment and
biologic ideals." There is no hope for the race through politics or economics, force, human ingenuity or philosophy. Only the great creative forces which created the world and made man what he is, the Infinite Personality that St. Paul in his great Mars Hill speech introduced to the Athenians, the unknown god whom they ignorantly worshipped and urged them to "seek after for he may not be far from every one of us, for in him we live and move and have our being."

The great creative intelligence which is kept out of our sight by the worship of the false god Nature, the great creative intelligence that made the universe and keeps it in order and created man, working through eugenics and the marvelous germ plasm, may save the race and even improve it. The germ plasm clings tenaciously to those noble and mysterious capacities which make man the image of his creator and stubbornly refuses to be damaged and deformed by the abuses to which its human host subjects it.

Here is the creating force, the transforming power that can take poor depreciated, degenerated humanity and bring it back to its pristine excellence, which viewed even through the eyes of infinite wisdom and judgment was pronounced "Very good." There is enough left in man of the excellent qualities planted in him by his Maker to make his salvation possible, but first of all it is necessary for him to change his way of life and to become obedient to the laws of his being; in other words, to live biologically or physiologically as he requires his slave animals to do.
The place to learn the way back to health and soundness of mind and body is not in our colleges and universities, great mines of knowledge and wisdom though they are. To Nature we must go for instruction and guidance.

Fortunately this search for the true way of life is not just begun. Diligent, earnest truth seekers have long been earnestly seeking for the better way, and a great store of knowledge has been accumulated.

The Good Health management has for months been busily engaged in seeking out and organizing a group of the most eminent leaders in a search for the better way of life, the way of salvation for the race and civilization. A partial list of these notable teachers will appear next month, and during the coming year the contributions of these eminent and highly informed and most dependable sources of information on race betterment subjects will each month aid in making Good Health one of the most important and most interesting magazines published.

The size has been cut down so that the price might be reduced, and as a result its contents will represent the quintessence of cogent information relating to up-to-date progress of inquiries into the world's needs and the latest discoveries of potent remedies.

Every number of Good Health will reach many thousands of homes. Plans that have been made will soon bring the journal to the eyes of several hundred thousand readers.

Please note in other columns the extraordinarily liberal terms offered to subscribers and join the American Good Health
Club which is starting out to create the greatest health organization in the world with the hope of helping to solve the world's greatest problem, how to save not simply America but humanity and civilization.
(Mem. for Address at Toronto.)

The rice deteriorating.

Insane, imbecile, epileptics, three times as numerous as fifty years ago.

In England cancer cases are five times as numerous as fifty years ago.

Other degenerations equally marked.

How impurity produces degeneration:

1. The influence of the internal secretions upon the body;
2. Infection.

According to Blaschko ten per cent. of the male population of Berlin infected.

Results inherited.
The evils of impurity.
Wide spread and deep rooted.
Thirty thousand in the wine rooms of Chicago.
Decay of morals.
Childrens' parties, balls, public schools.
Bicycle clubs.
Downfall begins in childhood.
This is the reason of the difficulty of reform.
Impossible to restore modesty that never existed.
The total failure of social sentiments.
The Gospel the only hope.
No good has yet resulted from the scientific study of society;
Sociology is to social reform what theology is to religion.
The Gospel must come first in social reforms as well as in so-called religious reforms.
Genuine religion is broad enough to cover the whole life, social, business, domestic, church.
Can't save the lost by machinery nor by wholesale efforts of some kind.
Must be done by personal work,—heart to heart work.
(Mem.) Now talk about dress and physical culture.)
Story: How the Tartars catch hawks.
Modern woman wants to soar up, but can't; wings are clipped.
Load in her stomach.
Pickles and olives, pies, cakes, pastry, candies and other indigestibles.
It requires power to soar.
The bird keeps up with the express train using... such power that
if a man had it in his legs he could jump a hundred feet into the air.

Too many women think it unwomanly to be strong.
Bicycle and gymnasiums of the Young Women's Christian Ass'n breaking this down somewhat.

Strong muscles necessary for strong nerves.
Cause of nervous headaches.
Sick Headaches.
Indigestion.
The prevalence of prolapsed stomachs, kidneys.
The cause of backache.
Health obtained, not by pill-swallowing and nostrum-taking, but by correct habits of eating, drinking and by proper training.

Women are naturally more enduring than men; give evidence.
Congo men do the house work.
Women of Tasmania.
Women have larger brains in proportion to the rest of the body than men.

Larger stomachs also, hence need larger waists.
THE BATTLE CREEK RACE BETTERMENT ENTERPRISES.

Every really great enterprise has back of it a great ideal. The ideal behind the Battle Creek Sanitarium, Battle Creek College and their associated philanthropies is Race Betterment. This offers the only hope for the salvation of the human race from final extinction.

Late in September of 1921, there met in New York City a great body of eminent scientists gathered from all over the world to discuss ways and means of averting race deterioration and ultimate destruction. It was The World's Eugenics Congress. There was general agreement that the human race is degenerating at a rapid rate and that only most strenuous efforts can avert further race decay and ultimate destruction. Some even seemed to have lost all hope. Said one well-known authority, "Of course, we all know that the human race must ultimately perish." Said the distinguished Prof. Darwin, son of Charles Darwin, "If our present civilization survives, and I fear it will not, it will have to be because the United States saves it."

Naturally, the metropolitan newspapers said there was a very pessimistic note at the Congress.

The Vision of a New Race.

The Battle Creek Race Betterment activities are the outgrowth of a wholly different vision, not a dying race bound to extinction, but through eugenics and biologic living, a new and better and greater human race.

The promotion of this great possibility is the ideal and purpose behind the Battle Creek Sanitarium, Battle Creek College, the Race Betterment Foundation and all their allied activities,
The work of these allied race betterment activities is unique. Nowhere else in the world is there to be found institutions with so complete and comprehensive a program for combating race deteriorating influences or race degeneracy. The validity and efficiency of the work has been demonstrated by its long existence, and by its gradual development in the face of great obstacles from a very small beginning to its present great proportions.

But its promoters feel that the work is only just begun. The world is just beginning to see the need of the rational and basic reforms that are being here promoted. The time seems to have come, in fact, when greater activities and plans of broader scope are required to meet the demands for help and enlightenment that are coming in from every direction.

THE BATTLE CREEK SANITARIUM

Starting as a small water-cure in 1866, the work was re-organized by the present management in 1876, with a larger scope. It has gradually developed into an extensive medical, educational and philanthropic enterprise. Instead of the dozen patients who constituted the family of which the new management took charge October 1, 1876, with an annual patronage of two or three hundred and no trained workers, the family of sick people now numbers 1200 or more at certain seasons and the total annual number of guests more than 12,000, with a family of doctors, nurses, attendants, clarks, electricians, mechanics, engineers, and other experts and workers, in the sixty different departments, numbering 1300 to 1500 according to the season.
All this has not been accomplished without great and persistent effort and sacrifice, and the effort not of a few only, but of a very large number of public-spirited men and women, but mostly of those who have had the active work in charge.

When taken over by the present management, the total assets of the enterprise amounted to not more than $35,000 or $40,000, and there were debts amounting to several thousand dollars. Buildings were erected with borrowed funds to accommodate the increasing family of patients. Debts were paid by the earning of the institution, which have been made, for the most part by the fact that the services of physicians and other experts were largely donated, their compensation for many years being so small as really to be scarcely more than nominal, barely sufficient to provide the necessaries of life on a very humble scale of living.

At the time of its re-organization and its real beginning as a scientific institution, the Sanitarium was unique both in methods and purpose.

For fifty years there had been a growing spirit of skepticism with reference to the soundness and the validity of many long-established customs, practices and beliefs. The great scientific discoveries that have made the nineteenth and twentieth centuries the Golden Age of knowledge and human progress were just being made. Pasteur had discovered germs, but the tremendous significance of his discovery to human life, was not yet appreciated.
The American Public Health Association had just been organized, and work had only been begun by a few State Health Boards. There were no Schools of Home Economics or of Dietetics. There was no place in the world where personal hygiene, or even public hygiene, was adequately taught and the practice of medicine was still held fast in the shackles of empiricism.

But among intelligent, thinking people there was a growing spirit of dissatisfaction. The spirit of progress was in the air. The slavery to established opinion was losing its hold upon the world. The rapid multiplication of diseases, and the failure of medical men to cope successfully with the grave maladies that were swelling the mortality rates, had developed a widespread spirit of protest and investigation. Orthodoxy was still dominant, but new heresies were being hatched every day. Most fantastic doctrines and grotesque ideas were being put forward by people who felt the need of a change or who had an itch for publicity, but who, unfortunately, had no knowledge of scientific method and no basis of scientific fact on which to rest their theories.

Physiologic Methods in the Treatment of Disease.

In the midst of this clamor for change and betterment in methods of living and methods of preventing and of combating disease, the Battle Creek Sanitarium was organized, as a philanthropic enterprise, having for its purpose human betterment through natural living and the application of natural or physiologic methods in the treatment of disease.

The spirit of the enterprise as then initiated and consistently carried forward since was that of constructive criticism of the whole
program of human living as it related to physical habits. The method
was to examine, and, if it seemed worth while, to test, every reasonable
plan or suggestion that offered hope of improvement. Nature was accepted
as the mentor, the fountainhead of knowledge. The fact that a custom had
been long in vogue was not accepted as a valid argument in its favor. The
deciding question in every case was "Is it Natural? Is it wholesome?"

The purely altruistic character of the work of the Battle
Creek Sanitarium is clearly set forth in the following statement of
"Objects," which we quote from its charter:

"The objects of said corporation and other matter germane
and auxiliary thereto, are as follows:

"To found a hospital or charitable asylum within the State
of Michigan for the care and relief of indigent or other sick or infirm
persons, at which institution may be received also patients and patrons
who are able to and do pay for the benefits there received, and which
institution shall devote the funds and property acquired, and received by
it from time to time from all sources, exclusively to maintaining itself,
improving its condition and facilities, extending its benefits and usefulness,
and facilitating and promoting its purposes by such sanitary,
dietetic, hygienic, and philanthropic reforms and efforts as are germane
or auxiliary thereto; all of its said purposes being un denominational,
unsectarian, philanthropic, humanitarian, charitable, and benevolent, and
in no manner directly or indirectly for private profit or dividend to any
one."

THE RACE BETTERMENT FOUNDATION.

This is an organization closely affiliated with the Battle
Creek Sanitarium having for its main purposes the promotion of the same
ideals and particularly the carrying forward of educational work in
relation to biologic living. The original fund by which the Foundation
was established was contributed by Dr. John Harvey Kellogg. This fund
represented the principal part of his life savings from his writings,
inventions and various other sources.
April 23, 1940

THE RACE BETTERMENT FOUNDATION

How founded.
What it has done.
Race Betterment Conferences.
Results.
Action taken at each Conference.
Names of officers at the Conferences.
Number of institutions represented.
Brief resume of each conference and other activities.
Lectures by Reed.
Public health lectures.
Visits to state institutions, introducing hydrotherapy, neutral bath.

    Dayton
    Kalamazoo
    Trenton State Hospital - Dr. Cotton

Muscle dynamometer

    Annapolis
    West Point
    Philippines

Physical perfection contests at Battle Creek
Nutrition laboratory
Battle Creek College
The Miami-Battle Creek
RACE BETTERMENT FOUNDATION

WRITE DR. MITCHELL

MAKE HIM PRESIDENT

COLON GERM - JEKYLL & HYDE

TOO MUCH ROUGHAGE

TOO MUCH YEAST

TOO MUCH YEAST

COLLECT FACTS

SOFT PEDAL

NEW WAY

CARNegie Foundation

race betterment foundation

john martin

HENDERSON

many years ago a few people became convinced that degener-
acy, etc.

RACE BETTERMENT FOUNDATION WAS FORMED. CONFERENCES WERE
HELD

NEW INFORMATION

DISSOLUTION BEGUN

DUBLIN EUGENICS CONFERENCES
EUGENICS

SEE PRESIDENT WILLIAMS

JOURNAL OF HEREDITY

SCHOOLS - TEACH IN ALL GRADES

TAKE PEDIGREE OF STUDENTS. MAKE VOLUNTARY

FORMER SECRETARY

MADISON GRANT

GET BOOK

FIND SUCCESSOR

DAVID STARR JORDAN ON PEDIGREE. LOOK UP BOOK

ROCKEFELLER MAN JEW

DR. MARTIN'S CHICAGO FRIEND

CURTIS FORTUNE

MAKE B. C. HEALTH CENTER

THE NEW WAY
PAPERS

PASSING OF RACES

SUMERIANS
EGYPT
BABYLONIAN
CRETES
GREEKS
PHOENICIANS

LOOK UP GINI'S LECTURE AT CHICAGO UNIVERSITY

SEE DURANT

AUTHOR OF BIOLOGY

SEE EAST

HUSSEY ABOUT B. C. COLLEGE
RACE BETTERMENT FOUNDATION

WRITE DR. MITCHELL
MAKE HIM PRESIDENT

COLON GERM - Jekyll & Hyde

TWO MUCH ROUGHAGE

TWO MUCH YEAST

TWO MUCH YEAST

COLLECT FACTS

SOFT PEDAL

NEW WAY

CARNEGIE FOUNDATION

race betterment foundation

JOHN MARTIN

HENDERSON

MANY YEARS AGO A FEW PEOPLE BECAME CONVINCED THAT DEGENERACY, etc.

RACE BETTERMENT FOUNDATION WAS FORMED. CONFERENCES WERE HELD

NEW INFORMATION

DISSOLUTION BEGUN

DUBLIN EUGENICS CONFERENCES
EUGENICS

SEE PRESIDENT WILLIAMS

JOURNAL OF HEREDITY

SCHOOLS — TEACH IN ALL GRADES

TAKE PEDIGREE OF STUDENTS. MAKE VOLUNTARY

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SEE DURANT

AUTHOR OF BIOLOGY

SEE EAST

HUSSEY ABOUT B. C. COLLEGE
For Peace Betterment

Dr.Marker on
Howard Kelly
Wileyon Coca Cola
Dr. Arbomey Fallon
Coffe

Dr. Fe Calum

Hindlende on efficient
of deo turnaround during war

Write Mr. Dr. Kinner for
accept the doctors
worse lecturer death and
paraentis
Ice Kerr of my glass

See Barry if she is a

Investigate if she is a

True Alicia for

Try Helier

Anna

$100

$60

For

Must go away. Uncle

Anna

Her non existence and

and
Cancer
Heart disease
Kidney disease - Newburg
Salmon or Blatherwick
Chitterdine - lean protein after 35 years.
Sir Mitchell
Symposium
Mitchelloff Roderick
Ratgar Forrey
Symposium

The insane
Know that
Came in
Treatment

The uplift
Increase
Remedy

Eugenics

Lawrence

Workman

Vries

Practical Eugenics

Johnson

Leavenworth

Popenoe
Symptoms

Leaves

1/10 women 1.5 - 5.5

1/10 all men over 45

Possible causes:
Statistics, Hoffman, Mifflin, Main
Leone

Man who read a report at Arlington
see program
Symposium
Leigh Stawatin
Steinbock = Less
Meyer = Saranac
May 8, Parry Sound
Meehle, Rynor
Sunnyside Beach
Hitchcock
Possible Life Etc., Etc.
Hornell Hart
Hirsh
Hirsh
Prohibition

Anti-saloon

Education

Fisher, Kirk, etc.

Tobacco

Learning Yale

Prof. New York

Summary of
new book by com.

See Ruth about

Tobacco Rep.
coffee and tea
Osborne
For RACE BETTERMENT

Dr. Mosher on

Howard Kelly
Wiley on Coca Cola
Osborne of Yale on coffee
McCullum
Folin
Hindhede on experiences of Denmark during the war.
Lane

Write Mrs. Tissier for account of the doctor's work and cause of death and her own experience, and photo, also about Metchnikoff's experience.

Write to Dr. Wollman, Russian, and offer him $50 for the article.

Try Rollier.
Cancer
Heart Disease
Kidney disease - Newburg
Sansum or Blatherwick.
Chittenden - Low protein after 25 years.

Symposiums
Metchnikoff
Mitchell
Roderick
Rettger
Torrey

The Insane
Growth
Causes
Treatment

The Unfit
Increase
Remedy

Eugenics
Lamarck
Weissman
De Vries

Practical Eugenics
Johnson
Davenport
Symposiums

Cancer

1/5 women 45 - 55
1/10 all men over 45

Possible causes

Statistics - Hoffman
Bristol man
Lane

X

[Signature, Dr. Wm. Patrick, N.Y. City.]

Man who read a paper at Asheville. (See program)

Light Starvation

Steenbock - Hess
Mayer - Saranac
Gray (?) of Perrysburg
Rollier, Reyn or Mitchell

Sun pool
Sunny beach.
Possible Life Extension

Hornell Hart
Fisher
Fisk

Prohibition

Anti-Saloon
Education

Fisher — Ask him who else.

Tobacco

Farman of Yale or
Prof. ______ of New York.

Summary of

New book by Committee.
THE RACE BETTERMENT FOUNDATION

More than fifty years ago, Dr. John Harvey Kellogg, founder of the Battle Creek Sanitarium, became a member of the Michigan State Board of Health and was soon led by his studies in connection with the work of the Board to the discovery that the civilized portion of the human race was rapidly deteriorating as a result of very great departures from the conditions under which the race developed and to which many primitives still adhere, together with man's nearest relative in the animal kingdom, the chimpanzee, gorilla and other anthropoids. A careful study of the reports of the Bureau of Statistics showed that although the length of human life was being increased, the duration of life after fifty was steadily diminishing. It was shown that insanity, epilepsy, idiocy, cancer and other degenerative disorders were rapidly increasing. The mortality reports showed the most civilized nations showed the smallest proportion of centenarians, the natural result of departure from normal conditions of life and the adoption of perverted destructive habits.

Successive reports of the Bureau of Vital Statistics showed a marked increase in the trend toward degeneracy, and it seemed unmistakably evident that a return to normal conditions of life and sane habits of living was necessary to prevent ultimate race extinction.
The Race Betterment Foundation was established for the purpose of calling the attention of the public to the danger which threatens the race, making researches for the discovery of the causes of race deterioration and initiating activities for the purpose of promoting radical reforms in habits of living.

The Race Betterment Foundation has had three large and very successful conferences which brought together the leading scientific men of the country—physicians, educators, eugenists, economists, statisticians, and sociologists, prominent among whom were such well known leaders as Dr. David Starr Jordan, of Stanford University, Dr. Stephen Smith, founder of the American Public Health Association, Dr. Irving Fisher, of Yale University, Dr. of Harvard, Dr. President of Michigan University, and Dr. C. B. Davenport. All the leading universities were represented and the leading insurance companies. Several foreign countries were also represented. The proceedings lasted three to five days and filled three large volumes. The interest in the meetings was so great audiences filled large halls and sometimes the over-flow was so great as to require three simultaneous meetings. The leading newspapers sent special reporters and the published reports of the meetings filled more than three million lines of newspaper space.

Since the World War the activities of the Race Betterment Foundation have been chiefly concerned with researches relating to the influence of regimen and habits upon individual and racial life and the study of methods by which civilized
life may be made as promotive of health, endurance and longevity as those of primitives.

Among the major things accomplished has been the discovery made in _______ that dental caries is a general and not a local disease and one of the indications of race deterioration. This discovery was reported in a paper read before the Michigan State Dental Society at its annual meeting on ____________. Another accomplishment was the introduction into many of the leading insane asylums of the United States of methods for the amelioration of the condition of this unfortunate and rapidly increasing class of victims of modern race decay and the promotion of their recovery by physiotherapeutic methods of promoting sleep and improved nutrition.

In recent years the interest in the work of the Foundation has been very greatly increased by the announcement made by leading statisticians of the result of new studies initiated by Professor Gini, head of the Statistical Institute of Rome, Italy. These new discoveries not only verify the fact of race degeneracy, but have shown that race decay and resulting depopulation is not a matter of the distant future, hundreds or thousands of years hence, but that it is already here, and that depopulation is proceeding so rapidly in every white nation that if the present trend continues, white civilization will, without any room for doubt, within a few centuries be a thing of the past and the world will be dominated by the yellow races of Asia.

While the public newspapers seldom discuss this question,
scientists throughout the world are greatly agitated and the leading speakers at the meetings of the great American Association for the Advancement of Science, with its 20,000 members, declare that a congress shall be called of the great scientists of the world for the purpose of devising ways and means whereby the white race and civilization may be saved.

The Planning Commission of Minnesota struck the keynote of race salvation and redemption in a recent report in which it declared, "What we need is a new way of life."

To find and promote the adoption of this new way of life has been and is still one of the many aims of the Race Betterment Foundation. As the result of its activities in this direction through a study of the personal habits and their consequences in the cases of more than 250,000 patients of the Battle Creek Sanitarium and the comparison of the habits of civilized people with those of primitives by the aid of questionnaires sent out to hundreds of medical missionaries practicing among uncivilized people, the results of these studies were compiled in a code or set of rules in which an attempt was made to coordinate the results of human experience with physiologic requirements.

It has been a source of great satisfaction and encouragement to find in the marvelous discoveries made by animal experimentation and other researches in the nutrition laboratories which have evolved a whole new class of essential food elements that made clear the great role of food minerals,
a strong validation of the biologic code made on a study of the conditions and habits which produce disease among civilized people and those which promote health among primitives. As further and very definite evidence of the soundness of the biologic way of life may be cited what might be termed the great experiment which has been conducted at the Battle Creek Sanitarium, which within three-quarters of a century has risen from its small beginning in a two-story cottage with two patients to an institution, developed without endowments, through its own efforts, to one of the largest health centers in the world, a combined invalid caravansary and health university.

The records of this institution show that the greater share of its patients have belonged to the class generally regarded as incurables, and yet very few indeed have failed to show substantial benefit from their stay of a few weeks or months, credit for which has always been recognized as chiefly due to the change of regimen and habits made on entering the institution. The practical results of the biologic way have won for it recognition throughout the civilized world, scattered over which may be found hundreds of successful institutions patterned after the Battle Creek model, the chief merit of which is to be found in the fact that it is not based upon theory and did not originate in Battle Creek, but is the result of an earnest effort through study and research to find the natural way, the Divinely appointed way, departure from which has resulted in bringing the race to its present state of degeneracy
and menaced with extinction, and a whole-hearted return to which may not only avert the impending catastrophe but may in time result in the development of a superior type of homo sapiens.

Since the facts of racial deterioration, depopulation and probable end of white civilization in the not distant future are no longer questioned, the Race Betterment Foundation sees as its present field of activity an educational campaign for the purpose of presenting to the public another picture as full of hope as the present world picture is full of dismay and despair. The marvelous achievement of science within the last century have provided ways and means by which the dismal fate which the scientists now predict as impending may be averted. State experiment stations have demonstrated again and again that not only flowers and fruits and plants of various sorts but animals of various species may be scientific means, skilfully applied, not only be restored to their former beauty but develop into such glorious creations as were before unknown. It is by these means that there have been produced such marvelous improvements in flowers, fruit, livestock and domestic animals. If he chooses to do so, man by the means science now provides may secure to himself not only equal improvement, but through his own intelligent cooperation, which animals cannot give, achieve even greater results. It is only necessary that he cease his headlong plunge down the hill of degeneracy and to make a right about face and through the miracle-working resources of
race betterment, eugenics and biologic living climb
back not only to heights from which he has fallen, but
through the marvelous attainments of science, all of
which he can carry with him, he may climb to more glorious
heights than the world has ever seen.

In addition to the original endowment of the Founda-
tion, amounting to more than $500,000, other large gifts
have been received from the late Mrs. Mary F. Henderson,
Miss Haskell, and other sources, including revenue-
yielding stocks and bonds, which place the Foundation in
a financial position which warrants a large extension of
the various educational activities which it has hereto-
fore promoted, and the launching of new race betterment
enterprises. Among the several lines of work now being
actively promoted are the following:

RACE BETTERMENT LECTURES

Several very able and experienced lecturers are de-
voting a considerable portion of their time to speaking
before Kiwanis, Rotary and other business men's organiza-
tions, women's clubs, universities, colleges, high schools,
and various other social, civic, and political groups.

THE THREE QUARTERS CENTURY CLUB

An organization of persons more than 75 years of age,
with associated members who are past the age of 60, having
for its purpose the amelioration of the conditions of the
greatly neglected group of people who have retired from
business and social activities and are very often most un-
happy while waiting for the end. This work was begun
more than 20 years ago in Battle Creek, largely through the efforts of an enthusiastic worker for Race Betterment, the late Hon. Charles D. Wheelock.

SUNSHINE CENTERS

This work is especially intended for the betterment of the middle class home by a new method of approach which has proved highly successful during several years since it was initiated by Miss Gertrude Estill.

RACE BETTERMENT RESEARCH

This department comprises a number of important lines of research, carried on by eminent experts in nutrition and food laboratories, a Pavlov Laboratory, sponsored by the late world-famous physiologist and professor I. Pavlov of Leningrad at the time of his visit to Battle Creek in and conducted by Professor W. N. Boldyreoff, for many years Pavlov's chief assistant.

GOOD HEALTH MAGAZINE:

A monthly magazine which serves as a mouthpiece for the Race Betterment Foundation in promoting the principles of biologic living and race betterment.

BATTLE CREEK COLLEGE

A fully equipped college which, after having attained national standing as an educational institution devoted to training in home economics, nursing and physical education, is now being reorganized for advanced and intensive training in the same lines and in race betterment activities, especially through lectures, teaching, writing and other lines of propaganda.

(Add here the Rules of Right Living.)
adding, "When my father died many years ago he left me a little sandy farm of 30 acres on the shore of Lake Huron. About the time of his death it was discovered that the sand of this farm was of a peculiar quality which rendered it valuable for mending the smelters connected with the big mines in the upper lake region and I was able to sell the sand at a dollar a ton. I built a little wharf, bought some wheelbarrows, hired a man to wheel the sand to the boats while I shoveled the sand into the wheelbarrows. I have earned all of my money with my own hands."

The annuity gift of Miss Haskell is greatly appreciated by the trustees of the Race Betterment Foundation, and following its receipt a committee was appointed by the Board to prepare and present to the Board plans for the organization of a health university as soon as sufficient funds shall have been obtained for the purpose. A good foundation for such an education institution is already laid in the three schools which are in successful operation,—The Sanitarium Training School of Nursing, The School of Home Economics, and The School of Physical Education. Two of these schools already present courses covering three full years so that an addition of only one year is required to afford an opportunity for a full four years' college course, the work required by the present curriculum being a full college grade so far as it goes.
(Memo for Eugenics Meeting, Jan. 3, 1928).

RACE BETTERMENT AIMS

Race betterment, in its largest sense, is a process which has been going on, sometimes advancing and sometimes retreating, during all the ages since man's career began. In a more restricted sense, the term relates in an effort to combat the race degeneracy, now generally recognized as making rapid progress among all civilized people.

At the last International Eugenics Congress, Dr. Davenport remarks.

Major Darwin's remarks.

Newspaper criticism.

The optimistic view.

Hope for the race through biologic living.

Eugenics and eugenics.

Eugenics are the chief factor.

Euthenics important, even though acquired characters are not inherited.

A growing conviction that somehow heredity is influenced by environment, even though the immediate effects may not be sufficiently tangible to be recognized.

Cumulative effects.

Euthenics supplements and aids eugenics - eugenics a better chance.

The Battle Creek Sanitarium a human experiment station especially devoted to euthenics.

Effort to discover the best technic for living longer under civilized conditions.
Means of supplementing civilized life so as to compensate for the things we have lost in abandoning primitive modes of life.

Open air.

Diet.

Poison habits.

Bring out different points of biologic life.

Impress demands for scientific living as well as scientific culture

Invite criticism.
CENTRAL COMMITTEE

RACE BETTERMENT CONFERENCE
January 2nd to 6th, Inclusive,
1928
BATTLE CREEK, MICH.

Abbott, Miss Grace
Chief Children's Bureau, Department of Labor, Washington, D.C.

Moore, Mr. Carl
American Museum of Natural History, New York, N.Y.

Anderson, Miss Mary
Chief Women's Bureau, U.S. Department of Labor, Washington, D.C.

Beck, Dr. Carl
Director North Chicago Hospital, Chicago, Ill.

Berry, Dr. Charles Scott
Professor of Education, University of Michigan; Department of Education, Detroit, Michigan.

Bishop, Dr. Louis Faugeres
Fordham University, New York City

Breckenridge, Mrs. Aida deAcosta
Director Division of Publicity and Promotion, American Child Hygiene Association, New York City

Brett, Mr. George P.
President The Macmillan Company, New York City

Bundesen, Dr. Herman N.
Health Commissioner, City of Chicago, Ill.

Butterfield, Dr. Kenyon B.
President Michigan State College, Lansing, Michigan

Butterfield, Dr. Paul M.
Chief Children's Urological Clinic, New York City

Carlson, Dr. Anton J.
Head of the Department of Physiology, University of Chicago, Ill.

Carrel, Dr. Alexis
Director of Research, Rockefeller Institute for Medical Research, New York City

Charters, Mr. W. W.
Professor of Education, University of Chicago, Ill.
Chittenden, Professor Russell H.,
Dean Sheffield Scientific School, Yale University, New Haven, Conn.

Crowell, Mr. Merle,
Editor The American Magazine, New York City

Cutter, Dr. Irving S.,
Dean Medical School, Northwestern University, Chicago, Ill.

Davenport, Dr. C. B.,
Director Eugenics Record Office of the Carnegie Institution of Washington, Cold Spring Harbor, N.Y.

Davis, Hon. J. J.,
Secretary of Labor, Washington, D.C.

Dean, Dr. Bashford
Metropolitan Museum of Art, New York, N.Y.

Edmondson, Professor J. B.,
Secretary North Central Association, and Professor of Education, University of Michigan

Elliott, Dr. Charles A.,
Professor of Internal Medicine, Northwestern University; Vice-President American Medical Association

Emerson, Dr. Haven,
Professor of Public Health Administration, and Director of the Delamar Institute of Public Health, Columbia University, New York City

Evans, Dr. W. A.,
Professor of Hygiene, Northwestern University; Director of "How to Keep Well" Department, Chicago Tribune

Fairchild, Dr. Henry Pratt,
Sec. & Treas. American Eugenics Associate Society; New York University, New York City

Farnam, Professor "Henry W.,
Emeritus Professor of Economics, Yale University, New Haven, Conn.

Fisher, Professor Irving
Professor of Political Economy, Yale University, New Haven, Conn.

Frank, Dr. Glenn Frank,
President University of Wisconsin, Madison, Wis.
Glover, J. W., Ph. D.m
Professor of Mathematics, University of Michigan, Ann Arbor, Michigan

Green, Hon. Fred W.,
Governor of Michigan, Lansing, Michigan

Guyer, Prof. M. F.m Prof. of Zoology
University of Wisconsin, Madison, Wisc.

Halsey, Dr. Robert H.,
New York City

Harris, Dr. Louis I.,
Commissioner of Health, New York City

Haynes, Dr. H. A.,
University of Michigan, Ann Arbor, Michigan

Henderson, Mrs. John B.,
Washington, D.C.

Hickson, Dr. Wm. J.m
Director Psychopathic Laboratory, Municipal Court, Chicago, Ill.

Hindhede, Prof. M.,
Copenhagen, Denmark

Hoffman, Mr. Frederick L.,
Prudential Insurance Co. of America, Newark, N. J.

Holt, Mr. Byron W.,
New York City

Howard, Mr. Roy
Pres. Scripps-Howard Syndicate, New York City

Hughes, Hon. J. A.m
Congressman from West Virginia, Washington, D.C.

Hull, Dr. Harry E.,
Commissioner General of Immigration, Washington, D.C.

Herty, Dr. Charles
Head Chemical Foundation, Inc., New York City

Ireland, Major-General M. W.,
Surgeon General U.S. Army, Washington, D.C.

Irons, Dr. Ernest E.,
Dean Rush Medical College, University of Chicago, Ill.
Ivy, Dr. Andrew Conway
Head Division Physiology and Pharmacology,
Medical School, Northwestern University, Chicago, Ill.

Johnson, Hon. Albert,
Chairman Committee on Immigration, House of Representatives,
Washington, D.C.

Jordan, E. O., Ph. D.,
Chairman of Department of Hygiene and Bacteriology,
University of Chicago, Ill.

Judd, Professor Charles H.,
Director of School of Education, University of Chicago, Ill.

Kellogg, Dr. Vernon
Secretary National Research Council, Washington, D.C.

Kendall, Dr. Arthur I.,
Professor of Bacteriology, Washington University, St. Louis, Mo

Kiefer, Dr. Guy L.,
State Health Commissioner, Lansing, Michigan

Kingsbury, Mr. John A.,
Secretary Milbank Memorial Fund, New York City

Klein, Dr.
Fargo, N.D.

Lambert, Dr. Alexander
Chairman Committee of Fifty for Studying Tobacco, New York City

Laughlin, Dr. H. H.,
Asst. Director Eugenics Record Office of the Carnegie Institution of Washington, Cold Spring Harbor, N.Y.

Lowsley, Dr. Oswald S.,
Director Brady, New York Hospital, New York City

Martin, Dr. Franklin H.,
Director General American College of Surgeons; Director Gorgas Memorial Institute, Chicago, Ill.

Mason, Dr. Max
President University of Chicago, Ill.

McCollum, Dr. E. V.,
School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md.

McCormack, Dr. A. T.M
President American Public Health Association; Secretary State Board of Health of Kentucky, Louisville.
McLean, Dr. Franklin C.,
Professor of Medicine, University of Chicago

Milliken, Mr. Carl E.,
Secretary Motion Picture Producers and Distributors of America, Inc., New York City

Mooshead, Dr. F. B.,
School of Dentistry, Chicago, Ill.

Nelson, E. W.,
Ex-Chief Bureau of Biological Survey, Washington, D.C.

Newburgh, Dr. Louis H.,
University of Michigan, Ann Arbor, Michigan

Noguchi, Dr. Hideyo
Rockefeller Institute for Medical Research, New York City

Olsen, Judge Harry
Municipal Court, Chicago, Ill.

O'Shea, Prof. M. V., M.
Director Department of Education, University of Wisconsin, Madison

O'Shea, Dr. William
Superintendent of Schools, New York City

Papanicolaou, Dr. George N.,
Cornell University Medical College, New York City

Patterson, Mr. Grove,
Editor The Toledo Blade, Cleveland, Ohio

Phillips, Mr. John S.,
Editor, New York City

Phillips, Dr. Wendell C.,
Ex-President American Medical Association, New York City

Plunkett, Right Hon. Sir Horace K.C.V.O., F.R.S.,
Ex-Minister of Agriculture for Ireland, Dublin, Ireland

Rettger, Professor Leo F.,
Professor of Bacteriology, Yale University, New Haven, Conn.

Riddle, Dr. Oscar
Carnegie Institution of Washington, Cold Spring Harbor, N.Y.

Rogers, Dr. Oscar H.,
Medical Director New York Life Ins. Co., New York City

Rose, Dr. Mary Swartz
Professor of Nutrition, Teachers' College, Columbia University
Ross, Professor Edward Alsworth
Professor of Sociology, University of Wisconsin, Madison

Sawyer, Dr. XXXXXX
Director Health Department, Eastman Kodak Co., Rochester, N.Y.

Scott, Dr. Walter Dill
President Northwestern University, Chicago, Ill.

Sisson, Mr. Francis H.,
National Community Foundation; Vice-Pres. Guaranty Trust Co.,
New York City

Slosson, Dr. Edwin E.,
Director Science Service, Washington, D.C.

Snow, Dr. William F.,
President National Health Council; ..., American Social
Hygiene Assoc., New York City

Stagg, Dr. A. A.,
University of Chicago, Ill.
Professor of Education, Culture and Athletics

Steenbock, Prof. H.,
Professor of Agricultural Chemistry, University of Wisconsin,
Madison, Wisc.

Steuart, Mr. William M.,
Director Bureau of the Census, Washington, D.C.

Stewart, Dr. George David,
President American College of Surgeons, New York City

Stieglitz, Prof. Julius
Head of Chemistry Department, University of Chicago

Sundwall, Dr. John
Professor of Hygiene and Public Health, University of
Michigan

Tarbell, Miss Ida
Writer, New York City

Thompson, Miss Ruth
Muskegon County Probate Court, Muskegon, Mich.

Vaughan, Dr. Henry F., Commissioner of Health, Detroit, Mich.

Warthin, Dr. Alfred Scott
President National Association of American Physicians,
Ann Arbor, Michigan
Wiggam, Mr. Albert Edward,
Writer and Lecturer, New York City

Wiley, Dr. Harvey W.,
Washington, D.C.

Williams, Dr. Frankwood E.,
Medical Director National Committee for Mental Hygiene,
New York City

Woods, Mr. William S.,
Editor The Literary Digest, New York City

Yost, Dr. Fielding H.,
Athletic Coach, University of Michigan, Ann Arbor, Mich.
NOTES FOR THE PROGRAM

Race Betterment Conference
January 2nd to 6th inclusive, 1928
Battle Creek, Michigan

Address of Welcome
Dr. John Harvey Kellogg, President of the Race Betterment Foundation and Superintendent of the Battle Creek Sanitarium

Shall We Live Longer and Should We?
Dr. C. C. Little, President of the University of Michigan and President of the Conference

The Lengthening of Human Life—in Retrospect and in Prospect
Irving Fisher, Professor of Political Economy, Yale University

The Immortality of Animal Tissues and Its Significance
Dr. Alexis Carrel, Director of Research, Rockefeller Institute for Medical Research

The Changing Race: Factors in Racial Deterioration
Edward Algworth Ross, Professor of Sociology, University of Wisconsin

The Influence of Immigration on American Health
Dr. H. H. Laughlin, Asst. Director Eugenics Record Office of the Carnegie Institution of Washington

The Physical Betterment of Future Citizens through Immigration
Dr. Harry E. Hull, Commissioner General of Immigration

The Influence of Immigration on the Size of Families
Hon. Albert Johnson, Chairman Committee on Immigration, House of Representatives, Washington

Are Americans Growing Healthier?
Representative of the Bureau of the Census, Washington, D.C.

Constructive Suggestions from the Figures on Mortality
James W. Glover, Professor of Mathematics, University of Michigan

The Economic Value of Health
Francis H. Sisson, National Community Foundation and Vice President Guaranty Trust Co.
New York City
The Possibility of Modifying the Germ Plasm
M. F. Guyer, Professor of Zoology, University of Wisconsin

Hereditary Factors in Health and Longevity
Dr. C. B. Davenport, Director Eugenics Record Office
of the Carnegie Institution of Washington, D.C.

The New Health Decalogue
Albert Edward Wiggam, New York City

A Biologic Philosophy of Life or Religion a Necessary Foundation
for Race Betterment
Dr. Aldred Scott Warthin, Professor of Pathology,
University of Michigan

The Status of the Low Protein Ration After Twenty-Five Years
Professor Russell H. Chittenden, Dean Sheffield Scientific
School, Yale University

Where We Stand Now in Our Knowledge of Nutrition
Dr. E. V. McCollum, School of Hygiene and Public Health
Johns Hopkins University

Studies in Nephritis and in Obesity
Dr. Louis H. Newburgh, University of Michigan

National Nutrition as a Factor in the Death Rate
Dr. M. Hindhede, Copenhagen, Denmark

Nutrition as a Practical Home Problem (To be read by title)
Dr. Mary Swartz Rose, Professor of Nutrition, Teachers' College, Columbia University

The Health Progress of the North American Indian
Frederick L. Hoffman, Statistician, Prudential Ins. Co.
of America

The Environment of the Gorilla
Mrs. Carl Akeley, American Museum of Natural History

The Physiologic Life
Dr. Anton J. Carlson, Head of the Department of
Physiology, University of Chicago

The Mechanisms of Normal Digestion and Their Significance
Dr. Andrew Conway Ivy, Head of the Division of Physiology
and Pharmacology, Northwestern University

Physiologic Habits
Dr. Sawyer, Director Health Department, Eastman Kodak Co.
The Practical Application of the Science of Bacteriology
Dr. Arthur I. Kendall, Washington University

Studies of the Intestinal Flora in Relation to Health
Dr. Leo F. Retterger, Professor of Bacteriology, Yale University

The Ultimate Mission of Chemistry
Dr. Charles Herty, Director Chemical Foundation, Ind.

Adding Life to the Years as well as Years to Life
Dr. Herman Bundesen, Commissioner of Health, Chicago

Making Our Visions in Public Health Service Effective
Dr. Louis I. Harris, Commissioner of Health, New York City

The Role of the State in the Reduction of Degenerative Disease
Dr. Guy L. Keifer, Commissioner of Health State of Michigan

....... Dr. A. T. McCormack, President American Public Health Assoc., and State Board of Health, Kentucky

What Infection Does to Shorten Life
E. O. Jordan, Head Department of Hygiene and Bacteriology University of Chicago

The Rural Health Problem and Its Significance Solution
John A. Kingsbury, Secretary Milbank Memorial Fund

........ (To be read by title)
Dr. Haven Emerson, Professor of Public Health Administration and Director of the DeLamar Institute of Public Health, Columbia University

Crime as a Medical Problem
Judge Harry Olson, Municipal Court, Chicago

The Criminal in Everyday Life
Dr. William J. Hickson, Municipal Court, Chicago

The Prevention of Insanity
Dr. Frankwood D. Williams, Medical Director National Committee for Mental Hygiene

Fifty Years After Fifty
Dr. Louis Faugeres Bishop, Fordham University

What Urology Has Done and Can Do in Lengthening Life
Dr. Oswald S. Lowery, Chief Brady Clinic, New York Hospital

The Diagnosis in Infancy of Diseases of the Urinary Tract
Dr. Paul M. Butterfield, Chief Children's Urological Clinic New York Hospital
The Oestrus Cycle --New Cancer Diagnosis
Dr. George N. Papanicolaou, Cornell University Medical College

The Role of Heredity in Cancer
Dr. Maud Slye, Chicago, Ill.

The Application of Science to Industry and Labor
Hon. J. J. Davis, Secretary of Labor, Washington

Child Care
Miss Grace Abbott, Chief Children's Bureau, U.S. Department of Labor

The Work of the Women's Bureau of the U.S. Department of Labor
Miss Mary Anderson, Director

Sex Education
Dr. William F. Snow, President National Health Council

Progress in Medical Education
Dr. Franklin H. Martin, Director General American College of Surgeons and Director Gorgas Memorial Institute

The Efforts of One Profession to Better Itself
Dr. George David Stewart, President American College of Surgeons

Preventive Medicine
Hon. Fred W. Green, Governor of Michigan

The Power of Man to Determine His Own Destiny,
Glenn Frank, President University of Wisconsin

The Commercial Advertisement as a Factor in Education
Dr. Harvey W. Wiley, Washington, D.C.

Body Building
Major General M. W. Ireland, Surgeon-General U.S. Army

Dr. John Sundwall, Prof. of Hygiene and Public Health, University of Michigan

The Playground as a Mind and Body Builder
Dr. William O'Shea, Supt. of Schools, New York City

(Or representative)
Newer Values in Education
Prof. M. V. O'Shea, Head of the Department of Education
University of Wisconsin

Educating for Long Life
Prof. Charles H. Judd, Director School of Education,
University of Chicago

Prof. W. W. Charters, University of Chicago

What a City System Can Do for Handicapped Children
Dr. Charles Scott Berry, University of Michigan and
Director Education of Handicapped Children, Detroit

Dr. Vernon Kellogg, National Research Council, Washington

Grove Patterson, Editor The Toledo Blade

Dr. W. A. Evans, Professor of Hygiene, Northwestern University
Writer The Chicago Tribune

The Motion Picture as an Educational Agent
Carl E. Milliken, Secretary Motion Picture Producers and
Distributors of America, Inc.

Dr. Henry F. Vaughan, Commissioner of Schools,
Detroit, Mich.
That the human race is degenerating so rapidly that race extinction is menaced is an established fact recognized by leading eugenists and anthropologists. Depopulation through decline of the birth rate, first noticed in France, is now observed in nearly all civilized countries.

McCleary in a recent work, "The Menace of British Depopulation," shows that the present population trend in England if continued during the next century at the same rate as during the last century will within a hundred years reduce the population of England from 40,000 to 4,425,000.

Experiments made at Johns Hopkins University under Professor Hooker and at Battle Creek Sanitarium under Drs. Roth and Mitchell, showed that tobacco dwarfs growth and lessens fertility to a marked degree.

The Journal of the American Medical Association in a recent issue in an editorial entitled "Headed for the Last Census" shows that the menace of depopulation is a real one that must be reckoned with.

One of the leading statesmen in this country recently in private conversation expressed the opinion that within a century the world will be dominated by the yellow race by whom the depreciated white race may be enslaved. Racial stamina and physical vigor win in the long run.

More than 20 years ago, Professor Wilcox of Cornell University showed in a paper that the falling birth rate in this country indicated that in the year 2,000 not a single baby would be born.

In a recent editorial in the Journal of the American Medical Association entitled "Headed for the last Census," attention is called
to the alarming fact shown by the last census that there are in this
country more children aged from 5 to 9 years than there are from 0 to
4. This shows that this country is following the same depopulation
trend as England and that already the youngest group is so reduced
that it will not replace the 5 year group ahead of it. This trend
has existed and has steadily progressed for nearly a century and no
doubt will continue unless the race betterment movement started at the
Battle Creek Sanitarium many years ago develops into a national revo-
lution toward sane and biologic methods of living.

There is ample justification for the warning expressed by
Professor Hooton in the following paragraph which I quote from his
startlingly interesting work:

"The howl of the Roman mob, 'Panem et circenses!' (bread and
the circus) is re-echoing ominously through this nation. However,
neither emotion nor rhetoric will alleviate the situation, and let him
who will put his trust in such sops to Cerberus as bonuses, old age
pensions, and legislation for social security. We must either do some
biological house-cleaning or delude ourselves with the futile hope that
a government of the unfit, for the unfit, and by the unfit will not
perish from the earth."
RACE BETTERMENT AIMS

Race betterment, in its largest sense, is a process which has been going on, sometimes advancing and sometimes retreating, during all the ages since man's career began. In a more restricted sense, the term relates to an effort to combat the race degeneracy now generally recognized as making rapid progress among all civilized people.

At the opening session of the last International Eugenics Congress a distinguished speaker said, "Of course we all know that the human race will ultimately perish; but if we will give attention to eugenics we may hope to postpone the catastrophe somewhat." And the venerable Major Darwin, son of Charles Darwin, said in an address at a banquet, "If our present civilization survives, and I fear it will not, it will have to be the United States that saves it, for there is no hope in any other country."

No dissenting voice was raised against these views, which seemed in fact to be the prevailing sentiment of the Congress for no dissenting voice was raised and the leading newspapers editorially remarked that a highly pessimistic note seemed to pervade the Congress.

These doleful forecasts appear to find abundant support in the multiple stigmata of degeneracy to which every student of modern racial tendencies has called attention. The Race Betterment perspective differs from that of eugenists in that it sees in the distant future not race extinction, but a finer, nobler, larger, wiser, stronger, happier, longer lived human race peopling a world which has been mastered and developed and beautified and standardized to meet human needs; in other words, a perfect race living in a perfect environment.

Just how this happy Elysium may be attained, I will not pretend to be able to point out; but I entertain the great hope that biology, the
greatest teacher and the safest leader our groping humanity has ever found will open the way for us; and it seems to me we can already see some glimmerings of light which suggest the goals toward which our efforts should be directed.

While we do not yet fully comprehend the forces which are working in organic evolution, it is certainly evident that evolutionary changes take place in both directions. The fact that there is retrogressive as well as progressive evolution, and that we actually see the two processes in active operation especially in the more advanced and highly civilized nations, does not suggest the conclusion that retrogressive evolution will ultimately dominate the scene and plunge the race into chaos and oblivion. Is it not possible that a too rigid adoption and application of the theories of Weismann has given rise to a sort of eugenic fatalism which sees in the future only a steadily diminishing minority of high quality organisms and a rapidly growing majority of inferior types.

Of course eugenics offers remedies, but when these are presented with an admission that they will doubtless prove futile, it can hardly be expected that the average man will become enthusiastic in their advocacy.

Is it not possible that the great naturalist Lamarck who coined for us the word biology, may have been right in his belief that environment sows seeds which blossom and bear fruit in later generations? Must we believe that the chromosomes rule our destiny so absolutely that there is no possible chance for the intervention of any modifying factors in the operation of heredity? Acceptance of this view has led some to the conclusion that vice and disease are really efficient race betterment
agencies because they weed out weakling and criminal types. Must we then 
facilitate our efforts to uphold moral and ethical standards and to 
combat disease and misery by sanitation, medical relief and moral in-
struction? If only temporary advantage is to be gained by remedial and 
prophylactic activities and to the ultimate disadvantage of the race, 
there is room for doubt whether it is worth while to be at so great 
pains to maintain at great cost our Boards of Health, Sanitary Commissions, 
Hospitals and Churches and the army of doctors, nurses, preachers and wel-
fare workers which now help to make life possible and tolerable for so 
many millions of feeble and unfortunate ones in all civilized communities.

Nearly fifty years ago, my duties as a member of the Michigan State 
Board of Health required me to study the mortality tables sent out by the 
Census Bureau and led me to the discovery that organic and degenerative 
disorders were increasing. I found this to be true to a very marked de-
gree in relation to mental disorders; and soon reached the conclusion that 
the human race was going down physically and mentally and for many years 
I enjoyed the felicity of being called a "calamity howler." The hope that 
attention to biologic requirements in personal habits and in such en-
vironmental factors as are controllable led me and my colleagues to labor for the establishment at the Sanitarium a sort of experiment station or 
laboratory for the study of human living, hoping thus to contribute some-
thing to Race Betterment. This hope is naturally based upon the belief 
that while eugenics is undoubtedly the chief hope for race improvement 
contributions from the environment or so-called acquired characters must 
also from generation to generation add something of importance to the 
family tree. Just how this is done or even how it might be done I am
quite willing to leave to those skilled in the mysteries of genetics to find out. If the Lamarckian doctrine can be shown to be true even in a very restricted sense and conditioned upon long periods of time, the field of opportunity for constructive Race Betterment activity will be greatly broadened. Eugenics plus eugenics will be more than double in interest. If a man can be convinced that his physical powers will appear to him more worthwhile. Eugenics will become more interesting if it may be associated with our whole life program instead of centering about a single function.

Again, even if it cannot be shown that characters developed by environmental factors become incorporated into the germ plasma, it must be admitted that an individual interested in physiologic living and ready to recognize biologic truth and to work for its development and diffusion would be much more ready to accept and appreciate the vitally important truths of eugenics and to adopt its ethical code. That is, a man interested in bettering himself by right living will be thereby much easier to interest in the welfare of people who are going to live five hundred years hence.

Our excellent friend, Mrs. Mary F. Henderson of Washington, D. C. has for many years advocated the establishment of an aristocracy of health as the best solution for some of the many problems which present themselves when one seeks to formulate a plan for a eugenic social organization. It may be that such a group of enlightened enthusiasts for race preservation and racial improvement is already developing. There is certainly a steadily growing number of eugenically minded persons and a rapidly increasing multitude of individuals who are willing to accept nature as an instructor
in modes of living. When we consider that eugenic conduct is an essential
part of a complete scheme of biologic living, it becomes evident that
eugenists and euthenists ought to join hands for the promotion of race
betterment and with the hope of ultimately developing a new human race
endowed with mental and physical powers far superior to our present standards
and with moral qualities and concepts based upon and consistent with the
solid foundation stones of scientific fact.
MAKING REAL MEN

By Dr. John Harvey Kellogg

Benjamin Franklin tells in his biography an interesting story which I am sure every Boy Scout can appreciate. A number of Indian chiefs had gathered together at Philadelphia, which was then the headquarters of the colonies for the purpose of concluding a treaty with reference to certain lands. After the business had been satisfactorily completed, the government officials, wishing to show the Indians a favor, suggested that if the chiefs would select ten of their young men and send them to Philadelphia, they would be sent to school and educated at government expense. The principal chief thanked the commission for their courtesy but declined the offer, saying that several of their Indian boys had attended the schools of the white man and obtained the education which he was able to give them, but when they returned to their tribe, they were useless. They were ignorant of almost everything they needed to know. They did not know the names of the trees, flowers and plants growing in the woods. They did not know how to find the berries, roots, nuts and seeds needful for food. They could not track the bear and deer and knew nothing of their habits, and so were unable to hunt. Besides they were weak and puny, far inferior to their brothers who had gotten their education through study of the great open book of Nature as they roamed the woods and swam the rivers and watched their "little brothers," the bears and beavers, the muskrats, rabbits, raccoons and squirrels at their work, and made the acquaintance of the birds and fishes and other of their forest neighbors.
In fact, he said, their education had made them useless, and so respectfully declined the offer made. And to the surprise of the commission, he added, "Send us ten of your sons and we will make real men of them."

That is what the world needs, REAL MEN. And the Boy Scout Movement, conceived and developed by that marvelous man, General Baden Powell, is giving to thousands of boys in England and America an opportunity for the training of their bodies, the development of good habits and the formation of manly characters, such as will make them noble citizens and fit them for successful careers.

I am deeply interested in this movement. It is greatly needed at this time. There are in the world certain sinister influences which are constantly and busily at work dragging men down, undermining health and injuring character. Alcohol is one of these enemies that every boy who wants to win must not only avoid, but fight for the protection of the weak and unwary.

And tobacco is another enemy almost as bad, possibly even worse. The cigarette is a terrible enemy of manhood. Its use will blast all hope of a boy becoming a real man, for it damages his body, his mind and his character.

The best men, the leaders who stand out in the forefront, the men who hold up the noblest standards and whose influence is strongly on the side of wholesome living and noble character, do not use tobacco and strongly oppose its use. Among such men whose names are familiar to every wide-awake boy, are President Roosevelt, President Wilson, President Taft, Chief Justice Hughes, Associate Justice Holmes, John D.
Rockefeller and his noble son, who is devoting his life to the distribution of a billion dollars for the advancement of human welfare; the Doctors Mayo, and hundreds of others.

General Grant was a smoker. He died of smoker's cancer of the throat. General Miles, his aid-de-camp, became a strict abstainer after General Grant became ill. He said to me, "I determined that I would not have my head eaten off in that terrible way." But General Grant followed his father's example in smoking and died the same horrible death.

It is a great mistake to suppose that it is all right for a boy to smoke after he is twenty-one. Tobacco hurts men just as much as boys. It prevents a boy from becoming as large and strong as he might be. It prevents a man from being as efficient and as successful as he might be, and shortens his life.

For a girl to smoke, is still worse. A boy who has a smoking mother is to be pitied.

Tobacco is certainly one of the enemies of human welfare which Boy Scouts should fight.

The opportunity which every Boy Scout has for becoming a strong, healthy man is of priceless value. Men undergo great hardships in training for a prize fight or a football game, or a boat race. Training for one's life work is far more worth while. Health and endurance are just as essential for complete and permanent success in a profession or in business as for a ball game or a race.
Every boy in America should have the chance to be a Boy Scout. The boys who take this training and who profit by it, will be the great leaders of the next generation. There's a good position and a splendidly useful career awaiting every good and faithful Scout.
Why Are We Less Sturdy Than Our Ancestors?

The men who cleared the forests and broke up the prairies, defied the mosquito with its plague of malaria, and bore the hardships of pioneer life to plant our civilization, were tougher, sturdier, more manly, more enduring men than the average man of to-day.

The war time examinations showed that half the men between the ages of 21 and 30, when a man should be in his very prime, were so far below the standard of normal health and vigor that half of them were not only unfit for military service at the front but incapable of being made fit by training. We lose from our population of one hundred million, by death, 1,500,000 people every year; 3,000,000 people are sick all the time. An average of seven days are lost from labor by sickness every year. Tuberculosis is gaining ground. It kills one out of every ten of our population. Cancer kills one in every twenty. Heart disease, Bright's disease and other chronic maladies are rapidly gaining ground. While the average length of life is increasing, the number of people who attain great age is rapidly decreasing. Every year fewer people die of old age for the reason that the average man dies before he is old enough to die of old age. Insanity, imbecility and epilepsy are increasing, and if the present rate of increase continues, in less than two centuries we will all be imbeciles, lunatics, idiots or epileptics. In England and Wales the insane are increasing twice as fast as the sane, and in France, ten times as fast. Another evidence that the human race is running out is found in the fact that the birth rate is diminishing. In France, England and Germany the birth rate is declining
so rapidly that if it continues at its present rate, a century hence not a child will be found in any of those countries, and in this country the decline of the birth rate, if not so rapid, is none the less definite and constant.

In the Marquesas Islands, a hundred years ago, there were 140,000 happy, healthy people, perhaps the finest race the world ever saw. At the present time there are only a few hundred left of these splendid people, who sprang originally from the same Caucasian root as ourselves. They have faded away under the blight of our perverted civilization. Every civilized country is traveling the same road, though more slowly. The fundamental cause of our trouble is unbiologic living. Man is a very old-fashioned animal trying to live in a new-fangled way, in a manner that no animal ever before adventured, and so unnatural and so ill adapted to his constitution and his requirements, as to render his ultimate undoing inevitable. No animal has ever survived such radical and violent departures from its normal environment as modern man has made. He is by nature a tropical creature, an open-air dweller. In the open air he is free from tuberculosis, pneumonia and a long list of "house diseases" which his atavistic proclivities toward cave dwelling have led him to cultivate. We have only recently found out that the wind carries a healing balm on its wings which fortifies the body against disease and makes fresh air the most important of all prophylactic and therapeutic means. The average man has not learned this important truth and so the business man, incarcerated behind the bars of his counting room with his male assistants dies at the premature age of 36 years, while the farmer, whose vocation keeps him in the open, lives to 55. The business man loses more than one-third of his life, the price he pays for ignorance or neglect. And the business woman
dies at 26, while the housewife lives more than twice as long, dying only at 53. And 42 per cent. of these office girls die of tuberculosis, one of the most easily preventable and curable of all the serious maladies to which man is subject.

Man is naturally a low protein feeder, like his relatives, those sturdy forest men, the chimpanzee and the gorilla, who began life with him in the primeval forests of the Eocene in North America, 3,000,000 years ago, when, according to Prof. Elliot of Oxford, there was not a single high protein feeder among all the higher animals that roamed the earth. The gorilla has adhered to the original bill of fare and to-day is king of that portion of the Congo in which he lives, not a lion being found within a space of four hundred miles square, in which the forest monarch reigns supreme. And this primitive creature has the strength of ten men. But he cannot endure the conditions of civilization. No gorilla has ever survived two years in captivity. Man has become in a measure immune to these evil conditions; but his immunity is only apparent; it is nothing more than delayed reaction. The ultimate effect is the same. The gorilla dies in captivity in a few months. The imprisoned business man lingers longer but dies fifty years before his time. There is no such thing as real immunity to unbiologic conditions. There is postponement of judgment, but no pardon.

For nearly fifty years the writer has been a close student of the influence of habits upon health. During this time a study has been made of the habits of more than 100,000 persons. One very definite conclusion reached is that while acute disease is usually the result of accident or infection, chronic disease is for the most part due to the breakdown of the vital machine as the result of the cumulative effects of unbiologic habits.
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four women alive for every three men.

For every 100 female deaths from disease of the blood vessels,
140 men die. One hundred and seventy men die of angina pectoris to
every 100 women. Between the ages of 20 and 24 years, 300 men die for
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and the general use of tobacco by men would seem to be a large factor
in causing the great difference in the mortality rate, for Hunter has
shown that the mortality of moderate drinkers is double that of ab-
stainers, and the medical director of a great life insurance company
and one of our best known actuaries, have independently reached the
conclusion that under like conditions, for every 100 deaths of non-
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It is also worthy of note that the Census Bureau reports only 407 female decedents from alcoholism for 3500 male decedents, and the mortality from alcoholism dropped to one-half the former figures the first year of war prohibition.

Above the age of 25 years, the mortality of men from tuberculosis is notably greater than that of women. Between 25 and 70 years, 170 men die of lung tuberculosis for every 100 women, and at the age period of 50-54 years, 243 men die for every 100 women. One in four of all adults over 25 years of age, die of lung tuberculosis; but the proportion of women deaths is less than 1 in 5, while 1 in three is the proportion for men.

The fact that tuberculosis is again on the increase after having been checked for a number of years, is of startling significance. It means that in spite of all that modern sanitation and therapeutics have thus far accomplished, tuberculosis is gaining ground; in other words, that at the present moment civilization stands defeated in the battle against this great plague, and that unless new and more thoroughgoing measures are adopted and the forces of the world rallied to combat this insidious foe, the whole civilized race will ultimately be exterminated by it as certainly as have been the natives of Tasmania and other islands of the South Pacific.

Our daily habits are the foundation on which we build for health or disease, a mold in which we shape our physical destiny.

A dangerous fallacy which leads annually to the loss of millions of years of life, is the notion that a man may be possessed of a surplus of vitality which he may expend in excesses and indulgences of various sorts, without serious injury. We need to learn that this surplus of vigor is a margin of safety provided for emergencies and to be drawn upon in our declining years when outgo exceeds income, a sacred endowment which we hold
in trust not for ourselves alone, but for the community, the nation, the race, by the judicious use and investment of which we may contribute to the welfare of our fellows, of those who come after us. To waste material wealth is folly; to squander vital capital is no less worthy of condemnation. We belong not to ourselves, but to the race: we have been bought with a price, the sum of which includes an infinite total of toil and effort and struggle and sacrifice to which many thousands have contributed that we might exist and that we might be what we are.

All present day religions need to be supplemented by a new religion or at least a new code, which shall set forth the sacred claim of our physical being, the religion of the body. Preachers should proclaim it from the pulpit. Teachers should dwell upon it every day and every hour. It should be taught in the Sunday school as a part of spiritual and ethical culture. Indeed, health culture, aiming toward soundness of body and mind might well be made the basis of all culture.

Among the interesting lessons from the war is the notable lowering of the death-rate in several countries. In Denmark, the death-rate fell 35 per cent., due, in the opinion of Dr. Hindhede, the Danish food controller, to simpler habits of living, and especially the low protein diet and the use of coarse bread.

The same thing was true in Germany. The medical director of one of our largest life insurance companies, which has a large number of policy holders in Germany, informed the writer some
months ago that the death-rate of their policy holders in Germany was much less during the war than before, even including war losses, and was even less than the same class of risks in this country.

Lieut. Col. Harris, of the U.S. Army, stated in a paper read at a medical meeting held last year in Atlantic City, that he had been informed by German physicians that disorders of the stomach largely disappeared in Germany during the war, together with the disorders of the liver and kidneys which usually develop in persons over 50 from over-feeding. It is said that diabetes has practically disappeared in Germany and that gout, formerly very common, is now unknown, which is ascribed to the absence of coffee and the small amount of alcohol in beer.

If Germany is profiting by the absence of its customary poisons, we are at present suffering from an overdose, and that notwithstanding the prohibition of alcoholics, for the increased consumption of coffee and tobacco has established new records which give to the average American a daily dose of three or four grains of nicotine and four grains of caffeine. Here are two widely prevalent habits which are likely to counteract almost any effort in the direction of health and race betterment which does not aim to lighten the burden of heart, nerves,
liver, kidneys and glands of internal secretion imposed by these lethal drugs.

Health studies and health conditions must be given first attention in our public schools. A good knowledge of physiology and personal hygiene should be required of every graduate from high school, academy, college or university. The people must be made to understand that soundness of body is fundamentally essential in business, art, literature, politics and religion, as well as in warfare, sports and industry. They must be made to realize that in our great haste to achieve civilization, we have neglected to provide the necessary compensations for the good things left behind in the primitive environment by which the race was trained and tutored to its physical preeminence, and that we need a mild return to savagery to secure the same purity of air and cleanliness of food and wholesomeness of environment which the savage enjoys; that the inside of our bodies must be kept as clean as the outside; that we have no vitality to squander and need no vices in order to enjoy life to the full; that we must assiduously cultivate health instead of disease as we have been doing for a thousand years, and especially in the last century. Thus, by creating an enthusiasm for health promotion and physical perfection, we may incorporate the practice of eugenics and euthenics into the mores of society, and even make them a part of religion, and be able to create laws and sanctions.
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man, who shall truly be, in the words of the immortal poet,
"The beauty of the world,
The paragon of animals."

By J.H. Kellogg. Pub. in The Journal of Health and Sanitation,

T.D. Oakley, Bus. Mgr. (January, 1921.)

Quoted in The Literary Digest, June 11, 1921.

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If Germany is profiting by the absence of its customary poisons, we are at present suffering from an overdose, and that notwithstanding the prohibition of alcoholics, for the increased consumption of coffee and tobacco has established new records which give *digits* to the average American a daily dose of three or four grains of nicotine and four grains of caffeine. Here are two widely prevalent habits which are likely to counteract almost any effort in the direction of health and race betterment which does not aim to lighten the burden of heart, nerves,
liver, kidneys and glands of internal secretion imposed by these lethal drugs.

Health studies and health conditions must be given first attention in our public schools. A good knowledge of physiology and personal hygiene should be required of every graduate from high school, academy, college or university. The people must be made to understand that soundness of body is fundamentally essential in business, art, literature, politics and religion, as well as in warfare, sports and industry. They must be made to realize that in our great haste to achieve civilization, we have neglected to provide the necessary compensations for the good things left behind in the primitive environment by which the race was trained and tutored to its physical preeminence, and that we need a mild return to savagery to secure the same purity of air and cleanness of food and wholesomeness of environment which the savage enjoys; that the inside of our bodies must be kept as clean as the outside; that we have no vitality to squander and need no vices in order to enjoy life to the full; that we must assiduously cultivate health instead of disease as we have been doing for a thousand years, and especially in the last century. Thus, by creating an enthusiasm for health promotion and physical perfection, we may incorporate the practice of eugenics and eugenics into the mores of society, and even make them a part of religion, and be able to create laws and sanctions.
by which we shall cease to propagate disease and unfitness and shall begin to climb back toward the primitive health and hardihood from which we have fallen, and set in operation the forces through which, after generations of righteous and biologic living, will come forth a new and better man, who shall truly be, in the words of the immortal poet,

"The beauty of the world,  
The paragon of animals."