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Remarks by Dr. J. H. Kellogg at the National Purity Conference Banquet,
Tuesday, November 5, 1907, at the Sanitarium Banquet Room, Battle Creek,
Mich., at 1:30 P.M.

I didn't know what I was going to talk about until your president here gave me a subject just now, but really I think you have discussed the foods so thoroughly that it is not necessary for me to say very much about that part of the subject.

First of all I want to tell you that the Battle Creek Sanitarium Management feel highly honored to have as our guests so large a body of men and women who are engaged in the work of trying to roll back that tide of impurity which is rolling in on our modern civilization and threatens to ~~change~~ sink it in the same vortex which swallowed up the ancient civilizations of Egypt, Babylonia, Greece and Rome. It is evident that we are going down.

Some optimists think we are not going down, but we are. Something must be done more than has been done, and I am glad to see the great interest there is in this purity movement, and the interest that brings so many hundreds of people from distant places to this place and keeps them here a week discussing this question is certainly speaks well for the increased attention that is being given to this important question. It seems to be one of the questions that is ignored more than any other question of importance, and doubtless because it is so difficult a question to deal with. Many people who are interested and feel in sympathy with the question do not dare to speak, do not dare to do it because they feel that they are in danger of not saying just the right thing, that they might not do it in just the right way, so perhaps a great many people who are the best qualified to speak do little and say the least because they hardly dare to speak, fearing that they may make a mistake. Certainly

everything that is done in a public way, almost everything that is done in the way of discussing these questions, have in them the possibilities of evil as well as of good. We have to think of that. I am glad to see the scores of people that have come here to attend this conference. It speaks well for the future of the work.

Now just a few words with reference to the Battle Creek Sanitarium and its relation to this movement. I am glad to tell you that in the charter of this institution there is to be found a plank which ~~recognizes~~ recognizes the truth of the same ideals which your association recognizes, and recognizes it as a part and one of the definite objects of this institution, to promote in every possible way the cause of purity. That is one of the ways in which this institution must expend its money, expend its earnings, one of the objects that is set before the men and women who come here to work.

This is a Christian institution first of all. No man or woman is allowed to enter definite, permanent employment in this institution unless he or she is a Christian man or woman, and this institution is absolutely ~~non~~ non-commercial. There is no private interest in it and all its earnings must be forever devoted to the advancement of the cause of purity and of human welfare.

Now one of the fundamental things in this institution is to deal with the roots of things, with the causes of things, not simply with palliatives in the treatment of disease. We seek not simply to relieve pain but to ^{find} ~~fight~~ out the cause of pain and remove that cause. That is why we have upon our table here so simple a bill of fare. We have to leave off the bill of fare everything which is likely to be harmful to the average man that comes to the institution, so we endeavor to build up a bill of fare which is innocuous, which is nutritious, which is simple and non-toxic and so far as possible to antagonize

the conditions which we find in the majority of people who come here. Now it is a tenet and belief with us, and a doctrine which we feel pretty thoroughly established in, that false and unnatural habits are the outgrowth of unnatural conditions; that disease is the result of unnatural conditions primarily. We believe that the natural state is the right state; that the thing that is natural is good; that the thing that is really natural is good. Now we look about and see a great many things that are common, everyday customs that are not natural. We believe God made man upright and he put him under certain conditions, and if we can find out what these conditions were, the conditions in which God intended man to live, then we find the conditions which are right, and the evils, sin and unnatural habits are the results to a large degree of unnatural conditions of life, of unnatural physical conditions, unnatural mental or moral conditions. The environment is the soil out of which the creatures grow. We are creatures of conditions and environment, and the most important of all these conditions or environment is nutrition. One of the most important of all is nutrition. Nutrition is the soil out of which the man grows and out of which the animal grows just the same as it is the soil out of which the vegetable grows. The tree is what the soil makes it, with its climatic conditions, so the man is what nutrition makes him to a very large degree. The old Germans had a proverb, "As a man eateth, so is he," and so we have found this to be true in actual experience. What we eat today is walking around and talking tomorrow. If it is cross food it is cross thought and cross talk. The food we eat is incorporated into ourselves by that most wonderful of all miracles--digestion and assimilation. The food that we eat is transformed into human beings and activity in human life. Now then it becomes a matter of tremendous importance whether we eat

~~whether we eat~~ natural or unnatural food, whether we eat things that are irritating, aggravating, stimulating, that fill the body with irritating elements that benumb the higher elements and stimulate and irritate the lower elements, the nature and the character, or whether we take food that is simple, that is chaste, pure, that is sweet. "As a man eateth so is he."

We may go a little further. There is another ancient proverb that says "As a man thinketh, so is he." I have made a new proverb out of these two. I have not made very many new things, but you know in logic two things equal to the same thing are equal to each other. "As a man ~~thinketh~~ ^{eateth}, so is he." "As a man thinketh, so is he." "As a man eateth, so he thinketh." There is no getting away from that. Now it is the purpose of this institution to hold up in the world a standard of purity all through, purity for the physical man, purity for the mental man and purity for the moral man. Man is a triune being, mental, physical and moral, and these three elements of man are so related one to the other that he cannot have perfection of one without perfection of the other. There is no getting away from that either. And we find the proof of ~~the~~ this fact in ~~the~~ this proverb, in the wonderful redeeming power there is in a pure, chaste, simple dietary. I presume I have had an opportunity to probe as deeply as anybody living into the habits of human depravity. I do not like to use that word because it does not always seem so much depravity as it seems to be misfortune. In so many cases it seems to be the natural result of the things that have repeatedly produced consequences, and sometimes the poor unfortunate victim is not so much to be blamed as the ~~a~~ circumstances and the conditions under which he has lived. How many ignorant mothers are unwittingly training their boys and girls up to lives of immorality without being aware of it at the very dinner table, feeding the boys with

things that arouse them and stimulate them: elements that nothing on earth but the grace of God can control and putting upon him a burden that he is unable to carry ^{when} ~~with~~ his animal nature has developed and his judgment and his inhibitory power have not yet become developed, putting him under conditions the most damning.

Now we have to carry about with us all the while a terrible burden of heredity, predisposition that comes from the cumulative effect of heredity working upon us. Now if we ~~add~~ add to that the exciting and stimulating elements, factors that come from an unnatural life, impurity is only a natural result, the inevitable result. These factors operating, these powerful influences operating upon the race have produced in the human race an abnormal condition. Man is, of all creatures that live, with very few exceptions, the most abnormal, ~~and~~ the most monstrously abnormal in his appetites, in his animal appetites and tendencies. It is most amazing, when you come to study comparative anatomy, to see how the human animal, the human being, surpasses all other creatures in abnormality, in the exaggerated character of his animal appetites. Now this is not a natural state of things at all. It is an excrescence that has been fostered and developed, an abnormality that has been grafted upon the race by ^{unnatural} ~~unnecessary~~ conditions of life.

The question is how to get away from it. The only way in the world I can see is to come back to nature, to return to simplicity, the natural, pure and sweet simplicity of life in which God placed man when he put him in the Garden of Eden, just as far, as we can, just as far as modern conditions will permit us, and, for myself, I am thoroughly satisfied the purity movement will never advance beyond the picking off of leaves until it begins to ~~make~~ dig away at the roots, and the fundamental great tap root of all is nutrition. Now I am not speaking of flesh eating only. I am referring particularly to one element, the high protein. And what does high protein do. I want to tell

you a word about that so that you will understand it. There are three elements of foods, fats, starch and protein; fats, carbohydrates and protein. Fats and carbohydrates are the ^{coal} ~~cola~~. They correspond with what we put into the locomotive to keep up steam, the coal and the wood, and the protein corresponds to ~~fix~~ bits of brass, iron, nuts, bolts and other metal things that the locomotive gets at the repair shop. The ^{coal} ~~cola~~ it takes in at every station as it goes along, ~~xy~~ but the metal it gets only at the repair shop where it stops once in every two or three hundred miles to have the metal put in. There is the metal to repair the locomotive, and there is the coal to burn in the locomotive. Now we have absolutely the same thing in the body. The fats, starches, sugars and these things are for fuel for the body to burn, to keep us ~~xxx~~ warm and to furnish energy to our bodies. The protein is the metal, brass, copper, iron and things, and the other elements necessary to repair the tissues. Now the amount required for ~~xxx~~ repair of the locomotive is very small. It is just as small for the body in proportion. It is astonishing what a little of this material is needed for the actual repair of the body, because the body is a locomotive and is kept intact to a wonderful degree. The amount is very small. Formerly it was supposed to be very large. Formerly it was supposed that protein was the thing necessary to supply muscular energy, but experiments have been made and repeated again and again until now it is known to every scientific physician who is up to date on this question that the protein is not an element that is required for work. It is not a thing that is required at all for muscular activity. It is only required for actual repair of the tissues, and that one can live for a long period, for days almost weeks without any protein at all has been demonstrated. Dr. Folin, of the Riverside Asylum, an expert physiological chemist,

~~xxxx~~ demonstrated that himself last year by experiments on himself. He lived two weeks, at work hard all the time, and never lost any strength or energy at all, without a bit of protein in his food. A few years ago a couple of men climbed the Matterhorn and spent a couple of days about it and ~~xxx~~ lived entirely on starch and sugar, did not take a particle of protein. The matter has been taken up again and again since that time. Experiments have been repeated on animals and men and now it is known that protein is fit for nothing at all in the body except to repair the machine, and that the amount required is very small. Now you see what the consequence of this is. Suppose you put into the locomotive firebox a lot of little bolts, pieces of iron and things of that sort, thrust them in there along with the coal. Soon the fire will be clogged. You would get a little heat from the roasting iron, a very minute quantity, but you would have a great deal of hindrance; the fire would be choked. That is exactly what happens to the body. But something else happens to the body too, because the surplus protein taken into the body that is not required for repairing the machine, this protein is converted into the most deadly kind of poisons. Poisons are formed in the tissues, uric acid and other poisons of that sort which benumb the brain, but still worse poisons are formed in the alimentary canal from the undigested, unassimilated, unused portions of food, and the same thing happens to it inside the body that happens to it outside the body. Place the beefsteak which you are about to eat in a warm place, as warm as the interior of the body, that is 100 degrees, and leave it there a couple of days and see what will happen to it. The same thing that happens to it outside the body will happen to it inside the body, exactly in the same way. The process has already begun. Every bit of beefsteak you have ever swallowed has fifteen or twenty to fifty

to seventy millions of bacteria, of putrefactive germs already setting up the process of decomposition. That portion that is digested and absorbed is utilized of course in some way and carried off. It does not decay inside. But that portion that is not digested and absorbed remains behind, one day, two days three days a week sometimes, or more, rotting, rotting, and the poisons are absorbed into the body, and these poisons are rotting inside the body.

I won't have time to dwell further upon that, but I want to say to you that we have proved it again and again, and I would like to tell you the details and the facts, but it is so plain to us that it is like the handwriting upon the wall. We cannot dodge it. We can look right at it and see it in our day to be an absolute fact; that the withholding of this high protein diet has the effect to wonderfully modify this abnormal condition that has been grafted upon the race by wrong habits of life, wrong conditions of life, so to return to the natural dietary which God gave to Adam in the first place, an account of which you will find in the 29th verse of the first chapter of Genesis--~~ix~~ when God made ^{Adam} ~~an~~ he told him what to eat, and when we get back to the original bill of fare we find that what was good for Adam in the Garden of Eden is just as good for Adam here. Just exactly as good now as it was then. The food has not changed materially. The food has not changed, and Adam has not changed materially. He is still the same Adam; he is not so good as he once was. He needs a better diet, if anything, than he did originally, so it is important to give attention to that thing. Go back to the original, simple, Adamic bill of fare and it is amazing what a whole lot of troubles are wiped away.

An old doctor said years ago when he heard of a certain refractory

boy whose father had been whipping him and it didn't do a bit of good. He said to the father, "My friend, cow's milk is a great deal better for your boy than cow's hide," so he tried cow's milk in the place of cow's hide. He fed the boy upon a diet of bread and milk and his troubles wonderfully disappeared. I am not going to say more upon this subject just now, but only just to call your attention to the work of Gautier and Prof. Fisher of Yale, and Prof. Chittenden of Yale, who have recently brought out much, whose names are sufficient authority anywhere in the civilized world for the accuracy of their statement, and see what they say about the effects of simple, non-flesh dietaries upon character, upon temperance, upon endurance and upon efficiency, and you will see there is abundant reason to say that the cleanliness of mind, the inhibitory power of the brain, the will and the ability to endure, to will, are marvelously increased by returning to natural conditions. Now it is not because of any special virtue in these simple, natural foods, but it is because they are natural, and when one wanders out of the natural road, gets out into the brambles and briars he gets wounded. The natural road is the right road. The road God made for man to walk in is the best road he can possibly find. He can never find a better road than that which God laid out for him at the very beginning. We have here in this institution not simply a place for sick people, but ~~an~~^{our} institution here is chiefly an educational school. We have a training school for nurses with from 150 to 200 in it. We have a medical school under control of the Sanitarium. The American Medical Missionary College receives its chief financial support from the Battle Creek Sanitarium and it is a school for missionaries, to send out medical missionaries into different parts of the world. It takes in only medical missionaries,

and these are educated largely at the expense of this institution, and go out all over the world. Young men and women of every denomination are received. This institution is a non-sectarian institution. It never was sectarian and it never will be. The public have been misinformed about that. It is under the control of a board, a private corporation of men who put their money into it for the purpose of doing the thing it is doing, making it a philanthropic institution. It has been affiliated with a religious body but this religious body has repudiated it simply because it would not submit to sectarian control. That is the one crime which this institution has committed, and I am glad to tell you we have found it better to stand alone with God than to submit to any Board or to receive any amount of backing that we could get from any body anywhere in the world. We have had no reason to regret our decision that we would not be forced into submission to sectarian control. The reason why is because this institution stands on the great foundations principles, and there is not a single sect that does stand entirely and alone exclusively on foundations principles only. Now this institution seeks to do its work on the great fundamentals of Christianity, and so it can affiliate with every Christian body in the world and with every body of men and women that are seeking to uplift humanity, and the institution holds out its hand to take hold with and work heartily with anybody that is engaged in Christian work, human betterment, philanthropic work on a Christian basis. I do not mean to intimate that I believe that diet will save the race from impurity. I don't believe any such thing, my friends. I know too well that is not true, but when we are asking God for help we must also do the best we can ourselves, and when we have done all we can then we may trust God to do the rest of the thing that we cannot do, but it is

preposterous for us to be asking God to deliver us from things, to deliver us from fire for example when we are feeding the flame, to ask God to put out the fire when we ourselves are feeding the flame. Now our institution, as I said, is a philanthropic institution. It is chiefly in its purpose an educational institution. We are seeking to hold up a simple, wholesome, pure life before the world and do what we can to rescue those who have fallen. We have here not only the wealthier classes but across the road in the building over there, the poor have the very same opportunities that the rich have in this building. In Chicago we have a dispensary connected with the American Medical Missionary College where from six to ten thousand people are treated annually. More people are treated in Chicago, in the very heart of the "jungle" as it has been called, where we have been carrying on our dispensary work for some 14 years, more people are treated there than are treated here in this place. We also have a rescue home in Chicago and we have another one here in the city. We have a maternity and also a rescue home. We have a "salvation farm" for men an hour's ride from Chicago where we take poor men to be helped up. We have a home for orphans and one for old people. In the orphan's home we have taken in some five thousand children in the last few years. We have sent out from our medical college 170 medical missionary physicians, and we have at the present time about half a hundred students in the College, and more are coming in. I am telling you this because I want you to know what our purpose is. We are doing but a small amount of what we want to do and hope to do by and by, but we have a great debt on hands and are trying to do a little while working off our debt. We have nobody to support us, but we are simply a charitable, philanthropic, institution. Our doors are always open to missionaries, and special consideration

is given to missionaries. We are just about starting a missionary home for foreign missionaries, so we are trying to do what we can.

I feel ashamed when I see how little I have done and how little we have done in the way of promoting the splendid work that you are doing. When I see the sacrifice that many of you are making when coming here I feel smitten that I have done so little, and I am sure we will all be encouraged by your coming here to do more, to do better work, to do harder work and do all we can to cooperate with you and with all who are trying to uphold the standard of purity in the world. It seems to me that one thing that must be done in the United States as an educational factor is to see that the existing laws are enforced. I believe that the most demoralizing thing there is in our communities is the fact that laws against impurity are not enforced. The fact that these laws are not enforced; that in every community brothers are tolerated and everybody knows where the brothel is and they go right by it and say, "here is a bad house there." It is a deplorable fact that the ministers of the Gospel will allow that thing to exist and do not cry out against it, and that ~~xxxxxxx~~ lawyers and doctors and decent people everywhere allow that thing to exist and do not cry out against it and say, "We will not tolerate this thing." It says to every young man, every young man whose intellect is not fully developed, "Well, now they say a great deal about this thing. They say it is awfully bad and I suppose it is too, but it cannot be so very bad for if it was they would not tolerate it." That is what young men have said to me. They say, "If this thing is so awfully bad, why is it allowed?" I said to ^{the} chief of police of this city last year, "Isn't there a law against the immoralities that are put in the papers all the time?" I ~~said~~ told him some circumstances of a young man who came here to be

reformed and had been ~~hundreds~~ led astray right here under our eyes by influences in the town. I want to see these things cleaned out so we will have a clean place, so that people who come here to be helped will find nothing leading them away, and I know that thing can be done, and I said to the Chief of Police, "Aren't there any laws against these things?" He said, "Oh, yes, certainly it is against the law." I said "Then why do you allow it to exist?" "Oh," he said, "It is a necessary evil." Now the officers of the law are talking that way. They say it is a necessary evil; that these people must be segregated; that they must be taken care of. The idea is absurd. I went to New York some fifteen years ago and I went to the Chief of Police and said, "I am making some inquiries and I want you to give me a good, trusty man. I want to take a walk down through the tenderloin to see what is going on there." So we took a walk down there, and he said, "Here is a whole lot of evil places, and you see they have got a very fine show. Do you want to go in?" "Oh no," I said, "I don't wish to go in: I simply want to go through here and I want a man to take me down through here." So he went on to tell me all about that business and tried to entice me into all sorts of places and told me of things that were going on there that were too horrible to be mentioned. When I got through I said to him, "Is there no law against this?" "Oh yes," he said. "Well, you are a police officer aren't you," I said. "Oh yes." "Well then why don't you stop it?" "Oh," he said, "we don't try to stop this thing. It has got to be. It is a necessary evil."

It is well enough known in our cities what is going on and it is known that it is against the law. Now I believe the thing that is needed more to help the purity movement at the present time than anything else I know of is a purity conscience league, a law and order league against impurity, and if we had such an organisation going I would like to help support it, if we could

find the right sort of men and send them out and see that existing laws are enforced. The result would be an educational campaign to support that movement. If these purity conventions and movements would educate the public with reference to the necessity for pure morals then we can have some kind of power somewhere that will ^{see} ~~say~~ that existing laws are enforced, and I ought to say, my friends, that I believe such a thing can be done. Suppose, for example, the laws against stealing were treated in just the same way as the laws against immorality. How long would property rights be respected at all? We have become so accustomed to the thing we do not really appreciate how the thing is ignored. If the people can only be informed about it they will want to have the law ~~enforced~~ enforced.

I was over in Paris just a short time ago and in different parts of Europe and I found these governments waking up. The French government has actually had plates prepared and stereoptican slides of them, ^{exhibitions} and ~~published~~ to show the horrors of immorality, the terrible consequences of it. They have people on exhibition who have lost their noses or their eyes or ears, horrible creatures, as the results of immorality, and they let the people see them, and they have their stereoptican exhibitions in which they show up the evils of the whole thing. It has gotten so far advanced that the government itself is afraid because they see the horrible, dreadful degeneracy that is sweeping in upon them. It is gaining ground, my friends, gaining ground. The tolerance of immorality is actually increasing, according to my observations. I judge by this town, and I have been other places, by other towns and by larger towns. It is necessary that the people who are opposed to these things should recognize the danger and arouse themselves and combine together to defeat this horrible evil. But I must not take more of your time.

We would like to have the pleasure of showing you the institution for a few minutes. We will go from here right straight through the dining room to

the kitchen and show you our kitchen, which is always on exhibition. I want to call your attention to the fact that you ~~do~~^{did} not get a whiff of the food when you came into the dining room, did you? The dining room is all ventilated by a great big ventilator, and in the kitchen there is a great big ventilator right over the stove that makes a draft upward, and as you go through you can notice what a strong draft there is through the kitchen and up through the roof of the kitchen. Then we will go into the surgical ward beyond that and then down and across to the laboratories. If you simply ~~do~~ follow your leaders you will all get a chance to have a look, and I hope, my friends, you will come and see us again sometime. You will always be welcome here, and be sure we are always ready to cooperate with you in every possible way.

VITAL RESISTANCE

Lecture at the Sanitarium Parlor, Battle Creek, Mich.,

November 14, 1907, at 8:00 P.M.

by J. H. Kellogg, M.D.

With remarks by Mr. F. J. Conrad.

Mr. Conrad, introduced by A. G. Read;

Mr. Conrad: The doctor does not stay long enough for me to say "Doctor and Ladies and Gentlemen," but I will say it just the same.

I had the very great pleasure to be elected to the Board of Congresses and conventions that was held at the World's Fair in St. Louis in 1904, and on going out there previous to the World's Fair I discovered to my astonishment that there was no congress that pertained to the most vital thing that we have to contend with in life--the food question. You are learning that here, I am quite sure, and probably recognize that it is a very vital question. I had been elected to the Commission on Congresses and Conventions and on all sorts and conceivable commissions, and I had also been elected to what was called the Pure Food Congress. It was a congress where scientists got together to see if we could enact laws by which we could make people put on the outside of packages and bottles containing the foods what they contained. Of course that meant nothing from my standpoint because a great many of the foods people eat are not worth eating, as you must know. I marvel that there was no congress ~~is~~ pertaining to the food question as I saw it; being a vegetarian of long standing, I realized something should be done. I had been at a congress in England and one in Europe and I had never known of one here, so I started out to have a congress at the World's Fair. I got one of the Societies of this country to take hold with me, and to my surprise I found myself elected chairman. Societies from other parts of the world

wrote in and said, "We will come if you will act as chairman," but it occurred to me that a congress of vegetarians without the Battle Creek Sanitarium would be like a play of Hamlet with Hamlet left out, for I know of no other institution in the world which does as much for the cause of vegetarianism as the Battle Creek Sanitarium. Some of the officials of the World's Fair said I was quite right and they yielded. They said, "We will even go further than that. We know how much you recommend the insitution and we will be only too glad to name a day "Battle Creek Sanitarium Day." I met a number of people, patients, guests, attendants and some physicians who had been at the Sanitarium, and so we had a Battle Creek Sanitarium Day at the World's Fair.

The congress itself was really quite a remarkable gathering. I was very much delighted and took a little pardonable pride because it turned out to be such a gigantic success. There were so many attractions there you know that I feared for the success of my enterprise and I feared that when my delegates came they would be so attracted by the bands of music and all the things of that type and the excitement that they would not come to our lectures and discussions. I feared that the thing would go as such congresses usually go, with only one or two delegates and very few people in attendance, so I felt rather shaky at what I might expect when our's came on. The Arts and Science Congress had just prepared the Sanitary Congress and I attended as a ~~delegate~~ delegate to that and I found there most eminent professors from Europe who had come to attend that congress, and they talked to little handfuls of people who came to listen to them, so I looked forward to the day of the Vegetarian Congress with almost horror, but to my delight I found people came and not only came but stayed, and on Battle Creek Sanitarium Day we found by figures kept by the Jefferson Guard stationed at the

door that 3,000 people came in through the door between ten o'clock in the morning and seven o'clock at night, and some of them actually stayed from ten o'clock until seven. We gave a little lunch and many of them stayed to the lunch and we had the most successful, and I am glad to say, the greatest congress held at the Fair. The term "University of Health" that I heard attributed to the Battle Creek Sanitarium, I am glad to say, was suggested by me, and it came about in this way. The young secretary of the committee that had charge of the congresses, Mr. Cockrell, the son of Senator Cockrell of Missouri, said, "What sort of a place must this be?" I said, "There are a lot of little schools of health. This is a big sanitarium. "Why," he said, "It is like a university." I said, "That is just exactly it." So the Battle Creek Sanitarium has come to be known as a university of health.

We had congresses from eleven countries outside of America, and from seventeen states in this country. Many of you are probably learning vegetarianism for the first time here, for there are not very many people who believe in the cause we love so well. Six delegates came from Manchester England, alone. Imagine their coming all the way over to attend this conference, but they came over to this country and brought their friends with them and we had some 20 people altogether from England, one from South Africa, two from Australia. One must have the cause of vegetarianism very dear at heart who will make the trip from Australia and come as far off as this country to pay their tribute and tell of anything of the cause of vegetarianism.

I fear to enter upon it because it is a subject which when I start upon I never know when it is time to stop, so I will confine myself more to generalities than to the vegetarian cause itself. Battle Creek Day was a remarkable day many ways because it brought the physicians from different sanitariums in the country to tell of the great work that had been done in their respective places. It brought many patients who had been here and known

the benefits , and when they heard of it they came and brought their friends and testified of what their experience had been. I wish you could have heard them testify for I cannot tell it now in as interesting a way as it was told then.

Then, too, there was brought out there the wonderful effect of diet. I don't know as many of you have begun to realize the effect of the food question upon the morals of the country. You would be surprised if you knew and went into it scientifically how much effect the food has upon the blood how much effect it has upon the morals , and some ~~starris skaxoxax~~ stories were told of rescue work by physicians, nurses and that part was even more interesting to me than simply the question of food so far as the physical health is concerned, because I think you must recognize that if you eat well and live properly your physical health must be better, but it is the moral and mental side that we know very little about, and they do appear to be foreign to each other but you know very often the unexpected happens and it did there. We had a delegate from Ireland, a man whom we didn't even know was a delegate. He came from a society there and someone was telling a story of vegetarianism but did not tell it quite right as he thought and he got up and said, "Let me tell you the facts," and so he gave us one of the most vivid and wonderful stories of what he had seen as the result of vegetarianism. I will illustrate by a little story. I have an Irish friend in New York who admires my opinion upon other subjects but does not care for my ideas upon diet and the food question, and looking at me one day and laughing in his broken Irish he said, "Sure, Mr. Conrad, you are all right when you talk about other things, but when you talk about me carrying the hod to the tenth floor on a little fruit and nuts I cannot do it." It didn't seem possible to him that a man could live on fruit and nuts and carry a hod to

the tenth floor. I said, "You are a very strong man, Mike." He says, "Sure I am, and my grandfather was the strongest man in Cork." I said, "Your grandfather was a vegetarian. He must have been for the poor Irishmen haven't money to buy meat. They live on potatoes, sour ~~xxxxxxx~~ milk, whole wheat bread and the few things they can get like that." He said, "You know I think your talk don't have any effect on me, but if I thought you were right I would eat that squirrel food of yours." I said, "You write over to some of your folks in Ireland and see if I am not right," and he said "Sure I will, and if you are wrong will you come back to the meat diet?" I knew what the result would be, and he got a letter from Ireland which told him what I said was quite true. I met him sometime afterwards in Union Square New York and he rushed up to me and said, "It is the most wonderful thing. You know I didn't understand it. I have been eating the stuff and I can carry my hod all right and the strangest thing about it is I have no backache when my day's work is done." There it is you see, when you get the right food and live properly you don't have to use half your energy to throw out the poisons that are in the food. He could not understand that of course. He found himself able to carry the hod all day long and to go back home at night without feeling fatigue, and you don't feel fatigue when you live properly because you don't ask your system to throw off unnecessary things that you put into the system by eating all the bad foods that we are in the habit of using. The result is that my friend Pat is eating a squirrel diet and his family are eating the same diet. His children love me because now they have figs and dates and oranges and nuts and things of that sort instead of ham and beefsteak and things of that sort. I use that as a sample illustration of the appearance of one who adopts the vegetarian diet.

We had among the delegates a number of men and women who have been for many years vegetarians. We had Mr. Broodbent of Manchester, England, who has been secretary of the vegetarian society. We had Dr. Clubb, of Philadelphia, a man 78 years of age and he has been a vegetarian for 57 years, and some reporters who were there anxious to find something to write about on the ridiculous, to make us appear as ridiculous as possible, took Dr. Clubb out and walked him about in the World's Fair grounds, found the hardest part of the Fair Grounds to walk in to give him a strenuous time to see if he could really stand up under it. The result was old Dr. Clubb came back feeling good but the young men were all tired out and they said, "We are convinced if this old man of 78 can walk about this way and feel all right and we are tired that it is one of the best object lessons we have seen. Dr. Clubb is a man I have never known to be ill or sick. He is a remarkable man physically and mentally and he has been for 57 years a vegetarian.

In New York I happen to have the honor of being the president of the ~~Sax~~ Society of Health Culture, and one time I had Dr. Riche, who is 99 years old, come to speak to us. Dr. Riche is a man who has been a vegetarian about 40 years. He is now 99 and the best way I could show you what a vegetarian should be would be to have him here. He is a man about 5 feet 10 inches and he looks not a bit over 65 or 70 at the very extreme. His hair is quite white and he has a good deal of it. He is not at all emaciated and I should think you would say he was a man somewhere around 65 or 70 at the most if you should see him. He is 99 now and expects to be 199 when he dies. He has lived the vegetarian diet for 40 years.

I looked around among the workmen at the World's Fair to see if I could find some good workman to show my audience what vegetarianism would do and

I found a carpenter who would carry his own lumber to the top of the buildings and do almost twice as much work as other men could do--a remarkable man physically, remarkable to look at, to contemplate as he worked, and he had been a vegetarian for about twenty years, and his diet had been almost wholly apples and nuts and the other workmen would tell him the apples and nuts were eaten there before them to impress them but they would tell him when ~~they~~ ^{he} went home they were quite ~~sure~~ ^{sure} he had something else. Of course I have had so much experience in this thing myself that I knew it was quite true but you could not convince them of it. If you have been in the habit of eating bad things for a long while you think of course that it is necessary to have them. There are many more instances that probably emphasize the good of a vegetarian life, but here you hear so much in the lectures that it is not necessary for me to talk much about it, but I like to second it. Here you naturally suppose people will adopt the vegetarian diet because it is one of the precepts of the institution, but when one from the outside comes in and endorses what is done here, I think it should have some effect; at least it should have more effect upon your minds, perhaps, than what you get right here. It always amuses me to see people who only eat the good elements of meat. They are careful to pick out the fine beef or the lamb or something like that that does not eat meat itself. They don't eat hawks and vultures and things of that kind, but I don't see why they don't. Once I knew of a Chinaman who had collected a basket full of roaches and he said, "Nicey roaches; meat." Before I would eat meat I would just as soon eat roaches or things of that kind. Some roaches I know live on a better diet than most chickens and hogs eat. If I knew of any way in which I could impress you and make you feel that the vegetarian life is the best one for the sake of your physical health I should ~~I should~~ certainly use it to ~~me~~

the best ~~advantage~~ of my ability, even though I disgusted you with the idea of eating flesh food. Strength is not gained by eating flesh food. You eat the beef because the ox is strong and you know the ox eats nothing but grass. The cow, the ox, gets its strength from pure food, from natural food. Man is a vegetarian animal. Nature provided beautiful food for him and he refuses to eat it and he turns around and eats of the food that was meant for animals, and he turns around and eats the animals themselves, and then he wonders that he is sick. I am surprised that he lives at all considering the terrible things he does to his stomach and the combinations he makes. In ordinary life man never asks any questions but eats anything and everything because it happens to please the taste. They never stop to think what the effect may be. They ask no questions.

In this country it is very hard to convince people and to break them of their habits because they have been ~~following~~ following those bad habits so long and it is so easy to follow them. In foreign countries it is very much easier to talk upon this question, and it is easier to impress people with the necessity of living as cheaply as they can live because they are forced to do it. Here you can get all you want, and it is hard to impress you with the necessity for reforming your habits. The foolish notion that meat means strength is hard to get away from, but natural food that is intended for man to eat is very much better for you in every way.. Here you learn that. That is why I said I suggested this as a University of Health. Nature will cure you if you will only give her a chance. I don't think any physician ever lived that ever cured anybody. The physician can only help to cure you, but if you listen to what the physician tells you and act upon it you will

be benefited, but I do not wish to dwell on that ~~maxax~~ now because you hear so much about it here.

What I wish to talk to you about is the wonderful time we had as far as the Congress was concerned, and to impress you with the fact that there are many vegetarians and if you become one you won't be alone and you will not be a crank, but if you are, be a good crank, one that turns something. In fact it takes a good crank to turn anything. If they do call you a crank you will know anyway that you have lots of company. A great many people are afraid of this thing for fear they will be exceptional or be out of the ordinary, will attract attention. Don't mind the attention you attract for it only does you good. Your example may help ~~somebody~~xxx somebody else to do right.

Perhaps you would like to know how I came to hear of this place? I found it by the merest accident. A woman in Europe said to me one time, "There is a place in Michigan, I think, that has 'Tom fool' notions." I had found a few places there in Europe where vegetarian ideas were taught and I said, "I regret very much that there is no such place in ~~that~~ America that I know of." She said, "There is one in Michigan where they do not eat any meat, but they do these things that you do." So I came here for two days and stayed three weeks, and afterwards I came and spent several months. The more I came and the more I knew of the ideas and the life and the work the more my admiration grew and always has, and always will. I have had the great pleasure of seeing many people go away from here benefited. It is the idea you get of right living that leaves an impression when you go away. You must know, and all intelligent people must know, that we believe these things will solve physical, mental and moral questions, nearly. That is a question that is

not understood. Its great value is not understood. People do not realize the wonderful amount it has to do with all our lives. We don't appreciate that. If I did nothing else, I wish I might impress upon you the fact that the blood you have ~~makes~~ makes you mentally, morally and physically what you are. You cannot get away from it when you understand fully what this question means. I know there are a great many people who have not gone in, like Dr. Kellogg, from a scientific standpoint. A physician who gives a great deal of medicine does not understand the science of life. He gives you a dose of one medicine then gives you a dose of another medicine. The man who can put a hot fomentation on your stomach to take your ~~stomach ache~~ stomach ache away is a much greater blessing than the man who puts a mustard plaster on and that takes the skin off the stomach so that you will have to come back the next day to get a dose of medicine put on. But the fomentation you can put on at home and the stomach ache is gone and there are no bad results. The other day a man was injured by an indian club in a New York Medical Club. I supervised the use of hot and cold water to get the circulation of the blood started again. My advice was followed and in half an hour the individual was all right, so you have to learn here how to take care of your selves. ~~in~~ The idea you get here at Battle Creek is the right one because it is one that helps nature to help you. That is the excuse I offer you for being so enthusiastic about this place, in which I have no interest except the love of the place which has my "Tom fool" notions. They are my notions, but whether they are "Tom fool" or not remains to be seen. The woman who told me this place had a lot of "Tom fool" notions weighed about 260 pounds. I would like to have had her come here and reduce about 40 or 50^{or} 60 pounds and then I think she would have thought it was a good place. She used to take away all the sweetness from the good things I loved. I told her she

could live very much better. "Oh, yes," she said, "I know there is a place up there that they do all those things." They asked her to leave in one place because she would persist in taking the treatment and then sneaking away to restaurants and eating all those horrible things that they serve at restaurants and then coming back and saying the treatment did not do her any good. She would insist on having the old food and then say the treatment did not do her any good. She often had headache after she had had three or four cups of chocolate, which she was very fond of and you could not make her believe that chocolate and sweets and things she ate had given her indigestion. I fooled her one day by taking her out to a picnic in the country where she had to eat good things and she had no headache that day. When she came home I said to her, "Where is your headache?" and she said, "Oh, isn't it funny, I didn't have any today." I said, "You didn't have any sugars, any sweets," and almost said, "any slops." "You haven't had any of those things today so you haven't had any headache." That is simply an illustration of people who want to help themselves. Here you are compelled to because your food is that kind. You are compelled to eat mostly the right things and you are almost compelled here by the work, the baths, the treatment, the food, to give you a chance to waken up and place you back to the place where nature meant you to be, which you have gotten away from, at least to give nature a chance to help you and nature always will help you if you help nature to help you.

I have been trying to talk to you tonight about the Vegetarian Congress and the Battle Creek Idea, and I long to get into the vegetarian part of it because I love it so, but I must not, because if I should I would get upon lines that would keep you here for hours. A great deal of good has been done and there are a great many sides to it, the cleanliness of mind and the benefit

to morals in every way is so marvelous I fear to begin to talk upon ~~it~~ it simply because I would want to talk hours before I could exhaust the subject, but I just want to tell you of the success of it, the phenomenal success, the wonderful success of our Vegetarian Congress. I had the pleasure and the honor at the same time of being a delegate to a conference in England a few months ago, and I hope this will impress the fact upon your minds that if you are vegetarians you need not feel ridicule or fear to be alone because there are many more like you. There are many more coming to be like you and many that would be like you if they only had the courage to follow out their own ideals, but are afraid of what their friends would think. I want you to go on and live it as you learn to do it here, both for your own benefit and for the example you will be for others, but I see Dr. Kellogg is here so I will not talk longer.

Dr. Kellogg: I am very glad, ladies and gentlemen, that ~~it~~ you have had an opportunity to hear from Mr. Conrad this evening. I was glad to find him in the room and I slipped in the rear and have been listening myself and have enjoyed his remarks very much. Mr. Conrad comes down upon us once inawhile like a shooting star. We don't know where he comes from or where he goes to but he drops in, gives us a little sunshine on the way and goes on again. The greatest surprise I think I ever had in my life was when Mr. Conrad came here three years ago last September and said he had arranged with the managers of the World's Fair to have a Battle Creek Sanitarium day, and all we had to do was simply to go in and to do it. Of course we could not refuse such an invitation as that and we were on hand. Mr. Conrad was in the chair and

we had a very pleasant time, as he has been telling you, and I really think it marked an area in the progress of ~~xxxxxxxxxxxxxxxx~~ food reform ideas in this country. There certainly has been very much greater progress since that time than before. We have had the packing house investigation since that time and ^{that} ~~we~~ may have helped to bring about the ~~xxxxxxxx~~ ^{agitation} that has been begun since that time. Certainly there has been a great increase in the trend of popular opinion in favor of these dietetic food reforms.

I was reading the other day a remark in Gautier--he is the greatest authority on dietetics in the world, that is of the chemistry of foods. He is perhaps the greatest chemist in the world. He is the great French doctor who has charge of the government investigations and researches in questions of diet, and chemistry. He is the chemist for the College of France.

Gautier, in his work on diet entitled, "Diet and Dietetics," makes this remark. He says, "This question of vegetarianism has received very little attention, but in the future is bound to receive an increasing amount of attention." The trend of public opinion is to be more and more in favor of the vegetarian idea, and why? why? simply because it is the fundamental thing. What we eat today is walking around and talking tomorrow, as I have very often remarked here, and we don't know any more forcible way to put it. What we eat today walks tomorrow and talks, and if it is not the right kind of eating today it won't be the right kind of walking or the right kind of thinking tomorrow. The old Germans said, "As a man eateth so is he." The old Saxons said, "Every man has seen himself on his own trencher." That is, he looks at his bread, and what he sees there is going to be himself. It is this wonderful transfiguration that we call digestion and assimilation, that miracle of miracles, that converts this common stuff we call food into living,

sentient, active human beings. Think of it! What a marvelous thing it is and how hard it must be to convert some of the gross things that are swallowed into really first class human beings. Now you could not expect to make a first class house out of poor rotten brick and rotten timber. You could not make a good house out of such material and how is it possible to build the house we live in out of gross food, cheap material. One is just as impossible as the other. If we are going to have first class bodies, clean blood, active cells, enduring tissues, we must ~~be~~ put into them the right sort of material. You cannot build a good ~~house~~ locomotive out of cheap material. You have got to put into it the best kind of ~~steel~~ steel, the very best sort of material--the best steel and copper, if it is to be a first class machine, and for a first class fire which would keep up high pressure steam you have got to have good fuel in it. Now the food we eat is made up of two things, repair food and power food. Our food consists entirely of those two elements, repair elements and fuel elements, fuel to burn and keep us warm and repairing material to build up our wasting tissues. Now we must have just the right proportion of each and have the best quality of each. When you eat an ox, as Mr. Conrad suggested, you are only eating the corn and grass upon which that ox fed second handed. I was walking along the streets of London one day and I saw a sign out "Second Hand Teeth." I had seen almost everything else at second hand but had never seen second hand teeth. I could hardly believe my eyes. I had seen second hand clothing and all that sort of thing but second hand teeth was going a step beyond ~~anything~~ anything I had ever seen before. I went back and read the sign over three times to be sure I was right about it. Pretty soon I passed another pawn shop and saw the same sign out. I found it there a good many times and I found an advertisement in a newspaper advertising for second hand teeth, and I discovered there was quite a traffic

in second hand teeth in London. That set me thinking. How would a man feel to be eating dinner with second hand teeth? About the first thing he would think about would be, "What were these teeth eating before I got them. I wonder if these teeth chewed tobacco or ~~had~~ ate anything of that sort. I wonder if these teeth ate limburger cheese. I wonder if they were taken proper care of and cleaned as they should have been." One would certainly have a great many unpleasant ~~thoughts~~ reminiscences or reflections at any rate in undertaking to eat a dinner with second hand teeth. Now I sat down at a hotel dinner not very long before that and I looked at the bill of fare and you know the first thing I saw on that bill of fare was brains, calves' brains, and I noticed the man next to me ordered some, and I took a look at him and I made up my mind that was just what he needed, second hand brains. How can one expect to get good brains and good service out of second hand material? If you are going to buy a coat you want a brand new coat; you don't care to have a second hand garment; and if you are going to have brains don't you want the first wear of those brains? Don't you want the very best material? When you eat calves' brains you are not getting the original material at all. You are not getting the first wear, the first elements in their pristine purity, but you are using wornout material. It is just like trying to make a locomotive out of the scrap heap, like building a locomotive out of a sewing machine, out of the iron scrap heap. You would not get the best material as you would if you had the original ore. People are getting hold of that idea. Animals were never made to be eaten anyway. I was reading a paper the other day written by an eminent Chicago physician. He is not a vegetarian at all and he was writing that paper on another question entirely. He was talking

about alcohol, showing that alcohol is not a food, and in the course of his arguments he says that all foods, with the exception of the flesh of animals, are made out of original material that was intended to be eaten. Food is made especially to be eaten, with the exception of the flesh of animals. Animals were not intended to be eaten at all. Animals are eaters, not eatables. Now for one animal to eat another is the very same thing as for a locomotive to be fed with small stoves and kerosine lamps. It is the very same kind of thing. An animal is a machine for using energy, not for producing energy. An animal is a consumer of energy. The vegetable stores energy. It takes the energy and stores it up in itself, then the animal draws upon this store of energy for force, for vigor and for life. An animal cannot store energy but the vegetable stores it up. The animal can only take the energy which is already stored up in the food and appropriate it, make use of it; so you see it is unphilosophical, going against nature, going absolutely against nature for one animal to eat another animal. I am thoroughly convinced that all animals were originally intended to subsist upon the products of the earth, and it is going against a natural law just as much as when we undertake to go against gravitation. When we try to go against gravitation we get into trouble. I saw a man in Chicago this morning that fell out of a fifth story window the other day right down upon the pavement. He struck upon his hand and one of the arm bones went right out through his shoulder and up above his head, but the man is coming out with two good legs and two good arms all straight. When I saw him he was smiling and looking happy. Such a thing seems impossible, as that he should fall from a fifth story window and live. Another man was not so fortunate. He fell out of the fourth story window and struck on the pavement and was crushed to a jelly. Almost every bone in his body was broken and he was killed. But how did this

man come to fall? because he neglected to obey the law of gravitation and keep terra firma under him. He got out into the air where there was nothing to support him, let go his hold and gravitation pulled him down. Gravitation is like sin; it is all the time pulling us down, and we have to avoid gravitation. We have to look out for it to see we keep ourselves in proper relation to the law of gravitation or it will smash us, ruin us one way or another. Now just the same sort of thing is true of every other law of nature, of every other principle, because if we get away from harmony with the universe which we are made to harmonize with we are sure to suffer just like a railroad train running against a big rock and going to smash. A man who tries to go against the laws of nature has got to fight the Almighty himself, because he made these laws, he established these principles. We cannot make the sun go the other way. We cannot make the earth revolve the other way. Things must go exactly as they are and we must conform to the order of nature. If we do not do it we must suffer the consequences. This is true with reference to diet, as Mr. Conrad has been telling you, and one of the characteristic features of this institution. The natural dietary is not a fad; it is not a religion, a superstition or a whim or a fancy, but it is a great principle of nature that eatables are to be eaten and eaters are to eat eatables and not to eat other eaters. There is no getting away from that.

I was talking sometime ago with a very scientific gentleman down in Mexico. I was riding with him from Colema down to the Pacific coast, through a very tropical country, and he was the only American there besides myself and my secretary and we were having a very delightful chat. This man had been 40 years in Mexico. He was a very cultivated gentleman and a graduate of the School of Technology in New York City, and a very prominent man in

that country, connected with the Mexican Central Railroad, and he took me up on this question of diet. I think he simply wanted to amuse himself and occupy the time so he made a vigorous attack upon me, upon this question of diet, and he compelled me to present to him every argument I ever knew of and the last argument I stated to him was this one I have just given to you, ~~ix~~ that it is contrary to nature, that vegetables store energy and animals use energy. Vegetables are not eaters. Animals are eaters. Vegetables are eatables and animals are to consume vegetables and that is the order of nature. He felt triumphant in every other argument that I offered, but when I came to that he succumbed. He said, "There is no getting away from that argument, but all animals eat meat when they get a chance." He said, "I had a horse once that I used to go out hunting with and when I killed a deer ~~ixxxx~~ and would boil some venison and that horse would smell the venison cooking, if he was ~~ixx~~ not a long way off he would ~~ixxxx~~ come and stand there close by the fire and sniff and snort and paw the ground and neigh for me to give him some of that meat, and he would not be satisfied until I gave him a nice piece of venison. That horse was just as fond of venison as I was, so you see animals that don't eat meat, if they were only introduced to it, if they only knew how and had the opportunity they would eat it." He was very well convinced that meat was one thing necessary for life, the one thing most important of all food, but when I pointed out to him the fact that the vegetable stores energy and the animal does not and cannot he had to admit it. He saw the point right away. He is thinking about it still and I think he is getting more and more persuaded. He finally admitted to me that he was acquainted with some people that lived up in the mountains in a certain

part of Mexico, and they are the most remarkable people of Mexico, a tribe of Indians who live entirely on pine nuts, bananas and tortillas, the very simplest kind of food, entirely free from flesh, never use flesh at all, and these men are famous runners. They live in a very mountainous country. There is no place level there except the river beds, and one of these runners would start off and go on a run carrying the message over the mountains where a horse could not possibly go, 500 miles in four days. No horse can keep up with one of these men. One of these Indians will out-travel a horse every time. A horse could keep up with him a little ways on level ground but he could not keep up with him for fifty or 100 miles, but these Indians keep that up continually for 100 to 125 miles a day. It seems almost incredible but these men have been brought up to it from their childhood. The same thing has been observed in India in the runners there. The Hindu runners will run ~~xx~~ night and day for several days very rapidly. In Mexico the running habit existed before it was discovered. As you know, the ~~king~~^{pr} the chieftain who ruled in Mexico City had relays of runners all the way down to the coast. He knew what was going on all the time. These men would start off and run as rapidly as they could run for half an hour, then another man would run half an hour at his top speed and so ~~ix~~ these very rapid runners would transmit a message with almost incredible velocity. Now I think at the present the question is entirely settled as to the ~~xxx~~ matter of endurance, that a natural diet gives the greatest endurance, and it is not simply because there is more nutrition in vegetable food than there is in the flesh diet, not because there is more food stuff in a pound of potatoes for instance than there is in a pound of beef. There is more food stuff in a pound of beef than there is in a pound of potatoes, just a little more. In a pound of beef

there is considerable more nutrition than there is in a pound of potato. But it is because the potato affords more natural nourishment than the meat does and more properly proportioned nourishment. In the potato the amount of repair food and fuel food is in exactly the right proportion. There is just enough of repair material and no excess, and just enough fuel material ~~xxxxxxx~~ so when a man eats a potato he gets just exactly what he needs. He only lacks one thing and that is fat. A little fat is necessary to oil the machinery of life and keep things going, but with a little fat the potato contains everything a man requires. If one eats only lean meat he has four times as much repair stuff as he needs. Here is an engine. We will suppose it requires 100 pounds of repairs, supplies for the engine, nuts and bolts and things to be put on to keep the engine intact, and ~~the~~ it requires ten tons of fuel. That is just about the right proportion perhaps for a locomotive and I think it is not very far out of the way for the body. The body requires about 10 per cent of repair food and 90 per cent of fuel food. The locomotive requires more fuel food than the body does. Suppose the locomotive requires 100 pounds of metal and ten tons of coal to keep it going over a certain distance. Suppose ~~xxxxxxx~~ instead of giving it the ten tons of coal you keep it going over a certain distance--suppose ^{instead} of giving it ten tons of coal and the 100 pounds of metal we give it 1 ton of metal and 9 tons of coal. It will not have fuel enough to keep up steam and it will be overloaded with this extra 1900 pounds, but it wouldn't heat it if it was thrown into the locomotive firebox. It would choke the fire and hinder the progress of the locomotive. The same thing is true of the body. When one takes an excess of protein this excess of protein is a hindrance and a clog and a burden, and worse than that it becomes poison for the only

way in the world the body can get rid of this extra amount of protein food that is taken in is to burn it, and when it is burned it makes poisonous substances. Now you know the difference when you burn a bit of paper or a bit of leather. If you burn paper that makes a little smoke and that is the end of it, but if you burn a piece of leather it fills the whole house with a stench and ~~the~~ it takes sometime to get rid of it. Why is it? It is because the leather has nitrogen, phosphorus and sulphur in it. These are three substances which, when burned, make deadly poisons. Nitrogen when burned makes nitric acid and nitrous acid. Sulphur when burned makes sulphuric acid, which is deadly poison, and ~~R~~ phosphorus makes phosphoric acid, which is also poison. Phosphoretted hydrogen is a very deadly poison. There are three substances, which, when burned, make poisons. Carbon, when burned, makes substances which when they permeate the air make no odor and produce no injurious effects. Paper, when burned, makes a harmless gas, but when you burn leather it makes simple gas and also a lot of poisonous gases along with it. That is exactly the ~~conditio~~ difference between the repair food and the fuel food. Carbohydrates when burned produce the very same thing paper produces--carbonic acid gas, whereas when meat is burned we have the very same thing produced as when leather is burned. Leather is an animal substance and meat is an animal substance. Protein, especially fresh protein, contains phosphorus and sulphur and nitrogen, and when burned they produce these poisonous gases and horrible odors, produce a veritable stench. Now the very same thing happens in the body that happens outside the body. The fat and carbohydrates when burned in the body make carbonic acid, which passes off through the lungs very readily and without any harmful effects, but the protein taken into the body when burned in the body produces poisonous matters. I met a very cultivated lady sometime ago, a patient, and as I approached her

to take her hand to feel her pulse I was fairly nauseated by the odor I encountered. I looked at her tongue. It was not so very bad but ~~xxxxxx~~ there was an odor I got from her body that was simply fetid. It was horribly fetid and it was exactly the same thing one encounters when brought in contact with excreta, putrid excreta, just exactly the same odor. I knew without any further ~~inquiry~~ inquiry that that woman was suffering from auto-intoxication; that she was taking an excess of protein; that she had been eating flesh in larger quantities than she was able to digest, and this flesh was simply rotting in her body and the ~~found~~ foul odors, the horrible stench, putrefactive compounds that are produced in putrefaction were absorbed into her blood, being poured into her lungs ~~and~~ ~~xxxxxx~~ skin and the whole body was saturated with these poisons. That is the way the body is contaminated when we eat an excess of these repair materials, so you see how important it is for us to ~~study~~ study nutrition. These poisons taken into the body in this way not only have a bad odor but they produce impressions upon the body and they produce impressions upon the nervous system. These poisonous substances are capable of producing nausea. They are capable of producing vertigo, confusion of the brain and depression of spirits, so they must have a tremendous effect upon the person. A man whose brain is saturated with these putrefactive poisons, products of putrefaction, protein substances, a man whose body is saturated with them cannot help ~~be~~ it if he has the blues.

THE COLD AIR CURE

A Lecture at the Sanitarium Parlor, Battle Creek, Mich., Thursday, December 19, 1907

At 8:00 P. M.,

by

J. H. Kellogg, M. D.

There is a strange impression abroad, among sick people particularly, that cold air is very dangerous. Most assemblies where a large number of people are together, as at church, or a concert somewhere, if some one goes to open a window, you see a whole lot of people begin to get scared. When cold weather approaches, multitudes of people flee away from the cold climate to a warmer climate. At the present time, the hotels at Tampa, St. Augustine, Jacksonville, and places along Indian River,-- in fact, all along the southern part of the United States, and over on the Pacific Coast, in Cuba, and the Bahamas, and Porto Rico, and all that region of the world, the hotels are all getting ready for a lively business. This season of the year they expect to be filled, and they are patronized mostly by people who are running away from cold air, who are afraid of Jack Frost, who imagine that a breath of cold air is as dangerous, almost, as a ball from a rifle.

Now it is true that cold air is dangerous. Cold air is more dangerous than bad air, and when a lot of people are sitting in a room and are warm and perspiring, perhaps, and their bodies reduced to an enfeebled state by means of bad air, to open a window and let a gust of cold air right in upon such people is likely to produce congestion and sudden stoppage of the circulation of the surface, and congestion of the internal parts, and that is really more dangerous than the impure air itself. It

is not a wise thing to do--to open the window and let the cold air flow in upon a lot of people under those circumstances. Many people, and a good many of you, under such circumstances, take cold and are sadly damaged. You better breathe bad air than to allow cold air to be used in that way. But cold air is a friend if you use it right. It is quite powerful, and has great advantages, like cold water. Cold water is a dangerous thing and will kill a man who has got heart disease, or a man who has got Bright's disease, or some other serious organic trouble--high blood-pressure, rotten arteries, have a stroke of apoplexy, perhaps, and on the verge of another one; you can kill such a man with cold water very easily. It is a very easy thing to do a great deal of harm with cold water. It is a powerful remedy. It would not be worth anything as a remedy if it did not have power in it to kill somebody. One doctor said years ago that the best medicinal remedies are the most powerful poisons. The most powerful poisons are the best medicines. Now, I don't say that, because I don't believe it; but nevertheless it is believed by a great many; and certain it is that the most powerful remedies are remedies which taken in doses a little larger would prove to be also powerful poisons--strychnia, for instance. Strychnia is the most wonderful of all tonics, and the most powerful of all tonics. It is not a good medicine; it is a bad medicine, because the beneficial effects, whatever they are, are only transient, and it is not nearly so useful as it was formerly supposed to be; also opium. It may be a useful drug sometimes as a means of relieving pain, yet it is a powerful poison. A dose a few times larger, six or eight or ten times larger than the ordinary dose, may be a deadly dose.

I remember a man who came here some little time ago who was suffering with spasms. A very little thing would produce a spasm. Taking off his clothes would throw his muscles into contractions. He was in a very spasmodic state. I found he was simply taking strychnia. The doctor had given him strychnia as a tonic, and he thought it was good to take about twice as much as the doctor ordered him to; and he

showed these poisonous effects at once. It is a cumulative drug. So there is some truth in the statement that a powerful remedy, a powerful medicine is also a powerful poison. It is equally true of water, that if water is effective as a remedy, it is equally effective as a means of damage, as a means of injury. It is a two-edged sword.

Now, how to use cold air in such a way as to get good effects from it and to get no bad effects, is the thing I want to talk to you about now. Really it is a powerful remedy. We are always glad to see the cold weather come. I always feel gratified myself when we see the cold weather come. When we see the fire beginning to look brighter, to burn brighter on the hearth, we say winter is coming; we see the heightened color of the fire; it is brighter; there is a better draft in the chimney, and the fire seems to burn the wood more readily; seems to have a better appetite for the wood. The stove as well as the stomach seems to have a better appetite. It takes more fuel to keep up the fire, to keep the house warm.

Now, the body is in the same situation as the stove, just exactly the same situation as the furnace. The combustive process takes place more rapidly in the body as well as in the furnace. When cold weather comes on, the house demands more heat to keep it warm; and the house we live in, the body, demands more heat just as the building does. And there is better fuel to consume. The stove can burn wood faster in winter time than in summer time. In summer time you could not possibly consume so much wood as you can in winter time. You would have to have a bellows or something to increase the draft, to make the fuel burn in the stove in the same time as it does in winter time, because in winter time there is a strong draft; the air goes through faster, the stove is fed with air, with oxygen more rapidly, so there is more consumption of fuel and more heat.

The same thing exactly is true of the body. It takes more to keep up steam in winter time than in summer. I have sometimes heard our engineer say in the summer time, "We can't get up steam today; we can not get up ~~sax~~ enough power out of this

engine, because somehow the boilers won't make steam today. What is the trouble with that boiler that it won't make steam? The clouds are hovering around the earth; the atmosphere is light; there isn't as much oxygen in the air as at other times, so the fire does not burn as readily, and you can not get up as much heat underneath the boiler, so there is not so much steam.

Now, the very same thing is true of the human body. The body manifests less energy and vigor in the summer time than in winter time, for the reason that there is less fuel consumed, and all the energy of our bodies comes from our food; and with less food burned in the body, there will be less energy manifested by the body. The body "is a form through which a stream of matter flows." The food we take in enters into our body and passes out; enters in and flows out, performing the dance of life, as somebody calls it. The bread, the apples and the potatoes and things that enter into our bodies dance their little waltz or polka, as you might call it; then out they go; they come in and perform their little dance by the heart, brain, muscles and nerves, and off they go; and some others come in to take their places. So the food we take is the means by which the new dancers are brought in in this dance of life, so that the dance is kept up. You know, in a ball room, the dancers get tired sometimes, after a little while, and sit down, and others take their places. The dance goes on more merrily; the dancers dance at a more vigorous pace, and the step is more active, and the music plays a great deal more rapidly and actively,--a more lively tune, if you please, in cold weather than in summer time, because in summer-time the heat is depressing; all the vital powers of the body are at a low ebb; but in winter the cold comes, it rouses the resistance of the body, gets up the fighting spunk of the body, if you please, gets up the grit and the vitality and the life of the nerve-centers, stimulates them to the highest point of activity, and the body demands a larger amount of food. The larger amount of food we eat in winter time is

for the purpose of keeping up the higher pressure of steam, keeping up the greater rate of activity that is necessary during the cold months, and is a result of the stimulus of the cold.

Now, then, is all this a bad thing for us to experience, or is it a good thing? It is manifestly a good thing, because our enjoyment of life and our efficiency in life depends upon the vigor and the energy and the activity of our vital machine, the body machine. This machine goes at a slow pace if the energy manifested, if the output of energy is small; so of course, the work done is small. So, if the rate is higher, the steam pressure is higher, the output of energy is greater, the work is greater, the enjoyment of life and the results of life are certainly greater. We see, then, this close relation between food and energy; and there is a close relation between the consumption of that food and the output of energy. There must be. You might take in such an large an amount of food as to smother the fire, so that the excess of food won't burn, won't be consumed; and the amount consumed depends upon the amount of oxygen we take in. In winter-time, the air is denser than in summer-time. For instance, here is air at 100°, and here is some more air at zero. Air diminishes one 490th, or practically 1/500th part of its volume with each degree of temperature lowering. The air expands 1/500th of its volume for each degree of temperature that it rises. Now, suppose here is air at zero. In this zero air there is a certain amount of oxygen, about an ounce and a quarter of air in a cubic foot,--and one fifth of that is oxygen; so there is just about a quarter of an ounce of oxygen in a cubic foot of air at zero. Now if this air is diluted by the rise in temperature,--the temperature rises to 100°, that is 100 500ths of its volume, or one fifth of its volume it is increased. And the consequence is it is diluted so much. It is just the same as though you had some lemonade and you put some water into the lemonade, and you dilute it so that each morsel, each spoonful, each glassful of that lemonade has less lemon juice in it, has less flavor in it,

has less taste in it, has less efficiency in it; and to the extent of one fifth. So, raising the temperature of the air from zero to 100° dilutes the oxygen one fifth, so that when we breathe, we take in at each breath one fifth less oxygen than before. That is the reason why the fire burns brighter in winter time than it does in summer, because the air is denser. And if we would condense this oxygen more and more and more, by cold and by pressure, we can by and by get it down to the liquid state, and if we get the oxygen down to a liquid state, if we simply touch a little of that oxygen to a hot coil, it will explode; it will burst into flame instantly, it would be consumed so quickly. The same is true of the body. The denser we make the air, the more rapid will be the output of energy, the more rapid the consumption, the more rapid the burning. That is why we get so much benefit from cold air; that is one reason, because the air is denser. Another reason is that the cold itself is stimulating. Suppose a person here is half asleep, sitting here half asleep, and some one comes along and turns a tablespoonful of ice water down the back of his neck. You can imagine there will be some lively movements directly right away, very likely, in the direction of the person that had the ice water; there would be some vigorous activity. A tremendous reflex stimulus is set up by the application of the cold to the surface. Here is a man who has fainted away, in a dead faint, absolutely unconscious, lying on the floor looking like a dead person. Now, what is the remedy everybody will recommend? Everybody suggests right off, cold water, cold water. Now just a few drops of cold water sprinkled on the face of that person apparently dead,-- would be dead in a few minutes if something were not done--just a few drops of cold water sprinkled upon the face arouses that person; the blood comes back to the cheeks, the expression comes back to the eyes, and pretty soon the person will be sitting up looking around, and wondering what has happened. Now, what has worked this wonderful miracle, this transformation ~~xxxx~~ ~~xxxx~~ from death to life in such a miraculous way? A few drops of cold water. But what has the cold water done? It is not inside;

it is only on the outside. Simply the contact of that cold water with the face has sent in impulses to the nerve-centers which have been sent up to the brain, and from the brain to the heart so the heart has been stimulated with activity; the blood is circulated again, and the whole vital machinery is set into running order, renewed operation.

Now, what is true of the fainting person is equally true of the tired person. Here is a man that is tired, a person that is sleep, who feels dull. Go to church on a hot summer day, and just see the fans going. What are all those fans moving for? For the purpose of cooling the face. What is the good of cooling the face? When the face is cool, that cool impression upon the face strikes in; the brain is stimulated; the heart is stimulated. When a person faints away, you fan the face quickly. The fanning of the face cools the face and stimulates the heart. So we see that cold air, and cold water, has in it something which is wonderfully stimulating. Cold is the most powerful of all known stimulants. Cold is the most powerful, the most useful, the most important of all natural stimulants, of all stimulants, because it is so universally applicable. Cold water and cold air,--those are the two things that are of more use as tonics, stimulants than anything else I know of.

an anesthetic.

Now we used to be very much afraid to give ~~a cold bath~~ an anesthetic. I remember when I was scared to death, almost, at the idea of giving ~~a cold bath~~, especially to a feeble person, a patient that had a feeble heart. Why, it seemed almost like putting a knife to that man's throat to give him ~~a cold bath~~ an anesthetic. An anesthetic is a very serious thing. When a person takes an anesthetic and becomes unconscious, he is brought right down close to the very door of death, and the purpose of giving an anesthetic is to let the person come down just far enough below the level of consciousness, but not far enough to get down into the grass of Old Father Time with his sickle, keep far enough away from him to keep safe. Now, there is the art of giving an anes-

thetic--not to get too far down , not to get the patient so far down you can not get him back again. Now, we used to be very much afraid in giving anesthetic, especially to people with feeble hearts; and of course it is always necessary to have great respect for that anesthetic, and to do the thing carefully, but with this idea I am telling you about, the powerful tonic effects of cold,--it occurred to me I could utilize that in the giving of anesthetics. So for several years now, in our operating room, when we begin to give an anesthetic, we always put cold over the chest. We bring a compress out of cold water, ~~put~~ water at about 60°, put it over the chest, and that keeps the heart going; and we are not scared by the anesthetic any more. We do for that person who has fainted away, just what we do for the man who has fainted away. When we begin to give an anesthetic, we begin to treat that man as though he had fainted away, and to treat him as though we had found him unconscious somewhere; we begin to treat him that way, and we are treating him all the time while he is under the anesthetic. The moment a person begins to take an anesthetic, the nurse stands right there, goes to work over that patient and is kept right at it all the time until the patient is out again from under its influence. She keeps right at it down in the patient's room, keeps changing it every four or five minutes, rubbing the chest with cold water, so keeps right at it; and we never have the slightest apprehension any more; and we never have any more the bad symptoms we used to have of patients getting black in the face when we got scared and thought certainly they were going to die. We don't have those symptoms any more, because we are able to keep the heart going in such good shape by the application of the remedy right along that while the anesthetic makes the patient unconscious, the cold application keeps the heart going so we don't have any trouble. Now, I only mention this, not to advertise our method of giving anesthetics, for that has been published long ago, but for the purpose of showing you what power there is in cold water to stimulate the internal processes of the body so that we can rely upon it in a practical way to antagonize such a powerful poison

as an anesthetic a little overdose of which will kill a person. With this cold water working right along with the anesthetic, the anesthetic puts the brain to sleep and the cold water keeps the heart awake, or keeps the heart going. If the anesthetic did not affect the heart, we would not have any difficulty; if we could find a medicine that would put the brain to sleep and would not affect the heart, it would be an ideal anesthetic; but unfortunately the anesthetic that puts the brain to sleep puts the heart to sleep also, and the liver and the kidneys--we want to keep those organs going; but by putting cold water over the chest at the same time that we apply the anesthetic to the nose and mouth and the brain, we are able to keep the heart going all right and make the brain unconscious at the same time.

Now, here is a person that is feeling depressed. For instance, a man spoke to me just a few moments ago; he said, "I feel, Doctor, very much depressed; I have been down several months, and I am very much discouraged"; and I looked into his face, saw he had a tawny skin, great brown circles around his eyes; I looked at his tongue, looked at the report of his examination made at the laboratory, and I saw right away what is the matter with that man. He was anesthetized, in a state of poisoning from poisons generated in his intestine, which had been absorbed and had narcotized his brain. He was in the state of a man who has been taking an anesthetic and it had not put him altogether to sleep, but only partly to sleep, paralyzes his Christian hope, if you please, and puts him in a state of depression. Many poisons have that effect. Some poisons exhilarate, some depress; but these poisons, these colon poisons are very, very depressing agents. Now, I didn't have any hesitancy in saying to that man, "You are just as sure to get well as the sun shines, ~~if you just~~ unless some accident happens to you; you are just going to get well as surely as the sun shines if you just do the right thing, because you are not broken down; you have not gone to smash; your heart is all right; your lungs are all right; your liver is

all right and your kidneys are all right; you are simply like a horse that has got a heavy load on its back; that is all,--like a horse with a whole lot of sand bags on its back; and all we have to do is to take off some of the bags and you will be hopping around here in a very frisky sort of way, when one does this.

I met a lady six or eight weeks ago just in the same condition--tawny, sallow skin, and yellow, awfully nervous, hysterical, in a most distressing condition, and her doctor had sent her here for treatment. I met her this evening a few moments ago; I saw her skin--clear and white, and pink roses on her cheeks, and she said, "My table maids are saying, 'What are you here for?'" The people she meets are wondering what she is staying around here for, she looks so well. Now, what has happened to that woman? Simply, these poisons have been burned up--these insidious poisons, these damaging, depressing, destructive, deteriorating poisons with which her whole body was filled have been oxidized, burned up, and her blood has been purified, and her vital processes are getting under way. The load is being taken off the donkey, if you please, so he can travel. Now, the poor liver, if you please, that is overloaded, enormously overloaded and overworked--if we just get this load off this liver, it can do its work; then these other excretory organs can all do their work, and the poisons are cleared out, and pretty soon the bloom of health comes back. I know what is going to happen to that gentleman. He has been here only two weeks, but in six weeks he will be another man, if he only follows along on this Sanitarium diet, the low protein diet,--because these poisons are made out of proteins, can not be made out of starch and fats except to a small extent--to a small extent out of fats but not out of starch; but the proteins are the real source of these damaging poisons.

Cold air enables us to burn up these poisons faster, just as we can burn up the coal and wood in the stove more rapidly in cold weather. The same thing happens in the body. One fifth more oxygen, means a much more rapid rate of consumption in the body as well as outside of the body. So we are glad to have cold air and cold weather come. I always feel 100° better in cold weather. I am always glad when

hot weather is gone. I am glad our patients have an opportunity to get out into the outdoor gymnasium and enjoy that, but after all, the cold weather is the time when we see people getting well on double quick. There is never a time of year when we see people getting well so fast as in dead of winter when this cold air is so accessible. In summer time we can not use the cold air method to any great extent. I have been planning for some time to put in a refrigerating apparatus where we can put people in and freeze them up in the summer time. I expect to have it going one of these days, where we can get the temperature down to ten or perhaps forty degrees below zero. But that is a very small thing compared with what we can get in winter; and if we keep cool in summer, we have got to burn coal to keep cool, and it takes a great deal more coal to cool off the air with which people come in contact in summer-time than it does to heat up the cold air in winter-time to a comfortable degree. But we don't need to warm up the air so much. All we need to do is to wear clothes. The majority of people subject themselves to too warm an atmosphere altogether, too high a temperature in their homes. People who have been accustomed to living in England or on the continent generally recognize it as soon as they come here to America. They say, "Your houses are so warm; why do you keep your houses so warm?" The custom in England in the winter-time is to keep the temperature about 60°, but here it is more common to find the temperature 72°, 75° or 80°; there are some people who keep getting their houses hotter and hotter and hotter all winter long. I know some people who are actually so afraid of cold air that ~~they~~ when they see cold weather coming and the frost upon the fence tops, begin to shut up their houses, put lathing around the doors and windows, shut up most of the doors. I have actually known people to go so far as to plug up the keyhole with cotton or something to keep the fresh air out, and everywhere there is this splendid fresh air outdoors that is just moaning, and sighing and groaning outside, trying to get in, and the people barricading against it. If we had to pay so much a cubic foot for that air, we could not get enough of it. An

old sea captain told me once they got short of water on ship board and he limited every man to two quarts of water a day; and every person on board was limited to two quarts, and they began to smile at one another and say, "We can never use so much water as that", but he said the man that made the most sport of having such a tremendous allowance of water, enough to drown them, he said, that man came around in the afternoon about three o'clock and said to the Captain, "Captain, would you mind giving me a drink out of your canteen." He had swallowed the whole two quarts and was calling for more, was dreadfully thirsty because he was limited. If he had not been limited at all, he probably would not have taken half as much. If somebody could make a corner on cold air somewhere, there would be the greatest demand for it, but as it is we have this abundance of cold air, we can get it for nothing, and we just actually run away from it, go off to Florida, California, Cuba or some other place to get away from it, and barricade our houses to keep it out,--the best friend we have in the world; and the winter time is a choice time for us, a special opportunity to get the benefit of this wonderful tonic that accomplishes so much in the way of burning up poisons and painting the roses on the cheeks, bringing back the color, the freshness to the skin; it accomplishes what nothing else can do.

Now the medical profession are just beginning to find this out. It is not any peculiar doctrine I am preaching here tonight; the whole medical profession everywhere are beginning to find it out. I remember when I began practicing medicine thirty- or thirty-five years ago, the doctors always used to recommend their patients who had lung troubles to go to some warm climate, to go to southern Colorado, to California, or to go south to Florida. Florida was the great place in those days. But we found out after while that people who went nearly all stayed there, rarely ever came back. They finished up their careers pretty soon after getting to the warm climate. The warm climate is a good place to die comfortably in. Some European doctors began to make experiments with this cold air method. A doctor went up into

the Alps and made some experiments up there, and he found that people got well faster in the winter time than in the summer time; that when the snow was three or four or six feet deep, the patients began to thrive; so he published these results to the world. That was about forty years ago. The world began to take notice after while, the medical profession began to take note of it, to look into the business; and it was found the claims were true; so the number of people increased there.

This is the holy grove of Belgrade. You see sick people lying outdoors. They are brought in on litters in great numbers; hundreds of people are brought in to this holy grove. People are making pilgrimages there all the time; and they get well in this ~~very~~ old, holy grove. They have the idea that certain good genii live here in this place that are healing people, and it is perfectly true. There is a healing power there in the wood, and the people who come there and lie there day after day in the grove, - you see they are uttering their prayers, beseeching the good spirits to heal the sick ones, and they are healed. They are not healed because they pray; they are not healed because they brought gifts, or anything of that sort, but they are healed because ~~they are sitting in~~ there is healing power there, and they are outdoors where the healing power is; and they are putting themselves in an attitude of faith, and hope and confidence, which is a favorable state of mind for the promotion of healing; but the same things that happen in that grove will happen in every other grove. Every grove in the world is a holy grove, if you please; the healing power is everywhere, in every grove; but it is outdoors a great deal more than it is indoors; there is no question about that.

I want to show you the reason why we get so much benefit from this fresh air. You see this represents the lungs, and here are the main tubes, the breathing tubes, and they divide, you see the many branching tubes, little tubes; and at the end of each tube is a little cell like that, and this cell is divided into minute depressions here, and inside these are cells. There are many millions of these in the lungs, so many that if the lining membrane of the lungs were spread out, it would

cover a surface ~~2200x150~~ of two thousand square feet, a surface 40 feet by 50 feet. Just think how much that would be--larger than this room. The surface of the lungs of a man would be just about the size of this room. If the mucous membrane inside of one pair of lungs were stripped off and spread out, it would cover the whole floor of this room. Underneath the mucous membrane the little arteries run. You see the minute blood-vessels, and all the blood of the body is spread out under that delicate, thin, transparent membrane every minute and a half. Every minute and a half, all the blood of the body passes through there and is spread out under this layer of air. That is where the blood is aerated. You know, in various manufacturing processes, the exposure of substances to the air is used as a means of purifying, and the purification for removing odors. Take some water that is polluted, foul, water with a bad odor to it,--take this water and pour it through the air a number of times, break it up into a fine spray, throw it out into the air, and it will be purified. The water of a river as it passes along, receives in the town where it goes through, the sewage of the town, and the sewage pollutes the water; you see it is dingy, it has a foul appearance. But ten or twelve miles down the stream, examine it and you find it has not ~~as~~ a quarter as much as it had where the sewer entered into it. Go on ~~down~~ the stream fifty miles further, and you won't find any trace of the matter at all. This is largely because of the contact of this water with the air.

So the foul blood current comes to the lungs, is spread out under this great surface and is purified. If the air that comes in contact with the blood is the dense, pure air of winter that has no germs in it, has no foul odors coming from decomposition in it, has no dust in it, if the whole ~~xxxxxx~~ ~~ix~~ ground is covered with snow, all frozen up so there is no dust at all, then the blood can be purified much more readily and perfectly. Now, see a difference between winter and summer. In the summer time, there are clouds of dust flying through the air, swarming with bacteria. Here are animals going along the street, and the excreta of these animals

is broken up into dust, becomes fine particles which are lifted into the air, inhaled, and taken into the lungs. You can not go out without getting more or less of this dust and dirt. In winter-time, all this dust is laid low; it is all held down in the earth by the frost and the snow; so the air of winter has no germs in it; the outdoor air has no foul odors in it, has no dust in it, is absolutely pure; and this pure air brought in contact with the lungs, under this surface of two thousand square feet of pulmonary membrane, purifies the blood, and oxidises it, carries off the foul gases which are generated in the body, the volatile impurities that are absorbed from the intestines; so this pure air becomes a wonderful means of energizing and vitalizing the body. Now, it is important to know, that when we are brought in contact with this cold air, we should breathe properly. I came down from my home an hour or two ago when I was out in this fresh air, and I watched the people I met. Many of them were doing just as I was doing--holding the chest up as high as possible, and taking in as deep breaths as I could. I saw a number of people doing as I was doing, improving the opportunity to get all the benefit they could from this fresh air while they had a chance. I want to show you how to do that. It is important first of all to know how to get the chest up. See this man with his back hollow and the front of his chest is convex. You very often see people get that thing reversed,--have the convexity here and the concavity here in front. If you will just stop to think of it a moment, perhaps that is your shape this present minute. Some of you have got this convex behind instead of in front, and so it makes a great deal of difference which way that is, because when you let the chest down in front of the collar bone, the chest is compressed and it is impossible to expand it properly, because the chest swells out here in front; and when the shoulders and the collar bone drop forward, it holds them down so you can not possibly expand the chest properly. Ask a little boy to expand his chest, and he puts it right up like that the first thing. Now see how to get into the proper position. A great many people do not know the proper

position. Stand up against the wall--heels, hips, shoulders, head against the wall; then bend the head back holding the hips and heels against the wall, and that lifts the chest forward. Now, keeping the chest right there, hips and heels against the wall, the head is simply thrown forward. That is the proper position of the body. When you have him in that position, he puts his hands upon his hips, holds the hands rigidly there, and that keeps his chest up, keeps his shoulders back, and he is ready to take in all the air he can possibly get into his lungs. Now, here is the difference between right position and wrong position in sitting. Here is a lady sitting up here with a flat chest. Here is a round back, you see, round shoulders, round shoulders that mean a flat chest. ~~He is~~ The subject is sitting down in a Sanitarium chair here, and this little curve in this part of the chair is to support the center of the back, and that throws the chest up, you see. Sitting in this chair, it is impossible to get that convex shape in the back. The chest is held up by this little round in the chair at this point. The back slopes back a little more than the back of the ordinary chair does. The reason for that is to carry the head back, because when the head is carried back in this way it makes these muscles contract. The head here is supported by the muscles on the back of the neck. The muscles running down to the top of the chest at the back are the muscles that are active, and that brings the head forward and compresses the chest, ~~pulls~~ pulls the chest down. Now, when the head is carried back in this way, the head is supported by the muscles at the front of the neck which are attached to the collar bone, and as these muscles are contracted, it lifts the collar bone up, you see, so that position of the head helps to keep the chest up, and that is of importance. There are various exercises that promote this--this position of the chest and this position of the body. Work of various sorts, the habitual form, the pose which we assume in work becomes a sort of mold into which the body grows. It is very important to take note of that. Dr. Sargent, the teacher of gymnastics at Harvard university, says when he was a boy he

he was a farmer and got his gymnastic exercises and training chiefly in the harvest field. He wanted to become a gymnast, so he said, "I will make my work gymnastic", so he always took pains to maintain the right pose of the body. So in whatever he did he was strengthening his body in the right pose. So when he was shoveling, he held his body in the right position so the chest was not flattened. Here are two men sawing wood. Here is one sawing wood in the way you often see people sawing, and that way the man keeps his ~~shank~~ pose very well, so the chest is not flattened, and the back muscles are not weakened, and the spine is not weakened, but the very reverse. Here are two men sawing in a way that cultivates deformity rather than health. These men have a right pose. Here you see men chopping wood, this man chopping in a way to cultivate round shoulders, and a flat chest, and this man has a pose which keeps his muscles tense and his chest well up; and if he develops his muscles, they will be developed in such a way as to hold the body in the right shape all the time.

This is a picture of what was happening in Austrian Silesia one hundred years ago just now. Just 100 years ago that woman was sawing wood up there in her bedroom. She was a titled lady that was visiting Graafenberg, the original water cure, the first sanatorium that ever was was at Graafenburg, a little peasant village in the Graafenburg hills of Austrian Silesia; and there Priessnitz, the peasant boy, had attained such wonderful success in the treatment of animals--cattle, horses and pigs, when they were sick, and his neighbors, and cases of his own sickness, and had such marvelous success with the use of water it was supposed that he had really a magic of some kind; it was supposed that he had put something in the water, that he had some magic about him. In fact, at the beginning, he thought he did have. He used to repeat some cabalistic words when he wet the cloth in the water and laid it on the stomach or any other part; but he learned better, and after while he developed a system which really was not so very different from the Battle Creek Sanitarium system; it had the elements in it--exercise, diet, the use of water, sunshine and fresh

air all combined together. This lady did not want to be seen sawing wood outdoors, so she put on her clothes, opened up the windows wide, had her servant bring the wood in for her, and she is sawing the wood and getting exercise. The patients at Graffenburg were all required to take vigorous exercise every day, and a great deal of it. Some titled friend is calling upon her, and the servant is coming in here you see with a card. This idea has gradually obtained a foothold in the world--that there is health in exercise, fresh air, cold air; but it is wonderful how long it has taken for this idea to get into practical operation. It takes about 200 years for a good idea actually to get a foothold. Thousands and thousands and thousands of people, millions of people have to die when they need not die, just because they have not gotten hold of what there is for them at the present time. Why, if we could only get people to carry out the right ideas,--what we know in relation to health and what we know in relation to health-getting, nine tenths of all mortality would be saved. There are a million and a half of people dying in the United States every year, and most all of those people, at least a million and a quarter of them, could be saved as well as not; their lives are simply thrown away, sacrificed to ignorance and this neglect to utilize fresh, cold air is what kills them.

Up here in the Adirondack mountains is an interesting place. At Trudeau is a sanitarium that was founded by Dr. Trudeau in 1885, twenty-two years ago. Dr. Trudeau went out there twenty-four or five years ago, himself smitten with consumption and about to die. He found himself getting better, induced some other people to come, and they gradually came and settled around him on this hillside out here in the Adirondacks, not far from Lake Placid; it is pretty near the end of the railroad, not far from Lake Placid; a few miles from the end of the railroad up there near Ogdens, and the number ~~greatly~~ gradually increased; he got some philanthropists interested and they helped him to put up some buildings; and this is the main building, you see here. People are received there for treatment at the price, I think, of seven dollars a week.

They take only a limited number, about thirty or forty, I think, and they have 100 or 200 people always on the waiting list. They must be people who are not able to pay for care, and they are received here and are treated by fresh air. Not another thing is done for them, except that they are fed, and sent outdoors, kept out in the fresh air. I was surprised to find they were not making a great use of tents. They found tents were not so very good, because people got so disorderly in tents; but everybody sleeps out on the broad porch at all seasons of the year. All sleep outdoors on the porch. You see the wide porch here, and every house has got a wide porch. There are about a dozen cottages there I think, but they are all kept filled, and sixty per cent of the people who go there with consumption get well, and it is nothing in the world but the diet and fresh air, and I don't think there is very much in the diet, because it is largely flesh; they eat too much altogether too much of pork and beef and flesh meats of various sorts. They would be a great deal better off ~~if~~ ~~they~~ without it, but they have fresh air. They don't even have baths or any massage to speak of, or anything of that sort--simply fresh air--go off and exercise and ~~walk~~ walk about in the fresh air, and sleep outdoors. I think that twenty per cent more would recover if they had the advantage of all the physiologic measures with which we are acquainted.

Now, this is a wonderfully interesting place which I had the pleasure of visiting about five years ago--it is Davos Platz. That is in Switzerland, in the most mountainous region of Switzerland, a few miles from the Engadine. Some of you have doubtless visited the Engadine, but probably did not take the trouble to go up to Davos; and here is a whole village that has grown up within a quarter of a century as a result of the observations made by a German physician who established a little Sanitarium up on the mountain side. I think Dr. Neumann is now the one in charge over there. The original founder is dead. He is an English-German physician--his father is German, his mother English,--educated in England,--a very charming gentleman,

and when I was visited the place and mentioned my name, I was very much surprised to hear the Doctor say, "Oh, yes, I ought to know you; we have your foods here." I found to my surprise that the patients were being furnished with our foods. He said, "Do you see that man over there? He has gained fifty pounds on Bromose, and won't eat anything else but Bromose." He was well acquainted with Battle Creek foods, had been using them with his patients for a number of years. This whole village has grown up around this original institution; and all these places you see are for the accommodation of people who are there for lung troubles. They are especially for lung troubles, for tuberculosis; scarcely anybody else comes there. Other people are afraid to come there. The whole town is filled with sanitariums that have been established for the treatment of tuberculosis, and they do nothing in the world but simply go outdoors and live outdoors. Every patient in the institution there is required to be outdoors so many hours every day. They have walks on the hills where they go for exercise, and they are required to take the exercise; they simply eat, drink, sleep and live outdoors.

Here is a picture of a little picture of Leysin, in French Switzerland, with a little sanitarium up here in the background. The snow is very deep there in some places,--eight, ten, fifteen, even twenty feet deep, and they have a long and very hard winter; but people go there especially to get the benefit of that cold air during the winter season.

Here is a picture of people at Graafenburg in winter-time at the present time,--Graafenburg, the place established by Priessnitz 100 years ago is still in operation. You can always find a good many people there,--more in the summer time than in winter; but in winter there are some scores, or even hundreds of people that frequent the place, though the winters are very severe there, and it is close by the border of Russia, and they have many sports of various kinds, and their most favorite sport there is sliding down hill. The hills are long. You can slide down hill four or five miles, then walk back again. Here is a picture of the patients clearing

away the snow which is sometimes eight or ten feet deep on a level, and they have to dig themselves out. They are expected to help at that. Here is a picture of one of the shacks. Patients live, one or two people, generally one person, in one of these places. They are called shacks. You see they have plenty of light--a long window here, a window in front, and a window on one side, and a little porch by the side where the patient sits out. Here is a picture of one of the porches at the Basle Sanatorium. You see the patients are sitting out in these chairs. The chairs are not good chairs; they have square backs, and nothing to support the backs at all. They have not gotten hold of the idea of correct breathing, so they do not get half the benefit from fresh air they otherwise would get. We have some couches made for our porches, that I am experimenting upon. I was glad to see them all in use today. They have a little round made in the back support for the purpose of supporting the center of the back, for the purpose of keeping the chest up and the lungs working at the fullest capacity all the time. I think that is very important indeed.

Here is another picture of a lot of people sitting out here on the porch, and here is the same here. Here are others that are writing letters home. They are all pretty happy looking folks. I visited one of these outdoor sanitariums, and I really was very much surprised at the looks of the people. I didn't see anybody who looked sick at all. They all looked like well people. Look at these people. You wouldn't think they had tuberculosis. Every single one of them has tuberculosis. This is Dr. Trudeau's place. Every person here has tuberculosis. They all have ulcers in their lungs, the deposits of tubercles--a dreadful disease, and yet they are all looking well; they have good appetites and good digestion.

I think you have seen this place before. This picture was taken last winter--a long row of patients on the south porch reaching from the entrance all the way down to the south end of the porch. Here is a good friend of ours, a lady doctor who was here. None of these are tubercular patients, but patients suffering from

stomach, liver, nervous and other troubles which are just as much benefited by fresh cold air as tubercular patients. I have been talking to you about tubercular patients to show you what can be done for such a great and hopeless disease as tuberculosis, so you can think of what may be done for these other diseases in which the body is still intact, but there is an accumulation of waste matters in the body that simply need to be burned up by the dense oxygen of cold air, to be destroyed so that the body will be relieved.

h Here is the big sleigh out for a sleighride, starting from the front door here. These pleasant days we have the sleigh at any time our patients are ready to form little parties; you can get out any day. We will be glad to furnish the sleighs for you at a very low cost; I think ten cents is the charge made, and that small charge is made more for regulating than for anything else; for we found the people of the neighborhood were coming in for free rides and the patients were driven out of it; but a small charge of ten cents was simply enough to keep the thing going, and to regulate it.

Here is a walking party down the river. Many of our patients enjoy these little outings, and some of you are getting out every day. We hope to have some good pictures from our outings this winter. These patients all come back with good appetites, and do not have any reason to complain about not liking the food, or that they can not relish the food, can not digest the food. The man who will spend several hours every day in the fresh cold air will have the ability to digest almost everything he can chew, for the cold air has in it the capacity somehow of ~~mak~~ improving digestion to a marvelous degree.

This is a tent devised by Prof. Fisher, and a diagram showing how the fresh air is drawn through the bottom and carried up out through the top. Here are automatic ventilating arrangements, little flaps or valves so that the wind blowing in this direction will suck the air out on this side, and draw it up from the floor.

It is a very ingenious arrangement. It has taken the prize, I believe, of all the tents that have ever been devised. Here is a tent and a house combined. In front it is closed only by a curtain which can be raised or lowered. Here is a chair and a half tent devised by Dr. Knopf, an eminent New York physician, who has done a great deal for the promotion of the outdoor life. This tent is for the purpose of protecting the patient from the cold. This forms a little shell which protects the patient's head when the wind is blowing so that it is unpleasant.

This is a window tent. The patient draws the bed up beside the window, then this arrangement keeps the cold air from entering the room. The window being open here, the air comes in and goes out, so the patient is really outdoors; although he is in his own room, he is really outdoors still.

Here is another plan, where the patient sleeps between two windows, the fresh air going right through the two windows. This plan has the disadvantage that the bed is cool, the floor is cool, the mattress is cool--the whole room is rendered cold, so the perspiration is retained in the bed until it becomes saturated and is likely to extract a great deal of heat from the body on that account in warming up the bed. This difficulty may be overcome by keeping the bed warm by means of an electrical mattress. One of these electrical blankets we use here at the Sanitarium may be used for keeping the bed warm and drying it out.

This is another method of ventilating the room. The fresh air comes in one window and out the other, the bed being placed in a corner, so the air can circulate around it. If the windows are on one side of the room, one should be lowered at the top and the other raised at the bottom.

Here is a person sleeping with the head out of the window, you see. There is a little platform here so that the bed post can be put outside--a narrow bed,--put outside the window, and in this way the patient gets the benefit of the outdoor air, and of course this is an advantage. But in case the wind blows very hard, or it is snowing or raining, it would be very objectionable, and in some circumstances

impossible; so that can only be used under certain conditions. Last winter this lady you see here slept outdoors every night all winter, I think, on the south porch, the second or third floor, and as you see, she is prepared to go to bed just as though she were going out for a sleighride, and all bottled up. This hood was invented by one of our nurses here and is a very convenient arrangement. It protects the forehead, you see, and protects the neck and shoulders, and keeps the wind from blowing down the neck. I use that sort of hood in winter time under a fresh air tube. I had that sort of hood pulled down over my head last night. Here is the same lady wrapped up in her bed enjoying the fresh air. Now, the eight hours spent in bed can be utilized by breathing in this fresh air, you see, when you can not do anything else--can not read, can not work, can not take treatment, can not do anything else at all, but you can breathe the fresh air while you are sound asleep, and the fresh air will be doing you more good, perhaps, than anything else you have had during the whole twenty-four hours.

This represents a sleeping room at my own home. If any of you visit my house, you will see at the back side, a two-story addition over the kitchen, at the back end; there is a ~~one~~ one-story kitchen, and two stories of sleeping rooms above, open on all sides, and the beds are supplied with mattresses; and the floor, you see, has wide cracks in it, because it is made to shed rain,--placed a little ways apart so the water can run down between and run off on the roof underneath. That is to prevent the rotting of the boards of the floor. Each one of these beds has one of these electric mattresses, so it is only necessary to turn on the button to turn on the heat. Then at any time during the night, or immediately after going to bed, the button is turned off. If at any time it gets cold in the night, or if there is a change of weather, it is only necessary to adjust the button and it warms up in two or three minutes. And the bed in this way is kept always dry.

Here is our fresh air tube. This is a Sanitarium device that we have perfected in the last two or three years and we find it is very practical and can be applied anywhere. You see one over here in this corner of the room. I hope you will investigate it. Some of you might want to take it home. It is patented, but nobody is forbidden to make use of the patent. It is patented more to make people think it is worth while, but anybody who wants to use it can make use of it. Here is a board put across the lower part of the window and a little door by means of which the amount of air which enters the tube can be regulated. When the wind blows very hard, the door can be partly closed so not so much air can get in. The difference in temperature between outdoor air and indoor air is always necessary to keep an incoming current of air moving all the time, and there is a little hood that can be arranged to come down around below. At first you feel a little strange to sleep with that sort of thing. One lady said to me, "Suppose somebody should climb up through that tube in the night." She had kind of a bogey feeling about it, but it is not necessary to have this hood at all. If the cold air comes in too strong, it is only necessary to have the tube closed up. You can have the tube over head, and have the cold air drop right down onto you, or have the tube lying down on the pillow, close beside the head. The cold air will flow down gently upon the face so the fresh air will be available at every breath, all night long, and the room will not be cooled off. The room can be just as warm as you like it for comfort so you don't have to be burdened with a great heavy weight of bed clothing, but the room can be warm and the bed perfectly dry and comfortable; then when you are ready for bed, open up the fresh air tube, put it in position and you will have the cold fresh air to breathe all night, and in the morning you will awaken with a good appetite and feeling refreshed. Every fifteen minutes of this cold air breathing in this way, every fifteen minutes of this experience, I believe, is worth a couple of hours' sleep under

any other conditions, because you are gaining ground, making headway, burning up the cobwebs, dust, poisons that have been accumulating in your body, speaking figuratively; you are burning these impurities up, clearing out the brain and the nerves, clearing the body of all its rubbish and debris that has been accumulating.

I hope you are all going to get the benefit of this fresh air while you are here. Get out and get the walks, get the fresh air, exercise. The walking parties go twice every day, you see it announced on the blackboard; and especially at night time, when you get to your rooms, if you haven't got a fresh air tube, open your window's wide open, leave the steam on your coils so that they won't freeze up, and you had better waste the steam than to have your coil freeze, a great deal. Have plenty of clothing upon your beds so you will keep warm; but the far better plan is to have the fresh air tube put in, have the cold air brought to your face just where you want it; then you can have the full benefit of the cold air without any inconvenience.

Don't be afraid because winter has come. Winter-time, as I said a little while ago, is the best season of all the year for the treatment of sick people, because we can burn up the old man, and the old sick man and woman that comes--we must get rid of them. Paul says we must put off the old man and put on the new. That is the only way in the world you can ever get well. It is the only way a bad man can ever get into a good, useful, wholesome state, the only way to be transformed, to be disposed of. You have got to put him off and put on the new man, to reconstruct the new man. That is exactly what is to be done for the sick ~~man~~ man. He has to be recruited, to be born again; we have to tear down the old man and build up the new, vigorous, healthy man in his place. I am sure of the people who come to the Sanitarium there is not one in ten that gets what is coming to him. A lady said to me a year or two ago, who brought a niece here, "Now, Doctor, this niece of mine I am interested in; you see she is a poor, wizened girl, and I feel as if she was not going

to have a fair chance unless something can be done for her to get her into a better state. She is my sister's daughter and I want to help her improve, to learn how to live; I want her to have a better body. I feel that she is not going to get what is coming to her in the world, and I want her to get what belongs to her of the world's enjoyment, and the world's happiness and the world's success." So she brought that niece here in order that she might learn how to get well and to live well, and how she might get what was coming to her.

Now, that is the way it is with these men and women who come here to the Sanitarium, my friends. Not one in ten gets what is coming to him. If we could only make our patients ~~see~~ here,--if we could put before you a picture of the health and the vigor and the joy and the efficiency that there is for you--but we can not make people see it. Just the minute a man begins to feel just a little better, to think he is getting out of the grave, instead of toiling on up the hill to splendid triumphs that are ahead for him, and the splendid health, vigor and efficiency and years of life that he can attain to, he is satisfied with just a little taste, and goes home; and he very soon drops back into the old way again, and in a little while he is gone, his feet are over the edge of the precipice, and the chance is lost. I sometimes get discouraged, thoroughly disheartened in the attempt to help people. The best we can do any way is to mend up broken bodies, but when we do not have a chance to finish the job up, I feel as though I were like a shoemaker who gets a pair of shoes, patches them up, and gets the patch almost put on, gets the stitches almost in to fasten them on, and the owner comes around and says, "Here, I would like to wear those shoes a little while; I want to take them, and if they are wearing satisfactorily I will come back and let you finish the job." That is the way I feel, and the way all my colleagues here feel. Once in a while a man or a woman stays on with us month after month and the results that come are splendid. I saw a woman a few minutes ago who has been here I believe just about a year, some months anyhow. A few months

ago she said, "Doctor, I am almost discouraged." I was pretty nearly discouraged myself. I met her walking down the hall the other night and saw the bloom coming back to her cheeks, saw the clearness of the skin and the hope and the animation in her eyes, and I was glad she stayed, and I am sure she is glad she stayed. At the end of six months there seemed to be no hope at all, hardly; she said, "I don't feel a bit better." I thought I could see a little improvement, and that little improvement led me to encourage her to go on, and I am sure she is glad she did hold on. That is rather an exceptional case. One of our doctors said the other day, "If we could only keep our patients three months, we could do so much more." The average person who comes here goes away before he is fairly started, before he has got fairly started. Here comes a person who has anaerobes in the intestine, ten billions of anaerobes, perhaps, or two billion anaerobes. That patient should stay until those anaerobes are brought down to the normal, which means one or two hundred millions, and he should know that that condition exists before ever he leaves the place, because if he goes away with that infection there, with all those germs infecting the whole ten or fifteen or twenty or thirty feet of intestine, they are just as certain to go back to the old condition as night follows day. It can not be otherwise.

I want to call your attention to just one thing, a new thing that is just out, a new book entitled, "The Simple Life~~x~~ in a Nutshell." It is not a very big book; it consists of fifteen pages. The "Simple Life In a Nutshell" consists of 55 paragraphs, and each paragraph tells you something to do, how to live the simple life and the natural life, how to live long and well. I have spent more time in the preparation of this little book, I think, than in the preparation of any book 100 times as large--I will not say quite as much as that--any book twenty times as large, at any rate; and I have endeavored to make it contain the gist of the

Battle Creek Idea,--how to live, how to eat, what to do to maintain health, and I will be glad if every one of you will get a copy of this little book, study it, read it carefully; and when you go home take it with you, lend it to your neighbors, and show them how to live the simple life. It will cost you ten cents. We will not give it to you because you would throw it away; but you have to pay ten cents for it. You will find it on sale at the counter.

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