JOHN HARVEY KELLOGG (1852-1943)

SUBJECT FILES, CA. 1885-1920
(PRIMARILY CONCERNING TOPIC OF MEDICAL MISSIONARIES)

INTERNATIONAL MEDICAL ALLIANCE

610.6

INTERNATIONAL MEDICAL ALLIANCE

--Chicago,Ill.,28 Thirty-third Place--

Tuesday, Dec. 19, 1905.

Dr. W.R. Simmons, Chairman.

Dr. J.H. Kellogg: I was glad to hear Brother Taylor mention the case that he referred to. The man came to the Sanitarium, was there only a few days. He was a worldly business man, without religious experience, and he heard the first sermon that Brother Taylor preached after he came to Battle Creek, when none of us were acquainted with Brother Taylor. I don't know why he came. We didn't ask him to come until we found he was looking our way. He said the way was open, and he felt the Lord was calling him to come to Battle Creek if there was a place for him. We didn't capture him by any sort of intrigue. In fact, when he proposed to come I was very much surprised, because I thought Battle Creek would be the very last place that Brother Taylor in particular would want to come to. But when he came we were very glad to find he had a message from the Lord for us, for our patients, for our helpers; and the first assurance I had was when Brother Judd came to me the next Monday following this Sabbath and said the man came to the office to settle his bills that morning and paid $50. He remarked that seemed a pretty good sized bill for ten days, but the man said "I am perfectly satisfied with this bill. The sermon I heard Sabbath morning is worth $50 and a great deal more to me:" and it was very encouraging to me to see that he was writing Brother Taylor that it was not simply an impression, but that it stayed with him. What an opportunity we have in our sanitariums for just that sort of work. Every patient that comes to us the Lord has brought,

the Lord is taking care of everybody.

I want to tell you it is a great comfort to me these days to know that there is One who rules the universe and who does not forget any of us. He is looking after us all. He cares for the little insect, cares for every sparrow, and He certainly has not forgotten any of us, and that is the great hope for us all. I want to tell you that these are days when I feel that we need to do very close heart-searching; and I am trying to do that. I have just been in Mexico and had an opportunity to have a little vacation. I have been out riding horseback among the mountains, and I improved my opportunity. I was alone most of the time riding by myself. The next horseman was some ways ahead or some distance behind, so I had abundant opportunity to have, and I had a real good time with the Lord, and I came home feeling strengthened. I don't know that my faith is strengthened, for I don't know that it has wavered. I got my feet planted on the firm foundation a good many years ago. When I began to work down here in Chicago thirteen years ago I had such experiences as satisfied me--many experiences right here in this place--that satisfied me that the Lord is right at hand, and is not far off, and he is willing to help us, poor miserable, weak and unworthy instruments, as I am. The Lord is willing to work for us, and I know the Lord helps us, and know he hears our prayers, know he helps me.

I might tell you a little incident that occurred last operating day that impressed me very much. I had two patients which I expected to operate on. I went up to the operating room very much distressed. The class and the doctors were all waiting, and a doubt came into my mind as to whether I ought to operate on either one of them--a serious doubt. I found a reason why I could not operate on one of them, and when I came to see the other one, the case of fibroid tumor, and we prayed, as we always do, to the Lord as to whether we should remove this fibroid tumor or be satisfied simply with a curetting. I want to say to you that my religion, what I have, enters

into everything I do; and if I could not bring it into my work I din't know what I could do, for I do not feel competent to deal with many cases that come along. Here was a case of fibroid tumor. The question was whether we should operate or not--do hysterectomy or something else. I decided, without knowing just why, that we would give the lady laughing gas and do curetting, and would not do the hysterectomy; would not give chloroform. When we came to do the operation we found there was really no occasion for doing hysterectomy at all. There was abundant reason for all the conditions that existed. There was reason why we should not do the operation we started out to do. I feel certain that as doctors we need to be in close enough touch with the Lord so that He may lead us and guide us in all the difficult things we do. We are walking in the dark. There are hidden things we don't know anything at all about. There are obscure heart troubles and nervous conditions, a great variety of conditions that we can never see, can not find out in the diagnosis, that the Lord knows all about. And if we can keep ourselves in close touch with the Lord, the Lord will help us in these things.

I am glad to come down here and spend a few days with you. Many of you are having new, bright, original experiences, and I am glad to come to a time when you can sit down in this way and study and learn, compare notes and experiences, and that we may cultivate the fraternity which I am sure exists among us as much as among any other people in the world, and perhaps more earnestly and intensely. For myself, I feel very thankful for the kindly feeling that exists among all our medical workers. I know there is a genial brotherly and sisterly feeling among our medical workers everywhere, and I am glad to be one of them.

My friends, I take great pleasure in introducing to you Dr. Babcock, of Chicago, whose name is familiar to all of you. Dr. Babcock I feel I may introduce to you as our friend, for he has kindly consented to come and give

you a clinical lecture without compensation as a courtesy to us, and I assure you we appreciate it exceedingly. I know we shall all be profited very greatly by what we shall hear.

(Loud applause)

Dr. Robert H. Babcock: Ladies and gentlemen: I am very happy to be here in this capacity this morning, and I only trust that what little I shall say will be of profit, and that you will feel repaid.

I have been favored with four cases this morning to present to you, which illustrate, or which may be used to illustrate some very practical points in diagnosis and prognosis in the treatment of cardiac disease. I feel that heart disease is one of the most difficult in many respects for the students and practitioners of medicine to master, to compass, and inasmuch as you are all practioners of medicine, I assume, it seems to me perhaps I can make the most of the material at hand if I tell you just what the cases are and bring out points of contrast between the cases in reference to the causation, symptoms, and physical signs, etc.

Now I have here four men. Two are cases of mitral disease, two are cases of aortic disease. The two cases of mitral disease are in young men, one of whom gives a distinct history ot articular rheumatism. The other, a man of twenty-five, gives no history of articular rheumatism, nor indeed of any illness prior to the present trouble for which he entered the County Hospital. The older of these two tells,me, in fact, that he was working in the tunnel as a laborer up to four months ago, doing arduous manual work, digging in fact. The other two men are older men. The colored man is 42 and the other 52, and they give each a different history, which we will consider when the time comes.

This young man gives a history of articular rheumatism, and that you know is the most frequent of the etiological factors in the production of endocardial lesions. The changes which have been produced are very easily received in this young man. The apex beat is situated here. It is a strong

beat abroad. There is a short presystolic murmur. The area of the cardiac dullness has been very clearly outlines, lies to the left of the nipple, as shown by this line, and runs out here to the right of the sturnum, as shown by a perpendicular line. On oscultation there is heard a very loud blowing systolic murmur, which perhaps fully replaced the first sound, nearly replaces the first sound, and is preceded by a very shory rougher lowered pitched murmur. The second tone is dull and distant. The other tones, the other heart sounds are what we might expect. The heart's action is regular. This murmur is heard behind. Now ~~thm~~ you know that the changes which the heart has undergone are of a compensatory nature, hypertrophy and dilatation. The others as shown by opposite character of the apex beat and the extent of the dullness to the left of the nipple, considerably hyperthophy and dilatation of the left ventricle. But the chief enlargement of the heart is to the right. The blood vessels are entirely soft in this young man. There is lack of sclerosis.

This man Welch is twenty-five, and this is the young man who said he was doing hard work up to four months ago. Considering the condition of the heart here it is almost incredible to me. His pulse is anything but regular or easy. It is a much less even pulse--more quiet just now, but under a little excitement it is very irregular and very rapid. His apex beat is situated there where we made a cross. There is a very distinct thrill. The thrill is a real purr, a cat's purr, and it runs up to a rather abrupt apex shock. Cardiac dullness is increased also to the left here and increased to the right. On oscultation there is a very loud pre-systolic murmur which runs up the first sound. The sounds are occasionally stopped and there is occasionally a suggestion of a murmur following the second tone. Now on percussion here the area of absent dullness is increased here across to the right border of the sternum, increased not to the left or upward. Deep-seated dullness is increased as shown by the lines we have marked, and

dullness is xxxxkx somewhat increased to the left, passes outside the nipple, but not far. Behind the murmur is not distinct, as it was in the first case. It is faintly heard. The first sound is heard behind more di stinctly than the murmur.

Now these two cases illustrate mitral disease, and illustrate one form of mitral regurgitation; that is, the first case does; and the second illustrates mitral stenosis predominating, although there probably is some regurgitation after. The mitral insufficiency in the young man is of distinct rheumatic origin. In this man we have no history of anything explaining the production of this mitral disease. Now it is not at all uncommon in eliciting the history of patients, that you will find a patient who shows mitral insufficiency, whether in the male or female, who will give you a distinct history of rheumatism, and usually of an acute attack, one or more acute attacks, whereas the patient, most commonly female of course, who displays predominating mitral stenosis, or pure mitral stenosis, will give you no history of rheumatism at all; and it has led to a good deal of discussion as to the etiology of mxxxxxx mitral stenosis. But the changes which take place are such as we would expect from a slowly induced and slowly progressing inflammation, a protection inflammation rather than a destruction inflammation of the changes at the mitral orifice in mitral stenosis are thus sclerosed, increase production of connective tissue, which produces a welding together in such a way as to narrow the orifice.

In the absence of definite history of previous acute infection in this young man, and finding the predominating mitral stenosis, I am forced to believe that the disease has been produced slowly, developed slowly, and without any knowledge on his part. Now it is singular that in this case he was able to work as arduously up to about two months ago as he did, because mitral stenosis is the disease par excellence which produces shortness of breath. It simply illustrates in my opinion that shortness of breath in

cardiac disease is not to be attributed solely or always mainly to the cardiac lesion itself. You will find patients with very pronounced mitral stenosis who will not acknowledge shortness of breath, or at least very insignificant to some other symptom, has decided palpitation, weakness, and so on.
It is probable therefore that although pulmonary stenosis, congestion within the pulmonary vessels, is a factor in the production of dyspnea of effort, it does so not because of the stasis alone, but because the stasis leads to a regidity on the part of the lungs. CHronic congestion of the lungs leads to a condition of more or less inelasticity, and if that rigidity is very pronounced in a patient, he will complain of shortness of breath. There is no question about it. You see all proposed symptoms and the objective signs of his heart lesion. In other cases, as I have just said, like this young man with a very pronounced lesion, they are able to stand more effort than we would expect. The effect of effort, however, is disasterous, because if an opening, as the left or right ventricle opening is narrowed, and the patient performs arduous physical efforts, such as are calculated to send the blood rushing to the more more rapidly and in larger amounts than the heart can take care of and send forward through this narrowed opening, I say if such things occur, the time will surely come when the heart will break down in its compensation. And a break occurs in the right heart, because it is the right heart which has to do the work,--the left oracle or right heart; in other words the parts of the heart back of the opening.

Now the young man with mitral insufficiency, when he entered ~~this~~ the Hospital, entered because of a fresh rheumatic attack. This other man entered the hospital because of a left side pain which was considered pleuratic. Now it may have been a true pleurisy, I can not say. There is no evidence of it today. But if it were pleurisy it is very suggestive of an infarct. Gerhardt has remarked that if pleurisy occurs in course of valvular disease it is usually due to an infarct. Now the action of this heart is tumultuous,

so it might readily be that under the influence of fresh infection xxxxxx it has set up sub-acute intercarditis, a coagulum had been loosened, or that the stasis within the right heart had loosened a portion of a thrombus, and a pulmonary infarct had occurred with the production of pleurisy. Howe ver, inasmuch as he was not and I know that at Cook County Hospital the interns asperate almost every case of pleuritic effusion which is at all extensive, he suggests to my mind that perhaps his pain was not pleuritic at all, but perhaps xxxxxxxxx one of an intercostal neuralgias which are so common in cardiopathy, especially mitral disease.

Before I go on speaking further of these cases I want to demonstrate to you these other two cases. Then we will draw some contrasts. Here is a man of 44. Gives no history of articular rheumatism at all, but gives a history of specific disease of Chancre. Under the distension of the superficial veins the apex beat is felt in this portion, and when it is exaggerated you can feel it away down in the sixth space, away outside of the nipple. The lesion here to the left shows the enormous increase of cardiac dullness to the left, whereas the lesion close to the sternum off here shows very little increase to the right. No stasis of the liver at all. The inspection also shows, and very markedly now, because he has quieted down, the carotids and all pulsating strongly, and on examination of the pulse I find a very regular pulse, which strikes the finger with moderate abruptness. Falls here a little too quickly, but it is not distinctly a collapsing pulse, at least it would not impress you when you took hold of it as a collapsing pulse. When he raises his left arm above his heart the collapsing quality comes out a little better. The radial arteries roll under the finger. This one rolls under the finger, it is stiff. Now on oscultation of this man the heart tones are heard plainly at the apex. There is no thrill there, but I am conscious of a strange heaving impulse, and the second tone is a rather dull booming character. But going over toward the sternum I at once hear a dull first tone, which has a little short murmur with it, a very peculiar diastolic

murmur, so characteristic that anybody would recognize it at once as the aortic, and coming up here toward the aortic area the murmurs are very intense; the heart tones are feeble, largely obstructed by the murmur. The tones are heard in the neck, and the first has a murmur with it. Now this line running down here simply shows the area of propagation of the murmur. These murmurs are not heard behind.

Here is the man Craig, who has an aortic insufficiency somewhat different in its character. This man is fifty-two. He gives no history of articular rheumatism, but he does give a history of specific disease twenty-five years ago. His apex beat is displaced downward and outward. There is a little suggestion of a pre-systolic thrill about it. It is feeble, but it is present, and the apex beat is rather heaving; not so forcible as in the colored man. The area of the dullness is increased to the left of the nipple here and not much to the right. In the aortic area two dull or two distant booming tones accompanied each by a murmur, the systolic murmur passing upward into the neck, the diastolic murmur being transmitted downward along the sternum, and having with itnthe same peculiar tambour qhich I heard in the other. The murmurs are also heard at the apex beat here, both of them, whereas in the man with the aortic insufficiency they were not heard at the apex at all. This man's arteries are also stiff.

Now the points I want specially to bring out are these: That in the two younger men we probably have had a true inflammation or endocarditis as a cause of the lesion--an acute endocarditis in the one, with a predominating mitral sufficiency; a sub-acute endocarditis of a proliferative character in the man of twenty-five, with a predominating mitral stenosis. In these two men probably no endocarditis at all is responsible for the lesion. There is no history of anything to lead to endocarditis, for syphilis does not produce endocarditis, it produces chronic degenerative changes; and in these two men, both middle aged, the aortic disease can not strictly be called a

valvulitis. It is a part of the general degenerative process which is going on, the stiff arteries more or less, renal change probably, but the degeneration having affected chiefly the aortic of the heart. Now in these men these changes have developed slowly, and after a while through the aortic ring itself which has stretched as a result of the degenerative changes in the mycardium or in the aorta all the valves have become sclerotic, thickened, possibly perforated, which changes when examined miscroscopically are the changes of sclerosis and not inflammation, and slowly produced degenerative process which has led to some destruction of the valves and not to a true valvulitis or inflammation. Now we find two types of aortic insufficiency. One is mitral insufficiency. You find it in the young man usually who gives a distinct history of acute rheumatism. The other type is the sclerotic type, as illustrated in this man, and should be classed as a part of the arteriosclerosis that is coming on. It is a part of vascular change. The heart is as a matter of fact, you understand, only a portion of the vascular system which has undergone special development. It is born of the same changes that the vessel coats may undergo fundamentally, although from a morbid standpoint somewhat different; but they are degenerative changes, and when you run across aortic insufficiency even in elderly men, without a history of inflammatory rheumatism, examine carefully the arterial walls and investigate the history of the case, and you will usually be able to determine to your satisfaction that the disease is really but a part of the general degenerative process which is going on.

Within the last year or two I have seen two exceedingly instructive examples. Some twelve years ago an old college friend of mine called on me because of palpitation. I could find absolutely nothing the matter with that man except that he was smoking to excess, and I told him so, and that the condition was probably functional, as we say, and not organic disease at the bottom of it. And another man about the same time called on me also complaining greatly or palpitation. His habits were different. He was not a smoker.

He was suffering from more or less indigestion and constipation.

INTERNATIONAL MEDICAL ALLIANCE

--Chicago,Ill.,28 Thirty-third Place--

Tuesday, Dec. 19, 1905.

Dr. W.R. Simmons, Chairman.

Dr. J.H. Kellogg: I was glad to hear Brother Taylor mention the case that he referred to. The man came to the Sanitarium, was there only a few days. He was a worldly business man, without religious experience, and he heard the first sermon that Brother Taylor preached after he came to Battle Creek, when none of us were acquainted with Brother Taylor. I don't know why he came. We didn't ask him to come until we found he was looking our way. He said the way was open, and he felt the Lord was calling him to come to Battle Creek if there was a place for him. We didn't capture him by any sort of intrigue. In fact, when he proposed to come I was very much surprised, because I thought Battle Creek would be the very last place that Brother Taylor in particular would want to come to. But when he came we were very glad to find he had a message from the Lord for us, for our patients, for our helpers; and the first assurance I had was when Brother Judd came to me the next Monday following this Sabbath and said the man came to the office to settle his bills that morning and paid $50. He remarked that seemed a pretty good sized bill for ten days, but the man said "I am perfectly satisfied with this bill. The sermon I heard Sabbath morning is worth $50 and a great deal more to me:" and it was very encouraging to me to see that he was writing Brother Taylor that it was not simply an impression, but that it stayed with him. What an opportunity we have in our sanitariums for just that sort of work. Every patient that comes to us the Lord has brought,

the Lord is taking care of everybody.

I want to tell you it is a great comfort to me these days to know that there is One who rules the universe and who does not forget any of us. He is looking after us all. He cares for the little insect, cares for every sparrow, and He certainly has not forgotten any of us, and that is the great hope for us all. I want to tell you that these are days when I feel that we need to do very close heart-searching; and I am trying to do that. I have just been in Mexico and had an opportunity to have a little vacation. I have been out riding horseback among the mountains, and I improved my opportunity. I was alone most of the time riding by myself. The next horseman was some ways ahead or some distance behind, so I had abundant opportunity to have, and I had a real good time with the Lord, and I came home feeling strengthened. I don't know that my faith is strengthened, for I don't know that it has wavered. I got my feet planted on the firm foundation a good many years ago. When I began to work down here in Chicago thirteen years ago I had such experiences as satisfied me--many experiences right here in this place--that satisfied me that the Lord is right at hand, and is not far off, and he is willing to help us, poor miserable, weak and unworthy instruments, as I am. The Lord is willing to work for us, and I know the Lord helps us, and know he hears our prayers, know he helps me.

I might tell you a little incident that occurred last operating day that impressed me very much. I had two patients which I expected to operate on. I went up to the operating room very much distressed. The class and the doctors were all waiting, and a doubt came into my mind as to whether I ought to operate on either one of them--a serious doubt. I found a reason why I could not operate on one of them, and when I came to see the other one, the case of fibroid tumor, and we prayed, as we always do, to the Lord as to whether we should remove this fibroid tumor or be satisfied simply with a curetting. I want to say to you that my religion, what I have, enters

into everything I do; and if I could not bring it into my work I din't know what I could do, for I do not feel competent to deal with many cases that come along. Here was a case of fibroid tumor. The question was whether we should operate or not--do hysterectomy or something else. I decided, without knowing just why, that we would give the lady laughing gas and do curetting, and would not do the hysterectomy; would not give chloreform. When we came to do the operation we found there was really no occasion for doing hysterectomy at all. There was abundant reason for all the conditions that existed. There was reason why we should not do the operation we started out to do. I feel certain that as docters we need to be in close enough touch with the Lord so that He may lead us and guide us in all the difficult things we do. We are walking in the dark. There are hidden things we don't know anything at all about. There are obscure heart troubles and nerveus conditions, a great variety of conditions that we can never see, can not find out in the diagnosis, that the Lord knows all about. And if we can keep ourselves in close touch with the Lord, the Lord will help us in these things.

I am glad to come down here and spend a few days with you. Many of you are having new, bright, original experiences, and I am glad to come to a time when you can sit down in this way and study and learn, compare notes and experiences, and that we may cultivate the fraternity which I am sure exists among us as much as among any other people in the world, and perhaps more earnestly and intensely. For myself, I feel very thankful for the kindly feeling that exists among all our medical workers. I know there is a genial brotherly and sisterly feeling among our medical workers everywhere, and I am glad to be one of them.

My friends, I take great pleasure in introducing to you Dr. Babcock, of Chicago, whose name is familiar to all of you. Dr. Babcock I feel I may introduce to you as our friend, for he has kindly consented to come and give

you a clinical lecture without compensation as a courtesy to us, and I assure you we appreciate it exceedingly. I know we shall all be profited very greatly by what we shall hear.

(Loud applause)

Dr. Robert H. Babcock: Ladies and gentlemen: I am very happy to be here in this capacity this morning, and I only trust that what little I shall say will be of profit, and that you will feel repaid.

I have been favored with four cases this morning to present to you, which illustrate, or which may be used to illustrate some very practical points in diagnosis and prognosis in the treatment of cardiac disease. I feel that heart disease is one of the most difficult in many respects for the students and practitioners of medicine to master, to compass, and inasmuch as you are all practioners of medicine, I assume, it seems to me perhaps I can make the most of the material at hand if I tell you just what the cases are and bring out points of contrast between the cases in reference to the causation, symptoms, and physical signs, etc.

Now I have here four men. Two are cases of mitral disease, two are cases of aortic disease. The two cases of mitral disease are in young men, one of whom gives a distinct history ot articular rheumatism. The other, a man of twenty-five, gives no history of articular rheumatism, nor indeed of any illness prior to the present trouble for which he entered the County Hospital. The older of these two tells,me, in fact, that he was working in the tunnel as a laborer up to four months ago, doing arduous manual work, digging in fact. The other two men are older men. The colored man is 42 and the other 52, and they give each a different history, which we will consider when the time comes.

This young man gives a history of articular rheumatism, and that you know is the most frequent of the etiological factors in the production of endocardial lesions. The changes which have been produced are very easily received in this young man. The apex beat is situated here. It is a strong

beat abroad. There is a short presystolic murmur. The area of the cardiac dullness has been very clearly outlines, lies to the left of the nipple, as shown by this line, and runs out here to the right of the sturnum, as shown by a perpendicular line. On esoultation there is heard a very loud blowing systolic murmur, which perhaps fully replaced the first sound, nearly replaces the first sound, and is preceded by a very shory rougher lowered pitched murmur. The second tone is dull and distant. The other tones, the other heart sounds are what we might expect. The heart's action is regular. This murmur is heard behind. Now ~~thm~~ you know that the changes which the heart has undergone are of a compensatory nature, hypertrophy and dilatation. The others as shown by opposite character of the apex beat and the extent of the dullness to the left of the nipple, considerably hyperthophy and dilatation of the left ventricle. But the chief enlargement of the heart is to the right. The blood vessels are entirely soft in this young man. There is lack of sclerosis.

This man Welch is twenty-five, and this is the young man who said he was doing hard work up to four months ago. Considering the condition of the heart here it is almost incredible to me. His pulse is anything but regular or easy. It is a much less even pulse--more quiet just now, but under a little excitement it is very irregular and very rapid. His apex beat is situated there where we made a cross. There is a very distinct thrill. The thrill is a real purr, a cat's purr, and it runs up to a rather abrupt apex shock. Cardiac dullness is increased also to the left here and increased to the right. On esoultation there is a very loud pre-systolic murmur which runs up the first sound. The sounds are occasionally stopped and there is occasionally a suggestion of a murmur following the second tone. Now on percussion here the area of absent dullness is increased here across to the right border of the sternum, increased not to the left or upward. Deep-seated dullness is increased as shown by the lines we have marked, and

dullness is somewhat increased to the left, passes outside the nipple, but not far. Behind the murmur is not distinct, as it was in the first case. It is faintly heard. The first sound is heard behind more distinctly than the murmur.

Now these two cases illustrate mitral disease, and illustrate one form of mitral regurgitation; that is, the first case does; and the second illustrates mitral stenosis predominating, although there probably is some regurgitation after. The mitral insufficiency in the young man is of distinct rheumatic origin. In this man we have no history of anything explaining the production of this mitral disease. Now it is not at all uncommon in eliciting the history of patients, that you will find a patient who shows mitral insufficiency, whether in the male or female, who will give you a distinct history of rheumatism, and usually of an acute attack, one or more acute attacks, whereas the patient, most commonly female of course, who displays predominating mitral stenosis, or pure mitral stenosis, will give you no history of rheumatism at all; and it has led to a good deal of discussion as to the etiology of mitral stenosis. But the changes which take place are such as we would expect from a slowly induced and slowly progressing inflammation, a protection inflammation rather than a destruction inflammation of the changes at the mitral orifice in mitral stenosis are thus sclerosed, increase production of connective tissue, which produces a welding together in such a way as to narrow the orifice.

In the absence of definite history of previous acute infection in this young man, and finding the predominating mitral stenosis, I am forced to believe that the disease has been produced slowly, developed slowly, and without any knowledge on his part. Now it is singular that in this case he was able to work as arduously up to about two months ago as he did, because mitral stenosis is the disease par excellence which produces shortness of breath. It simply illustrates in my opinion that shortness of breath in

cardiac disease is not to be attributed solely or always mainly to the cardiac lesion itself. You will find patients with very pronounced mitral stenosis who will not acknowledge shortness of breath, or at least very insig[redacted]icant to some other symptom, has decided palpitation, weakness, and so on. It is probable therefore that although pulmonary stenosis, congestion within the pulmonary vessels, is a factor in the production of dyspnea of effort, it does so not because of the stasis alone, but because the stasis leads to a regidity on the part of the lungs. Chronic congestion of the lungs leads to a condition of more or less inelasticity, and if that rigidity is very pronounced in a patient, he will complain of shortness of breath. There is no question about it. You see all proposed symptoms and the objective signs of his heart lesion. In other cases, as I have just said, like this young man with a very pronounced lesion, they are able to stand more effort than we would expect. The effect of effort, however, is disasterous, because if an opening, as the left or right ventricle opening is narrowed, and the patient performs arduous physical efforts, such as are calculated to send the blood rushing to the more more rapidly and in larger amounts than the heart can take care of and send forward through this narrowed opening, I say if such things occur, the time will surely come when the heart will break down in its compensation. And a break occurs in the right heart, because it is the right heart which has to do the work,--the left oracle or right heart; in other words the parts of the heart back of the opening.

Now the young man with mitral insufficiency, when he entered [redacted] the Hospital, entered because of a fresh rheumatic attack. This other man entered the hospital because of a left side pain which was considered pleuratic. Now it may have been a true pleurisy, I can not say. There is no evidence of it today. But if it were pleurisy it is very suggestive of an infarct. Gerhardt has remarked that if pleurisy occurs in course of valvular disease it is usually due to an infarct. Now the action of this heart is tumultuous,

so it might readily be that under the influence of fresh infection xkkxbx it has set up sub-acu[illegible] intercarditis, a coagulum had been loosened, or that the stasis within the right heart had loosened a portion of a thrombus, and a pulmonary infarct had occurred with the production of pleurisy. However, inasmuch as he was not and I know that at Cook County Hospital the interns asperate almost every case of pleuritic effusion which is at all extensive, he suggests to my mind that perhaps his pain was not pleuritic at all, but perhaps thatxxfxxx one of an intercostal neuralgias which are so common in cardiopathy, especially mitral disease.

Before I go on speaking further of these cases I want to demonstrate to you these other two cases. Then we will draw some contrasts. Here is a man of 44. Gives no history of articular rheumatism at all, but gives a history of specific disease of Chenore. Under the distension of the superficial veins the apex beat is felt in this portion, and when it is exaggerated you can feel it away down in the sixth space, away outside of the nipple. The lesion here to the left shows the enormous increase of cardiac dullness to the left, whereas the lesion close to the sternum off here shows very little increase to the right. No stasis of the liver at all. The inspection also shows, and very markedly now, because he has quieted down, the carotids and all pulsating strongly, and on examination of the pulse I find a very regular pulse, which strikes the finger with moderate abruptness. Falls here a little too quickly, but it is not distinctly a collapsing pulse, at least it would not impress you when you took hold of it as a collapsing pulse. When he raises his left arm above his heart the collapsing quality comes out a little better. The radial arteries roll under the finger. This one rolls under the finger, it is stiff. Now on oscultation of this man the heart tones are heard plainly at the apex. There is no thrill there, but I am conscious of a strange heaving impulse, and the second tone is a rather dull booming character. But going over toward the sternum I at once hear a dull first tone, which has a little short murmur with it, a very peculiar diastolic

murmur, so characteristic that anybody would recognize it at once as the aortic, and coming up here toward the aortic area the murmurs are very intense; the heart tones are feeble, largely obstructed by the murmur. The tones are heard in the neck, and the first has a murmur with it. Now this line running down here simply shows the area of propagation of the murmur. These murmurs are not heard behind.

Here is the man Craig, who has an aortic insufficiency somewhat different in its character. This man is fifty-two. He gives no history of articular rheumatism, but he does give a history of specific disease twenty-five years ago. His apex beat is displaced downward and outward. There is a little suggestion of a pre-systolic thrill about it. It is feeble, but it is present, and the apex beat is rather heaving; not so forcible as in the colored man. The area of the dullness is increased to the left of the nipple here and not much to the right. In the aortic area two dull or two distant booming tones accompanied each by a murmur, the systolic murmur passing upward into the neck, the diastolic murmur being transmitted downward along the sternum, and having with itnthe same peculiar tambour qhich I heard in the other. The murmurs are also heard at the apex beat here, both of them, whereas in the man with the aortic insufficiency they were not heard at the apex at all. This man's arteries are also stiff.

Now the points I want specially to bring out are these: That in the two younger men we probably have had a true inflammation or endocarditis as a cause of the lesion--an acute endocarditis in the one, with a predominating mitral sufficiency; a sub-acute endocarditis of a proliferative character in the man of twenty-five, with a predominating mitral stenosis. In these two men probably no endocarditis at all is responsible for the lesion. There is no history of anything to lead to endocarditis, for syphilis does not produce endocarditis, it produces chronic degenerative changes; and in these two men, both middle aged, the aortic disease can not strictly be called a

valvulitis. It is a part of the general degenerative process which is going on, the stiff arteries more or less, renal change probably, but the degeneration having affected chiefly the aortic of the heart. Now in these men these changes have developed slowly, and after a while through the aortic ring itself which has stretched as a result of the degenerative changes in the mycardium or in the aorta all the valves have become sclerotic, thickened, possibly perforated, which changes when examined miscroscopically are the changes of sclerosis and not inflammation, and slowly produced degenerative process which has led to some destruction of the valves and not to a true valvulitis or inflammation. Now we find two types of aortic insufficiency. One is mitral insufficiency. You find it in the young man usually who gives a distinct history of acute rheumatism. The other type is the sclerotic type, as illustrated in this man, and should be classed as a part of the arteriosclerosis that is coming on. It is a part of vascular change. The heart is as a matter of fact, you understand, only a portion of the vascular system which has undergone special development. It is born of the same changes that the vessel coats may undergo fundamentally, although from a morbid standpoint somewhat different; but they are degenerative changes, and when you run across aortic insufficiency even in elderly men, without a history of inflammatory rheumatism, examine carefully the arterial walls and investigate the history of the case, and you will usually be able to determine to your satisfaction that the disease is really but a part of the general degenerative process which is going on.

Within the last year or two I have seen two exceedingly instructive examples. Some twelve years ago an old college friend of mine called on me because of palpitation. I could find absolutely nothing the matter with that man except that he was smoking to excess, and I told him so, and that the condition was probably functional, as we say, and not organic disease at the bottom of it. And another man about the same time called on me also complaining greatly or palpitation. His habits were different. He was not a smoker.

He was suffering from more or less indigestion and constipation.

INTERNATIONAL MEDICAL ALLIANCE

--Chicago,Ill.,28 Thirty-third Place--

Tuesday, Dec. 19, 1905.

Dr. W.R. Simmons, Chairman.

Dr. J.H. Kellogg: I was glad to hear Brother Taylor mention the case that he referred to. The man came to the Sanitarium, was there only a few days. He was a worldly business man, without religious experience, and he heard the first sermon that Brother Taylor preached after he came to Battle Creek, when none of us were acquainted with Brother Taylor. I don't know why he came. We didn't ask him to come until we found he was looking our way. He said the way was open, and he felt the Lord was calling him to come to Battle Creek if there was a place for him. We didn't capture him by any sort of intrigue. In fact, when he proposed to come I was very much surprised, because I thought Battle Creek would be the very last place that Brother Taylor in particular would want to come to. But when he came we were very glad to find he had a message from the Lord for us, for our patients, for our helpers; and the first assurance I had was when Brother Judd came to me the next Monday following this Sabbath and said the man came to the office to settle his bills that morning and paid $50. He remarked that seemed a pretty good sized bill for ten days, but the man said "I am perfectly satisfied with this bill. The sermon I heard Sabbath morning is worth $50 and a great deal more to me:" and it was very encouraging to me to see that he was writing Brother Taylor that it was not simply an impression, but that it stayed with him. What an opportunity we have in our sanitariums for just that sort of work. Every patient that comes to us the Lord has brought,

the Lord is taking care of everybody.

I want to tell you it is a great comfort to me these days to know that there is One who rules the universe and who does not forget any of us. He is looking after us all. He cares for the little insect, cares for every sparrow, and He certainly has not forgotten any of us, and that is the great hope for us all. I want to tell you that these are days when I feel that we need to do very close heart-searching; and I am trying to do that. I have just been in Mexico and had an opportunity to have a little vacation. I have been out riding horseback among the mountains, and I improved my opportunity. I was alone most of the time riding by myself. The next horseman was some ways ahead or some distance behind, so I had abundant opportunity to have, and I had a real good time with the Lord, and I came home feeling strengthened. I don't know that my faith is strengthened, for I don't know that it has wavered. I got my feet planted on the firm foundation a good many years ago. When I began to work down here in Chicago thirteen years ago I had such experiences as satisfied me--many experiences right here in this place--that satisfied me that the Lord is right at hand, and is not far off, and he is willing to help us, poor miserable, weak and unworthy instruments, as I am. The Lord is willing to work for us, and I know the Lord helps us, and know he hears our prayers, know he helps me.

I might tell you a little incident that occurred last operating day that impressed me very much. I had two patients which I expected to operate on. I went up to the operating room very much distressed. The class and the doctors were all waiting, and a doubt came into my mind as to whether I ought to operate on either one of them--a serious doubt. I found a reason why I could not operate on one of them, and when I came to see the other one, the case of fibroid tumor, and we prayed, as we always do, to the Lord as to whether we should remove this fibroid tumor or be satisfied simply with a curetting. I want to say to you that my religion, what I have, enters

into everything I do; and if I could not bring it into my work I din't know what I could do, for I do not feel competent to deal with many cases that come along. Here was a case of fibroid tumor. The question was whether we should operate or not--do hysterectomy or something else. I decided, without knowing just why, that we would give the lady laughing gas and do curetting, and would not do the hysterectomy; would not give chloroform. When we came to do the operation we found there was really no occasion for doing hysterectomy at all. There was abundant reason for all the conditions that existed. There was reason why we should not do the operation we started out to do. I feel certain that as doctors we need to be in close enough touch with the Lord so that He may lead us and guide us in all the difficult things we do. We are walking in the dark. There are hidden things we don't know anything at all about. There are obscure heart troubles and nervous conditions, a great variety of conditions that we can never see, can not find out in the diagnosis, that the Lord knows all about. And if we can keep ourselves in close touch with the Lord, the Lord will help us in these things.

I am glad to come down here and spend a few days with you. Many of you are having new, bright, original experiences, and I am glad to come to a time when you can sit down in this way and study and learn, compare notes and experiences, and that we may cultivate the fraternity which I am sure exists among us as much as among any other people in the world, and perhaps more earnestly and intensely. For myself, I feel very thankful for the kindly feeling that exists among all our medical workers. I know there is a genial brotherly and sisterly feeling among our medical workers everywhere, and I am glad to be one of them.

My friends, I take great pleasure in introducing to you Dr. Babcock, of Chicago, whose name is familiar to all of you. Dr. Babcock I feel I may introduce to you as our friend, for he has kindly consented to come and give

you a clinical lecture without compensation as a courtesy to us, and I assure you we appreciate it exceedingly. I know we shall all be profited very greatly by what we shall hear.

(Loud applause)

Dr. Robert H. Babcock: Ladies and gentlemen: I am very happy to be here in this capacity this morning, and I only trust that what little I shall say will be of profit, and that you will feel repaid.

I have been favored with four cases this morning to present to you, which illustrate, or which may be used to illustrate some very practical points in diagnosis and prognosis in the treatment of cardiac disease. I feel that heart disease is one of the most difficult in many respects for the students and practitioners of medicine to master, to compass, and inasmuch as you are all practioners of medicine, I assume, it seems to me perhaps I can make the most of the material at hand if I tell you just what the cases are and bring out points of contrast between the cases in reference to the causation, symptoms, and physical signs, etc.

Now I have here four men. Two are cases of mitral disease, two are cases of aortic disease. The two cases of mitral disease are in young men, one of whom gives a distinct history ot articular rheumatism. The other, a man of twenty-five, gives no history of articular rheumatism, nor indeed of any illness prior to the present trouble for which he entered the County Hospital. The older of these two tells,me, in fact, that he was working in the tunnel as a laborer up to four months ago, doing arduous manual work, digging in fact. The other two men are older men. The colored man is 42 and the other 52, and they give each a different history, which we will consider when the time comes.

This young man gives a history of articular rheumatism, and that you know is the most frequent of the etiological factors in the production of endocardial lesions. The changes which have been produced are very easily received in this young man. The apex beat is situated here. It is a strong

beat abroad. There is a short presystolic murmur. The area of the cardiac dullness has been very clearly outlines, lies to the left of the nipple, as shown by this line, and runs out here to the right of the sturnum, as shown by a perpendicular line. On osculation there is heard a very loud blowing systolic murmur, which perhaps fully replaced the first sound, nearly replaces the first sound, and is preceded by a very shory rougher lowered pitched murmur. The second tone is dull and distant. The other tones, the other heart sounds are what we might expect. The heart's action is regular. This murmur is heard behind. Now ~~thm~~ you know that the changes which the heart has undergone are of a compensatory nature, hypertrophy and dilatation. The others as shown by opposite character of the apex beat and the extent of the dullness to the left of the nipple, considerably hyperthophy and dilatation of the left ventricle. But the chief enlargement of the heart is to the right. The blood vessels are entirely soft in this young man. There is lack of sclerosis.

This man Welch is twenty-five, and this is the young man who said he was doing hard work up to four months ago. Considering the condition of the heart here it is almost incredible to me. His pulse is anything but regular or easy. It is a much less even pulse--more quiet just now, but under a little excitement it is very irregular and very rapid. His apex beat is situated there where we made a cross. There is a very distinct thrill. The thrill is a real purr, a cat's purr, and it runs up to a rather abrupt apex shock. Cardiac dullness is increased also to the left here and increased to the right. On osculation there is a very loud pre-systolic murmur which runs up the first sound. The sounds are occasionally stopped and there is occasionally a suggestion of a murmur following the second tone. Now on percussion here the area of absent dullness is increased here across to the right border of the sternum, increased not to the left or upward. Deep-seated dullness is increased as shown by the lines we have marked, and

dullness is ~~xxxxxx~~ somewhat increased to the left, passes outside the nipple, but not far. Behind the murmur is not distinct, as it was in the first case. It is faintly heard. The first sound is heard behind more dinstinctly than the murmur.

Now these two cases illustrate mitral disease, and illustrate one form of mitral regurgitation; that is, the first case does; and the second illustrates mitral stenosis predominating, although there probably is some regurgigation after. The mitral insufficiency in the young man is of distinct rheumatic origin. In this man we have no history of anything explaining the production of this mitral disease. Now it is not at all uncommon in eliciting the history of patients, that you will find a patient who shows mitral insufficiency, whether in the male or female, who will give you a distinct history of rheumatism, and usually of an acute attack, one or more acute attacks, whereas the patient, most commonly female of course, who displays predominating mitral stenosis, or pure mitral stenosis, will give you no history of rheumatism at all; and it has led to a good deal of discussion as to the etiology of ~~xxxxxx~~ mitral stenosis. But the changes which take place are such as we would expect from a slowly induced and slowly progressing inflammation, a protection inflammation rather than a destruction inflammation of the changes at the mitral orifice in mitral stenosis are thus sclerosed, increase production of connective tissue, which produces a welding together in such a way as to narrow the orifice.

In the absence of definite history of previous acute infection in this young man, and finding the predominating mitral stenosis, I am forced to believe that the disease has been produced slowly, developed slowly, and without any knowledge on his part. Now it is singular that in this case he was able to work as arduously up to about two months ago as he did, because mitral stenosis is the disease par excellence which produces shortness of breath. It simply illustrates in my opinion that shortness of breath in

cardiac disease is not to be attributed solely or always mainly to the cardiac lesion itself. You will find patients with very pronounced mitral stenosis who will not acknowledge shortness of breath, or at least very insignificant to some other symptom, has decided palpitation, weakness, and so on. It is probable therefore that although pulmonary stenosis, congestion within the pulmonary vessels, is a factor in the production of dyspnea of effort, it does so not because of the stasis alone, but because the stasis leads to a regidity on the part of the lungs. Chronic congestion of the lungs leads to a condition of more or less inelasticity, and if that rigidity is very pronounced in a patient, he will complain of shortness of breath. There is no question about it. You see all proposed symptoms and the objective signs of his heart lesion. In other cases, as I have just said, like this young man with a very pronounced lesion, they are able to stand more effort than we would expect. The effect of effort, however, is disasterous, because if an opening, as the left or right ventricle opening is narrowed, and the patient performs arduous physical efforts, such as are calculated to send the blood rushing to the more more rapidly and in larger amounts than the heart can take care of and send forward through this narrowed opening, I say if such things occur, the time will surely come when the heart will break down in its compensation. And a break occurs in the right heart, because it is the right heart which has to do the work,--the left oracle or right heart; in other words the parts of the heart back of the opening.

Now the young man with mitral insufficiency, when he entered this the Hospital, entered because of a fresh rheumatic attack. This other man entered the hospital because of a left side pain which was considered pleuratic. Now it may have been a true pleurisy, I can not say. There is no evidence of it today. But if it were pleurisy it is very suggestive of an infarct. Gerhardt has remarked that if pleurisy occurs in course of valvular disease it is usually due to an infarct. Now the action of this heart is tumultuous,

so it might readily be that under the influence of fresh infection xkkxkx it has set up sub-acute intercarditis, a coagulum had been loosened, or that the stasis within the right heart had loosened a portion of a thrombus, and a pulmonary infarct had occurred with the production of pleurisy. However, inasmuch as he was not and I know that at Cook County Hospital the interns asperate almost every case of pseuritic effusion which is at all extensive, he suggests to my mind that perhaps his pain was not pleuritic at all, but perhaps xhaxxafxxx one of an intercostal neuralgias which are so common in cardiopathy, especially mitral disease.

Before I go on speaking further of these cases I want to demonstrate to you these other two cases. Then we will draw some contrasts. Here is a man of 44. Gives no history of articular rheumatism at all, but gives a history of specific disease of Chenore. Under the distension of the superficial veins the apex beat is felt in this portion, and when it is exaggerated you can feel it away down in the sixth space, away outside of the nipple. The lesion here to the left shows the enormous increase of cardiac dullness to the left, whereas the lesion close to the sternum off here shows very little increase to the right. No stasis of the liver at all. The inspection also shows, and very markedly now, because he has quieted down, the carotids and all pulsating strongly, and on examination of the pulse I find a very regular pulse, which strikes the finger with moderate abruptness. Falls here a little too quickly, but it is not distinctly a collapsing pulse, at least it would not impress you when you took hold of it as a collapsing pulse. When he raises his left arm above his heart the collapsing quality comes out a little better. The radial arteries roll under the finger. This one rolls under the finger, it is stiff. Now on oscultation of this man the heart tones are heard plainly at the apex. There is no thrill there, but I am conscious of a strange heaving impulse, and the second tone is a rather dull booming character. But going over toward the sternum I at once hear a dull first tone, which has a little short murmur with it, a very peculiar diastolic

murmur, so characteristic that anybody would recognize it at once as the aortic, and coming up here toward the aortic area the murmurs are very intense; the heart tones are feeble, largely obstructed by the murmur. The tones are heard in the neck, and the first has a murmur with it. Now this line running down here simply shows the area of propagation of the murmur. These murmurs are not heard behind.

Here is the man Craig, who has an aortic insufficiency somewhat different in its character. This man is fifty-two. He gives no history of articular rheumatism, but he does give a history of specific disease twenty-five years ago. His apex beat is displaced downward and outward. There is a little suggestion of a pre-systolic thrill about it. It is feeble, but it is present, and the apex beat is rather heaving; not so forcible as in the colored man. The area of the dullness is increased to the left of the nipple here and not much to the right. In the aortic area two dull or two distant booming tones accompanied each by a murmur, the systolic murmur passing upward into the neck, the diastolic murmur being transmitted downward along the sternum, and having with itnthe same peculiar tambour which I heard in the other. The murmurs are also heard at the apex beat here, both of them, whereas in the man with the aortic insufficiency they were not heard at the apex at all. This man's arteries are also stiff.

Now the points I want specially to bring out are these: That in the two younger men we probably have had a true inflammation or endocarditis as a cause of the lesion--an acute endocarditis in the one, with a predominating mitral sufficiency; a sub-acute endocarditis of a proliferative character in the man of twenty-five, with a predominating mitral stenosis. In these two men probably no endocarditis at all is responsible for the lesion. There is no history of anything to lead to endocarditis, for syphilis does not produce endocarditis, it produces chronic degenerative changes; and in these two men, both middle aged, the aortic disease can not strictly be called a

valvulitis. It is a part of the general degenerative process which is going on, the stiff arteries more or less, renal change probably, but the degeneration having affected chiefly the aortic of the heart. Now in these men these changes have developed slowly, and after a while through the aortic ring itself which has stretched as a result of the degenerative changes in the mycardium or in the aorta all the valves have become sclerotic, thickened, possibly perforated, which changes when examined miscroscopically are the changes of sclerosis and not inflammation, and slowly produced degenerative process which has led to some destruction of the valves and not to a true valvulitis or inflammation. Now we find two types of aortic insufficiency. One is mitral insufficiency. You find it in the young man usually who gives a distinct history of acute rheumatism. The other type is the sclerotic type, as illustrated in this man, and should be classed as a part of the arteriosclerosis that is coming on. It is a part of vascular change. The heart is as a matter of fact, you understand, only a portion of the vascular system which has undergone special development. It is born of the same changes that the vessel coats may undergo fundamentally, although from a morbid standpoint somewhat different; but they are degenerative changes, and when you run across aortic insufficiency even in elderly men, without a history of inflammatory rheumatism, examine carefully the arterial walls and investigate the history of the case, and you will usually be able to determine to your satisfaction that the disease is really but a part of the general degenerative process which is going on.

Within the last year or two I have seen two exceedingly instructive examples. Some twelve years ago an old college friend of mine called on me because of palpitation. I could find absolutely nothing the matter with that man except that he was smoking to excess, and I told him so, and that the condition was probably functional, as we say, and not organic disease at the bottom of it. And another man about the same time called on me also complaining greatly or palpitation. His habits were different. He was not a smoker.

He was suffering from more or less indigestion and constipation.

INTERNATIONAL MEDICAL ALLIANCE

--Chicago,Ill.,28 Thirty-third Place--

Tuesday, Dec. 19, 1905.

Dr. W.R. Simmons, Chairman.

Dr. J.H. Kellogg: I was glad to hear Brother Taylor mention the case that he referred to. The man came to the Sanitarium, was there only a few days. He was a worldly business man, without religious experience, and he heard the first sermon that Brother Taylor preached after he came to Battle Creek, when none of us were acquainted with Brother Taylor. I don't know why he came. We didn't ask him to come until we found he was looking our way. He said the way was open, and he felt the Lord was calling him to come to Battle Creek if there was a place for him. We didn't capture him by any sort of intrigue. In fact, when he proposed to come I was very much surprised, because I thought Battle Creek would be the very last place that Brother Taylor in particular would want to come to. But when he came we were very glad to find he had a message from the Lord for us, for our patients, for our helpers; and the first assurance I had was when Brother Judd came to me the next Monday following this Sabbath and said the man came to the office to settle his bills that morning and paid $50. He remarked that seemed a pretty good sized bill for ten days, but the man said "I am perfectly satisfied with this bill. The sermon I heard Sabbath morning is worth $50 and a great deal more to me:" and it was very encouraging to me to see that he was writing Brother Taylor that it was not simply an impression, but that it stayed with him. What an opportunity we have in our sanitariums for just that sort of work. Every patient that comes to us the Lord has brought,

the Lord is taking care of everybody.

I want to tell you it is a great comfort to me these days to know that there is One who rules the universe and who does not forget any of us. He is looking after us all. He cares for the little insect, cares for every sparrow, and He certainly has not forgotten any of us, and that is the great hope for us all. I want to tell you that these are days when I feel that we need to do very close heart-searching; and I am trying to do that. I have just been in Mexico and had an opportunity to have a little vacation. I have been out riding horseback among the mountains, and I improved my opportunity. I was alone most of the time riding by myself. The next horseman was some ways ahead or some distance behind, so I had abundant opportunity to have, and I had a real good time with the Lord, and I came home feeling strengthened. I don't know that my faith is strengthened, for I don't know that it has wavered. I got my feet planted on the firm foundation a good many years ago. When I began to work down here in Chicago thirteen years ago I had such experiences as satisfied me--many experiences right here in this place--that satisfied me that the Lord is right at hand, and is not far off, and he is willing to help us, poor miserable, weak and unworthy instruments, as I am. The Lord is willing to work for us, and I know the Lord helps us, and know he hears our prayers, know he helps me.

I might tell you a little incident that occurred last operating day that impressed me very much. I had two patients which I expected to operate on. I went up to the operating room very much distressed. The class and the doctors were all waiting, and a doubt came into my mind as to whether I ought to operate on either one of them--a serious doubt. I found a reason why I could not operate on one of them, and when I came to see the other one, the case of fibroid tumor, and we prayed, as we always do, to the Lord as to whether we should remove this fibroid tumor or be satisfied simply with a curetting. I want to say to you that my religion, what I have, enters

into everything I do; and if I could not bring it into my work I din't know what I could do, for I do not feel competent to deal with many cases that come along. Here was a case of fibroid tumor. The question was whether we should operate or not--do hysterectomy or something else. I decided, without knowing just why, that we would give the lady laughing gas and do curetting, and would not do the hysterectomy; would not give chloroform. When we came to do the operation we found there was really no occasion for doing hysterectomy at all. There was abundant reason for all the conditions that existed. There was reason why we should not do the operation we started out to do. I feel certain that as doctors we need to be in close enough touch with the Lord so that He may lead us and guide us in all the difficult things we do. We are walking in the dark. There are hidden things we don't know anything at all about. There are obscure heart troubles and nervous conditions, a great variety of conditions that we can never see, can not find out in the diagnosis, that the Lord knows all about. And if we can keep ourselves in close touch with the Lord, the Lord will help us in these things.

I am glad to come down here and spend a few days with you. Many of you are having new, bright, original experiences, and I am glad to come to a time when you can sit down in this way and study and learn, compare notes and experiences, and that we may cultivate the fraternity which I am sure exists among us as much as among any other people in the world, and perhaps more earnestly and intensely. For myself, I feel very thankful for the kindly feeling that exists among all our medical workers. I know there is a genial brotherly and sisterly feeling among our medical workers everywhere, and I am glad to be one of them.

My friends, I take great pleasure in introducing to you Dr. Babcock, of Chicago, whose name is familiar to all of you. Dr. Babcock I feel I may introduce to you as our friend, for he has kindly consented to come and give

you a clinical lecture without compensation as a courtesy to us, and I assure you we appreciate it exceedingly. I know we shall all be profited very greatly by what we shall hear.

(Loud applause)

Dr. Robert H. Babcock: Ladies and gentlemen: I am very happy to be here in this capacity this morning, and I only trust that what little I shall say will be of profit, and that you will feel repaid.

I have been favored with four cases this morning to present to you, which illustrate, or which may be used to illustrate some very practical points in diagnosis and prognosis in the treatment of cardiac disease. I feel that heart disease is one of the most difficult in many respects for the students and practitioners of medicine to master, to compass, and inasmuch as you are all practioners of medicine, I assume, it seems to me perhaps I can make the most of the material at hand if I tell you just what the cases are and bring out points of contrast between the cases in reference to the causation, symptoms, and physical signs, etc.

Now I have here four men. Two are cases of mitral disease, two are cases of aortic disease. The two cases of mitral disease are in young men, one of whom gives a distinct history ot articular rheumatism. The other, a man of twenty-five, gives no history of articular rheumatism, nor indeed of any illness prior to the present trouble for which he entered the County Hospital. The older of these two tells,me, in fact, that he was working in the tunnel as a laborer up to four months ago, doing arduous manual work, digging in fact. The other two men are older men. The colored man is 42 and the other 52, and they give each a different history, which we will consider when the time comes.

This young man gives a history of articular rheumatism, and that you know is the most frequent of the etiological factors in the production of endocardial lesions. The changes which have been produced are very easily received in this young man. The apex beat is situated here. It is a strong

beat abroad. There is a short presystolic murmur. The area of the cardiac dullness has been very clearly outlines, lies to the left of the nipple, as shown by this line, and runs out here to the right of the sturnum, as shown by a perpendicular line. On osculation there is heard a very loud blowing systolic murmur, which perhaps fully replaced the first sound, nearly replaces the first sound, and is preceded by a very shory rougher lowered pitched murmur. The second tone is dull and distant. The other tones, the other heart sounds are what we might expect. The heart's action is regular. This murmur is heard behind. Now ~~thm~~ you know that the changes which the heart has undergone are of a compensatory nature, hypertrophy and dilatation. The others as shown by opposite character of the apex beat and the extent of the dullness to the left of the nipple, considerably hyperthophy and dilatation of the left ventricle. But the chief enlargement of the heart is to the right. The blood vessels are entirely soft in this young man. There is lack of sclerosis.

This man Welch is twenty-five, and this is the young man who said he was doing hard work up to four months ago. Considering the condition of the heart here it is almost incredible to me. His pulse is anything but regular or easy. It is a much less even pulse--more quiet just now, but under a little excitement it is very irregular and very rapid. His apex beat is situated there where we made a cross. There is a very distinct thrill. The thrill is a real purr, a cat's purr, and it runs up to a rather abrupt apex shock. Cardiac dullness is increased also to the left here and increased to the right. On osculation there is a very loud pre-systolic murmur which runs up the first sound. The sounds are occasionally stopped and there is occasionally a suggestion of a murmur following the second tone. Now on percussion here the area of absent dullness is increased here across to the right border of the sternum, increased not to the left or upward. Deep-seated dullness is increased as shown by the lines we have marked, and

dullness is xxxxhx somewhat increased to the left, passes outside the nipple, but not far. Behind the murmur is not distinct, as it was in the first case. It is faintly heard. The first sound is heard behind more dinstinctly than the murmur.

Now these two cases illustrate mitral disease, and illustrate one form of mitral regurgitation; that is, the first case does; and the second illustrates mitral stenosis predominating, although there probably is some regurgigation after. The mitral insufficiency in the young man is of distinct rheumatic origin. In this man we have no history of anything explaining the production of this mitral disease. Now it is not at all uncommon in eliciting the history of patients, that you will find a patient who shows mitral insufficiency, whether in the male or female, who will give you a distinct history of rheumatism, and usually of an acute attack, one or more acute attacks, whereas the patient, most commonly female of course, who displays predominating mitral stenosis, or pure mitral stenosis, will give you no history of rheumatism at all; and it has led to a good deal of discussion as to the etiology of mxxxxxx mitral stenosis. But the changes which take place are such as we would expect from a slowly induced and slowly progressing inflammation, a protection inflammation rather than a destruction inflammation of the changes at the mitral orifice in mitral stenosis are thus sclerosed, increase production of connective tissue, which produces a welding together in such a way as to narrow the orifice.

In the absence of definite history of previous acute infection in this young man, and finding the predominating mitral stenosis, I am forced to believe that the disease has been produced slowly, developed slowly, and without any knowledge on his part. Now it is singular that in this case he was able to work as arduously up to about two months ago as he did, because mitral stenosis is the disease par excellence which produces shortness of breath. It simply illustrates in my opinion that shortness of breath in

cardiac disease is not to be attributed solely or always mainly to the cardiac lesion itself. You will find patients with very pronounced mitral stenosis who will not acknowledge shortness of breath, or at least very insignificant to some other symptom, has decided palpitation, weakness, and so on. It is probable therefore that although pulmonary stenosis, congestion within the pulmonary vessels, is a factor in the production of dyspnea of effort, it does so not because of the stasis alone, but because the stasis leads to a regidity on the part of the lungs. Chronic congestion of the lungs leads to a condition of more or less inelasticity, and if that rigidity is very pronounced in a patient, he will complain of shortness of breath. There is no question about it. You see all proposed symptoms and the objective signs of his heart lesion. In other cases, as I have just said, like this young man with a very pronounced lesion, they are able to stand more effort than we would expect. The effect of effort, however, is disasterous, because if an opening, as the left or right ventricle opening is narrowed, and the patient performs arduous physical efforts, such as are calculated to send the blood rushing to the more more rapidly and in larger amounts than the heart can take care of and send forward through this narrowed opening, I say if such things occur, the time will surely come when the heart will break down in its compensation. And a break occurs in the right heart, because it is the right heart which has to do the work,--the left oracle or right heart; in other words the parts of the heart back of the opening.

Now the young man with mitral insufficiency, when he entered this the Hospital, entered because of a fresh rheumatic attack. This other man entered the hospital because of a left side pain which was considered pleuratic. Now it may have been a true pleurisy, I can not say. There is no evidence of it today. But if it were pleurisy it is very suggestive of an infarct. Gerhardt has remarked that if pleurisy occurs in course of valvular disease it is usually due to an infarct. Now the action of this heart is tumultuous,

so it might readily be that under the influence of fresh infection xhixdx it has set up sub-acute intercarditis, a coagulum had been loosened, or that the stasis within the right heart had loosened a portion of a thrombus, and a pulmonary infarct had occurred with the production of pleurisy. However, inasmuch as he was not and I know that at Cook County Hospital the interns asperate almost every case of pleuritic effusion which is at all extensive, he suggests to my mind that perhaps his pain was not pleuritic at all, but perhaps xhxtxaxxxx one of an intercostal neuralgias which are so common in cardiopathy, especially mitral disease.

Before I go on speaking further of these cases I want to demonstrate to you these other two cases. Then we will draw some contrasts. Here is a man of 44. Gives no history of articular rheumatism at all, but gives a history of specific disease of Chenore. Under the distension of the superficial veins the apex beat is felt in this portion, and when it is exaggerated you can feel it away down in the sixth space, away outside of the nipple. The lesion here to the left shows the enormous increase of cardiac dullness to the left, whereas the lesion close to the sternum off here shows very little increase to the right. No stasis of the liver at all. The inspection also shows, and very markedly now, because he has quieted down, the carotids and all pulsating strongly, and on examination of the pulse I find a very regular pulse, which strikes the finger with moderate abruptness. Falls here a little too quickly, but it is not distinctly a collapsing pulse, at least it would not impress you when you took hold of it as a collapsing pulse. When he raises his left arm above his heart the collapsing quality comes out a little better. The radial arteryes roll under the finger. This one rolls under the finger, it is stiff. Now on oscultation of this man the heart tones are heard plainly at the apex. There is no thrill there, but I am conscious of a strange heaving impulse, and the second tone is a rather dull booming character. But going over toward the sternum I at once hear a dull first tone, which has a little short murmur with it, a very peculiar diastolic

murmur, so characteristic that anybody would recognize it at once as the aortic, and coming up here toward the aortic area the murmurs are very intense; the heart tones are feeble, largely obstructed by the murmur. The tones are heard in the neck, and the first has a murmur with it. Now this line running down here simply shows the area of propagation of the murmur. These murmurs are not heard behind.

Here is the man Craig, who has an aortic insufficiency somewhat different in its character. This man is fifty-two. He gives no history of articular rheumatism, but he does give a history of specific disease twenty-five years ago. His apex beat is displaced downward and outward. There is a little suggestion of a pre-systolic thrill about it. It is feeble, but it is present, and the apex beat is rather heaving; not so forcible as in the colored man. The area of the dullness is increased to the left of the nipple here and not much to the right. In the aortic area two dull or two distant booming tones accompanied each by a murmur, the systolic murmur passing upward into the neck, the diastolic murmur being transmitted downward along the sternum, and having with itnthe same peculiar tambour phich I heard in the other. The murmurs are also heard at the apex beat here, both of them, whereas in the man with the aortic insufficiency they were not heard at the apex at all. This man's arteries are also stiff.

Now the points I want specially to bring out are these: That in the two younger men we probably have had a true inflammation or endocarditis as a cause of the lesion--an acute endocarditis in the one, with a predominating mitral sufficiency; a sub-acute endocarditis of a proliferative character in the man of twenty-five, with a predominating mitral stenosis. In these two men probably no endocarditis at all is responsible for the lesion. There is no history of anything to lead to endocarditis, for syphilis does not produce endocarditis, it produces chronic degenerative changes; and in these two men, both middle aged, the aortic disease can not strictly be called a

valvulitis. It is a part of the general degenerative process which is going on, the stiff arteries more or less, renal change probably, but the degeneration having affected chiefly the aortic of the heart. Now in these men these changes have developed slowly, and after a while through the aortic ring itself which has stretched as a result of the degenerative changes in the mycardium or in the aorta all the valves have become sclerotic, thickened, possibly perforated, which changes when examined miscroscopically are the changes of sclerosis and not inflammation, and slowly produced degenerative process which has led to some destruction of the valves and not to a true valvulitis or inflammation. Now we find two types of aortic insufficiency. One is mitral insufficiency. You find it in the young man usually who gives a distinct history of acute rheumatism. The other type is the sclerotic type, as illustrated in this man, and should be classed as a part of the arteriosclerosis that is coming on. It is a part of vascular change. The heart is as a matter of fact, you understand, only a portion of the vascular system which has undergone special development. It is born of the same changes that the vessel coats may undergo fundamentally, although from a morbid standpoint somewhat different; but they are degenerative changes, and when you run across aortic insufficiency even in elderly men, without a history of inflammatory rheumatism, examine carefully the arterial walls and investigate the history of the case, and you will usually be able to determine to your satisfaction that the disease is really but a part of the general degenerative process which is going on.

Within the last year or two I have seen two exceedingly instructive examples. Some twelve years ago an old college friend of mine called on me because of palpitation. I could find absolutely nothing the matter with that man except that he was smoking to excess, and I told him so, and that the condition was probably functional, as we say, and not organic disease at the bottom of it. And another man about the same time called on me also complaining greatly or palpitation. His habits were different. He was not a smoker.

He was suffering from more or less indigestion and constipation.

valvulitis. It is a part of the general degenerative process which is going on, the stiff arteries more or less, renal change probably, but the degeneration having affected chiefly the aortic of the heart. Now in these men these changes have developed slowly, and after a while through the aortic ring itself which has stretched as a result of the degenerative changes in the mycardium or in the aorta all the valves have become sclerotic, thickened, possibly perforated, which changes when examined miscroscopically are the changes of sclerosis and not inflammation, and slowly produced degenerative process which has led to some destruction of the valves and not to a true valvulitis or inflammation. Now we find two types of aortic insufficiency. One is mitral insufficiency. You find it in the young man usually who gives a distinct history of acute rheumatism. The other type is the sclerotic type, as illustrated in this man, and should be classed as a part of the arteriosclerosis that is coming on. It is a part of vascular change. The heart is as a matter of fact, you understand, only a portion of the vascular system which has undergone special development. It is born of the same changes that the vessel coats may undergo fundamentally, although from a morbid standpoint somewhat different; but they are degenerative changes, and when you run across aortic insufficiency even in elderly men, without a history of inflammatory rheumatism, examine carefully the arterial walls and investigate the history of the case, and you will usually be able to determine to your satisfaction that the disease is really but a part of the general degenerative process which is going on.

Within the last year or two I have seen two exceedingly instructive examples. Some twelve years ago an old college friend of mine called on me because of palpitation. I could find absolutely nothing the matter with that man except that he was smoking to excess, and I told him so, and that the condition was probably functional, as we say, and not organic disease at the bottom of it. And another man about the same time called on me also complaining greatly or palpitation. His habits were different. He was not a smoker.

He was suffering from more or less indigestion and constipation.

614.6

THE ANNUAL SESSION

of the

International Medical Alliance

Sept. 17-20, 1907.

Battle Creek, Mich.

LABORATORY INSTRUCTION

The Clinical Laboratories of the Battle Creek Sanitarium and American Medical Missionary College will be open for any desiring personal instruction in the latest methods and technique. The physicians in charge, with their assistants will be glad to receive visitors, especially at the times indicated in the program. The forenoons will be devoted to this work.

MEDICAL SESSIONS

At 3:30 P.M. daily the regular Medical Sessions will convene in Room 17--College Building--Physicians, Medical Students and Nurses are invited to these Meetings.

MISSIONARY MEETINGS

Each evening at 7:30 a missionary meeting will be held in the Sanitarium Chapel. All members of the Sanitarium Family and the general public are invited to attend these rousing talks by such well known Missionaries.

Tuesday---Sept. 17, 1907.

2:30 P.M., Room 17 College Bldg.

1. David Paulson----------Intestinal Toxins

2. Dr. A. J. Read----------Food Adulteration

3. F. J. Otis----------Stricture of the Esophagus and the clinical dilation of the Caridac orifice. (Demonstration of a case)

4. M. A. Mortenson----------Differential Diagnosis between the continued Fever of Lues and Tuberculosis.

5. Elsie Martinson----------Diet and treatment of Typhoid Fever.

7:30 P.M.--Sanitarium Chapel.

Dr. Creegan, Secretary of American Board of Commissioners of Foreign Missions,

A trip around the World and the Missions Visited.

Wednesday Sept. 18, 1907.

11 A. M. to 1 P.M. College Laboratory.

Practical work in the Fecal Laboratory.

12 to 5 P.M., Sanitarium Surgery

Surgical Clinic. — Dr. Kellogg

7:30 P.M., Sanitarium Chapel.

Dr. Van Allen of India.

Dr. Forsythe of Louisville, Ky.

Dr. Margaret Lewis of India

Dr. Ingersoll of India.

Thursday— Sept. 19, 1907.

11 A.M. to 1 P.M. College Laboratory.

Practical work in the Gastric, Bacteriological and Blood Laboratories.

2:30 P.M. Room 17, College Building.

1. J. F. Morse----------Clinical report of three cases of Sarcoma, of Ileum, of Myelid (Melanotic) of Tibia.

2. M. V. Dryden----------Clinical report of a case, with demonstration.

3. Carrie Staines----------Pelvic Massage—with a review of cases.

4. Loiza Elwell----------Delivery and the Puerpsurium, with a practical demonstration.

5. Jean Whitney-Morse-----Clinical report of a case of Malignant Endocarditis with observations of opsonic index.

6. W. F. Martin----------Physiologic treatment of Vesiculitis.

7:30 P.M., Sanitarium Chapel.

Girard A. Bailey (Superintendent of the Christian Missionary Alliance)

West Indies.

Dr. Carolyn Geisel----------Review of the years Chautauqua Work.

Friday Sept. 20, 1907.

11 A.M. to 1 P.M. College Laboratory.

Practical Demonstrations in the Urinary Laboratory.

2:30 P.M., Room 17, College Building

1. W. H. Riley----------Clinical Report of Cases.

2. Howard Rand----------Arterio-sclerosis.

3. E. L. Eggleston--------Interstitial Nephritis; observations on the effect of various measures on the Urinary output.

4. E. D. Vince----------The care of the Teeth and its relation to other diseases.

5. J. F. Byington--------Question box on the Eye, Ear, Nose and Throat.

6. H. B. Farnsworth------Spotted fever of Western Montana.

7:30 P.M. Sanitarium Chapel.

Mr. Marshall Hudson, Syracuse, N.Y. (originator of the Baraca Bible Study plan)

610.6

Frank Van Allen, M. D.,

Lecture at the Sanitarium Chapel, Battle Creek, Mich., September 19, 1907., at 8:00 P. M., in connection with the meeting of the International Medical Alliance.

Dr. C. C. Creegan: I count it a very great pleasure tonight to speak a brief word in introducing my friend, Dr. Van Allen, who has been one of the highly honored and greatly beloved missionaries of the Board which I represent, for eighteen long years in southern India. A graduate of Yale University, with promises of great usefulness indeed in the home land, having the missionary spirit, he responded to a call from our Board to go forth to that needy field, and under that burning sky of Southern India. In my tour around the world, if I envied any man, it was this man who claims that he is not an orator at all. Perhaps he is not; but when I heard the eloquent words that were spoken by his colleagues in regard to what he is doing there, how he had more than any other living man broken down prejudice on the part of the proud Brahmins and Hindoos, and that he had access into the homes of princes and governors and all alike; and when I saw the beautiful building which I threw on the screen last night, that splendid hospital building, the prettiest hospital building it was my pleasure to see in allIndia, perhaps, though perhaps not the largest; and you will remember I told you last night that was built not by contributions from America, no dollar of it coming from any church or any individual in this country, but it was the gift of the Hindoos, practically all of them non-christians, given to this man who was loved by them, honored by them, who had rendered so much service to them, to their race, and it was turned over to the American Board which I represent without a dollar of expense, so as to be ours for ever simply because of the services this man rendered to those people, labors of love. When I learned of that and went through his hospital and saw his work there, I felt I ought to have

carried out my original plan of my student days when I commenced the study of medicine myself but turned ~~inxa~~ aside ~~inxa~~ for theology,--I felt I ought to have carried out my original plan to prepare myself for medical work so that I could have had the highest honor to be conferred upon any servant of Christ, to my mind--to be a medical missionary, to go forth to the land of China, of India and give myself to the ministry of healing among those people, and while doing that do just what is being done in Dr. Van Allen's hospital every single day,--telling them about the great Physician, the One who heals the soulas well as the body. It gives me very great pleasure to introduce to you Dr. Van Allen.

Dr. Frank Van Allen: Eighteen years in the jungles of India plus never having been a public speaker any way is very poor preparation for addressing you, but if you will be patient with me, I will try to stumble along for half an hour or so telling you about our medical missionary work in South India.

In 1834 the American Board established the Madura Mission in Madura, South India, and from the beginning of that mission the Board and the workers , doctor and all, have always believed in making the medical work prominent because it was following the footsteps of Christ, and we have always had a little dispensary building in Madura and a stock of medicines and some one to give them out. Very many years ago, from the very beginning of the establishment of the mission, a little dispensary building was used there. The medical work had an uphill time of it just the same as the other forms of mission work had, because the natives did not believe in the white man's medicine any more than they believe inthe other things the white man brought to them, but this dispensary building gradually had a little addition here and one there until in 1888 when we went there, this building was quite a patchwork of various buildings, and a good deal of medical work had been carried on in those years; and many were the lives saved and much the suffering relieved in the name of the Master.

We found there at that time when we went there, four men and a lady doctor, Dr. Pauline Root(?) whom very many here may know and a good many at least know of. She had been there then about four years, and she was just then scraping together some money to put up a hospital for women and children. That is standing on the Mission compound now, just opposite where the little old dispensary was. She is not now in India and has not been for some years, but I am located there with Dr. Parker, our lady doctor who is now in charge of that hospital, and she treats annually about 15,000 or 16,000 ~~women~~ patients. But I will not speak much of her work, but mostly of my own being better acquainted with it.

I labored on in this little patchwork of buildings doing the best I could for about eight years, or seven years, and in that little building made friends, of course, with some native people, and the work began to grow until the little building was so crowded it was not suitable, and I wrote to Bostonand said, "I must have a new hospital. They wrote back and said they were very sorry they hadn't any money, and we must do the best we could with what we had. When a church or anything really must go up, some way or other it does go up. By a lucky turn, the money was contributed by merchants in Southern India and from even as far away as New Zealand, Australia, Penang, Singapore and all those places. Those merchants are rich and they are very generous; and an number of native princes also took an interest in it, and the money was all given and this hospital was put up. It cost together with its equipment about 50,000 rupees, that is, $17,000; but that does not quite represent what the hospital would be to one who does not know India; because a day's labor in India costs from ~~three~~ eight to sixteen cents a day--four to eight annas, and when the material was gotten out with that labor and the hospital was built, my estimate is that it is a building which would cost in this country about $100,000.

To carry on the hospital work costs about Rs. 12,000 a year, and of

that the American Board gives Rs. 1000, and the natives give Rs. 11,000; and in addition to that we are getting up a little endowment, and we have Rs. 10,000 in the bank, and that is all given by the native people. That is just a brief history of the hospital as it stands now.

Perhaps I might go over a day's routine in the hospital in order that all can see just what naturally happens in a day's work in the hospital. I usually go to the hospital about quarter past or half past seven in the morning. Of course you know India is a very,very hot climate, and there is a great deal of travelling done in the night on account of the heat, and the result of it is that on the front verands of the hospital usually there are a lot of patients waiting, and as I approach the hospital, I always take particular pains to speak a few words to them, because I know they are suffering, and probably have been travelling a long ways to get there, so I have a few words with them first then go to the in-patients. We make a difference in our hospital with the in-patients and the out-patients. These out-patients come and get a little medicine, take it home, and come again the next day. The in-patients are those who are more critically ill, and they stay in the hospital day and night, and there they are all the time; and we feel that our first duty is to the in-patients. So, after a moment or two I go to the wards usually, and do dressings, etc., that are necessary, and when we are through downstairs we go upstairs, and by the time we are through with all the in-patients, about an hour or perhaps an hour and a half has elapsed. Then we go downstairs, go into a room we call the treatment room which is for dressings etc. for out-patients. We see many patients there, and do dressings and things that are rather hard work, but of course pleasant; and during this time the religious work has been carried on by a man, one of the native helpers who has given his whole time to teaching the Bible to the natives. After while I go out, and when I pass my evangelist, I just stop and inquire what he has been talking to the people about, and just by such words as I can, just

just such things as I can I try to enforce his words with the people, and we have religious teaching going on all the time,. And after the work with the out patients is done he goes to the in-patients; and so he works--spends his whole time that way.

After getting through with the treatment room, I usually go out and sit down at the prescription table, and write prescriptions for those who have not been attended to. I have one man, a medically qualified man who is a graduate of the government medical college, and a very good man he is, and a man of very good experience; and while we have been doing this work all around, he has been treating a good many out patients. Then I sit down and treat such out-patients as might be serious cases or have come specially to see me. By that time it is about eleven o'clock, and breakfast time. Then in the afternoon work begins about three o'clock and goes on until about six o'clock in the evening. By that time, of course, in the tropics it is dark. That constitutes a day's work. Of course mornings in the treatment room, we do a few minor operations; but when there is a major operation to be done, two o'clock in the afternoon is the time selected for it, because it is the hot part of the day and the people are all quiet, and there is nobody to be attended to, to be looked after, and we have time for doing the major operations

Now, in regard to eye operations, we do not do in the hospital very many eye operations; and nearly all the eye operations which we do are on the outside of the eye, on the cornea of the eye, and almost always include pterygium, or opening canaliculi, or something of that sort. I am so busy that I ~~have~~ am not able to keep up with the delicate work of operating on the eye. Another reason is that in Madras there is an excellent government eye hospital and a very good man in charge of it, and he does not do anything but operate on eyes all the time, and he told me one day of his record--it sounds rather big but I believe it,--he told me he had done fifty-one cataract operations in one morning.

That is a pretty large number of that particular operation, but it shows how wonderfully skillful he is; so I send al my eye cases down to him for operations on the eyes. I specially mention that in reply to a question asked yesterday in regard to it.

In regard to food for the patients: we used to have a great deal of trouble about feeding the patients because they are all different castes, and it is a very hard thing to feed a lot of people who are of different castes, because a man won't eat food which has not only been cooked by a person of a lower caste than he--it may be cooked by a person of higher caste,--but if anybody of a lower caste has even seen it; and we used to have a great deal of trouble about feeding the patients. We have simplified that very much, I think. There are those that are poor and have to be looked after, and of course the great mass of our people are quite poor. We give to each patient three annas, six cents a day, and with that he will go into the bazaar, or send his wife. The wife or daughter accompanies the patient usually, because then he is much more satisfied, and does not get so homesick, and usually his wife or his daughter takes this money and goes out into the bazaar, buys the necessary things, usually some form of rice, because of course you know the people of India are great grain eaters, and she goes there, prepares it in one of the numerous little kitchens which we have,--small places fitted up for their style of cooking; and if any one is not there to look after his food, like a wife or a daughter, to prepare his food, some of the compounders go out and get it in one of the numerous clubs. Madras is a town of about 100,000 people, and there are a good many clubs where people of different castes,--a Brahman club, and all sorts of clubs presided over bypeople of different castes, and the patient will have brought to him food prepared in a club, and the natives are very, very good about taking their diet prescription. If you are looking after a native and do not prescribe diet, he will think you do not know your business; and he will stick most closely to whatever diet you prescribe,

and that is very largely because the native doctors have brought him up that way. They are very, very strict about diet. So almost all the trouble we have or might have about diet is settled by that three annas a day. Of course, in typhoid fever and cases of that sort where a pure diet of milk is necessary, it costs rather more, and we simply make a special case of that; but we do not have very much trouble about diet. I mention that in answer to a question that was asked yesterday in regard to feeding patients.

In regard to fees, we do not charge in our hospital, and I think it is an ideal thing to do in medical mission work. We do not charge any fees at all. We do not have any scale of charges, and the great mass of patients who come to us are so poor it would be perfectly silly to talk about charging them anything; but fortunately we have some rich people, and it is a custom in India, as it is here, that the rich pay for the poor; and always when a patient is leaving the hospital, if I believe--of course it is very easy to know whether a man is rich or poor,--I say, "Do you want to give something to the hospital?" Of course he may say, "I am a poor man, and I can not do it", and I do not say another word. But if I have not made a mistake, he will say, "Yes, I want to give something", and he will give Rs. 10, or Rs. 50, sometimes give very large sums; but whatever they give we take it and take it thankfully, and the amount which they give is enough practically to carry on the hospital; but we do not charge any fees.

There is one thing I ought to mention because it is rather an important matter, I think, in the consideration of a hospital in tropical lands, especially in lands ridden by castes as we have it there; that is, this hospital is arranged entirely or principally of in small wards giving each man a room to himself. If any of us were to go to a hospital to be treated, we would like to have a room by ourselves, and especially is that true in the case of a man who has belief in caste. We have twenty small wards in the hospital in addition, of course, to all the many rooms, and if we should give each man a ward and a bed to himself,

of course we could accommodate only twenty, but if we put two in a ward, we double that number, and so on up to sixty. But I do not like to put three in a room if we can help it; but sometimes if a man really objects to having a man of a different caste in his room, we can not object, and it sometimes makes a little trouble.

Now in regard to the diseases of India, you might be interested to hear a little something in regard to some of the diseases which we have to put up with, and to begin with, there are three diseases we do not have, and you will be very much astonished, and pleased when you know that in India--of course the People of South India only,--not of North India in the least, because I do not know anything about that. There are three diseases we do not have in South India--scarlet fever, diphtheria, and croup. Those are three grand diseases to be rid of, but in place of them are three other diseases we do have and which we have to contend with all the time. One of them is plague, another cholera, and the third leprosy. Perhaps you will be interested to hear a few words about these three diseases. Of course, these are awful big subjects and have to be treated very briefly. Plague is a disease of rats just exactly the same as hydrophobia is a disease of dogs, and if you kill off all the rats you will stop the plague, just as you will stop hydrophobia by killing off all the dogs; and the agency of transfer of plague from the rat to the human being is by means of infected fleas. That is, the flea will bite the rat, and of course the rat will get plague, and the plague stays on the rat, I presume, until it dies, and the rat comes to the human being and he gets plague because he is infected by the rat. That is the means of its transfer. This experiment has been done very many times, and many others like it, and it is very conclusive. In one experiment, six rats were caught, put into a flea-proof receptacle of some sort, and placed in a house where there had been deaths from plague, and six other healthy rats were put into an open cage placed beside them in the same house where there had been death from

plague. At the end of two weeks, all the rats which had been protected from fleas were healthy and well and the other six were dead from plague, which is a very good evidence of the fact that the unprotected rats were bitten by fleas. Now before this fact was known, you would be astonished to know what measures were taken by by the British government in India to stamp out the plage in the matter of pulling down buildings and burning up bedding, taking tiles off the roof, digging up floors, putting in carbolic lotion, bichlorid of mercury lotion, etc. They thought the germs were very, very deeply embedded in the ground, or at least that they inhabited the ground to considerable depth. Now it is known to be a matter as simple as this, that now we know the truth and see the reason for very many things that we did not know before. If you ~~ax~~ find a dead ~~rats~~ in the house, the first thing to do is to pack up and go as quick as you can go; and the worst thing you can do is to touch that rat with anything. The only thing to do to the dead rat is to pour alcohol or kerosene on the rat and touch a match to it. In India there are no floors made of wood, but they are all made of cement, etc; so it is a perfectly safe proceeding to burn up the rat as nearly as possible. But even before this fact was known, of the propagation of the plague by means of fleas,--everybody as soon as he sees a dead rat in his house,--he will get out at once, because he knows if he doesn't he will come down with it shortly afterwards.

In this connection you will probably remember that when we had the war with Spain we took possession of Havana, and yellow fever was rampant, and the United States doctors took hold to try to find out the means of the conveyance of yellow fever from one man to another, and it was discovered that it was the mosquito that had bitten a person who had yellow fever, and then later had bitten a person who was healthy; and this experiment was done under the auspices of the United States Army in Cuba. A shed was built and a partition was put through it,

and it was screened against mosquitoes, and on one side old blankets and clothes and things of that sort were all piled in there that had been taken off the people who died with yellow fever, and the other side was left perfectly clean. Volunteers were called for from the army who were willing to pry to prove this matter, and six men volunteered to go into that place and stay for several days and sleep on those old coats and blankets; and on the other side where it was perfectly clean, six other men volunteered to go in and to be bitten by infected mosquitoes, and of those six men who slept on thos blankets and coats and those who were bitten by infected mosquitoes, five out of the six came down with yellow fever, and two of them died. The medical journals said no greater heroes ever lived than those two men who gave up their lives to prove this matter. The fact then was established that it was given by means of mosquitoes, and of course you know there are very many kinds of mosquitoes, I believe 346 different kinds of mosquitoes; and it is the Culex mosquito which carries yellow fever, and the Anopheles mosquito which carries malarial fever, of course, as is very well known.

Now there is another disease we have to contend with. The plague germ is rather an interesting thing to look at through the microscope. It is what is called bi-polar, that is, two ends. They grow in huge numbers, swarming millions on a slide which can be seen under a microscope.

Another disease is cholera. Of course, everybody knows all about cholera and what a lot of it we have. In India we have more deaths from cholera every year than we do from plague, yet because it is such an old disease and everybody has gotten used to it, it does not raise anything like the trouble that plague does. The people are very much afraid of plague, but they might well be much more afraid of cholera which carries off more people than plague does which last year was more than a million. The cholera germ looks much like the typhoid fever germ. It occurs in water and in milk. You may be pretty sure when there is raging cholera all about you and they are carrying the dead bodies away on all

sides, and the streets are simply dum, dum, dum,dum on all sides with the dead, that you do one thing: If you boil your water and milk you will never get cholera. If you do that and keep your hands clean ad keep your servants clean, ypu will never get cholera at all. I want to describe an interesting experiment we did in the hospital with this cholera. A man was dying with cholera, just in the last stages of it, and a test tube was taken, some sterile, neutral gelatin added, and just a fraction of a drop of the infection was put into this test-tube, and then it was set aside for three days. By that time, the germs had grown tremendously, and it was taken out and spread on a glass slide in the usual way and put under the microscope, and the cholera germs were so thick that they had to be separated with the greatest care to get the specimen thin enough so they could be distinguished through the microscope there was such an uncounted mass there; and three days later the same test-tube was taken out and another smear was put on a glass slide, and there was not a single cholera germ present. I was rather astonished to see this, but on looking into it, I understood it. The fact is cholera germs grow very rapidly, but there are a great many germs that are working against them, and there was not a single cholera germ present, but there was an immense development of other kinds of germs, which shows how it is that epidemics of cholera come to a conclusion by a process of nature.

Another disease which we have to contend with is leprosy. Leprosy is a peculiar disease, and a disease which practically no white people ever get. In India, according to the census, there are 200,000 lepers, but in all the history of India, there has been but one white man known ever to have come down with the leprosy, and I do not suppose a white man ever lived in India that would not have been subjected to it, because the ~~kinds~~ ~~coins~~ copper coins are handled by the beggars who are suffering from leprosy, many of them, and we handle those coins; but especially if you take hold of a man and feel his pulse, you are ex-

pected to be exposed to leprosy; but there was a man by the name of Dr. Donaldson(?) connected with the London Tropical School of Medicine, and he has inoculated himself with leprosy and inoculated forty white people with leprosy, and not one of them has come down with the disease. It seems to be a race peculiarity, and I don't think we are subject to leprosy.

There are two other diseases we have there, and one of them is elephantiasis, and the other is Madura foot, and they resemble each other. They are very much alike in appearance. Elephantiasis is a constitutional disease in which the foot grows large so that it looks exactly like an elephant's foot, it is so large. That is a constitutional disease, and if the blood of the patient is examined, little fine bodies are found in it. These bodies circulate in the blood and produce local effects. Another one is Madura foot, which is a fungus disease and grows in the feet usually of those who are tillers of the soil, almost entirely among the farmers, and it is a very slow disease, usually lasts about five years, and if the patient does not have his leg amputated, he will die. A great many of the amputations that we do are done for Madura foot.

I am very much afraid it is getting rather late and you are getting rather tired. There are one or two other things I would like to speak of that are not strictly medical, and those are of the barbarities I have seen in India. One of them is hook swinging. Of course you know, probably, that the natives believe that when small-pox descends upon a village, it is because one of their gods is angry with them. They have numerous gods and one of them presides over the destinies of this disease, and they believe this god--or rather goddess--is angry, and it is necessary to propitiate her. They take a man and they pinch up the skin and the tissue under the skin just under his shoulder-blades, and pass an iron hook under the two shoulder blades--or two hooks, and they then tie these hooks to one end of a big well-sweep, then theypull down the other end,

and this man goes up into the air; and this is attached to a great car twenty feet square ~~an a kuga xixi xixh xaa~~ with huge, solid wooden wheels, and this man is drawn around the temple. I heard there was going to be a case of hook swinging in a certain town, and I went to the village and spent severalhours watching it, very profitable ones too. I should say he was swinning aloft forty feet, and he had a rope and was bringing up flowers that were given him, and he would throw them through the crowd. You would be astonished to see what a crowd was there, and everybody was grabbing, getting something supposed to be sort of half holy or something like that. When this man was up there I thought to myself, "It is impossible." I should say he weighed a good 140 lbs. I did not think it was possible that his skin was strong enough to hold himup there, and I was sure there was some chicanery about this. When they got him down in front of the temple and were going to let this well sweep down, this man was in a fearful condition, perspiring, and coming down in front of me, and I saw there was no chicanery about it at all; he was supported entirely by the hooks through the flesh of his back. I felt his pulse, and everything was quite right. I asked him how he felt, and he said he felt all right. But the government stopped it and there has never been any more hook swinging around. Another barberity which is not quite so bad has not been stopped by the government yet, and I hear it is a fairly common thing, and that is walking on fire. I was in a village about twenty-seven miles from Madura one day, and I heard there was going to be some fire walking. I would not believe it, but they said there was the wood about ten feet long, a c rd of wood piled up. In the afternoon they set fire to it, and it went up with a tremendous blaze, and it burned down until there was a bed of coals six inches deep. Six men came out from the temple clad inyellow robes, rather scanty, the color of lemon yellow. I have never seen that color used before or since. There were five rather youngish men and one very old man. There was a trough made about as wide as that, and water was poured in there until it

was filled with water, and these men got in there and walked about, soaking their feet pretty well with the water, and after while they started and walked across this bed of coals, and the younger men went over it in a very short skip. They go through it three times. The younger men scarcely touched their feed to it at all. There was also one woman, and she had rather a harder time. The old man had a very hard time. They were doing all this to get rid of their sins to fulfill avow. The old, old tottering man was so feeble, so weak, somebody had to walk along beside him, reaching out this way, holding his hands as he walked along through the fire. I saw two of the young men but did not see the others. I said, "Let me see the bottoms of your feet." They showed them to me, and there was not a single thing the matter with them. I said, "How is it you could walk through the fire and not be hurt?" and they said, "Because God protected us." Of course, our own idea was that they got the feet pretty well soaked, and the steam formed on the bottoms of their feet, and that meeting these embers formed a sort of cushion of steam or something of that sort and protected them. Fire walking is still fairly common, but hook swinging is stopped.

I won't trouble you any more. I thank you very much indeed, for your attention.

Dr. Morse: If there is any question any one would like to ask the Doctor would be perfectly willing to answer it. One question I had in mind was as to whether caste was any obstruction to the work of a physician. If a physician treats a man of one caste, is he received with equal readiness by one of another caste?

Dr. Van Allen: It is rather remarkable that caste is not in the way at all of the doctor, and the natives, of course, have their own religious books, and in those, it is said, "You may have anybody you want when you are ill, and he may give you anything he wants to", and the natives, who are very much opposed to the use of whiskey or brandy will take it from the hand of a doctor if

he thinks it is necessary to save their lives. People of high caste will go into a cook room all blackened with smoke, etc., and never ask for one minute who has been there before, but will go right in there and cook,--simply because their native religious books enable them to do most anything when they are ill.

There is one other thing I would like to say, and that is that people are going around the world , and I suppose there are more than one in this audience who will go around the world sometime. When you get to Colombo you can not get to North India without passing through Madura, and if any of you do, I do wish you would stop off and spend a few days with us. We will do the best we can to make you comfortable, and show you all there is to be seen in educational work and other forms of work. You can rely on us to do the best we can, and we would be so pleased and so delighted to have you stop. (Applause.)

Dr. Kellogg: I would like to ask the Doctor if he finds beeftea useful in his practice in his hospital there.

Dr. Van Allen: I meant to speak about that. We do use beeftea a little, but I am a very strong believer in the very thing we see here at Battle Creek, and that is, I do not use very much meat, and I do not have much trouble about it because the natives do not believe in eating meat. The higher the caste is the less they believe in meat eating; and a Brahman would rather die than touch meat, and he would not touch beeftea at all, but sometimes I find it rather valuable when a man is sinking, and do use beeftea a little, but I do not use a very great deal.

Dr. Kellogg: Do you find it necessary to use meat to any extent in your work there? Do you have meat on your regular bill of fare to any extent?

Dr. Van Allen: Well, I will tell you, I give them three annas a day, and say, "You must buy so and so,--"so much rice, but I very, very rarely put in meat.

sides, and the streets are simply dum, dum, dum,dum on all sides with the dead, that you do one thing: If you boil your water and milk you will never get cholera. If you do that and keep your hands clean ad keep your servants clean, ypu will never get cholera at all. I want to describe an interesting experiment we did in the hospital with this cholera. A man was dying with cholera, just in the last stages of it, and a test tube was taken, some sterile, neutral gelatin added, and just a fraction of a drop of the infection was put into this test-tube, and then it was set aside for three days. By that time, the germs had grown tremendously, and it was taken out and spread on a glass slide in the usual way and put under the microscope, and the cholera germs were so thick that they had to be separated with the greatest care to get the specimen thin enough so they could be distinguished through the microscope there was such an uncounted mass there; and three days later the same test-tube was taken out and another smear was put on a glass slide, and there was not a single cholera germ present. I was rather astonished to see this, but on looking into it, I understood it. The fact is cholera germs grow very rapidly, but there are a great many germs that are working against them, and there was not a single cholera germ present, but there was an immense development of other kinds of germs, which shows how it is that epidemics of cholera come to a conclusion by a process of nature.

Another disease which we have to contend with is leprosy. Leprosy is a peculiar disease, and a disease which practically no white people ever get. In India, according to the census, there are 200,000 lepers, but in all the history of India, there has been but one white man known ever to have come down with the leprosy, and I do not suppose a white man ever lived in India that would not have been subjected to it, because the ~~native~~ copper coins are handled by the beggars who are suffering from leprosy, many of them, and we handle those coins; but especially if you take hold of a man and feel his pulse, you are ex-

pected to be exposed to leprosy; but there was a man by the name of Dr. Donaldson(?) connected with the London Tropical School of Medicine, and he has inoculated himself with leprosy and inoculated forty white people with leprosy, and not one of them has come down with the disease. It seems to be a race peculiarity, and I don't think we are subject to leprosy.

There are two other diseases we have there, and one of them is elephantiasis, and the other is Madura foot, and they resemble each other. They are very much alike in appearance. Elephantiasis is a constitutional disease in which the foot grows large so that it looks exactly like an elephant's foot, it is so large. That is a constitutional disease, and if the blood of the patient is examined, little fine bodies are found in it. These bodies circulate in the blood and produce local effects. Another one is Madura foot, which is a fungus disease and grows in the feet usually of those who are tillers of the soil, almost entirely among the farmers, and it is a very slow disease, usually lasts about five years, and if the patient does not have his leg amputated, he will die. A great many of the amputations that we do are done for Madura foot.

I am very much afraid it is getting rather late and you are getting rather tired. There are one or two other things I would like to speak of that are not strictly medical, and those are of the barbarities I have seen in India. One of them is hook swinging. Of course you know, probably, that the natives believe that when small-pox descends upon a village, it is because one of their gods is angry with them. They have numerous gods and one of them presides over the destinies of this disease, and they believe this god--or rather goddess--is angry, and it is necessary to propitiate her. They take a man and they pinch up the skin and the tissue under the skin just under his shoulder-blades, and pass an iron hook under the two shoulder blades--or two hooks, and they then tie these hooks to one end of a big well-sweep, then theypull down the other end,

and this man goes up into the air; and this is attached to a great car twenty feet square ~~an a kuga xiost xixh xss~~ with huge, solid wooden wheels, and this man is drawn around the temple. I heard there was going to be a case of hook swinging in a certain town, and I went to the village and spent severalhours watching it, very profitable ones too. I should say he was swinning aloft forty feet, and he had a rope and was bringing up flowers that were given him, and he would throw them through the crowd. You would be astonished to see what a crowd was there, and everybody was grabbing, getting something supposed to be sort of half holy or something like that. When this man was up there I thought to myself, "It is impossible." I should say he weighed a good 140 lbs. I did not think it was possible that his skin was strong enough to hold himup there, and I was sure there was some chicanery about this. When they got him down in front of the temple and were going to let this well sweep down, this man was in a fearful condition, perspiring, and coming down in front of me, and I saw there was no chicanery about it at all; he was supported entirely by the hooks through the flesh of his back. I felt his pulse, and everything was quite right. I asked him how he felt, and he said he felt all right. But the government stopped it and there has never been any more hook swinging around. Another barberity which is not quite so bad has not been stopped by the government yet, and I hear it is a fairly common thing, and that is walking on fire. I was in a village about twenty-seven miles from Madura one day, and I heard there was going to be some fire walking. I would not believe it, but they said there was the wood about ten feet long, a c rd of wood piled up. In the afternoon they set fire to it, and it went up with a tremendous blaze, and it burned down until there was a bed of coals six inches deep. Six men came out from the temple clad inyellow robes, rather scanty, the color of lemon yellow. I have never seen that color used before or since. There were five rather youngish men and one very old man. There was a trough made about as wide as that, and water was poured in there until it

was filled with water, and these men got in there and walked about, soaking their feet pretty well with the water, and after while they started and walked across this bed of coals, and the younger men went over it in a very short skip. They go through it three times. The younger men scarcely touched their feed to it at all. There was also one woman, and she had rather a harder time. The old man had a very hard time. They were doing all this to get rid of their sins to fulfill avow. The old, old tottering man was so feeble, so weak, somebody had to walk along beside him, reaching out this way, holding his hands as he walked along through the fire. I saw two of the young men but did not see the others. I said, "Let me see the bottoms of your feet." They showed them to me, and there was not a single thing the matter with them. I said, "How is it you could walk through the fire and not be hurt?" and they said, "Because God protected us." Of course, our own idea was that they got the feet pretty well soaked, and the steam formed on the bottoms of their feet, and that meeting these embers formed a sort of cushion of steam or something of that sort and protected them. Fire walking is still fairly common, but hook swinging is stopped.

I won't trouble you any more. I thank you very much indeed, for your attention.

Dr. Morse: If there is any question any one would like to ask the Doctor would be perfectly willing to answer it. One question I had in mind was as to whether caste was any obstruction to the work of a physician. If a physician treats a man of one caste, is he received with equal readiness by one of another caste?

Dr. Van Allen: It is rather remarkable that caste is not in the way at all of the doctor, and the natives, of course, have their own religious books, and in those, it is said, "You may have anybody you want when you are ill, and he may give you anything he wants to", and the natives, who are very much opposed to the use of whiskey or brandy will take it from the hand of a doctor if

he thinks it is necessary to save their lives. People of high caste will go into a cook room all blackened with smoke, etc., and never ask for one minute who has been there before, but will go right in there and cook,--simply because their native religious books enable them to do most anything when they are ill.

There is one other thing I would like to say, and that is that people are going around the world , and I suppose there are more than one in this audience who will go around the world sometime. When you get to Colombo you can not get to North India without passing through Madura, and if any of you do, I do wish you would stop off and spend a few days with us. We will do the best we can to make you comfortable, and show you all there is to be seen in educational work and other forms of work. You can rely on us to do the best we can, and we would be so pleased and so delighted to have you stop. (Applause.)

Dr. Kellogg: I would like to ask the Doctor if he finds beeftea useful in his practice in his hospital there.

Dr. Van Allen: I meant to speak about that. We do use beeftea a little, but I am a very strong believer in the very thing we see here at Battle Creek, and that is, I do not use very much meat, and I do not have much trouble about it because the natives do not believe in eating meat. The higher the caste is the less they believe in meat eating; and a Brahman would rather die than touch meat, and he would not touch beeftea at all, but sometimes I find it rather valuable when a man is sinking, and do use beeftea a little, but I do not use a very great deal.

Dr. Kellogg: Do you find it necessary to use meat to any extent in your work there? Do you have meat on your regular bill of fare to any extent?

Dr. Van Allen: Well, I will tell you, I give them three annas a day, and say, "You must buy so and so,--"so much rice, but I very, very rarely put in meat.

Dr. Kellogg: Do you think your sick people do just as well without meat as with it?

Dr. Van Allen: I think they do better. In the Russo-Japanese War they say the Japanese are wonderfully good surgical patients, and they make so many recoveries, and they put it all down to their being grain eators, and I do not know how I can better express it in a very few words than this: There was a medical missionary who had been in India for a good many years, and he had to go to England on account of his children, had to give up his medical missionary work, and he began to practice in Bristol, England, and he said, "I hate to give up. The natives are very good surgical patients; they recover a great deal better than we do, and the shock of operation is a great deal less, and the wounds heal better. I hate to give up practice among these grain eaters and go home and do surgery on the beef laden Englishmen.

Dr. Morse: The Doctor has come to us so alive with interest in the thrilling story he has told us that I fancy none of us have taken to heart the days and nights of weariness and trial the Doctor has gone through before this story came so freely from his lips; and I am sure if the Doctor could tell us some of the heart experiences he has had, it would bring to our minds not only the joy that we share with him tonight in being able to listen to his story of victory for Christ, for Christian missionary work in India, there would be brought to our hearts the sorrows that he has seen, the sorrows that our Father in heaven sees daily, sorrows, perhaps, that are pleading for some one here to heal; and it is my prayer tonight that the words of this story of triumph in missionary work that Dr. Van Allen has told us may be an inspiration to us. Some of us perhaps are preparing to go to some field; some of us who have not yet prepared ought to prepare and I trust that as we have the opportunity of hearing these interesting words, that the very conviction that the good Father has for each of us may be brought home to our hearts.

Eld. Tenney: I would like to ask that the profit of this occasion may be further heightened by hearing a few words from Dr. Ingersoll.

Dr. Ingersoll: I am certainly glad to be here tonight and to listen to these words we have been permitted to listen to. I can tell you tonight that eight years of the most enjoyable portion of my life have been spent in India; that I have no regret for having gone to that country, and of having worked there. It is true that my work has been somewhat different from what Dr. Van Allen's has. It has been for a different class of people than his has. But it has been in the same needy field; and tonight the people of India appeal to me more than they ever did before. I have more of an interest in that country than I did before I went to it, and I am more anxious to go back to it than I was to go in the first place, and I believe that is the experience of every one who has ever gone to a mission field to work. Their interest in it increases rather than lightening if they have had the true missionary spirit. It is true that there are those who sometimes go who lose their interest. Perhaps they did not know what they were going to. But I am glad it is so. I am glad that our interest in missions increases by experience in that work, and I do wish, and I really could wish no more pleasant experience to any one of you than for you to heed the call to go to some mission field and to spend your life in work for those who are in so great need.

The work that we have been associated with in Calcutta started a little over ten years ago by Dr. O. C. Place. He went there with his wife and attempted work in the City of Calcutta, something on the same plan as the work which has been done by Dr. Van Allen. The conditions in Calcutta are such that it is difficult to do work for the native people, to gain their confidence without first having the confidence of the Europeans. And having started this work for the poorer class of the native people in Calcutta, Dr. Place found it very difficult to do work for the better educated class of people; not that his having worked for the native people hindered, but they had not the confidence. The better educated

class of the native people did not have the confidence in the work because the Europeans didn't, and didn't take part in it. It is different from what it would be in a district in the country or in smaller cities similar to where Dr. Van Allen's work has been located. On the other hand, no doubt if Dr. Place had continued in that same line of work for a long time, he might have established a similar work for the native people right there in Calcutta; but he was anxious to make his work self-supporting, and in order to do this, he moved to the European portion of the town and opened treatment rooms for the Europeans and the better educated natives, that is, those of the natives who would come to the treatment rooms and take treatments and who would pay for them and could pay for them. He conducted work in these treatment rooms something less than a year before my wife and I went there to assist him in his work.

Just previous to our going there, they rented a house in a good locality in the City of Calcutta, and intended that to be the small beginning of a Sanitarium; and it was only a small house. It could accomodate eight patients with rooms downstairs for the helpers; and my wife and I lived in the house, and there were some nurses there also who occupied rooms downstairs, and we had the upstairs roomsf for patients. We continued our work there for a year, and we had a very good experience there. We had the house well filled, and the treatment rooms were wellpatronized. After we had been there for about a year, it seemed advisable to open a larger house, and so a house was engaged in a better portion of the city, and we started work there. That was in May 1900. I may state first, that the work was not of course self-supporting at all the first year, and it was not self-supporting for some years after that. We had a heavy expense and a large pay roll, and we were not able to meet our expenses. But after a little time in this new place, we were able to make our work self-supporting. We all of us were very much grieved to have Dr. Place leave the work there in Calcutta, because he had a good influence and had quite a reputation as a surgeon in Cal-

cutta, and even up to the present time, the people always speak very favorably of his work there in Calcutta. He left a good influence behind him. From the fall of 1902--I think it was the fall of 1902--we went on what we called a self-supporting basis, and from that time we have continued to pay our expenses or to be responsible for them. It is a fact we did run behind at one time and lost a little bit, but we still hold the responsibility of paying those debts. The work has gradually increased and has the confidence of the people of Calcutta, and as we have gained the confidence of the Europeans and of the better class of natives,--as we have gained the confidence of the Europeans we have also gained the confidence of the better class of native people, and we had, during the last two years, my wife and I find there, so far as our number of patients is concerned, the patronage is about equally divided between Europeans and the Native people. The indoor patients were mostly Europeans of Eurasians--that is a cross between natives and Europeans. They constitute our indoor patients proper. We have an institution now where we can accommodate about twenty indoor patients comfortably besides some helpers. We have a good set of treatment rooms. Really, our treatment rooms will compare favorably with any treatment rooms I have ever seen in any of our small sanitariums, for instance, with those in Friedensau, or Skodsbork, or even Caterham,England,--Our treatment rooms I think are even better than theirs, and we have a very good patronage in the rooms, and we hope that the work may continue to be self-supporting, and more than that, be able to do more in the missionary work way; that is, to open up other institutions of a similar nature, but perhaps on a smaller scale. That is the idea out there and it is hoped that it can be done.

There are some things of interest in connection with our experience in dealing with patients in India that Dr. Van Allen perhaps has experienced, and perhaps would have told of if he had taken more time; but there is one thing especially, and that is the difficulty in dealing with lady patients. It is very

difficult for a gentleman doctor to have anything to do with lady patients, especially with those of the better castes, the better classes. They object, of course, to being examined by a gentleman at all, and I have often gone to examine a patient and had them ~~xxxxx xx xx xx~~ with their maid standing around holding a curtain that I might not see them. I could reach under the curtain and feel their pulse, but they would cover up their faces while I made examinations of the abdomen, for instance,--a thing very peculiar to one who has never been to those countries. But there is a field there for women, for lady doctors and for nurses. They can go into these homes, they can deal with the women, they can speak to them, not only about their physical condition, but about their spiritual condition, and that is an open field for women, for more women than are ready to go, I am sure, and it is to be hoped that the number who are engaged in that line of work may be increased, because those women have a powerful influence among their communities. They exert a great deal of influence. It is not an uncommon thing to hear a man say, "I have no objection; I am not so particular about the caste, but my wife or my mother objects, and I can not disregard her feelings", and so you see they have an influence, and they have a powerful influence just as women do in every country, and it is through that channel that a great work may be done, can be done if the women are ready to go to the help of their sisters in these dark lands, and as I said this afternoon here, we must remember that the Indians, the people of East India have a special claim upon us. They are relatives of ours. They came from the same stock as we did; that is, those who live in the plains, the Brahmins and the Hindoos proper come from the same stock as we do, and the same old breeding ground that was the home of their ancestors was the home of ours; so we should remember them, and do for them perhaps more than we are inclined to do for others. At least, one who has been in India feels that they would like to see more done for that country perhaps than for others. We do not want to be selfish, bit I can not help but feel a special interest in India tonight. I thank you for your attention. (Applause.)

v-10-16-7-.

610.7

INTERNATIONAL MEDICAL ALLIANCE.

Convention held at Chicago. Ill. Dec. 18-20 1905.

P R O G R A M .

Monday December 18th., 1905.

Morning Session. 9.30 A.M. - 12.00 M.

Devotional Services.

Secretary's Report.

Appointment of Committees.

Letters of Greeting read from Doctors Thomason, Lockwood, DeForest, Olsen and Keichline.

Italy as a Field for Medical Missionary Work. By Chas. T. Everson/ Paper read by Dr. Mabel Howe-Otis/

Latin Europe as a Medical Missionary Field. By Dr. P. A. DeForest/ Paper read by Dr. S. P. S. Edwards.

Labor Saving Ideas in connection with smaller Sanitariums. By Dr. S. P. S. Edwards. Moline. Ill.

Afternoon Session. 3 - 5 P.M.

Sanitary Conditions in Japan. By Dr. S. A. Lockwood. Tokio/ Japan. Paper read by Dr. Maria Edwards/

Reports of several interesting Cases. By Dr. Geo. Thomason. Paper read by Dr. C. C. Nicola.

Hypertrophy of the Prostate Gland and its conservative Treatment. By Dr. W. T. Thornton. Chicago. Ill.

The Ottawa Tent Colony. By Dr. David Paulson. Hinsdale. Ill.

Educational Work for the Patients in our Sanitariums. By Dr. A. J. Read. Battle Creek. Mich.

Evening Session. 7 - 9 P.M.

Arthritis Deformans. A Comparison of Joint Inflammations. By Dr. C. C. Nicola. Melrose. Mass.

Medical Study in Edinburgh. By Dr. R. H. Harris/ Battle Creek. Mich.

Tuesday December 19th., 1905.

Morning Session. 9.30 A.M. - 12 M.

Devotional Services.

Clinic on the Diseases of the Thoracic Viscera. By Dr. Robert H. Babcock. Chicago. Ill.

Diagnosis and Treatment, and the Relation they sustain to each other. By Dr. T. J. Evans. Colorado Springs. Colo.

Vital Resistance. By Dr. Herbert Ossig. Battle Creek. Mich/

Afternoon Session. 4 P.M. Cook County Hospital.

Surgical Clinic. By Dr. A. E. Halstead.

Evening Session. 7 - 9 P.M.

Some Practical Leesons to be learned from the recent Researches of Metchnikoff. By Dr. David Paulson. Hinsdale. Ill.

The Treatment of Pneumonia. By Dr. O. M. Hayward. Nashville. Tenn

Wednesday December 20th., 1905.

Morning Session. 9.30 A.M. - 12.00 M.

Devotional Services.

The Nitrogen Balance. By Dr. E. H. Risley. Battle Creek. Mich.

The Etiology and Diagnosis of Chronic Gastritis and Neuroses of the Stomach. By Dr. Chas. E. Stewart. Battle Creek. Mich.

The Treatment of Gastric Disorders. By Dr. Elmer L. Eggleston. Battle Creek. Mich.

The Use of the X-Ray in the Study of the Hollow Viscera. By Dr. W. T. Martin. Battle Creek. Mich.

Afternoon Session. 3 - 5 P.M.

Cancer of the Digestive Tract with a Report of 30 cases which have come under Observation. By Dr. W. R. Simmons. Mt. Tabor. Ore.

The Cause and Diagnosis of Diseases of the Nervous System. By Dr. W. H. Riley. Battle Creek. Mich.

Evening Session. 7 - 9 P.M.

Some of the Practical Lessons to be learned from the Researches of Pawlow and Cannon. By Dr. David Paulson. Hinsdale. Ill.

Colon Diseases. Dr. J. H. Kellogg. Battle Creek. Mich.

Thursday December 21st., 1905.

Morning Session. 9.30 A.M. - 12.00M.

Devotional Services.

Myxoedema, with a Report of Two Cases. By Dr. Margaret Banta. Battle Creek. Mich.

The X-Ray in the Treatment of Lupus and Epithelioma, with a Report of Cases. By C. P. Farnsworth. M.D., Madison. Wis.

Gun Shot and other Wounds of the Intestines, with Report of Cases. By Dr. D. C. Ross. Keene. Texas.

Simplicity in Surgical Technique. By Dr. F. J. Otis. Chicago.Ill.

Afternoon Session. 3 - 5 P.M.

Ectopic Gestation. By Dr. Jean Vernier. Detroit. Mich.

Eclampsia. By Dr. Mary V. Dryden. Battle Creek. Mich.

Evening Session. 7 - 9 P.M.

Gastro-Enterostomy, its Indications, Method, After-care, and recent Progress in the Surgical Procedure. By Dr. J. H. Kellogg. Battle Creek. Mich.

Surgical and Non-surgical Treatment of Floating and Palpable Kidneys. By Dr. H. F. Rand. Boulder. Colo.