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TAKEN FROM PAGE 47.

BY DOCTOR [redacted]:

Mr. Chairman, Ladies and Gentlemen: I'm afraid that any attempt on my part to lead this discussion would be to take up much more time than you have at your disposal, and strain your patience beyond almost endurance.

If you followed at all what has been said up to now, you will have grasped the extreme complexity of this question. I have had very little time to prepare for this,

because my masters gave me very little notice about coming here and I didn't really know at the time, what was expected of me. However, I thought that perhaps I might take up a side of thequestion which is the - from my point of view, a practical one, and that is definition from the point of view of the person who has to certify for compensation, that is to say the question which was in some respect dealt with then by Mr. Wagner.

If one is to attempt to deal with the point, with the definition itself, from the pathological and clinical point of view, strictly medical point of view, one enters a very wide field indeed. To attempt to add to the definitions, the importance of exact definition from the certifying physician's point of view, is indeed a very wide field also.

Now, South Africa is a little, small country, but it has had experience with legislation on pneumoconiosis or strictly speaking, silicosis, of some forty years today, and there it was the experience in legislation, of attempts at definition of terms, over numerous acts, as Mr. Wagner mentioned in the days of certain of the states, where again and again, attempts were made to clarify the position for the benefit of the certifying physician.

The first question that arises immediately is, of course, what does one mean by disease. That, in itself,

is a problem which could be discussed at considerable length. From the clinical - pathological point of view, of course, it was laid down a century ago, by Wilhelm, that it is an abnormality of cells, but you can have abnormality of cells, as you all know, in an area, or in an organ without having any disability whatsoever, and, therefore, disease, in the sense of the person who has to decide that something exists in an individual for which he has some - for which he has to receive compensation.

We, I think, or those of us who have to consider legislation from the point of view of compensation, must bear in mind two important and somewhat opposing points of view. One is that if you don't define a disease, an industrial disease, with great exactitude, or with as much exactitude as you can manage, grave injustice would be done or might be done on the one hand, to the man who suffers from the disease, such as has been the case on a large scale in South Wales, or you might, in the case of certain industries, damage the prosperity of that industry by excessive compensation being paid out, and therefore, in our concept, in South Africa, we consider pneumoconiosis, silicosis, an incapacity of some sort, a disability of some sort.

Now, the legiwlation of South Africa has started with the Act of 1912, when it was first thought that disease existed which was due to quartz, and at that time, two

stages of disease were defined and at that time, it was, of course, called 'Miners' Phthisis', and the first definition was: "Miners' Phthisis shall mean silicosis of the lungs". Certain benefits are awarded when there is no serious or permanent impairment, or more if there is serious or permanent impairment. No mention was made of tuberculosis.

Four years afterwards, it was - the legislation was amended, and it was then said that, for the purposes of this Act, the expression 'Miners' Phthisis' means silicosis of the lungs, and tuberculosis means tuberculosis of the lungs or of the respiratory organs.

Now, here it may be strange to an American audience to appreciate how the acts are drafted. In our draft, you start off by defining in the beginning of the act, every term that you use, as if it were a dictionary, and it is that definition that fixes the attitude of the Compensation Board toward the particular individual's troubles.

Now, in 1918, tuberculosis was included and became compensable, whether associated with or without silicosis. Then, it was realized that the definition which was used then was not satisfactory, and a much more elaborate one was introduced three years afterwards under the so-called Consolidating Act, and a radical change was made.

At this stage - in this Act, a third stage of silicosis was recognized and that is the so-called ante-

primary stage, now called the first stage.

The ante-primary stage was then defined, when it is found by the Bureau, that is to say the medical examiners, that physical signs of damage to the lungs, short of definite physical signs of silicosis - SHORT OF DEFINITE PHYSICAL SIGNS OF SILICOSIS - have become evident, and that such damage has supervened during and in consequence of employment in a scheduled mine; and then the primary stage, with a certain amount of disability, and the secondary stage with more disability. I have no time to read these without detaining you too long.

Now, the ante-primary stage was introduced when a condition, ill-defined condition became compensable. The reason for that I don't want to go into at the moment beyond saying in a word that the idea was then that if you remove the man from exposure to dust early enough, the disease would not progress and, therefore, the man would be able to locate himself in some other occupation, and incidentally, the people who were responsible for paying the compensation would be relieved of the higher compensation which, in the secondary stages, meant pension for life and a pension to the widow or dependents. That, of course, in the event neither of these expectations proved to be correct. We all know now that at least in relation to SI O_2, no matter how early you remove a person, a certain progression

takes place.

In 1920, in giving evidence before a Parliamentary Commission that dealt with this subject, I expressed very strongly the view that they barked up the wrong tree and that they passed legislation which, in itself, was not reasonable and that they expected medical men to possess occult or supernatural powers in making a diagnosis of something which didn't exist.

Then, in 1925, an act was passed in which the ante-primary stage was defined, the earliest detectable specific signs - physical signs, of silicosis, and thereafter, the whole of the compensation question became bedevilled by this word 'specific', because the interpretation was made that specific meant radiological, radiological and nothing else.

Well, this went on for some considerable time until it became clear, as was said a while ago by several speakers, that the radiological signs do not necessarily or, for that matters, frequently even, bear any relation to disability, and so it came about last year, that the Miners Union memorialized the Government and said that unless a radical change is made in the function of the Government Bureau of Medical Examiners, they would boycott the Bureau. The effect of that would have been a general strike, of course, because it is a crime to employ any person in a

dusty occupation in South Africa who is not possessed of a certificate of being free from silicosis and tuberculosis, which he has to supply at periodic intervals.

Now, as a result of that, a Commission was appointed under the chairmanship of a Judge of the Supreme Court, and they made certain recommendations with regard to alterations in the act. Meanwhile, something had to be done to placate the Miners' Union, and rapidly, an amendment to the Silicosis Act was passed at the last session of Parliament early this year, or the middle of this year, in which amendment - an amendment was passed named 'Pulmonary Disability'.

Pulmonary Disability was defined very loosely as something or other which a man might acquire by working in a dusty occupation, but which is not silicosis, but which disables his lungs or his heart or lung and heart. That was passed while the Commission was in session and before the Commission was ready to advise with regard to the best way of amending the act and the definition.

Well, that particular amendment will probably be thrown out at the next session of Parliament and a new definition will be introduced.

I - you already had quoted to you the Sydney definition of pneumoconiosis with which I entirely agree. I thought I told you briefly about our difficulties, because they are difficulties which apply or might apply to anybody

in any country that attempts legislation of dust disease of the lungs, damage to the lungs due to working in dust.

We have - the Commission of which I happen to be a member, felt that the definitions should be to the effect that -- I'll read to you just this much if you'll forgive me; it won't take more than a few minutes -- it first of all stated in the definition of terms that the word 'Silicosis' as used in the Act means any pneumoconiosis whatsoever, the word silicosis, so you turn this around and talk of a pneumoconiosis, but then Mr. Wagner and some of the lawyers here realize that when you have had a number of previous acts and you have to make an amendment, it is always dangerous to change the name of the act, because the effect - it might effect previous decisions of the court on previous compensation, so the particular technique of saying silicosis means pneumoconiosis, you might just as well have said if the word 'John Smith' is used in this Act, it will mean pneumoconiosis, it will have the same effect.

And they defined it in these stages or proposed to the Government that the three stages be defined as follows:

That a person shall be deemed to be or to have been suffering -- that is to say on post-mortem -- from silicosis:

(a) In the first stage when the Bureau has found during life the earliest signs of silicosis demonstrable by

radiological or any other appropriate examination, or when the Bureau has found demonstrable permanent impairment of respiratory or cardio-respiratory function; or when the Bureau has found post-mortem early lesions of silicosis or chronic bronchitis and/or its sequelae. Provided that the impairment of the respiratory or cardio-respiratory function or the chronic bronchitis and its sequelae shall, in the opinion of the Bureau, be permanent and have resulted from the performance of work in a dusty occupation and shall have been found within a period of twelve months since the person last worked in a dusty occupation.

Then, it proceeds to define the second and third stages on the basis of incapacity for exertion.

The Commission remarked, in defense of its proposal, that "This definition has been drafted with the view to removing as much ambiguity as is possible and at the same time leaving the Bureau the same amount of latitude in exercising the science and art of diagnosis as must be left to those called upon to deal with a subject which is by no means either static or easy.

"The words 'specific", 'moderately marked' and 'marked' have been deliberately omitted from the proposed definitions as being vague and too much the subject of a variety of personal interpretation, and because their use tends to over-emphasize the radiological findings and to

obscure the overwhelming importance of incapacity work w-- for work.

"Furthermore, the words 'cardio-respiratory' are brought into the definition in order to indicate as clearly as may be that such affections of the lungs as are usually present in at least the later stages of silicosis cannot be dissociated from cardiac disfunction.

"The word 'exertion' has been substituted for the words 'manual work' in order to indicate that what is to be assessed is loss of power for sustained muscular effort."

Now, finally I just want to say one word in emphasis of what has been said before, and because of our rather unfortunate experience, and that is we must bear in mind the danger of trying to use the radiograph as a measure of disability, as a measure of disability, as a measure of a man's impairment of function, except in a very highest degree of fibrosis; it is no measure of disability whatsoever and should not be used as such.

I have seen in many law suits, as long as I have experienced, and it is a long experience, any number of people, and such people brought before the Commission, who radiologically, showed practically no signs, very very early signs of striation or slight nodulation, who were invalids in every sense of the word, hardly able to do anything, certainly would have been handicapped if you asked

them to walk rapidly down this room, and we have seen people with advanced nodulation, massive fibrosis of portions of the lung, who are playing a very good game of tennis, and those are extremes, of course, but what I suggest to you gentlemen is that, after all, we, as industrial medical men, must be deeply concerned with the question of doing substantial justice to the people who look to us, as medical men, to advise those who draft legislation which may mean the propserity of a person or, at least may mean a person not being thrown into the utmost depths of poverty, because he - because somebody quibbled about the wording of a law or somebody has quibbled about what should be done to establish that man's ability to earn a living, or on the other hand, his entitlement to compensation for something that has happened whilst he was directly or indirectly in the service of the nation.

We can not escape that, and to satisfy ourselves merely with purely medical, clinical, pathological definitions, does not - is not substantial justice to the task, the duty which is thrown upon us as industrial medical men.

(Applause).

BY DOCTOR VORWALD:

The meeting is now ready for the rebuttal, may I say, by the members of the panel who have heard one another

express their views, and the first one to call upon is Doctor Lanza. Do you have anything to add, Doctor Lanza, any other remarks?

BY DOCTOR LANZA:

I don't think I have anything to add; I don't think there is as much disagreement between us as we might have expected. I differ with Doctor Sander on the broad use of the word 'pneumoconiosis' and I think a lot more thought has to be given to the matter of inert dusts or active dusts. I don't know whether Doctor Kenneth Lynch is in the audience or not, but not long ago, he presented to me the facts on two cases, two fatal cases of kaolin. Well, now, we always think of kaolin as an inert dust, yet here were two men who have died. He had the lungs, so he knew what he was talking about.

Well, of course, it comes back, just as one of the speakers said, to the question of dosage. These two men had worked forty-seven years in the industry, each one of them, and they had little - they had been smothered or drowned in kaolin. Now, to quibble as to whether that is dust, inert or active dust, I don't think, gets us very far. I don't think I have anything else to add.

BY DOCTOR VORWALD:

Doctor Greenburg?

BY DOCTOR GREENBURG:

Mr. Chairman, I don't think there is any great area of difference between the speakers here this morning. I think perhaps some of us have one or two points of disagreement with Doctor Sander, but I think that will all be straightened out after we get the record and read it over and discuss it a little more between ourselves.

I would only like to emphasize two points. I first came to Saranac in about 1921, if I remember correctly or possibly '22. Doctor Gardner was then just beginning to get interested in the dust question and I had been working for a year or two on the Public Health Service. I started in April, 1918 to be exact, and I came up here and we spent time in the laboratory doing some foolish things. Among others, we put salicic acid down the nostrils of some guinea pigs to see what happened. Of course, you know what happened, most of them drowned, but anyway, one thing that did emerge over the period of years was this, that I've seen a change in our attitude toward many different types of dusts which, at the beginning, we thought were completely inert.

At that time, silica was only supposed to be the only villain in the picture, and I remember the time when the question of talc dust, the effect of talc dust was brought up and it was said that the pathological effects of respiration of talc dust were due to three - two or three or four percent of free crystalline silica, and today we know that

to be completely untrue, so I would say that anything we do, we must keep an open mind and not say that this or that dust is completely free of damaging effect, because time has proven us wrong again and again and again, the last time with the coal dust studies in South Wales.

And, the other point which I should like to emphasize is this point which has been mentioned by Doctor Orenstein, in which I believe I mentioned before, and that is the fallaciousness of attributing, reading too much into an X-ray picture. If you look at an X-ray picture of the chest and you see that there is no nodulation present, and then wait until the autopsy of the lungs, taken out and blown up, and take an X-ray picture of the lungs, you will very frequently see nodulation present there, and I say that the difference between the early stages of dust inhalation and incapacity, bear no co-relation to each other, just as Doctor Orenstein has said, and that the Xray picture is sometimes most deceiving, and I admit we may not have any tool to substitute for it, but we must be very careful in our interpretations based on X-ray pictures and try instead to use the X-ray picture, careful industrial histories and laboratory studies on the dust and studies of the functional capacity of the work. Thank you.

BY DOCTOR VORWALD:

Doctor Sander?

BY DOCTOR SANDER:

I seem to be in the minority on the overall use of pneumoconiosis, and before I talk about that, I would like to correct one misstatement. I fully agree that you can inhale enough, I mean it's theoretically possible to inhale enough inert material to drown yourself; there is no question about that. We have not seen, in industry, sufficient concentrations of dust to have that occur, at least not in our area, and we have these extreme deposits of tin and iron in the welders, for example. Those welders have terrific exposure, inside of small tanks, and yet none of them had symptoms, none of them have had symptoms elsewhere. None of them had a measurable decrease in the maximal breathing capacity, perfectly normal lung function, so that in industry, out our way at least, and as far as I know in this country, we have not had sufficiently high concentrations of inert material to cause any impairment of lung function or disability. I say it's theoretically possible, of course, and Doctor Fletcher cited one case where it probably was such an excessive concentration.

But, for the overall use of pneumoconiosis, I still believe in staying with the generic meaning of words. I'm a purist in that regard. I don't like to call something what it isn't, and here we are, going to limit a pneumoconiosis to fibrotic pneumoconioses, and what do we call these

others which we have been able to show, and many others have shown have been truely inert. I throw out that question and I think maybe we might get an answer before the week is over.

BY DOCTOR VORWALD:

Mr. Wagner? Dick?

BY MR. WAGNER:

Well, I'll just say one sentence from here. I don't think there is anything else I can add to what I've said. I think, from the legal standpoint, the important thing is, as has been pointed out, what diseases are we going to make - what do we want to make - compensable? What are the diseases for which industry should bear a responsibility for compensation? And then let's see if we can fit the terms closest to them, so as not to leave the courts to construe those terms.

BY DOCTOR VORWALD:

Charles?

BY DOCTOR FLETCHER:

I think Doctor Sander has misunderstood me. I don't want to restrict the term 'pneumoconiosis' to fibrotic changes. Pneumoconiosis is a process in the lung, and I think, theoretically, that process is initiated when the first dust particle is engulfed by the first lung cell. You can't get away from it, that's when the process is first

initiated. It becomes done, of course, when Doctor Vorwald can say there is a deviation from normal; I can say there is a significant deviation; Doctor Hugh-Jones can say there is a deviation, clinically, but you can say they are all pneumoconioses, right from the engulfment of the first particle by the cell. I want to make that quite clear.

All I hesitate about is the statement that a dust is inert on two or three pathological cases. It may be quite true, I'm not denying it is true, I'm just quite frightened of it because of similar experiences in relation to coal.

The other point that I'd like to make, and that I tried to make earlier, is that I do strongly disagree with Doctor Lanza that a pneumociniosis must be occupational. Perhaps he has a vested interest there. What would we say to a deep sea diver whose hobby was sandstone and who got pneumoconiosis from his hobby?

BY DOCTOR VORWALD:

There is an announcement that Doctor Parker is wanted on the phone, call 154, Doctor Parker.

That brings us then to participation from the floor. Now, what are your questions, what are your comments? Doctor Hussey?

BY DOCTOR HUSSEY:

I'd like to say a word or two about one or two of

the matters that I made notes about. I don't want to be - I don't want to appear to be - I'm not, but I don't want to appear to be pedantic about this.

In the first place, I would like to emphasize that it has been - or give further emphasis to the fact that we are discussing a subject about which our knowledge is most imperfect. Now, does anybody disagree with that? Definitions at their best are imperfect, so we have a very complicated situation to try to formulate a definition.

Then I'd like to say a word in defense of Doctor Zenker. So many people used the word 'pneumoconiosis' and refer to Zenker as having originated it. I'd like tocall your attention, if you don't know it, to the fact that Doctor Zenker was a pathologist and he was not necessarily introducing a term. If you will read his paper, you will find the very last sentence, almost in the last paragraph, the title of his paper was "The Pulmonary Diseases Due to Inhalation of Dust", and he said rather than to use this long-winded expression, I will simply use the word 'pneumoconiosis', which means the same thing. That's the way the Greeks say it, and I won't go into the Greek about it; you can find some Greek scholar for that, but that's the dope.

Now, he was talking about an anatomical disease, not clinical disease. All of you are talking about clinical disease. Don't, then, blame it on Zenker. If he were here

today and he knew the story about Mary's little lamb that went to Pittsburg, I'm sure he'd speak of it that way.

Now, also in making these various definitions, we have to keep in mind that, in most instances, if you look into the origin of our terms that we use in medicine, they are much less secure than is the term pneumonoconiosis, which I think must be, if you're going to accept the original way in which it was introduced, mean diseases of the lung due to the inhalation of dust.

Typhoid fever is a term we derive from comparative and statistical data. Tuberculosis is a disease that we derive from the appearance of tubercles, and finally, I'd like to indicate to you, the need, in thinking about all of these matters of definition especially, and this is one of the few, if not the only instance in medicine, I don't mean the pulmonary dust diseases, but occupational diseases,where our definitions have to stand a legal test and that's always a difficult matter, but I do think it's very important for us to keep in mind that we must have in our definitions, not just vague words, but very definite expressions to indicate as nearly as is possible, the exact meaning that we wish to convey, whether it's an anatomical meaning or whether it's a clinical meaning or whether it's a combination of the two, and then finally, since the one consideration that's of particular importance involved in all of these matters,

is the question of disability, the definition should also include some statement that permits one to determine, insofar as it's possible, the disability and the extent of it in connection with that disease.

BY DOCTOR VORWALD:

Doctor Fletcher cited the fact, in agreement with Doctor Sander, and I saw Doctor Sander shake his head, that as soon as a particle of free crystalline silica is deposited in the lung, there is a cellualr reaction. In studying these many cases which come to us here, there is always the problem, in my own mind, and that is looking at tissue, I see that cellular reaction. Maybe one particle of free crystalline silica, maybe more particles. There is a reaction there of the lung to free crystalline silica. However, there has never been any evident clinical signs or symptoms. The radiograph appears normal; there are no respiratory symptoms. We know the man has been exposed to free crystalline silica. We can recover free crystalline silica from the lung which may or may not mean a thing, and the real problem then is, does this man have silicosis. I am aware, as you are, of our definition of silicosis, that if a man is in the presence of brief nodular shadows, radiographically, and nodular lesions in the lung; yet here we have this case where frequently silica particles are in cells within the lung and there is cellular damage, yet

what we see does not conform to our definition. Does this man have silicosis? Those are some of the problems.

Again, it is open to the floor. Doctor Brodman?

BY DOCTOR BRODMAN:

May I speak from here? I am one of these intrepid thoracic surgeons that Doctor Fletcher referred to in a very hesitating manner. I can not help but think, we speak of looking at an X-ray, with nodulation, and since there are no symptoms, is there loss of function or isn't there? Now, sometimes it becomes my duty to take out a half a lung. Now, there is no question at all in that case, that there is loss of pulmonary tissue, or I might say destruction of pulmonary tissue and still that patient without, or with a half a lung gone, is absolutely simulous from the standpoint of pulmonary disease.

I should like to cite one case to which Doctor Fletcher referred, and that is a case of a young man of 21 who had an exposure ti silica, and had diffused nodulations throughout both lungs, and six experts gave six different diagnoses. I must confess it remained, it was left to me as the thoracic surgeon to take out a small piece of lung which did not involve too much surgery or excessive danger to the patient, aside from the fact that he was quite dismayed, and somewhat anxious, but with that piece of lung, we were able to very, very definitely determine that the man

had sarco-silicosis.

BY DOCTOR VORWALD:

Doctor Merewether, would you care to say anything? I call upon Doctor Merewether because, during recent days, we have had considerable discussion about these things, and Doctor Merewether whom you will hear later on in the Symposium is also a guest at the Symposium coming from England.

BY DOCTOR MEREWETHER:

Mr. Chairman, Ladies and Gentlemen: The most expert exposition of this subject this morning has, as I expected, served not to show grievance so much, as to throw up differences in the various aspects that the people have to deal with in this matter. I have not prepared anything on it, and I feel rather like the new tenth husband of the famous film star, in a very humble and embarrassed position, but more particularly, because - and more particularly because I feel that I can't give you any answers.

Doctor Raymond Hussey implies that the Greeks may have an answer to these things, but I think we should better get down to the real priorities in this discussion, as much as possible, as must be obvious to all of us. The important thing is or the important things are really - first priorities are prevention and compensation for those unfortunate enough to get the disease, and its nomenclature and definitions which enable these matters to be facilitated

forwardly and these are more important that academic protection, and moreover, we can't expect total prevention of these diseases, but only a proportion, and you, no doubt, will come along way in this in the course of the future, but we must try and keep up to these things in practical priorities.

Therefore, since - since the word 'pneumoconiosis' in the industries and amongst the people who suffer from the disease, has a most sinister meaning, I deplore the use of the word except in medical circles, to indicate something that does not cause disablement, sickness or death. Now, it's unfortunate really, that the word has come to stay. It's been in existence so long, but it is very necessary for operational purposes that we should know what it means, as all the speakers have pointed out.

Now, there are three types in general, of people who consider or who have to consider the word 'pneumoconiosis'. The widest conception of it is that of the man who is not the least bit interested, the intelligent layman, the doctor who is specializing in some other - highly specialized in some other line of business, who uses it merely meaning a dusty lung, but it sounds better to call it 'pneumoconiosis'.

The second is a wide definition and a particular definition like that adopted - adopted by the ILO, some years

ago. This is important that the ILO has to adopt a high definition, so as to enable, in your somewhat infrequent discussions that they have dealing with particular subjects like pneumoconiosis, there is opportunity to expand, follow expert knowledge and focus research and compensation laws and prevention laws, and so forth, in the right direction.

The third and more narrow types of definition are those which we commonly use in different forms in different states in different countires. They will probably always vary for other reasons, amongst themselves. In England, we have a rather tight definity, which in itself, has varied since 1925, 1925, the first main definition of these things, and that is likely to vary again as more knowledge comes along.

At the present moment, pneumoconiosis is defined as fibrosis of the lungs due to silica dust, as bestos dust or other dust, and includes the condition known as dust reticulation of the lungs.

Now, that is for a particular purpose. It is something that expert chest physicians in your country, my country, and so forth, understand what it means, because they have seen so many cases and they can apply it with justice. The word 'other dust', if there was another dust, then it would have to be scheduled separately and that is what is causing the trouble at the moment. Berylliosis at

at the moment, for instance, is presently being compensated as beryllium poisoning.

Now, it is important to have a definition for compensation purposes, which can be applied by specialists in the field, for the reason that compensation is something for a - in this case, it's something for a devastating disease, and those people should be paid equivalent for it, those that get it. It is just to compensate them for such a disease.

It is also unjust to compensate somebody who has not got the disease, by making the definition too wide. In our law, we also have a method, a provision in the Industrial Injuries Act which provides for prescribing a disease with retrograde effect, a very unusual thing in any legislation, that enables one, as soon as evidence is found of the occupational character of any disease, evidence that satisfys the criteria just mentioned, it can be scheduled and people who have got the disease, after it is, you know, on the list, can be compensated.

Now, I said I was going to add a few bits and pieces to the difficulties. Is carsinoma due to actual trioxide dust, or nickel, if nickel is the cause, dust, or the bichromates pneumoconiosis. This is not a pneumoconiosis by our own definition, so we have to put it in the Acts separately.

Now, mixed dust, some people suggest we should put the dust on, but here surely we should have further information from the experts in minerology, and geology, because you could have mixed dusts which are deliberately mixed, and they produce, as everybody knows, very mixed types of X-ray appearances. Then you can have mixed dusts which are mixed in some areas of the country and not in others. Thus, you can have a pure talc, or so-called talc, French chalk, call it what you like, which has no free silica in it.

Yet, I have seen, I remember the last time I was here ten years ago, through the courtesy of my old friend, that great man, that lovable great man, LeRoy Gardner, a slide of a lung which in the literature was labeled talc pneumoconiosis, and it was pretty obvious that the man died of silicosis, and asbestosis together, whatever else the talc did. It was obvious to anybody. He didn't label it that.

Now, the quiet agreement that a thing is called inert, may be illustrated by Roy Gardner's magnificently illuminating deliberations, that dust if inhaled, may cause damage to the lung in spite of being classed as active or inert dust, and lastly, the main dust that causes disability in disease, we know, and if we can get a nomenclature suitable for them, we have achieved a priority, which will cause

or help justice to be done to those known cases. It may do a little damage to the researchers who are looking into the epoch type, but it is more important to see that justice is done and do it quickly.

BY DOCTOR VORWALD:

Are there other questions or comments from the floor? (No response).

We have had a discussion of disease, what is disease. Anyone wish to comment as to their interpretation of a disease. Doctor McCann, really, you should say something about it. Doctor Werner, care to make a remark?

BY DOCTOR McCANN:

This is a very difficult question to which to address oneself. As a clinician, I think we have to relate the word disease to the occurrence of symptoms and we must realize, at the outset, that disease in the sense that symptoms occur, is not so extensive that a - that it becomes a pathological process.

A very skilled athlete may develop a system of distress if the emotional distress is great enough, so I think that we have then to take into consideration the factor of great stress, the factor of normality or abnormality of the individual; we have to take the individual as a whole into account, in regard to his ability to adapt himself to stress. He may have a pathological process in one organ,

for which he will comensate by the adapted processes in another, so that under the same stress, he may react differently from his neighbor. I think it's one word to try to define disease as distinct from a pathological process; he would have to take these things into account, aside from an individual with definite pathological process recognized as being produced by silica, who may never be put under stress sufficient to bring out symptoms, so that from a clinician's standpoint, I think he would have to say then that disease is the difference in adaptation to stress produced by a pathological process, to such an extent that the individual is unable to adapt with ease to the extent that a normal man would do so. This is very difficult.

BY DOCTOR VORWALD:

We will get some remarks here. We're going to close the session immediately because we are late. But there is considerable agreement between our thoughts concerning definitions. However, I think that all of us will agree that there is considerable disagreement also, and that there are terms which we are - which we use today which need definition and clarification, and thinking about this, anticipating that we would come out of this discussion with something that might not be concrete enough, I thought that it might be well to make something concrete out of

this discussion, and in debating this thing with my colleagues, it was thought that we better present this to the Symposium, that this Symposium regrets the confusion caused by the use of the word 'pneumoconiosis' with uncertain meaning and that this Symposium invites Doctor Seward Miller, Doctor Peterson of the Industrial Counsel, Doctor Miller of the United States Public Health Service, to constitute a small committee, to constitute a small committee under the heading of representatives from bodies and individual experts specifically concerned with the use of the term 'pneumoconiosis', to consider its definition, having regard to its application in the research, clinical, operative, and legal fields, with the aim of common interpretation, and that that committee should report.

What is your comment, do you think that such a committee should be constituted under the aegis of a group having interest, such as the industrial counsel, or on industrial health, or the United States Public Health Service, to appoint this committee and this committee will consider these terms and that there shall be letters - there shall be also corresponding members to the committee, our friends from England, our friends from South Afraica and elsewhere, who might write their views to the Committee. Is that worthwhile? I think it is. Any expression?

BY DOCTOR PAUL RICHARDS:

I make a suggestion that your suggestion be made as a motion and I second the motion.

BY DOCTOR VORWALD:

My suggestion - it has been suggested that my suggestion be made a motion and that that motion be seconded. It has been seconded. So it has been done, so is it your wish then, by a voice merely, that this be done, and then I think Doctor Seward Hiller and Doctor Peterson in the audience, and I shall place the burden of responsibility upon either one or both of them to arrange such committee. Is that your wish by voice vote? Those in favor? (Response of ayes). Those against it? (No response). I take it it's unanimous, then, Doctor Peterson.

BY DOCTOR PETERSON:

I'd like to see in that representation, the American Public Health Association.

BY DOCTOR VORWALD:

American Public Health; I'm sure Doctor Seward Miller is here and Doctor Peterson and they have heard your recommendation, and they will take consideration of it.

BY DOCTOR GREENBURG:

Mr. Chairman, the American Public Health Association now has a committee at work on it.

BY DOCTOR VORWALD:

Well, perhaps the American Public Health Associa-

tion should be a tri-part members of this group, with Doctor Hiller and Doctor Peterson to formulate a defhition under the aegis of individuals, specifically concerned with the use of terms. Then I place that responsibility upon Doctor Seward Hiller, Doctor Peterson, hoping they can arrange this committee.

(Adjournment of morning session 12:20 P.M.)

SUBJECT: THE INHALATION OF CERTAIN INDUSTRIAL SUBSTANCES

Chairman: Theodore F. Hatch — Monday, Sept. 22. 2:00 - 5:30 P. M.

Brief Reviews

Silica	Thomas M. Durkan
Asbestos	Arthur J. Vorwald, M. D.
Beryllium	Harriet L. Hardy, M. D.
Bauxite	C. G. Shaver, M.D. and Donald Solandt, M. D.

Discussion.

New Synethetic Silica — Philip C. Pratt, M. D.

The Fate of Inhaled Particulates — Merril Eisenbud

Discussion, led by — Theodore F. Hatch.

BY DOCTOR VORWALD: