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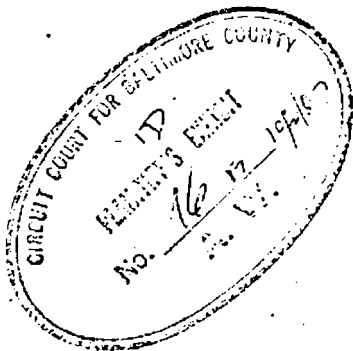
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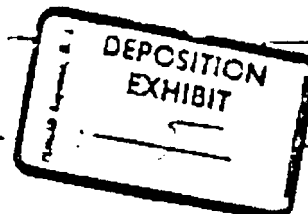
HARRY A. NELSON, *Director of Workmen's Compensation*

Proceedings of Conference Concerning

## EFFECTS OF DUSTS UPON THE RESPIRATORY SYSTEM



Held at Medinah Athletic Club, Chicago  
November 16-17, 1932



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Dr. Albert E. Russell, Surgeon, U.S.  
Bureau of Mines

180

This man was a slate worker. His history is that he lived in the area of this slate and that for most of his life, aside from farming, that had been his sole occupation. The slate workers in one plant which we observed were not exposed to any quartz. The plant adjacent to this mill had about 35% quartz in the slate it used. You will note in considering slate that the silica content of slate varies in different areas so we can't say that slate has a definite amount of silica without determining it first. The same holds true for granite. There are certain granites which have much less than 35%. I think most of the Vermont granite contains about 35% quartz. You can see the futility of trying to compare X-rays of the lungs from workers in one industry to those of another.

This is an X-ray of a slate miller. You will notice he has a few pulmonary markings, with quite a bit of fine linear fibrosis. We found in the group of slate miller workers one case who had an active tuberculosis. He had been in this slate mill about six years and apparently the tuberculosis was just incidental and not a result of his occupation.

Other slate workers showed hilus thickenings with a few calcifications. Still other slate workers showed a different picture but not extensive pathology.

This is an X-ray of another slate worker showing quite a bit of shadows in the lower portion of the right lung with a few calcifications.

This is the X-ray of a man who had, or has, asbestosis. His occupation was that of cleaning and restoring the asbestos on pipes in one of our government hospitals. He had been working at the trade about six years, I think; and you will see, he has fibrosis of both lungs. The character of the fibrosis is quite a bit different from that of the granite workers. He had disability and the government compensated him for it.

This is a graph showing classification of silicosis. The first classification was made in South Africa. They started out classifying their cases as primary and secondary stages, and as they learned more about the disease they had to add to this classification. They learned that they had a stage earlier than primary and it was called ante-primary,

and as it came they called it that "intermediate" stage of the disease and there was the average placed in the case as having asbestosis, their compensation and This is the one

In Australia. They called it Dr. Moore's more fibrosis, tuberculosis, or dust. The standard advanced case phases. At classification is recommended. The written into it they said a should be added stages designating fibrosis than recommended. The stages would first stage of considered as

This slide come under the ever, the dense stage, but you indicating that the lung. He States Government eight years. masks. He which were going in the same

which position he held until 1919. He then entered the employment of the United States Public Health Service as a member of the Staff of Service, Hospital No. 26, at Greenville, South Carolina, where he remained in service, specializing in the treatment of tuberculosis during 1920 and 1921. From 1922-23, inclusive, Dr. Russell acted as Assistant Chief of the Tuberculosis Hospital Section of the U. S. Veterans' Bureau. From 1924-30 he was in charge of field studies as to the health of workers in dusty trades for the United States Public Health Service. In 1930 he was appointed as official representative of the United States at the International Silicosis Conference at the League of Nations at Johannesburg, South Africa, of which he acted as Vice-Chairman. In 1930 he became Chief Surgeon of the U. S. Bureau of Mines.

Dr. Russell has made numerous contributions to medical magazines, and has written many reports for the U. S. Public Health Service, covering particularly the field of pulmonary diseases and more specifically those diseases resulting from the inhalation of dust.

LIST OF PERSONS  
CONCERNING EFFECTS  
SYSTEM FIELD  
SION OF WISCONSIN  
BIR 16 17, 1932

|                      |       |
|----------------------|-------|
| Andrew, A. A.        | Chief |
| Atkinson, F. L.      | Milw  |
| Auger, R. A.         | Mon   |
| Banyai, Dr. A. L.    | Milw  |
| Beiknap, E. L. M. D. | M.    |
| Bellis, Dr. G. L.    | Wau   |
| Berlin, Dr. D. S.    | Chic  |
| Bierer, E. J.        | Kohl  |
| Bloomfield, J. L.    | Was   |
| Britton, Dr. J. A.   | Chic  |
| Brown, Wm. E.        | Milw  |
| Clark, Dr. W. Irvine | Wau   |
| Cottingham, M. D.    | Kohl  |
| Cummings, D. E.      | Sarg  |
| Defflois, Lewis      | New   |
| Dickson, L. H.       | Chic  |
| Dobbins, Dr. Thos.   | Kem   |
| Doe, Arthur B.       | Sarg  |
| Earlywine, J. L.     | Chic  |
| French, G. E.        | Chic  |
| Ford, Dr. W. B.      | Milw  |

California

N. Dakota

Connecticut

Mass

Wisc

and all others

of Comp Laws in 1932 and  
1933.

Would this go to the same Commission? Or to the same body?

## Appendix B

LIST OF PERSONS WHO ATTENDED CONFERENCE CONCERNING EFFECTS OF DUSTS UPON THE RESPIRATORY SYSTEM HELD BEFORE THE INDUSTRIAL COMMISSION OF WISCONSIN AT CHICAGO, ILLINOIS, ON NOVEMBER 16-17, 1922.

| Name                 | Address                          | Profession       | Business Connection                 |
|----------------------|----------------------------------|------------------|-------------------------------------|
| Andrews, Art A.      | Chicago, Ill.                    |                  | Lumbermens Mutual Casualty Co.      |
| Atkinson, F.         | Milwaukee, Wis.                  |                  | Liberty Mutual Casualty             |
| Augst, R. A.         | Montreal, Wis.                   |                  | Montreal Mining Co.                 |
| Banyai, Dr. A. L.    | Milwaukee, Wis.                  | Physician        | Clinic Director, St. Michael's San. |
| Belknap, E. L. M.D.  | 231 W. Wis. Ave. Milwaukee, Wis. | Medical Director | Globe Union Mfg. Co.                |
| Bellis, Dr. G. L.    | Wauwatosa, Wis.                  |                  | Supt. Muirsdale San.                |
| Berlin, Dr. D. S.    | Chicago, Ill.                    |                  | Augustine Hosp.                     |
| Biever, E. J.        | Kohler, Wis.                     | Mech. Engineer   | Kohler Company                      |
| Bloomfield, J. J.    | Washington, D. C.                |                  | U. S. Public Health Service         |
| Britton, Dr. J. A.   | Chicago, Ill.                    | Medical Director | International Harvester Co.         |
| Brown, Wm. E.        | Milwaukee, Wis.                  | Lawyer           | Allis-Chalmers Mfg. Co.             |
| Clark, Dr. W. Irvine | Worcester, Mass.                 | Physician        | Norton Company Harvard School       |
| Cottingham, M. D.    | Kohler, Wis.                     | Medical Director | Kohler Company                      |
| Cummings, D. E.      | Saranac Lake, N. Y.              | Asst. Director   | Saranac Lab.                        |
| DeBlois, Lewis       | New York, N. Y.                  |                  |                                     |
| Dickson, L. E.       | Chicago, Ill.                    |                  | Standard Equipment Co.              |
| Dobbins, Dr. Thos.   | Kenosha, Wis.                    |                  | Nash Motors Co.                     |
| Doe, Arthur B.       | 825 N. Broadway, Milwaukee, Wis. | Lawyer           | Employers Group                     |
| Earlywine, J. L.     | Chicago, Ill.                    |                  |                                     |
| French, G. E.        | Chicago, Ill.                    |                  | Liberty Mut. Cas.                   |
| Ford, Dr. W. B.      | Milwaukee, Wis.                  | Physician        | Asst. Chief T. B. Div. Health Dept. |

| Name                        | Address                              | Profession              | Business Connection                         | Name                        |          |
|-----------------------------|--------------------------------------|-------------------------|---------------------------------------------|-----------------------------|----------|
| Gandrey, Alfred R.          | Milwaukee, Wis.                      | Lawyer                  | Ass't City Atty.                            | Guillert, F.                | Ch       |
| Nowak, C. A.                | Chicago, Ill.                        |                         | Ill. Indus. Com.                            | Guire, Peter, Jr.           | Ch       |
| O'Malley, Dr. T. S.         | 223 W. Wis. Ave.,<br>Milwaukee, Wis. | Surgeon                 |                                             | Hahne, Dr. J. E.            | MI       |
| Ogden, Dr. C. H.            | Chicago, Ill.                        |                         | Ill. Steel Co.                              | Hensel, H. G.               | Ch       |
| Otjen, C. J.                | Milwaukee, Wis.                      | Attorney                | Liberty Mutual<br>Ins. Co.                  | Huth, Gordon C.             | Ch       |
| Parrish, L. J.              | Milwaukee, Wis.                      |                         | A. O. Smith Corp.                           | Ireland, Walter             | Ro       |
| Pierpont, Dr. D. C.         | Ironwood, Mich.                      |                         | Piekunski, Mather<br>Co.                    | Janzer, W. W.               | MI       |
| Reid, M. A.                 | Hurley, Wis.                         |                         | Montreal Mining<br>Co. & Odanah<br>Iron Co. | Knutson, R. G.              | Ma       |
| Reynolds, Paul F.           | Cleveland, Ohio                      |                         | Montreal Mining<br>Co.                      | Kuechle, S. E.              | Bo       |
| Ringo, Dr. H. F.            | Montreal, Wis.                       |                         | Montreal Mining<br>Co.                      | Kuhn, Dr. Leroy P.          | Chi      |
| Russell, Dr. A. E.          | Washington, D.C.                     | Surgeon                 | U. S. Public<br>Health Service              | Lavich, J. L.               | Chi      |
| Sander, O. A.               | 800 Empire Bldg.,<br>Milwaukee, Wis. |                         | Employers Mut.                              | Lotz, Oscar                 | 324<br>3 |
| Sappington,<br>Dr. C. O.    | Chicago, Ill.                        | Consultant<br>Int. Med. |                                             | McIntyre, M. D.             | Cle      |
| Schlomoviat, W.<br>Benj. H. | 210 Empire Bldg.,<br>Milwaukee, Wis. | Internist               |                                             | McLaren, Dr. J. B.          | Apr      |
| Sexton, James M.            | Milwaukee, Wis.                      |                         | Employers Mut.                              | Meilum, H. J.               | Ken      |
| Story, H. W.                | Milwaukee, Wis.                      |                         | Allis-Chalmers<br>Mfg. Co.                  | Miloslavich, Dr.<br>Edw. L. | MI       |
| Tarrell, L. A.              | Milwaukee, Wis.                      | Attorney                |                                             | Nelson, Harry A.            | Mar      |
| Tharinger, E. L.            | Milwaukee, Wis.                      | Pathologist             |                                             | Wrabetz, Voyta              | Man      |
| Warfield, Dr.<br>Louis M.   | Milwaukee, Wis.                      | Internist               |                                             | Wright, C. B.               | MI       |
| White, Wm. W.               | Cleveland, Ohio                      |                         | Montreal Mining<br>Co.                      | Zinn, R. F.                 | Iron     |
| Wilcox, F. M.               | Madison, Wis.                        | Chairman                | Wis. Indus. Com.                            |                             |          |
| Willis, H. S.               | Detroit, Mich.                       |                         | Detroit Public<br>Health Dept.              |                             |          |
| Goldschmidt, W. J.          | Milwaukee, Wis.                      | Attorney                |                                             |                             |          |
| Graves, Dr. S. S.           | Chicago, Ill.                        | Medical Director        | Ill. Indus. Com.                            |                             |          |
| Gray, A. W.                 | 324 E. Wis. Ave.,<br>Milwaukee, Wis. | Medical                 | Private Practice                            |                             |          |

| Name                     | Address                           | Profession                 | Business Connections                |
|--------------------------|-----------------------------------|----------------------------|-------------------------------------|
| Guillert, F.             | Chicago, Ill.                     |                            | Eye Shield Co.                      |
| Guire, Peter, Jr.        | Chicago, Ill.                     | Commissioner               | Ill. Indus. Com.                    |
| Habbe, Dr. J. E.         | Milwaukee, Wis.                   | Röntgenologist             |                                     |
| Hornel, H. G.            | Chicago, Ill.                     | Safety Director            | Youngstown Sht. & Tube Co.          |
| Huth, Gordon C.          | Chicago, Ill.                     |                            | Universal Atlas Cement Co.          |
| Ireland, Walter          | Kohler, Wis.                      | Employment Mgr.            | Kohler Co.                          |
| Janzer, W. W.            | Milwaukee, Wis.                   |                            | Seaman Body Corp.                   |
| Knutson, R. G.           | Madison, Wis.                     | Member                     | Wis. Indus. Com.                    |
| Kuechle, B. E.           | Box 32, Wausau, Wis.              | Insurance                  | Employers Mut.                      |
| Kuhn, Dr. Leroy P.       | Chicago, Ill.                     |                            | Lumbermens Mut. Cas. Co.            |
| Lavich, J. L.            | Chicago, Ill.                     |                            | Lumbermens Mut. Cas. Co.            |
| Lotz, Oscar              | 324 E. Wis. Ave., Milwaukee, Wis. | Medical                    | Private Practice                    |
| McIntyre, M. D.          | Cleveland, Ohio                   |                            | Pickands, Mather Co.                |
| McLaren, Dr. J. B.       | Appleton, Wis.                    | Physician                  | Chief Surgeon, Kimberly-Clark Corp. |
| Mellum, H. J.            | Kenosha, Wis.                     |                            | Nash Motors Co.                     |
| Miloslavich, Dr. Edw. L. | Milwaukee, Wis.                   | Pathologist                |                                     |
| Nelson, Harry A.         | Madison, Wis.                     | Director, Workmen's Comps. | Wis. Indus. Com.                    |
| Wrabetz, Voyta           | Madison, Wis.                     | Member                     | Wis. Indus. Com.                    |
| Wright, C. B.            | Minneapolis, Minn.                | Internal                   |                                     |
| Zinn, R. P.              | Ironwood, Mich.                   |                            | Pickands, Mather Co.                |