FILE NAME: Philip Carey (PC)

DATE: 1954-1957

DOC#: PC011

DOCUMENT DESCRIPTION: Worker's Comp File of Len Hope

CASEY, GERRY, CASEY, WESTBROOK, REED & HUGHES

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JAMES F COLLINS, III
DENNIS PAUL DORMAN
GERSHON D GREENBLATT
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*A PROFESSIONAL CORPORATION

RICHARD D WESTBROOK
1944-1982

VALLEJO OFFICE
1500 TENNESSEE STREET
VALLEJO, CALIFORNIA 94590
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MARSHALL ISLANDS OFFICE
ROOM 205
POST OFFICE BUILDING
P O BOX 141
MAJURO, MARSHALL ISLANDS 96960

January 17, 1985

Mr. Barry Castleman
1722 Linden Avenue
Baltimore, Maryland 21217

Dear Mr. Castleman:

Enclosed please find the copy of the Len Hope file, which is part of the Kenneth Lynch Documents. This is being sent to you as requested by Marcia W. Hughes.

Very truly yours,

M. Montgomery

Michael Montgomery
Legal Assistant to MARCIA W. HUGHES

MM:341/123psd

P. Casey
Clerk

NINE BROWN ENVELOPES WITH INFORMATION PERTAINING TO ASBESTOSIS

1. Reprints: Pulmonary Asbestosis II, Pulmonary Asbestosis III: Carcinoma of Lung in Asbesto-Silicosis - Lynch & Smith
   Work Sheets - Lynch
   Asbestos Bodies in Sputum and Lung - Lynch & Smith

   Effects of Inhalation of Asbestos Dust on the Lungs of Asbestos Workers By A. J. Lanza, McConnell, Fehnel

   A Review of Pneumoconiosis by Pancoast & Pendergrass
   Public Health Reports, Jan. 4, 1935 - Vol. 50, No. I
   The Occurrence of Pulmonary Fibrosis and Other Pulmonary Affections in Asbestos Workers - E.R.A. Merewether, M.D.
   Pulmonary Asbestosis: Report of a Case-Ralph D. Mills, M.D.
   Pulmonary Asbestosis: Wood, Lond, Gloyne and Leeds
   Pulmonary Asbestosis in its Clinical Aspects-Sir Thomas Oliver, M.D.
   ASBESTOSIS. Special Bulletin No. 42, Dept. of Labor, Pa.

2. Schulken Case, 1935

3. Carcinoma in Asbesto-Silicosis, Reprint No. III - Garvis, 1935.

4. Illustrations of Paper on the Asbestosis Body and Similar Objects in Lung, JAMA, June 1937.

5. Illustrations - Asbestosis, 1937.

6. Pulmonary Asbestosis IV. The Asbestosis Body and Similar Objects in the Lung. March 1937 - Work Sheets.

7. Photos - Asbestosis - KML

8. Photographs of Asbestosis Slides, June 1937.

9. Films & Prints, 25237, Wm. Parnell and Paper No. V., Aug. 1939

ASBESTOSIS (Special)
Len R. Hope Case

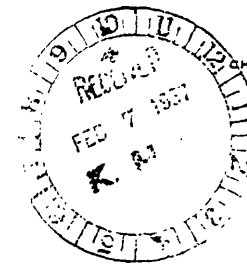
COWELL & FLETCHER
ATTORNEYS AND COUNSELLORS AT LAW
1109 ENQUIRER BUILDING
617 VINE STREET
CINCINNATI 2, OHIO

JOHN W. COWELL (1901-1955)
STUART E. FLETCHER
LEE J. HERETH

DAVID W. BACON

PHONES
CHERRY 1-0063
1-0064

February 5, 1957



Dr. Kenneth M. Lynch, President
Medical College of South Carolina
16 Lucas Street
Charleston 16, South Carolina

Re: Industrial Commission OD 79998
Len R. Hope, dec'd.
Mary Lee Hope, widow-claimant

Dear Dr. Lynch:

I have just received a copy of the official order of the Commission in the above matter allowing the claim. When I was in Columbus a week or so ago I first learned that the Commission was going to do so. I am enclosing a copy of the report of the Attorney-Examiner and also a copy of the Commission's order which adopted the report into its order.

I want to thank you for your very kind cooperation in this matter, not only on behalf of myself but also on behalf of Mrs. Mary Lee Hope, the widow. As I wrote Dr. Princi, enclosing a copy of the report and order, this is an excellent example of cooperation between doctors and lawyers, and the important thing is it benefits the client, or, as in this case, the widow-claimant.

As you can see from the Attorney-Examiner's report, your letter of October 30, 1956, was sufficient, although I had sent them a copy of your letter of December 31, 1956, prior to my going to the final hearing in Columbus on January 24, 1957.

I thought you would be interested in the outcome of this case and, again, thank you for your invaluable aid.

Sincerely yours,

LEE J. HERETH

LJH:ic
Encls.

COPY

O. D.79998

Len R. Hope, Dec'd.
Mrs. Mary Lee Hope
5434 Sansom Street
Philadelphia, Pennsylvania

The Philip Carey Manufacturing Company, Wayne Avenue, Lockland, Ohio

December 22, 1951 — September 14, 1952

Asbestosis

$70.88

Medical services - $359.00

APPEAL TO THE COMMISSION

In accordance with the recent order of the Commission this claim was submitted to the Medical Advisory Board at Columbus on December 20, 1956 for their review and opinion as requested by the Commission. It is found that in addition to the proof which was previously on record, the claimant for the attorney offered in evidence a letter, dated October 30, 1956, from Dr. Kenneth M. Lynch, in respect to the cause of death. Copies of this letter have been made and are now to be found on file.

After a careful review of proof on file, together with the agreement of the attorneys and the additional medical reports given by Dr. Lynch and recently by Dr. Clark, the Medical Advisory Board have given a final opinion as follows:

> "After reviewing the entire file, and a letter in the possession of claimant's attorney, which has not previously been in the file, and which was a letter from Dr. Lynch of the University of South Carolina, and after reviewing the x-rays, the Medical Advisory Board concludes as follows:
>
> That the claimant died of heart disease secondary to chronic pulmonary fibrosis, that the pulmonary fibrosis was associated in chemical analysis with the finding of silicates characteristic of asbestos similar to those found in the dust at his place of employment and that his death therefore resulted from asbestosis."

CONCLUSION:

The opinion given by the three Members of the Medical Advisory Board, together with the later opinions of Dr. Lynch and of Dr. Clark, now show a preponderance of proof in favor of the allowance of this death claim in accordance with the previous finding of the Commission to the effect that the claimant herein is the legal widow and that she is the only person dependent upon the decedent.

It is now concluded that this death claim should be allowed and that a death award should be granted in the amount of $9,000.00 in accordance with the law which was in effect at the time of death on September 14, 1952.

HEM:JC
12-28-56

O. . 79998
Len R. Hope, Dec'd.
Mrs. Mary Lee Hope, Widow-claimant

RECOMMENDATION:

That the order of January 15, 1954, and any later orders which disallowed this death claim, be hereby revoked and set aside; that the Appeal to the Commission filed on July 12, 1954, be allowed to the extent of the following order: The Commission finds from recent medical reports now on file and the opinion of the three Members of Medical Advisory Board on December 20, 1956, established that the death of the decedent herein on September 14, 1952, resulted from the disease of asbestosis contracted in the course of employment. It is now the order of the Commission that this death claim be allowed and that the statutory death award in the amount of $9,000.00 be granted to Mary Lee Hope, who is the legal widow and who was wholly dependent upon the decedent at the time of death; that the balance on the funeral bill in the amount of $70.60 be paid to the Sunset Lawn Mortuary; that the previous expenses which have been paid in connection with this claim and charged to the occupational disease surplus fund be now charged to the expenses of this claim and to the risk of the Philip Carey Manufacturing Company.

Prepared by Harry E. McKeever-JC
Attorney Examiner

December 28, 1956

COPY

THE INDUSTRIAL COMMISSION OF OHIO

Form C-10A

NOTICE OF FINDING

Employee: Len R. Hope, Dec'd.
Claimant: Mrs. Mary Lee Hope, Widow — Claim No. O. D. 79998
Street & No. 5434 Sansom Street — Date of injury December 22, 1951
City Philadelphia, Pennsylvania — Date of Death September 14, 1952

Employer: The Philip Carey Manufacturing Co. — Manual No. 1852
Street and No. Wayne Avenue — Risk No. 1684
City Lockland, Ohio

PREVIOUS AWARDS FOR COMPENSATION AND MEDICAL SERVICES

Total Medical Services to date — Amount $449.00

FINDING OF FACTS AND MINUTES

On this day the above numbered claim, together with the proof on file, was presented to the Commission, considered and a finding of facts made as follows: That said employe's injury was sustained in the course of employment, and at the time and in the manner alleged in the application; that employe's employer was at the time of injury a subscriber to the State Insurance Fund; that said injury was not purposely self-inflicted; that death resulted to said employe from the injruy described in the application. that the following persons were his dependents at the time of death.

The claim, therefore, was allowed in accordance with the facts shown below, and order and authority granted to the Auditor for issuing warrants in payment of the same according to the rules of the Commission.

MEDICAL SERVICES

Item	Name	Address	Amount	Warrant No.
Funeral	Sunset Lawn Mortuary	2350 East 13th South Salt Lake City, Utah.	$70.60	

COMPENSATION

Weeks	Rate	Period	Amount	Warrant No.
279-4/7	32.20	Sept. 15-52 to Jan. 23-58	$9000.00	

minus

Lee J. Hereth
Present for Claimant — Address

James Hughes
Present for Employer — Address
Daniel Mann for Attorney General
This action was based upon the following motion made by Mr. Norse
Heard by Mr. Morse, Mr. Dickerson, Mr. Blake:RR
That the order of January 15, 1954, and any later orders which disallowed this death claim, be hereby revoked and set aside; that the Appeal to the Commission filed on July 12, 1954 be allowed to the extent of the following order: The Commission finds from recent medical reports now on file and the opinion of the three Members of Medical Advisory Boadd on December 20, 1956, established that the death of the decedent herein on September 14, 1952, resulted from the disease of asbestosis contracted in the course of employment. It is now the order of the Commission that this death claim be allowed and that the statutory death award in the amount of $9,000.00 be granted to Mary Lee Hope, who is the legal widow and who was wholly dependent upon the decedent at the time of death; that the balance on the funeral bill in the amount of $70.60 be paid to the Sunset Lawn Mortuary; that the previous expenses which have been paid in connection with this claim and charged to the Occupational Disease Surplus Fund be now charged to the expenses of this claim and to the Risk of Philip Carey Manufacturing Company. The motion was seconded by Mr. Blake and voted upon as follows: Mr. Morse, aye; Mr. Dickerson, aye; Mr. Blake, aye.

Date January 24, 1957 — Secretary

December 31, 1956

Mr. L. J. Hereth
c/o Cowell & Fletcher
1109 Enquirer Building
617 Vine Street
Cincinnati 2, Ohio

Re: Industrial Commission
OD 79998
Len R. Hope, deceased
Mary Lee Hope, widow claimant

Dear Mr. Hereth:

In response to your letter of December 21, 1956, I have reviewed my material and the records in the Len R. Hope case, and I wish to state that on the basis of the clinical findings, the medical history, the chest X-ray, the record of exposure to the inhalation of asbestos dust and the autopsy findings of fibrosis of the lungs consistent with the effects of such exposure, in my opinion this man died of chronic fibrosis of the lungs with consequent heart disability as a result of prolonged asbestos dust exposure. In a broad definition, that is chronic fibrous disease of the lungs resulting from the deposit of materials contained in the asbestos dust inhaled, a diagnosis of asbestosis is reasonable and justified.

Very truly yours,

Kenneth M. Lynch, M. D.
President

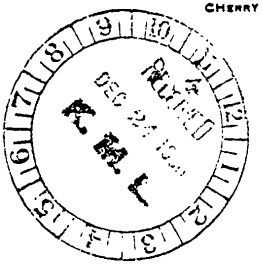
KML:mmk

COWELL & FLETCHER
ATTORNEYS AND COUNSELLORS AT LAW
1109 ENQUIRER BUILDING
617 VINE STREET
CINCINNATI 2, OHIO

JOHN W. COWELL (1901-1955)
STUART E. FLETCHER
LEE J. HERETH
DAVID W. BACON

PHONES
CHERRY 1-0063
1-0064

Dec. 21, 1956



Dr. Kenneth M. Lynch
Professor of Pathology and President
Medical College of South Carolina
16 Lucas St.
Charleston, South Carolina

Re: Industrial Commission
OD 79998
Len R. Hope, deceased
Mary Lee Hope, widow claimant

Dear Dr. Lynch:

We had another hearing yesterday before the Medical Board of Review of the Industrial Commission and your letter of October 30, 1956, was considered by the members.

It seems pretty well settled now that the man had pulmonary fibrosis, or asbestosis, or whatever you choose to call it, but the question now is one of etiology, or history: in other words, what caused the condition.

In view of this I am enclosing a copy of a letter written by Dr. Princi, which is self-explanatory, and I would like to know whether, in view of the work experience, you could be more certain as to the diagnosis and reports. In other words, with this picture of the working conditions and environment, is there any question now of the cause of this man's death?

An early reply will be appreciated. I also want to thank you for your previous co-operation in this matter and may I wish you a Merry Christmas and Happy New Year.

Very truly yours,

COWELL & FLETCHER

LJH:ic
CC: Dr. Frank Princi, Kettering Laboratory, Edon & Bethesda, Cincinnati, Ohio

P. S. The enclosed report was made, of course, prior to the autopsy, analysés of samples of dust, and also his later reports.

L. J. H.

May 21, 1954

Mr. Harry E. Mc Keever
Attorney-Examiner, Legal Section
Industrial Commission of Ohio
Columbus 15, Ohio

Re: OD 79998

Dear Mr. McKeever:

At the request of Mr. Lee Hereth, I have reviewed the Industrial Commission's file in the case of Len R. Hope, deceased, a former employee of the Philip-Carey Manufacturing Company, Cincinnati, Ohio.

The first report of the present illness in the file is that contained in the report of the Veterans Administration Hospital of Salt Lake City, Utah. The patient was described as a 58 year old colored male who was first seen on 55-13-52. He had been perfectly well until one year prior to admission. At that time he developed paroxysms of non-productive cough which were followed by the development of external dyspnea six months after the onset of the cough. There was no history of weight change, no sputum, no hemoptysis, or night sweats. On admission the patient was dyspneic on slight exertion. There was a venous engorgement of the neck when the patient was in the sitting position. The fingers showed moderate clubbing and there was evidence of arteriosclerosis. The laboratory findings were non-specific. The chest examination showed fullness and decreased breath sounds at both lung bases and fine rales over the lower half of both lung fields posteriorly. On admission a diagnosis of hypertension with congestive heart failure was made. This was said to be on the basis of hypertension and chronic pulmonary disease, most likely asbestosis. The electrocardiogram showed evidence of left ventricular failure and was suggestive of cor pulmonale and digitalis effect when the patient was seen at the Cardiovascular Clinic at Salt Lake County General Hospital on September 12, 1953. At this time he had a productive cough with dyspnea on exertion, ankle edema and increasing weakness. No attempt was made to examine the sputum for asbestos bodies. The patient died two days after being seen at the county hospital in Salt Lake City.

On 5-18-54 I visited the Philip-Carey Manufacturing Company where Mr. Hope had been employed from 4-25-28 to 12-22-51. An inspection trip was made with the plant superintendent through the areas in which Mr. Hope had worked during his period of employment. An examination of the employment records revealsd that Mr. Hope had worked in the paper mill from June 1938 to August 1943 when he was transferred to the asbestos

mill. His work consisted of emptying bags (most of them of burlap) of powdered asbestos into a hopper. The asbestos fiber was carried by a conveyor to the "beaters" where it was mixed with water and scrapped salvage. At the time of my visit the procedure had been changed so that a new type of hopper was being used. This new adaptation was designed to reduce the amount of dust in the atmosphere but it had not been in use during the period of time that Mr. Hope had worked in that area. The work area consisted of a large basement area with a high ceiling. The space was approximately 100 ft. by 200 ft. and about 20 ft. in height. In the far corner of the room (at ceiling level) was a ventilating fan which was not in operation. If it had been operating, it is not likely that it would have produced much exhaust action. An employee was emptying bags (at a rate of about 340 per day) of asbestos fiber into a grilled hopper. The excess that spilled over was brushed in by hand. During this process a respirator was worn. When the hopper was loaded, the same employee would sweep the floor with a broom, but during this activity he did not wear his respirator. A considerable amount of fine dust was present in the air at all times and this dust was increased during manipulation of the bags. This was essentially the same job in which Mr. Hope had been employed except that he had unloaded the bags by hand from a chute and in this fashion had created more dust than was present during our visit. He had also emptied the bags into an open hopper in a smaller and more confined space. The bags were then shaken out by hand. Questioning revealed that there was no supervision over the use of respirators in this procedure. The men themselves would change the filters when they deemed it necessay (about every three days). Between changes, they would "blow out" the filters with an air hose. An examination of the respirators at this time showed that the inside of the face piece was filled with asbestos fiber. Asbestos dust was piled in all the wall projections and rafters of the room. The only report of a dust count that could be obtained is that which is found in the report of the Industrial Commission's investigator dated 12-3-53 in which it is said that a single dust count revealed a concentration of 2.8 million particles per cubic foot of asbestos fiber in the work area.

a review of the chest roetgenograms which were provided shows the following. A PA of the chest taken on 5-15-52 shows pulmonary fibrosis of a non-discrete character with an increase in bronchovascular markings and evidence of passive congestion. The heart is markedly enlarged. Oblique views at this time showed enlargement of both sides of the heart with marked enlargement of the right ventricle. The film taken on 5-19-52 shows reduction in heart size with a decrease in pulmonary congestion. The mottled areas of increased radio-opacity persist, however, and are extensive in the bases and scant in the apices.

Discussion. Despite the finding of arteriosclerosis and left heart failure, the presence of cor pulmonale and pulmonary fibrosis is apparent both in the clinical history and the laboratory findings despite the fact that the latter are non-specific. Clinically, it would be expected that chronic pulmonary fibrosis would produce a terminal picture of cor pulmonale with passive congestion. It would have been desirable to have the sputum examined for asbestos bodies. Unfortunately, this was not done. The appearance of the X-rays, however, is definitely consistent with a history of exposure to asbestos dust in quantities sufficient to have produced pulmonary fibrosis. Although a ground-glass appearance is not seen, this is not necessarily typical of asbestosis. The most typical feature, which is present in these X-rays, is the fact that the pulmonary fibrosis predominates in the bases and is scanty in the apices. The clearing of the lung picture as seen in the X-rays taken on 5-19-52 further accentuates the fibrotic changes which are seen in the chest roentgenogram. The right oblique views demonstrate clearly the presence of right ventricular enlargement.

From the history it seems evident that this individual has had about 14 years exposure to asbestos dust. Asbestosis is known to have occurred in persons who have had as little as seven years exposure. The amount and degree of exposure can be determined only roughly at this time and in retrospect since the one air analysis which is reported is in no way definite. There is no record of where the atmospheric sample was taken, during what period of operation it was taken, nor what the particle size of the fibers might have been. In addition, sampling just one time is not sufficient to establish the presence or absence of an exposure. The fact that it was not customary to exercise supervision over the wearing of masks indicates that masks probably were not worn faithfully. In addition, the history of blowing out the filters with an air hose makes one suspect that these filters were perhaps broken and certainly not efficient.

Conslusion. On the basis of clinical findings, the medical history, the history of exposure and the laboratory findings, a diagnosis of cor pulmonale secondary to asbestosis is justified.

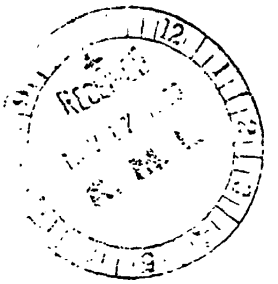
Very truly yours,

Frank Princi, M. D.

FP:rms

cc: Lee J. Hereth

LATTER-DAY SAINTS HOSPITAL
325 8TH AVENUE
SALT LAKE CITY 3, UTAH



November 13th, 1956

Mr. Lee J. Hereth,
c/o Cowell & Fletcher,
1109 Enquirer Building,
617 Vine Street,
Cincinnati 2, Ohio.

Re: Ohio Industrial Commission,
No. OD79998;
Len R. Hope, deceased.
Mary Lee Hope, widow-claimant.

Dear Mr. Hereth:

This is a response to your letter dated 23 October, 1956 with reference to letters of Dr. Frank Princi, 24 August, 1956 and Dr. Kenneth M. Lynch, 30 August, 1956.

I am in total agreement with the conclusion that pulmonary fibrosis was the underlying factor in the demise of Len C. Hope. Dr. Princi's finding of chemical substances in pulmonary tissue similar to those of the specific industrial atmosphere in question are of interest. The resultant conclusion implicating them in a specific role in the etiology of pulmonary fibrosis seems problematic. This involves a knowledge of experimental production of fibrosis as well as an analysis of a control population with reference to these specific substances. Quantitative factors are no doubt important considerations. I find myself unequipped to evaluate this case with reference to these factors.

Let me hasten to say that I have no distinct conviction that these chemical agents, described by Dr. Princi, were not involved in the production of fibrosis.

It seems that in view of the clinical history, the autopsy findings and chemical analysis, the burden of proof resides with disclaiming this as a case of pulmonary fibrosis related to chronic exposure to chemical substances, allied with the production of asbestos.

Sincerely yours,

Homer H. Clark, M.D.

HHC/vhb

cc: Frank Princi, M.D.
Kenneth M. Lynch, M.D.

October 30, 1956

Mr. Lee J. Hereth
c/o Cowell & Fletcher
1109 Enquirer Building
617 Vine Street
Cincinnati 2, Ohio

Re: Ohio Industrial Commission
No. OD79998
Len R. Hope, deceased
Mary Lee Hope, widow-claimant

Dear Mr. Hereth:

In response to your letter concerning the above case accompanied by a copy of the letter of August 24, 1956, from Dr. Frank Princi, Cincinnati, to Dr. R. B. Hudson, Bureau of Workmen's Compensation, Ohio, I am still prevented from making a clean-cut diagnosis of asbestosis in this case by reason of the lack of positive identification of the asbestos material or characteristic bodies that up to this time are accepted as necessary for the application of that term. At the same time I am in agreement with the opinion expressed by Dr. Frank Princi quoted as follows:

> "The presence of pulmonary fibrosis, however, and the history of exposure which is reported in the record combined with the finding of silicate material which is present frequently in many combinations of asbestos dust confirms my previous opinion that pulmonary fibrosis was the result of the inhalation of a foreign material during the course of this man's work. Consequently, whether we call this a case of asbestosis or of pulmonary fibrosis caused by occupational exposure becomes a matter of individual interpretation."

It appears that the questions which bother me in using the term asbestosis are really academic in this case, and that there is sufficient evidence that this man's disability from which he died was the product of the material to which he was exposed in his occupation. Dr. Princi identified

Mr. Lee J. Hereth

diopside in the lung tissue submitted to him, but neither he nor I found the material familiar to each in establishing a diagnosis of asbestosis. In my report on June 3, 1955, on this case I said that the nature of the fibrosis found in this lung tissue was like that seen in asbestosis. Since the silicate found by Dr. Princi in the samples of dust where the the deceased worked and in the lung tissue, chrysotile in the former and diopside in the latter are among the combinations of such materials frequently found in asbestos dust, I believe that the demonstrated exposure and the nature of the fibrosis of the lung are sufficient to establish a diagnosis of fatal disease of the lung caused by inhalation exposure to which the deceased was subject, and that the term asbestosis may justifiably be used if that is necessary in the legal applications that are required to establish this man's claim.

Very truly yours,

Kenneth M. Lynch, M. D.
Professor of Pathology and President

KML:jch

cc: Dr. Frank Princi
Dr. Homer H. Clark

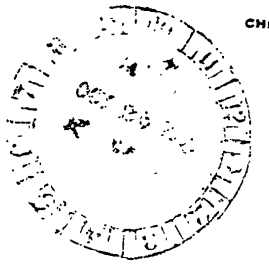
COWELL & FLETCHER
ATTORNEYS AND COUNSELLORS AT LAW
1109 ENQUIRER BUILDING
617 VINE STREET
CINCINNATI 2, OHIO

JOHN W. COWELL
STUART E. FLETCHER
LEE J. HERETH

DAVID W. BACON
JOHN M. SAYRE

PHONES
CHERRY 1-0063
1-0064

October 23, 1956



Dr. Kenneth M. Lynch
Professor of Pathology and
President of Medical College
of South Carolina
16 Lucas St.
Charleston 16, South Carolina

Re: Ohio Industrial Commission
No. OD79998
Len R. Hope, deceased
Mary Lee Hope, widow, claimant

Dear Dr. Lynch:

As you probably know, we represent the claimant in the above matter and we have a copy of your letter and pathology report of June 3, 1955. Subsequent to your report and analysis of the samples of dust where the deceased worked, by Dr. Princi, of this city, disclosed that it consisted principally of chrysotile, a form of asbestos. The material that was found in the lung, or tissue, submitted on June 14, 1955, showed the presence of diopside. The former material is hydrated magnesium silicate; the latter material is calcium magnesium silicate. I am quoting from a report of Dr. Princi to Dr. Hudson, of the Medical Department of the Industrial Commission. Dr. Princi goes on to say than the following, in the same line:

> "The presence of pulmonary fibrosis, however, and the history of exposure which is reported in the record combined with the finding of silicate material which is present frequently in many combinations of asbestos dust confirms my previous opinion that pulmonary fibrosis was the result of the inhalation of a foreign material during the course of this man's work. Consequently, whether we call this a case of asbestosis or of pulmonary fibrosis caused by occupational exposure becomes a matter of individual interpretation."

According to your report of June 3, 1955, you stated that you could not identify the condition as asbestosis in the absence of "asbestos bodies". Then you go on in your letter to say that perhaps Dr. Princi could identify asbestos itself in such an amount as would explain the fibrosis.

I would like to know, at this time, whether, in view of Dr. Princi's subsequent report quoted above, you could now identify the condition as asbestosis. The Industrial Commission puts great reliance on your views on this matter and I would appreciate your cooperation at this time.

I am sending a copy of this letter to Dr. Princi.

Very truly yours,

COWELL & FLETCHER

LJH:ic
CC: Dr. Frank Princi, Kettering Laboratory, Eden & Bethesda, Cincinnati, Ohio

P.S. A copy of Dr. Princi's report, is full, is enclosed.

(COPY)

August 24, 1956

Dr. R. B. Hudson
Medical Department
Bureau of Workmen's Compensation
Columbus 15, Ohio

Re: OD 79998
Len R. Hope, Dec'd

Dear Doctor Hudson:

In reply to your letter of August 10th concerning the sample of dust from the Philip Carey Manufacturing Company one can only conclude that the sample of dust which was forwarded to us on February 9, 1956 consisted principally of chrysotile, a form of asbestos. The material that was found in the lung tissue submitted on 6-14-55 showed the presence of diopside. The former material is hydrated magnesium silicate; the latter material is calcium magnesium silicate.

Whether the material submitted to us as a dust for analysis truly represented the exposure undergone by Mr. Len R. Hope during his lifetime cannot be ascertained at this time for obvious reasons.

The presence of pulmonary fibrosis, however, and the history of exposure which is reported in the record combined with the finding of a silicate material which is present frequently in many combinations of asbestos dust confirms my previous opinion that pulmonary fibrosis was the result of the inhalation of a foreign material during the course of this man's work. Consequently, whether we call this a case of asbestosis or of pulmonary fibrosis caused by occupational exposure becomes a matter of individual interpretation.

Yours Sincerely,

Frank Primoi, M. D.

FP:rms

BC: L. J. Hereth

January 3, 1956

Dr. Frank Princi
University of Cincinnati
Cincinnati 19, Ohio

Dear Dr. Princi:

Your letter about the X-ray diffraction studies on the lungs of Len R. Hope and the asbestos now being used at the place where he was exposed is most interesting. You did not say whether this material is the same as that being used during his employment.

I believe that we have some lungs from cases of asbestosis which have been preserved various lengths of time. Please let me know what would be the minimum amount of lung tissue needed, and I will ask Dr. Patton to see what we can send.

Incidentally, I have had some correspondence with Dr. G. Nagelschmidt of the British Ministry of Fuel and Power, in which he has offered to carry out X-ray diffraction analyses on the asbestos dust which we are using in our animal experiments. I have not sent him any material, and I wonder whether you could do this for us.

In Dr. Nagelschmidt's letter he says, "Asbestos does not give a particularly sharp diffraction pattern, but it can be used, and we have in fact had occasion to study a human alleged asbestosis lung in which we found traces of asbestos after various pre-treatments."

With many thanks and best wishes, I am

Sincerely yours,

Kenneth M. Lynch, M. D.
President and Professor of Pathology

KML:jch

cc: Dr. M. F. Patton

UNIVERSITY OF CINCINNATI
DEPARTMENT OF PREVENTIVE MEDICINE AND INDUSTRIAL HEALTH

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December 28, 1955

Dr. Kenneth M. Lynch
Professor of Pathology and President
Medical College of South Carolina
16 Lucas Street
Charleston 16, South Carolina

Dear Doctor Lynch:

You will recall that on June 3rd, 1955 you reported to the Industrial Commission of Ohio your findings concerning the lungs of Len R. Hope who was said to have had a considerable exposure to asbestos. At that time it was your opinion that since asbestosis bodies could not be identified, this could not be called asbestosis although there was fibrosis of the lung. The opinion of our own pathologist was identical to your own.

Since that time X-ray diffraction studies of this lung were done and the report of the analyst was as follows. "X-ray analysis of the lungs (ashed and washed with water to remove soluble salts) showed that both samples contained diopside (calcium magnesium silicate, $CaMgSi_2O_6$) and quartz (SiO_2). The concentration of quartz was 0.2% in the right lung and 0.18% in the left lung (dried basis). The X-ray diffraction patterns did not show lines of asbestos (hydrated magnesium silicate, $3MgO.2SiO_2.2H_2O$)."

Since this was a curious finding (namely, that we had an exposure to asbestos and yet no asbestos in the lung), we wondered about the material to which the patient had actually been exposed. Consequently, we obtained a sample of asbestos which is being used at the present time by the Philip-Carey Company and analyzed this sample. The report of the analyst was as follows. "An X-ray diffraction pattern of the dust showed the material to be principally chrysotile, a form of asbestos (hydrated magnesium silicate, $3MgO.2SiO_2.2H_2O$). The dust also contained some gamma iron oxide (γFe_2O_3) and 1 per cent quartz (SiO_2). The X-ray diffraction pattern of asbestos was not affected by heating the material to temperatures not exceeding 500°C. and treating with water."

These unusual findings have caused us to wonder if the material that we are calling diopside is present in other persons who are known to have had asbestosis, (You will recognize, of course, that the question is now purely academic.) and whether the diopside is an incidental finding or perhaps even the important factor in the production of fibrosis. I wonder, therefore, if you might have any autopsy material in which asbestosis is known to exist, and if it might be possible for you to provide us with such material for X-ray diffraction analysis. Regardless of our findings, I think this might prove an interesting investigation. We would, of course, provide you with all the information we are able to obtain. In any event, I would be interested in having your comments on these suggestions. With best regards.

Very sincerely,

FP:rms

Frank Princi, M.D.