The State of Ohio,)
) SS:
County of Cuyahoga.)

IN THE COURT OF COMMON PLEAS

Shirley Barnhart,
etc, et al,

Plaintiffs,

-vs- CASE NO. 86876

Parma General Community
Hospital, et al,

Defendants.

* * *

Deposition of DENNIS BROOKS, M.D., called as a witness by the Plaintiffs, taken before Kathleen A. Hopkins, a Notary Public within and for the State of Ohio, at the Offices of Dennis Brooks, M.D., Mount Sinai Medical Center, Beachwood, Ohio, on Wednesday, the 30th day of July, 1986, at 3:00 p.m., pursuant to agreement of counsel.

* * *

APPEARANCES:

On behalf of the Plaintiffs:

Michael F. Becker, Esq.;

On behalf of Defendant Parma General Community Hospital::

Weston, Hurd, Fallon, Paisley & Howley, Esqs, by Carolyn M. Cappel, Esq.;

On behalf of Defendant Dr. Rodriguez:

Jacobson, Maynard, Tuschman & Kalur Co., LPA, by Anthony Dapore, Esq.

* * *

DENNIS BROOKS, M.D.,

of lawful age, called as a witness by the Plaintiffs, being by me first duly sworn as hereinafter certified, deposed and said as follows:

CROSS-EXAMINATION OF DENNIS BROOKS, M.D.

BY MR. BECKER:

Q. Doctor, would you state your full name and spell your last name for us, please?

A. My name is Dennis Bruce Brooks. My last name is spelled B-R-O-O-K-S.

Q. I understand you have had your deposition taken many times before, is that correct?

A. I have had my deposition taken before, yes.

Q. Okay. Just to restate the rules, this is a question and answer session under oath. It is very important that you understand the question that I ask. If you don't understand the question, tell me, and I will attempt to rephrase or restate that question. Okay?

A. Fine.

Q. It is also important you answer verbally, because it is difficult for her to pick up a head nod. But unless you indicate otherwise to me, I will assume that you fully understand the question

that's been posed. Okay?

A. Okay.

Q. Your attorney has just a few moments ago been kind enough to hand me your CV. I haven't had a chance to really look at it. Is this current as of January of this year? What about publications? Are there any publications to be amended to this?

A. No new publications.

Q. You have a particular interest in biomechanics, would that be a safe statement?

A. Yes.

Q. Do you have a file on this case that I can look at?

A. Certainly.

Q. Do you know Dr. Weiss from Columbus?

A. No, I don't.

Q. Have you read his deposition?

A. No, I have not.

Q. Okay. What is your hourly rate for deposition?

A. My rate for a deposition is $525 for the first two hours or any part thereof, and then $250 an hour thereafter.

Q. Can you tell me what you have reviewed

recently in preparation for this deposition, if anything?

A. Reviewed the hospital records again, reviewed Dr. Weiss' report and reviewed Dr. Weggs report, briefly looks at Dr. Rosenberg's report and reviewed some reprints of some articles about pulmonary embolism.

Q. What reprints are those, Doctor?

A. There is an article from the Journal of Bone and Joint Surgery written by Saltzman and Harris. It was in the Journal, Volume 58 A, No. 7, published in 1976; and an article from J.A.M.A., Volume 225, Number 5, published July 30th, 1973, written by Everett and Alfidi, A-L-F-I-D-I.

Q. And how did you happen to get those articles?

A. Mr. Dapore gave them to me.

Q. Can you tell me how many times you have acted as an expert in malpractice cases before?

A. No.

Q. Can you give me a ballpark?

A. I have been in practice for 15 years. I don't know. Ten maybe.

Q. Ten times?

A. Maybe. I have no real --

Q. That includes reviewing, writing a report,

total of ten times?
A. My best recollection. I don't keep track of those things.
Q. And of those ten times, was that predominantly for the defense?
A. I don't know what you mean by predominantly.
Q. Well, what percentage of those ten would have been for the defendant?
A. I would say it's pretty equal.
Q. If I had an orthopedic malpractice case out in Lorain County and needed review, could I come to you for a review?
A. Certainly could.
MR. BECKER: Off the record.
(Discussion had off the record.)
Q. Of these ten occasions that you have cited, have any of them dealt with the subject matter of deep vein thrombosis and/or pulmonary embolism?
A. No, they have not.
Q. Can you cite me to some texts or journals that you would consider authoritative in the area of orthopedic complications?
A. I have trouble with the word authoritative. There are lot of texts that are published. There are certainly lots of journals that are

published. And in terms of complications, I suspect that the most widely read textbook would be Epp's book on Complications in Orthopedic Surgery. I personally have not read it.

Q. What book do you turn to personally?

A. It depends upon the subject.

Q. What about this subject matter?

A. This subject matter? I have not had the occasion to turn to any books in many, many years on this subject.

Q. All right. Would it be safe to say, Doctor, when this, when the potential for this situation arises clinically, you gain a consultation?

A. Yes.

Q. And that would be with an internist?

A. Yes.

Q. And would that be at Mount Sinai Hospital?

A. If the patient were hospitalized in Mount Sinai, yes.

Q. Okay. What other hospitals again do you have privileges at?

A. Hillcrest and Suburban Community Hospital.

Q. So it would be one of the three that you would gain a consult with an internist. Would an internist be a Dr. Rosenberg?

A. If, for example, if I were at Mount Sinai Hospital, it is with Martin or Dr. Rosenberg. I haven't had the occasion to be in that situation at Suburban or Hillcrest, so I don't know whom I would call.

Q. You have had an occasion at Mount Sinai to get a consultation in this subject matter in the past?

A. I was trying to -- let's define the subject matter so I can answer the question.

Q. Deep vein thrombosis and pulmonary embolism.

A. I have not had a patient who has had deep vein thrombosis or pulmonary embolus in the hospital in the last eight or ten years. I mean, I can't remember.

Just this past week I had an elderly woman on whom I did a hip fracture that had some changes in her blood gasses postoperatively, and I asked Dr. Martin to see her. She did not have a pulmonary embolism.

Q. Did you order tests or was Dr. Martin the person that ordered the tests for this lady?

A. We did it concurrently.

Q. So the best you can recall, you haven't had a deep vein thrombosis or pulmonary embolism case

for at least the last ten years, is that fair to say?

A. In the hospital, that is correct.

Q. Well, you say in the hospital; have you had one in the office?

A. Well, I just saw a patient two days ago that I was suspicious of having a calf thrombosis, and I referred him to his own internist. Okay. Who then saw him and is now presently managing it.

Q. Okay. Now, are you in partnership with another doctor in this office?

A. Yes.

Q. What is that doctor's name?

A. Dr. Zaas.

Q. Have you or he ever been sued in the area of deep vein thrombosis and/or pulmonary embolism?

MR. DAPORE: Objection. You can answer.

A. No, we have not.

Q. And when I say sued, I mean either a claim presented and/or litigation filed.

MR. DAPORE: Objection.

A. That is correct, we have not. The reason I hesitated, you just jogged my memory. And a number of years ago I was asked to be an expert in a case that involved deep vein thrombosis, and I

can't remember whether it also involved pulmonary embolism.

Q. Did you participate in that case?

A. Yes.

Q. Do you remember who asked you to participate?

A. I don't.

Q. Do you remember the name of the doctor that was sued?

A. Yes, I do.

Q. What's that doctor's name?

A. Moses Leeb.

Q. How do you spell that last name?

A. L-E-E-B.

Q. L-E-E?

A. L-E-E-B.

Q. And is he an internist or an orthopod?

A. No, he's an orthopedic surgeon.

Q. In the Cleveland area?

A. Yes.

Q. Is he still in the Cleveland area?

A. Yes.

Q. And was that litigation in the City of Cleveland?

A. It was in Cuyahoga County. I don't know what city it was in.

Q. Did you give a deposition at that time?
A. I have -- I don't recall.
Q. It's been about ten years ago?
A. I think so.
Q. You don't remember the plaintiff's attorney or the defendant's attorney?
A. No. I just remember some of the fact situation.
Q. Let me ask you this about that; were you acting on behalf of the plaintiff or the defendant in that particular case?
A. The defendant.
Q. Was anyone else involved in that particular piece of litigation; in other words, was a hospital sued as well or another doctor?
A. His associate may have been sued.
Q. And what would his name have been?
A. Kaffen, K-A-F-F-E-N.
Q. As best you know, the case was resolved? It didn't go to trial?
A. That is correct.
Q. Do you still have a file on that case?
A. No.
Q. You would not?
A. No.

Q. What are the symptoms of pulmonary embolism?
A. The patient who has a pulmonary embolism will oftentimes complain of shortness of breath, chest pain, sometimes a complaint of a nondescript but generalized feeling of none well-being, which is not very articulate, but they just say, you know, I just don't feel very well, something is bothering me. Depending upon the degree of the embolism and their associated reaction to that, they may complain of palpitations or rapid heart rate.
Q. All right. Can you have these symptoms that you have described, can you have them of and by themselves or do they always appear in groups, constellation?
A. I don't understand your question.
Q. Can you have one symptom of pulmonary embolism -- strike that question.
Let me ask you this, is it correct that clinical signs and symptoms of pulmonary embolism are nonspecific?
A. Again, I don't understand your question.
Q. Well, when I say specific, that is this condition is only present with pulmonary embolism.

A. If I understand your question correctly, the signs and symptoms or are we talking about symptoms? The symptoms of pulmonary embolism may be the same symptoms that are associated with other disease processes.

Q. So it is not specific. And do you understand what I mean when I use the word sensitive; that is, always present, that symptom is always present?

A. No.

Q. That is what I mean by sensitive. So my question to you now, sir, is would you agree with me that the clinical signs and symptoms of pulmonary embolism are nonsensitive?

A. Yes, I would agree with you in that, as I understand your question, there are signs and symptoms that may be present in pulmonary embolism that may be present in other diseases; and there are certain signs and symptoms that may not be present, even though an individual has a pulmonary embolism.

Q. Would you consider Anna Wagner, the deceased, at increased risk for deep vein thrombosis or pulmonary embolism?

A. In comparison to whom or to what?

Q. In comparison to a normal hospital patient.
A. Well, see, I can't define a normal hospital patient.
Q. All right. Let me ask it another way. Doctor, are there certain things that predispose one to the condition of deep vein thrombosis and pulmonary embolism?
A. Yes.
Q. Tell me what they are?
A. Prior history of deep vein thrombosis, obesity, lower extremity trauma, in particular trauma about the hip or the thigh. Certainly there is an increased incidence of deep vein thrombosis in people who have undergone surgery about the hip and about the knee.
Q. Anything else?
A. Not that I can think of.
Q. Would you agree with me that the more predisposing factors there are, the higher the risk the person is for that condition?
A. Yes.
Q. Would you agree with me that because clinical signs and symptoms of deep vein thrombosis and pulmonary embolism are nonspecific and nonsensitive, it is the duty of the attending

physician to have a high index of clinical suspicion for pulmonary embolism, particularly among patients who are at increased risk?

MR. DAPORE: Objection to the form of the question. You can answer.

A. I can't answer that question yes or no. I think that a physician has an index of suspicion about this condition in a patient who has a number of risk factors, that is true. Just like he has an index of suspicion about other processes that also are nonspecific and nonsensitive.

Q. Well, do you have an opinion whether or not Anna Wagner was at increased risk to develop DVT and pulmonary embolism?

A. She was overweight, so therefore she may have had some increase in her risk with respect to a similar person with similar injuries who was not overweight. I'm not aware that she had any prior history of deep vein thrombosis. So I would say that she was perhaps slightly more at risk than another patient who had the same kind of injury, the same past medical history, who was not as overweight as she was.

Q. Would you agree with me that a physician who suspects pulmonary embolism has a duty to order

tests and attempt to confirm or rule out that suspicion?

A. If a physician has a suspicion of pulmonary embolus and if he talks to the patient and examines the patient and in his own mind feels that the patient does not have a pulmonary embolus, then, no, I don't believe that he needs to order specific tests.

If, however, after examining, talking to the patient, taking a history, examining the patient, he is still concerned that the patient may have had a pulmonary embolus, yes, I think he should then proceed.

Q. Well, let me ask that question another way. If a physician, after taking a history and talking to the patient, is still suspicious of pulmonary embolism, does the physician have a duty to order tests and attempt to confirm or rule that out?

MS. CAPPEL: Objection.

MR. DAPORE: Objection. It's been asked and answered. You can answer the question.

A. Under the assumptions that you have just given me, yes, I think a physician has a duty to order tests to confirm or rule out the suspicion of pulmonary embolus.

Q. Now, you have told me earlier about what the symptoms are of pulmonary embolism. If only one of those symptoms was present, would that make a reasonably prudent and cautious physician suspect pulmonary embolism?

A. No.

Q. That is what I want to get at. I want to know what symptoms have to be present in your mind for a reasonably prudent and cautious physician to suspect pulmonary embolism?

A. As a physician, I would never just rely on the patient's symptoms. And I can't answer your question and say, no; I can't.

Q. Well, what else would you rely on besides her symptoms and her history?

A. There are her symptoms. There are her physical findings, and there are what we refer to as the vital signs. You put all these things together, and if there are enough pieces that suggest it, then you become suspicious.

Q. Are you saying that if you saw in a postop orthopedic patient who had surgery in her lower limb, who was at increased risk for developing deep vein thrombosis, that if she only had the symptom of shortness of breath, you wouldn't

suspect pulmonary embolism?

A. That's right. If her only symptom was shortness of breath and there were no other symptoms and there were no other physical findings and there were no change in her vital signs, and more importantly if I could explain her shortness of breath on another basis, then, no, I wouldn't suspect pulmonary embolus.

Q. Okay. Assume the same fact situation, except add that there was a slight increase in temperature and there was at least one episode of increased pulse rate.

A. Well, again, those are, as you pointed out, nonspecific and nonsensitive findings. The increase in temperature is normal in postoperative patients for a variety of reasons, even without infection. Increased pulse rate certainly can be a normal or an expected finding in a postoperative patient and doesn't necessarily indicate that she's had a pulmonary embolism.

Q. Well, I guess I've got to understand from you what symptoms in a postop orthopedic patient who's had surgery in her lower limb, who is at some increased risk, what symptoms have to be present in your mind for you to suspect pulmonary

embolism?

MR. DAPORE: Objection. Asked and answered.

A. Yes, I thought I answered that. And they are the same symptoms that I mentioned before.

Q. Okay. Maybe I'm missing it. You're saying that every one of those symptoms have to be present before you are --

A. No, I am not saying that. I guess maybe I'm not understanding your question. Let's try it this way.

If I walk into the room and I see a patient, and the patient tells me I have had some shortness of breath, already I am starting with a differential diagnosis.

Q. Okay.

A. Okay. Everything from being short of breath because they have just been ambulating and they are just tired, to being short of breath because they have a little postoperative atelectasis to a pulmonary embolism to hyperventilation because they are nervous. Okay?

Q. Okay.

A. Fine.

Q. You have at that point, Doctor, you have a

duty to make further inquiry of the patient, would you agree with that, as to --

A. Yes. I got hung up on the word duty. You know, I consider myself a good physician. Duty or not, I'm going to ask, try to find out what's wrong with this patient, so I will ask them some more questions.

Q. What more questions would you ask?

A. When did your shortness of breath occur, how long did it last, what was it related to, is this the first episode that you have had, have you had shortness of breath before; those kinds of questions.

Q. You would agree with me, it would be your duty to ask those under those circumstances that you have just given us?

MR. DAPORE: Objection. Asked and answered.

MS. CAPPEL: Objection.

A. If you like the word duty, I will use the word duty that is what I would do, duty or not. You know, nobody's looking over my shoulder.

Q. Well, what is the appropriate standard of care? When I say duty, I'm saying what's the appropriate standard of care?

A. Yes, that is what a wise and prudent physician would do.

Q. And that is consistent with the appropriate standard of care?

A. Yes.

Q. All right. Go ahead.

A. It is your turn. I have answered the question.

Q. It's my turn. You were going to tell me you were going to make -- you were going to ask them further questions?

A. After asking them all these questions, then I'd examine them. And I'd listen to their lungs, for example. I'd check their calf or their calves that were accessible. And then I would have to make some further decisions. Either I was convinced on the basis of that examination that the shortness of breath was due to some factor other than the pulmonary embolism or I was still concerned about it.

Q. This examination that you have described after you made the inquiry, that would also be consistent with the appropriate standard of care, wouldn't it, Doctor?

A. Yes.

Q. All right. These symptoms that you have described that you feel are consistent with pulmonary embolism, can they be transient?
A. Generally not.
Q. Your answers to that is no?
A. In medicine there is never, never, never, never an always, so that is why my answer was generally not.
Q. So you would expect then, if someone had, was throwing a pulmonary embolism, that if they were experiencing shortness of breath that that would be over a long period of time?
A. Yes.
Q. What is your opinion as to the cause of Anna Wagner's death, if you have one?
A. I don't have an opinion as to her cause of death.
Q. Do not?
A. Do not.
Q. Is your opinion that it's just as possible or probable that she had died from a fat embolism as compared to pulmonary embolism?
A. No, that is not my opinion.
Q. You don't have an opinion one way or the other as to her cause of death, just so that I

fully understand you?

A. That is correct, I do not.

Q. So if I told you what a certain expert would say, you would say you don't agree or disagree; you don't have an opinion one way or the other on the cause of death, is that correct?

A. That is correct, I do not have an opinion as to her cause of death.

Q. Have you heard of the study, the Urokinase Pulmonary Embolism Trials?

A. No.

Q. Never heard of that?

A. If I did, I would have answered yes the first time.

Q. Sometimes I don't hear too well.

Is there any certain period of time postoperatively when a pulmonary embolism generally appears?

A. I can't answer that question.

Q. You can't answer it yes or no?

A. That's right. It's too broad. It has two very broad parts to it.

Q. What are the symptoms of deep vein thrombosis?

A. Symptoms of deep vein thrombosis may include

calf pain, calf cramping, pain with ambulation.
Q. What about pain in the popliteal fossa area of the knee?
A. That may be a symptom of deep vein thrombosis.
Q. What about warmth in the area of the knee?
A. You have to be a little more specific. The knee is, believe it or not, a big anatomical area.
Q. What about on top of the knee?
A. No.
Q. On the side of the knee?
A. No.
Q. Underneath the knee?
A. Behind the knee?
Q. Behind the knee.
A. Can be.
Q. What about change in color around the knee?
A. Same question.
Q. Okay. Let's start at the top. Top of the knee?
A. I don't speak the law very well, but I can answer your questions better if we talk medicine. Let's call the top of the knee the anterior, the back of the knee the posterior, the outside of the knee the lateral and the inside of the knee the

medial.

Q. I'm just struggling with the law here, so go ahead.

A. So the anterior aspect of the knee, no; medially, possibly; laterally, no; posteriorally, possibly.

Q. Can a short leg cast cause popliteal fossa pain?

A. Yes.

Q. Why would that be?

A. A short leg cast, if for example it is applied above the tibial tubercle, may cause pain in the popliteal fossa as the individual attempts to bend their knee and the posterior aspect of the cast impinges upon the posterior soft tissue.

In addition to that, if an individual is non-weight bearing or partial weight bearing because they're in a short leg cast, they have to keep their knee bent, and that can be a cause of pain in the popliteal fossa.

Q. If one had pain in the popliteal fossa area that was, in other words, she was experiencing this pain while she was on bed rest, would that be explainable away as to the cast?

A. Just so I understand your question, if the

patient only had pain while they were on bed rest in the popliteal fossa?

Q. Right.

A. Could that be explained by the cast?

Q. Yes, sir.

A. It might be. Couldn't really say without seeing the cast.

Q. Is your opinion that one of the signs of easy fatigueability and diminished exercise is shortness of breath?

A. Would you read back the question, please?

(Notary read back last question.)

Q. Diminished exercise tolerance. I am reading Tony's question.

A. Yes.

Q. Doctor, I'm going to give you a hypothetical, and I'm going to ask you then if that is substandard care or not. All right?

A. Okay.

Q. I want you to assume that you have a patient that is a postop orthopedic patient, had surgery in her lower limb, and she is at some increased risk for the development of deep vein thrombosis and pulmonary embolism, and she has an episode of shortness of breath that resulted in a house

physician being called by the nursing staff.

Assume further, that the attending orthopedic physician saw the patient shortly after the house physician saw the patient, but not at the same time.

And assume further, that the orthopedic physician makes direct inquiry to the patient. The patient responds that she is fine now, but she's had some problems with shortness of breath.

Assume further, that the doctor makes no further inquiry and makes no examination of her leg and orders no further diagnostic tests for her.

Do you have an opinion whether or not that conduct would be substandard care?

MR. DAPORE: Objection to the form of the question. You can answer.

A. Yes, I have an opinion.

Q. What is your opinion?

A. That is not substandard care.

Q. Tell me why.

A. The patient had a complaint of shortness of breath. When the orthopedic surgeon saw the patient, she said that she was fine. She no longer had that symptom. The patient had been

examined by a house physician. And I'm assuming, although you didn't state it in your hypothetical either way, that the house physician found nothing abnormal and there was nothing communicated to the orthopedic surgeon. And, therefore, there would be no reason to pursue this matter any further. The patient said she had an episode of shortness of breath and she was fine now.

Q. Excuse me. Maybe I didn't make myself clear. Maybe you misunderstood me.

Assume that the patient says, I have had some problems, problems plural, with shortness of breath.

A. I have an opinion, and my opinion is that that is substandard care.

Q. How is it that you know Mr. Dapore or how is it that he came in contact with you for this case, if you can tell me?

MR. DAPORE: Objection. You can answer.

A. I know Mr. Dapore because he is one of the attorneys at Physicians' Insuring Exchange.

MR. DAPORE: Move to strike.

Q. I mean, what is it about that fact that -- I mean, do you work for them, Physicians' Insurance

Exchange?

MR. DAPORE: Objection.

A. I work for myself. On occasion I am asked to consult for Physicians' Insuring Exchange just as I am by other organizations.

Q. Other defense firms?

MR. DAPORE: Move to strike.

A. By plaintiffs' firms as well as defense firms.

Q. There is a journal article that I am trying to get my hands on. It is entitled, Treatment of Pulmonary Embolism in Total Hip Replacement. Is that one of the articles that Mr. Dapore sent you?

A. The two articles, and again it may be a matter of semantics, that I referred to was Thromboembolism After Total Hip Reconstruction.

Q. By an English author, English orthopod, Charney or something, starts with a C?

A. No, the English -- that is not the article. The English orthopod's name is Charnley.

Q. Okay.

A. And I have not reviewed an article by Charnley about embolism.

MR. BECKER: That's all I have, Doctor.

Do you have any questions?

MS. CAPPEL: Just a couple.

CROSS-EXAMINATION OF DENNIS BROOKS, M.D.

BY MS. CAPPEL:

Q. Doctor, do you have any opinion that what Dr. Go, the house physician, did or failed to do amounted to substandard care?

A. I don't understand your question.

Q. Well, as I understand it, you reviewed the Parma Community Hospital records and various other expert's reports in this case?

A. Yes.

Q. After review of those records do you have any opinion with regard to any of the actions or failure to act, if you hold that opinion, with respect to Dr. Go, the house physician at Parma Community Hospital?

A. Yes, I have an opinion.

Q. What is your opinion?

A. That there was nothing that Dr. Go did that fell below the standard of care.

Q. Do you have any opinion that what anybody from Parma Community Hospital did or failed to do amounted to substandard care?

A. Yes, I have an opinion.

Q. What is your opinion?

A. There was nothing in the records that I reviewed that indicated that any of the employees of Parma Community Hospital who were identified in those records -- off the record, because I don't know about the cleaning lady and all those other folks, back on the record -- that was below the standard of care.

MS. CAPPEL: Thank you. I have nothing further.

MR. BECKER: Would you explain waiver to him, Tony?

MR. DAPORE: You have a right to have it transcribed so that you can read it for corrections or you can waive your right. The choice is yours.

THE WITNESS: I will waive my right with the proviso that if we do go to trial in this matter and Mr. Becker tries to discredit me because I misspoke or you didn't understand me, we can explain it at the time of trial.

C E R T I F I C A T E

The State of Ohio,)
) SS:
County of Lorain.)

I, Kathleen A. Hopkins, a Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within-named witness, DENNIS BROOKS, M.D., was by me first duly sworn to testify the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by him was reduced by me to stenotype in the presence of said witness, subsequently transcribed into typewriting under my direction, and that the foregoing is a true and correct transcript of the testimony so given by him as aforesaid.

I do further certify that this deposition was taken at the time and place as specified in the foregoing caption, and was completed without adjournment.

I do further certify that I am not a relative, counsel or attorney of either party, or otherwise interested in the outcome of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Elyria, Ohio this 18th day of August, 1986.

Kathleen A. Hopkins

Kathleen A. Hopkins, Notary Public
My commission expires 1-8-90
Recorded in Lorain County, Ohio