

I regret to say I don't know the gentleman's name, but he too was properly identified.

Mr. SPECTER. And prior to the time when the Court Reporter started to transcribe the deposition which you have been kind enough to provide us with, had you and I been talking about the same subjects which you have answered questions on all during the course of this deposition?

Dr. GREGORY. Yes.

Mr. SPECTER. And during the time that you first were interviewed by the Secret Service down through the present moment, have you had the same general opinion concerning the matters which you have testified about here today?

Dr. GREGORY. Yes.

Mr. SPECTER. Do you have anything to add which you think would be helpful in any way to the work of the Commission?

Dr. GREGORY. No; not really. This is the only articulation I have had with this whole episode concerning Governor Connally's wound and his subsequent recovery and none other.

Mr. SPECTER. Thank you very much, Dr. Gregory, for coming.

Dr. GREGORY. Very well.

TESTIMONY OF DR. GEORGE T. SHIRES

The testimony of Dr. George T. Shires was taken at 4:35 p.m., on March 23, 1964, at Parkland Memorial Hospital, Dallas, Tex., by Mr. Arlen Specter, assistant counsel of the President's Commission.

Mr. SPECTER. Let the record show that as we are reconvening this session and about to commence the deposition of Dr. George T. Shires, that the preliminary statement is being made that this is pursuant to the investigation being conducted by the President's Commission on the Assassination of President Kennedy to determine all the facts relating to the shooting, including the treatment rendered to Governor Connally as well as President Kennedy, and that Dr. Shires has appeared here today in response to a letter of request from the President's Commission to testify concerning his knowledge of the treatment which he and other medical personnel at Parkland Hospital performed on Governor Connally.

Will you rise, please, Dr. Shires and raise your right hand. Do you solemnly swear that the testimony you will give before the President's Commission in this deposition proceeding will be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. SHIRES. I do.

Mr. SPECTER. Would you state your full name, please, for the record?

Dr. SHIRES. George Thomas Shires.

Mr. SPECTER. And what is your profession, sir?

Dr. SHIRES. Professor of Surgery and Chairman of the Department of Surgery, University of Texas, Southwestern Medical School.

Mr. SPECTER. And you are a medical doctor by profession, I assume?

Dr. SHIRES. Yes; M.D.

Mr. SPECTER. Would you outline briefly your educational background?

Dr. SHIRES. Undergraduate education at the University of Texas in Austin, Tex.; graduate medical education at the University of Texas, Southwestern Medical School in Dallas; internship, Massachusetts Memorial Hospital in Boston, Mass.; surgical residency—Parkland Memorial Hospital in Dallas, Tex.; two tours of active duty in the United States Navy, first as research investigator at the Naval Medical Research Institute, National Naval Medical Center, Bethesda, Md.; second as Associate Surgeon, United States Naval Hospital Ship *Haven*—do you want staff positions?

Mr. SPECTER. Please, give me those, as well.

Dr. SHIRES. Subsequently, Clinical Instructor in Surgery, University of Texas, Southwestern Medical School, progressing through Assistant Professor of Surgery, Associate Professor of Surgery, Professor of Surgery, and Chairman of the Department of Surgery.

Mr. SPECTER. What was your year of graduation from college, Dr. Shires?

Dr. SHIRES. This was premedical, and at that time the war was on, so it was a premedical 3 years—it was 1944.

Mr. SPECTER. And what year did you receive your medical degree?

Dr. SHIRES. 1948.

Mr. SPECTER. Are you Board certified at the present time?

Dr. SHIRES. Yes.

Mr. SPECTER. And, in what year were you so certified?

Dr. SHIRES. I was certified by the American Board of Surgery in 1956.

Mr. SPECTER. Did you have occasion to render any medical treatment for President Kennedy back on November 22, 1963?

Dr. SHIRES. No; I was not in town at the time the shooting occurred. I was in Galveston, Tex., at the meeting of the Western Surgical Association.

Mr. SPECTER. Did you have occasion to render medical attention and services to Governor Connally, Dr. Shires?

Dr. SHIRES. Yes.

Mr. SPECTER. Will you state briefly the circumstances under which you were called into this case?

Dr. SHIRES. After the President and the Governor were brought to Parkland Hospital, it was determined—well—all aid was given to the President that was available, and it was determined that Governor Connally's injuries were multiple, the primary injury to Governor Connally was to the chest.

Dr. Shaw, who is the professor of surgery—I don't need to tell their titles—you will have all that?

Mr. SPECTER. Yes—correct.

Dr. SHIRES. Dr. Shaw ascertained the condition of Governor Connally, instituted therapy, and had the hospital notify me in Galveston of the status of the President and also the Governor.

Mr. SPECTER. Were you able to return then to Dallas in time to assist in the operative procedures on Governor Connally?

Dr. SHIRES. Yes.

Mr. SPECTER. And at approximately what time did you return to Dallas?

Dr. SHIRES. Approximately 3 p.m.

Mr. SPECTER. And what participation did you have in the operative procedures on Governor Connally?

Dr. SHIRES. At the time I returned, the chest procedure was in progress. The orthopedic procedure on the arm and the leg debridement were ready to be started. I scrubbed and performed the leg procedure.

Mr. SPECTER. What did you observe, if anything, as to the condition of Governor Connally's chest wound?

Dr. SHIRES. At the time I arrived, the chest wound had been debrided and was being closed. His general condition at that point was very good. He was receiving blood and the arm and leg wounds were being prepared for surgery.

Mr. SPECTER. Did you have any opportunity to observe the wound on his back?

Dr. SHIRES. Not at that time.

Mr. SPECTER. Did you have any opportunity to observe a wound on his chest?

Dr. SHIRES. Once again, not at that time—later, but not at that time.

Mr. SPECTER. Well, what did you observe at a later time concerning the wound on his back and on his chest?

Dr. SHIRES. Well, in part of his postoperative care, which was a large part of the treatment, we were concerned, of course, with all the wounds, and he had several chest wounds. These, at the time I saw them, had been debrided and were the site of draining, so that their initial appearance was completely altered by having had surgical debridement, so they were clean postsurgical wounds with drainage, at the time I first saw them.

Mr. SPECTER. Would their alteration and condition preclude you from giving an opinion as to whether they were points of entry or points of exit?

Dr. SHIRES. They would—really.

Mr. SPECTER. What did you observe at the time you arrived at the hospital as to the condition of his wrist, if anything?

Dr. SHIRES. At that point his wrist was being prepared for surgery, and although I did not examine this in detail, since I was concerned with the thigh wound, there appeared to be a through and through wound of the wrist which looked like a missile wound.

Mr. SPECTER. Were you able to formulate any opinion as to the point of entry or the point of exit?

Dr. SHIRES. No; since I didn't examine it in detail; no, not really.

Mr. SPECTER. And what did you observe as to the wound on the thigh?

Dr. SHIRES. The wound on the thigh was a peculiar one. There was a 1 cm. punctate missile wound over the junction of the middle and lower third of the leg and the medial aspect of the thigh. The peculiarity came in that the X-rays of the left leg showed only a very small 1 mm. bullet fragment imbedded in the femur of the left leg. Upon exploration of this wound, the other peculiarity was that there was very little soft tissue damage, less than one would expect from an entrance wound of a centimeter in diameter, which was seen on the skin. So, it appeared, therefore, that the skin wound was either a tangential wound or that a larger fragment had penetrated or stopped in the skin and had subsequently fallen out of the entrance wound.

Mr. SPECTER. What size fragment was there in the Governor's leg at that time?

Dr. SHIRES. We recovered none. The small one that was seen was on X-ray and it was still in the femur and being that small, with no tissue damage after the debridement, it was thought inadvisable to remove this small fragment.

Mr. SPECTER. Is that fragment in the bone itself at the present time?

Dr. SHIRES. Yes.

Mr. SPECTER. What would your best estimate be as to the size of that fragment?

Dr. SHIRES. One millimeter in diameter—one to two.

Mr. SPECTER. Would you have any estimate as to how much that might weigh in grains?

Dr. SHIRES. In grains—a fraction of a grain, maybe, a tenth of a grain—very small.

Mr. SPECTER. A tenth of one grain?

Dr. SHIRES. Yes.

Mr. SPECTER. What size bullet would it take to create the punctate hole which you described in the thigh?

Dr. SHIRES. This would depend entirely on the angle and the speed and weight of the bullet. For example, a small missile on a tangent may create a surprisingly large defect. A large bullet with fast or a relatively slow velocity will create the same defect.

Mr. SPECTER. What operative procedures did you employ?

Dr. SHIRES. Progressive debridement from skin, fat, fascia, muscle, irrigation, and through and through enclosure with stainless steel alloy wire and removable sutures.

Mr. SPECTER. Does that complete a general description of what you did to Governor Connally?

Dr. SHIRES. In the operating room, yes.

Mr. SPECTER. Approximately what time did that operation start?

Dr. SHIRES. Approximately 1 o'clock.

Mr. SPECTER. The operation that you were concerned with?

Dr. SHIRES. Oh, the operation that I was concerned with must have started at 3:30 or 4 o'clock, I guess it was.

Mr. SPECTER. And about what time did it end?

Dr. SHIRES. My portion of it—about 20 minutes later.

Mr. SPECTER. And who, if anyone, assisted you in that portion of the operation?

Dr. SHIRES. Doctors Robert McClelland, Charles Baxter, and Ralph Don Patman.

Mr. SPECTER. Dr. Shires, I am showing you a document identified heretofore

as Commission Exhibit No. 392, which is the report of Parkland Hospital on the treatment of President Kennedy and Governor Connally, and I show you a Parkland Memorial Hospital operative record, dated November 22, 1963, which lists you as the surgeon, and ask you whether or not this represents the report made by you on the operative procedures on Governor Connally?

Dr. SHIRES. Yes; it does.

Mr. SPECTER. And, are those the same as the matters which you have heretofore described during the course of this deposition as to what you did?

Dr. SHIRES. Yes.

Mr. SPECTER. Now, what treatment, if any, have you performed on Governor Connally subsequent to November 22?

Dr. SHIRES. A tremendous amount—postoperative care was of the essence here in that he had multiple injuries, massive blood and fluid replacement, so that to describe the care is really a detail of postoperative—I don't know how much of this you want—in other words, he had clotting defects—I don't know whether you want to take this down—I just want to ask you how much detail you would like?

Mr. SPECTER. Start off with a general description—perhaps, I will direct your attention to some specific areas to abbreviate it.

First of all, how frequently did you see him after November 22, 1963?

Dr. SHIRES. For the first several days I saw him approximately every 2 to 4 hours for an hour or so each visit, and many times for 6 and 8 hours at a stretch.

Mr. SPECTER. And after that time how frequently did you see him?

Dr. SHIRES. Decreasing frequency over the next 3 weeks—never less than three or four times a day, even after he was convalescing.

Mr. SPECTER. How long was he in the hospital?

Dr. SHIRES. I don't really know the number of days he was in the hospital.

Mr. SPECTER. After he left the hospital, have you seen him?

Dr. SHIRES. Yes; I saw him again approximately 2 weeks, I guess it was, after he left the hospital, in Austin. He developed a superficial saphenous thrombophlebitis in the right leg, not the one that the injury occurred in. This was undoubtedly incident to a catheter cutdown having been placed in this leg for administration of blood and fluids while he was in the hospital. He unequivocally had a clot in the saphenous vein and at this time was placed on bed rest, antibiotics, anticoagulants and responded very satisfactorily.

Mr. SPECTER. Do you anticipate seeing him in the future?

Dr. SHIRES. Do I?

Mr. SPECTER. Yes.

Dr. SHIRES. Not for his wounds. No—the only followup care that he really requires at the moment is the bone—the orthopedic followup, which incidentally is also completely healed.

Mr. SPECTER. Doctor, look, if you will, at a document which we have marked Dr. Gregory X-1, used in the course of the deposition of Dr. Gregory, which immediately preceded yours and directing your attention first to Diagram Number 1, would the entry and exit holes on Governor Connally's back and chest, being entry and exit, respectively, and the exit and entry on the wrist with the entry being on the back side of the wrist and the exit on the front side of the wrist, correspond with your observations of Governor Connally?

Dr. SHIRES. Yes; they would.

Mr. SPECTER. Now, going to Diagram 2, which depicts a man standing, would that correspond to the angle of the entry and exit wounds?

Dr. SHIRES. Yes.

Mr. SPECTER. Now, going to Diagram No. 3, would that diagram correspond with the wounds on Governor Connally as you recollect them to be?

Dr. SHIRES. Yes.

Mr. SPECTER. Going now to Diagram 4, would that again correspond with the wounds on Governor Connally?

Dr. SHIRES. Yes.

Mr. SPECTER. And as to Diagram No. 5, what does that represent?

Dr. SHIRES. This, at the time of the discussion of Governor Connally's injuries with his wife, before he really regained consciousness from surgery, was the

apparent position that he was in in the car, which would explain one missile producing all three wounds.

Mr. SPECTER. Did you have a discussion with Mrs. Connally?

Dr. SHIRES. Yes; with Mrs. Connally.

Mr. SPECTER. And when was that discussion?

Dr. SHIRES. Right after the surgery—this was the 22d, late in the afternoon.

Mr. SPECTER. And what, if anything, did she tell you as to the Governor's position?

Dr. SHIRES. She had thought, and I think correctly so, that he had turned to his right after he heard the first shot, apparently, to see what had happened to the President, and he then later confirmed this, that he heard the first shot, turned to his right, and then was hit.

I forgot about that a moment ago, incidentally. He definitely remembers turning after hearing the first shot, before he was struck with a bullet. I forgot about that.

Mr. SPECTER. When did Governor Connally tell you that?

Dr. SHIRES. Oh, several days later.

Mr. SPECTER. While he was in the hospital?

Dr. SHIRES. Oh, yes—4 or 5 days later and we were constructing the events.

Mr. SPECTER. What was the occasion for your conversation with him?

Dr. SHIRES. In part of his routine care one morning, as he was reconstructing his memory of events, because his memory was quite hazy, since he had a sucking wound of the chest and came in here relatively in anoxia, he had some cyanosis, as you know.

Mr. SPECTER. What is cyanosis?

Dr. SHIRES. Not enough oxygen of the tissues and this means they turn blue.

Mr. SPECTER. Would that affect his memory?

Dr. SHIRES. Yes; sure would and did, and he remembers very little after he fell over in the car—he is very hazy, until, oh, probably the second day post-operatively.

Mr. SPECTER. Would that affect his memory as to what happened before the wound?

Dr. SHIRES. No.

Mr. SPECTER. Or, would that affect only his memory while he was suffering from lack of oxygen?

Dr. SHIRES. Probably just while he was suffering from lack of oxygen. He didn't have that much hypoxia. Hypoxia or anoxia or lack of oxygen could affect his memory. Had this been severe, this could have affected his memory for preceding events, but his hypoxia fortunately did not last that long, and he never showed real evidence of brain damage from the anoxia, so that I think his memory for events up until the time he recalls falling over in the car is probably accurate.

Mr. SPECTER. Would you relate just as exactly as you can for us what he said to you, and the nature of the conversation, with your replies, and how it went as closely as you can recount it now?

Dr. SHIRES. He recounted, and as I remember this particular occasion, Mrs. Connally was in the room too, and reconstructing events, she related the story of her last conversation with the President, relating to him, that the reception had been warm and that she was glad he couldn't say that people of Texas and in Dallas didn't like him and admire him, and she was very pleased with the way things had gone the whole visit. Then, the next event that occurred was that she remembers hearing a shot, he remembered hearing a shot—he remembers turning to the right, he remembered being struck by a bullet, and his next thought as he fell over toward his wife was "They're going to kill all of us," and that's the last really clear memory that he expressed to me until he remembers vaguely being in the emergency room, but very little of that, and then he remembers waking up in the recovery room several hours later.

Mr. SPECTER. Did he say anything to you about who he meant by "they"?

Dr. SHIRES. He didn't say—he didn't comment on it at all.

Mr. SPECTER. Did he describe the nature of the sound which he heard?

Dr. SHIRES. I don't believe he did—no.

Mr. SPECTER. Did anybody describe the nature of the sound?

Dr. SHIRES. I think Mrs. Connally did. I think she thought it was, if I'm not wrong, she thought it was a loud retort, either a gun or a firecracker. I think she thought it was a bullet and I think he did too—thought it was a gun—I believe he did too.

Mr. SPECTER. Now, did Governor Connally say anything about hearing President Kennedy say anything?

Dr. SHIRES. No—no, he didn't.

Mr. SPECTER. Did Mrs. Connally say anything about whether President Kennedy said anything?

Dr. SHIRES. No, she didn't. She remembered Mrs. Kennedy saying some things, but she didn't remember anything about the President having uttered a word.

Mr. SPECTER. What did Mrs. Kennedy say, according to Mrs. Connally?

Dr. SHIRES. Oh, it's vague, even in my memory, but things to the effect that her husband had been shot and—well, that was really the essence of it. It wasn't phrased that way.

Mr. SPECTER. Focusing on the time sequence—what did Governor Connally say as to the timing, number one, the time he was hit, and number two, the time he had heard a sound, and number three, the time he turned—those three factors? In what sequence did he relate them?

Dr. SHIRES. As he recalled it, he heard a shot, he turned to the right and felt himself receiving a shot—in that order—in a matter of a few seconds.

Mr. SPECTER. Where did he feel himself receive a shot?

Dr. SHIRES. In the right chest.

Mr. SPECTER. Did he make any comment about feeling anything in his wrist?

Dr. SHIRES. No; I don't believe he did.

Mr. SPECTER. How about feeling anything in his thigh?

Dr. SHIRES. I don't believe he ever commented on that to me.

Mr. SPECTER. Did he say anything else to you at that time about his recollections on the day of the assassination?

Dr. SHIRES. No; other than this striking feeling he had after he was hit, that someone was trying to kill all of them—apparently he remembers that quite clearly, right after he was hit, but that's all.

Mr. SPECTER. Did you discuss his recollection of the events of the assassination day with Governor Connally on any other occasion?

Dr. SHIRES. Oh, yes; sporadically, during his convalescence.

Mr. SPECTER. What else did he say to you at any other time?

Dr. SHIRES. He was just simply asking questions about things that happened to him in the Emergency Room, in the Operating Room, and he was a little surprised that he didn't recall them better, but this was after he was wounded in here, but that was really the main thing—he was surprised that he didn't remember some of the things—like the cutdowns for blood and that sort of thing that were done to him, and, of course, this is obviously because he was so anoxic at the time.

Mr. SPECTER. Did he ever describe anything in more detail in his recollection of the things on the day of the assassination?

Dr. SHIRES. No.

Mr. SPECTER. Now, going back to the first conversation you had with Mrs. Connally on November 22d, did she say anything more to you other than that which you have already testified about?

Dr. SHIRES. No—those were mainly the remarks that she made. I don't remember any others, except—well, no—most of the others were—we were discussing the Governor's condition and outlook and chances for recovery and that sort of thing.

Mr. SPECTER. Now, looking again at Diagram No. 5, what is your professional opinion, if you have one, as to whether Governor Connally's chest injury, wrist injury, and thigh injury were caused by the same bullet?

Dr. SHIRES. Well we all thought, me included, that this was probably one missile, one bullet.

Mr. SPECTER. When you say "we all thought," whom do you mean by that?

Dr. SHIRES. Dr. Shaw, Dr. Gregory—as we were reconstructing the events

in the operating room in an attempt to plot out trajectory as best we could, this appeared to be our opinion.

Mr. SPECTER. Did any of your assistants consult with you in those calculations?

Dr. SHIRES. I guess nearly all of them we have listed.

Mr. SPECTER. Dr. McClelland, Dr. Baxter and Dr. Patman?

Dr. SHIRES. Yes.

Mr. SPECTER. How about Dr. Osborne and Dr. Parker?

Dr. SHIRES. They were working with Dr. Gregory. If they discussed it, I'm sure they did—it was before I got there.

Mr. SPECTER. How about Dr. Boland and Dr. Duke who worked with Dr. Shaw?

Dr. SHIRES. Now, again, I talked to them and they were discussing it as they did the chest procedure, and again thought the same thing. Everyone was under the impression this was one missile—through and through the chest, through and through the arm and the thigh.

Mr. SPECTER. Was there any one of the doctors on either of these three teams who had a different point of view?

Dr. SHIRES. Not that I remember.

Mr. SPECTER. Do you think it is possible that Governor Connally could have been struck by two bullets, one entering his back and emerging from his chest and the second going into his wrist?

Dr. SHIRES. I'm sure it is possible, because missile sites are so variable, depending upon the size of the bullet, the speed at which it travels, whether it was tumbling or not. We have seen all kinds of combinations of entrance and exit wounds and it's just impossible to state with any certainty, looking at a given wound, what the nature of the missile was, so I am sure it is possible.

Mr. SPECTER. Do you think it is possible that, assuming a missile being a bullet 6.5 mm. with a velocity of over 2,000 feet per second, and the distance between the weapon and the victim being approximately 160 to 250 feet, that the same bullet might have passed through President Kennedy, entering his back near the midline and emerging from his neck, and then entering Governor Connally in the back and emerging from his chest, into his wrist, through his wrist and into the thigh?

Dr. SHIRES. I assume that it would be possible. The main thing that would make me think that this was not the case in that he remembers so distinctly hearing a shot and having turned prior to the time he was hit, and in the position he must have been, particularly here in Figure 5, I think it's obvious that he did turn rather sharply to the right and this would make me think that it was a second shot, but this is purely conjecture, of course.

Mr. SPECTER. Well, is there anything, aside from what he told you, that is, anything in the characteristics of the wounds on President Kennedy and the wounds on Governor Connally which would lead you to conclude that it was not the same bullet?

Dr. SHIRES. No—there is nothing. It could have been—purely from the standpoint of the wounds, it is possible.

Mr. SPECTER. You referred just a minute ago to his turning position?

Dr. SHIRES. Yes.

Mr. SPECTER. Is the postulation of a turning by Governor Connally necessary to explain the point of entry in the back, exit in the chest, entry in the wrist, and exit in the wrist, and entry into the thigh, in order to have that line—to state it differently, is it necessary to postulate turning by the Governor?

Dr. SHIRES. Depending upon the angle of the trajectory—I suppose not. I don't know what the angle of the trajectory was from where the bullet was fired.

Mr. SPECTER. Assuming an angle of declination of approximately 45 degrees?

Dr. SHIRES. This, I don't know without drawing it out, but as long as his right arm is drawn in front of him next to the exit wound on the chest, he is in a sitting position, if the angle of declination was right, then I think he could have received this facing straight forward.

Mr. SPECTER. Now, on the wrist, would that be palm of the wrist, back of the wrist, or how?

Dr. SHIRES. I don't understand.

Mr. SPECTER. In what position would the wrist have had to be in, in order to have the same bullet make all three wounds?

Dr. SHIRES. The main point was that his arm be up here. In other words, in some fashion, however his hand happened to be turned, but he had to have his right arm raised up next to his chest.

Mr. SPECTER. His wrist would have to be up with the palm down, would it not?

Dr. SHIRES. As depicted here.

Mr. SPECTER. In order for the point of entry to be on the dorsal side?

Dr. SHIRES. That's right, again, which makes it a little more likely he was turning, since ordinarily you pronate your wrist as you turn, whereas, this would have been a little strange for him to have been sitting like this, but again, depending on what he had in his hand. It's just a question of which side is up.

Mr. SPECTER. But it would be more natural, you say, for the palm to be down in the turning, which was as contrasted with a relaxed sitting position where it would be more likely his palm would be facing in towards his chest area?

Dr. SHIRES. Right.

Mr. SPECTER. Do you have any knowledge as to the damage which was done to the rib?

Dr. SHIRES. Only from hearsay from Dr. Shaw, that's all.

Mr. SPECTER. Do you have any knowledge as to what fragments there were in the chest, bullet fragments, if any?

Dr. SHIRES. No, again except from postoperative X-rays, there is a small fragment remaining, but the initial fragments I think Dr. Shaw saw before I arrived.

Mr. SPECTER. How about the fragments in the wrist, do you have any knowledge of that?

Dr. SHIRES. Again, there were small fragments which I saw during the procedure on the wrist, but I was not directly involved in that procedure.

Mr. SPECTER. What opinion do you have, if any, Dr. Shires, as to whether the wound in the thigh might have been inflicted from a missile that did not pass through any other part of the Governor's body, assuming that it was a 6.5-mm. bullet with a muzzle velocity of 2,000 feet per second, traveling approximately 160 to 250 feet between the end of the weapon and the point of impact on the thigh?

Dr. SHIRES. Well, again, in that wound—it was strange in that the hole in the skin was too large for the amount of damage inflicted on the underlying tissues, so that had this been the case, this would have had to have been a tangential wound. Had it been a tangential wound, then it's possible that small fragments could have gone into bone as it did and that the damage to the soft tissues was done only by that small fragment, so that the major portion of the bullet simply hit the skin in a tangent and went on in its course elsewhere.

Mr. SPECTER. Well, is it possible that the bullet could have hit Governor Connally with the thigh being the initial point of impact and do the damage which was done there with the high velocity missile that I have just described for you?

Dr. SHIRES. Is it possible to get a wound like that?

Mr. SPECTER. Yes, sir.

Dr. SHIRES. Yes; as long as it's on a tangent.

Mr. SPECTER. Is it likely to receive a wound like that from a high velocity weapon of 2,000 feet per second and at about 160 to 250 feet?

Dr. SHIRES. If it's a tangential wound, tangential wounds can be very strange. A large bullet can cause a small hole if its on a tangent or a small bullet can rip out a fairly large hole on a tangent. It just depends on the time of contact and the angle of contact with the skin. That's why it's awfully hard to predict.

Mr. SPECTER. So that wound could have either been the first striking of the Governor from the bullet, or it could have been from a missile whose velocity

was spent after going through President Kennedy and through the Governor's body and wrist and then caused that wound in the thigh?

Dr. SHIRES. That's right, if it was a tangential bullet.

Mr. SPECTER. Dr. Shires, have you ever been contacted by any representative of the Federal Government prior to today?

Dr. SHIRES. Yes.

Mr. SPECTER. And who was it who contacted you?

Dr. SHIRES. I don't recall the name—it was two individuals from the Secret Service. They presented their credentials at the time to the administration and then subsequently to me and they were given copies of our operative reports, statements made by people concerned with the President and Governor at the time, and then subsequently one of those same two men from Secret Service returned and charted the entrance and exit wounds which you have described previously, or we have looked at previously in these five diagrams.

Mr. SPECTER. Have you ever been interviewed by any other representative of the Federal Government before today?

Dr. SHIRES. No; not in person. I discussed over the phone with the FBI—well, that was with regard to Oswald. I discussed over the phone what happened to the bullet that was taken from Oswald, but not with regard to the President or the Governor—no.

Mr. SPECTER. On your prior interviews by the Secret Service, sir, did they cover the same subjects which you and I have gone over today, or were other subjects covered?

Dr. SHIRES. No; essentially the same subjects.

Mr. SPECTER. And was any different information given to you by the Secret Service at that time of either of those two occasions?

Dr. SHIRES. No; the same as we have discussed here.

Mr. SPECTER. Now, prior to the time when you were sworn in and the court reporter started to take the deposition in shorthand form, did you and I have a brief discussion about the purpose of the deposition and the subject matters of interest to the Commission?

Dr. SHIRES. Yes.

Mr. SPECTER. And was the same information given by you to me during the course of that informal discussion as you have testified to on the record here this afternoon?

Dr. SHIRES. Yes; in less detail.

Mr. SPECTER. And do you have anything which you would care to add which you think might be helpful to the Commission in its work?

Dr. SHIRES. No.

Mr. SPECTER. Well, fine, that concludes the deposition, thank you very much, Dr. Shires.

Dr. SHIRES. Are you interested in Oswald—that's my only other question?

Mr. SPECTER. Well, let's talk about it a little off the record.

(Discussion between Counsel Specter and witness Dr. Shires off the record at this point.)

Mr. SPECTER. Let's go back on the record. Dr. Shires, before concluding the deposition, permit me to ask you just a few additional questions about care for Lee Harvey Oswald.

First of all, I again show you Commission Exhibit No. 392, the last two pages which purport to be an operative record of Parkland Memorial Hospital on November 24, 1963, concerning treatment of Mr. Oswald, with you listed as the surgeon, and I'll ask you to take a look at these two sheets and tell us whether or not that is a report which you prepared on treatment of Mr. Oswald?

Dr. SHIRES. Yes, it is.

Mr. SPECTER. Will you outline in a very general way what his condition was when you first saw him?

Dr. SHIRES. When he was first seen in the emergency room, he was unconscious, without blood pressure or pulse, but with an audible heart beat, and attempts, feeble though they were, attempts in respiration. There was an entrance wound over the left lower chest and the bullet could be felt subcutaneously over the lower chest lateral projecting this trajectory through the body and look-

ing at his general condition, it was fairly obvious that the bullet had transgressed virtually every major organ and vessel in the abdominal cavity, which later proved to be the case.

Mr. SPECTER. What did you do for him?

Dr. SHIRES. He was given resuscitation, including an endotracheal tube, intravenous fluids, blood, moved to the operating room, prepared, draped, an abdominal incision, laparotomy made, just as is described in the record. The injuries were in fact mortal and involved both major vessels in the abdomen, the aorta, the inferior vena cava, and there had been massive exanguinating hemorrhage into the abdomen—in and around the abdomen.

After securing control of all the many, many bleeding points and the bleeding organs, he never had regained consciousness. Approximately 15, 16—whatever it is, approximately, pints of blood had been given, and he had suffered irreparable anoxia from the initial massive blood loss incident to the gunshot wound. When his heart did stop, even though we felt this was a terminal cessation of heartbeat, efforts were made at resuscitation by open heart massage and all that went with it, but never once was an effective heartbeat obtained, so that our initial impression was that it was correct in that this was simply cardiac death and not cardiac arrest.

Mr. SPECTER. Did you come close to saving him, in the vernacular—in lay terms?

Dr. SHIRES. There has never been recorded in medical literature recovery from a wound like this. There was too much blood lost too fast. Had the injury occurred right outside the operating room, it might have been possible to reduce the period of anoxia that comes from overwhelming blood loss like this, sufficiently to have corrected it. We did control all the bleeding points with a lot of difficulty, finally all bleeding points were controlled and this was a mortal wound—there was no question about that.

Mr. SPECTER. Are the details of your observations, examination, and treatment of Mr. Oswald set forth in the two pages of this report which I have just shown you in Commission No. 392?

Dr. SHIRES. Yes, the operative reports that are contained there.

Mr. SPECTER. Thank you very much, Dr. Shires.

Dr. SHIRES. Thank you.

TESTIMONY OF DR. RICHARD BROOKS DULANY

The testimony of Dr. Richard Brooks Dulany was taken at 6:20 p.m., on March 25, 1964, at Parkland Memorial Hospital, Dallas, Tex., by Mr. Arlen Specter, assistant counsel of the President's Commission.

Mr. SPECTER. May the record show that Dr. Richard Dulany is present in response to the request that he appear to have his deposition taken and he has been requested to appear here because he has been identified in prior depositions as perhaps being one of the first doctors to see President Kennedy.

Dr. Dulany, have you had an opportunity to examine the Executive Order creating the President's Commission?

Dr. DULANY. Yes, sir.

Mr. SPECTER. And the rules and regulations relating to the taking of testimony?

Dr. DULANY. Yes, sir.

Mr. SPECTER. Are you willing to have your deposition taken here today, even though you haven't had the 3 days' notice which you have a right to, if you want it?

Dr. DULANY. Yes, sir.

Mr. SPECTER. You are willing to waive that requirement?

Dr. DULANY. Yes.

Mr. SPECTER. Will you stand up now and raise your right hand?

Do you solemnly swear that the testimony you give before the President's