

A Critique of Wallace Milam's Confabulatory:

THE "CONFABULATIONS" OF DR. BOB

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In trying to come to an understanding about the medical evidence in the JFK assassination, investigators often have to second guess the imperfect records, impressions, and sketches of physicians who treated or examined its victims. Thus, reconstruction of wound formation scenarios are at best approximations which often have to be adjusted. However, the latest piece of work by Wallace Milam regarding Connally's wrist wound in which he contends that the bullet striking the radius was shattered and that "the totality of the evidence indicates that virtually all of this shattered bullet was expelled out of the large (2.0 cm) hole it had made..", is not an approximation. It is not even a close miss. It is a ludicrous essay that goes even so far as to mention mass murderer Charles Whitman, and yet completely ignores the more germane issue: the ballistic experimental work done with the Mannlicher-Carcano bullet, as well as other associated findings. There is no doubt that Mr. Milam is very conversant with many of the facts of the assassination, but the sort of conclusions he has come to are typical of ones reached by working backwards from a cherished theory while blocking out inconvenient facts, rather than by reconstructing a reasonable scenario that tries to integrate all the available data. For this, Wallace gets a Tycho Brahe Award.*

MR. MILAM IGNORES MANNLICHER-CARCANO BULLET DATA.

In experiments for the Warren Commission, Dr. Olivier fired Mannlicher-Carcano bullets at FULL velocity at cadaver wrists. Although the tips of the bullets deformed, the bullets did not fragment and the lead core did not separate from the copper jacket.

To demonstrate that the Mannlicher-Carcano bullet could perforate a radius without deforming, Dr. Martin Fackler downloaded Mannlicher-Carcano bullets and fired them at wrist cadavers. Two bullets hit a wrist cadaver at reduced velocity, one at around 1300 fps and another at around 1100

* Tycho Brahe was a brilliant 16th century astronomer who made many valuable contributions to astronomy. His work helped the Western World accept the Copernican view of the solar system. However, Tycho Brahe to his death believed in a modified Copernican system in which the planets revolved around the Sun, which in turn revolved around the Earth.

fps. This is even faster than Dr. Fackler's own estimation of the velocity of 900 fps that the Mannlicher-Carcano bullet would have been traveling after going through JFK and JBC. Each bullet perforated the cadaver wrist, broke the radius, was recovered from a bullet trap, inspected, and found to be completely undeformed, much less fragmented. His demonstration also corrected the erroneous approach used in experiments done for the Warren Commission in which Mannlicher-Carcano bullets were fired full velocity through cadaver wrists at close range. (The conclusion by the Warren Commission--that the CE 399 was significantly less deformed than the test bullets because CE 399 hit Connally's wrist at a reduced velocity--was proven to be correct by Dr. Fackler.)

Dr. Fackler tells me that for the ballistic studies of Connally's wrist wound to be more complete, a bullet should be fired at a wrist base first, since this is most likely how the bullet struck the radius. Dr. Fackler has expressed an interest and intent in performing this experiment.

When Dr. Olivier's group fired Mannlicher-Carcano bullets at gelatin filled skulls, the bullets broke up, and formed fragments very similar to those found in the limo. (Figure 1)

When Dr. Lattimer fired Mannlicher-Carcano bullets at human skulls, he too, found that the bullets fragmented, and again, produced fragments very similar to those found in the limousine. (Figure 1)

The REPRODUCIBLE ballistic experimental data produced thus far, all of which Mr. Milam ignores, indicates the following there is a bullet that in one instance will perforate a human wrist without breaking up, yet in another instance will hit the head and break up to fragments similar in appearance to the fragments found in the limousine. That bullet is the 6.5 Mannlicher-Carcano bullet.

The bullet fragments found in the car were ballistically identified as 6.5 Mannlicher-Carcano bullet fragments fired from the 6.5 Mannlicher-Carcano carbine found in the TSBD. Thus, the reproducible ballistic experimental data, combined with the crime scene evidence, indicates that the fragments found in the limo came from a Mannlicher-Carcano bullet fired from the 6.5 Mannlicher-Carcano carbine found in the Texas School Book Depository and were the result of the bullet fragmenting in the head and not the wrist. (Mr. Milam seems to forget that JFK's head was in the limo only a few feet from Connally's wrist)

There were two bullets found in association with the assassination. The fragmented bullet found on the floor of the limo is similar in appearance to bullet fragments

resulting from experimental head shots with 6.5 Mannlicher-Carcano bullets. A whole bullet was found at Parkland. This bullet is deformed in such a way as to be compatible with the 6.5 Mannlicher-Carcano bullet going through two men according to every wound ballistics expert in the world. (Dr. Wecht is not a wound ballistics expert.) Not only that, but the mean estimated weight loss of CE 399 is virtually identical to the weight loss of experimental bullets deformed to the same extent as CE 399 after the lead extruding from their bases is shaved off. (Lattimer, "The Kennedy-Connally Single Bullet Theory: A Feasibility Study", *International Surgery*, Vol. 50, pp. 524-532, Dec. 1968). And the amount of lead shaved off the bases of the experimental bullets matches the amount of lead in the X-rays of Governor Connally's preoperative x-rays.

Furthermore, Mr. Milam agrees that the bullet hit the wrist rear first. The rear portion of the copper jacket found in the limousine is peeled from front to back (Figure 1). There is no way this front to back peeling of the rear of the jacket could have occurred by the bullet hitting the radius rear first. This sort of peeling occurs when a bullet hits an object tip first with resulting fragmentation of the jacket's tip and subsequent rearward shearing of the rest of the jacket as it proceeds through the bone.

Thus, Mr. Milam's belief that the bullet hit the radius rear first AND his belief that the fragments in the limo were the result of a radius strike, are mutually exclusive. This is a typical *conspirati* example of blocking out the major data in this case.

OTHER EVIDENCE MR. MILAM IGNORES

On the forearm x-rays, there are only three small fragments. If a bullet had "shattered" upon hitting the wrist, there would have been a snowstorm of metal fragments.

Mr. Milam completely ignores soft x-ray and energy dispersal analyses of Governor Connally's clothing done by Dr. Petty for the HSCA (HSCA Vol. 7 PP 231-241). The results of this study failed to find any significant lead or copper content in Governor Connally's shirt cuff or coat sleeve. If a copper jacketed lead bullet had disintegrated upon hitting Connally's radius, surely there would have been high lead or copper found in the area of his cuff and sleeve.

And finally, Mr. Milam does not tell us how he imagines the fragments from a "shattered bullet" bounced out of the entrance wound and deftly avoided producing any secondary tears in the fabric of Governor Connally's shirt cuff or coat sleeve. There is one hole for a wound of entrance, one hole for the wound of exit, and NO OTHER holes or tears.

THE PATH OF THE MISSILE THROUGH THE WRIST: A REVISION

Because of typographical errors and incomplete descriptions in Dr. Gregory's operative note, interpreting the path of the bullet is difficult. At the top of the body of dictated note, Dr. Gregory wrote in his own hand, "also a partial transection of the superficial radial nerve". Above that he wrote "or Ext. Pol. Brevis" with a line leading from that phrase down into the body of the note where he refers to the abductor **palmaris** longus. The word "longus" was handwritten in over the word "brevis." There is no tendon named abductor palmaris longus or brevis, so one has to decide whether Dr. Gregory is referring to the palmaris longus tendon, or the abductor pollicis longus tendon. At first, I thought Dr. Gregory was referring to the palmaris longus tendon, because he drew an exit wound in the center aspect of the volar surface of the wrist in an area that overlies the palmaris longus tendon. I am now of the opinion that the palmaris longus tendon was not severed and that Dr. Gregory was referring to the abductor pollicis longus tendon and failed to correct "palmaris" for "pollicus" on the operative note. I also now surmise that Dr. Gregory was not sure which tendon was severed, either the extensor pollicus brevis or the abductor pollicis longus. (Both of these tendons lead to the thumb.) This uncertainty is understandable because the extensor pollicus brevis and abductor pollicis longus are immediately adjacent to each other in the first extensor compartment of the wrist, which is located on the radial side of the radius. (Figure 2) Given the grave condition of the Governor, Dr. Gregory properly did not take the time to extensively explore the wound or to effect a repair.

In his examination of Governor Connally for the HSCA, Dr. Baden noticed that the scar wound of entry was on the "lateral [radial] aspect of the distal forearm slightly dorsally. . ." (HSCA Vol. 7 p. 240)

Thus, as indicated in Figure 2, I am now of the opinion that the bullet probably entered in the dorsal radial aspect of the wrist base-first at an oblique angle with a small amount of lead extruding from its base. The extrusion of lead was caused when the bullet impacted broadside on Connally's rib. The small amount of metal extruding from the bullet's base was sheared off during its impact on the radius. As the bullet traveled slightly ulnarward after striking the radius, it pitched slightly and exited the volar surface with its long axis perpendicular to the skin, creating a small exit wound. It exited to the radial side of the median nerve and flexor tendons. The structures on the radial volar aspect of the wrist such as the radial artery,

the flexor carpi radialis, and flexor pollicis longus were pushed to the side as the intact bullet passed through it.

**DR. SHAW AND DR. GREGORY:
GREAT SURGEONS, LOUSY PATHOLOGISTS**

While I have expressed reservations about the inexpert forensic opinions expressed by Dr. Shaw and Dr. Gregory, I do not mean to imply they were not excellent surgeons. The truth of the matter is that surgeons do not receive much training in wound forensics or wound ballistics, and they generally go through their career with superficial impressions of these matters. This is not a criticism, it is a simple fact. A detailed knowledge of forensic pathology and wound ballistics is not required to be an excellent trauma surgeon. On my surgical written boards, I do not recall one question dealing in wound ballistics or forensic pathology of gunshot wounds. And as Dr. Fackler wrote to me after reading my original critique, "I doubt that either Dr. Gregory or Dr. Shaw (or even Dr. Wecht, for that matter) had ever previously seen a wound made by the FMJ 6.5 mm Mannlicher-Carcano bullet. This bullet acts very differently in tissue than most others. ." [including, probably, the FMJ's that Mr. Milam claims Charles Whitman used]. Unlike the opinions of Drs. Gregory, Shaw, and Wecht, Dr. Fackler's observations are not speculations, they are based on ballistic experiments done with the 6.5 Mannlicher-Carcano bullet, comparing its behavior with more modern military FMJ bullets." (Fackler, ML, "Theodur Kocher and the Scientific Foundation of Wound Ballistics", *Surgery, Gynecology & Obstetrics*, Vol. 172, pp. 153-160. February, 1991, and Fackler, ML, "Wounding patterns of military bullets", *International Defense Review*, Vol. 1, pp. 59-63, 1989)

Readers might be interested in the fact that the book from which my hand illustration are taken, Common Hand Injuries and Infections, by Peter R. Carter, M.D., was dedicated to Dr. Gregory.

DR. SHAW'S TESTIMONY: WHAT MR. MILAN LEAVES OUT

As far as Dr. Shaw's analysis wound analysis is concerned, Mr. Milam omits other testimony by Dr. Shaw:

WARREN COMMISSION

Mr. SPECTOR: As to the wound on the back of Governor Connally, was there any indication that the bullet was tumbling prior to the time it struck him?

Dr. SHAW: I would have to say that I'm not a **ballistics expert**, but the wound on his chest was not a single puncture wound, it was **long enough so there might have been some tumbling**.

Mr. SPECTOR: You mean the wound on his back?

Dr. SHAW: The wound on his back--yes, it was long enough so that there **might have been some tumbling**. In other words it was **not a spherical puncture wound**.

HSCA

Donald A Purdy, Staff Counsel HSCA, who interviewed Dr. Shaw, reports that in addition to now claiming the wound was a "**puncture-type wound**", Dr. Shaw also contended (quoting the report) "the shape of the entrance wound was consistent with a missile striking in a downward trajectory. It is Dr. Shaw's opinion that the wound was **not caused by a tumbling bullet** (an inference drawn, explicitly, from his belief that a tumbling bullet would not have sufficient force to cause the remainder of the Governor's wounds." (HSCA Vol.7 p. 326)

Dr. Shaw's stated belief that the bullet was not tumbling was not based on wound morphology, but on the incorrect belief that a tumbling bullet would not have sufficient force to perforate Governor Connally's chest and wrist. The wound was oblong, whether it was 3 cm or 1.5 cm. For a 6.5 mm diameter bullet to create such a 3 or 1.5 cm oblong wound by entering the body obliquely, it would have to have been fired almost directly over the Governor's head, or from his extreme right or extreme left. The exact orientation of the wound is hard to determine because Dr. Shaw drew a vertically oriented wound for the Warren Commission, and also stated that the bullet appeared to have hit Connally going downward. However, the scar on JBC's back, and the bullet holes on the back of Governor Connally's back and shirt are horizontally oriented. Depending on how Dr. Shaw excised the wound, the orientation of the wound could have been changed. Nevertheless, if the bullet had entered at such an extreme angle, from whatever direction, the trajectory of the wound through the body would have certainly been different. The bullet hit the rib slightly below and slightly to the left of where it entered the skin. There is no evidence that the bullet entered the chest at an extremely oblique angle. Thus, the oblong wound was more likely caused by a tumbling bullet striking the body significantly out of perpendicular.

It may have been more than Dr. Shaw's incorrect impression of the perforating power of a tumbling bullet that caused him to declare that the bullet was not tumbling. Other assassination researchers (and NOT Dr. Lattimer) have

told me that Shaw's changed opinion as to whether or not the bullet could have been tumbling was coincident with Governor Connally's incorrect claims that he and President Kennedy could not have been hit by the same bullet.

**SLIT WOUNDS:
CONCRETE THINKING AND INEXPERIENCE BY MR. MILAM**

The illustrations of slit-like exit wounds (i.e. linear wounds with basically two edges) were meant to show that an exit wound does not have to be jagged, stellate, or circular. The author uses lawyer-like accusations to advance his case rather than engage in discussions with any level of reasonable understanding or intuitive extrapolation. His concrete interpretation of a convenient illustrative example that approximates the shape of Gov. Connally's volar wrist wound merely demonstrates a lack of experience in viewing first hand the diverse morphology of gunshot wounds.

The plain fact is, a bullet exiting the body at greatly reduced velocity can form an exit wound even smaller than its diameter. This is because of the skin's elasticity. As the bullet exits, it can first stretch the skin, then perforate it, leaving the skin to recoil with a hole smaller than the bullet's diameter.

Mr. Milam's challenge that I "bring forth one documented case of a rifle bullet striking human tissue, producing an entrance wound of 2.0-2.5 cm, fracturing a bone of any significant size, then emerging entire through an exit wound 1/4 the size of the entry wound," again merely indicates a lack of first hand experience in treating gunshot wounds on his part. Just because a gunshot wound is unique and may not be reproducible does not mean it cannot occur. I have encountered many unique gunshot wounds during my career as a physician, the likes of which I will never see again. One case that comes to mind, is a perpetrator who was shot in the back of the head by a police officer. The bullet entered the back of the head, circumnavigated the head just underneath the scalp without breaking or entering the skull, and then exited from the entrance wound. I doubt that I will ever see this sort of wound again. But that certainly does not mean that this wound did not occur.

JUST HOW LONG IS THAT BULLET, ANYWAY?

Mr. Milam should do more than "glance" at the photograph on p 282 of Vol. VII of the HSCA Hearings. He should carefully take measurements with a caliper. He will find that the bullets measure almost exactly 1 3/16 inches. In decimal terms this is 1.1875 inches. If one multiplies

1.1875 inches by 2.54 cm per inch, one comes up with 3.02 cm. Conversely, if one works backwards from 2.7 cm, one would find that this comes out to 1.06 inches, which is much less than 1.875 inches. If this is too much of a mental task, Mr. Milam can turn to page 207 of the same volume, where the bullet is depicted lengthwise under a cm marker in Dr. Wecht's exhibits. Using calipers one finds the bullet as depicted in the photo is slightly over 3 cm.

I do not see the point of Mr. Milam's some-of-the-bullet-inside-and-some-of-the-bullet-outside argument. It makes absolutely no ballistic sense to make the case that part of the bullet will be outside and part of the bullet will be on the inside of the arm during its course through the wrist, or even during its impact on the radius. The same is true for Dr. Fackler's bullets that perforated the wrist without deforming, or any bullet penetrating the body. This *non sequitur* by Mr. Milam is (dare I say it?) a confabulation. Speaking of which. . .

**THERE'S CONFABULATION, THEN THERE'S CONFABULATION:
(LEAPING LEXICONS--MORE CONCRETE THINKING BY MR. MILAM)**

Mr. Milam appears to be as ill-informed in basic psychiatric terminology as he is in wound ballistics. He apparently is unaware that the term "confabulation" is a psychiatric term that means a recitation of imaginary experiences to fill gaps in memory. Judging from his prior evidence of concrete thought processes, it is possible that he does not possess an intuitive mind that is capable enough of extrapolation to see that I was adopting the word to mean an unfounded conclusion or scenario based on gaps in forensic knowledge.

A SLIGHT BIOGRAPHICAL CORRECTION

Mr. Milam's referral to me as an emergency room physician is correct, but incomplete. Although I currently work as an emergency room attending, my training is in general surgery. I completed a fully credited surgical residency. I trained at the University of Maryland Hospital, a busy inner-city Level I trauma center. As a senior and chief resident, I was the resident in charge of the trauma team and spent six months in house every other night treating trauma victims (which were usually gunshot wounds or stabbings), as well as instructing junior residents in the management of same. During my surgical residency I rotated on the Plastic Surgery service as intern, assistant resident, and two rotations as chief resident, during which times I treated many gunshot wounds to the hand.

The hospital in which I currently work, the Union Memorial Hospital, in Baltimore, Maryland is home of the Raymond T. Curtis Hand Center, which is a statewide hand

trauma referral center. My emergency room is the receiving area for every upper extremity trauma that is referred in. I continue to enjoy a vast experience in evaluating upper extremity trauma and participating in their initial management.

EXPERIENCE VS. KNOWLEDGE--IT AIN'T THE SAME

For the rest of Mr. Milam's confabulatory rebuttal (in the psychiatric sense), I will let my original critique speak for itself.

Finally, as Mr. Milam did, I would also like to conclude with a quote. This is one by Sir William Olser, a Canadian diagnostician and professor of medicine at Johns Hopkins Medical School, that is certainly applicable to the conclusions reached by Wallace Milam after twenty years of research:

"Some people have been doing the same thing wrong for twenty years and call it experience."

Dr. Bob.

Dr. Bob,
Definitely NOT a Member
85-95% of American people who
know ZIP about wound ballistics,
or the medical evidence
in this case, and
who have received most of
their information from
movies
and TV shows
rife with
historical errors,
and
medical misinformation
dished out
by pretenders of knowledge.

Figure 2

From: Common Hand Injuries and Infections: A Practical Approach to Early Treatment, by Peter R. Carter, MD. Published by Saunders, 1983

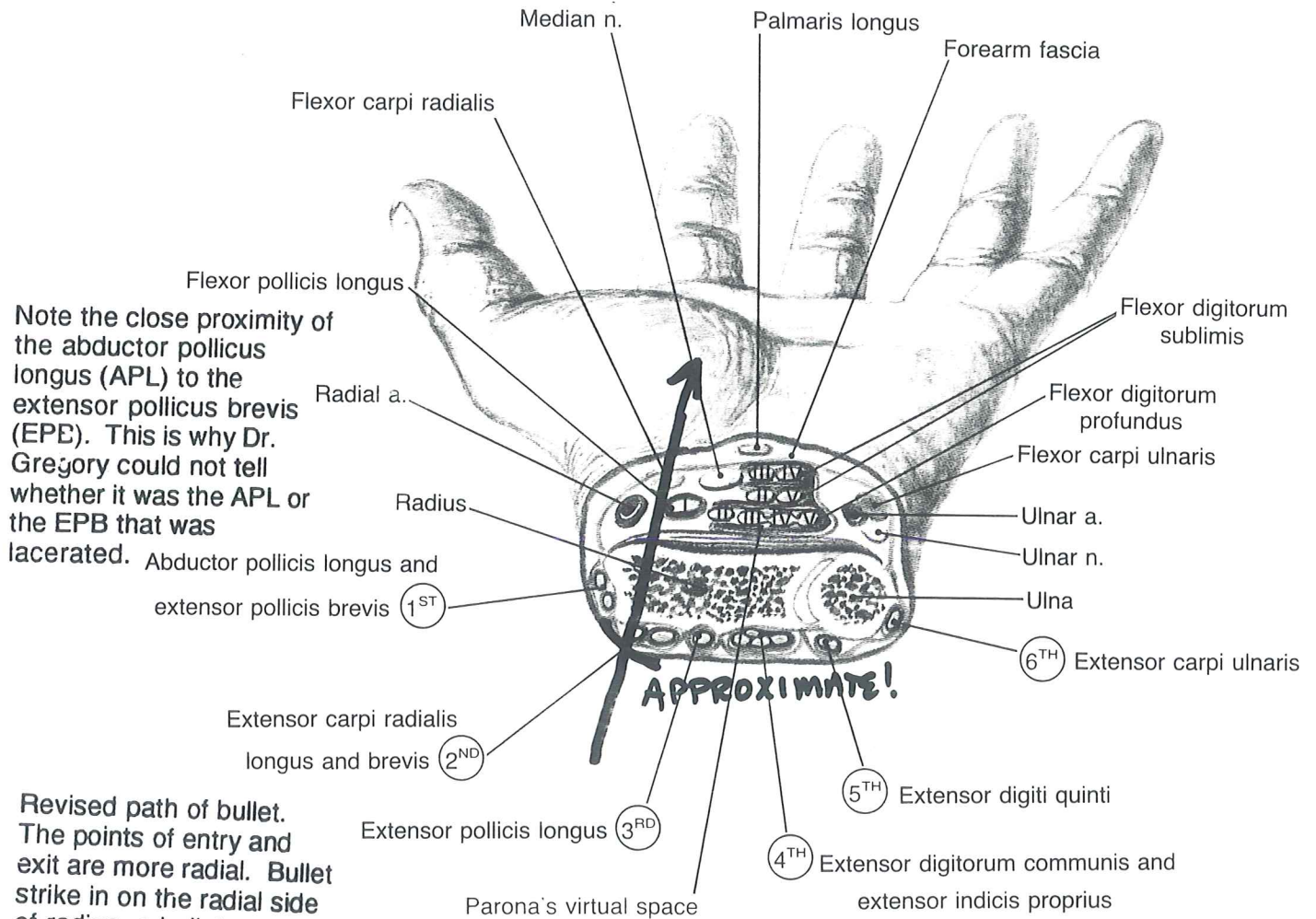


Figure 1

BULLETS RECOVERED FROM
SIMULATIONS OF PRESIDENT KENNEDY'S
FATAL HEAD WOUND

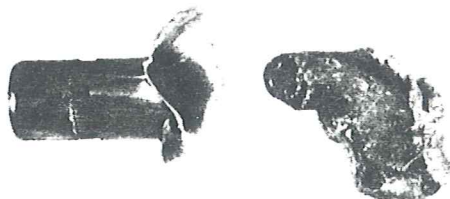
Copper jacket peeled from front to rear

This is the rear portion of bullet jacket found in limo. It is peeled front to rear. There is no way this jacket could have peeled in this manner by striking radius tail first.



KENNEDY HEAD BULLET
SHOWING COMPLETE SEPARATION
OF JACKET AND CORE OF 6.5
MM WESTERN CARCANO ROUND

Note the similarity of these bullets. Each bullet hit a human skull. In each bullet, the lead core separated from the jacket. The tips of the copper jackets have been lost. The copper jackets have peeled back rearwards.



OLIVIER SKULL TEST BULLET
SHOWING COMPLETE SEPARATION,
WITH 6.5 MM WESTERN CARCANO
ROUND.



LATTIMER SKULL TEST BULLET
SHOWING SIMILAR SEPARATION
OF JACKET FROM CORE OF 6.5
MM WESTERN CARCANO ROUND.

SKULL BULLETS

Top: The two largest fragments of the bullet that struck Kennedy in the head and separated into an empty copper jacket, left, and the lead core, right. Both fragments bore markings from the rifling of Oswald's rifle, showing that they were fired from this rifle, to the exclusion of all other rifles. Both fragments were found in the front-seat area of the presidential automobile, apparently having struck the inside of the windshield and its frame at greatly reduced velocities before dropping. Other tiny fragments were found in the President's brain case and on the floor under the jump seats of the automobile. Neutron activation tests showed that these all came from this same bullet that struck the President's head. Still other fragments are assumed to have flown over the windshield and struck the ground or pavement ahead of the car.

Middle: Pair of fragments showing complete separation of the jacket and the lead core of one of the bullets fired by Olivier of the Aberdeen Proving Grounds into human skulls in an effort to reproduce Kennedy's wounds.

Bottom: Pair of fragments from one of our experimental shots after passing through a skull.

All three bullets were 6.5 mm Western Mannlicher-Carcano rounds.

(Bottom: J. K. Lattimer; others: National Archives)

From: Kennedy and Lincoln: Medical and Ballistic Comparisons of Their Assassinations, by John K. Lattimer, M.D., Sc.D., Published by Harcourt Brace Jovanovich, 1980