having served on active duty from 195 to 1958, including a year aboard a Coast Guard cutter. A graduate of the Mestern Reserve University School of Medicine, Dr. Steinfeld worked at the National Cancer Institute from 1952 to 1958, first in the laboratory of experimental oncology and later in the general medicine branch. In 1958 he joined the faculty of USC, where he nice Dr. Egeberg. Ten years later, he returned to the NIH campus, this time as an NCI associate director helping to administer more than \$180 million in research grants and contract studies. Last spring he became NCI's first deputy director.

Last summer, just before Dr. Egeberg was tapped to be the nation's top health officer, he asked Dr. Steinfeld to join him at USC as his assistant. Steinfeld accepted, but no sooner had he moved his family back to California than Dr. Egeberg took the HEW post and asked Steinfeld to make a rapid U turn and return with him.

As deputy assistant secretary, he is sitting in a political job. But while his predecessor, Dr. Stewart, had little power, Dr. Steinfeld has been delegated the complete day-to-day management of the three health agencies, along with the job of overseeing Medicare, Medicaid, and other department health activities, including the Food and Drug Administration.

Dr. Carruth Wagner, former Assistant Surgeon General under Dr. Stewart, sees a weakness in that Dr. Steinfeld will be forced to play two roles. "If he is Egeberg's alter ego, he can't at the same time be the health professional." Dr. Wagner maintains that no one, not even Dr. Steinfeld, whom he endorses for the job, will be able to function as Surgeon General until HEW decides what it wants to accomplish in health. "The primary problems are lack of program, lack of direction, lack of knowledge of what they want to achieve. Until the Secretary comes up with a clear-cut mission for the health side of his department, nobody can function. Once you train a guy to be a pro, then don't give him anything to be professional about, you've got a real unhappy organization, and that's what has happened in the last ten years in the Public Health Service." ■

## MD-Mistorian's

New York urologist re-enacts crime and concludes that Oswald's role as lone assassin is credible

feasibility study by the chief of urology of New York's Columbia-Presbyterian Medical Center should, by rights, involve an elaborate electronic urethral probe, a bladder stimulator, or a new surgical technique for prostatectomy. But interspersed among the scientific talks he gives, Dr. John K. Lattimer gives his findings on the ballistic controversy over the assassination of President John F. Kennedy—and with some similarities in the personality of the assassin's killer, Jack Ruby, and the man who killed John Wilkes Booth in a flaming barn near Port Royal, Va., 12 days after the fatal wounding of President Abraham Lincoln.

Urologist Lattimer, at 55 a year younger than Lincoln was in 1865, and of about the same stature, has long been a collector of Americana. Then, a few years ago, he bought a British-made bowie knife claimed to be the weapon with which Booth's co-conspirator, Lewis Payne, attempted to kill Secretary of State William Seward on the night of the tragedy at Ford's Theater. The authenticity of this weapon was doubted\_exen by Seward's descendants, but after months of diligent research in old archives, Dr. Lattimer was able to convince even the most determined skeptics that he indeed had in hand the silver-handled knife carried by Payne in his Florida regiment. And another fruit of his archival digging was an account of the melce in Seward's house (JAMA, Vol. 192, No. 2).

While working on the Seward weapon, Dr. Lattimer became intrigued by the contradictions surrounding the eventual location in Lincoln's skull of the ball Booth fired. When, coincidentally, a lost autopsy was uncovered, he returned to JAMA's pages to review the problem.

In the meantime, of course, the nation was agog over claims from a number of sources that there had been a conspiracy in the Kennedy assassination. Central to these was the claim that Lee Oswald could not have fired three such accurately aimed shots in the space of seven seconds as timed by the famed Zapruder film of the Dallas tragedy.

While working on his Lincoln reports in late 1964, Dr. Lattimer thought to advertise in *Shotgun News* for Winchester ammunition of the type used by Oswald. And he purchased four Mannlicher-Carcano rifles identical to the weapon found in the Texas School Book Depository, and equipped them with telescopic sights such as were used by Oswald. With his son, Jon, Dr. Lattimer has now fired 400 rounds of the ammunition and, like the FBI agents who tested other lots for the Warren Commission, has not found a single one defective.

Some months later, invited to a teaching visit to Dallas, Dr. Lattimer visited the book depository and gauged for

## Targel is JFK Assassination

himself the position from which the rifle had been fired. Then, the New York urologist began practicing with his guns, trying to hit a one-inch-diameter circle at a range of 250 feet—the distance from the depository window to the Presidential limousine. "After two weeks of firing 20 to 30 rounds a day, I could put three consecutive bullets into the target," says Dr. Lattimer, "but not at the rate Oswald is supposed to have fired." But when he enlarged the target to head-size, he found he could quite consistently put three slugs into it within seven seconds.

Dr. Lattimer next tackled the question of bullet 399, the one the Warren Commission said passed through the President's neck and then shattered Governor Connally's fifth right rib, turned sideways, emerged from his chest, entered his right wrist and, theoretically, came to rest partially embedded in his left thigh. This is the bullet that was found in "pristine" condition on a stretcher in Parkland

Memorial Hospital.

Bullet 399, which Dr. Lattimer has examined, is not in perfect shape, he says. It was "definitely flattened on one side" but, according to the Kennedy autopsy report, never encountered bone in passing through the President. (In tests by Dr. John Nichols, pathologist at the University of Kansas Medical Center, similar bullets fired at close range passed almost completely through a bundle of closely packed pine boards four feet thick.) Dr. Lattimer is convinced from the shape of the entry wounds in Governor Connally and the bullet fragments seen roentgenographically in his wrist that bullet 399 did indeed strike both the President and his Texas political associate.

Dr. Lattimer tried stamping on several of his Winchester bullets but found he could not deform them that way. He then put the bullets in a vise and compressed them until they were flattened to resemble the original. At the same time the New York urologist's son extracted 100 of the bullets from their cartridges and weighed them on a precision balance at the Englewood (N.J.) School for Boys. The FBI had weighed three and found an average of 161.5 grains, while the more extensive Lattimer measurements yielded a mean weight of 160.8 grains. Says Dr. Lattimer: "Since the remains of bullet 399 tipped the scales at 158.6 grains, we can safely assume that the bullet had lost somewhere between 1.2 and 2.9 grains of weight. When we squeezed the bullets in our vise, we found that the hard jacket acted like a toothpaste tube-soft interior lead came out of the rear of the projectile."

Dr. Lattimer sliced off this protruding lead and it weighed just 2.1 grains. He further found it possible to microtome the fragment into 41 separate pieces, whereas only four fragments showed up in the Governor's x-rays. Repeating that experiment ten times with his vise, Dr. Lattimer became convinced that the bullet could have been

flattened in contact with the Governor's rib and lost its bleb of lead in tiny fragments when it hit his wrist tangentially.

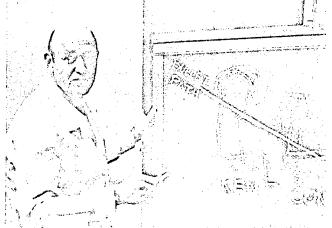
The Columbia urologist thus finds the "other bullet" theory as unnecessary to explain Connally's wound as the co-conspirator theory was to explain Oswald's rapid firing. (Dr. Lattimer also checked Marine Corps rifle range records and discovered that Oswald, firing prone with a simple metal sight, could score bull's-eyes consistently at 200

yards, more than double the range in Dallas.)

Despite Oswald's demonstrated marksmanship, the stability of the aiming position he had on his packing cases in the depository, and the straight course downhill that the limousine took-keeping it directly in his line of fire, Dr. Lattimer calls attention to still another doubtful factor in the killing of the President: "You would expect after the first shot and the neck wound that President Kennedy would either have instinctively ducked down or been thrown forward and down out of the line of fire by the impact," he says. "But from the Parkland doctors' account of their emergency treatment, I find that President Kennedy wore that day more than his usual lumbar brace and that it was physically impossible for him to have bent over. Thus his head was almost in the same position when Oswald's second or third shot destroyed the right side of his brain,"

Dr. Lattimer makes no claims to being a psychologist, but he finds it striking that Dallas entrepreneur Jack Ruby showed many signs of emotional instability as did Boston Corbett, the religious fanatic who is generally credited with fatally wounding Lincoln's assassin. As the Columbia urologist pointed out in an article in the New York State Journal of Medicine (Vol. 66, No. 13), both men used Colt revolvers. But Jack Ruby's had a modern shroud over the hammer so that it could be fired from his pocket.

Dr. Lattimer is also intrigued by the fact that in both cases single pistol bullets inflicted fatal damage on the assassins, an unlikely occurrence matching the improbabilities of the earlier killings of the two Presidents. "In both assassinations," he says, "the number of coincidences is striking." And Dr. Lattimer continues to unearth them.



Dr. Lattimer shows how fatal bullet could have passed through Kennedy to Connully.