## HOW MANY BULLETS?

TO THE EDITOR:

Edward Jay Epstein now says there is no "substantial evidence that indicates there was more than one rifleman firing" in Dealey Plaza ("The Final Chapter in the Assassination Controversy?", April 20). Let's look at his reasons.

"The C.B.S. analysis [of the Zapruder film]," he tells us, "renders the single-bullet theory irrelevant." And why? Because the C.B.S. analysis showed jiggles on the Zapruder film at frames 190, 227 and 318, thus suggesting that one of the shots was fired some 24 frames before the Warren Commission concluded a shot was possible. But what never appeared in the C.B.S. analysis is the fact that the Zapruder film shows additional jiggles. One jiggle occurs at frame 197, less than onehalf second after the frame 190 blur, and still others are visible at frames 210 and 331. Following C.B.S.'s theory that these jiggles should be correlated with gunshots, then at least six shots were fired in Dealey Plaza, four of them in less than two seconds. Moreover, both experts worked on the C.B.S. project have admitted in private correspondence that additional iiggles were found, but were not mentioned on the broadcast. So Epstein consigns the single-bullet theory to "irrelevancy" on the basis of a "jiggle theory" hatched by a television network and since discredited.

His treatment of the backward snap of the President's head at Zapruder frame 313 is even more egregious. He tells us that "other causes-the acceleration of the President's car for a split second or a neurological reaction - could account for the effect." Apparently, he is ignorant of the fact that precise measurements of the car's, velocity made from the Zapruder film show conclusively that no acceleration of the car occurred during this time period, and that the magnitude of the backward acceleration (100.3 ft. per sec. per sec.) together with the brevity of the time

period over which it is exerted (2/18 sec.) rule out a neurological reaction. Neither Epstein nor anyone else has shown how this backward snap can be reconciled with a shot from the rear. The dispersion of impact debris over the motorcyclists riding to the

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left rear plus Parkland Hospital reports of what appeared to be an exit wound in the back of the President's head urge the conclusion that this movement was caused by the impact of a shot fired from the right front. The recent panel's report on the autopsy photos and X-rays, showing that the military surgeons mislocated the head wound by four inches and most likely overlooked a substantial bullet fragment measuring 1/2 x 3/4 inches, only serves to undermine our confidence in the original autopsy report-a report whose deficiencies Epstein himself has amply recognized.

It would be nice if the Kennedy assassination could be consigned to the antiquarian's shelf. But it can't; it still haunts us, and even the efforts of a critic turned defender will not suffice to exorcise it.

JOSIAH THOMPSON.

Haverford, Pa.

The author replies: "Professor Thompson apparently misses the point of both arguments he cites:

"(1) The argument over the single-bullet theory rests on an analysis of the Zapruder film by Warren Commission lawyers which fixes the earliest possible point at which President Kennedy could have been shot as frame 210. This allowed critics to point out that not enough time elapsed between that point and the second shot for a single rifleman to fire both shots. The C.B.S. analysis suggested to me that the first shot occurred earlier than the commission assumed possible, and on reexamining the commission's analysis, I found that that

analysis was based on insufficient evidence and it was not possible to determine from it when the earlier shot had occurred. Hence the argument over the single-bullet theory cannot logically prove the existence of a second assassin.

"(2) My reason for dismissing Professor Thompson's own argument that the backward snap of the President's head indicates that he had been hit from the front is not that 'other causes' could have accounted for it (although I see real problems in deducing a cause from an effect as Thompson attempts to do) but that new autopsy evidence revealed in 1968 indicates that the President was struck only from behind. If this new analysis of the autopsy material by a panel of forensic experts is indeed correct, Thompson's theory cannot be valid."