COPY FOR WEISBERG

29 April 1969

John Nichols
Kansas City, Kan.

Dear John:

I have your undated letter which arrived 29 April, and copy of letter from Archives to you.

The cases and clip took longer in the mail than your stuff usuall y does, but they did arrive, and I did try what I could.

I have revised the explanation and drawing at the bottom of p.8.

I still hold with my present explanation of the shoulder dents, and will try for this when I get all the equipment necessayy. A couple of things make it appealing. Shoulder dents of this type are not unusual-- Ihave seen them on unfired cartridges that had been chambered in rifles other than M-C. These dents were caused in the course of normal chambering. I think that the old Ross rifle does it all the time. Also CE 141 (which was in the rifle when found) has a mark in the same place-- this bullet obviously was never fired.

The letter from Archives drives me wild with confusion. Josiah Thompson's description is this:

> Both of these cases (CE~~xxx~~ 557) displayed the characteristic mark in the same spot (n.4: Although quite obvious on~~e~~ one of the cases, the mark was more difficult to discern on the other.

Thompson mentions no dent in the "open end" of one of the two cases in CE 557.

Really, I won't be satisfied with any of this until I see the cases myself. I am going to try to get to Washington as soon as possible.

I have made ~~xxxxxxxxxx~~ microscopic comparisons between the primers of cases that have fired bullets and ~~xxxxxxxxxxxxxx~~ ~~fire~~ primers that were fired in empty cases. As I expected, there was no comparison, no~~t~~ way of determining that they were fired from the same rifle. If the pressure is different, the characteristic marks on the primers are different. I did this experiment with ~~xxxx~~ several rifles; results were always the same. I'll collect more cases and try to get good photos of the primers that show the difference.

Here is an experiment that I overlooked. It pertains to the assertion (p.5) that slight pressure is produced by firing the primers of empty cases, and that cases retain their ~~xxxxx~~ original shape after being so fired. I plan to do this ~~xxx~~ with other cartridge cases than the M-C, but you may wish to do it with yours. This is the experiment: Deliberately place dents on the shoulders of a few ~~xxxx~~ cartridges. Iull the bullets from the dented cases, and phptograph a "before" picture of the dents on the empty cases. Chamber the empty cases and fire them. Then photograph an "after" picture of the dents. There should be no

significant difference between "before" and "after".

Harold Weisberg is going to try to work our a publication deal and will figure out the best way to make public release. Nothing will go ~~xxxx~~ public until everything is thoroughly check, verified by tests, and scrutinized by experts.

Certain adjustments may be necessary, but I don't see any possiblility whereby we can be wrong about the basic issue. Only further description or a change in our knowledge of the character of the evidence could shake my certainty. That degree of certainty is not good, and I must be checked by others. I trust myself, but over an issue as potentially explosive as this I dare not even trust myself.

I don't know whether getting the evidence gun would now be of any help for this. It's hard to say, for we don't know to what degree firing has changed it. My own feeling is that as evidence the M-C rifle is no different from any other M-C rifle that can (or can be made to) produce shoulder dents. The evidence M-C may be useful for other purposes, but for this it is just like any other. It may be valuable for publicity or persuasion if the evidence M-C produced dents, but in fact, whether or not it produced dents, it's value as evidence for this is the same as for other guns that can produce them.

I must stop now.

Still,

Dick

Dick Bernabei

cc. Weisberg

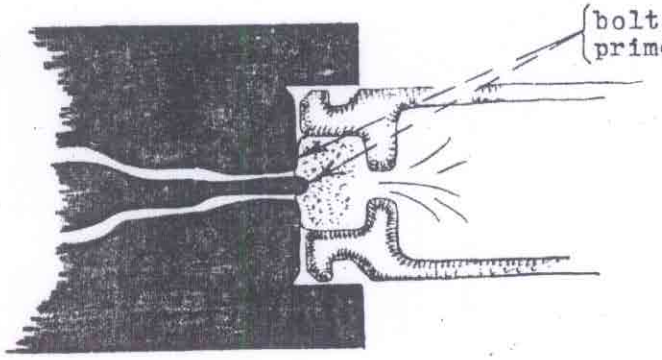
FOR WEISBERG

59/40

My rancor and my shame thrust me into a digression, and I have not yet explained why it was necessary in the collection of tests to fire the primers of empty cartridge cases, why the microscopic marks explain everthing.

When the primer of an empty cartridge case is detonated in a rifle chamber, the shape of the case is essentially unchanged, but the primer undergoes considerable alteration. Struck by a firing pin, the primer explodes and sends a fiery flash into the body of the case. Responding to the pressure produced by that explosion, the soft primer metal puffs up like a tiny balloon and blows back against the firing pin that tapped it and against the portion of the bolt-face that rests immediately behind it.

The Effect of Firing the Primer of an Empty Cartridge Case



The force of the primer's blow-back causes the primer to be imprinted by the steel bolt-face and firing pin of the rifle in which it is fired. When the pressure falls, the resilient surface of the primer recedes from its tight contact with the steel surface. It now bears a unique set of marks that can have been made by one bolt-face and one firing pin to the exclusion of all others in the world.

However, the same steel surface which produces certain characteristic marks on primers that are fired in empty cases regularly produces different characteristic marks on primers that are fired in fully loaded cartridges. Physical tests with 6.5 mm Mannlicher-Carcano rifles and with rifles of other calibers invariably produced no comparable similarities between microscopic marks that were produced on primers during simple primer blow-back and microscopic marks that were produced on primers during the blow-back of a whole cartridge case. When a particular rifle fires a bulleted cartridge, the bolt-face and firing pin mark the primer in a particulat way; when the same rifle fires an empty cartridge case, the same bolt face and the same firing pin mark the primer in another particular way. Tremendous pressure makes a tremendous difference.

In legitimate tests, firing bulleted cartridges, Frazier could not have reproduced the microscopic marks that occurred on the primers of CEs 543, 544, and 545, for they had all been fired as empty cases. Nevertheless, Frazier did reproduce those marks, and he can have reproduced them only by firing empty test cases, at least two of them. The microscopic correspondences between the three cartridge cases and Frazier's two tests constitute unequivocal proof that the primers of all five cases were imprinted under virtually the same pressure. There was only one way to reproduce those marks; Frazier's two test cases are tangible evidence that he did it in just that way and in no other way, for there was no other way. He fired the primers of empty cartridge cases.

Those tests do not prove Oswald's guilt; they prove Frazier's guilt.