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Written for this Paper. GARFIELD'S BULLET:

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HE 'X' RAYS might have saved President Garfield's life.

This statement has been frequently made within the past

It is said that the new pho tography could have located the bullet; that it could have been taken out, and that Garfield could have gotten well. This is very doubtful. Dr. Frank Hamilton, who was the chief surgeon in charge of Garfield, said that no one so wounded has ever recovered. The real story of the search for Garfield's builet has never been told. It was kept out of the newspapers, and it is not generally known that a number of experiments were made to locate it by electricity. The results were of no value to Garfield, but they brought out inventions which have been worth much to medical science. These inventions were made by Professor Alexander Graham Bell, the inventor of the telephone. It was be who was given charge of the matter of locating the bullet by electricity, and during a visit which I made to his laboratory he showed me the instrument which was used for this purpose. It was a piece of mahogany board of about the size and shape of a flat-iron. It had a handle upon its top, and the bottom of the board was covered with green cloth.

"That," said Professor Bell, "is the

"That," said Professor Bell, "is the instrument with which we attempted to find the bullet in President Garfield's body. There is an electric coil inside that board, and it is so made that when the board is moved over anything in which there is lead or other metallic substances it will buzz. Now, if you held a bullet in your hand, and, having the proper electric connections, should rub this over the back, of your hand, you would find that the board would make a loud buzzing noise, and that it would buzz the loudest when just over the bullet. When Garfield was lying almost at the point of death with the bullet in his body, a number of inventions were proposed for locating the exact position of the bullet. Several inventions were sent here by electricians to be tried. The matter of making the experiment was put into my hands. I invented this balance, and we tested it,

"How did you happen to fail, Mr. Bell," said I "if the machine will locate

Bell," said I "if the machine will locate the existence of metal, as you describe?" "I will tell you," replied Professor Bell. "We took the balance to Garfield, s bedside, and Dr. Hamilton and myself tried it upon President Garfield. We moved it over his body. To our surprise, the instrument buzzed when ever it came near him. According to it, he was full of lead, and we gave the matter up in despair. It worried me exceedingly. I could not see why the balance had acted as it had. But a day or two later, in thinking about it, I came or two later, in thinking about it, I came to the conclusion that there must have been something metallic about the bed upon which President Garfield was lying. I inquired, and found that his mattress rested on a net of steel springs. It was the steel that made the machine buzz. We did not, however, try it again, and the matter was allowed to drop."

"It was not long after this," Mr. Bell

continued, "that I tested the invention again, and this time successfully. It was in the case of an army officer, who had been shot in the neck. All attempts to locate the bullet failed until we attempted to do it by electricity. We found, through this instrument, that the bullet lay under one of the ribs in the chest, and took it out. In locating the bullet we moved the instrument up and down the man's body until we came to the point where it buzzed. We then drew two parallel lines up and down the chest on each side of where the noise occurred. We moved the balance back and forth across these lines until it came again to the point to buzzing, where we drew other lines at right angles to the first, making a square, in which we thought was the bullet. We found the ball as soon as we probed for it. A report of our success was pub ished in the surgical journais. I thought that the result would be a great demand for these instruments. I made a number of them, but no one seemed to want them, and they remained here until the death of Dr. Frank Hamilton. Dr. Hamilton considered the invention very valuable, but he died before he could take it up. At his death his chief assistant told me he would like to test the instrument. He was connected with one of the large New York hospitals. I went to New York to see him, and told him of our trouble with Garneld, and warned him that the patient must be removed from all metallic substances while the experiment was being made.

"Soon after this," continued Professor Bell, "an old soldier was brought into the hospital. He had a very sore leg and there seemed to be no apparent reason for it. The man had been shot in the leg during the civil war. The ball

had struck his shin bone, but it was thought to have glanced off. The wound soon healed and for twenty years the old soldier moved about on that leg without trouble. Then one day he stubbed his toe and the shock caused his limb to swell. It soon becaused his limb to swell. It soon became as big as two legs, and the hospital surgeon said that his life could only be saved by its amputation. There seemed to be its amputation. There seemed to be the shadow of a chance that there was a bullet in his leg. The doctors told him so, but he insisted that there was no bullet, and that he knew that it had glanced off. He was told, however, that he would certainly lose his leg if there was no bullet, and that there might be a chance of saving it if it was found that he was mistaken. He then consented to any experiments the doctors might choose to make. Well they tors might choose to make. Well, they tried the instrument on him. The machine acted in the same way that it did when it was applied to Garfield. The man was evidently made of lead, and the electric buzz sounded out whenever the machine was brought near him. They examined the bed and found the mattress had been fastened to the bedstead with tacks. They took the soldier to a lounge and beld his leg out from it so that it might be free from any metal in the lounge. Still the balance buzzed. At last the doctor noted that he had a gold ring on the hand that held the instrument. This was taken off and the buzzing stopped. The instrument was then run up and down the man's leg, and when it came to a certain point it buzzed. The man was now put under the influence of ether and the flesh of his leg was taid open to the bone. Still there was no bullet. The doctors then cut away a piece of the bone, and lol there under the bone they found a hullet. It had gone in between the bones of the leg and the bone had grown over it so as to completely cover it. It was taken

out and the man got well.

"The story of this experiment was sent to me," continued Professor Bell.
"I was much pleased and I asked that I be allowed to have the bullet. atter this Mrs. Bell was passing through New York. She stopped over night at one of the hotels, and while there she one of the notes, and while there she received a little pasteboard jewel box marked "Tillany." She thought it was a present and opened it, and there in the center lay the bullet."

As Mr. Bell said this he picked up a little box which lay on one of the shelves of the laboratory. He opened it and there on a little piece of cotton wool lay this battered ball of lead, which had been carried by the old soldier for twenty years without his knowing it. The invention had most certainly saved his leg.
'As I looked at the bullet the great in-