

deeply-seated small bullet could be distinguishable upon the skin, unless, indeed, a very brilliant light emanating from a single point could be safely produced inside the body.

The following experiments bearing upon the subject were made in Boston July 6th, 1881, with the assistance of Mr. Wm. Schnyler Johnson:

*Experiment 1.*—Mr. Johnson placed in his mouth a glass cylinder containing a spiral of platinum wire, which was rendered incandescent by the passage of an electrical current. He also held in his cheek a small leaden bullet.

In a dark room the effect was very striking. The cheek appeared semi-transparent, and the location of the bullet was detected at a glance by a shadowy spot upon the skin.

*Experiment 2.*—A metallic glove button (not more than 4 or 5 mm. in diameter) was attached to the glass cylinder by a few turns of black thread passed round the cylinder.

In this case the effect, although not so marked as in the former experiment, was quite discernible, and a faint shadowy streak could be seen crossing the cheek, caused by the shadow of the black thread tied round the cylinder.

NOTE 2.—*Letter from Mr. George M. Hopkins, published in the New York Tribune, July 11, 1881.*

LETTERS FROM THE PEOPLE—THE BULLET FIRED BY GITEAU.

*A suggestion that the Induction Balance be used to discover its position in the President's body.*

*To the Editor of the Tribune:*

SIR: The attempt upon President Garfield's life and the present condition of the sufferer have called forth the nation's deepest sympathies, and elicited very many suggestions as to the methods of promoting his comfort and assuring his recovery.

As one crisis after another has passed hope has risen, and the people wait with earnest desire for the last danger to pass away.

The attending and consulting surgeons state that it is impossible to predict the final result of the shot without locating the ball.

With all deference to the several methods proposed, I desire to suggest a method of ascertaining the position of the missile which will be painless and harmless, and which, in my experiments under conditions analogous to those under which it might be practised in the present instance, has proved successful. I refer to the use of the Induction Balance—a most delicate electrical instrument for detecting the presence of metals—a modified form of which could be easily applied in this case with a reasonable expectation of success. This instrument consists of two short glass cylinders, around each of which are wound two parallel coils of fine insulated copper wire.

One coil of each pair is included in a battery circuit, in which there is a clock microphone. The other pair is placed in a closed circuit with a receiving telephone. The two glass cylinders, with their encircling coils, may be widely separated.

The induction set up in the secondary or telephone circuit is balanced by the reversal of one of the secondary coils, and so adjusted that the induction