



A Nonprofit Organization
The Public is Invited to Attend our Meetings
SVDB Web Site <http://www.sacramentovalleydetectingbuffs.com/>
Issue Date December 2012

Sacramento Valley Detecting Buffs

2012 Elected Officers

President: Barbara Anderton
lcrbean@aol.com

Vice President: Kyle Miles
ktmiles2@hotmail.com

Secretary: Open

Treasurer: Charlotte Key
moxieroxie@msn.com

2012 Volunteer Positions

Hospitality: Al & Linda Woltman
looking4au@live.com

Hunt Master: Bob Meneely
bmeneely@starstream.com

Librarian: Tom Schweppe
coottom@aol.com

Membership: George Magann
gcmagann@hotmail.com

Newsletter Editor: Steve Timmons
stimm_99@yahoo.com

Raffle Table: Mary Ann Meji, Don Ivers &
James Neeley
nightdustr@aol.com

Web-Site Editors: Bob Meneely
bmeneely@starstream.net

November Meeting Minutes

- Barbara called the meeting to order and welcomed George Magann back after his accident. The candidates for the Board were introduced and Barbara asked once again for volunteers to run for Secretary. The candidates then gave a brief speech about their vision for the Club in the coming year. Barbara went first and said she would strive for more guest speakers, a coin purchasing team, and more Board meetings with membership input. Al spoke next and echoed some of the same points with more membership interaction and input and more presentations at the meetings as well as promoting community services, more planted hunts and support for organizations that protect public lands. The V.P. candidate, Kyle Miles, stated he was running so he could give something back for the joy he experiences in detecting and promote the ideals and common cause for which we gather. Charlotte spoke of the challenges of keeping the bookkeeping in order and the improvements that have come about since she first started as treasurer. Balloting followed the speeches and was proctored by Don Dunn. The results came back with Barbara Anderton being elected as President, Kyle Miles as Vice President, and Charlotte Key as Treasurer. There was no candidate for Secretary. Their terms are for one year beginning in January.

*Our Newly Elected Board Members
Kyle Miles, Charlotte Key, Barbara Anderton*



Secretary's Report:

- Barbara was running the meeting so no report.

Treasurer's Report: *Charlotte Key*

- This month's Treasurer's report:

Opening October Balance:	\$2,037.45
Income	696.50
Expenses	<u>(160.53)</u>
Ending Balance	<u>\$2,573.42</u>

SVDB Meeting Time and Location Information:

- SVDB Meetings are held at **7:30 pm** the **first Thursday of each month** at the Sacramento County Sewer District's Building in North Highlands, located at the intersection of Elkhorn Blvd. and Don Julio Blvd. Our meeting room is held in a large room facing Elkhorn, close to where all the cars are parked in the parking lot near Elkhorn Blvd. (Mapquest address is 5026 Don Julio Blvd., Sacramento, CA 95842).

Day-In-The-Park Hunts:

- There are 3 day-in-the park hunts per month. The hunts are on the first, second and third Sundays. Breakfast is at 8:00 am with departure to the hunt site at 9:00 am. The hunt ends at 12 noon. The meeting places for the hunts:
 - ❑ 1st Sunday Hunt: Meet at Denny's Watt and Auburn
 - ❑ 2nd Sunday Hunt: Meet at Denny's at Sunrise and Zinfandel Dr. (2474 Sunrise Blvd)
 - ❑ 3rd Sunday Hunt: Meet at Lumberjack's at Howe Ave. and Enterprise Dr.



Odds 'n Ends:

- The raffle brought in **\$818.00**. Dan Cordes won the night's 1/10 oz. gold coin.
- The December meeting on the 6th will be our annual Christmas potluck dinner. There will be prizes galore and mounds of delicious food. We hope to see all of you there. If you are coming, please bring a potluck dish based on your last name as follows:

- A through G – Dessert
- H through Q – Salad/Side Dish
- R through Z – Main Course

- For your Holiday enjoyment, after the pictures is the true story of the first metal detector. If you wish to read more about President Garfield and his assassination, there is a wonderful book, Destiny of the Republic by Candice Millard.



Prizes for the Raffle



Scott's Habitat for Humanity job site finds.



Kris Wilson F.O.M. Prize Winner



Ray's group of Kennedy's



Dan Cortes Total Raffle Winnings November 2012

The First Metal Detector

In 1881, James Garfield became the 20th President of the United States. His tenure as President was to be short lived. Four months into his term he was shot twice, once in the arm and once in the back, as he entered the train station to board a train. The assassin was a deranged man named Charles Guiteau. The gun shots however did not prove to be immediately fatal. Garfield was taken back to the White House where a sick room was set up and a staff of physicians worked to save his life. One major problem confronting the medical staff was the inability to know where the bullet came to rest inside the President's body. X-ray had not been invented yet and surgery was still a very risky undertaking, particularly if you have to hunt for the bullet. Compiling the President's problems, the practice of sterilizing examination instruments had only recently been suggested by Joseph Lister and was not widely accepted throughout the medical community. Garfield's doctors were probing the wound with unsterilized equipment as well as their fingers creating a huge risk of infection.

One gentleman, the noted American inventor Alexander Graham Bell, felt he could help the President. He knew he could find the bullet, he just did not yet know how. His first thought was to flood the body with light. He had read about a patient in Paris whose tumor had been revealed when doctors inserted an electric light in his stomach, setting him aglow like a Chinese lantern. Bell asked his assistant to hold a bullet and a light inside his mouth and as he hoped, he could clearly see the bullet as a dark shadow against the man's cheek. The problem was even if Bell used an intensely bright light in a darkened room, the bullet would have to be very near the surface to be discernible. As he pondered the flaws in this approach, the answer came to him. What he needed was not a light but a metal detector. The memory of an earlier invention returned to his mind. Four years earlier while struggling to fend off interference from nearby telegraph wires which were cluttering his telephone lines with their rapid clicking sounds, Bell had found an ingenious solution. The problem stemmed from the telegraph wires constantly changing magnetic fields which created or "induced" corresponding currents in the telephone wires. Bell realized if he split the telephone wire in two, and placed one wire along each side of the telegraph line, the currents would cancel each other out. The currents induced in one telephone line were exactly equal and opposite to the currents induced in the other line. The technique known as balancing the induction left the line silent.

Now thinking of the President's condition, he recalled that his tests had shown him that his method of balancing the induction could not only achieve a quiet line, it could

detect metal. When a position of silence was established, a piece of metal brought within the field of induction caused the telephone to sound. After considering this, Bell realized he could turn his system of reducing interference into an instrument for locating metal, the induction balance. He would loop two wires in a coil, connecting one wire to a telephone receiver and the other to a battery and a circuit interrupter to provide the changing current necessary for induction. Then he would arrange the coils so they overlapped each other just the right amount. He would know he had them perfectly adjusted when the buzzing sound in the receiver disappeared. If he then passed the coils over the President's body, the metal bullet would upset the balance and Bell would literally be able to hear it through the receiver. His instincts told him it would work but he couldn't be certain until he tested it. He tried various tests including bullets buried in wet sacks of flour and shot into a leg of beef. He also experimented on soldiers from the Civil War, many of whom still carried around bullets inside them. All tests were positive and after receiving the go ahead from the doctors, Bell brought his contraption to the White House. The chief physician was concerned about the weakened state of Garfield and wanted to limit the experiment to one side of the President's body where, in his professional opinion, the bullet had come to rest. The first test was a disaster. There was a constant pulse like sound on the line which had never been there before and Bell found no conclusive evidence of a bullet. He later learned that the bed Garfield was laying on was a mattress on top of a box spring with metal springs. That had been the source of the interference in the first test. A second test was arranged, but again Bell could only test the right side of the body and again found no conclusive proof of a bullet. He left dejected and continued working on the machine ultimately achieving a depth of 5 inches in finding metal. Unfortunately Garfield was growing weaker and the doctors would not let Bell run another test. Garfield finally succumbed on September 19th of massive infections throughout his body. The autopsy performed after his death discovered the assassin's bullet on the left side of his body, where Bell would have found it had he been permitted to test the President's entire body. The other ironic thing is if the doctors had done nothing, Garfield likely would have survived. Alexander Graham Bell contributed knowledge and inventions in many scientific arena and is clearly one of the most influential people in history. In the interesting and tragic situation with President Garfield, Bell proved conclusively that necessity is the mother of invention.