

Images of the Past

On a cold February day, I was bidding on some old pictures of Abraham Lincoln on an online auction site – problem was, I was being 'sniped' by another buyer, each and every time. A sniper sits in wait and only places a bid in the last few seconds of an auction, so it's almost impossible to counter the bid. One picture after another went to buyer 'IM-PAST18', while I sat and fumed. It looked like this guy was going to get the whole collection if I didn't act quickly. I scanned the list of pictures that would be selling in the next 15 minutes, and I decided to concentrate on just one. I decided to put in a high enough bid that the sniper would be defeated. I bid \$1,015 for an image of Lincoln standing by a tree, after the Battle of Gettysburg. I waited as the clock ticked down. In the last second, I saw the bid jump to \$1,009, as the IM-PAST18 tried to snipe me – but my bid was better, and I won! My blood pressure came down a few points as I pondered my next move – there were a few images that I really wanted, but I kind of blew my budget already and my wife was bound to be mad. I scanned the upcoming auctions and decided that one picture was going to have to be sufficient. Within moments, I paid for it, and by time I was back at the auction site, I noticed a message in my in box. It was from IM-PAST18. It said "Please let me know when you plan to sell the picture. It is vital to my collection. Money is no object."

Well, that got my attention. Usually, I don't resell stuff that I buy – I'm a collector, not a dealer, but I struggled with his offer for a few moments and I replied "Sorry, I'm going to keep it for my collection." I don't know if that was such a good idea because within a minute, I got another email that said "List your collection. Money is no object."

Oops. I had a huge collection of excellent pictures of Mr. Lincoln that I had acquired over the years, and I almost felt like I knew him from all the books and articles that I'd read. But ...

Another email came across the auction's website "Call me at 256-555-1121 to discuss."

My wife was calling me to dinner, so I wrote down the phone number. At dinner, we got into an argument as soon as I told her that I'd bought another Lincoln picture. I tried to convince her that my collection was valuable, and someday it would be worth a lot of money. She argued about the need for repairing the windows in the house, replacing the flooring and buying new ceiling fans – typical of women.

Next day, I called IM-PAST18 – Marc answered, and he guessed that it was me. "I'd like to purchase your Lincoln collection. It's for an important project, and you'll get more than a fair price."

"I've been collecting for years, and it's hard to get good images – they're all in museums."

"Tell me," he grunted. "Look, let's make a deal: you come here and see my project, and then decide if you want to sell your images, how does that sound? I'm in Huntsville."

"Well, that's about 30 minutes away, so okay. How about Saturday morning?"

We agreed on a time and location. On Friday, my new image of Lincoln arrived, and it was a beauty. I decided to take it along. When I rolled into Huntsville, I was looking forward to meeting another collector, so I brought a few of my images, and also the best image that I owned: a tin-type of Lincoln when he was a lawyer in Illinois.

Marc opened the metal door of a huge warehouse and invited me in. We went around a few portable walls, and finally emerged into a cavern-like area that was covered with computers that looked like escapees from NASA – or maybe the NSA.

"Welcome to my lab-or-atory," he deadpanned.

I never saw so much computing power, and I'd been in the industry for decades. "Where..."

"I bought it from government auction sites," he said. "It's some real powerful stuff. I use it for image-processing."

I did image processing on a desktop computer at home, so I wondered at the roomful of heavy iron.

Two college-age gals came towards Marc, and then two athletic college-age guys followed them.

Marc introduced us – they were students at University of Alabama, Huntsville. They were all working on their Ph.D. theses. "These kids all work with me on image processing, ray-tracing, frame-stacking – that kind of stuff. I'll show you in a minute." We all went to a light-table, where some images of Lincoln were sitting. They were of very good quality, I noticed. A huge "process camera" hung overhead, and the lens alone must have cost a fortune. He saw me staring, and said "Yeah, the lens was over a hundred K, on eBay. But it was worth it."

I asked the obvious question "So you scan in images and clean them up?"

The students chuckled. Marc said "You could say that, but let's see – you brought some images, right? Let's take a peek."

He saw me hesitate, and he said "I promise not to scan them unless you give me permission."

"Okay, here they are. This tin-type is primo."

Everyone oohed and aahed when they saw my pictures of Lincoln. Marc said "Let me show you something over here," and he pointed towards one of the huge Cray computers. "Here, grab a seat. Obviously you like Lincoln. Let's see how you like this..."

A 3-dimensional image of the Man Himself appeared. He was standing next to a smaller man, and they were surrounded by a crowd. The image took my breath away! Now THAT was Lincoln! So much for my pathetic image processing program – I had been put to shame. Marc saw my face, and he pointed to one of the guys and said "Go ahead Tim – show him."

The room darkened, and Mr. Lincoln turned towards the smaller man and pointed at him, and was obviously engaged in a spirited argument. And then I could see the veins stick out on the short man's neck, as he replied – he was obviously shouting at Lincoln. The crowd was completely animated – I could see their eyes following the two speakers as they argued – and then I realized that I was looking at one of the Lincoln-Douglas debates – I just about had a heart attack! "That's 1858," I shouted. "It's one of the debates!" I was gasping for air.

"Tim, hit the rewind button. Jan, enable the audio feed."

Now the debate unfolded, and a scratchy, but usable audio track played – this was the real thing, and the audio sounded like something from an ancient piece of celluloid film from the 20's.

Jan calmly said "We've managed to recover the audio from analyzing the movements of peoples' eyes – it turns out that they're fluid, so they vibrate, so we can reverse-engineer the audio using some FFT algorithms that we developed."

Tim added "If we get more pictures, we get better video, and better audio."

Marc said "And you've got a tin-type. Tin-types and coated glass images give us the best video input to this system. The information-density quotient is very high, so we're able to process it into some pretty good stuff, as you can see."

My head was light – I didn't know what to think. This small group of students and their professor had totally blown away the concept of imaging. I quietly asked "What else have you got?"

Trudy and Jan looked at Marc, who nodded, and they pressed a series of buttons. From my chair, I watched a 3-D movie, with pretty good audio – of the Gettysburg Address. I just flat sat there, totally stunned.

"You can see that it needs more input – and that's why you're here. We're hoping to add your images to our collection. You have some good stuff that will get rid of some of the gaps."

I replied "You don't have a clue about what I've got – I've been collecting images for 30 years, and until you outbid me, I always got what I wanted. I have thousands of images of The Man. I scanned them into my computer and cleaned them up. I was hoping to do a book one day. I see now that I've lost the battle."

"No, Mr. Sheldon, we'd like to add your name to our book, that's all."

I looked around the room and I realized that this was a National Treasure of the first order. "Of course you can scan in all my stuff. I would be very proud to be part of this exercise."

They all high-fived and were very excited.

"Er, ah, I've also got a few other pictures that you might be interested in," I said quietly.

Marc asked "And what would they be images of?"

"I have 40,000 negatives from the Pacific Campaign in the Second World War. My uncle was a Captain in the Army Air Corps, and he was a photo nut. When he died, he left boxes and boxes of film, slides and prints to the family, and I finally wound up with them – there is actually some unprocessed motion picture film. I've got pictures of island invasions, and even some good ones of the A-bomb – he knew the pilot of the photo plane, so he was able to get some pictures of the explosion over Nagasaki, about 15 minutes after it happened."

Now they all looked at me and I could see the joy in their eyes. "Welcome to the team, Mr. Sheldon," Marc said. "Students – meet the new curator."

That was 5 years ago...you should see what we got today.