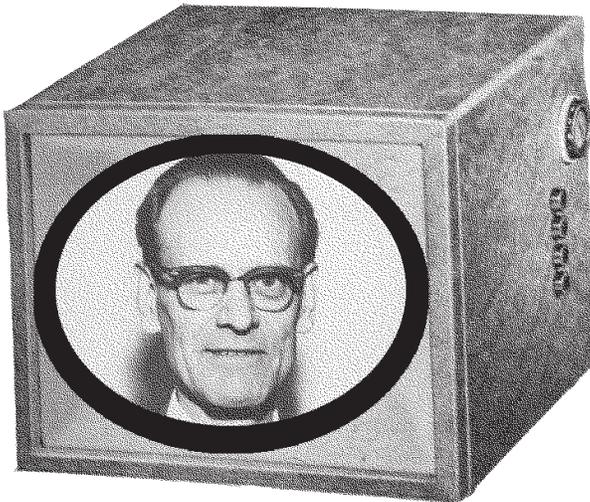




The Newsletter of the Idaho State Historical Society's Junior Historian Program

PROSPECTOR

April, 2006



The Invention of Television

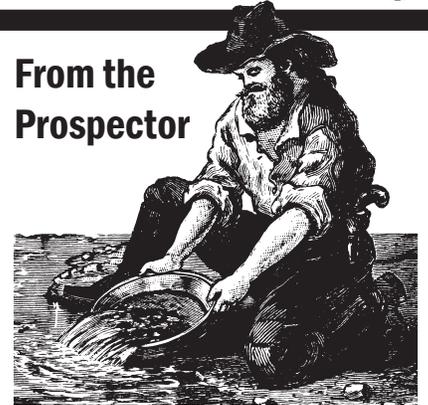
It's hard to imagine a world without television. Most American families have multiple T.V. sets around the house and at least one is on from when they get up in the morning until they go to bed in the evening. It seems as if television is and always has been an important part of our everyday lives. But television is a relatively new invention. It's been around less than 100 years. In the early 1900's no one could guess that

an invention would come along that would change communication and entertainment forever.

Two men working at the same time but not knowing anything about each other, invented the first television cameras. One, Vladimir Zworykin, had worked in Russia and France as a young man before moving to America. One of his teachers had written articles theorizing how a camera might be made without using film. The other, a

Continued on next page

From the Prospector



Howdy Prospectors!

Lately, I can't get my mule out of the house. The sun is shining, the birds are singing, and the springtime weather is perfect, but my mule won't budge from the television. Every time I pass, by he's got his hoof on the remote control and his feedbag full of potato chips. Enough is enough. Today I told him no more T.V., it's time to go out and get some exercise. What do you think you're doing, anyway? You know what he said? Research. Apparently, this month's issue is about the origin of television. That mule's got a smart alek answer for everything.

Because this is the last full issue of the season, there will be no "Next Month Activity" section. For the last issue we're going to give you a short quiz, to see who has been paying attention.

Television Continued

young man named Philo Taylor Farnsworth, read these articles while he was going to high school in Rigby, Idaho.

Philo T. Farnsworth was born on August 19th, 1906 near Beaver Creek, Utah. His family had very little money and few belongings. Philo's father tried hard to find a good job that would support his family. In 1919, the family moved to Rigby, Idaho to live on a ranch.

Even as a boy, Philo had been interested in science. Unlike his home in Utah, the ranch in Rigby had electricity. Philo delighted in studying how electricity worked. He experimented by taking apart and putting back together the ranch's generator.

Philo was very lucky. His science teacher, Justin Tolman, helped him to learn just as much as he could about all kinds of science. When Philo was in the ninth grade, he studied chemistry with his classmates. But he also listened to the twelfth-grade science classes. After school, Mr. Tolman would teach Philo extra lessons on advanced science topics. Philo also read everything he could find about science, from magazine articles to textbooks, and the knowledge he gained helped to spark his inventor's imagination.

Philo used what he learned. When people talk about electronic inventions—radios, telephones, even electric light systems—they use drawings of “circuits” to explain how electric devices work. One day, Mr. Tolman found sixteen-year-old Philo covering a blackboard with

diagrams of electrical circuits. When his teacher asked him what he was doing, Philo explained his idea for a television system—at a time when radio was only beginning to be used by people in their homes. Mr. Tolman was surprised that such a young student could know so much about electronics and be able to invent new ways to use what he knew.

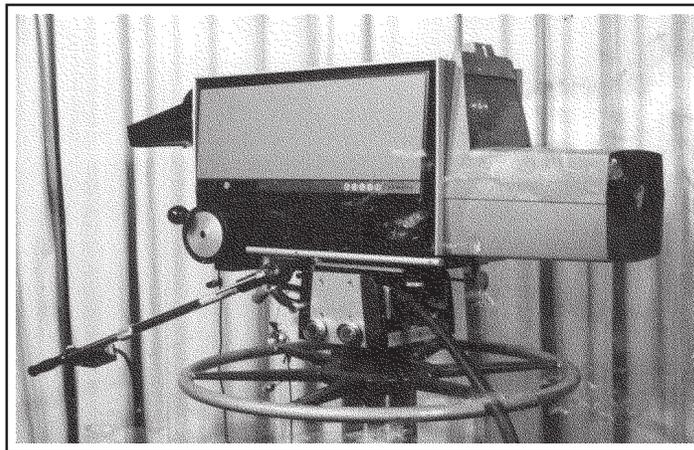
When Philo was seventeen, his family moved away from Rigby to Salt Lake City. There, Philo kept

worked closely with a teacher on a television system. Now, at the same time as Philo, he was also trying to get the first patent for television design. A great deal of money and fame would go to whoever had the first patent. Each hurried to prove that he had made his design first. Philo had no sketches of his work that he had made before 1926, but he remembered the drawing he had put on the blackboard of Rigby High School. He did not know where Mr. Tolman was, but his former teacher was the only other person who had seen the drawing made in 1922.

Mr. Tolman was teaching in Salt Lake City. He and Philo had not even seen each other since 1923. But when Mr. Tolman came to Washington to testify for Philo, he was able to draw on a blackboard, from memory, the diagram that Philo had drawn years before and he could explain the system to the other people at the hearing. This, com-

combined with other important evidence, helped prove the young inventor had developed the idea first. Philo was awarded the first patents. But other later patents used both Philo's designs and Zworykin's.

Zworykin continued to work on television throughout his career. Philo Farnsworth also kept developing new scientific ideas. Throughout his life he worked on everything from electronics to nuclear fission and had over 300 patents for inventions. Farnsworth died in 1971 and Zworykin in 1982. Today both men are credited with the development of T.V. ☞



An early television camera

working on his ideas for a television system. In the summer of 1926, he met a group of men from San Francisco who gave the twenty-year-old young man money to set up his own laboratory and turn his ideas into real equipment. He began to write to the United States Patent Office in Washington D.C. to ask for patents on his inventions. This way he could protect and make money from the ideas he had.

This was when Philo's crossed paths with Zworykin's. Vladimir Zworykin had worked as a scientist in Europe before getting a job at the Westinghouse laboratory in the U.S. Early in his career, he had also



The Fun Page

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Using the numbers 1-6 fill in the blank squares. You can put them anywhere you want, but a number cannot repeat itself in any row, column, or 2 x 6 box. Good luck!

Solution

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5	1	2	6	3	4
3	2	6	4	5	1
6	4	1	5	2	3
1	5	3	2	4	6