



Dial Log



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Jody Georgeson, Editor

Director's Report By Jody Georgeson

It doesn't seem possible that another year has passed and that we've been in our "new" space for nearly two years. It's beginning to feel like home.

We keep making improvements. Qwest graciously agreed to let us use the two conference rooms across the hall from our main office. These will become our new Media Center. When volunteers **Ron Pickens** and **Roy Lynn** are finished, we will be able to view and listen to all of our vast collection of audio and video materials.

We've received some great new documents and artifacts from members and friends. **Frank and Rebecca Brady** gave us a wonderful old Ohmmeter that was her father's (who was also a telephone man), and a telegraph set that he had made. **John Hyland** from Brewster, New York sent several documents from New York Tel, including a 1993 copy of the New York Telephone Weekly Summary. Along with a bunch of other treasures, **Alice Hall** (Omaha) sent us samples of "Call Me Cards," issued by the Bell System back in the 1970s. Since they're so seasonally

appropriate, we've included a few in this issue. From **Sandy Wunder** in Cheyenne came a scrapbook containing photos of the IMM radio Telephone (ULTRAPHONE). This facility, near Glendo, Wyoming, was the first commercial application of its kind in the world, so we're very excited to have this documentation.

I hope you enjoy this issue as much as we've enjoyed putting it together. Be sure to read *the Future of the Telephone*, written in 1880. Who could have imagined what the technology would morph into? There's news from our museum in Seattle and from the Pioneers' Museum in Phoenix. We've included selections from regular contributors like **Herb Hackenburg** and some new ones, too, like **Dave Felice's** fascinating tale of early telephony in Wabash County, Illinois.

We hope you'll have time to visit us in either our Denver or Seattle facilities in the coming year. Your interest and support are what keep us going.





Bruce Amsbury Volunteer of the Year

THG volunteers, staff and Board members gathered in November at the Old Spaghetti Factory in downtown Denver on November 5th. The luncheon was held to honor all of our wonderful volunteers, and to induct **Bruce Amsbury** into the THG Volunteer Hall of Fame.

Bruce has been with us for many years and is an important member of our volunteer force. We all appreciate his willingness, good humor and dependability. Thanks, Bruce, for all your hard work!

Thanks, too, to all our other volunteers. We literally could not operate without them.

See pictures of our celebration at:
<http://www.telcomhistory.org/volunteers.shtml>

If you'd like more information about becoming a volunteer, please contact us at 303-296-1221, or at:
telcomhist@aol.com



MUSEUM OF COMMUNICATIONS

Part of the TELECOMMUNICATIONS HISTORY GROUP, INC.

The THG Museum of Communications was recently named one of the "Best Museums for Seattle History" by Benjamin Lukoff, Seattle History Examiner (September 30, 2008).

Congratulations to all the volunteers who help make it such a wonderful place! Here's what he had to say:

Located in a still-working Qwest equipment building, it's two floors of vintage AT&T, Western Electric, Pacific Telephone, Pacific Northwest Bell, and Qwest equipment that truly has to be seen to be believed. Telegraphs, teletypes, central office switching banks, switchboards, old radio and other electronic equipment — even a red British phone booth and a huge working model of a touch-tone phone produced by AT&T to introduce the concept to skeptical consumers in the 1970s. If I remember correctly, they set up booths at places like the Puyallup Fair. Would have been great fun for kids to play with, I'm sure.

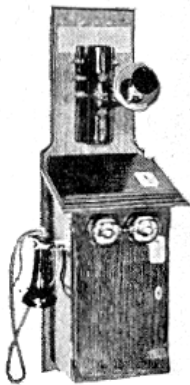


The Telephone Office

By Mel McFarland

Mr. McFarland writes a weekly column, "Cobweb Corners," for the Westside Pioneer in Colorado Springs, CO. This is from the September 11, 2008 issue and is used with his permission.

Quite some time ago, I talked about the telephone office on 23rd Street. Three lady operators worked in shifts on the old switchboard. The original telephone office's location was in a store on Colorado Avenue, but more room was needed. In 1920, the offices and switchboard were installed in an ordinary-looking brick building behind what was then the Safeway store at 23rd and Colorado. It would fit well into the community, without any disturbance. Once the new equipment was ready, the old equipment was removed. The back room was the site of the manual switchboard where the operators guided calls to their destinations. In the front was a wall with what looked like a bank teller, where people could pay their bills.



Here is a short description of the early telephones. The receiver was at the end of a wire that hung on a hook on the side of a box. There was a place on the front of the box that you talked into. There was often another box that held a set of batteries, usually big dry cells that powered the phone. Picking up the receiver turned the phone on, and you could talk into it.

In the building, women (and sometimes young girls) sat at a switchboard to make the connections. When you raised the receiver at your

phone, a light on the switchboard came on. The operator saw the light and switched you on, then asked, "Number, please?" You gave the number you wanted, and she connected your phone by connecting a wire from your plug to the number you asked for. She had a switch that could make that phone ring. The ringer was one of the needs for the batteries. Once the person you were calling answered, their light came on at the switchboard. When the call was finished and you'd both hung up, the lights went out and the operator would unplug the connections.



Colorado Springs operators, about 1915.

There was also the entertainment of the "party line" where the same trunk line served many families. Everyone on the line's phone rang when a call was made. Depending upon who the call was for, the rings were different. Everyone recognized their personal rings. One thing to be sure, often there was someone on the line who would pick up on the wrong ring, purposely or by accident, and listen in. As more phones came in, the system had to be updated. Thankfully, most of the party lines are long gone, but not always forgotten.

The Future of the Telephone

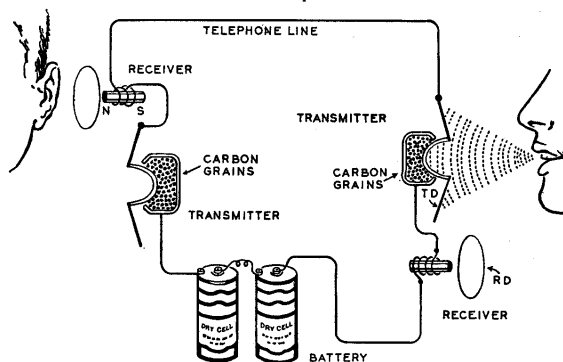
This article could almost have been written today (except for the elegant language), but is, in fact, from The Journal of the Telegraph, May 1, 1880. Page 130. This Journal was part of Alexander Graham Bell's own library, now in THG's collection.

There is nothing more characteristic of the present age than the avidity with which it seizes upon and puts to practical use the discoveries of science and the infinite marvels of invention. Today the experimental student wrests from the secret treasures of the universe a new truth, a new law, a new manifestation of force. To-morrow a countless host of printing presses spread a knowledge of the discovery to the earth's remotest bounds. Directly it is made a working factor in the world's best thought and action; in a little while some practical mind puts the harness of utility upon the new truth, and straightway the world is the richer by another useful invention.

What would formerly have taken centuries to accomplish – or what the most fearless minds would scarcely have dared to dream of undertaking – is now done in a day. The invention is achieved, and finds a world predisposed to receive it with gladness, even though its adoption should necessitate many and radical changes in the whole range of national and social customs. It took the steam engine centuries to pass from the stage of science unapplied to that of practical utility. The telegraph was not so many years in rising from the level of scientific experiment to that of a useful factor in the daily affairs of nations.

What the telegraph accomplished in years the telephone has done in months. One year it was a scientific toy, with infinite possibilities of practical use; the next it was the basis of a system of communication, the most rapidly expanding, intricate, and convenient that the world has known.

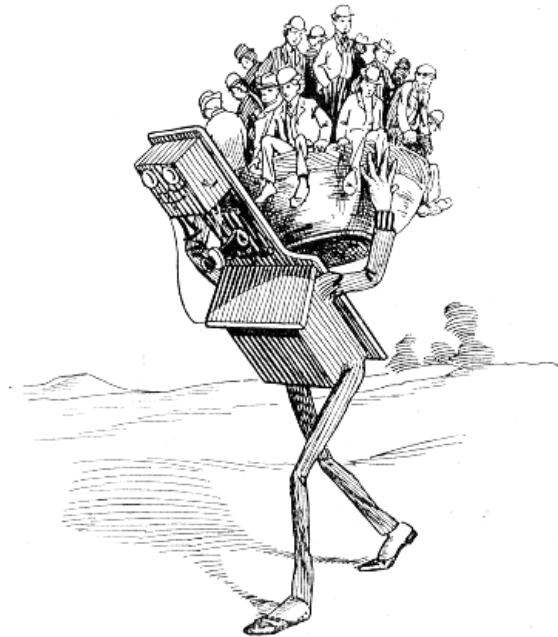
One of the most notable occurrences of our Centennial year was a little gathering of scientific men from various parts of the world to test the performance of a new scientific invention of which wonderful stories had begun to be told, especially with regard to what it was going to do. To the astonishment of all it did do marvelous things. A little disk of metal



could be made to speak; still more, the operator might be miles away, and exerting power only through his vocal organs. With a couple of magnetic cups and a slender wire spoken messages were transmitted through considerable distances and delivered in tones so like those of the speaker that his personality could be detected by the sound of his voice, if it had ever been heard before.

Though far from perfect, the speaking telephone was an assured fact, and a new era in social and business communication had dawned. Scores of active minds at once set to work upon the problems to which the telephone gave rise, and hundreds soon joined them. In a little while the telephone, in various forms, was in the hands of progressive men in every part of the world.

It was tried as a means of uniting more or less widely detached portions of business houses, as the salesroom and the manufactory, and proved a great success. As a means of social and professional communication it was equally satisfactory.



The next step was to form little clusters of telephonic communicants; the wider and more varied the business callings of the members of the group and the more numerous its membership the greater was found to be the utility of the system. But it soon outgrew manageable proportions without some system of centralization. The telephonic exchange, or central office, was a natural and necessary result.

The limits of our space forbid any attempt even to summarize the infinite range and variety of possible telephonic communication. Its scope is as wide, as limitless, indeed, as is the range of communication possible between men.

In its infancy, with the inertia of customer to overcome, the system has developed a capacity for growth that has distanced the expectation of the most

sanguine, and its utility as well as its capacity for further development increases with every new wire, more especially with every new connecting link between central stations. Who, then, can have courage to predict even the immediate future of the system, or to attempt to forecast the social and commercial changes, which the annihilation of time and trouble, and the doing away with the mediation of forgetful or erring servants, will bring in their train? Soon it will be the rule and not the exception for business houses, indeed, for the dwellings of all well-to-do people as well, to be interlocked by means of the telephone exchange, not merely in our cities, but in all outlying regions.

The result can be nothing less than a new organization of society – a state of things in which every individual, however secluded, will have at call every other individual in the community, to the saving of no end of social and business complications, of needless goings to and fro, of disappointments, delays, and a countless host of those great and little evils and annoyances which go so far under present conditions to make life laborious and unsatisfactory.

The time is close at hand when the scattered members of civilized communities will be as closely united, so far as instant telephonic communication is concerned, as the various members of the body now are by the nervous system.



In Memory

Winfred O. "Fred" Jacobs 1922-2008



Fred died at his home on October 19, 2008.

He began with Mountain States Telephone in 1946, as a Yellow Pages salesman in El Paso, Texas. That was just the start of a 37-year career that included

service throughout the Rocky Mountains, a stint with AT&T in New York, and culminated in his being named Chief Operating Officer in 1977.

Fred had a varied career before joining the 'phone company. He served in the army during WWII, participating in the invasion of Southern France, and the campaigns in the Vosges Mountains and Bastogne. Fred played as a defensive specialist in the second NBA game ever played, at which the St. Louis Bombers lost to the Pittsburgh Ironmen (11-26-1946). For a while he made a living driving a sightseeing bus up the switchbacks of Lookout Mountain.

Fred and his wife, Kay, lived in Denver, Salt Lake, Boise, Butte, and Phoenix and he handled every tough job he was given, including negotiation of a workers' strike in the 1950s and the coordination of the break-up of the Bell System in the early 1980s. Fred retired from Mountain Bell in 1984, and remained active in the community. Fred served on the THG board of directors from 2007 until his death.

Fred is survived by his wife, Kay; sons Richard Jacobs of Dallas, and Robert Jacobs of Santa Fe,

grandchildren, Joseph, Ian, Sarah, Victoria, Clayton, Cole; and sister, Mrs. Margery Greenhalge, of Sun City, AZ.

Fred was a true gentleman and he will be greatly missed by all of his friends here at THG.

Norman Christiansen

The passing of Norman Christiansen at the age of 98 saddened the Seattle crew. He was a very active museum crewmember through age 96. Norman worked primarily on the Pioneers' Talking Book project.



Amos E. Joel Jr. Cell Phone Pioneer

Amos E. Joel Jr., an inventor whose switching device opened the way for the cellular phone business, died Oct. 25 at his home in Maplewood, N.J. He was 90.

Mr. Joel received more than 70 patents, but was best known for No. 3,663,762, a 1972 patent that allows a cell phone user to make an uninterrupted call while moving from one cell region to another. In an interview with The Star-Ledger in New Jersey this year, Mr. Joel traced his career back to childhood fascinations: the switches on his electric train and his family's first dial telephone. "I wanted to know: How does this thing work?" he said.

He held a bachelor's and master's degree in electrical engineering from the Massachusetts Institute of Technology.

Mr. Joel worked at Bell Labs for 43 years, until he retired in 1983. During World War II, he designed circuits for early digital computers, and played a key role in the creation of encryption machines for military and domestic use, according to the National Inventors Hall of Fame.

After the war, he developed and taught a course on switching systems and circuit design and eventually designed the first automatic telephone billing equipment, according to IEEE, a professional organization of engineers. His patent for an automatic accounting system for customers' charges on long-distance direct dialing filled more than 500 pages and weighed in at 11 pounds.

Mr. Joel's awards include the Franklin Institute's Stuart Ballantine Medal in 1981 and the Kyoto Prize in Advanced Technology in 1989. Mr. Joel was inducted into the National Inventors Hall of Fame earlier this year.

Telephone is in the family
Progressive Immigrants
Adopt Technology

By Dave Felice

After a 30-year career with Mountain Bell and successors, I now learn that I am descended from a family that had one of the first telephones in Wabash County, Illinois.

According to historical documents and family remembrances, my great grandparents--George Conrad Ewald and Sarah Jane "Jennie" Seiler Ewald--installed a wall-mounted magneto set around 1900. They lived at the family homestead, known as the Cloverleaf Stock Farm, in the Sugar Creek community of south-central Illinois.

The story is told that at one time, the local elementary school was dismissed early so the children could see how the telephone worked. It was a party line, and Jennie is said to have taken great delight in "listening in."



George Ewald (1851-1940)
and Jennie Ewald (1860-1948)

"What I remember was a crank wall phone," says my great uncle George, son of my grandfather's brother. "(The phone) was in the dining room on the west wall. Our ring on the party line was two longs and a short.

"I believe the phone company was in Belmont. I remember my father (Ralph Waldo Ewald) helped maintain the lines. It was a community effort. I remember that if someone got a call, you could listen in on the conversation if you picked up the receiver," George adds.

Born in 1940, George still lives in the town of Mt. Carmel in Wabash County. His remembrances show that the phone was still in use when he was a child at mid-century.

Following exchange realignments and consolidations in the 1950's, General Telephone (GTE) provided

service to the area. That company became Sprint, and apparently some time later was absorbed into Verizon. Residents of the area think nothing of saying, "Oh, Verizon is the phone company" without much of an acknowledgement to the history of phone service.

Most of the records and artifacts relating to phone service in Wabash County seem to be lost, hidden, or forgotten. As a result, it is difficult to determine exactly what happened and when. Developments such as this dramatize the critically important preservation and reconstruction work of the Telecommunications History Group.

"My own experience with telephones is that for as long as I can remember service was provided in Wabash County by General Telephone," says Claudia Dant of the Wabash County (Historical Society) Museum. "After Ma Bell broke up our service has been provided by Verizon. I am not familiar with the Wabash Telephone Cooperative at all."

She refers to the cooperative phone company that now provides service for nine exchanges in parts of Wabash and seven other counties in southeastern Illinois. Wabash Cooperative Telephone, formed in 1952 from several smaller cooperatives, now serves about 4,000 customers in rural locations.

As a steward for Communications Workers of America (CWA) Local 7777, I was gratified to find out that craft workers for both Verizon and Wabash Cooperative are represented by Local 702 of the International Brotherhood of Electrical Workers (IBEW), the local formed in 1911.

Innovation part of family homestead

George Conrad Ewald was born in the German state of Hesse and immigrated to the U.S. as a child. Sarah

Jane Seiler, born in West Hofen, Germany, had immigrated earlier with her parents. George and Jennie were married in 1880.

The telephone isn't the only technology adopted early in the Ewald household. The family began using kerosene for illumination shortly after the fuel was introduced for general use in 1850. Electricity was extended to the community in 1930.

The Ewald family installed a furnace about 1900. The house had hot water radiators in all rooms, and a bathroom with hot, and cold, running water soon followed.

In addition to a piano, a Brunswick Talking Machine and a varied collection of records provided musical entertainment.

George and Jennie reportedly got their first radio about 1930. They never saw television. The family had a large collection of stereoscope picture viewing devices.



The Ewalds enjoyed traveling. In 1893, they attended the Columbian Exposition in Chicago with Ralph, the baby, while the other six children stayed home. In 1909, George and Jennie visited Colorado and attended the Alaska-Yukon Exposition in Seattle. They made other trips as far as Florida, Oklahoma, and New England.

The Ewalds purchased their first automobile in 1917. It was a seven-passenger Studebaker Touring Car.

George Conrad and Jennie lived to celebrate their 60th wedding anniversary. According to Wabash County history, they were always active in church and civic life, working for improved conditions for the family and the community.

Area phone co-op keeps pace

According to Wabash Telephone Cooperative, dial conversion started with three exchanges in 1957. With the dial conversion completed in 1963, the magneto system “became a thing of the past.”

By 1979, the company says, “All members-customers were receiving one-party service. ANI conversions were made in 1973 through 1975 and three exchanges' central dial offices were converted to electronic switching in 1979 and 1983. The digital conversion began in 1983 with installation of the Stromberg-Carlson DCO in Louisville. During the next seven years each of the other exchanges was converted to digital switching, connected via fiber optic cable.”

Wabash Telephone Cooperative implemented Equal Access conversion as early as 1991. The company started providing Digital Subscriber Line (DSL) service in 2000. Video service was introduced in 2003.

A board of nine directors, representing the exchanges served by the cooperative governs the company. Each year, members elect directors to three-year terms. There are currently 34 full-time and three co-op student employees.

Wabash Telephone also operates two wholly owned subsidiaries.

Independent Telcom Associates (ITA) installs and maintains telephone business systems, provides engineering-consulting services, and delivers cellular agency service. Wabash Independent Networks (WIN) provides Long Distance Service, Internet Service, and Video Service through its office located in Flora, Illinois.

Officials of Wabash Telephone Cooperative say they've successfully used Rural Electrification Administration (REA) funding to keep up with industry changes and provide the highest quality of service available for its members.



We're from the federal government...

...we're here to help

By Herb Hackenburg

2008 will probably be remembered as the year of financial disasters and large government bailouts. The United States government began to buy into the nation's largest banks. The banks' cost for government help was additional government oversight of how they conduct business. Not quite bank nationalization...yet.

Ninety years ago, the world was at war. The United States entered the conflict and the government took control of the nation's telephone industry.

Woodrow Wilson was the President of the United States. Wilson's Postmaster General was Albert Sidney Burleson, described by most people as a populist, by some as a socialist. In 1913, Burleson advocated that the Nation's telegraph and telephone service should be "postalized." Burleson suggested that if that idea was good enough for most of Europe, it should be good enough for the United States.



Albert Sidney Burleson

Burleson had never really sold his idea to the United States' telephone or telegraph industry, the government, or the voters. The emergency powers brought about by the United States' entry into World War I allowed Burleson make a government operated telephone system a reality.

The marriage between the Bell System, the Independent Telephone Association, and the U. S. Postal Department was not made in heaven--it was made by edict. A press release at 1:01 am on August 1, 1918, was the "wedding announcement."

The release said:

"Pursuant to the proclamation of the President of the United States I have assumed possession, control and supervision of the telegraph and telephone systems of the United States. This proclamation has already been published and the officers, operators and employees of the various telegraph and telephone companies are acquainted with its terms."

The next paragraph says that the telephone and telegraph companies should operate exactly as they had been, under the same leadership and financing they had in place. There are seven rather important words in this paragraph — "...unless otherwise ordered by the Postmaster General."

"I earnestly request the loyal cooperation of all officers, operators and employees, and the public in order that the service rendered shall be not only maintained at a high standard but improved wherever possible. It is the purpose to coordinate and unify these services so that they may be operated as a national system with due regard to the interests of the public and the owners of the properties.

"No changes will be made until after the most careful consideration of all the facts. When deemed desirable to make changes announcement will be made."

Authorization for issuing the edict came from a joint resolution from Congress designed to give the president the authority to assume control of all of the nation's telegraph and telephone companies. In the Congressional hearings on the matter Theodore Vail, the head of the Nation's largest telephone company, was not invited to give testimony. In fact, he was not even allowed to attend the hearings.

After the fact, Vail was invited to meet with Burleson. Privately, both men had expressed a dislike and distrust of each other. They had never met face to face. During the meeting, Vail expressed his main concern--that customer service should not be degraded under "postalization." Burleson, in turn, asked Vail to take a major role in making mutually satisfactory financial arrangements between the phone companies and the government. By the end of the meeting both Burleson and Vail felt the other guy wasn't so bad after all.

However, it's interesting that a search of Bell System employee publications at this time show that phone company stories concerning this government takeover at no time mention Burleson by name. He is always referred to as the Postmaster General.

While the "postalized" telephone service only lasted about a year, for the average customer it was a service and financial disaster. One of the first things Burleson did was to institute fees for installing a telephone. Vail had been trying to establish an installation fee system, but the state utility commissions would not allow it. Now federal edict instantly trumped all the state regulators, according to the United States Supreme Court. Later, the post office raised both long distance and local service rates by 20 percent.

Service was degraded because much of the newly manufactured phone equipment was being sent overseas for the Army's use. In addition, there was a shortage of employees to maintain domestic telephone service; the Army Signal Corps had nearly 18,000 Bell System men in its ranks and nearly as many from the nation's independent telephone companies.

And when customers would complain to the telephone company, many were told politely, "There isn't anything we can do about it, we're owned by the government."

The war ended about a month after the "postalization," but "postalization" lived on.

The voters became restless.

Congress was deluged with letters demanding the end of government controlled telephone service. A new joint resolution was adopted, unique in that Congress admitted that the whole "postalization" idea was wrong and apologized to the voters for adopting it in the first place.

Meanwhile, rather quietly, AT&T enjoyed its most profitable year to date.

And those installation fees are still around.

It will be interesting to see how government ownership affects the banking industry over the next few months.



To Be Calling



Get your 2009 Calendars!

The 2009 Pioneer Calendars are out, featuring full color images from the THG and AT&T archives. If you don't have yours, yet, or if you'd like extras, they can still be purchased for only \$10 each!

Don't miss your opportunity to own and enjoy this calendar that celebrates the legacy of the telecommunications industry while supporting Pioneers making a difference! In addition to the stunning historical images, it's brimming with Pioneering information and photos of Pioneers in action.

At just \$10 (including shipping and handling) and with the holiday season just around the corner, the Pioneer Calendar makes a great gift for family and friends ... so why not purchase more than one!

CALL: 1-877-619-5276

or VISIT

www.telecompioneers.org/calendar
TO ORDER TODAY!

Payment options include Visa, MasterCard and AMEX.

A Grand Opening on Indian School!

On November 16th, Telecomm Pioneers joined the "Partners for Prosperity" in a six block "block party" on Indian School Road (*in Phoenix*). Traffic was shut down from 32nd to 38th Streets for food, fun, dancing, music and, a little bit of telephone history! The festivities took place just outside the front doors of our **NEW** Pioneer Telephone Museum. What a wonderful opportunity to invite the public in to see from "whence the Blackberry came"!

Over 125 visitors were amazed as they watched a telephone call go through a "step-by-step" office, handled by Chief Operator, **Fred Holz**.

Helen Troubough, Alma Shipley, Jane Holz, Burl Long and Audrey Gregory welcomed our guests, while **Frank Elsberry, Fred Holz and Joe Hersey** looked on with pride as so many people enjoyed the fruits of their labors.

Joe, Frank and Fred have spent many months moving and setting up this new museum site with beautiful displays, including of Alexander Graham Bell's first telephones! This museum gives credence to the phrase, "You've come a long way baby!"

The museum is located at 3640 E. Indian School Road in Phoenix, Arizona. Call Joe for tours at 602-996-9878.



*Share the Happiness of the Holidays...
Call someone special.*

December 1, 1878

The first five telephones were connected with a central office switchboard in Washington, D.C.:

Line No. 1	White House
Line No. 2	Capitol
Line No. 3	Associated Press
Line No. 4	Treasury Dept.
Line No. 5	Institute for the Deaf & Dumb

The central office, a 24-wire peg switch, was established by Mr. George Maynard. Mr. Maynard, an electrical engineer who had been in the Signal Corps of the Army during the Civil War, obtained the rights from Gardiner G. Hubbard (Bell's father-in-law and partner) to introduce the telephone in Washington.

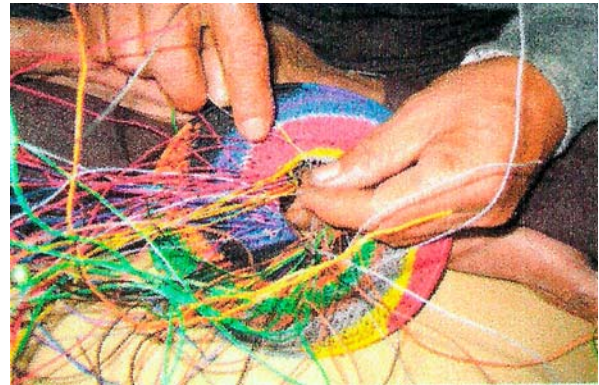
Carefree Holiday Shopping



Don't forget to check out the THG virtual gift shop for your Christmas gifts. We offer an array of telecom-related items to delight the telephone and history buffs on your list. We'll be happy to wrap and mail gifts directly to the recipient to make your holidays even easier.

We recently came across some beautiful baskets made from recycled telephone wire, and were especially happy to learn that they are made by disabled artisans in Vietnam. Imagine our delight upon hearing that THG could benefit from their sale as well.

THG has joined the **Spiral Foundation** in an on-going fundraising effort. The Spiral foundation is a nonprofit humanitarian organization doing work in Nepal and Vietnam.



Making telephone wire baskets in OGCDC/Spiral Workshop in Hue, Vietnam. By making these beautiful gift items, our friends are able to fund many heart surgeries through the Office of Genetics and disabled Children at Hue medical College (www.ogcdc.org).

Each time you purchase from the Spiral Foundation, and "THG Fundraiser" is mentioned, we receive 20% of the sale. All remaining proceeds are returned to Vietnam and Nepal to fund primary healthcare, medical and educational projects.

Please visit the SPIRAL website at www.spiralfoundation.org. You can also access their site through THG's virtual museum gift shop, at <http://www.telcomhistory.org/store.php>.



We at THG wish you and your family a happy, healthy and peaceful holiday season.

