THE ALTAMONT BARBED WIRE TELEPHONE CO. LTD.

By Francis J. Young, 1980

In the early 1890s there was an article in a Bay Area newspaper that began "A new corporation has been formed in the little town of Altamont [in the east end of the Livermore Valley] ... called The Altamont Barbed Wire Telephone Company Limited. The projectors, builders and directors of the concern are four brothers, Jesse, Chester, Archie and Guy Young..." The line ran from the Young Ranch on North Flynn Road to the Sweet Ranch on Patterson Pass Road.

Archie Young, when he was a high school student, became interested in the uses of electricity. It was something new at that time and about which there was very little in his schoolbooks. But in a magazine (sent to the family by relatives in the east) he read an item about two men, living a few hundred feet apart who had linked their homes with a telephone line consisting of a piece of barbed wire.

Archie's sister Alice was then married to Richard C. Sweet and their home was on a section of property two and a half miles from the Young home. Whenever one branch of the Young family wanted to give a. message to the Sweet family, one of the Young boys had to saddle up and ride -in good weather or bad- the distance to the other farm. Archie's proposal to install a telephone line between the two places interested the boys very much and met with their approval. They set out to inspect the wire fences of the pastures and fields between the two farms.

They found that there were a few problems that would have to be overcome. First, there were gates through the fences. The boys decided that since the gates were only used for convenience during harvesting and plowing times, the gaps could be connected with a link of wire, which could be removed to open the gate. Second, the land traversed a canyon, which, if the wire followed it, would add a mile to their line. But at one point the canyon was not wide and the boys believed they could close the gap at the narrowest point. Thirdly, the wire itself was not all in good condition. They intended to use the top wire, but sometimes this was mended and the old parts were badly corroded. Sometimes there would not be a good strand of wire until perhaps the second or third strand from the top. This problem was solved by deciding to use the best strand of wire whatever position it was in and to bridge the gaps with short lengths of good wire. They planned to insure connections by soldering them. (When Archie was asked about this many years later, he insisted that£ this was actually done.)

When their line had been decided upon, there was the problem of how to obtain the necessary instruments. The boys knew that they would not be able to interest their father in the plan to the extent of purchasing the instruments. John Young was a pioneer in farming methods who was an advocate of education and a great progressive but he was also one who demanded results. To ask him to pay \$30 for two telephone instruments to use in an untried, untested (in fact unheard of) experiment would, they knew, draw from him a prompt and unalterable refusal.

But Christmas was coming and Archie and Chester decided to pool their Christmas funds for the purpose. Alas, they only had about a third of the money they needed. At this point, a third brother, Jesse Young, was inveigled into the "Company". Archie said later that Jesse was included mostly because he had the money and they needed it.

A trip to Livermore was made and the two instruments were ordered from San Francisco by Mr. McKown, the druggist. (There was already a telephone switchboard in his store but only a few telephones connected to it.)

The boys now set to work in earnest, using all their available time. The gates were connected, the canyon was bridged and the connections soldered. No attempt was made at insulation - continuity was the only problem - and only one wire was necessary as a ground return was to be used.

The instruments arrived just before Christmas. They were tested between two farm buildings

and they worked perfectly They were described as "two walnut boxes containing a hand ringing generator and bells, and with a switch-hook on which hung the telephone instrument. This instrument, or "trumpet" as it was called, was both receiver and transmitter - the set contained no batteries and no provision was made for any, the instrument creating its own current

On Christmas Eve, the instrument in the Young house was connected to the barbed wire line and one terminal to a water pipe. Archie and Chester then carried the other instrument the two and a half miles to the Sweet farmhouse. They walked along the fence for about two hundred yards, then connected to their line and drove an iron rod into the ground - and rang. Rome-one in the house answered! It worked! They continued testing until they reached the Sweet household. Then they set up the instrument, rang the bell and handed the trumpet to their sister Alice. Archie says that that night no one went to bed until very late because they were all busy testing the line.

When using this telephone it was necessary to shift the phone from mouth to ear and it was not possible to listen and talk at the same time. This involved some very quick shifting of the trumpet so as not to lose a word. It was amusing, they said, to watch Alice talking to her sister Nellie in a rapid conversation, shifting the trumpet from ear to mouth in what was almost a sleight of hand in order not to miss a word.

Archie and Chester had, eliminated their message rides only to find that they had originated a new task. The line was so important that whenever there was a break in the wire- if a cow broke through or if someone left a gate open - it was necessary for one of them to go out, rain or shine, and repair the break immediately. Norman Sweet says that as a boy it was no fun to walk the fence during a heavy rain and repair the break after being routed out of bed early before school to find the trouble.

A few weeks after the installation, Archie arrived home from school to find a reporter from the <u>San Francisco Call</u> newspaper waiting to interview him. The reporter tested the service and walked quite a distance examining the line.

The quality of the circuit was good. They could talk back and forth in an ordinary tone of voice and with the exception of a few days a year when a hot dry North wind was blowing, there was no difficulty in communication. When this wind was blowing, the circuit became quite noisy but was still usable. During a rain or heavy fog, the volume would drop down very low but by both parties hanging up and ringing vigorously, the circuit would be quite clear again.

Alice Sweet said that the telephone was used for farm business, social calls and a great deal for new reports. When one family went to town they always called the other to ask if they had any errands to be done, and when they came back they would relay the latest news from town.

Father Young rarely used the instrument directly but when the younger people were using it he would ask them to relay messages for him.

This "Barbed Wire Telephone" served continuously from its installation until about 1915, when it was replaced by a line from the Central Office in Livermore. Even after this, one of the instruments was used as a lineman's testing telephone up into the 1920s. In all that time, the instruments never gave any trouble and were never repaired.

This "Barbed Wire Telephone Service" was, as far as is known to us, the first rural telephone service in Northern California.

Francis J. Young, the one who contributed this article, is the grandson of John and Anna Young and the cousin of Malvern Sweet of Livermore. The Young Ranch is still at its original location at 11761 North Flynn Road and the Sweet Ranch house is at its original location at 12020 Patterson Pass Road.