seeing by telephone...

the PICTUREPHONE story
Ever since the first telephones were put into service almost a century ago, people have wondered if the day would come when they could see and be seen — by telephone.

The development of a practical telephone-like instrument that would transmit a visual image over great distances has long been a dream among Bell Telephone people. There has been work going on for years, in the hope of accomplishing this goal as a step toward better, warmer, and more nearly complete communications.

To telephone people, there never was any doubt that it would be done — the only real question was when.

Now, a practical beginning has been made. This booklet tells the story.
Picturephone calls of three-minutes’ duration may now be made for $16 between New York and Washington, $21 between Chicago and Washington, or $27 between Chicago and New York.

HOW TO ARRANGE FOR PICTUREPHONE CALLS

Picturephone calls can be placed at a central location in each of these three cities. (See below.)

To make a Picturephone call you reserve a convenient time with the local Bell Telephone Company in the city from which you will call. (See below.) The attendant there will arrange beforehand with the party you wish to call to come to the distant Picturephone location at an agreed-upon time.

IN NEW YORK, call the Picturephone attendant at Grand Central Station, Area Code 212 581-5400.

IN CHICAGO, call the Picturephone attendant at The Prudential Building, Area Code 312 372-9100.

IN WASHINGTON, D.C., call the Picturephone attendant at the new National Geographic Society Building, 16th and L Sts., N.W., Area Code 202 392-8458.

The ability to see facial expressions and gestures adds new effectiveness and a new dimension to telephone communications.

PICTUREPHONE calling is as easy as ordinary telephoning. See next page.
When you arrive for your Picturephone appointment, an attendant shows you how to place your call. (The same help will be given to the person you are calling in the other city.)

Booths are modern and spacious, so family members, friends or business associates can also participate in the call. You are seated about four feet from the Picturephone unit.

You place your call using Touch-Tone dialing instead of the conventional rotary dial. The call goes through quickly and automatically.

You see the other party clearly, and he sees you. Images are bright and sharp.

You can see your own image any time you wish, then switch back to watching the other party, without interrupting the conversation or your picture on his screen.

If you wish, you can stop sending your image without interrupting the conversation or the picture of the other person.

And if you prefer, you can talk and listen "hands-free" to consult notes or hold up pictures or other objects for the other person to examine.
Scientists and engineers at Bell Telephone Laboratories pioneered in the development of television and, in 1927, demonstrated the first intercity TV transmission over wires. (See right.) Foreseeing the need some day for a nationwide television network, they continued research on coaxial cables and microwave radio relay systems, to be ready when TV came of age. As a result, when you watch a live television show originating at some distant point today, it is brought to your local station via the coaxial cables and microwave systems of the Bell System network. More recently, schools and industries have begun using the Bell System network for closed-circuit TV.

The first live overseas television pictures were transmitted in July, 1962, via the Telstar® satellite built by Bell Laboratories, and were sent and received at the Bell System's satellite communications station at Andover, Maine.

Bell System research has a long history of similar contributions, such as the basic discoveries that led to the science of radio astronomy, and invention of the transistor and the solar cell. Bell Laboratories scientists won Nobel prizes for the invention of the transistor and for experiments on the wave nature of matter. They pioneered in laser research and proposed the concepts basic to all lasers.

*First live overseas TV pictures were relayed by Telstar satellite in July, 1962.*

*The invention of the transistor in 1948 by a team of Bell Labs scientists helped make possible the compact size of the Picturephone instrument.*

*The laser is theoretically capable of sending communications of the future over beams of light — enormously surpassing the transmission capacities of present-day systems.*

*Herbert Hoover, then secretary of commerce, made the first visual telephone call from Washington, D.C., in 1927.*

*Walter S. Gifford, A.T.&T. president in 1927, saw Mr. Hoover on a small screen and spoke with him from Bell Laboratories in New York.*
The first Americans to make Picturephone calls will be pioneers in a new kind of communication and, in a sense, will participate in the development of this service.

For, while Picturephone service is a logical extension of telephoning, Picturephone calls require more frequency bandwidth than is involved in an ordinary telephone call. Naturally, this limits the amount of Picturephone service available to start with; it also explains, in part, why Picturephone calls must now cost much more than long distance telephone calls between the same cities . . .

We are able today, however, to give some people the opportunity to use the service, and we're interested in their reaction. The three-city service is by no means the ultimate. There are many future possibilities for this service and we haven't as yet fully evaluated other applications or determined when they might be available. But we do expect that eventually this service will evolve for anyone who wants it—whether for businesses, schools, or homes.

PICTUREPHONE service is on display in the Bell System Exhibit at the New York World's Fair and at Disneyland in California. Visitors may participate in special closed-circuit Picturephone demonstrations free of charge.