

First Motion Pictures Are Received by Radio And Shown in Capital

**Government Officials and Scientists, Summoned Quickly
by Telephone, View Successful Experiment in
Laboratory of C. Francis Jenkins—Small
Apparatus Functions Perfectly.**

A group of distinguished government officials and scientists, called unexpectedly from their offices and laboratories, sat yesterday morning in the laboratory of C. Francis Jenkins, at 1519 Connecticut avenue northwest, and saw for the first time in history motion pictures of a moving object miles away, received over the radio and thrown upon a miniature screen.

Among the visitors who had been called hurriedly on the telephone by Mr. Jenkins when he found the machine functioning perfectly, and who visited the laboratory at various hours in the morning, were Secretary of the Navy Wilbur, Dr. G. K. Burgess, director of the bureau of standards; Stephen B. Davis, Acting Secretary of Commerce; W. D. Terrill, of the radio department of the Department of Commerce, and two San Francisco scientists, who heard of the experiments and accompanied the officials to the laboratory.

Although the image broadcast was devoid of dramatic interest of itself, being merely a small model windmill with the blades in motion, the men who witnessed the accomplishment expressed amazement and showered compliments on the inventor.

The broadcasting was done from

NOF, the old naval radio station, which was turned over to Mr. Jenkins for experimental purposes when the department erected a larger one. It was from NOF that Mr. Jenkins broadcast still photographs to Philadelphia, Boston and other cities in 1923.

To illustrate motion, a small model Dutch windmill was erected and the blades propelled slowly by wind from an electric fan. The image of this was through a lens onto a ground glass. From this ground glass the image was picked up by Mr. Jenkins' apparatus in much the same fashion that it is for a still photograph. That is, a small sensitive pencil travels across it making approximately fifteen lines to the inch, converting the light intensity into electrical intensity or electrical modulations.

These modulations were broadcast over a wave-length of 546 meters and picked up in Mr. Jenkins' Connecticut avenue laboratory. Here the modulations were converted back into light values and a pencil of light made to travel in the same fashion as the sending one, except that it was projected upon an 8x10-inch motion-picture screen in a darkened room.

Whereas in the broadcasting of

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MOTION PICTURES ARE SENT BY RADIO

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still photographs, Mr. Jenkins explained, from 8 to 30 and 40 minutes are consumed by the pencil of light in making one picture, which must be registered on a photographic plate, in the motion-picture broadcasting sixteen complete images are projected on the screen each second. The "prismatic disc" on the apparatus makes 960 complete revolutions each minute, and each revolution makes a picture.

The motion picture apparatus is merely an attachment which Mr. Jenkins says may be attached to any radio broadcasting or receiving machine. Either the sending or receiving apparatus may be carried by an adult, so small, compact and simple is it.

Mr. Jenkins said the effect reminded him of his first motion pictures, the films of which he is said to have been the first to make 35 years ago. The windmill, with its slowly moving blades, which would halt and hitch and then get into motion again, appeared plainly on the screen while the visitors gasped.

For seventeen years Mr. Jenkins has been working on his picture broadcasting machine, he said, and when he attained the accomplishment of broadcasting a still photograph through the air, he knew it was only a matter of speeding up the machine to a point where it would go fast enough to show motion.

He explained that there are two phases to the broadcasting wave and that he has at times in the course of his experiments broadcast the motion pictures on one portion of the wave and the voice on the other, resulting in actually transferring an entire scene, sights and sounds, through the air. He was so excited at the success of his project yesterday, he said, that he forgot to try receiving the sounds simultaneously.

Now, he said, he will go through a year of intensive experimentation with a view to "refining" the machine so that it may be applicable to the home. Its operation is simple, he said, and the scarcity of broadcasting stations for motion pictures would eliminate the tedious "tuning in" process.

The machine has not been christened, he said, but it has been suggested that it be called the "telarama," which means "distant viewing," and it is possible that he will make it "telaramaphone"—"distant viewing and hearing."

Mr. Jenkins is quite retiring and attempted to explain that though spectacular the machine is not so marvelous, but just a simple electrical principle. The credit for the accomplishment, he said, should not go so much to him as to his helpers, whose untiring efforts have enabled him to bring it about.