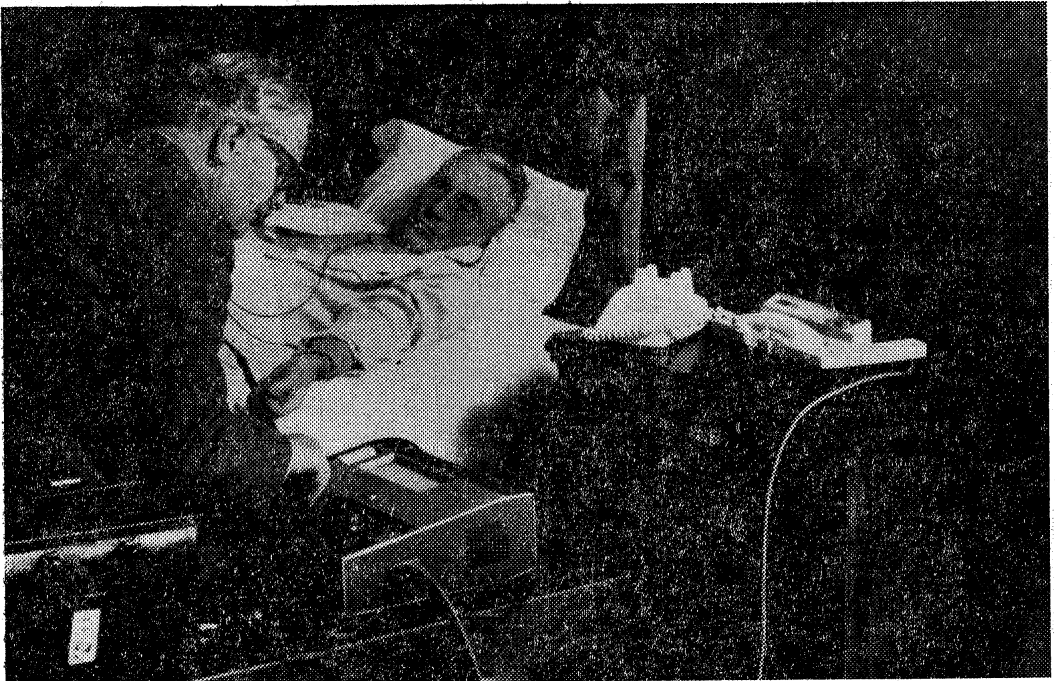


ables machines to talk to machines and, of course, it can also be used as a regular telephone for verbal communications.

(The Data-Phone sender illustration referred to follows:)



Mr. CALLAHAN. There are three types of data sets that are used in the transmission of EKG's. The sender, which is normally used in a small hospital or a nursing home, from where a number of EKG's would be sent regularly, is permanently installed like a telephone. There is a portable sending set that is used with a portable EKG machine and can be used with almost any telephone, whether it be in a hospital, a doctor's office, or even in the patient's home.

The Data-Phone receiver would be located in a cardiologist's office or a hospital or regional medical center.

In a typical transmission of electrocardiograms over a telephone line, a doctor, technician, or hospital staff member prepares a patient for a regular EKG examination. But before the examination begins, a phone call is dialed to a heart specialist. Before the EKG is transmitted, certain personal data about the patient is provided verbally—his name, his age, his sex, height, and weight. The examination takes about 5 minutes with both the transmitting and receiving locations getting simultaneous recordings of the tracing.

Once the electrocardiogram has been sent, the specialist can analyze and discuss the interpretation with the sending location.

Several medical centers are using Data-Phone service to provide EKG service to doctors and hospitals in their region. For instance, there are 29 hospitals and doctors' offices located in Nebraska, Iowa, and South Dakota which send EKG's to Creighton University School of Medicine's cardiac laboratory in Omaha.