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The General Radio Company

No. 5 of a Series of Instrument Company Histories

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The General Radio Company was chartered as a Massachusetts corporation on June 14, 1915, and has, therefore, just completed its twentieth year. The company was founded by Mr. Melville Eastham with the aim of supplying the need for accurate and serviceable measuring equipment which the radio industry was at that time beginning to realize. While the activities of the company have somewhat outgrown the radio field and now include the whole area of communications and allied branches of engineering, they have developed along the line originally laid down.

The earliest instruments of the company included standards of the fundamental circuit elements which would be suitable for radio-frequency measurements. The line also included inexpensive types of variable condensers, resistors and transformers suitable for use in the circuit experimentation which was then very active. It was this branch of the company's activities which later expanded rapidly during the period of popular set building. It was at this period that the closed-core audio transformer was put on the market, and this early type was probably the first one commercially available.

The company's development was almost immediately diverted from the normal course by the entrance of the United States into the World War. Plans for the development of an increasingly wide



Fig. 1. Mr. Melville Eastham

expansion of plant facilities, and the first unit of a modern factory designed specially for the company's requirements and use was erected in 1924, followed by a second unit in 1925.

While the bulk of the company's sales during this period was not in the measuring field, developments in measuring instruments were actively carried on against the day when the popular interest in set building would diminish. When this occurred in 1927 and 1928 a growing instrument line quickly took up the slack.

During the years of 1928 to 1930 new methods of selling and administration providing for increased ratios of research to manufacturing cost were worked out and put into effect, and with the completion of the transition period a third

unit to provide increased laboratory space was erected in 1930, this completing the plant as it exists today.

The transition from a business composed primarily of small parts sold to consumers to that of laboratory instruments sold to industrial and educational institutes has now been completed. The line of measuring equipment has been greatly expanded until it covers the entire communication field and reaches out into such allied arts as acoustics and motion pictures. During the period of the company's existence measurement methods at communication frequencies have been refined from the crudest sorts of approximations to accuracies comparable with those expected at commercial frequencies. Indeed, the measurement of frequency has been developed to a point where frequency is the most precisely determinable physical constant which we have.

Mr. Eastham has maintained his daily activity in the company since its founding, and is still the President and directive head.

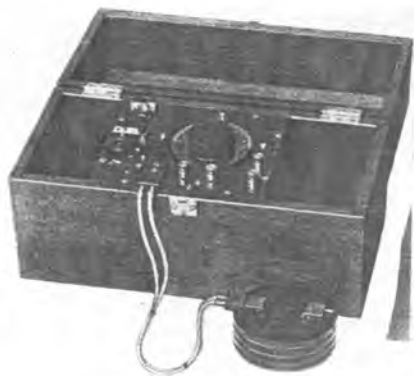


Fig. 2. Early Type of Wavemeter.

line of measuring equipment had to be abandoned and the plant adapted to the turning out of necessary war material in quantity. This material included radio-training equipment, field equipment, airplane sets and similar items required by the Signal Services of the Army and Navy.

At the close of the war period the company resumed the development of measuring apparatus. During this period bridges and other more elaborate measuring devices began to take their place beside the earlier standard units and circuit elements.

It was not long, however, before the group of inexpensive circuit components began to assume a preponderance of influence in the company's activities in consequence of the great growth of popular interest in radio-set building which occurred in the early 1920's. This period marked the beginning of a substantial

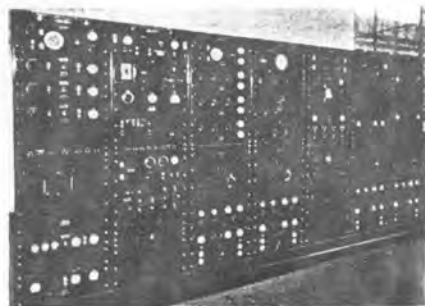


Fig. 3. A modern Frequency Standard. The progress in radio measurements can be gaged by a comparison between this modern standard of frequency and the earlier wavemeter shown in Fig. 2.

As the company expanded others were added to the management group. The first of these, Mr. Henry S. Shaw, now Chairman of the Board of Directors, became associated with Mr. Eastham during the war period.

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Fig. 4. Windsor Street Factory, occupied about 1917.

During the readjustment period at the close of the war Mr. E. H. Locke and Mr. H. B. Richmond joined the company. Mr. Locke is Vice President in charge of manufacturing, and Mr. Richmond, with the title of Treasurer, has general supervision of all non-manufacturing activities. While these four, all actively engaged in the business, constitute the management influence in the company, in recent years a good start has been made on a plan to extend both ownership and management to a group of junior executives.

Fig. 5. The Present Plant of the General Radio Company. Of the three units shown the first was completed in 1924, the second in 1925 and the last in 1930.



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