Fig. 9. Electron scattering from the proton at an incident energy of 188 MeV. Curve (a) shows the theoretical Mott curve for a spinless point proton. Curve (b) shows the theoretical curve for a point proton with a Dirac magnetic moment alone. Curve (c) shows the theoretical behavior of a point proton having the anomalous Pauli contribution in addition to the Dirac value of the magnetic moment. The deviation of the experimental curve from the Curve (c) represents the effect of form factors for the proton and indicates structure within the proton. The best fit in this figure indicates an rms radius close to $0.7 \cdot 10^{-13}$ cm.

drogen and helium. The first targets employed high-pressure, thin-wall, gas chambers and were designed by the late Miss Eva Wiener. In the latter part of 1954 it was first realized that the experiments on hydrogen demonstrated that the proton was an object of finite size and not merely a point object. In fact, the size was found to be surprisingly large and could be described in terms of a root-mean-square radius of value $(0.74 \pm 0.24) \cdot 10^{-13}$ cm. It is an interesting fact that more recent determinations of the rms proton charge