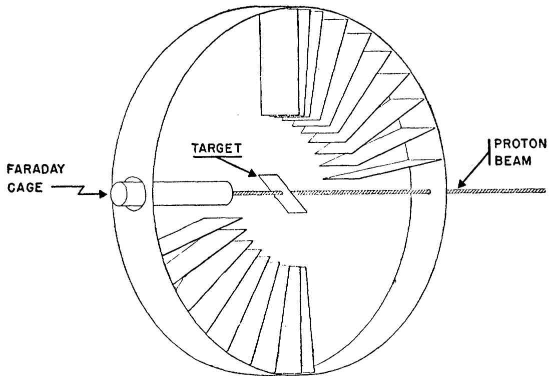

FIG. 1. Scattering camera with 7.1-Mev protons incident from right.

tron. The magnetic flux density in the camera proper was nowhere found to be greater than 40 gauss and at the target was determined to be less than 30 gauss. In view of these measurements, curvature of the proton paths in the camera was extremely small, and all trajectories were taken as straight lines without serious distortion of scattering angles. A control run in the absence of a rarget foil showed the background owing to slit edge scattering and similar sources to be negligible. The early apparent narrowness of the 2.4-Mev level has been confirmed in refined measurements by later observers[5] and is of particular interest since the level is a virtual one, being more than 780 kev above the dissociation energy.

The experimental results are given in Fig. 2. It can be seen that the scattering is essentially isotropic over the range 60° to 160° but then rises to more than three times this value by the time it reaches 20°. It is clear that the counts at the smaller angles cannot be attributed to elastically scattered protons since the distinction in length was easily and clearly made. Longmire[9] has calculated the expected angular distribution on the basis of the simplified model of a neutron and Be^8 previously used by Caldirola. His results gave either (a) isotropic scattering (for $n-p$ force completely exchange) or (b) average predominance of forward and backward compared to 90° scattering as 3 to 1 ($n-p$ force of ordinary, nonexchange, type). If the sharp increase in scattering observed in the forward direction is interpreted as *inelastic Coulomb* scattering, one secures general agreement with (a) i.e., a pure exchange force between n and p since the theoretical calculations did not include the Coulomb force on the proton.[10] It would seem that the rise is too fast for nuclear scattering. If

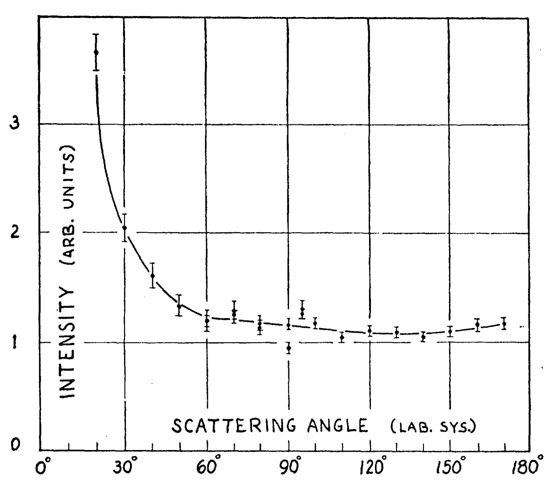

FIG. 2. Angular distribution of inelastically scattered protons from Be^9 (2.4-Mev level).

information could be secured at angles as small as 10°, a continued steep rise would tend to bear out this hypothesis. Longmire properly points out that the model used is a highly simplified one and conclusions based on it cannot be made in fine detail.

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Color Centers Generated in Sodium Chloride by Electrolysis

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HACSKAYLO and Groetzinger[1] have recently reported the existence in sodium chloride crystals subjected to electrolysis of two ultraviolet absorption bands lying at 2260A and 2850A. These writers do not speculate on the origin of these bands. It is of interest to note, however, that a band identified as V_2 has been observed in NaCl colored by x-rays at 2226A by Casler, Pringsheim, and Yuster.[2] This V-band is attributed to trapping of "holes." Furthermore, Uchida, Ueta, and Nakai[3] have reported a band, designated K, at 2900–2950A in NaCl colored by electrolysis. It appears likely that these are the two bands observed by Hacskaylo and Groetzinger.

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Errata

Similarity Properties of the Two-Fluid Model of Superconductivity, E. MAXWELL [Phys. Rev. **87**, 1126 (1952)]. Through an oversight a minus sign was omitted in Eq. (2). The first part of Eq. (2) should read: $F_g = -\frac{1}{2}\gamma T^2 x^\alpha$.

Optical Focusing in Constant Radius Accelerators, DAVID C. DEPACKH [Phys. Rev. **86**, 433 (1952)]. It has come to the attention of the writer that Wideröe[1] published the idea for sequential focusing by magnetic lenses in 1947. It would appear that all work subsequent to that time on sequential focusing in constant radius accelerators, including the writer's, must admit this prior claim, and the writer regrets his not having encountered reference 1 before his own publication.

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Interaction between Electron and One-Dimensional Electromagnetic Field, NATHAN ROSEN [Phys. Rev. **87**, 940 (1952)]. Equation (14) is incorrect in the general case and corresponds to the assumption that the electromagnetic field is moving in the positive direction of the Z axis. For consistency with this assumption further changes in the calculations are necessary, including the deletion of Eq. (22a). The final result remains essentially unchanged, but is subject to the restriction of this assumption.