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## TWO SIMPLE PIECES OF APPARATUS FOR LECTURE DEMONSTRATION IN GENERAL PHYSICS

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Two simple pieces of lecture demonstration apparatus are presented: one an electromagnet made from the field structure from an old 'Edison' type D. C. generator with suitable accessory parts to conveniently demonstrate the Faraday disc or Homopolar Generator, Barlow's wheel, the action of a D'Arsonval galvanometer, electromagnetic damping, and the moving element oscillograph, and the other a modification of the usual device for demonstrating the addition of colored lights. This latter device consists of three small lamp houses each equipped with one of the three color-separation filters supplied by the Eastman Kodak Company, and so mounted as to swing in a vertical arc about a central white

circular plane having at its center an equilateral triangular pyramid also white. When the lights and pyramid are adjusted so that each light shines on a separate face of the pyramid each primary color is separately visible. As the pyramid is rotated, any pair of colored lights are additively combined in variable proportions on a single face of the pyramid, and when the three lights are swung down they all three combine on a single face of the pyramid and thus demonstrate rather strikingly that if the three colors are the three primary colors, their additive combination must necessarily—and does actually—produce the sensation of white.