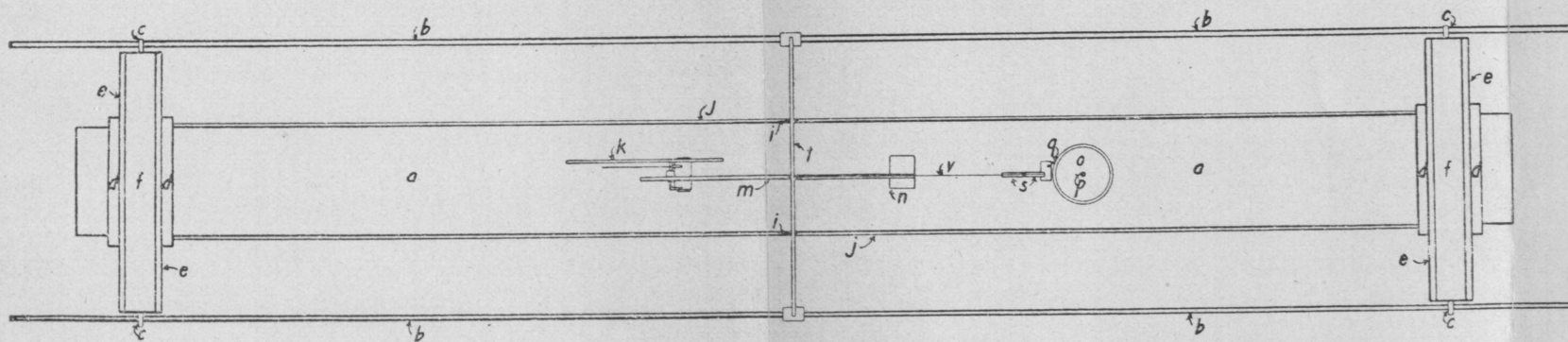


DIAGRAM illustrating the Method of Testing and Recording Deformations in the Large Beams.



- a—Beam.
 - b, b—Boards for taking deflection.
 - c, c—Hangers for holding boards to knife edges.
 - d, d—Blocks of hardwood.
 - e, e—Automatic adjustment for knife edges.
 - f, f—Cylinder pressure.
 - g, g—Supports.
 - h, h—Plates to allow free play between supports.
 - i, i—Scales reading $\frac{1}{16}$ inch.
 - j, j—Chords passing across scale, and attached each end to nails.
 - k—Sector for measuring strain at the extreme fibre, reading $\frac{1}{16}$ mm.
 - l—Support for sector.
 - m—Pointer travelling over drum of sector.
 - n—Support for pointer.
 - o—Drum for autographic diagram.
 - p, p—Pivots on which drum revolves.
 - q—Pencil.
 - r—Pencil guide.
 - s, s—Pulleys for wire to drum.
 - t—Bridge and pulley for carrying wire.
 - u—Hook to hold wire to beam.
 - v—Wire to drum.
- Total length of beam = 11'.
 Tested length " = 10'.
 Distance between supports = 20'.
 Dimensions of cross section of beam = 10" x 10".