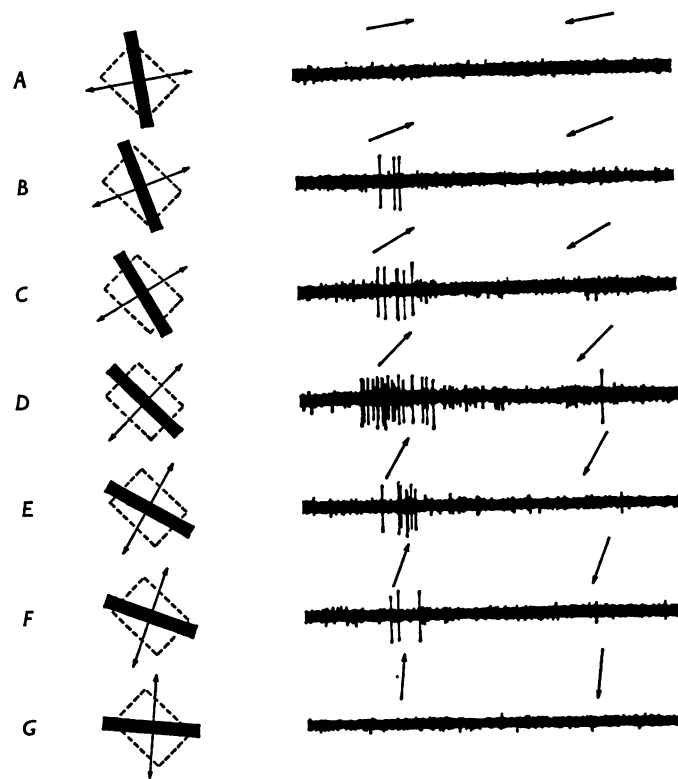


showed little or no directional preference. Even when responses were highly asymmetrical, the less effective direction of movement usually evoked some minimal response (see Text-fig. 2), but there were a few examples in which the maintained activity was actually suppressed.

Individual complex cells differed markedly in their relative responsiveness to slits, edges, or dark bars. The majority responded very much better to one than to the other two, but some reacted briskly to two of them, and a few to all three. For a cell that was sensitive to slits, but not to edges, the



Text-fig. 2. Responses of a complex cell in right striate cortex (layer IV A) to various orientations of a moving black bar. Receptive field in the left eye indicated by the interrupted rectangles; it was approximately $\frac{3}{8} \times \frac{3}{8}^\circ$ in size, and was situated 4° below and to the left of the point of fixation. Ocular-dominance group 4. Duration of each record, 2 sec. Background intensity $1.3 \log_{10} \text{ cd/m}^2$, dark bars $0.0 \log \text{ cd/m}^2$.

responses increased as slit width was increased up to some optimal value, and then they fell off sharply; the optimum width was always a small fraction of the width of the whole field. For complex cells that responded best to edges, some reacted to one configuration and also to its mirror