

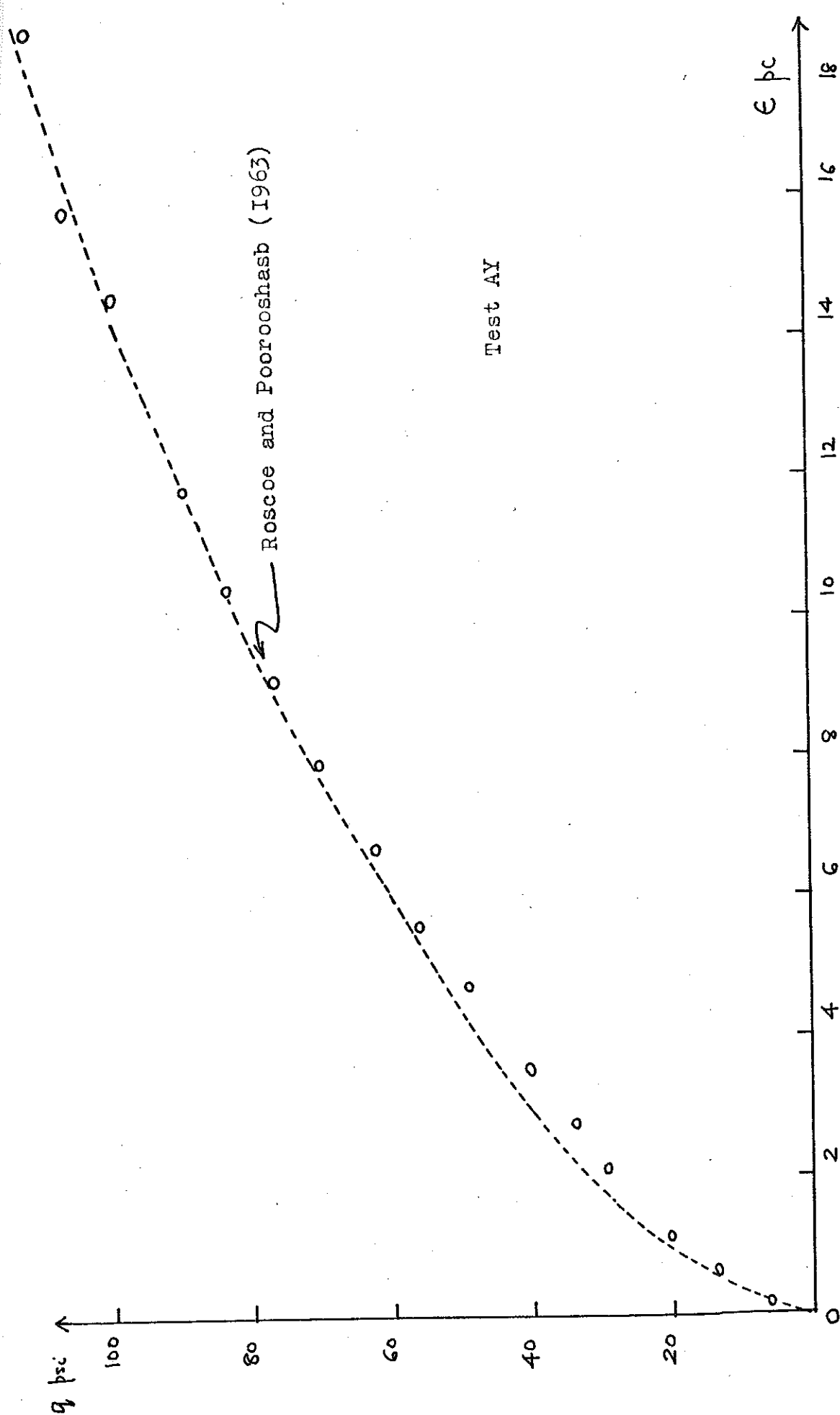


Fig. 6.33. Observed and predicted (q, ϵ) relationship for a drained test with applied stress path of slope 1.5

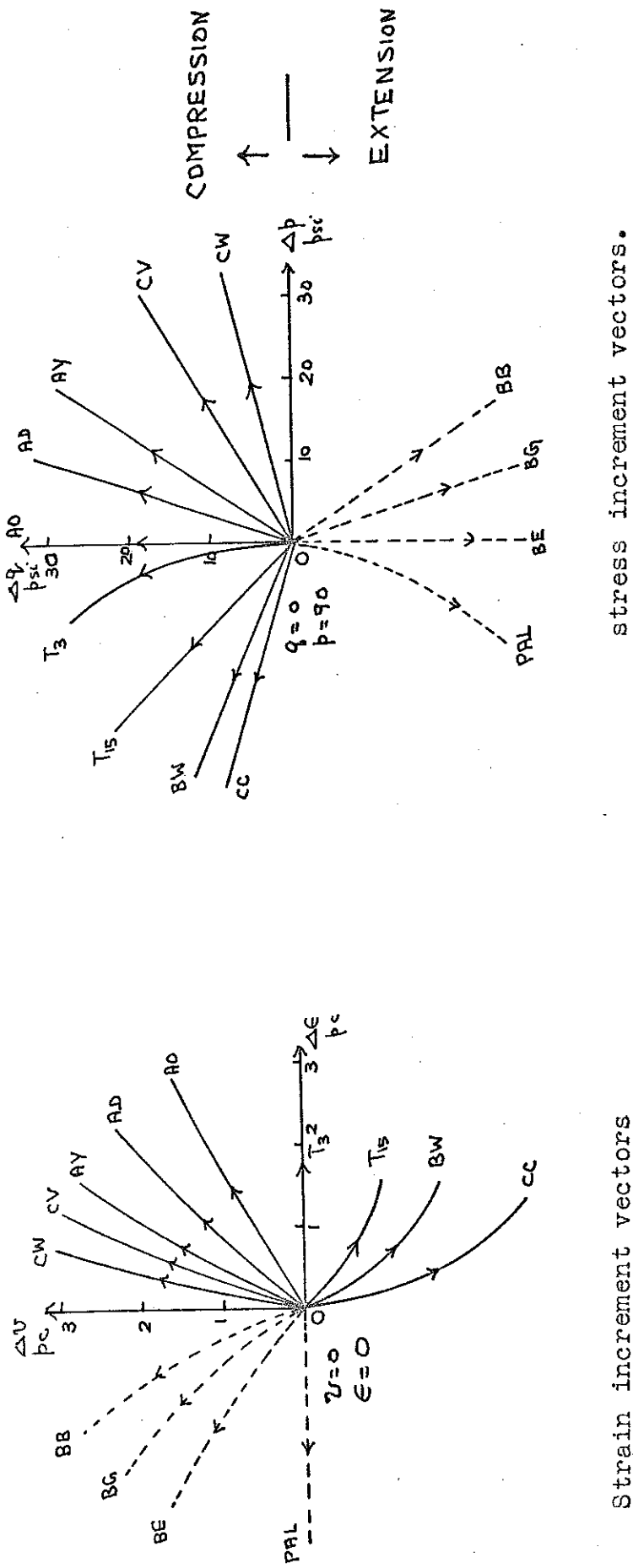
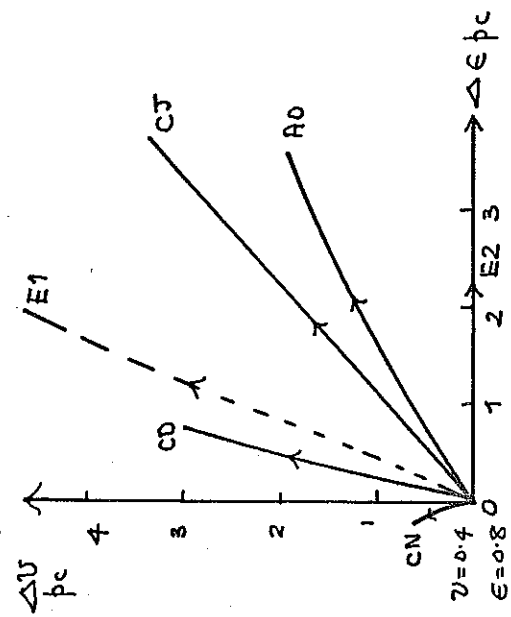
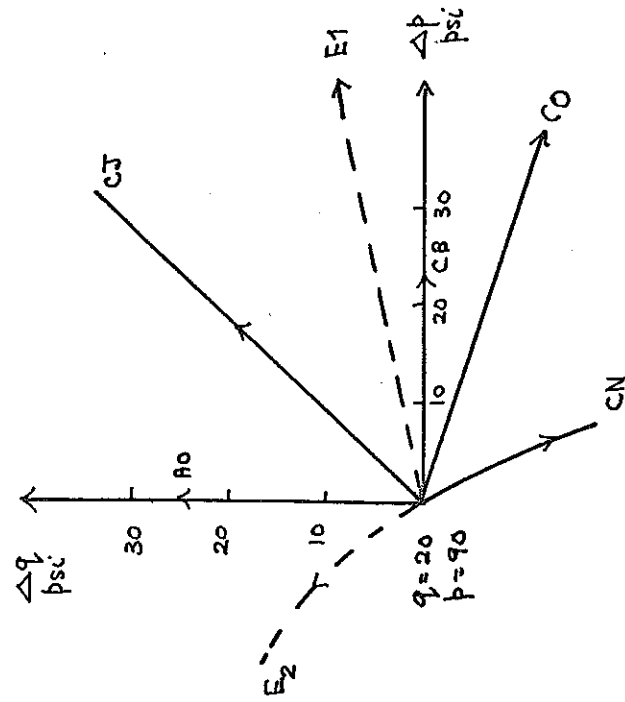


Fig. 6.34 Directions of stress and strain increment vectors at stress ratio $\eta = 0$

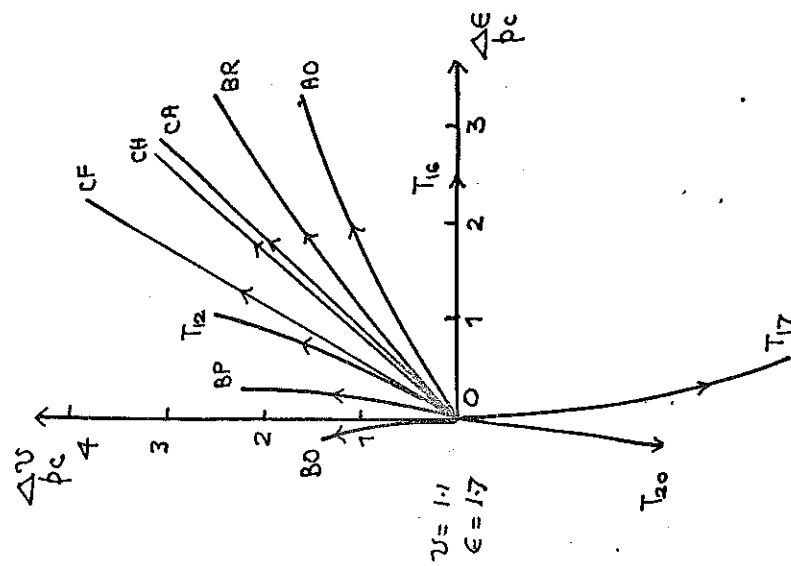


Strain increment vectors.

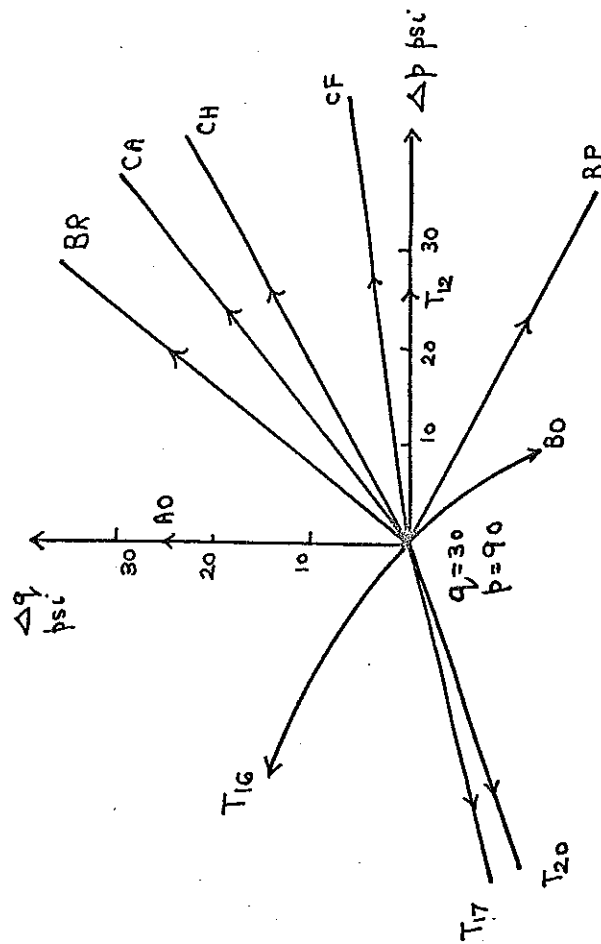


Stress increment vectors

Fig. G.35. Directions of stress and strain increment vectors at stress ratio $\eta = 0.22$

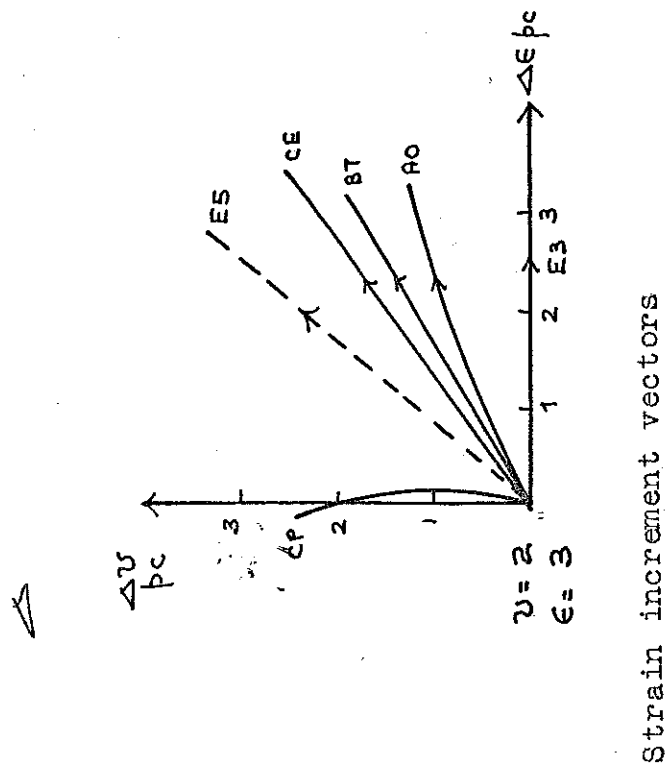


Directions of strain increment vectors

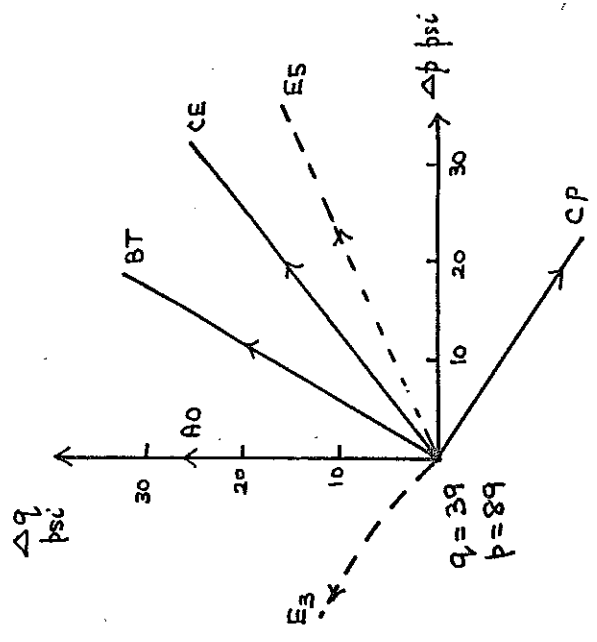


Stress increment vectors.

Fig. 6.36. Directions of stress and strain increment vectors at stress ratio $\eta = 0.33$

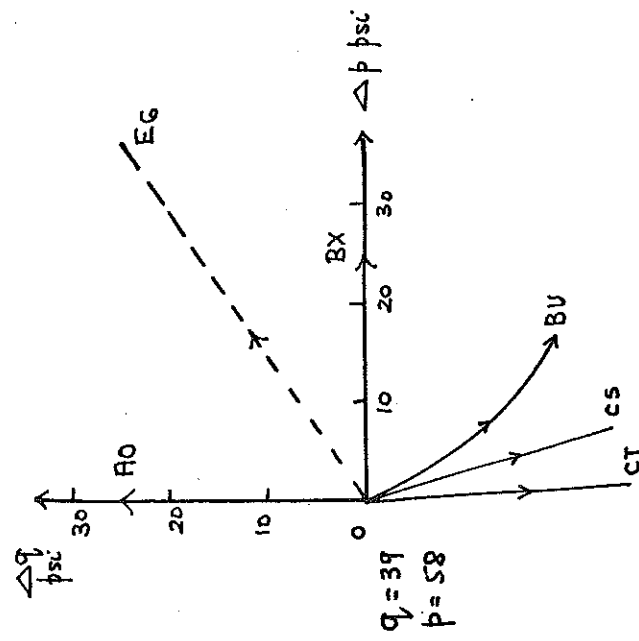


Strain increment vectors

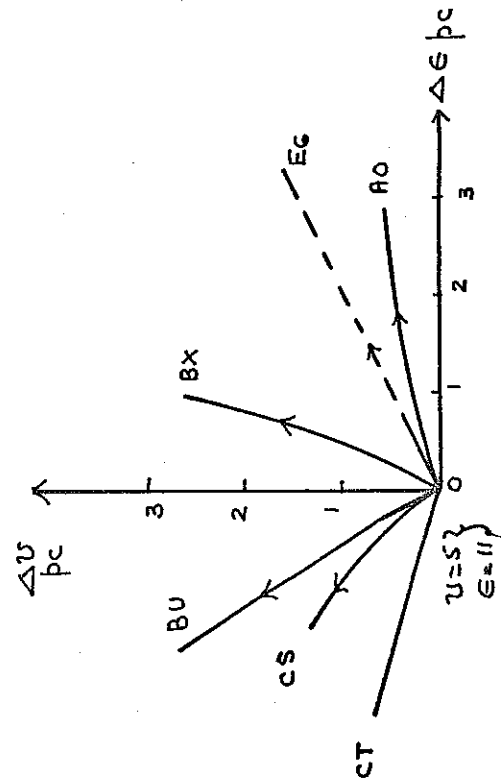


Stress increment vectors

Fig. G.37. Directions of stress and strain increment vectors at stress ratio $\eta = 0.44$



Stress increment vectors



Strain increment vectors

Fig. 6.38. Directions of stress and strain increment vectors at stress ratio $\eta = 0.69$

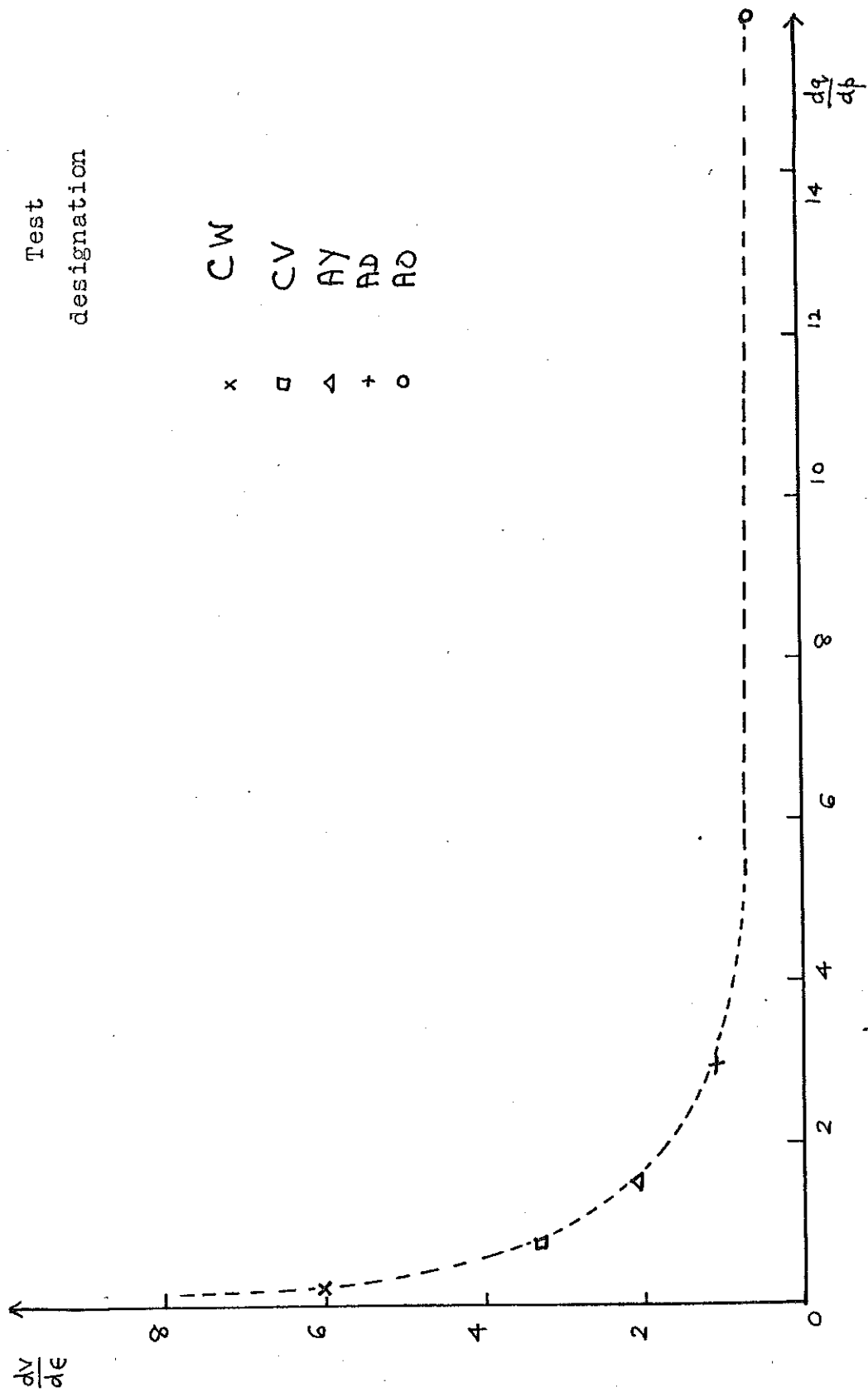


Fig. 6.39. Observed ($\frac{dv}{d\epsilon}, \frac{dq}{dp}$) relationship at stress ratio $\eta = 0$

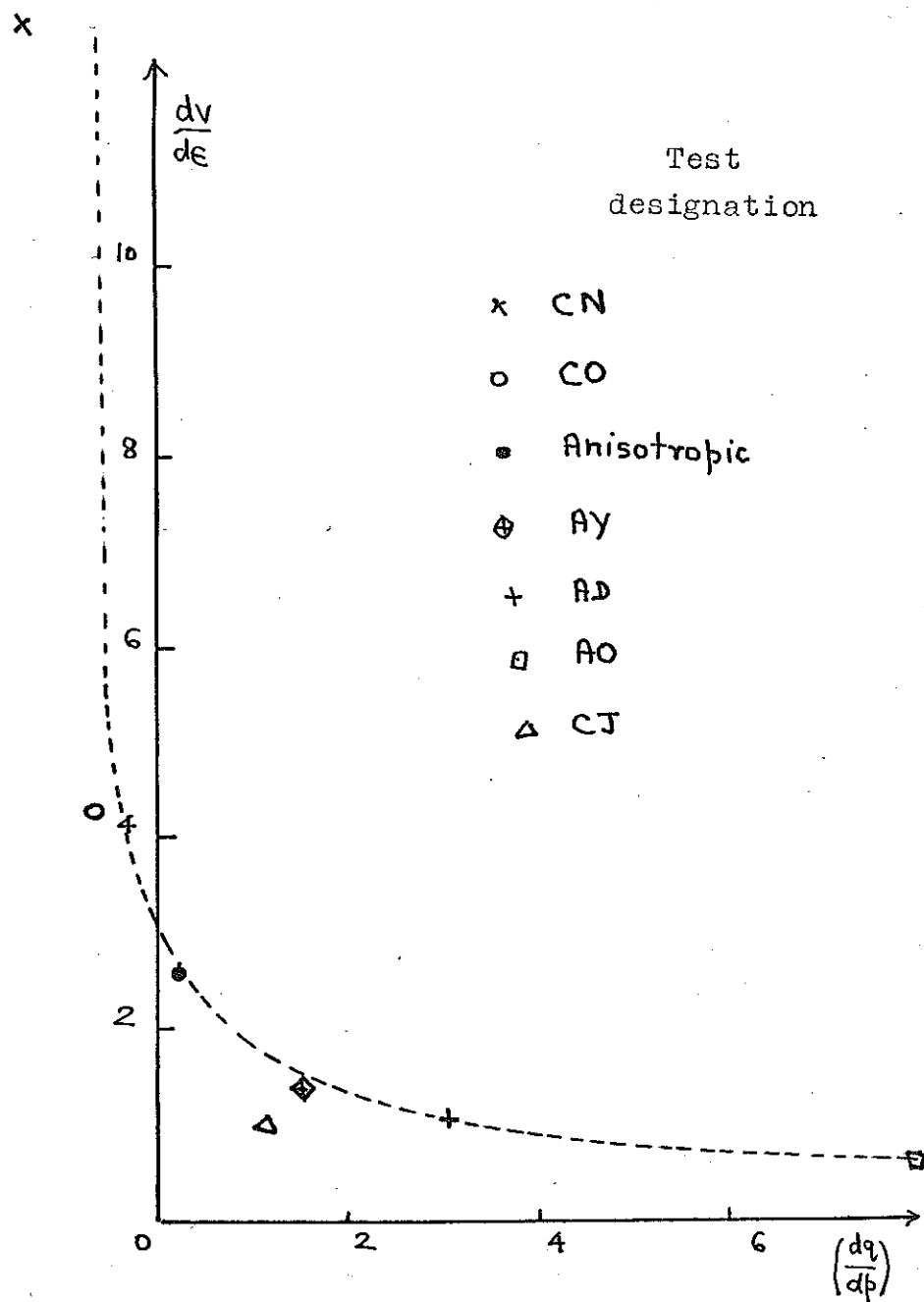


Fig. 6.40. Observed $\left(\frac{dv}{d\epsilon}, \frac{dq}{dp} \right)$ relationship at a stress ratio $\eta = 0.22$

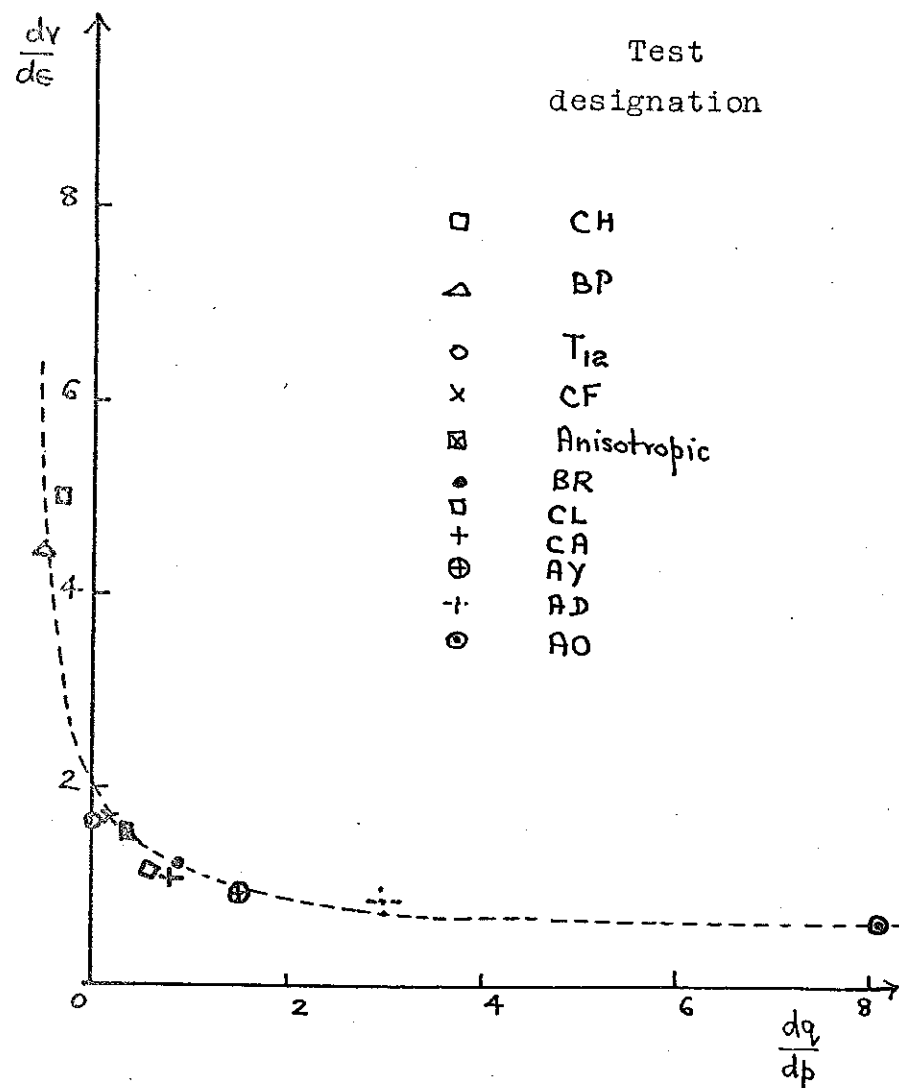


Fig. 6.41. Observed ($\frac{dv}{de}$, $\frac{dq}{dp}$) relationship at a stress ratio $\eta = 0.33$

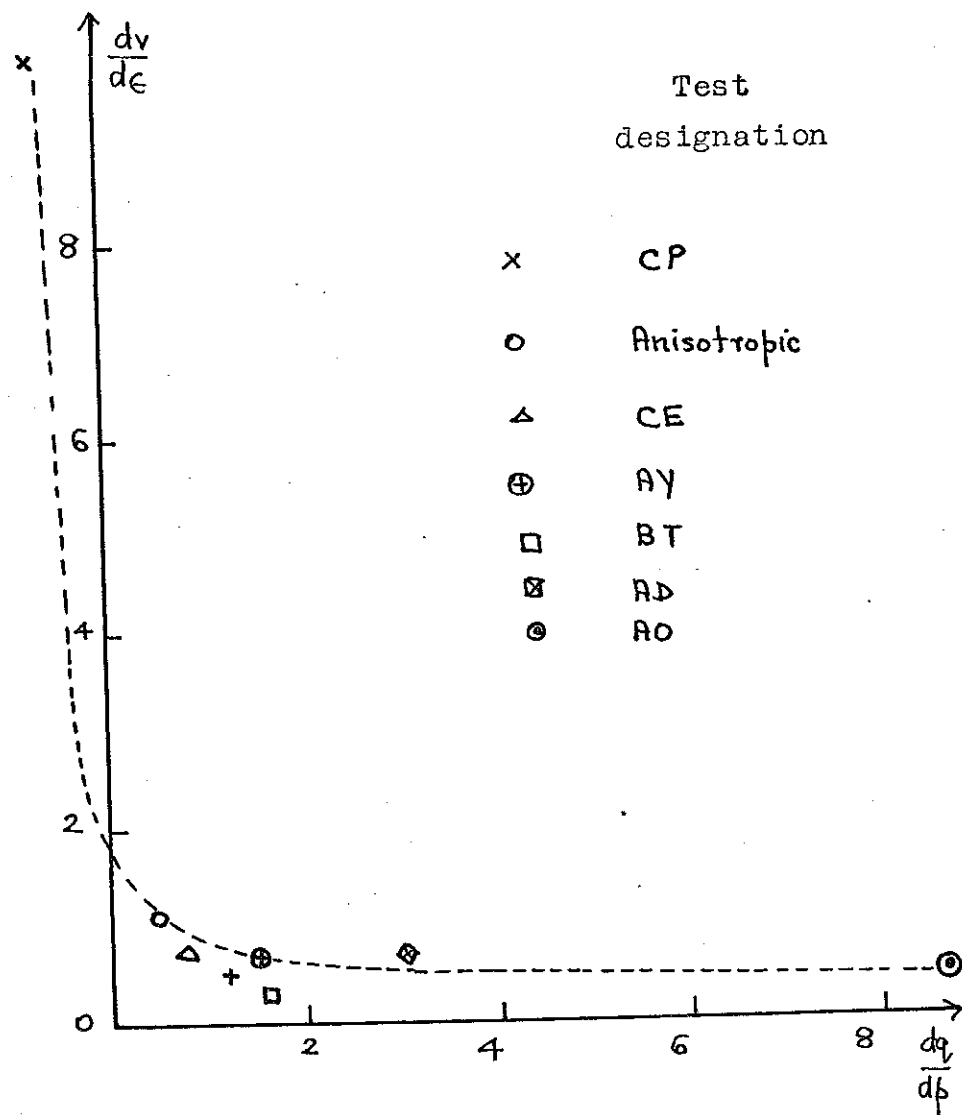


Fig. 6.42. Observed ($\frac{dv}{d\epsilon}$, $\frac{dq}{dp}$) relationship at stress ratio $\eta = 0.45$

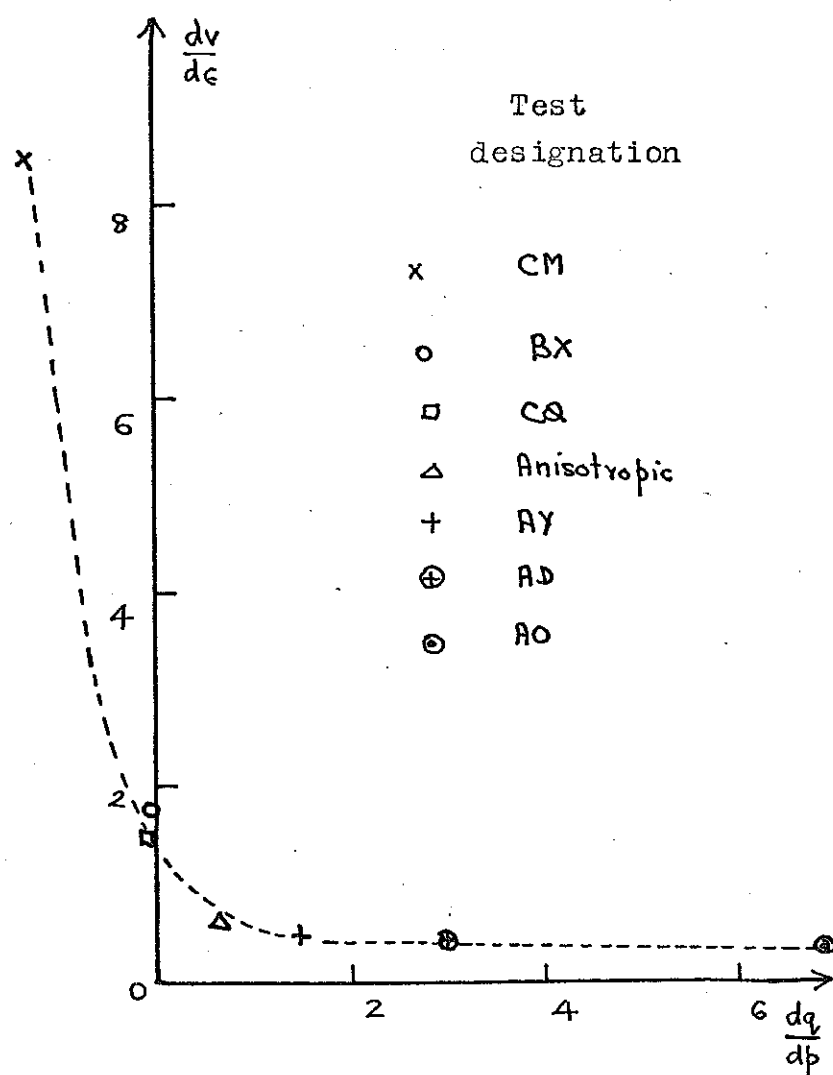


Fig. 6.43.

Observed ($dv/d\epsilon$, dq/dp) relationship
at stress ratio $\eta = 0.69$

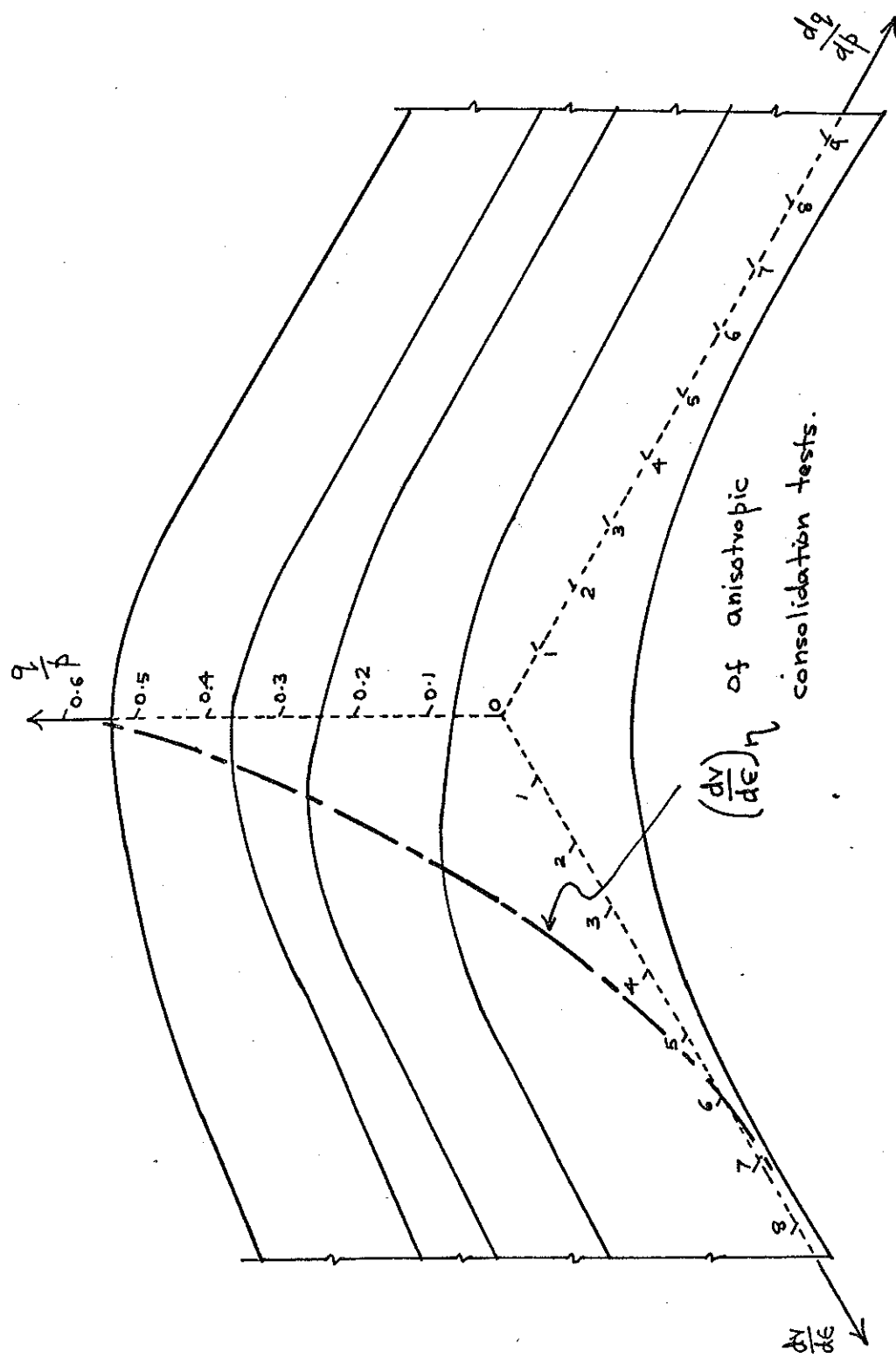
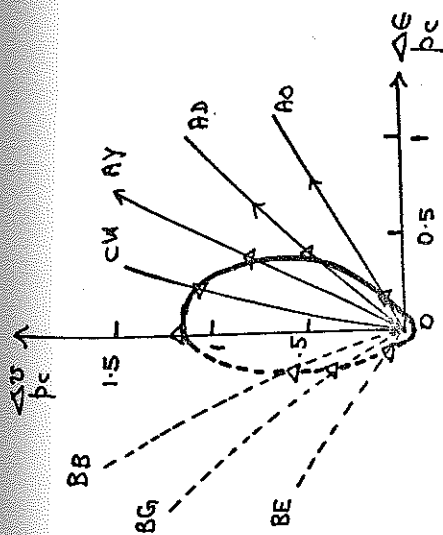
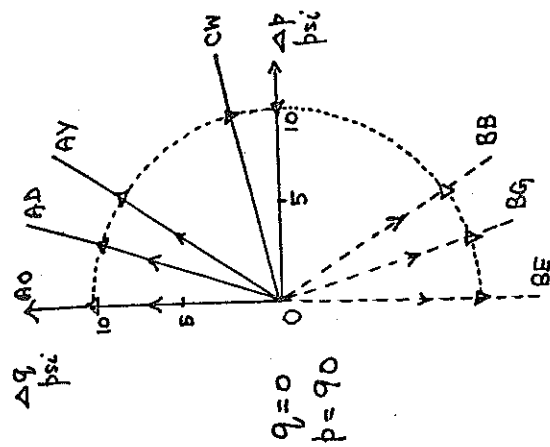


Fig. 6.43(a). An isometric view of the surface relating $dv/d\epsilon$, dq/dp , and q/p .

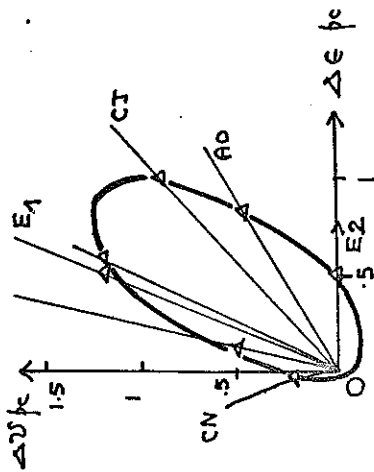


Strain increment ellipse for
constant stress increment

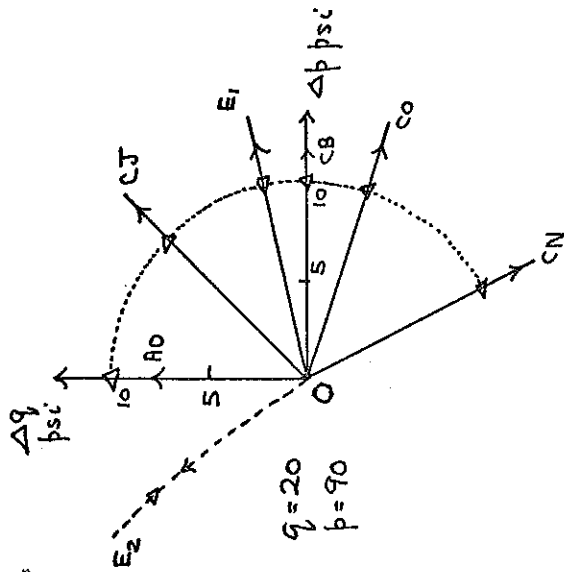


Constant stress increments

Fig. 6.44. Observed strain increment ellipse for constant stress increment vectors at a stress ratio of $\eta = 0$

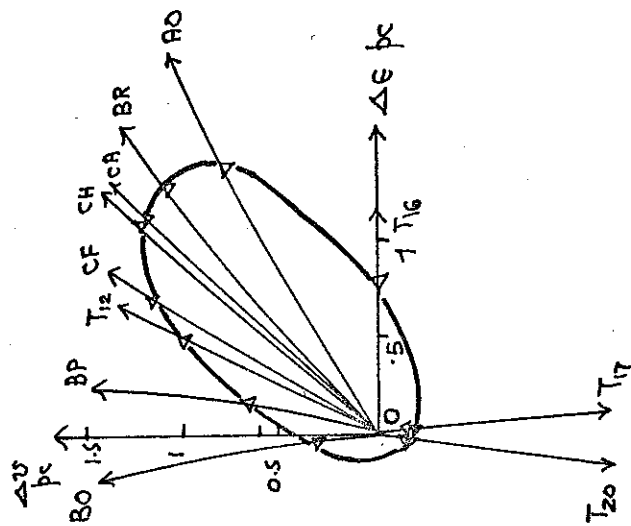


Strain increment ellipse for
constant stress increment

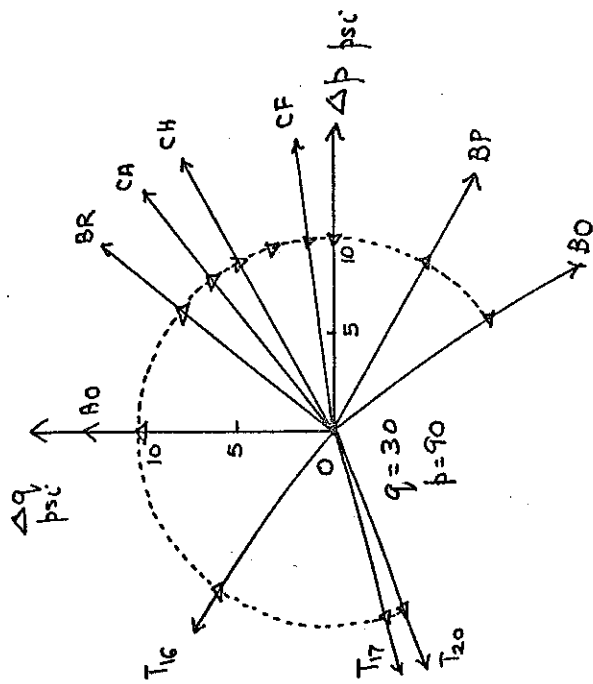


Constant stress increment vectors.

Fig. 6.45. Observed strain increment ellipse for constant stress increment
at stress ratio $\eta = 0.22$

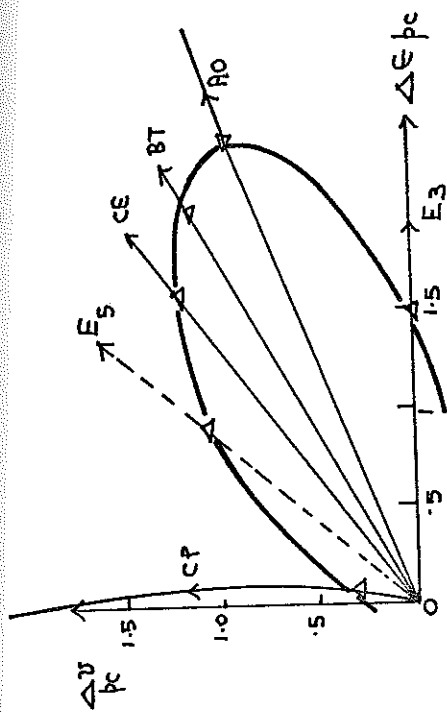


Strain increment ellipse for stress increment vectors of equal magnitude

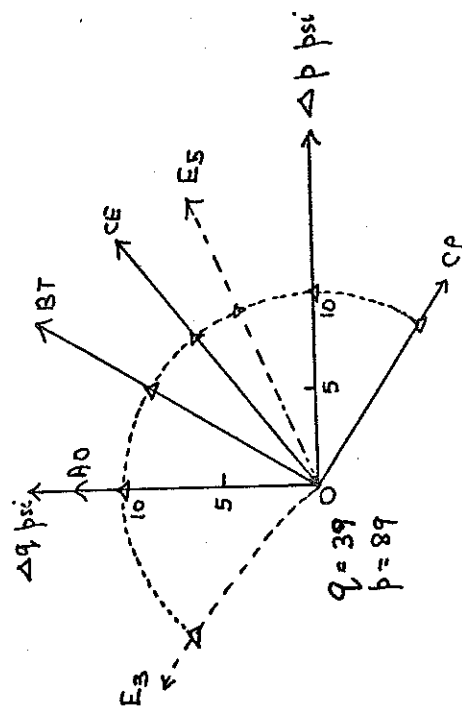


Stress increment vectors of equal magnitude

Fig. 6.46. Observed strain increment ellipse for stress increment vectors of equal magnitudes at stress ratio $\eta = 0.33$

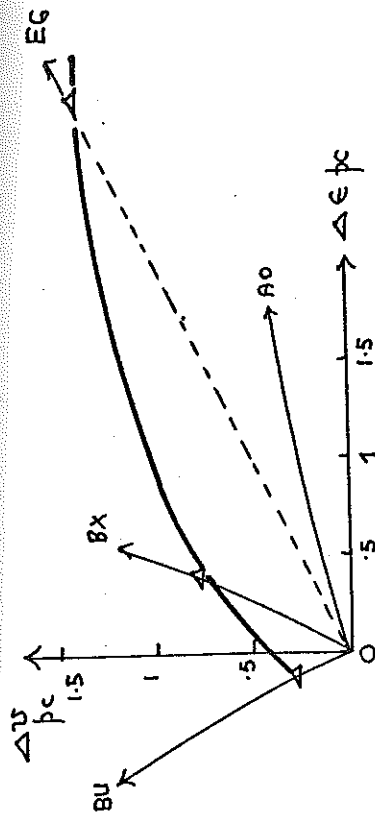


Strain increment ellipse for stress increment vectors of equal magnitudes

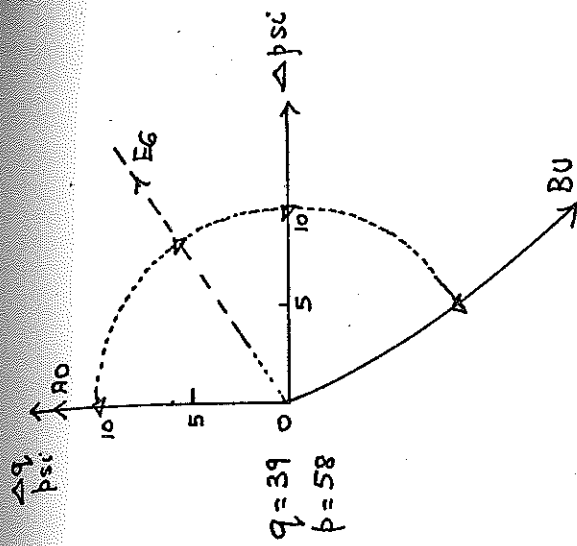


Stress increment vectors of equal magnitudes.

Fig. 6.47 Observed strain increment ellipse for stress increment vectors of equal magnitudes at stress ratio $\eta = 0.44$

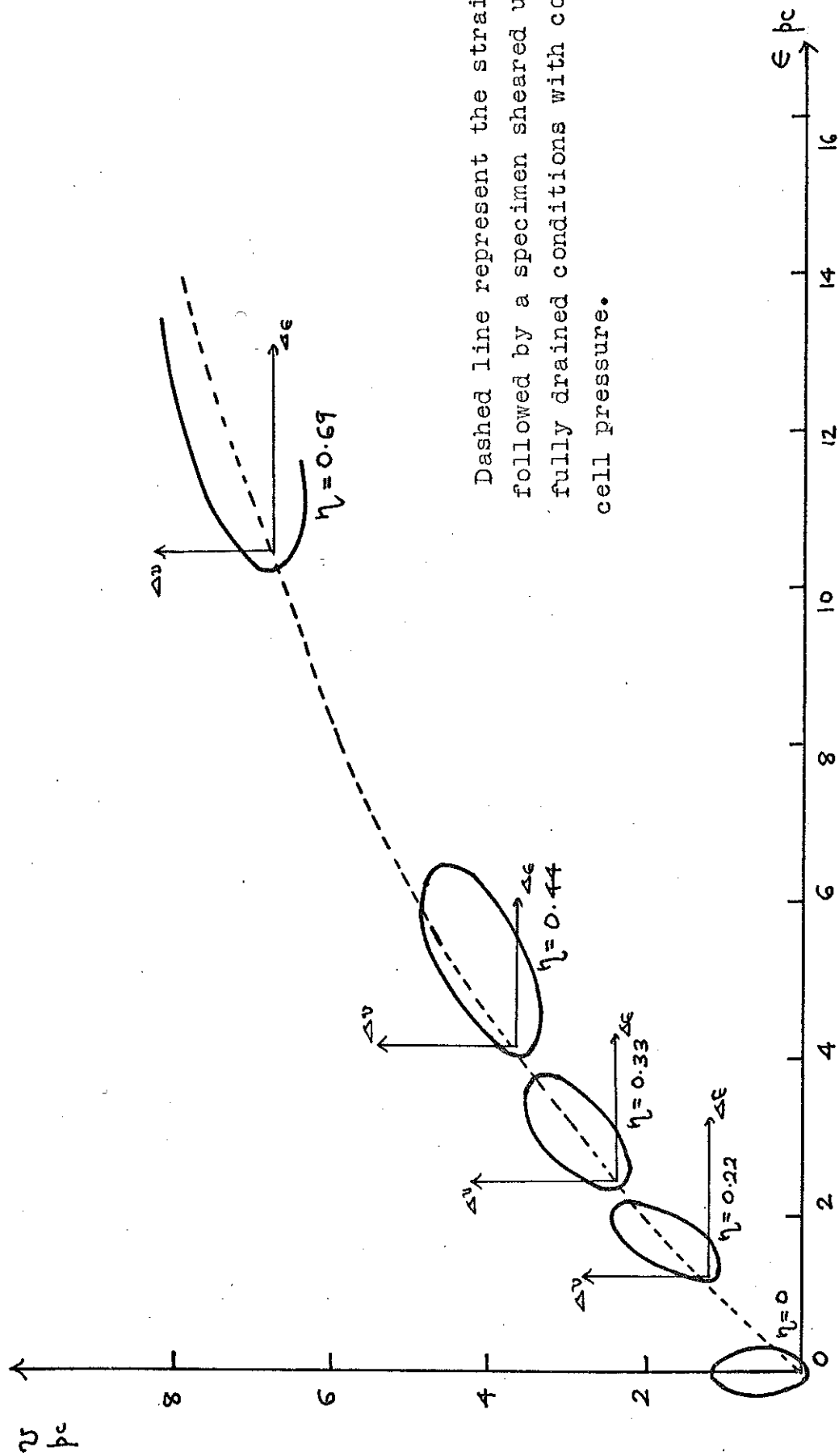


Part of the strain increment ellipse for stress increment vectors of equal magnitude



Stress increment vectors of equal magnitudes.

Fig. 6.48. Part of the observed strain increment ellipse for stress increments of equal magnitudes at stress ratio $\eta = 0.69$



Dashed line represent the strain path followed by a specimen sheared under fully drained conditions with constant cell pressure.

Fig. 6.49. Strain increment ellipses for stress increment vectors of equal magnitudes at stress ratios of $\eta = 0, 0.22, 0.33, 0.44$ and 0.69

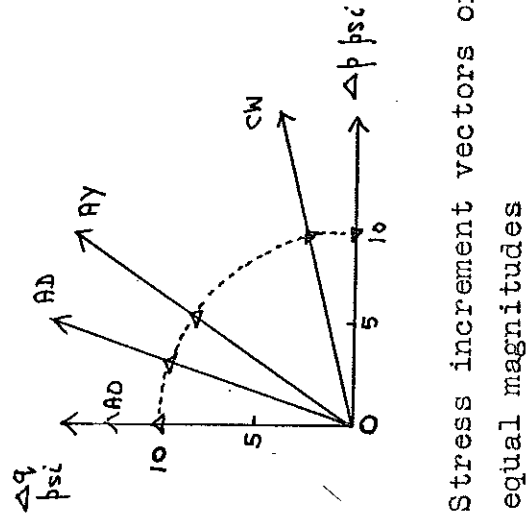
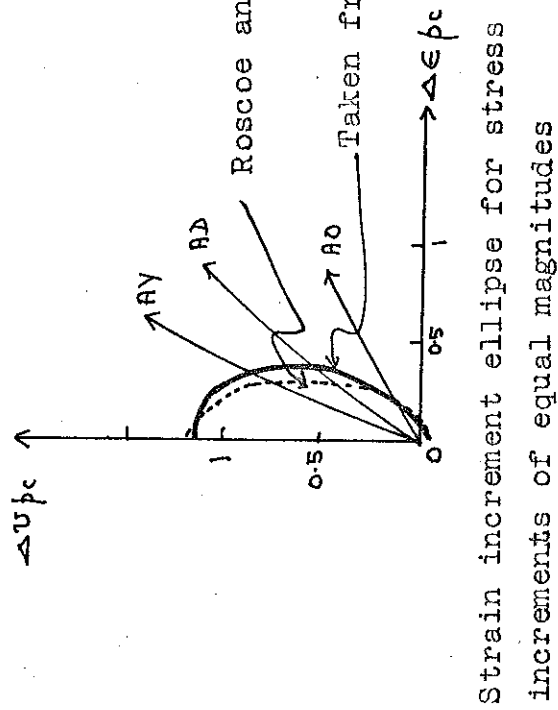
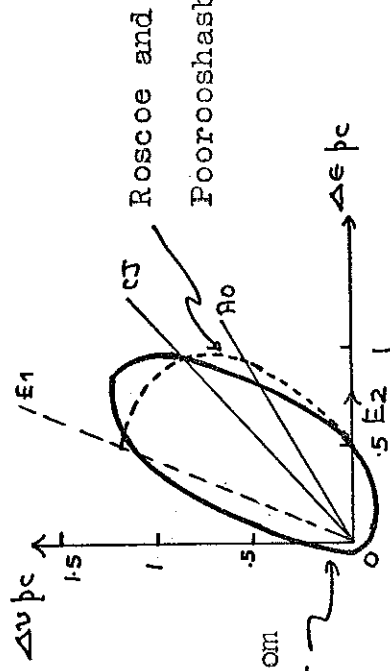


Fig. 6.50 Observed strain increment ellipse and the portion of the strain increment ellipse predicted by the stress strain theory of Roscoe and Poorooshasb (1963)

($\eta = 0$)

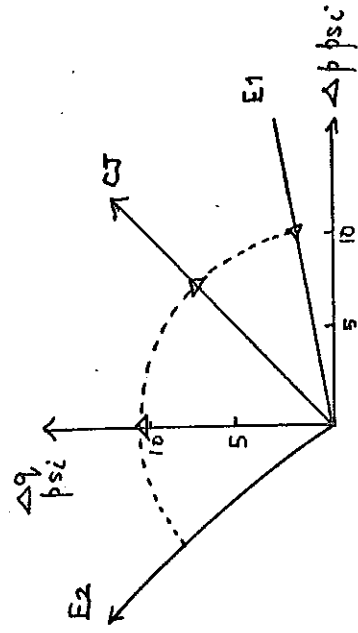


Taken from

Fig. 6.45

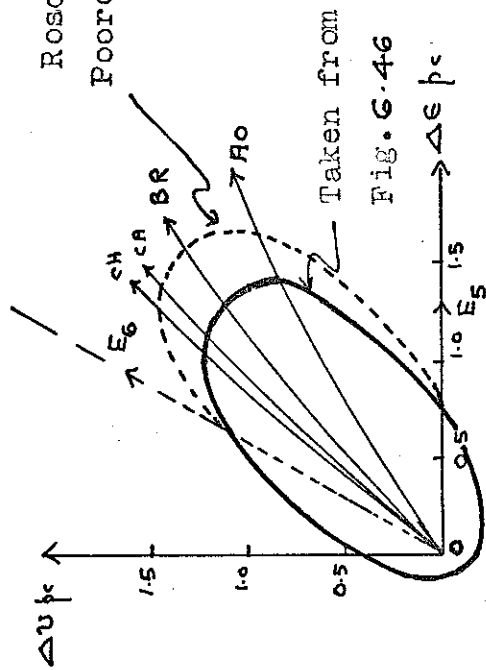
Roscoe and
Poorooshasb (1963)

Strain increment ellipse for stress
increments of equal magnitudes



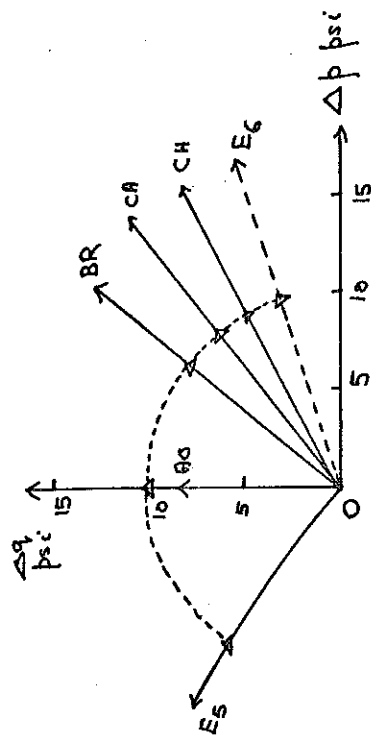
Stress increment vectors of
equal magnitudes

Fig. 6.51 Observed strain increment ellipse and the portion of the strain increment ellipse predicted by using the stress strain theory of Roscoe and Poorooshasb (1963)
($\eta = 0.22$)



Roscoe and
Poorooshasb (1963)

Strain increment ellipse for stress increments of equal magnitudes



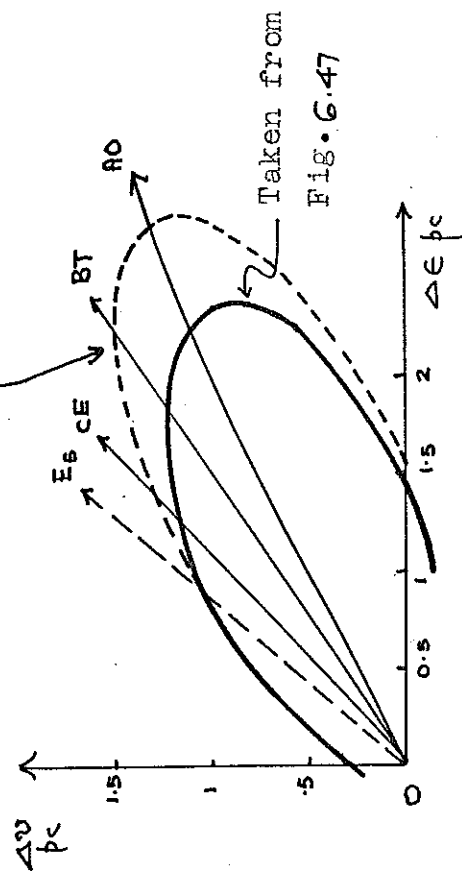
Stress increment vectors of
equal magnitude

Fig. 6.52

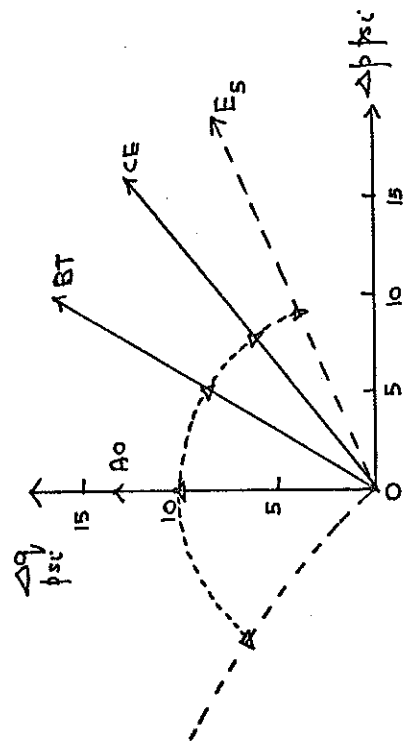
Observed strain increment ellipse and the portion of the strain increment ellipse predicted by the stress strain theory of Roscoe and Poorooshasb (1963)

$$(\eta = 0.33)$$

Roscoe and Poorooshasb (1963)



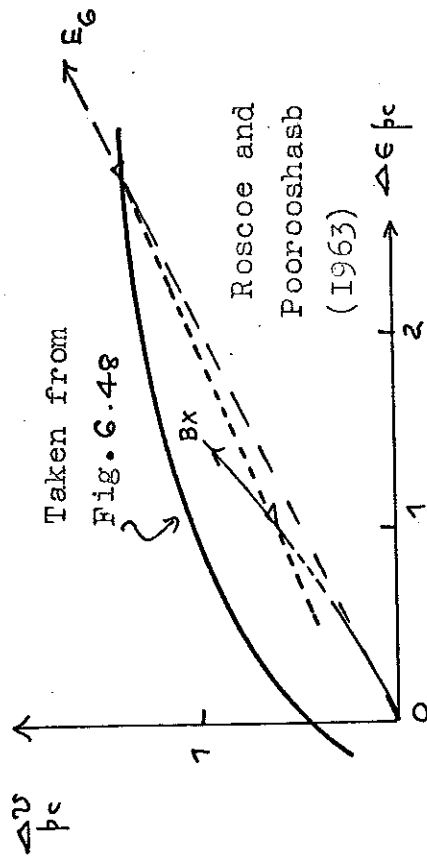
Strain increment ellipse for stress increments of equal magnitudes



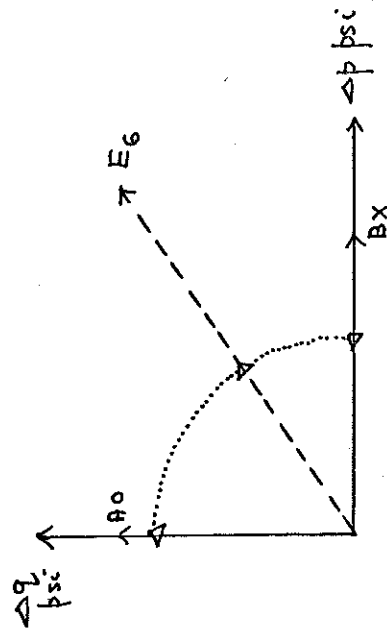
Stress increment vectors of equal magnitudes

Fig. 6.53. Observed strain increment ellipse and the portion of the strain increment ellipse predicted by the stress strain theory of Roscoe and Poorooshasb (1963)

$$(\eta = 0.44)$$



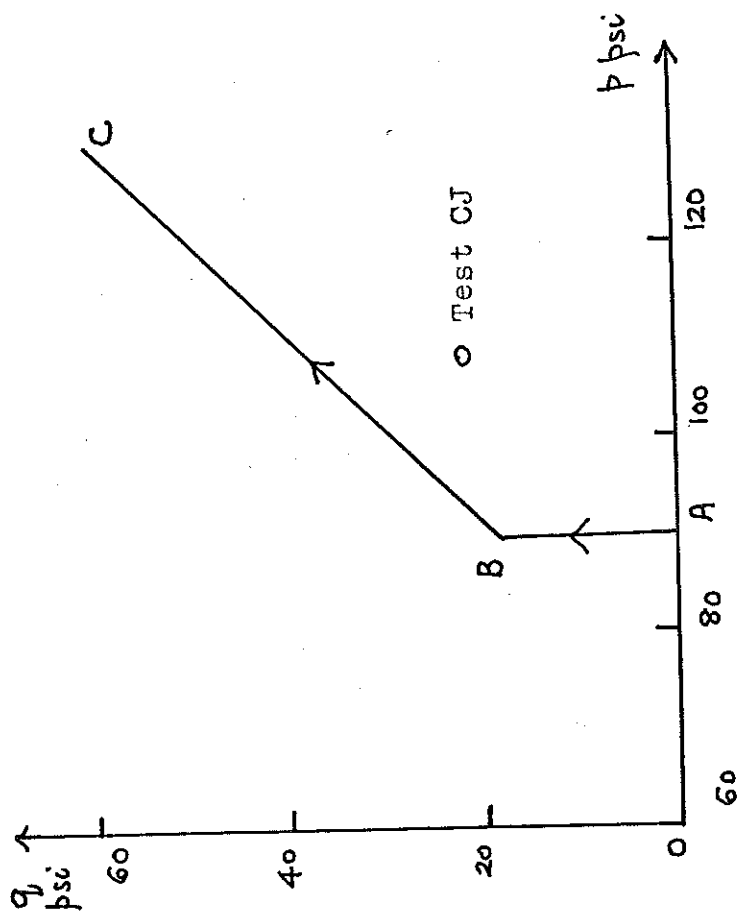
Strain increment ellipse for stress increments of equal magnitudes



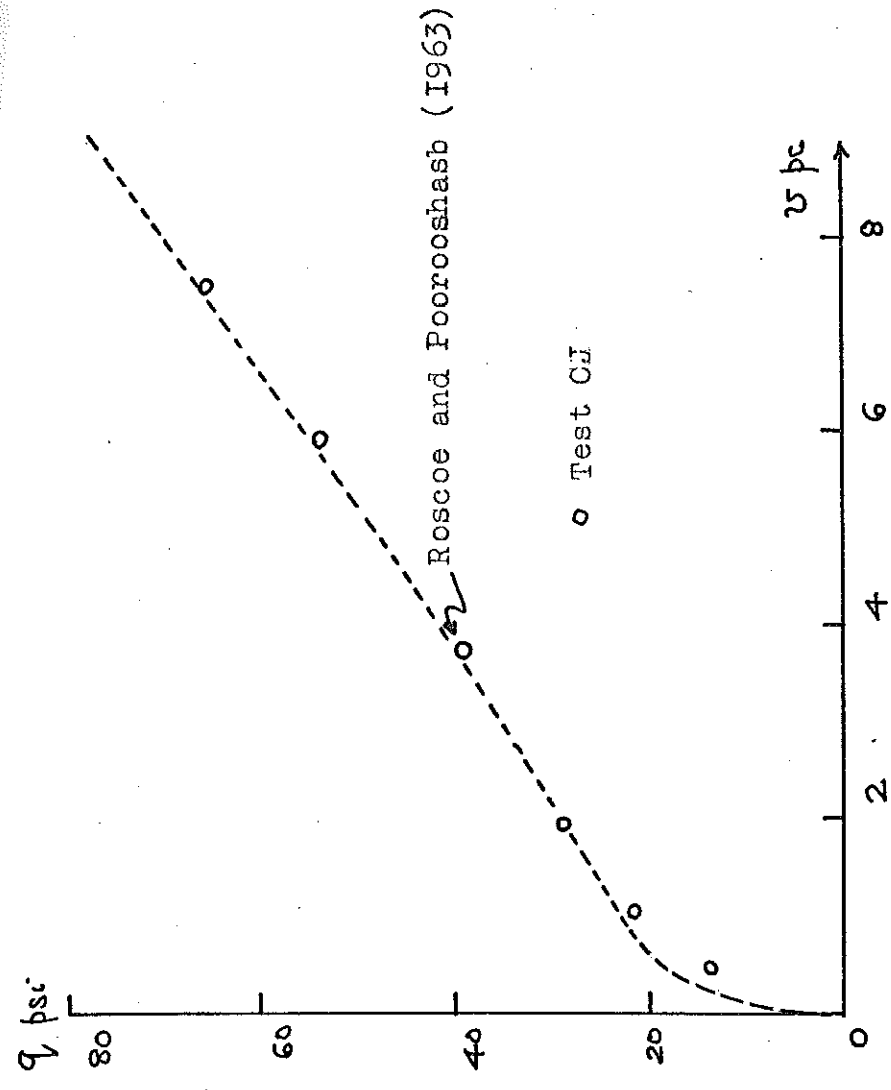
Stress increment vectors of equal magnitudes

Fig. 6.54. Observed strain increment ellipse and the portion of the strain increment ellipse predicted by using the stress strain theory of Roscoe and Poorooshasb (1963)

$$\eta = 0.69$$



Stress path followed by specimen CJ



The (q, v) characteristic of specimen CJ

Fig. 6.55. The stress path followed and the observed and predicted (q, v) characteristics of specimen CJ.

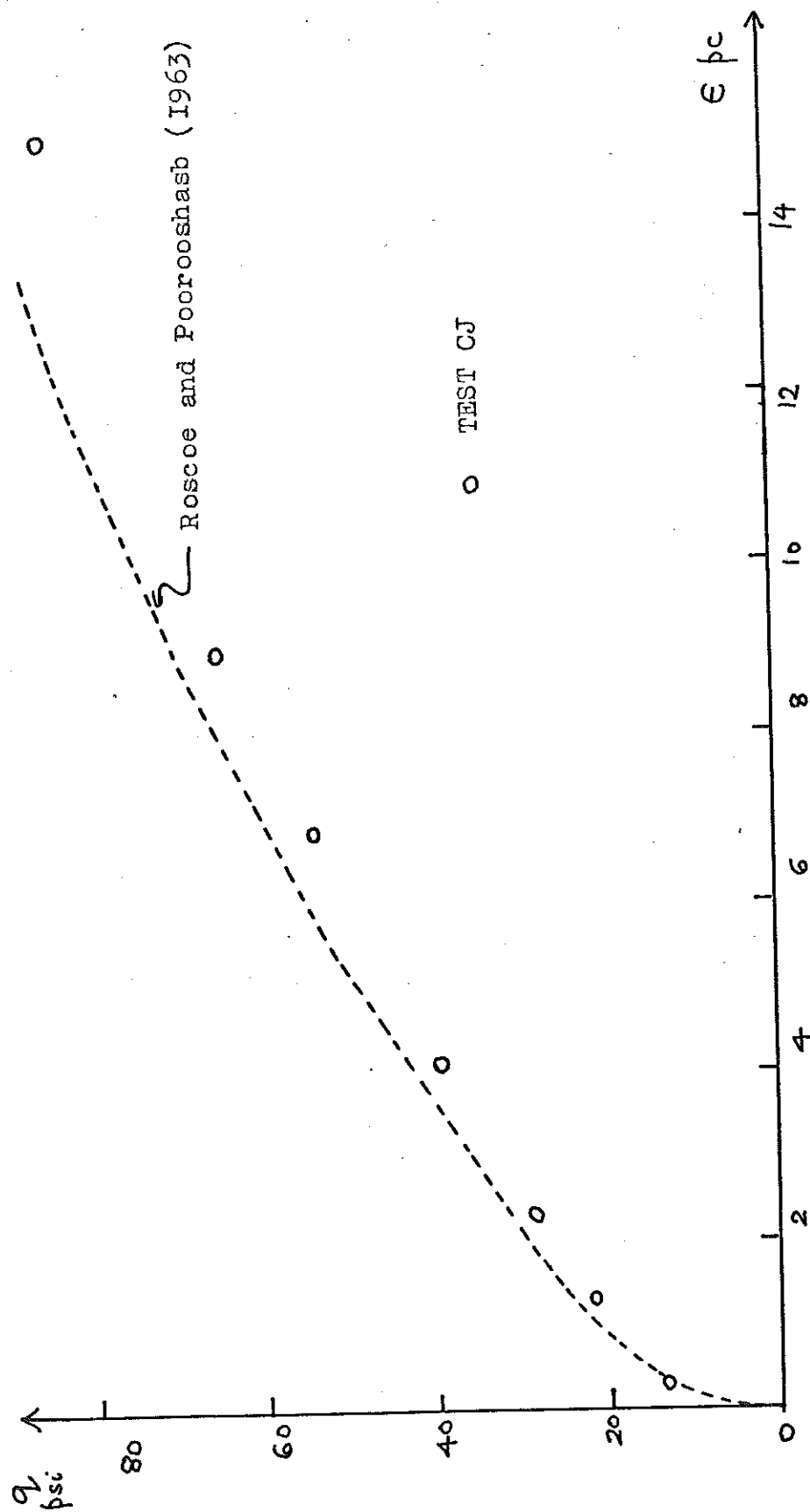
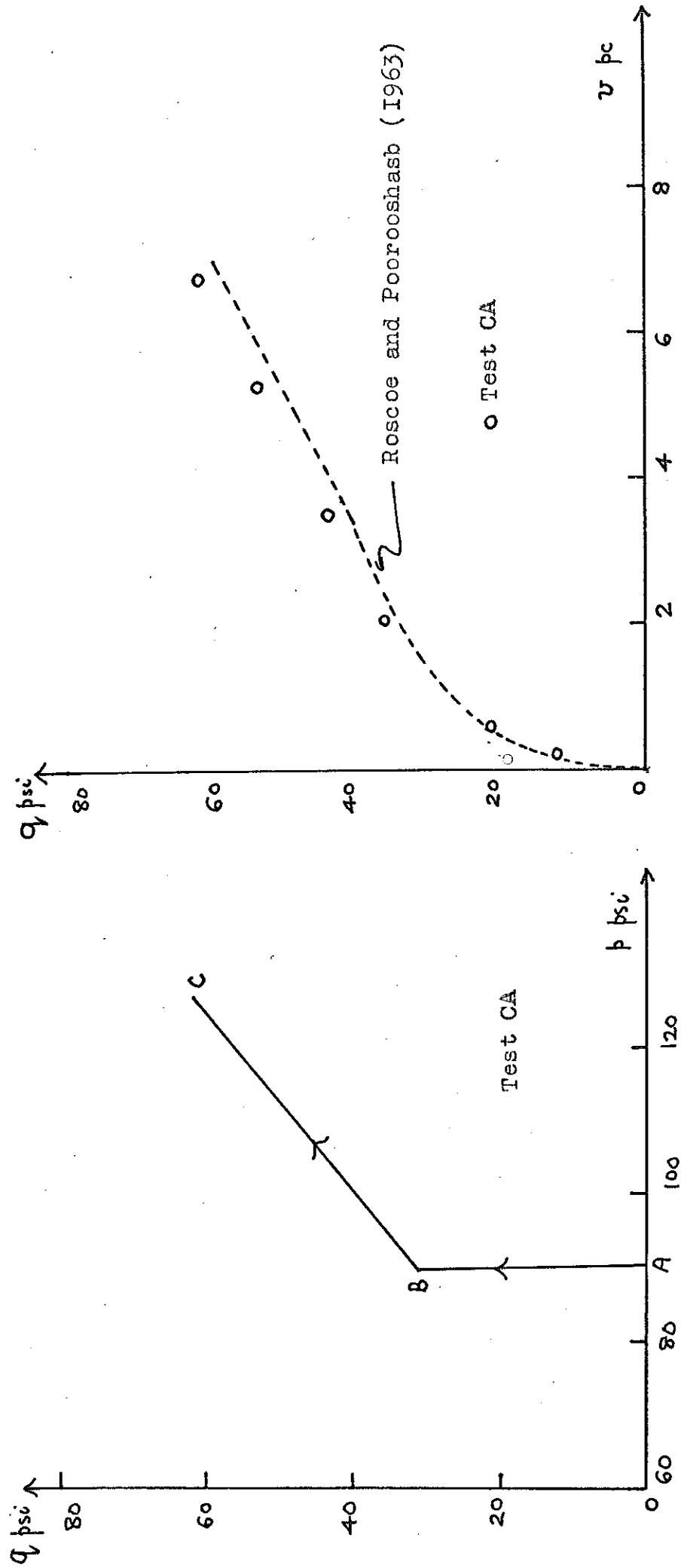


Fig. 6.56. Observed and predicted (q, ϵ) characteristics for specimen CJ.



Stress path followed by specimen CA.

The (q, v) characteristics of specimen CA.

Fig. 6.57. The stress path followed and the observed and predicted (q, v) characteristics of specimen CA.

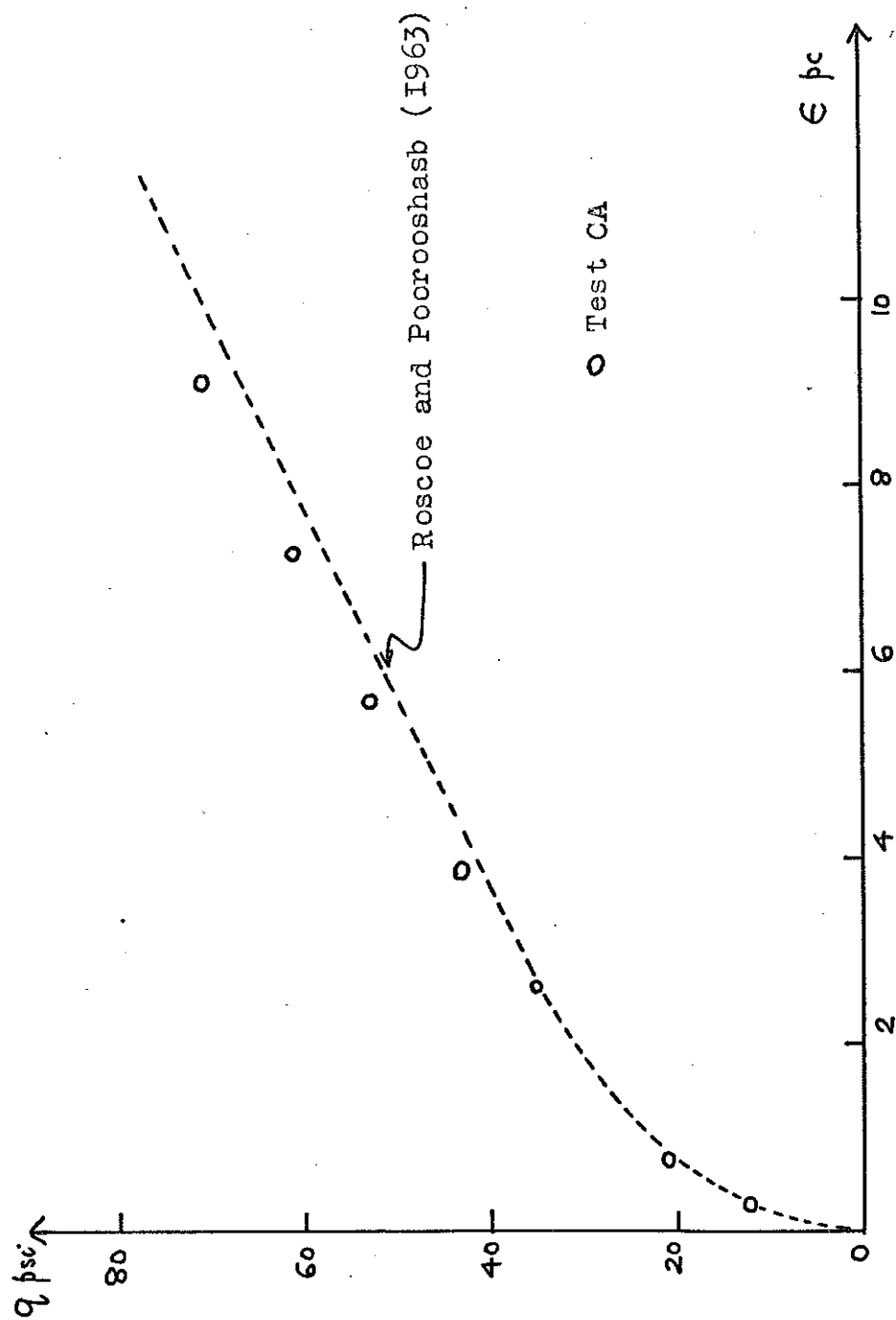
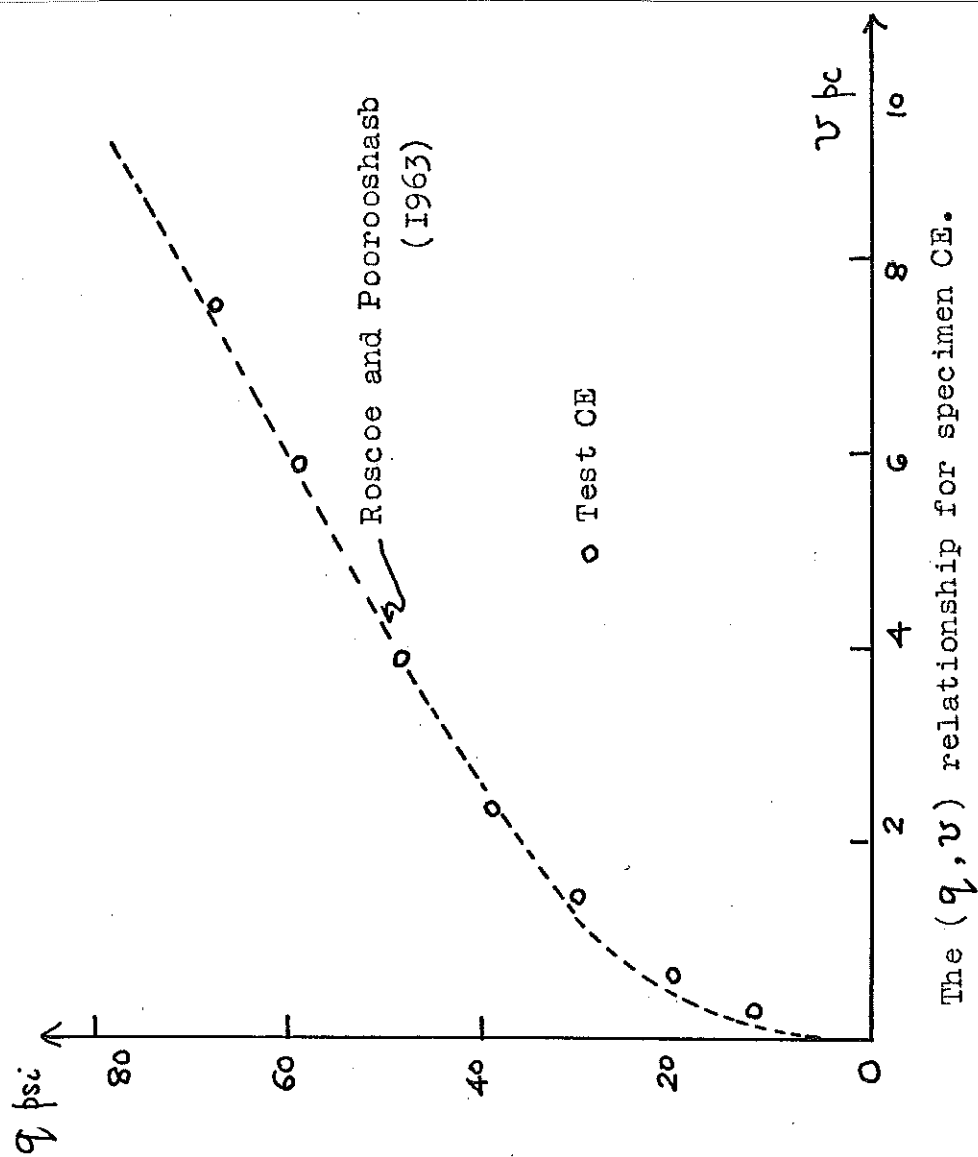
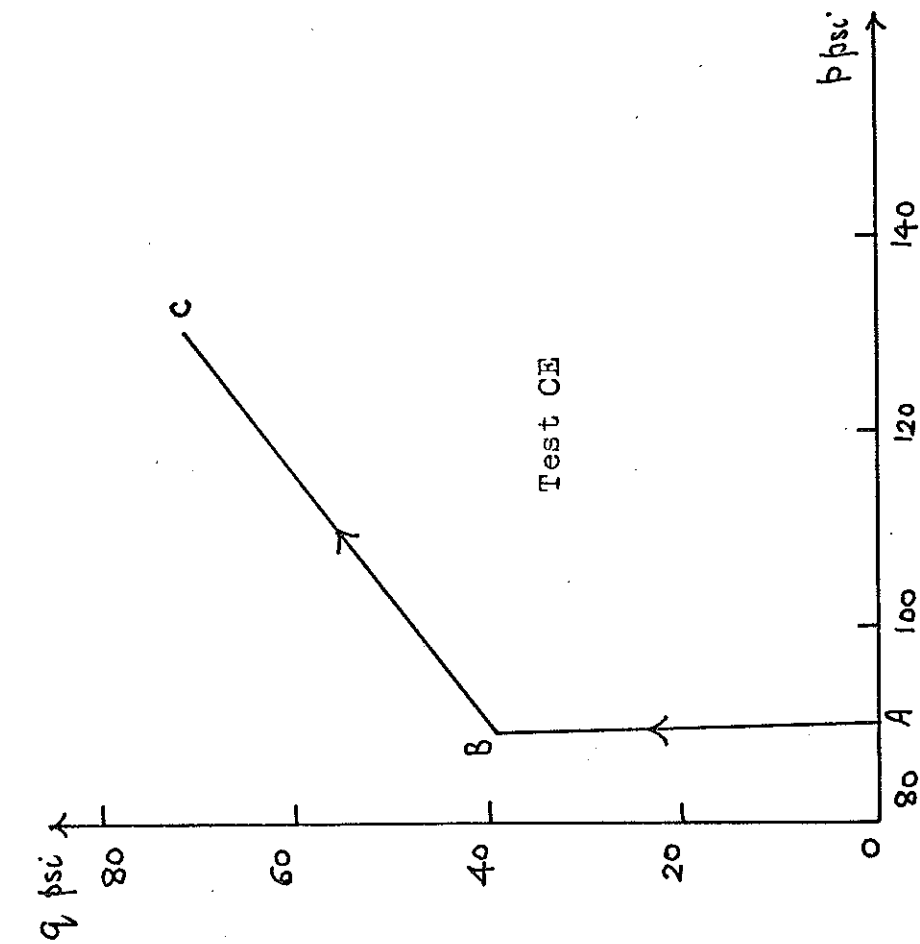


Fig. 6.58. Observed and predicted (q, ϵ) characteristics for specimen CA.



The stress path followed by specimen CE

The (q, v) relationship for specimen CE.

Fig. 6.59. The stress path followed and the observed and predicted (q, v) relationships for specimen CE

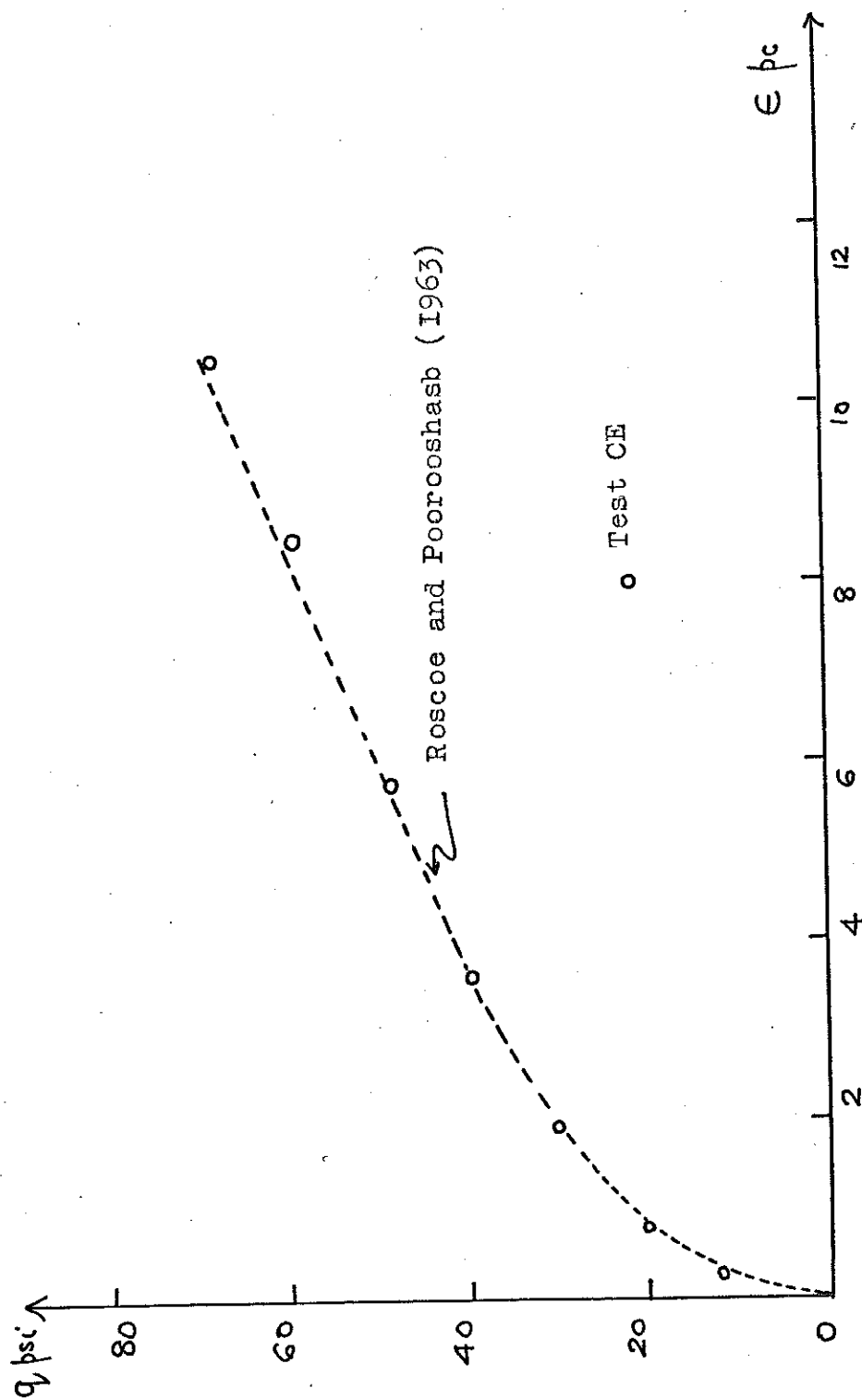


Fig. 6-60. Observed and predicted (q, ϵ) relationship for specimen CE.

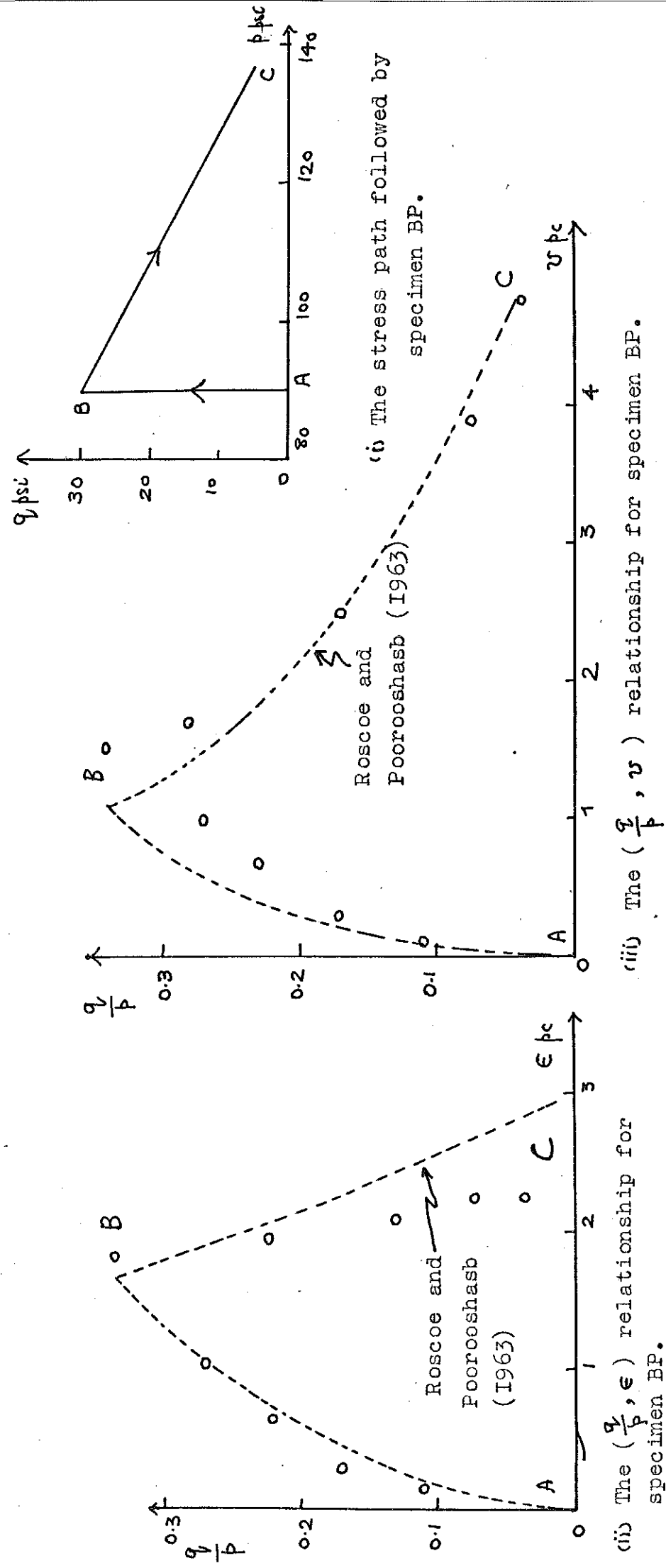
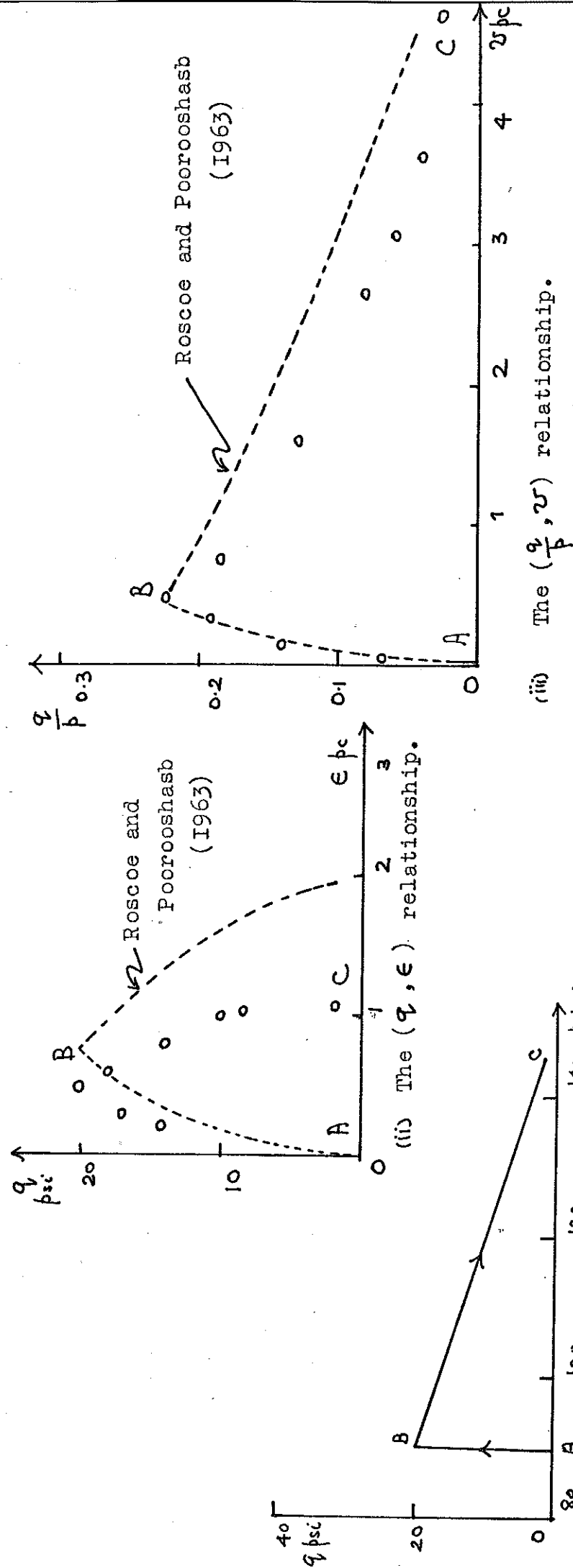


Fig. 6.51 The observed and predicted strains on sample BP.



(i) The stress path followed by specimen CO.

Fig. 6.62(i-iii). The observed and predicted strains on sample CO.

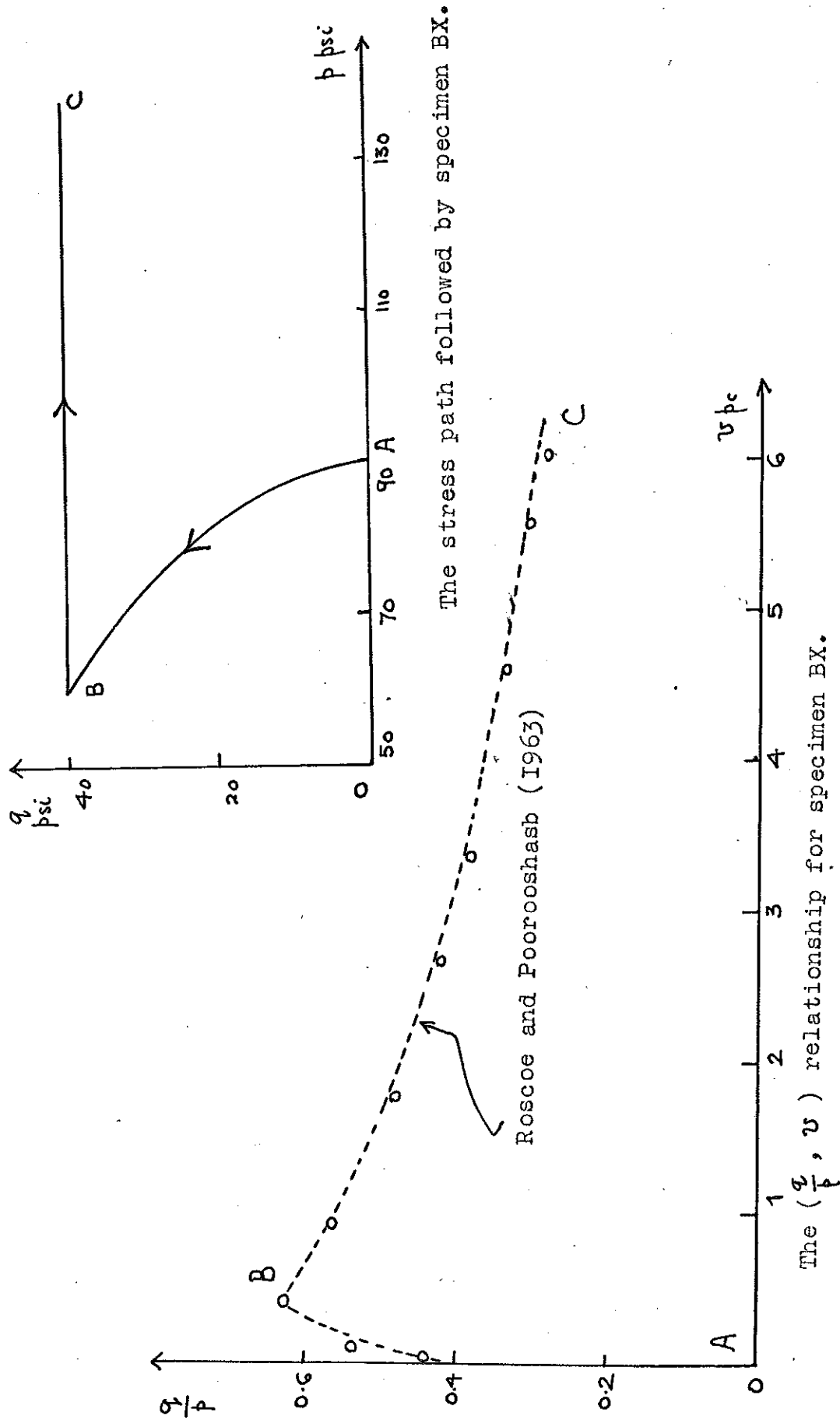


Fig. 6.63. The stress path followed and the observed and predicted ($\frac{q}{p}, v$) relationship for specimen BX.

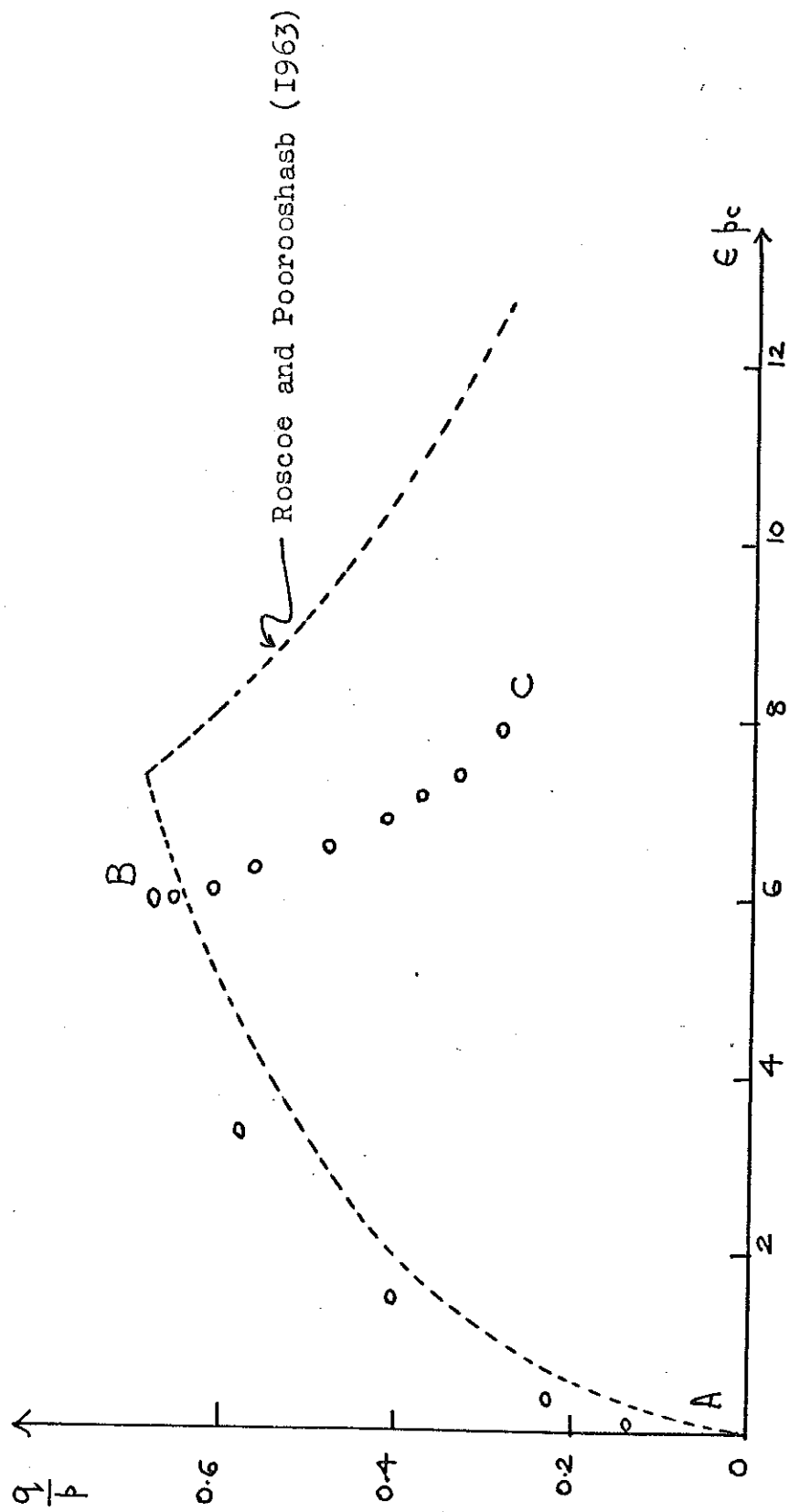
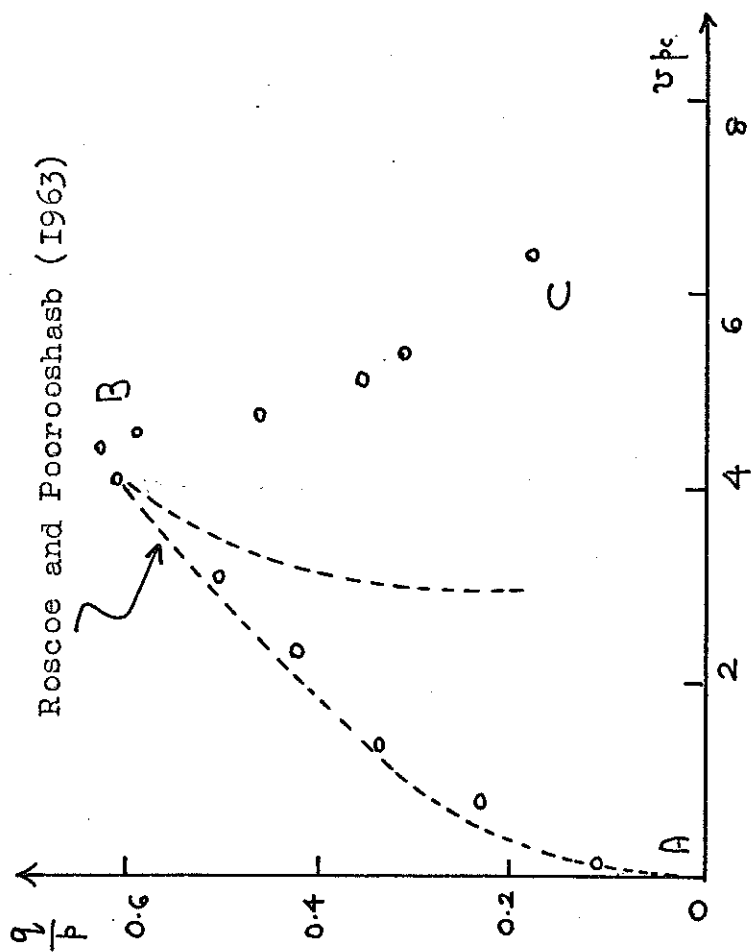
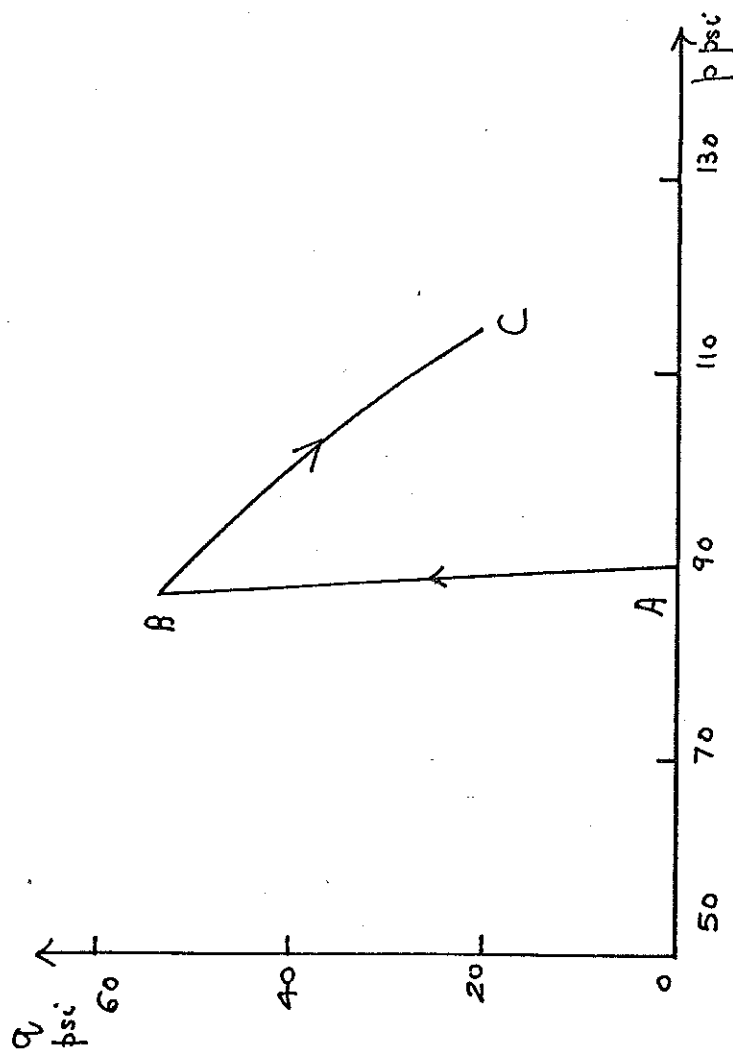


Fig. G.G.4. Observed and predicted ($\frac{q}{p}, e$) relationship for specimen BX.



The $(\frac{q}{p}, v)$ relationship for specimen CM.



The stress path followed by specimen CM.

Fig. 6.65. The stress path followed and the observed and predicted strainon sample CM.

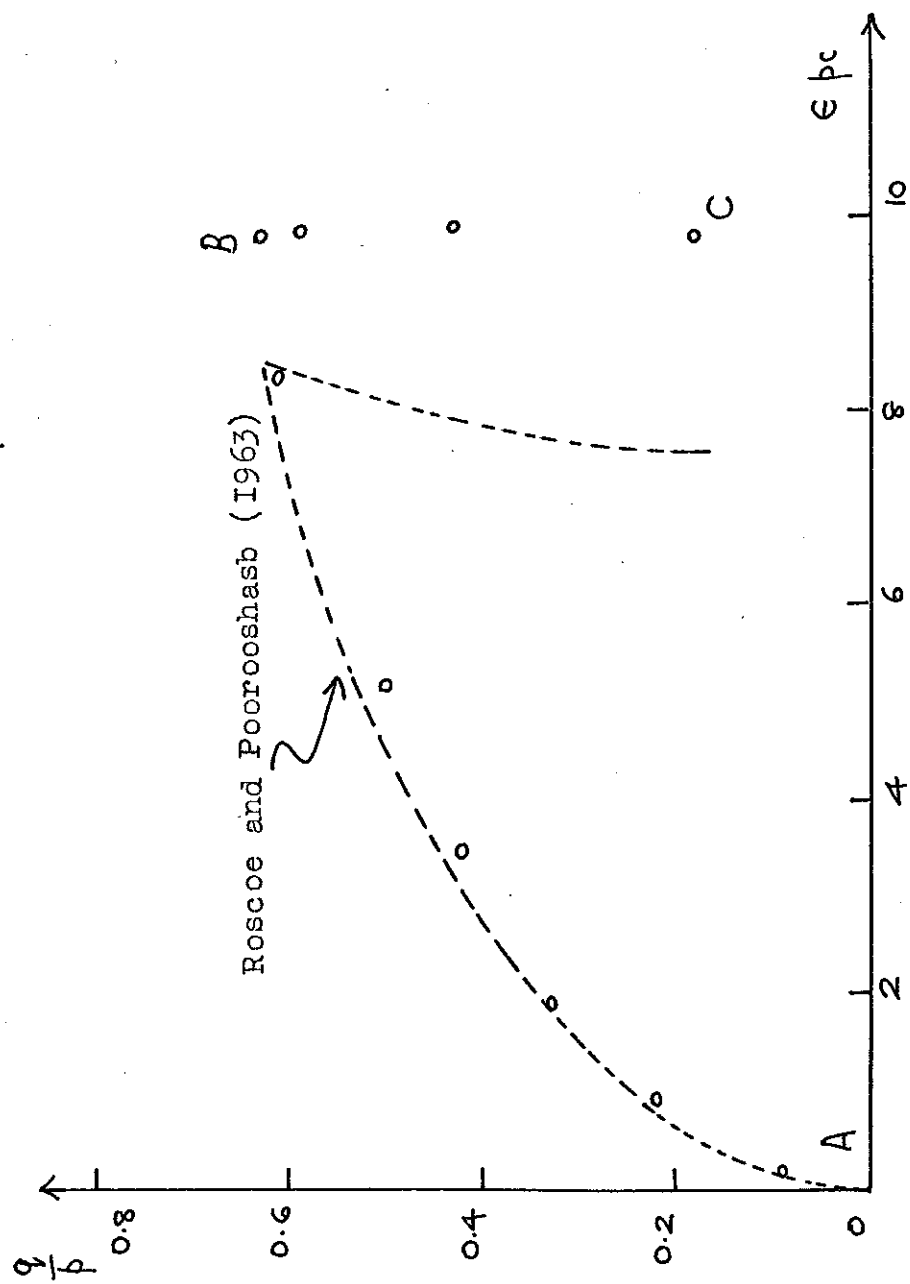


Fig. 6.66. Observed and predicted strains on sample CM.