Mullion and rodding structures are both forms of a coarse lineation developed in rocks which have been strongly deformed. In general they are parallel to fold hinges. In the past the two terms were considered more or less synonymous; and Holmes (1928, p. 16) described mullion structure as recalling the appearance of the clustered columns which support the arches, or divide the lights of mullioned windows, in Gothic churches. The structure is also described as rodding structure, and is typically developed in the Eirebol district, where ‘rods’ of white quartz, varying in dimensions from those of telegraph poles to those of walking sticks, lie parallel to each other down the dip slope of the Moine Schists. Where minerals of elongated habit like hornblende or biotite are present in the rocks showing mullion or rodding structure the crystals are arranged parallel to each other and to the dip and plunge of the folds.

I have distinguished between these two types of structure; and have confined the term mullion to the structures which have been formed from the country-rocks themselves (Fig. 11.1); and rods to those which have been developed from quartz or other minerals that have segregated in, or have been introduced into the rocks while movement was in progress.

The first use of the term mullion structure is not known, but it was referred to in print by Hull, Kinahan and Nolan in 1891, who observed it in Donegal, Ireland. They employed the term as if it were one which was already familiar to them, but no earlier reference has been found. Fermor (1909) observed similar structures which he described as ‘parallel striated and grooved prisms suggesting logs of wood’, in the manganese deposits of India, and named them ‘slickensides-grooving’. In 1924 he gave examples illustrating the parallelism of such coarse linear structures to the plunges of the local folds. ‘Corduroy structure’ was a term suggested for all varieties of lineation which formed ridges or undulations on the rock surface, by Bailey and MacCallien (1937, p. G. Wilson, Introduction to Small-scale Geological Structures © G. Wilson 1982
103). They included the rippling of schists, gaufrage, and microfolding etc., together with mullion structure, under this term. Leith (1923, p. 100) considered mullions as being a coarse form of slickenside striation, like the Rodadero (Gregory 1914), an idea which was commonly held by early workers in the North-West Highlands of Scotland. This theory was modified by Read in 1926, when he suggested that structures had resulted from the interaction of two deformations — the first a compression normal to the lengths of the mullions; and the second, a stretching parallel to their lengths (Read & Phemister 1926). Coles Phillips (1937, p. 597) supported Read after having studied the

Figure 11.1 (a) Steeply plunging mullions, Dalradian Series, near Portsoy, Banffshire, Scotland.