

of similar variety in point of size. The humblest grass in our meadows belongs to the same natural order as the tall bamboo, that, shooting up its panicles amid the jungles of India to the height of sixty feet, looks down upon all the second-class trees of the country. Again, the minute forked spleenwort of Arthur Seat, which rarely exceeds three inches in length, is of the same family as those tree-ferns of New Zealand and Tasmania that rise to an elevation of from twenty to thirty feet. And we know how in the ferns provision is made for the attainment and maintenance of the tree-like size and character. The rachis,

e v f m d

EAST INDIA TREE FERN.\*
(Asophila perrotetiana.)

SECTION OF THE STEM OF TREE-FERN.†
(Cyathea.)

\* Fig. 21, ra, Rachis, greatly thickened towards its base by numerous aerial roots, shot downwards to the soil, and which closely cover the stem.

+ Fig. 22, m, Cellular tissue of the centre of rachis; d, similar tissue