everywhere covered, stem and branch, by thickly set scale-like leaflets, that, suddenly narrowing, terminate in exceedingly slim points.   It has, however, proportionally, a stouter stem than Lycopodium ; its leaves, when seen in profile, seem more rectilinear and thin ; and none of its branches yet found bear the fructiferous stalk or spike.   Its resemblance, however, to this commonest of the Lycopodia,—a plant that may be gathered by handfuls on the moors by which the flagstones are covered,—is close enough to suggest a new reading of the familiar adage on the meeting of extremes.   Between the times of this ancient fossil,—one of the oldest of land-plants yet known,—and those of the existing club-moss that now scatters its light spores by millions over the dead and blackened remains of its remote predecessor, many creations must have intervened, and many a prodigy of the vegetable world appeared, especially in the earlier and middle periods,— Sigillaria, Favularia, Knorria, and Ulodendron,—that have had no representatives in the floras of latter times ; and yet here, flanking the immense scale at both its ends, do we find plants of so nearly the same form and type, that it demands a careful survey to distinguish their points of difference.   Here, for instance, to illustrate the fact, is there a specimen of *Lycopodium clavatum*, from one of these Caithness moors, that agrees branch for branch, and both in the disposition of its scales and in general outline, with the specimen in the stone. What seems to be an early representative of the Calamites occurs in the same beds.   Some of the specimens are of large size,—at least from nine inches to a foot in circumference,— and retain their thickness, though existing as fragments several feet in length, with but little diminution throughout. They resembled the interior casts of Calamites in being longitudinally furrowed ; but the furrows are flatter, and are themselves minutely striated lengthwise by lines as fine as hairs ; and, instead of presenting any appearance of joints, there run