In the beds of the grès bigarré there are found thin beds and concretions of magnesian limestone; and above this is a more extensive formation of smoke grey limestone called *muschel-kalk*, abounding in organic remains. In this limestone, the beautiful fossil, the lily encrinite, is found. (See the cut.) The muschel-kalk occurs also in Germany, but is entirely wanting in England. In its mineral character it bears a near resemblance to the limestone called lias, but it is sep-



arated from the lias of the Vosges by thick beds, corresponding with the English red marl, but called by the French marnes irrisées, from their spotted and variegated colours. The fossils in the muschelkalk bear a nearer relation to those in the lias than to the shells in the magnesian limestone below it : but neither belemnites nor gryphites occur in this limestone in the Vosges. Its chief fossils are the lily encrinite, two species of ammonite, the terebratula subrotunda, and a species of muscle. According to M. E. Beaumont, were it not for the intervention of the muschel-kalk, there would be a complete passage of the red sandstone into the red marl, as occurs in England. It deserves attention, that the lily encrinite has just been discovered in limestone brought from Ireland to the Isle of Wight. The drawing I have seen of it leaves no doubt of the fact; but whether the limestone be mountain limestone, as it is called, or the muschel-kalk, remains to be determined. Thick beds of red marl, with fibrous gypsum, compose the upper part of the new red formation in the midland counties of England: the red marl is, generally spotted, and striped by greenish and yellow marl.