

remarkably abrupt — an excellent wedge, both in consistency and form — instead of having acted on the surrounding depositions, as most of the south country traps have done that have merely issued from a vent, and overlaid the upper strata, it has torn up the entire formation from the very bottom. Imagine a large wedge forced from below through a sheet of thick ice on a river or pond. First the ice rises in an angle, that becomes sharper and higher as the wedge rises; then it cracks and opens, presenting its upturned edges on both sides, and through comes the wedge. And this is a very different process, be it observed, from what takes place when the ice merely cracks, and the water issues through the crack. In the one case there is a rent, and water diffused over the surface; in the other, there is the projecting wedge, flanked by the upturned edges of the ice; and these edges, of course, serve as indices to decide regarding the ice's thickness, and the various layers of which it is composed. Now, such are the phenomena exhibited by the wedge-like granitic ridge. The Lower Old Red Sandstone, tilted up against it on both sides, at an angle of about eighty, exhibits in some parts a section of well nigh two thousand feet, stretching from the lower conglomerate to the soft, unfossiliferous sandstone, which forms in Ross and Cromarty the upper beds of the formation. There is a mighty advantage to the geologist in this arrangement. When books are packed up in a deep box or chest, we have to raise the upper tier ere we can see the tier below, and this second tier ere we can arrive at a third, and so on to the bottom. But when well arranged on the shelves of a library, we have merely to run the eye along their lettered backs and we can thus form an acquaintance with them at a glance which in the other case would have cost us a good deal of