

Mackinac and Cheboygan. Mackinac Island, which we have talked about, is of Corniferous Limestone. The eastern margin of this dish is at London, in Ontario, and the western is under Lake Michigan. A little nearer the center of the state we find the margin of the next overlying group—the Hamilton. So the other groups follow as the successively smaller dishes. The top dish consists of the Coal Measures. It is a pretty flat dish, however, since the middle is about as high as the margin.

That is one kind of arrangement which we observe. More frequently, however, the arrangement is more like a pile of long, broad, thin troughs without ends. In this case you perceive that each formation goes down on one side and comes up on the opposite side. But at the ends, they may not appear at the surface. Such an arrangement of strata is called *synclinal*, and the line along the middle is the *synclinal axis*.

Still another arrangement is quite as common. Suppose we turn our nest of wooden dishes upside down, and suppose that is their natural position. They represent so many formations still. Then suppose we saw through the nest horizontally in such place as to saw off all the bottoms except that of the smallest dish. It is done. Now you see the edges of the formations presenting themselves in concentric outcrops. Plant yourself on the inner or middle formation. Notice that this now *underlies* all the others. This also, *dips* toward all the others, and passes under them out of sight. Then fix your attention on the outcrop of the next dish. Notice that this *dips away* from the first one—the older one, first laid down; and that it *dips toward* the newer or overlying formations. And so to the uppermost or newest—*each newer dipping away from all the older*.

This arrangement of strata is common. The city of Cincinnati stands on an upward bulge of Cambrian rocks. All around, at the distance of some miles, may be seen the outcropping edge of the Silurian System. The Silurian strata overlie the Cambrian, as shown in the Table, page 73, and