

Where a series of strata has been so folded and inverted that its reduplicated members appear to dip regularly in one direction, the structure is termed *isoclinal*. This structure, illustrated on a small scale among the curved Silurian rocks shown in Fig. 247, occurs on a grand scale among the Alps, where the folds have sometimes been so squeezed together that, when the tops of the arches have been worn away, the strata could scarcely be supposed to have been really inverted, save for the evidence as to their

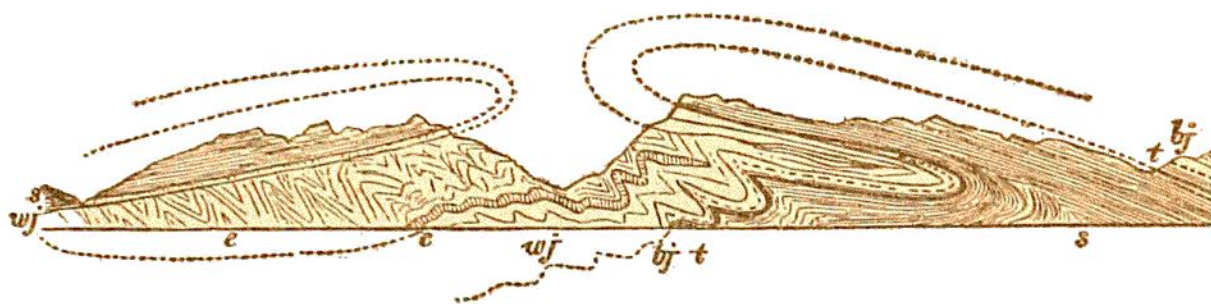


Fig. 249.—Inversion and Thrust-plane among the mountains south of the Lake of Wallenstadt, Cantons Glarus and St. Gall (A. Heim).

e, Eocene; *c*, Cretaceous; *w.j.* White Jura thrust upward on the left hand over the plicated Eocene; *b.j.* Brown Jura; *t*, Trias; *s*, Schistose rocks, perhaps metamorphosed Palæozoic formations.

true order of succession supplied by their included fossils. The extent of this compression in the Alps has been already (p. 539) referred to.⁵ So intense has been the plication, and so great the subsequent denudation, that portions of Carboniferous strata appear as if regularly interbedded among

tion could bring the White Jura where it lies comparatively undisturbed on the edge of the excessively plicated Eocene beds. It has evidently been pushed over the latter, the line of junction between them being a "thrust-plane" (p. 915).

⁵ See also F. M. Stapff, "Zur Mechanik der Schichtenfaltungen," *Neues Jahrb.* 1879, pp. 292, 792. A fine series of sections illustrating the various features of mountain structure may be found in the plates accompanying the "Materiaux pour la Carte Géologique de la Suisse." See especially Livraison xvi. on the Vaudois Alps by Prof. Renevier; Livraison xxi. by E. Favre and Schardt, on Canton de Vaud, etc., and xxv. by A. Heim on the High Alps between Reuss and Rhine. An interesting study of an abnormal system of folds and faults involving Triassic, Jurassic and Cretaceous rocks in the south of France, will be found in M. Bertrand's monograph, "Le Massif d'Allauch," *Bull. Carte. Geol. France*, iii. No. 24, 1891, p. 283.