

gles be observed in another way (as on a cottage roof at B), we may learn that an apparently inclined surface may really be horizontal (as from *a* to *b* and from *c* to *d*), and that by the effect of perspective, slopes may be made to appear much steeper than they really are.²⁷

Much evil has resulted in geological research from the use of exaggerated angles of slope in sections and diagrams. It is therefore desirable that the student should, from the beginning, accustom himself to the drawing of outlines as

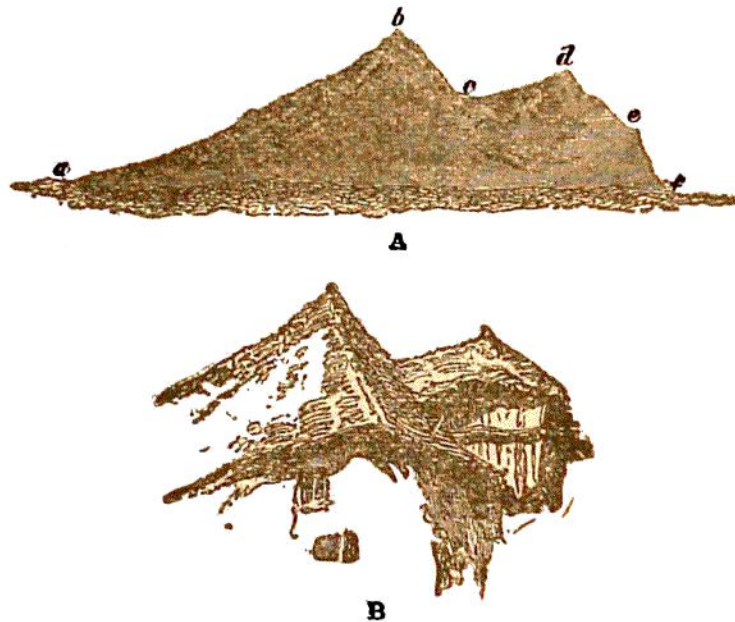


Fig. 2.—Angles of Slope where the eye may be deceived by perspective. (After Ruskin.) A, Mountain outline; B, The same outline as shown by cottage roof

nearly as possible on a true scale. The accompanying section of the Alps by De la Beche (Fig. 3) is of interest in this respect, as one of the earliest illustrations of the advantage of constructing geological sections on a true scale as to the relative proportions of height and length.²⁸

²⁷ Mr. Ruskin has well illustrated this point. See "Modern Painters," vol. iv. p. 183, whence the illustrations in the text are taken.

²⁸ "Sections and Views, illustrative of Geological Phenomena," 1830. Geol. Observer, p. 646.



Fig. 3.—Section from the Jura to Mont Blanc, on the same scale for length and height. *j*, Jura; *s*, Lake of Geneva; *a*, Algruille de Varenis; *b*, Brevent; *m*, Mole; *n*, Mole; *c*, Algruille de Varenis; *d*, Brevent; *k*, Mont Blanc