

lent. Thus in the Swiss Alps we have the massifs of the Glärnisch, the Tödi, the Matterhorn, the Jungfrau, etc.

Very exaggerated notions are common regarding the angle of declivity in mountains. Sections drawn across any mountain or mountain-chain on a true scale, that is, with the length and height on the same scale, bring out the fact that, even in the loftiest mountains, the breadth of base is always very much greater than the height. Actual vertical precipices are less frequent than is usually supposed, and even when they do occur, generally form minor incidents in the declivities of mountains. Slopes of more than 30° in angle are likewise far less abundant than casual tourists believe. Even such steep declivities as those of 38° or 40° are most frequently found as *talus*-slopes at the foot of crumbling cliffs, and represent the angle of repose of the disintegrated débris. Here and there, where the blocks loosened by weathering are of large size, they may accumulate upon each other in such a manner that for short distances the average angle of declivity may mount as high as 65° . But such steep slopes are of limited extent. Declivities exceeding 40° , and bearing a large proportion to the total dimensions of hill or mountain, are always found to consist of naked solid rock. In estimating angles of inclination from a distance, the student will learn by practice how apt is the eye to be deceived by perspective and to exaggerate the true declivity, sometimes to mistake a horizontal for a highly inclined or vertical line. The mountain outline shown in Fig. 2 presents a slope of 25° between *a* and *b*, of 45° between *b* and *c*, of 17° between *c* and *d*, of 40° between *d* and *e*, and of 70° between *e* and *f*. At a great distance, or with bad conditions of atmosphere, these might be believed to be the real declivities. Yet if the same an-