

of some 80 ft. from the portion which was, by that in rear of it pushed forward ; and the debris from a height of cliff of say 100 ft. were only projected, and that, down hill or to the level of the wharves, some 40 ft. below, to a horizontal distance of not over 150 ft.

Therefore again I say that if the so-called rough sketch you give of the general features of the occurrence, be reliable, some additional force or of an explosive nature, as conjectured, must have been at hand to thrust the debris to the distance shown in the engraving.

If at any time MM. Editors, more precise data are afforded of how the cliff behaved, a vertical cross section for instance of the slide or fall or avalanch, to scale and showing thickness of deposit along the route, be forth coming ; I hope dear sirs you will reproduce the same in your ever increasingly interesting and instructive journal—for as says my paper on "The Instructiveness of failure" nothing in view of explaining future happenings of the kind, and if possible of guarding against them, can be so pertinent as when the exact cause of failure is made known ; and only by failure are we really made wise, for if a structure holds its own, it only teaches that it is strong enough to do so, while its weakest part may be many times stronger and more costly than it need be.

N. B. —Pending further information in the premises -- there being a coal mine under exploitation near of even under the foot of the mountain, an explosion may have been brought about by " fire-damp " from the coal measures penetrating the lime stone strata of which the mountain is said to be composed, accumulating in pockets, and the ignition thereof through some accidental cause ; or the burning fire damp or other gases from the mine may have reduced the carbonate to quick lime, and the subsequent penetration of water hydrating and swelling the lime may have burst out the fallen rock with such an effort as to project the debris to the distance recorded.

C. BAILLARGÉ, C. E.

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