

CIRCULAR RELATIVE TO HEIGHTS.

For the purpose of forming a general map of the North American Continent, exhibiting the plains, mountains, valleys, etc., the Smithsonian Institution has collected a large amount of material relative to *altitudes*, which has been placed in the hands of W. L. Nicholson, Esq., Topographer of the U. S. Post-Office Department, to be discussed and elaborated.

There must, however, still remain in the hands of individuals and corporations, records of an important character, which would be of great value in properly carrying out the enterprise. It is, therefore, respectfully requested that printed copies, or original manuscripts of records, especially of plotted profiles or maps pertaining to this subject, be forwarded to the Smithsonian Institution.

In stating the heights, as furnished by surveys for railroads, whether actually constructed, or only projected, it is desirable that the levellings be referred to some known point on connecting or intersecting roads, or to the water-surface (high-water, low-water, or mean-tide) of the ocean, or of one of the great lakes, or to the level of a noted stage of water (high or low) of some river. The crossings of the watercourses, ridges, and summits are particularly desired, as well as all considerable and characteristic changes of level, giving, where much difference exists, both grade-line and original surface; the levels of all intersections with other roads are important as means of comparison, and for checking results.

Due credit will be given to all contributors to this work.

JOSEPH HENRY,

Secretary Smithsonian Institution.

SMITHSONIAN INSTITUTION, Washington, D. C.

Form of Schedule for Record of Altitudes.

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