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CONTENTS:

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Prof. J. McKeen Cattell, Garrison-on-Hudson, N. Y.

THE VEGETATION OF THE HOT SPRINGS OF YELLOWSTONE PARK.

MUCH of the beauty of the so-called 'formations' of Yellowstone National Park lies in the brilliant tints of the mineral deposits, wet from the streams of hot water that issue from the thermal springs and geysers.

Formation is a general term employed to designate any mineral matter deposited by the geysers and hot springs. The amount of formation in the Park is extraordinarily large, but it is chiefly confined to four regions. At Mammoth Hot Springs there is an immense deposit of calcium carbonate, the sides of which are terraced with pulpit-like projecting basins, as is shown in figure 1.*

These interesting basins are formed by the activities of numerous hot springs upon the top and along the sides of the terraces. The entire pile of dazzling white mineral has been likened to the front of a glacier. The Norris Geyser Basin, the Lower Geyser Basin and the Upper Geyser Basin are similar to one another in certain respects. They are extensive expanses of formation chiefly silicious in composition. All of them are situated in the floor of a valley and cover acres on either side of the Firehole River, which flows between banks of snowy whiteness. Upon these formations are scattered the numerous mounds built up by the geysers, and here also are many clear pools of hot water. The latter are of various sizes, some mere shallow puddles which sizzle and sputter, but most of them deep basins with sloping sides, and one at least a pond a hundred yards wide. The water is almost always scalding hot, sometimes even boiling violently in the middle of the pool.

*Figures 1, 5 and 7 are taken from the Ninth Annual Report of the United States Geological Survey.