The urethane resembles the corresponding urethane of synthetic tetrahydro-cannabinol in solubilities, but was a higher melting point (about 216° C with reddening and gas evolution compared with that of tetrahydro-cannabinol at about 208° C with reddening and gas evolution). The analysis suggests a derivative of methyl cannabinol: C 65.12; H 6.00. The preparation could be repeated. A derivative of an active product which is possibly a tetrahydro-cannabinol has been obtained directly from the red oil.

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DESIGNATION OF LOCATIONS ON MAPS AND PHOTOGRAPHS

IN recent issues of SCIENCE, two methods of location designation have been described. One of these is a "gridiron" system,[1] the other employs "latitudes and departures."[2] Both are entirely workable within reasonable limits; neither is suitable, without some or much modification, for use with maps or photographs which are to be reproduced on a scale differing from that of the original.

A third method, which may be called a method of intersection, in which the designation remains unchanged regardless of the enlargement or reduction of the original, is here presented. Through the point to be designated and the lower left corner of the map, draw a line. Record the angle between this line and the lower margin of the map. Repeat the process with a line through the point and the lower right corner. A typical actual designation, using this system, is: *Lake Nokoni,* Rocky Mountain National Park Quadrangle, L 51½°, R 56½°. The letters R and L before the angles refer to the right and left corner angles, respectively.

It will be noted that these designations are unaltered by any change in scale of the map, through reproduction or otherwise, and that they may be used with equal facility on photographs or sketches.

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KARL FRIEDRICH GAUSS AND HIS FAMILY RELATIVES

IN this crisis of civilization the reflections of one too old for active service turn toward the history of the human progress that is now at stake. The appearance of a familiar name in the American news is a reminder of the great achievements coming from the classic ground of the Georgia Augusta at Göttingen, the famous foundation of King George the Second. In the early years of the last century a young assistant at the observatory, already a great mathematician, directed his attention to the philosophy of geodesy. He recognized that an observer at station A could make his survey of his neighborhood by use of the fixed stars as a frame of reference; while an observer at a distant terrestrial station B could likewise make a local survey, by aid of the same framework of stars now however in quite different relative position. The two observers or any set of such pairs could know nothing more about their mutual relations if they were outside each other's range of vision owing to the protuberance of the earth's curvature; unless they had the property of locomotion, and could carry measuring chains about with them. The philosophical question of the relation of the results of survey by astronomical angular observations to the results of a chain triangulation of the non-spherical surface, and the foundations required to express their mutual consistency in a single scheme impressed the attention of Gauss so far as even to entice him to undertake a practical survey in the kingdom of Hanover with that end in view. This was the beginning from which the famous mathematical theory of a surface, like that of the earth, arose, considered as a self-contained region standing by itself without any support from a frame of space such as the stars had provided in the practical geodesic problem. Building on his foundation Riemann, also at Göttingen, extended it far beyond this self-contained surface of two dimensions to cognate loci of many dimensions, in results which were made available to the public only many years later, after his premature death. And more recently the Italian geometers Ricci and Levi-Civika condensed its complications into a very remarkable system of general classification of a system of related abstract concepts. This in turn has been annexed during the last great war as a foundation for a universe of mathematical relativity, which by abolishing time and space and evading all dependence of expression of results on frames of reference, has presented a mathematical model of a concise new physical world free from observational imperfections that insisted on arising from the fact of the delay in time of transmission of influences, which is in fact necessary if there is to be any analyzable medium of transmission at all.

This digression leads to my query. Long ago the great mathematician Felix Klein, well known in America, mentioned to me that he understood that

[1] C. F. Reed, SCIENCE, 93: 68, 1941.
[2] L. Hubrecht and R. O. Erickson, SCIENCE, 93: 288, 1941.