

Earth the Unconquerable

TOPOGRAPHY AND STRATEGY IN THE WAR. By Douglas Wilson Johnson. Holt; \$1.75.

It goes without saying that one who would understand the great war must know one's maps, and know them thoroughly; and while political geography is important, physical geography and topography are even more so. It might be supposed by the layman that in these days when guns hurl high explosive shells with marvelous accuracy over lofty mountain ridges and across the widest river valleys, warfare has ceased to be greatly affected by the element of terrain. But this is by no means the case. Diligent and scientific study of the matter has, indeed, brought at least one of our foremost physiographers, Professor Johnson, to the conclusion that the rôle played by land forms "in plans of campaign and movements of armies is no less important today than in the past."

In the scholarly treatise under review Professor Johnson undertakes to explain with the precision of the scientist, yet in untechnical language, the effects of topography upon the campaigns in all the principal theatres of war, from the invasion of Belgium to the conquest of Rumania. Taking the great areas of combat one by one, he first portrays, with the aid of numerous drawings and pictures, the topographic features that would be likely to affect either offensive or defensive military operations, and follows with a running account of the campaigns that actually took place, carefully interpreted with reference to the land forms described. The descriptions are models of vivid presentation, and the narratives make up a summary of military operations which has value quite apart from the purpose which the author has primarily in view.

In the chapters on the western theatre of war topographic reasons for the invasion of Belgium are made perfectly clear. It is shown that while the terrain of eastern and northeastern France offers four great routes from Germany to Paris, three of these were impracticable under the conditions existing in August, 1914. Germany found herself simultaneously at war with three leading powers—Russia, France, and Great Britain—and, as every one knows, the plan of the Kaiser's strategists was that the German legions should drive swiftly to the heart of France and bring that country to its knees before Russia should have time to mobilize and become a pressing danger on the east. The route from the

middle Rhine country westward through the Belfort gateway, that along the Moselle trench by way of Luxemburg, and that from Cologne around the Ardennes past Aix-la-Chapelle were alike impossible, because they could not be traversed with the requisite speed. The sole reason why they could not be so traversed lay in topographic conditions, or in French fortifications which these conditions had made possible.

Only the route by way of the open Belgian plain—although it was longer than any of the others—could be made to yield the desired result; and the decision was to take it, in defiance of Belgian rights, the sacredness of treaties, and the sentiment of an outraged world. Hence it is literally true that "the violation of Belgian neutrality was predetermined by events which took place several million years ago"; that is, by the geological process which gave the rock layers of northeastern France their uniform downward slope toward the west, and left the Belgian territories flat and depressed almost to the level of the sea. Professor Johnson's incisive discussion brings the reader to the opinion which manifestly was held by the German General Staff in 1914; namely, that it was a question of either invading France through Belgium or of not successfully invading France at all.

In the east as in the west, the fortunes of combat closely followed terrain. When the Russians pushed their armies into the lake country of East Prussia they lost topographic advantage and suffered disaster, but when they fell back to the line of the Bobr and Narew marshes the pursuing Germans were summarily halted. Taking the eastern campaigns as a whole, however, the treachery which left great Russian armies, and eventually the whole of the Rumanian forces, without ammunition and other supplies was of more ultimate weight in determining the course of events than topography or anything else. How topographic advantages saved Servia from Austrian subjugation until the situation was changed by Bulgaria's entrance into the war, is clearly brought out by Professor Johnson, as also the balance of topographic forces in the region of Saloniki which has so long precluded decisive action by either group of belligerents in that quarter. Better known but not less interesting is the topography of the Trentine and Isonzo fronts, described by the author in such a manner as to make the great Italian retreat of 1917 easily intelligible.

There has been much need of such a book as Professor Johnson has written, and no author

better qualified for the task could have been found. Professional physiographers may regret the treatise's brevity and its essentially popular nature. But scientific accuracy has at no point been sacrificed, and a longer, more technical work would fail utterly to serve the intelligent reading public as the present volume will serve it.

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