## CHAPTER NINETEEN

## **Defense of Rivers and Streams-Continued**

We should like to add a few observations concerning the effect of rivers and streams on the defense of a country, even if they themselves are not defended.

Any important river valley, together with its tributaries, constitutes a substantial natural obstacle, and as such it is generally an asset for the defense; but the salient features of its actual role can be defined in greater detail.

To start with, we must establish whether the river runs parallel, diagonal, or at right angles to the border-that is, to the main strategic front. If it does run parallel, we must distinguish whether it runs behind the defender's army or the attacker's; and in either case, it makes a difference how far away the army is from the river.

A defending army with a major river close (but no less than a normal day's march) behind it, a river on which it has secured a sufficient number of crossing points, is undoubtedly in a much stronger position than it would be without the river. While concern for its crossing points may deprive it of some liberty of movement, it will gain a great deal more through the security of its strategic rear, especially of its lines of communication. It must be understood that we are talking about defense on one's own territory; on hostile territory, even where the enemy army is in one's front, one must expect him in one's rear as well once one has crossed the river. Then the river would be more of a disadvantage than an advantage, because it constricts our communications. The further distant the river is from the army, the smaller its usefulness; and at a certain distance, its value vanishes altogether.

If an advancing army has to leave a river in its rear, the river is bound to impede its movements, because the lines of communication will be limited to a few crossing points. In r760, when Prince Henry marched against the Russians along the right bank of the Oder near Breslau, the river, which was only a day's march to his rear, clearly gave him a point of support. Later on, by contrast, when the Russians crossed the Oder under Chernichev, they were in a most uncomfortable position simply because of the risk of losing their line of retreat, which depended on a single bridge.

Where a river runs more or less at right angles across a theater of operations, the advantage again lies on the side of the defender. To start with, he will usually have a choice of good positions by using the river as support and the tributary valleys as reinforcements for his front (as the Prussians used the Elbe in the Seven Years War); second, the attacker must either leave one side of the river alone or split his forces. In the latter case, the defender will doubtlessly be favored by virtue of having a larger number of safe crossings than the attacker. A glance at the Seven Years War is enough to demonstrate that the Oder and the Elbe were of great help to Frederick in defending his theater of operations-that is to say, Silesia, Saxony, and the Mark-and, conversely, constituted a decided obstacle to the Austrian and Russian conquest of these provinces. Yet neither river was really defended during the course of the war. Moreover, for the most part, both ran diagonally or at right angles to the enemy's front more frequently than they ran parallel to it.

Generally speaking, a river's role as a means of transportation is its most favorable aspect as far as the attacker is concerned, provided it runs at right angles to the front: his lines of transportation are longer and he therefore has greater problems in moving up his supplies. Water transport will, therefore, come as a relief and be an advantage. It is true that here too the defender has the advantage of being able to close the river to traffic by means of fortresses from the border on; but this does not counteract the benefits that the attacker reaps up to that point. Still, several factors must be called to mind. A river may be wide enough to be of some military significance without necessarily being navigable; it may not be navigable all year round; river traffic upstream is extremely slow and often difficult; frequent bends may more than double the distance to be traveled; highways nowadays serve as the main arteries between two countries; and finally, the bulk of an army's needs is at present raised through local requisitioning rather than through commercial procurement from distant places. These considerations make it clear that water transport plays a much smaller part in the supply of armies than textbooks would have us believe. Its effect on the course of events is therefore quite remote and hard to measure.