

upon England, by means of three thousand pinnaces, or large gun boats, protected by sixty ships-of-the-line.

We see also how different it is to attempt such descents when only an arm of the sea of some leagues is to be crossed, or when one is to direct himself in open sea to great distances. The number of operations made by the Bosphorus is explained by this difference, which is decisive in these kinds of enterprises.

* Six months after the first publication of this work, thirty thousand French embarked at Toulon, made a descent upon Algiers, and, more fortunate than Charles V, took possession of that place in a few days, and of all the regency. This expedition, as well conducted by the marine troops as by those of the land, did honor to the army as well as to its chiefs.

NOTE

ON INTRENCHED CAMPS.

To the article on intrenched camps already written in 1835, (page 173,) I had added a few words upon that of Linz, of which I had only a superficial hear-say knowledge; the number of the Military Spectator which makes mention of it, having afterwards fallen into my hands, I think it my duty to rectify what I have said inexact upon that camp. It is composed of thirty-two towers, of which eight are on the left bank, with a square fort commanding the Perlingsberg. Of the twenty-four towers which are found on the right bank, seven are only half towers. The circumference of this line is about twenty-one thousand yards, (about twelve miles.) The towers are nearly five hundred and twenty-five yards from each other, and will hereafter be connected, in case of war, by a palisaded covered way. They are in masonry and of three stories, in addition to a terrace which constitutes the principal defense, since it contains eleven twenty-four pounders; two howitzers are besides placed in the upper story. Those towers are placed, as I have said, in the excavation of a broad and deep ditch, the earth of which has furnished an elevated glacis that places, it is said, the tower secure from direct shots, which I think, nevertheless, difficult for the platform where the artillery is found.

We have been assured that this great work had cost almost three-fourths of what an entirely bastioned enciente would have cost, which would have made of Linz a place of the first rank; others affirm that it has cost no more than a fourth of the expense which an enciente would have required, and that it fulfills quite another object. If those works be considered as made for resisting a regular siege, it is certain that they would be very defective. But, considered as an intrenched camp, for giving a refuge and an outlet upon the two banks of the Danube to a considerable army, it is certain also that they would fulfill sufficiently well this design, and that they would be of great importance in case of

a war like that of 1809. If they had existed at this epoch, they would probably have saved the capitol.

In order to complete a great system, it would have been better, perhaps, to surround Linz with a regular bastioned line, then to establish a line of from seven to eight towers between the eastern salient of the place and the mouth of the Traun, in a direct extent of four thousand yards only, to the end of reserving as an intrenched camp only the great bend formed by the Danube between Linz and the Traun. There would thus be had the double advantage of a fortress of the first rank, and a camp under the shelter of its ramparts; if it had been a little less vast, it would have sufficed nevertheless, for a great army, especially if they had preserved the eight towers of the left bank and the fort of Perlingsberg.

I shall not speak of the defects of this camp, for there would be necessary an exact plan of the ground upon both banks of the Danube, and although I have passed Linz many times, I do not recollect the environs sufficiently well to judge of them. What astonishes me is, that there is not at least a redoubt around Linz, to favor a retreat if the camp chanced to be forced. It will be said, perhaps, that no army could penetrate between those towers, even after the fire of some of them had been extinguished; this is not unanswerable, for in such a case it would not be easy for the adjacent towers to fire upon two armies engaged in so narrow a space, without doing as much harm to the defenders as to the enemy himself; besides, if I am well informed, the batteries could not be directed against the interior. Now, if, after having paralyzed the fire of the four towers, from 7 to 10, strong masses were pushed to Linz, God knows what a *melee* might have place, if one had to do with a Suwarof or a Ney, with the soldiers of Ismail, or of Friedland.

I have not comprehended, either, the necessity of the nine towers, 21 to 29, which are placed upon the Danube; could a debarkation in boats in the midst of a hundred thousand men be feared? Could they be for replying to the hostile field batteries placed on the left bank? Land batteries would have well sufficed, guarded by a ditch like the Danube!

For the rest, the interesting notice of Captain Allard upon those towers, proves that they are well conceived for obtaining the greatest possible fire, upon the whole periphery of attack with a small number of artillerists, although there is a manifest error in the enumeration which he has made of them. In mountainous places like Genoa, (where they are employed for the first time upon a different model,) as well as Besançon, Grenoble, Lyons, Belfort, Briançon, Verona, Prague, Salsburg,

and the forts covering the gorges of mountains, they would be valuable. With regard to the *tracé* of the camp which seems somewhat extensive, the space of from eighteen to twenty thousand yards, to be garnished completely upon a single line with a reserve, would require a hundred and fifty battalions at least; but it would rarely occur that both banks would require to be defended at the same time, the same also of the side along the Danube; now, the true defense would scarcely comprise but the distance of eight thousand yards, from the mouth of the Traun to the Danube above, so that with eighty battalions the camp would be well guarded. Denuded of troops, it would always require a garrison of five thousand men for the occupation of the towers; but those men, scattered into thirty-two small detachments, would be unable to make sorties.

Definitively, if Vienna still possessed its ancient *enceinte*, and its garrison were resolved to make good use of it, the enemy would think twice before braving two such establishments, and march without being disturbed by them upon that capital by the valley of the Danube. It could be done only by the route, through Carinthia, except after having totally defeated the army as at Ulm, at Jéna, and at Waterloo, or after having reduced the camp of Linz.

LOGISTICS.



