## Modern Tactics.

[By Capt: H: R. Gall-From Illustrated Naval and Military Magazine.]

(Continued from Page 341.)

HILE this was doing, the King, on his side, lays over his bridge. Both sides wrought hard all day and all night, as if the spade and not the sword had been to decide the controversy, and that he had gotten the victory whose trenches were first ready. In the meanwhile cannon and musket-bullets flew, and both sides had enough to do to make their men stand to their work. The King, in the hottest of it, animaled his men by his presence, and Tilly, to give him his due, did the same. The execution was so great that many officers on both sides were killed and wounded. Tilly was obliged to expose himself.

"And here, about one o'clock, much about the time that the King's bridge and works were finished, and just as Tilly had ordered his men to fall upon our ravelin wity 3,000 foot, was the brave old Tilly slain with a musket-ball in the thigh. He was carried off to Ingolstat, and lived some days afterwards; but died of that wound the same day as the King had his horse shot under him at the siege of that town.

"We made no question of passing the river here, having brought everything so forward, and with such extraordinary success; but we should have found it a very hot piece of work had Tilly lived one day more; and, if I may give my opinion of it, having seen Tilly's battery and breastwork, in the face of which we must have passed the river, I must say that whenever we had marched, if Tilly had fallen in with his horse and foot placed in that trench, the whole army would have passed as much danger as in the face of a strong town in the storming of a counterscarp. The King himself, when he saw with what judgment Tilly had prepared his works, and what danger he must have run, would often say that day's success was every way equal to the victory of Leipsic.

"Tilly being hurt and carried off, as if the soul of the army had been lost, they began to draw off; they drew off by degrees, sending their cannon and baggage away first, and leaving some to continue firing on the bank of the river to conceal their retreat.

"The river preventing any intelligence, we knew nothing of the disaster befallen them; and the King, who looked for blows, having finished his bridge and ravelin, ordered to run a line of palisadoes, to take in more ground on the bank of the river, to cover the first troops he should send over; this being finished the same night, the King sends over a party of his guards to relieve the men who were in the ravelin, and commanded 600 musketeers to man the new line of the Scots brigade.

"Early the next morning a small party were sent out to learn something of the enemy, commanded by Captain Forbes, of my Lord Reay's regiment, the King observing that they had not fired all night; and while this party were abroad the army stood in battalia, and Sir John Hepburn, whom, of all men, the King most depended upon for any desperate service, was ordered to pass the bridge with his brigade, and draw up without the line, with command to advance as he found the horse, who were to second him, came over.

"Sir John being passed, meets Captain Forbes, and the news of the enemy's retreat; he sends him directly to the King, who was by this time at the head of his army, in full battalia, ready to follow his van-guard, expecting a hot day's work of it. Sir John entreated the King to give him orders to advance, but the King would not suffer him, for he was ever upon his guard, and would not venture a surprise. So the army continued on this side of the Lech all day and the next night.

"In the morning the King ordered out 900 horse and 800 dragoons, and ordered us to enter the wood by three different ways, but so as to be able to support one another, and then ordered Sir John Hepburn with his brigade to advance to the edge of the wood to secure our retreat; and at the same time commanded another brigade of foot to pass the bridge, if need were, to second Sir John Hepburn, so warily did this prudent general proceed."

## The Passage of the Danube.

The passage of the Danube by the Russians in 1877 affords a striking example of how a formidable river should be crossed.

By the end of May the Russians had concentrated four corps at a central point in the vicinity of Bucharest, with one corps at Slatina; but their preparations for crossing the river were, from various causes, delayed until the 26th June.

Meanwhile the Turks occupied the fortresses of Nikopolis, Rustchuck, and Silistria, and collected some troops at Turtukai. They also had standing camps of observation at Sistova, Parapan, and other places along the southern bank of the Danube, which commands very considerably the northern, or Roumanian, side throughout.

The Russians had brought up their pontoon-trains, and had also collected a considerable number of boats. Between the 20th and 24th of June the various corps in the neighbourhood of Bucharest had moved down, and were concentrated between Beia and Segartcha, a position threatening Rustchuck, Sistova and Nikopolis, and leaving the Turks in ignorance as to their real intentions.

After the completion of a final and personal reconnaissance on the 24th June, the Grand Duke decided to cross at Zimnitza-Sistova, and on the same day he gave orders for the siege-batteries in position before Rustchuck and Nikopolis to begin the bombardment of those two fortresses, and issued secret orders that Zimnitza-Sistova was to be the actual spot where a crossing was to be attempted, directing the IXth Corps at Slatina to co-operate by making a feint at crossing at Nikopolis.

A Division of the 8th Corps with some light guns, and the whole of the pontoon trains and boats, were told off to form the covering darty.

This division, composed of 15,000 infantry under General Dragomiroff, arrived at Zimnitza on the afternoon of the 26th of June, and, as soon as it was dark, launched their pontoons and boats on the stream at Zimnitza. Meanwhile, during the launching of the boats five batteries were placed in position on the north bank, to the east of an island, behind which was the point of embarkation; these guns were directed to cover the passage of the covering party of infantry destined to land at the mouth of a small stream on the Turkish side, opposite to where the Russian batteries were in position.

This was about the only available landing-place, and was well chosen, as the southern bank completely commands the northern, and a small force might hope to be able to protect itself on the banks of this stream, if attacked, until reinforcements arrived.

The first detachment, 2,500 men, started to row over at 1 a.m. on the morning of the 27th of June, and landed at the mouth of the above-mentioned stream. The Turkish outposts discovered them just as they reached the shore; but too late to prevent their landing. The Turks had in the immediate vicinity two camps, computed at about 5,000 men each, and from the most easterly of these camps they advanced to oppose the covering party, when some severe fighting ensued.

The Russians being steadily reinforced by fresh boatloads of their comrades, after advancing slowly up the stream, by 8 o'clock a.m. secured some heights on its right bank or east side, which protected them from the Turks on that side. Meanwhile, General Dragomiroff was collecting the remainder of his division as it got over, and by 11 a.m. he had about 10,000 men on the west bank of the stream, and ordered a general advance against the Turkish troops occupying the heights directly facing the island, while the troops who had first landed held the ground they had captured, and protected Dragomiroff's left flank during his advance which was also covered by the fire of the guns in position on the north side of the river.

The result was that the Turks were divided and retreated in a south-easterly direction to Tirnova. By 3 o'clock the Russians had established themselves on the heights held by the Turks in the morning. The Russians lost 800 men and 31 officers killed and wounded, of whom the greater portion belonged to the regiment which landed first, and fought its way up the little stream in the morning. By dark the same evening the 2nd Division of the 8th Corps had been ferried across the stream, making in all about 25,000 infantry, under General Radetsky, and the passage was secured. Next day the bridge was commenced which was completed on the 2nd of July, when the army at once marched over

In this crossing many of the most important principles of river tactics were triumphantly demonstrated.

- 1. The collection of pontoons for bridging the stream.
- 2. Concentration of troops at a strategical point equidistant from several likely crossing places.
  - 3. Secrecy, up to the last moment, as to the actual place of crossing.
  - 4. Careful reconnaissances.
- 5. Selection of point possessing the following tactical advantages, viz. a tributary stream, which was utilized for conveying the pontoons and boats down to the point of embarkation, the presence of two islands, which covered the movements of the invaders for a considerable portion of their passage, and lessened the labour of constructing the bridge.
- 6. The selection of a favourable point to land at, in spite of the natural difficulties of the situation, owing to the entire command of the banks being on the Turkish side.

The arrangements for the embarkation of the covering troops, and for the co-operation of the batteries placed in position on the assailants' side of the river, were all very complete, and apparently everything was timed in such a manner as to ensure success.

Although the Turks did not offer a desperate resistance, still the loss incurred by the regiment which was the first to land was very severe in proportion to the number of men engaged (2,500), and at one time the opposition it encountered must have been considerable.

For a detailed account of this interesting passage, the student is again recommended to read *The Russian Army and its Campaign in Turkey in* 1877-8, F. V. Greene, U.S.

## Bridges and Fords.

Unless surprised or turned, to attempt to force the passage of a bridge, or a ford, in the presence of an enemy who still commands the passage with his guns in position, and his infantry entrenched or provided with cover, in these days of improved firearms is such a dangerous operation as to be practically almost an impossibility. It is now considered absolutely necessary to subdue the enemy's fire before a bridge or a ford can be attacked by infantry.

Forcing the passage of a river in retreat in presence of an enemy is, perhaps, the most hopeless operation that an army can be called upon to attempt.

## (To be continued.)

Lieutenant Chamberlain, R. N., has recently invented a new game called "Naval Blockade," a kind of backgammon in which the dice, when thrown, are found to give hits, misses, and "Ram, oh!" thus imparting the necessary element of chance; while rules determine the movements of the two ships, one of which is attempting to break blockade, the other to prevent the accomplishment of this object. The paraphernalia of the game takes up about the same space as that of a chess-board and men.