

reserve men available for the gun detachments, and the proportion of horses, should be increased, and a second collar-maker should be given to those batteries that have but one at present. Not unnecessarily to increase the number of officers in the junior grades, the third lieutenant for each battery may be drawn from the auxiliary army in the event of a mobilisation; but the adjutants should remain permanently with their respective batteries, otherwise it will be necessary, in the event of war, to make a number of fresh appointments, thus removing the senior non-commissioned officers from their batteries at a time when their services are most needed.

The *sous chef* artificer should be included in the number of battery non-commissioned officers, the proportion of which may not be increased.

**Eight-gun Batteries.**—The tactical unit of artillery should remain the battery of six pieces. Relieved by the formation of the divisional reserves, the battery may be handled under all circumstances, by the captain in command. Promotion might perhaps be facilitated, within certain limits, by substituting batteries of eight guns for those of six, but the change would offer no special advantages from a tactical point of view. The new battery, under a *chef d'escadron*, having two captains under him, would be less handy than the old; and although, it is true, it might easily be split into two detachments of equal strength, this advantage which would be chiefly observable from an administrative standpoint, would be counterbalanced by the retention of the captains in a subaltern position, whereby, in the long run, their self-reliance would be destroyed altogether.

**Escorts and supports for Divisional Artillery.**—Many officers, considering that the troops employed in supporting the artillery assure the safety of that arm in, at least, a very imperfect manner, have suggested the formation of a special corps to furnish permanent artillery escorts.

According to this view, each division would have attached to it for the purpose, a battalion of foot artillerymen, who would be entrusted with the duties of fascina and gabion making, battery building, &c. The mounted duty would be performed by squadrons, specially told off for the purpose armed as mounted riflemen, and equipped so that their horses could be used for draught whenever required.

Others, again, whose number, it is true, is small, hold that standing escorts would, at the best, perform with difficulty the duties thus entrusted to them. When the artillery supports consist of infantry, they observe, the latter are frequently unable to keep with the guns in rapid movements, when they are composed of cavalry the latter are often brought upon ground where they are unable to act. It is for generals to make such tactical dispositions, according to the circumstances of individual cases, as will secure the artillery against sudden and unforeseen attacks.

The German military press says that the new Prussian Manser rifle carries with extraordinary exactness at long distances. It is sighted up to 1,600 metres. The maximum rapidity, in isolated cases, is 18 shots per minute, and 12 in salvoes in exercise. In campaigns these numbers will probably decrease to 12 and 8 respectively. The Manser can be charged in half the time taken for the needle-gun, and three fourths of that occupied in loading the Chassepot.

THE KHIVAN EXPEDITION.

The latest intelligence from the seat of war confirms in general the previous news, referred to in our last impression, of the progress made by the Russian columns in Central Asia. Telegrams have arrived from St. Petersburg, dated the 18th and 19th instant, from which it appears that the Mangushlak detachment, commanded by Colonel Lomakine, effected a junction on the 26th of May with the Orenburg detachment, commanded by General Verevkine, and that the next day the Russian forces took Khodji li by storm, and put the enemy to flight. The Kbiyans numbered 6000 men, and had six guns. A second time, namely, on the 1st of June, the Kbiyans, numbering 3000 men, with three guns, made a stand at the fortified town of Mangit, when again they were defeated, and the town captured. General Kaufman had crossed the Amou Darya, and was only two days' march from Khiva. General Verevkine was at the distance of three days' march. He occupied Kungrad on the 20th of May, the Kbiyans flying before the Russian troops. The Russian flotilla from the sea of Aral was unable to get beyond Kungrad, on account of the shallowness of the water.

A telegram from Teheran, dated at noon, June 19, states that Colonel Baker, Captain Clayton, and Lieutenant Gill have arrived at that place, after having visited Tchikishlar and the Attreck. The statement in the same telegram that the Russians have abandoned Tchikishlar, and have no posts on the Persian frontier, except at Ashurade, confirms the former announcement that the men of Colonel Markosoff's command were too much exhausted to retrace their steps, and had retired on Fort Krasnovodsk. Tchikishlar, nine miles north of Hassam Gouli Bay, into which the Attreck runs, is said to be unimportant as a military position and is now reoccupied by the Turcomans.

With respect to the future of Central Asia as likely to be determined by this campaign should it end in the complete success of the Russians, it seems pretty evident, as pointed out in the Petersburg *Golos*, that Bokhara, surrounded on three sides by the frontiers of Russia, will also be occupied. "The Bokharians evidently know what is coming, and are already afraid of it, but come it must, although, perhaps not so speedily as they imagine. In addition to Bokhara, we shall require the densely inhabited and very rich Provinces of Marshi, Hissar, Kundush, and some others in that quarter. Without the annexation of these districts, Turkestan is worth nothing to us; but a single glance at the map suffices to that if we extend our frontiers in that direction we shall only be doing what is inevitable." As for our own Imperial interests in the matter, the *Russian World* publishes a Constantinople letter, in which the writer says that after taking Khiva the Russians could invade India in three months, marching the distance to Herat in twelve days. The correspondent adds that the English Ambassador at Constantinople is in conference with the Envoy of Kashgar, with a view to a joint English and Turkish protectorate of that province. This must be accepted *quantum valeat*. We would only add, on the impulse of the moment that the old policy of keeping a sort of hedge and ditch of weak States between our own frontiers and those of other Powers which threaten our security in the East, appears to be played out.

Some interesting information has been

sent by the Teheran telegrams quoted above relative to the Attreck. The river, it appears, though broad and deep a short distance from its mouth, is cut off from the Caspian by a bar with only two feet of water. About one hundred miles from its mouth it narrows greatly, and becomes unimportant, variable, and it can only be navigated by the light Turcoman boats of about six tons, and only two feet draught of water. There is bad anchorage along the shore of the Caspian from Tchikishlar to near Ashurade. Vessels of twelve foot draught cannot approach within three miles of the bay of Hassam-Gouli. Finally, the Russian Consul at Astrabad maintains Russian influence along the frontier.

How keenly Russia is watching her own interests in these regions may be judged of from the report which reaches by way of Brussels that on account of the Persian Concession to Baron de Reuter—which is the subject of remark in another column—the Russian Government has decided to impose a transit duty on all goods crossing the Caucasus.—*Broad Arrow*, 21st June.

"MONCRIEFF" SYSTEM OF MOUNTING ORDNANCE.

On Monday evening, the 9th inst., Major Moncrieff read a most interesting and able paper at the United Service Institution, entitled, "Further Observations on the Moncrieff System of Mounting Ordnance," to a large and influential meeting of officers and gentlemen, Colonel Right Hon. Lord Waverley, A. D. C., presided. In explaining the precise object of the paper, reference must be made to the report which was made in our column of a lecture by Lieutenant English on this system a short time ago, the paper produced by Major Moncrieff being in reality an explanation of defects and disadvantages alleged against his system by Lieut. English. The lecturer first referred for his explanation to the tables produced by Lieutenant English at the lecture, which showed that the 9 inch 12 ton gun, which was used for the Moncrieff carriage as compared to the 11 inch gun, had a mean error of 81.1 yards against 16 yards, and difference of deflection of 4.4 against 1.5 yards; but he stated that particularly, as there were so many of the 9 inch 12 ton guns in the Service, he was glad to find that the tables used related to an experiment of the rifling and shot, and not of the gun. It was evidently, he thought desired by Lieutenant English to reduce the advantage of horizontal exposure, by his recent lecture; but it was well known by simple experiments only that a miscalculation of range which might only cause an error of inches against a vertical target, would give an error of yards in a horizontal one. In answer to a statement as to the cost of foundations being a necessary evil in his system he remarked that he could at a much smaller cost establish his batteries on the Thames and Medway than could be done by the old system, and also without the need of men being permanently stationed there. In answer to the statement of Lieutenant English that "the one advantage of extreme lateral range is to provide against the rather improbable case of one of a small number of vessels attacking a number of heavy batteries," he remarked first if it was a true assertion, and if so, would it be true on other cases also. He thought that there would be a great advantage in the guns besides bearing over the range as allowed by firing from behind iron shields, to do so over as large a lateral range as possible as in his system, by