

Artillery Draft.

In the last report of the proceedings of the Royal Artillery Institution there is a very interesting article on the above subject by Lieut. H. A. Bethell, R.A., the chief points of which are here given:

Modern weapons and modern artillery tactics have altered the conditions under which the present system of artillery draft was established. Then the effective range of musketry was 200 yards, and of artillery 1,000 yards; now our rifles range up to 1,200 yards, yet we are taught that artillery must take its place in the front fighting line at ranges from 1,500 yards up to short rifle range. It is worth while then to inquire whether our system is as well adapted to the new order of things as to the old.

Two principal things are required of a gun team: 1. To draw a gun long distances over all sorts of ground with the least possible fatigue to the horses. 2. To stand being shot at as much as possible without being altogether disabled. Experience has shown that our present six-horse three-driver team satisfies the first of these conditions; the objection that extra work is thrown on the shaft-horse is got over by using a stronger horse than the rest of the team for this purpose. Whether in war time a supply of such extra strong horses would be available is another question. The second condition—resistance to fire effect—is a question of replacing disabled horses and combining the remnants of a partly disabled team. It is obviously best satisfied by a system in which all the horses are equipped alike, and in which any particular horse can be unhooked with the least possible delay. This is hardly the case with our present system with which among six horses we have four different noninterchangeable patterns of equipment, and in which the whole team must be unhooked to extricate a wheel-horse. The same conditions apply to men. With three drivers only the loss of one man may be sufficient to disable the whole team.

I propose to describe a system which in this respect will, I think, compare favourably with the present one. A six-horse team, each horse ridden by a gunner. Pole-draft. No kit of any sort carried on the horses, except a cotton head-rope. The whole of the present marching order kit, except the shoes, which are under the footboard, is carried in knapsacks on the axle-tree seats, and arranged so as to be used as a shield in action. Two gunners on the limber. In action the off-side gunners dismount. On the march the team is driven alternately by the three near side and three off-side gunners, the remaining three either walking or riding on the limber and axle-tree seats. The distinction between gunners and drivers is abolished. Once established, the principle that a team should be driven (when under fire) by six men, not three, it follows naturally that each of the six should be efficient both as a gunner and as a driver.

Without going into detail, the principal points of difference in equipment are:

Harness.—All universal saddles, wheeler's-breeching, like the present riding-wheeler's, connected to the collar at both ends. The horse will then hold back from his breech, through the bottom of the collar and the pole-chain. This difference of equipment will not prevent a leader from being used in the wheel without a breeching, as a horse can on emergency hold back with his neck. The bridle, a plain curb with a neck strap for picketing. No head collar. On the march, the hand horse's reins will be passed under his neck; when unlimbered the hand horse can be driven sufficiently well with one rein.

Dress.—Mounted infantry kit. Field boots or putties. The rest of the kit reduced in weight.

Arms.—Pistols all round for protection when in billets, etc., not for use in action. No swords, long or short, except for officers and staff-sergeants.

Carriages.—Tubular steel where it can be used. The chief point as effecting draft is that the weight on the limber should be carried lower down, so that—allowing for the weight of the trail—the centre of gravity should be nearly coincident with that of draft, i.e., the axletree. This will prevent jar on the necks of the wheelers from the pole; if possible, a spring trail-eye or limber-hook.

From the point of view of "resistance to fire effect" the advantages of the system above outlined are sufficiently obvious. As a system of draft pure and simple, its chief advantages are:

1st. The greatly reduced weight carried by the horses. It may be safely said that 99 per cent. of the work on service will be done on the line of march. At present the team have to carry the three men and the double marching order kit the whole time, no change or relief being possible, while, as proposed, they will carry the men only, and each horse will be ridden only half the time.

2nd. The greater flexibility afforded by a system of interchangeable men and horses. For instance, a horse with a sore back could work in his proper place, as he need not be ridden.

3rd. The activity of a team in marching order (in which order it may be assumed that a battery would always go into action) is at present much reduced by the number of loose articles of kit which are hung about them. In this respect a team carrying nothing but harness and riders would have an immense advantage.

The chief objections to which the proposed system is open are: Pole-draft—"Carriage not so well under control." This is admitted and cannot be helped. I think, however, the disadvantages are exaggerated. "Extra strain on the pole-horses."—With a proper distribution of weight, I think the strain would be less than at present, especially as it is divided between two horses.

It is urged that it takes a man all his time to become a good driver or a good gunner, and that the proposed "hybrid" would be neither. I do not consider a gunner's duties so difficult to learn as this would imply. A horse artilleryman is not generally considered to be a worse gunner because a great part of his time is taken up in riding and sword drill. As for men who cannot learn to ride, they are usually deficient in activity, and as such out of place in a field battery. The thirty limber-gunners, moreover, furnish billets for a certain number of heavyweights. "The two lead drivers would be of different minds, and would not go at an obstacle together." This is difficult to overcome by practice. With reference to this, as to the objection to pole-draft, I have never heard that the old Bengal Horse Artillery were inferior to modern batteries at getting over bad ground.

"A man should never be separated from his kit." This is an infantry notion. In India the importance attached to it is shown by the fact that a gunner's kit is carried on a camel miles away. A gunner or driver is not, like a cavalry or infantryman, a complete fighting unit, but only part of a subdivision. As soon as he is separated from his gun and waggon he ceases to be efficient, and no provision need be made for his food or clothing. It follows that the kit should always go with the gun, not with the man. Moreover, the proper use for kits in action is as bullet-proof shields. Most modern writers agree on the necessity of some form of protection. Why, however, a battery which carries some hundreds of cubic feet of boots, gray shirts, blankets, and other bullet-proof materials should encumber itself with armour plates is not apparent.

In conclusion, I may say that I have advanced these somewhat revolutionary ideas less in the hope of seeing any of them carried out than of provoking criticism and discussion from officers of more experience than myself.

The British Soldier's Pluck.

Mr. Frederic Villiers, the noted war artist and correspondent of the London *Graphic*, who has within the past few weeks lectured in several cities of Eastern Canada, while in Montreal was interviewed by a *Witness* correspondent, to whom he imparted some interesting information relative to the operations in which Britain's soldiers have been engaged in recent years:

"I want you to make a comparison with the British and the Russian soldier," said the interviewer. "You have seen both in the field?"

"Yes," said Mr. Villiers, "and there is no comparison whatever between the troops. The British are superior in every respect. I never saw Tommy Atkins to such advantage as I did when he cut his way through to the Nile. The worse our position became the more desperately he fought. I just saw their backs when the vast horde of fifteen thousand men swept down upon them. They did not get near enough for hand-to-hand work. I think the British soldier is as good a man as he ever was. There we were short of food—water not to be had—the situation growing worse every moment. But we knew that the water was in front of us, and the soldiers were determined to get it. They did."

"What do you think of the chances of our troops in a war with Russia?"

"I think it will be largely a question of numbers, arms and position—strategy. The British officer, however, is superior to the Russian, and therefore we should not suffer in regard to the matter of position. The day has gone, however, for hand-to-hand work, such as gave British pluck the chance to turn the balance against superior numbers, as at the Crimea."

"Did you not come to hand-to-hand work in Egypt?"

"Oh, yes, at the wells and also at Tel-el-Kebir. But the advance in the quality of arms reduces the question to one of position and numbers. The British did admirable work at close quarters, but there is less of it."

"I suppose you have not had your adventures without paying for it all in hardship?"

"No; the worst of it is that we sometimes got nothing to eat. I was with Archibald Forbes one time, and for three whole days we had