

Nothing but the application of science could enable the British Army to exist in its present position.

The little harbour of Balaklava, which I can liken to nothing than the eye of the needle through which the camel *must* pass, is now embraced on either side by the railway—its branches leading from the various wharves and storehouses to depôts outside the town, where room (though not sufficient) is afforded to the transport to load up. Waggon and their teams are thus allotted for the special service of drawing supplies of fuel, hay, and corn, to these depôts, independent of the trains which proceed to the front. The narrow ways of the little town are thus relieved in a great measure from the interminable crush of animals and carriages throughout the day, which effectually impeded one another, and caused the death of many.

The road is another important work, the progress of which I watch with the greatest interest. I am an old road-maker myself, and believe the line to be good.

But the most important work of all will, in my opinion, be the floating factory.

This is a measure worthy of England; for her base is on the waters, and she has now floated Woolwich to her army in the Crimea.

I have minutely inspected this vessel and her fittings, (and moreover drawn largely from her stores,) and have been struck with admiration at her capacities.

I have had the fashion of the boxes of wheels taken, and I hope to have them cast in large numbers.

Iron axles can be welded and turned, engines fitted, and timbers sawn; in short, I have no longer to look 3,000 miles for the source of vitality. I hope now to be enabled to make provision for the spring; for the transport is so situated that the material parts of all the carriages must become worn out by the incessant traffic to which it will necessarily be exposed throughout the entire winter.

I reckon that every waggon, with its horse, harness, and driver, must travel on an average of 14 miles daily, over indifferent roads, and that this wear and tear must extend over a period of six months; at the end of which time, when the army, refreshed, will call upon this corps to take it into the field, neither waggons nor harness will be in a serviceable state. It is absolutely necessary therefore that strong reserves of wheels, axles, shafts, poles, and harness of every kind should be ready; and although I see that the floating factory can do much, it will be necessary for the arsenals at home to help, especially with harness, which should be very strong and serviceable.

I think it would be worth while to ascertain by comparison the relative quantity and prices of the English and Sardinian mule waggon harness. It may be found that the advantage as to cost is on the Sardinian side, and that the stout white leather of which it is composed is more durable than that furnished to this corps.

The general organization of this corps proceeds satisfactorily. I was glad of an opportunity lately, when a Division of the army was under orders for Eupatoria, to try the efficiency of the corps. Two divisions of transport, composed of 3,000 animals, with their proportion of waggons, carts, ambulances, and artificers, were ready for embarkation in a very short time, and appeared very efficient and complete.

The scope of the intended operations of the force being afterwards limited to three or four days, the amount of transport was proportionally reduced to nearly one half.

The bulk of the transport of an army is entirely regulated by the radius of intended operations—it is solely a question of supply. Thus, for these three days, which were intended to be the scope of the operations at Eupatoria, the Commissary-General made a requisition on this department for 1,500 pack animals and 20 carts. The requirements of the other branches of the force were trifling compared to this demand, and it will enable his Lordship to form some idea of what the requirements of the whole army will be, when it takes the field in a country devoid of resources.

I will here venture to express an opinion, as it bears materially upon the subject of transport; it is, that our soldiers should habitually move with three days' provisions on their person; whether it be in war or peace, the weight should never be diminished.

The Roman soldiers used to be clad in heavier armour during peace than they wore on a campaign, so that war with its burdens and toils should sit lightly upon them. The French soldiers in the present campaign carry four days' provisions, besides their tents; and if the British soldier should do the same, 1,500 animals to every 6,000 men that take the field would be saved to the transport of the army.

I make these observations with profound respect to the opinions of my superiors, and in the spirit and intention of these Reports, viz.—to do all that lays in my power to make the British army moveable and efficient.

To return to the corps. The arrival of the young English drivers is a timely resource, as the natives had begun to desert in great numbers, notwithstanding the precautions I have taken to prevent them, in communication with the police and Admiral Freemantle.

I have obtained labourers from Constantinople to aid in building stables, and I hope that the most valuable of the animals will soon be under cover.

I have adapted the constructions entirely to the nature of the ground on which the several camps are pitched, which, being principally rocky, I find the simplest mode to be that of excavating a couple of feet, and running a centre wall with a roof on either side. The earth thrown out by the excavation being mixed with manure, forms every day a higher bank outside, so as to increase the protection and warmth of the stables.

Stone is abundant, and I am making use of the materials of the packing cases, in which the bat saddles are sent out for planking.

M. M'MURDO, D. G.

Total of last week's Return of Animals,	14,837
Destroyed, - - -	83
Died, - - -	17
	100
Total remaining,	14,737

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