

march, carried on the off horses, and the gunners on the gun limbers and wagons; in time it will, perhaps, be seen that such baggage could be better disposed in light baggage carts. As a matter of fact the present arrangement could not be carried out in India (where we have 43 out of our 63 light field batteries) without destroying the men's kits. The gunners' pack, exclusive of greatcoat, weighs about 15lbs, the drivers' about 16lbs.; from this it would be easy to calculate how many light baggage carts would be required to keep up with the battery on service.

The ammunition wagons used to be made available for the carriage of tents, cooking utensils, &c. The tents are now otherwise disposed of, but the wagons are still constructed with limber attachment, a form quite unnecessary to their efficiency as wagons and the heaviest in draft that could be devised. Now that the ammunition boxes are not really wanted to seat gunners upon them, would it not be better to build the wagons solely with a view to conveyance of ammunition and the speedy replenishing of exhausted gun limbers under fire? And with this in view would not some form of cart requiring only one, or at the most two horses and one driver, be safer and better than the present wagon and limber with, on service, six horses and three drivers? The wagons, as now arranged, carry not quite three times as much ammunition as the gun and its limber contain, and if we take for comparison only the new 9pounder wagon, we find its weight with limber to be rather more than thirty three cwt., that is very nearly as much as the gun and limber, it can hardly be doubted that the old style of ammunition wagon might be improved, so as to better suit altered circumstances. We cannot now expose men and horses with the same impunity as formerly, and yet it is more than ever necessary to keep up a constant supply of ammunition from a comparatively safe distance. The changes here hinted at would appear to admit of a somewhat smaller establishment of both men and horses in time of peace, but though nominally the present organization admits of nine men to a detachment, yet the men are, at least on home service, so frittered away on all sorts of other duty, endless "fatigues" and orderly work, &c., &c., that even in the Horse Artillery for ordinary parades three or four men are as many as can be mustered in detachments. In India all batteries should be kept up to full strength. What appears to be wanted now more than ever is a simple code of drill and manœuvre, drawn up with a view entirely to its applicability in the field. This is all the more necessary since short enlistments seem more and more likely to be adopted.

June 17, 1874.

C.

The following letter respecting the difference between the pay of soldiers in the service of the United States and those in the service of Great Britain will be read with considerable interest, as it suggests the only real solution of the problem of recruiting in the British Army, which has exercised the ingenuity of political economists, civil and military in England, to such a fearful extent. The letter is copied from *Broad Arrow* of 13th June.

Sir—I see by your valuable journal (or rather an extract therefrom) that effort is

being made to place to the soldier upon a more equitable footing. The pay of 1s. per diem—less, I believe 4d. deducted for groceries—is ridiculously small in comparison with what the soldier of the United States receives. The American soldier enlists for five years, and, as privates in the line, receives \$13 per month for the first two years; \$14 for the third; \$15 for the fourth; and \$16 for the fifth year—all above \$13 being retained to his credit until his discharge. Should he re-enlist, he receives \$18 per month. In addition to this, he receives during an enlistment (five years) \$305 76c. as allowance for clothing, the whole of which will be paid him in cash, on his final statements, if he shall not have drawn clothing therefor. The corporal for the line is paid \$15 per month; the duty sergeant \$17; and the first sergeant of a company, \$20 per month—each receiving the \$1 additional per month for the third, fourth and fifth years of enlistment, and \$2 per month for re-enlistment.

In the Engineer and Signal Corps, a second class private is paid \$13; first class private \$17; corporal, \$20; sergeant, \$34—and \$1 per month additional for the third, fourth, and fifth years. The clothing allowance is a trifle more than that afore mentioned for non-commissioned officers and the Staff Corps. The ration and quarters are very fair, and furnished free of charge to the enlisted man.

Thus it will be plainly seen, as far as remuneration goes the English soldier is a long way behind.

I was born in old England, and know that I speak but the sentiments of nearly every Englishman in "Uncle Sam's" Service when I say that if the pay and allowances were at all approximate to what they are here, I would be better satisfied to serve under the grand old "Cross of St. George."

If the War authorities of England really desire to secure intelligent, sober, and earnest men, let them act with justice and give the soldier a pay out of which he may save a few shillings for the day when he shall no longer be able to carry a musket; or hold out the certainty that, his behaviour being good, he shall receive a living pension, and not be driven out to act as "commissioned air" (another name for errand boy), after long and faithful service in the field, and in guarding the rich, though sickly, possessions of the nation.

Apologising for taking so much space, I am, very respectfully yours,

AN EX-BRITISH VOLUNTEER AND AT  
PRESENT UNITED STATES SOLDIER.

Willels Point, New York Harbour,  
May 24, 1874.

We have been advocates of the "Mon-teith system of Fortification"—Gun pits—as opposed to the bastion, or what may be called the architectural system of raised forts, as best adapted to the use, safety and efficient working of Modern Artillery. The following from *Broad Arrow* of 2nd May goes far to prove the correctness of our views.

"At Gibraltar, on the morning of April 16, the commanding Royal Engineer and the officer commanding the Royal Artillery, with the view of testing the stability of the Gibraltar shield, made some experiments with the 10 inch 18 ton gun, M.L.R., mounted in the "Engineer Battery." This

is a new work and has just been completed by the Engineers. It is fitted up with the strengthened shield, which is fixed into blocks of granite and covered over with a concrete bomb-proof. The first shot was fired with a blank charge, with the gun direct and horizontal. This had no effect upon the shield. The second discharge was fired with Palliser shot, the gun being in the same position as before. The result of this was that the wooden plates between the iron ones were burnt up by the flame of the gas from the powder. At the third shot the gun was laid at the extreme right trail, and with the maximum elevation of 8 deg. 20 min. The effect of this upon the shield was startling. The whole iron mass was displaced 2½ sec. or 3 sec. and the outer bolts forced out a couple of inches. A few more shots at that elevation, and with the same trail, and the shield would have become perfectly useless. Two more shots were fired, which resulted in forcing the bolts still further, and in charring the wooden plates still more. The reason assigned for this collapse of the Gibraltar shield is that the gun is too short, the muzzle being a few inches inside the porthole. The gas escaping from the muzzle burns up the wooden plates, and causes the iron ones to get loose. It must also be borne in mind that at least a quarter of the 70lb. is consumed in the gun, and no doubt expends itself on the plates. The remedies suggested are—1, to line the porthole with iron sheathing so as to prevent the gas coming in contact with the wood between the iron plates; 2, to advance the front racer, which would enable the muzzle of the gun to project beyond the porthole. This latter remedy would, however, be effected at the sacrifice of lateral range.

We copy the following from the *Nation* of 2nd July, inasmuch as it is an instance of *indiscipline* which should be carefully avoided. Soldiers in uniform should consort with their officers. Although there was nothing in the case cited to prevent the *guard of honor* from retiring exchanging their uniforms and enjoying their captain's social hospitality as civilians.

It is absolutely necessary to draw a broad line of demarcation between both classes; the neglect of it was the ruin of the discipline and subordination of the French army and the degradation of their country as well as the fearful losses it sustained. "Familiarity breeds contempt," is an old proverb and a wise one—which it is to be hoped our soldier will recognize—with the most elastic and best system of organization in the world we must be sure to enforce discipline and subordination. It is easy to attend to propriety, and no good will ensue from outraging it.

"There are certain qualities which, to a certain extent, disqualify an officer trained in the exact discipline and accustomed to the inflexible rules of a regular army for satisfactorily managing a force like a Colonial Militia—a force that requires a delicate handling, that, with tact may be led anywhere, but that, without tact, cannot be driven at all. The manners and habits of the country have to be considered, the probable social equality of officers and men has to be taken into account, and consequently a considerable latitude of action