strap, if hiteling places ne near; but tho hobbling plan mekes a scout indepondent in a meadow behind a hill, whence ho might often mako valuiblo obsorvations. scouts should bo furnshed with powerful telescopes to enablo them to count distant forces with accuracy and in safoty. A wary scout, at a prudent distance, with a good glass, can olten gather moro valuablo information than a more reckless one who ven tures in closer. Tho former soes, hamself unseen.

If mon can bo found well nequainted with the country to bo operated in, so much tho better scouts. But if the is impossible, overy scout should carry a map, on a largo scale, to be filled in with details from lis observations. Under this system, it wall bo seon, a scout becomes an important adjunct of the topographical engineers, and inay bo often of great service. The senlo maps furnished them should be drawn by tho engincor officers of the corps, and the scouts will very soou learn their uso, and becomin emulous of supplying tho best details for their skeleton maps. True, an engineor officel would bo needed on tho corps staff, but this is only $2 s$ it should be; and if topographical skill wero more genorally uthlized by cavalry officers, the gain would bo immense to the wholo army. A very little experience under the gudance of a good practical topographical engineer, would render tho majur ity of men of intelligenco and fair education capable of filling the dotails of a map enlarged to say two inches to the mile, with a fair degree of accuracy, increasing every day. Distances from place to place sliould be timed by the wateh and paco very caro fully noted at overy change thereof on a note book. Courses by the pocket compass, carefully laid down, whll help the engincer officer and his assistants amazingly. If overy scout carried a note book in which lie was taught to record his route, in the form of an itinery, maps might bo made with but littlo dificulty that would prove of great servico in oprrations over the same ground. Tho gencrat and engineer oflicer, by taking a lit tle trouble to train scouts in this matter during winter quarters and in long rests over well lnown ground, can very soon judge of their capacity and correct their inaccuracies, besides teaching them how to do the greatest amount of worls in the short est tinde. No scout need then come in empty handed. Even if ho has not seen tho enciny, ho has mapped the country, and topographical information is always valuable.

In the second part will bo found brief directions for an itincrary overs suppositious country, and rules for estimating distances by the size of objects, olc.
Scouts should be paid highly and kept on probation. If they are detailed from the ranks they must bo very sharply watched, to prevent their becoming mavauders. Scouts havo such fine opportunities for this practico that the only real safeguard against it is the selection of honest men for the duty.
(To be conthued.)

## VOLUNTEER FIELD ARTILLERY.

Tho following letter has appoared in tho (Englsin Observer:-

Sir,-You havo kindly given two letters from mo on this important subject; may I beg the favour of another?

No sooner was ithproposed to turn some Royal Garrison Artillery into Ficld irtillery than critics sprang up, urging- Wat will never dol It's putting skilled labour to unsizilled work $!_{s}$

Then it is urged, "Volunteer Artillery is only fit to bo Garrison Artillery, as tho skill requiroll in managing Fiold Artllery is be. yond them l"
Evory one interested in tho subject must be familiar with the above two ropresentations. Now, thero can bo no doubt that the science of artillery is developed by heary gamery in all its varied lranches; but it is also not unfrequently true that tho man who. by such qualities ns stylo and tompera ment, likes, and is lighly fitted for, ono thing, dialikes, and is totally unfitted tor, another thing, and seldom is that shown moro than in Garrison and Field Artllery.

From the two sayings abovo given no do duction can ve made unless, as Volunteers do not claim to bo highly skilled in either hranch, some ono will bo bold enough to step beforo the jublic and urge that they aro unfit for both.

It surprises mo to hoar and read such fancies expressed as that carriage, omnibus, and van horses are unfit for Artillery, and would requiro long training. Let mo ask seriously, what is it proposed to train thom to? Sirely not to harness
'To thusu who imagine that horses must bo trained to Artillesy fire, I can speak from great expericuce.

Any team shanis it well enough from the very first, and in a day of two hardly notices thu guns, while single horses standing close tu tho teams talie ur. tho general contidence. I venture the opinion there are no horses superior to Loudon ones for Artillery pur poses, and that on requisition Iondon could turn out 3000 any day.
In regard $t$, tho taining of an artillerist, I join the general vion, that a lengthencd penod is as absolutely necessary to him as it is in tho mastering of any other va ied and somewhat intricato subject.

But to teach men tho comparatively easy work of driving a ficld baltery gun and of fighting it in action, when they, aro anxious and willing to do both, is quito another matter.
Uccasionally I see and hear of long training and vast dinitulties connected with Field Artillery. Wo aro all entitled to our opinions, but when I notice statements of tho kind, I feel they are not made by really practical, professional, loving, and observant artillerymen; at least, I think not, and so decided am I on tho point that if I heard they irere, I shouid only ditfer and laugh.
So far as my abilities go, I have in my letters disposed of the subject of Volunteer Field Artillery men and horees. Now I como to another mattor.
Wo all know that "a maid of nll work," " JJack of all trades," and a " handy man" aro generally ill-requilted and roundly abused; yot, and strange to say, Volunteer Field Artillery are not in a very dissimilar position to those useful servants.
For, in addition to their osn special rork as Field Artillerymen, the regulations roquire that they shall learn the duties and drills of Garrison Artillery, which are and. less in variety; then, as Infantry, thoy are required to movo as a battalion and as a company, all of which drills are practically useless to artillerymen.

About trenty years ago the samo anomaly existed in the Royal Artillery, when every man was enlisted as and styled a "Gunner and Driver." just as if six feet and sixteen stone was the same as five feet seven inches aud ten stone, both supposed to bo cqually avali ble when fighting any gun, or driving a pair af horses as a postillion.
Happily for the Royal Field artillery, the idea of "all rrork' has long sinco been givon up as impracticable, and consequently it is
in tho lighest stato of eflicicncy ; but I sup. pose. for want of able friends, tho Volunteer Artillory is hampered by the old system of requiring too great a varioty of accomplish ment for human naturo when timo is very limited. The correspondonts of soma morn ing yapers havo been criticizing our dofects, but it does not appear that they havo recog nized tho circumstanco that we, who can scarcely call time owr own, aro requircd to bo drilled and informed in about threo times as many difforent things as is tho same branch of tho Regular service,
In evory branch tho Volunteors had best bo content with one thing only.

A letter is now open at my elbow from the commanding oflicer of an Artillory Volun teer corps ; the ono iden pervading it is in fantry drill as a battalion and a compary Artillory duties aro ignored. Is that as it should be?-

Your obedient servant,
J. D. Sinakespear, I.p. Royal Irtil lery, Lient. Colon, I, Commanding lst Middlesex Voluntoor Artil lery.
May $10,1871$.
P.S.-Since writing the above I have wad the report of Lieat. General Sir Iopo Gran: on the Brighton Review, and ono so vory junior as myself must sjecak of it with cbely feelng of respect, at the same time, if he has been led into an error, as I believe he has, I may bo pardoned for remarking on it.
I quote the paragraph cuncerning us.
"I would also state I consider the Volun teer Artillery should bo solely confued to garrison duties, to which they are ad.nirably adapted; but as lield Arthllery they are neither manned nor horsed in sufficient numbers for service, and would necessarily run great risk of capture by an enemy if brought into action."

Having no time for actual inquiry, I write from momory in regard to the iden of our not being sufficiently manned, and shall not bo far wrong. I lad on the ground four spare men per gun, and I will venturo to say another brigade had more than four times that number, Royal Field Artillery bas not such a reserve of men, nor anythos like it.
$\Lambda$ s to insufficiency of horses, we knew tre wero not going to lyave many killed in action, so we avoided tho usoless shory of spare horses, and saved our money. But it is beg. ging the question to imagine horses aro not forthcoming becauso we did not parado then at Brighton. When we go on active service money will be plentiful, and, thercfore there will be horses got. Tho grounds fo: thinking wo would thon be captured so easily by an enemy are yet to bo stated. Wo conmand men equal to such occasions and suff cient in numbers. Horses mean mones, nothing more, and that wo shall willingly give for what is necessary, though we ought not to be expocted to be wasteful in a mat. ter of mero display.
T. D. S.

Mny 13, 1871.
AN ADDRESS PRESENIED TO SIR G.E. CARLIELR.

Nisgard, lo, 1 Sil.
The Nayor and Corporation of the torn of Niagara waited upon Sir G. E. Cartier, Bart., Prinister of Militia and Defence, today, at 11 o'clock, and presented an address in the draming room of Qacen's Rogal Niagara Hotel, of which tho folloring is a copy:

