

cannot play a game of football without hedging yourselves with a lot of "Don'ts," and you know that you howl your head off at the man who breaks the rules of the game.

Discipline is good for us, but we don't apply it to ourselves, if we think it interferes with our pleasures, although the latter may leave the bad taste in the mouth and the nasty head with which we bluff ourselves that we "had a good time."

When the next war comes we shall all be there, ready to start our grousing and grumbling, but chuckling inwardly to be "back in the Army again."

So, here's luck to the "Army don'ts." They tickle but don't hurt, and after a while we find that the tickling is good for the circulation.

"I've eaten your bread and salt,
I've drunk of your water and wine;
The deaths ye died, I've sat beside,
And the lives ye led were mine.
I've written the tale of our life,
For a sheltered people's worth,
In jesting guise, but ye are wise,
And know what the jest is worth."

—RUDYARD KIPLING.

The Latest in Gas.

"— sappers of the —th Battalion C.E. were gassed with mustard gas while cleaning out an old trench. They all complained that they were not aware of the peculiar properties of mustard gas."

The above is an extract from an official letter received recently. The number of sappers referred to was large.

The great trouble in anti-gas training is to keep up to the enemy's latest moves. For in no branch is he showing such devilish ingenuity and feverish determination to beat us as in this. Every week brings a letter giving details of some fresh gas or fresh method of using old gases.

In this article I want to say a little about mustard gas, most of it old, but some of it new. But first, to bring home the Hun's unrelenting efforts, the following dates and ranges (approximate only) are peculiarly applicable.

In January, 1918, the range of German gas shells was 12,000 yards.

In April, 1918, the range of German gas shells was 20,000 yards.

In June, 1918, the range of German gas shells was 25,000 yards.

These figures speak for themselves.

Now for mustard gas.

This gas was first used in July, 1917, and for a while caused heavy casualties, as its strange properties were not immediately recognised. These properties are:—

First: It does not usually affect a man directly he breathes it, some five or six hours elapsing before serious symptoms set in.

Second: It is very persistent, hanging in shell holes, etc., for days in dangerous quantities.

Third: It can be carried into dugouts on clothing or muddy boots, in sufficient quantities to gas the dugouts.

No. 1 is due to its curious chemical properties; 2 and 3 are due to the fact that at ordinary temperatures mustard gas is a liquid.

Until quite recently the enemy always sent mustard gas over in shells. Sufficient heat was generated by

friction and by the expulsion to boil the liquid, forming clouds of vapour or gas. As, however, the shells burst after impact with the ground, a considerable percentage of the liquid would be soaked up by the soil. This portion would remain dormant in the shell holes in cold weather, at night particularly. But in warm or sunny weather it would slowly evaporate, so that every mustard gas shell-hole became a death trap to the unwary. It was ignorance or forgetfulness of this that caused the sappers referred to above to become casualties.

The greatest danger is due to the amount of gas given off from any shell hole being naturally small, and therefore difficult to detect. Unless all troops are thoroughly aware of the danger of all shell holes, and unless they realise that the smallest amount of any gas is highly dangerous, casualties are bound to occur.

This state of affairs was bad enough, but we could remedy it to a certain extent. Dangerous shell holes could be rendered harmless by sprinkling them with a good layer of fresh earth. Recently large quantities of chloride of lime have been issued for this purpose, as being more effective than earth. This was a big enough job; still, the most annoying shell holes, *i.e.*, those near dugouts, working parties, etc., could be readily handled this way. This naturally did not suit Fritz, hence his latest move.

He now sends over mustard gas by means of heavy trench mortars, the projectiles or drums being timed to burst a few feet above the ground. The result is that a good percentage of the liquid in the drums, not being fully vapourised, drops to the ground as a fine rain, contaminating the soil for yards around, and impregnating the clothing of anyone near by.

The difficulties initiated by this new dodge of his are obvious. There is no shell hole or mark of any description to indicate that the soil may be impregnated with gas. At present all that can be done to offset this new condition is to warn everyone of his methods, and to warn them to be constantly on the alert for contaminated ground. The least suspicion of a strange smell or taste in the air, or the appearance of a slight haze or mist not easily accounted for, or an undue tendency to cough or sneeze, means gas. Get into your "best friend" first, and then consider what can be done next. "Call it a night and go home" ought to be a good plan.

I understand that THE SAPPER is highly popular in France, and I have no doubt this article will be duly scorned and scoffed at on arrival in that delectable country, but the extract quoted at the beginning is my vindication.

R. A. POOK,

Lieut. C.S.M.E.

The Stone Angel of Arras.

Whilst coughed the guns, I rambled through the town

And saw the ruin war had lately wrought—

The shell-holed walls, the buildings tottering down,

The havoc made where battery battery sought.

I passed beneath the shelled cathedral's dome,

And paced the ancient marble pillared aisle,

'Neath broken arches now the jackdaws' home,

Where rubbish heaps marked that still noble pile.

And nought was there in chancel, aisle, but gave

Of Hun-wrought sacrilege some tangent trace,

Save just one sculptured angel in the nave

That looked from out her niche with hallowed grace

Unscathed, alone with ruins round the base,

In stern denouncement of a vandal race.

SAPPER ROCKE SAVAGE.