

incentive to see that oxygen is carried in all aeroplanes in which Africans are passengers.

#### CONCLUSIONS.

Experiments were carried out in West Africa to determine whether a flight up to 15,000 feet above sea level, without administration of oxygen, would induce an acute hæmolytic crisis in Africans with sicklæmia.

Three Africans with sicklæmia showed no ill-effects from such a flight, although all showed the presence of sickled red cells at 15,000 feet above sea level after ten to fifteen minutes at this height.

Differences in the rate at which sickling occurred *in vitro* in different individuals were noted and are correlated with the *in vivo* findings.

#### REFERENCES.

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### Correspondence.

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SIR,

On page 60 of the February number of this Journal, Lieutenant-Colonel R. Gwyn Evans refers to "The development during the hot summer months of a foot condition amongst tank crews in which the clinical signs consisted of pain, redness and œdema of either one or both ankles, combined with small hæmorrhages. Their interest lay in the severity of the condition after what must have been a comparatively short space of time in which crews were compelled to stand continuously in a confined and overheated space, the obvious cause of the condition."

It would be interesting to hear comments on this from medical officers with long experience of armoured warfare.

This condition gave us a lot of trouble in 9th Armoured Brigade at the Battle of El Alamein, and during the prolonged tank fights at Miteriya Ridge and Tel el Aqaqir some 70 to 80 per cent of Grant and Sherman tank commanders suffered from it; whilst Crusader tank commanders, who can sit in their tanks during battle, were rarely if ever affected. Marked œdema or brawny painful swelling extended in some cases well up the thighs; was often associated with considerable fever of which it seemed to be the only cause; and often necessitated admission to a medical unit. I personally saw no case with hæmorrhages. As the condition was much more common in officers we suspected a connexion with the rubber-soled thin "desert boots" which they wore; but the real reason for its preponderance in officers was obviously the fact that fewer other ranks were tank commanders.

The condition, as Lieutenant-Colonel Gwyn Evans says, is caused by

prolonged standing in a confined space, and much the same effects were reported amongst men who had to stand for long periods in train corridors.

We thought that the continuous current of cold air which is drawn in through the turrets of tanks causing chilling of the commanders' legs might be an aetiological factor.

I advised our tank commanders to take every possible opportunity of getting out and lying on the ground with their legs well elevated, but, as tank men are notoriously averse to dismounting during battle, I later concentrated attention on devising a simple sling seat which could be hooked on to the turret and adjusted to the individual commander's needs, and this seemed to give good results in training.

It is, however, not easy to persuade tank commanders to sit during battle, as, when standing, the possibility of footwork gives them better command of the whole field of view.

If the attention of tank designers has not been directed to this problem, then it should be; and another important point is the well-known fact that in battle there invariably protrudes from thousands of pounds worth of armour the most valuable piece of mechanism in the tank—the commander's head quite unprotected in a black beret.

He will seldom use his expensive periscope, but a bullet-proof perspex dome might give him protection from small arms fire and splinters from near misses.

I am, etc.,

F. M. RICHARDSON,  
Colonel.

Colonel F. M. Richardson,  
H.Q. Hamburg District.  
July 16, 1947.

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### Notice.

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## THE CONSULTANTS' PRIZE.

THE Consultants to the War Office and the Armies in the Field in the late War have presented a sum of money to the R.A.M.C. in order to found a Consultants' Prize, to be competed for at intervals of one to three years.

This prize will be awarded for the first time in 1948 and will be to the value of 25 guineas. The prize is open to serving officers of the Royal Army Medical Corps, holding a regular or a short service commission.

The first prize will be awarded for an essay of not more than 10,000 words on a professional subject, based on the author's own experiences between 1939 and 1946. It is hoped that these essays will ensure that valuable war experience which would otherwise be lost will be recorded for future guidance and possibly for publication.

Entries should be sent in through the usual channels, so as to reach the Hon. Secretary, R.A.M.C. Prize Funds Committee, R.A.M. College, Millbank, London S.W.1, not later than August 1, 1948.