## THE HOME FRONT

## TO THE EDITOR OF THE TIMES

Sir,—In the second of his important articles on "The Home Front in War," Sir William Beveridge rightly points out that "the treatment of livestock is the crux of wartime feeding policy." He points out that livestock are in varying degrees wasteful converters of energy, and compete with human beings for such feeding-stuffs as wheat, barley, and oats, and, in so far as they depend on imports, they compete for tonnage. Animal feeding-stuffs, he adds, are only the means to human food.

As one who some 10 years ago investigated the comparative efficiency of different types of livestock as converters of energy (Journal, Royal Agricultural Society, 1926), and examined the technical and engineering problems associated with grass drying (Empire Marketing Board, E.M.B.8, 1928), I feel that Sir William's article may leave the impression on some minds that their dependence on imported feeding-stuffs, and on acreage which might be devoted to crops for immediate human consumption, would render livestock and their products a luxury in time of war. Sir William, I am sure, did not intend to convey this conclusion, and would, I hope, admit that, in the event of war, the good dairy cow and the pig should be called upon to occupy an important sector of the home front, for the following reasons.

First, because in a temperate climate like ours, the soil can only produce fats and firstclass proteins (which are essentials of human diet) through the medium of grassland and crops devoted to livestock.

Secondly, because the good dairy cow could convert dried grass (which yields 200 per cent. more energy value an acre than wheat or other cereals), and the pig, recent German developments suggest, could convert potatoes, sugar beet, and other root crops (most of which yield at least 100 per cent. more energy value an acre than cereals) into fat and first-class protein, without demanding a prohibitive share of the reduced supplies of imported and home-grown cereals which would otherwise be consumed by humans.

Thirdly, because the good dairy cow and the pig lead the field as efficient converters of energy, and, acre for acre, land devoted to dried grass and root crops for their use could, while helping to swell the diminished but essential supply of first-class protein and fats, yield nearly as much energy value in the form of fat and protein as cereals yield carbohydrates and protein.

It may be objected that these reasons have no more than an academic validity, and that such a policy would be inapplicable in practice. Nevertheless, if recent developments in grass and root crop drying in this country and in pig feeding in Germany can, with the help of agriculturists and engineers, be consolidated, it would appear that the dairy cow and the pig could in time of war make a big contribution to the essential supply of fats and first-class proteins, without unduly reducing the supplies of cereals for human consumption.

I am, Sir, yours, &c.,

A. N. DUCKHAM. Thames House, Millbank, S.W.1, Feb. 23.