# Care of the Plough . . .

ALL WAR is wasteful of materials and man power. Apart from the efforts of the contending Powers to destroy life and property in the hands of their enemies, many other factors tend to increase sharply the degree and variety of waste of the available materials and man-power.

In the present instance it is waste of materials we are considering, and this does not mean only the waste of used articles which are past their normal life, though that is an important field in which much is being, and can still be, done by the reclamation authorities.

In considering the matter of reclamation of what is even in normal times regarded as waste material to be thrown away, it must be remembered that such reclamation is using man-power and transport which could be used profitably for other purposes. As in the case of most human disorders, the place to arrest a trouble is at its source. Any increase in the life of an article is desirable, particularly in time of war, because you save not only the drain on raw materials used in the production of a new article, but also the man-power and machine hours involved in processing such material. So, to stop unnecessary waste at its source in the field of farm machinery, we should attack the problem of making machines last longer.

What, for instance, are the factors that tend to shorten the life of a plough? There are many types of ploughs, but if we consider a tractor plough we shall find that what applies to it applies to all other types. The answer can be stated under four headings.

### *Rust*

When first supplied a plough is well painted. This is done, not only to make its appearance attractive, as is done with a house, but, as in the case of a house, to preserve it and add to its life. Just because the main parts are substantial it does not follow that rust does not matter. Rust, if allowed to establish, continually eats away at the material and eventually so weakens it that the parts will no longer perform the functions for which they were made. How many farmers give their plough a good coat of good paint when required? In this matter of painting, even the use of paint—a vital war commodity—can be conserved if a plough is housed and protected against the weather whenever possible. One has only to move about the country to see, at times, ploughs still in the furrow where the job was finished. The skeith and mouldboard cannot, of course, be painted, and should be kept bright so that when put into use one does not have to wear the rusted surface away before these parts do their work well and with minimum of draft. If adequately greased or oiled when each period of ploughing is finished, many more acres of work will be done by boards and skeiths. As these parts are in short supply and the depreciation through unnecessary wear due to rusted condition is very marked, this is a particularly necessary practice today.

### *Wear*

No one expects a motor vehicle, be it car, truck, or tractor, to run without lubrication. Because the parts of a plough run at lower speeds it does not mean that lubrication is less necessary. The stresses on moving parts are considerable and the dusty conditions are severe. At all times lubri-