

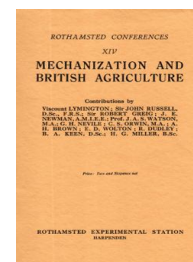
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

# Mechanization and British Agriculture

[Full Table of Content](#)



## Foreword

**Sir E. J. Russell**

Sir E. J. Russell (1933) *Foreword* ; Mechanization And British Agriculture, pp 5 - 6 - DOI:  
<https://doi.org/10.23637/ERADOC-1-207>

## FOREWORD

BY SIR E. J. RUSSELL

THREE great appliances have in the last ninety years been given by science to crop production: the first was the artificial fertiliser introduced in 1843; the second, some sixty years later, was the new way of producing new varieties of plants; and the third is the internal combustion engine now becoming increasingly prominent in agricultural developments. This was not the first engine to come on to the farm: it had already been preceded by the steam engine. But there was this important difference in the circumstances of their introduction and development. The steam engine was used in the 1860's to do a new job: to plough more deeply in the hope of getting the bigger crops which at that time were the ambition of good farmers. Afterwards, when the bad times of the 1890's set in, the big crops were no longer profitable and the steam engine ceased to play the part that its friends had expected. The internal combustion engine, on the other hand, was introduced to save labour, and the urgent and continuing need for this is shown by the fact that wage rates on all farms are now nearly 100 per cent. above pre-war level, and show no tendency to fall, while prices of farm produce are on the average only about 40 per cent. above, and for many farmers they are almost down to pre-war level. There is only one way of meeting the disparity and that is to furnish the worker with a machine so that one man may do the work of two.

The Rothamsted Conference dealt only with the technical problems involved in this arming of the farm workers with machinery. It can be done in two ways. The farm system may be radically changed and based on machinery instead of hand labour as at present; to be effective the change must be logical, complete and ruthless: machines have no sentiment. If this were done with adequate thoroughness, cereal farming could be made profitable over large areas of the south and east of England even in open competition with the rest of the world—provided only that the competitors were not helped by subsidies or unpaid labour. But it would mean heavy reductions in numbers of men now employed on the land; and their most probable fate would be to migrate to the towns and cities where provision exists for mass-relief. Alternatively, the system can remain substantially as at present and the machine introduced to lighten the day's labour and to increase



## 6 MECHANIZATION OF BRITISH AGRICULTURE

the amount of work that can be done in a spell of fine weather. This is the obvious use for machinery on a live stock farm, where human labour must remain the foundation of all the work.

There is no question that British farmers as a whole would prefer the second alternative ; they like the machine as a servant but not as a master, and they intensely dislike discharging men whose only fault is that, for some reason which neither party quite understands, they have become unwanted. Empty cottages and depopulated villages are probably more distasteful to farmers than to any other section of the community.

Both methods are dispassionately discussed in the succeeding pages. Farmers are completely powerless to decide which is to be adopted : perhaps one should say "which is to happen," for it is not clear that any body of people can make the decision ; it may be forced upon us by powers beyond our control. Some of the Russians have gone so far as to set up the Machine as a god to be worshipped : we have not yet reached that stage, though we all admit ourselves powerless to stay its progress and its devastating activity in making men superfluous. This is the great problem of our time.