

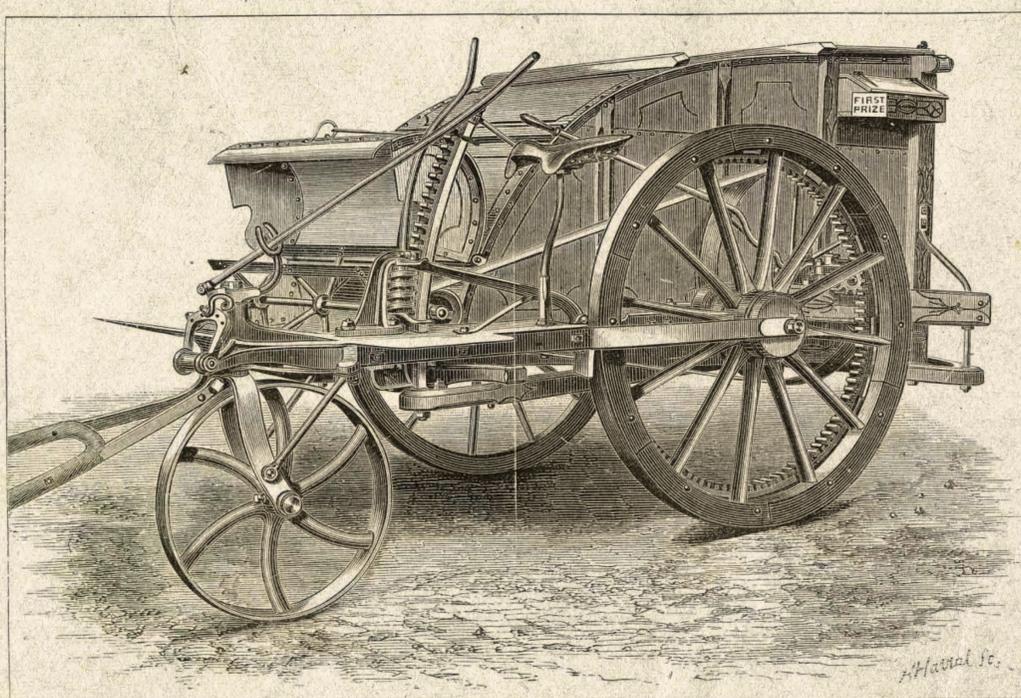
GROWING THE CROP

Information kindly provided by
Dr John Radcliffe AM FTSE,
RA&HSSA Grain and Fodder Committee



Initially, sowing was by hand and harvesting with hand-sickles. Ploughing the ground for preparation was slow. Land had to be cleared by hand, then prepared for the crop. One man with 4-horse team could plough 2-3 acres (1 hectare) /day.

Later, seeds were sown by simple machines drawn by horses.



SIDE VIEW OF REAPING MACHINE, SHOWING HOW SPEED IS OBTAINED.

Grain was originally threshed from the heads by hand, using a winnower. Later models were driven by horses on a treadmill or simple engines made by local blacksmiths.

1843 – The first mechanical harvester to strip off the heads of grain was developed by John Ridley. The first models were pushed by horses – later models were drawn by horses. They could harvest 7-8 acres (2.5 hectares) each day.

As farmers learned how to cope with the Australian environment, very different from where they came from in England and Germany, they acquired a large range of equipment – John Riggs farm, Gawler, 1870.



GENERAL VIEW OF IMPLEMENTS AND STOCK ON THE FARM OF MR. JOHN RIGGS, GAWLER PLAINS.

The first “combine harvesters” were developed in the 1890s, – initially “ground drive”, towed by the horse team. In sticky or sandy ground, the drive wheel would drag and the machine blocked.

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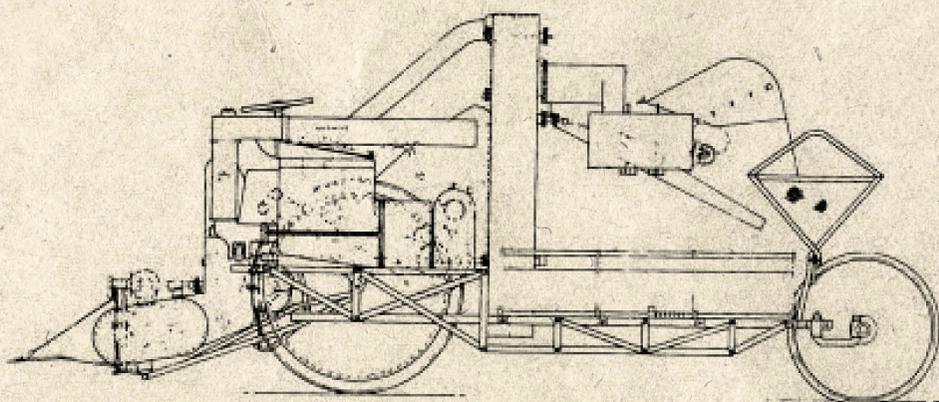


South Australian firms such as J. S. Bagshaw (later Horwood Bagshaw) and John Shearer (Kilkenny) and David Shearer (Mannum) made a wide range of agricultural equipment.

Some harvesters had engines on the back but were still drawn by horses at the front.

The first tractors arrived just after 1900. Experience with tanks in World War 1 resulted in much better tractors in the 1920s.

In 1924, self-propelled harvesters were developed.



Most harvesters were still tractor drawn. Spark arrestors had to be used on the engine exhaust pipes to ensure the crop did not catch fire.



Today farmers use new much larger equipment – stubble trash handling, air seeders, sprayers, self-propelled headers. Much of it is based on precision farming using satellites which allow accurate tracking and even automatic steering within a few centimetres while sitting in comfortable air-conditioned cabins. But vast capital investment is required.

