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THE EMU HARVESTER

A Wonderful Triumph! Good News to Agriculturalists.

The present age is a marvel of progression. The wonderful strides made in the production of labour saving machinery of all descriptions during the nineteenth century will be remembered with avidity in future decades. The improvements are not confined to one particular branch of labour, on the contrary the new processes being brought into general use are to suit all tastes, trades or professions.

The people in the future will look back to the present time as the commencement of a millennium that will produce greater wonders every year. However, the machine we have to deal with is a new invention for the farming interest which will without doubt revolutionise the agricultural world. Great progression has within the past few years been made in all countries in agricultural machinery, and the astonishing inventions such as the reaper and binder, and more recently the stripper, quite took the yeomanry by surprise.

But a far greater boon is in store for them than they perhaps have conceived, the machine under notice – the Emu Harvester – having reduced the labours of farming to merely a minimum.
This wonderful production, which eclipses all previous efforts in the way of labour-saving machinery of any kind, is the outcome of three years off and on laborious, patient, and exhaustive study on the part of the inventor, Mr. George F. Berthoud, of Runnymede, who is well known and respected in the surrounding districts.
The Americans, generally speaking, have been the authors of most of the machinery for the farming class, but it has been left to Mr. Berthoud – a colonial we are proud to say – to show our Yankee cousins that there are other, and in the present instance, better inventive intellects in the sunny land of Australia than has ever been dreamt of by the denizens of other countries.
Australia, and her colonial youth, from the favourable impressions already made in the various professions and pursuits, will yet make a deep mark in the world that will never be eradicated by the healthy competitions of other countries. Her soil, climate, and nearly every other natural with which she has been especially favoured by bountiful Providence, is more fitted to produce gigantic intellects, and consequently great minds to cause Australia to become a power in the world, than most other countries, which nearly all labour under natural disadvantages.

A private and in a measure, successful, trial of the Harvester, took place in Mr. Berthoud's paddock on Wednesday, in the presence of a few friends. The crop was sown late in the expectation of the machine being finished for a trial, at least, but the grain was very patchy, thickly studded with cockspurs and altogether unsuitable to allow the invention a fair trial.
This being the only standing crop nearabouts, recourse had to be made to it, and although these inconveniences are taken into account, the trial, as we before said, was in a measure successful. The theory and principle were right, and that is everything. There were certainly a few defects, but of course these could not be properly determined until a trial had taken place, and Mr. Berthoud is confident that he can remedy the imperfections, and make some improvements without much loss of time.

The machine is worked as under:-

The wheat stalks are cut by means of revolving woodwork fan, similar to that used by a reaper and binder, which beats the crop on to a travelling apron, in turn carrying the stalks to the hopper or receiver by means of elevating revolving aprons; the stalks are then dropped into a revolving peg drum, which threshes the grain.

From thence it falls into a straw screen, then on to a chaff sieve and into a long frake screen through which the inferior stuff, such as wild oats, drake, small wheat etc., commonly called seconds, drops into an iron slide or bottom, by is which it is conveyed into a box-like compartment – the good corn likewise falling into a similar receptacle. (Half being apportioned to each).
The box is furnished with suitable slides by which the corn, both good and bad is shot into bags.
The box, as divided will contain about one bag of good grain and one of seconds.

The machine is mounted on two driving wheels, which carry the main body of the machine; the off side wheel has a tooth segment, which drives a suitable pinion, in turn driving another spur wheel, which causes the drum, fan, riddles, elevators, knives and everything connected with the machine to work.
The cutting is done on the left hand side, the knives being supported by an outside wheel. The many advantages of the machine are that it will cut and thresh any ordinary crop such as wheat, oats, barley etc., bugging all the inferior stuff.
The only labour required is one or two men and three horses. The straw is left on the field ready to be disposed of as required. Instead of being cumbersome and of heavy structure, as will be generally supposed, the new Harvester is notable for its lightness, which can be readily determined by the fact of its only requiring three horses to draw it.
The general outline of the machine is not unpleasing to the eye, and the effect was added to by its being neatly painted. The noise produced by working would not disturb quiet horses.

The machine is automatic and can be thrown in and out of gear at will by means of a lever controlled by the driver, who is provided with a seat; the height of the structure is much less than of an ordinary threshing machine.
The width of cut is about the same as that of a reaper and binder, but could be made longer and the knives lower, as occasion required.
The amount of acreage got through in a day would be about the same as a stripper. The internal, and in fact the general construction of the machine is rather complicated, rendered necessary by the peculiar nature of the invention.

To sum up, it will be seen that this wonderful contrivance will eventually do away with the reaper and binder, thresher, winnower, carting etc., so that ONE or at the most, TWO MEN, can go into the field, and with the aid of the Emu Harvester, and three horses, EFFECTUALLY GATHER IN THEIR HARVEST IN A SHORT TIME WITHOUT FURTHER TROUBLE OR ASSISTANCE.

Anyone possessing the least idea of agriculture can thus see the great amount of labour and expense done away with. It will be hundreds of pounds in the pockets of farmers every season, and while on the subject, it may be said that yeomanry of the colony may now take heart, for although the very low prices ruling, and the bad seasons experienced, have nigh disgusted and disheartened the majority of the class, many of whom had determined to give up agricultural pursuits, this invention has come just in the nick of time, and may be characterised as a manifold blessing to them, at least. Mr. Berthoud's invention, we are sure, will cause a great reaction in farming, because the tillers of the soil being freed from the many charges and different machines that had to be obtained to complete their harvest, will now be better able to compete with their American cousins, who by their superior mode of pursuing agricultural work with the aid of machinery, hitherto had the English market in their own hands, by being able to supply grain at a very much cheaper rate than the Australian grown wheat.

Mr. Berthoud is a native of Geelong, Victoria, is about 25 years of age, and has been living in this district for nearly 16 years. His parents are French Swiss, and the inventor is their only son.
He has proved himself to be possessed of an inventive mind of no mean order. The father and son are experimental gardeners and vignerons, and their garden at Runnymede amply demonstrates the facts.
The son has successfully grown olive and almond oils, samples of which are in the Exhibition and Melbourne Museum, and which were pronounced by Baron von Mueller to be equal, if not superior, to those grown in the south of France, and reverted to by us in previous issues.

It must be remembered that Mr. Berthoud is a self-taught farmer, and not being a machinist he was placed under many disadvantages in the construction of the Harvester; the most part of the ironwork had to be case (cast sic)in Melbourne, although some of it was done in Elmore, while Mr. Berthoud, with the assistance of a carpenter latterly, made the woodwork himself.

His skill at woodcarving, painting, preservation of insects etc., is wonderful, taking into consideration it is all self-taught. Mr. Berthoud had been put to considerable expense by travelling backwards and forwards to Melbourne, and the cost of material, but it is cheering to think that he will be hansomely recouped for his trouble at no great distant date.

The residence of Mr. Berthoud is situated about four miles from Elmore.
Three years ago he started on a working model of a reaper and binder to bind with its own stuff, but the present idea catching him, he set to work to carry it out, and made two working models, which answered the purpose, and from which the Emu Harvester is the outcome.
Mr. Berthoud is protected by letters patent, which were granted a few days ago.
He has not been engaged at the invention all the time mentioned – only on and off as leisure time would permit.

This young genius intends to construct an improved machine on the same principle for the £4,000. 0. O prize offered by the South Australian Government this coming harvest for an invention of this description, and we heartily wish him success, and are sure the compliment will be re-echoed by all well wishers, of the colonial population of Australia.

An example of the grain put through the machine, which is clean and not split in the least, can be seen at our office by anyone interested.

In connection with the S. A. prize, we learn that an American
competed for the money last year with a similar machine to the one under notice, drawn by six horses, but it altogether disappointed expectations, and after two hours' trial, was pronounced a failure.
This with all due respect to Americans as a rule, to whom the world is largely indebted for the remarkable machinery brought out from that inventive country.