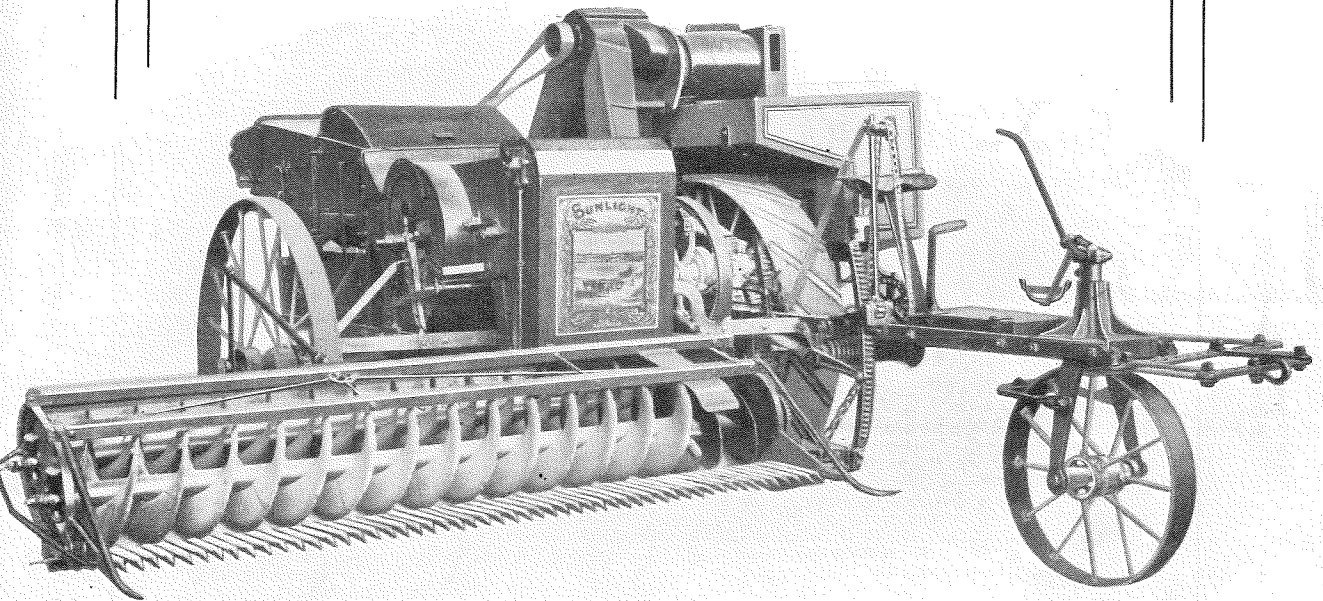


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Eric A
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The "Sunlight" Header Harvester

(H. S. Taylor's Patents)



Sole Manufacturer:

H. V. McKAY, Sunshine Harvester Works
SUNSHINE, VICTORIA

Branches:

27-39 George Street West, Sydney, New South Wales.
Stanley Street, Brisbane, Queensland.
Corner of Collins and Spencer Streets, Melbourne, Victoria.

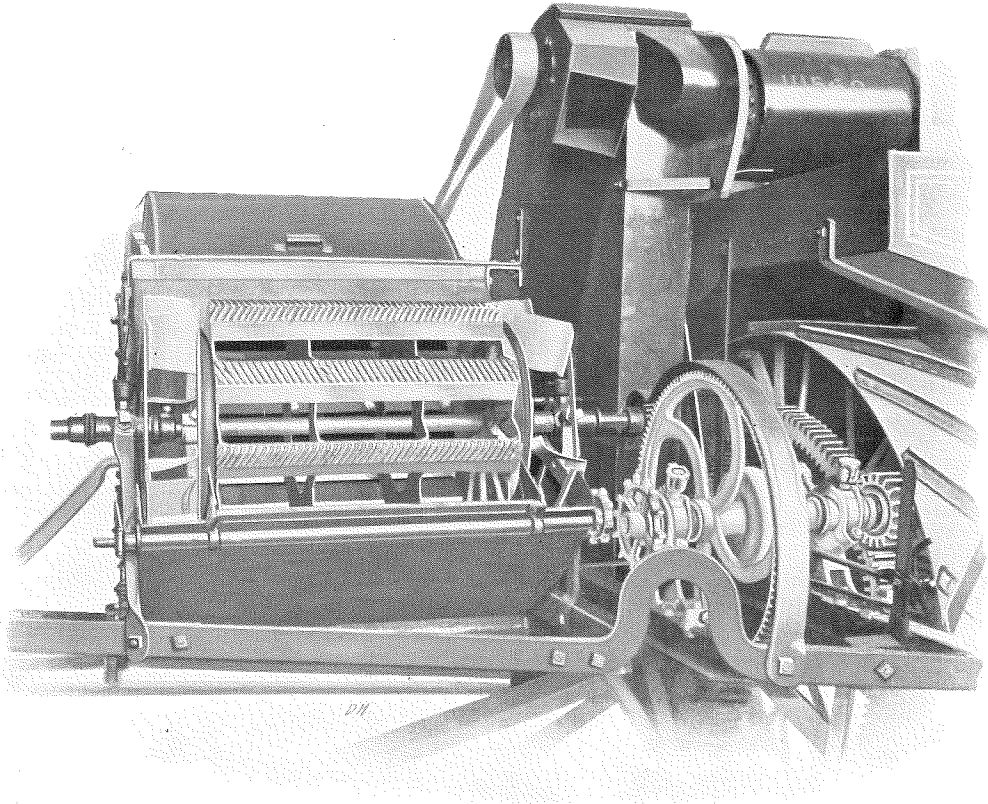
The "Sunlight" Header Harvester or REAPER-THRASHER

The "Sunlight" Header cuts, thrashes, winnows, cleans, and bags the ripe grain from the standing crop in one continuous operation.

The Harvester with the Knife.

The Lightest-Draught Machine of 8-feet cut.

The Comb remains level whether working low down in short crops or high up in tall crops.



"SUNLIGHT" HEADER HARVESTER—Sectional View, showing Thrasher Drum, Double Fan, and Gearing.

The Machine which dispenses with perishable canvas aprons.

The Steel Spiral Conveyors do not wear out.

The Harvester which will work without choking in the worst thistle-infested fields.

Has Thrasher Drum of enormous capacity.

Has Straw Walkers which relieve the Riddles of surplus straw, weeds, etc.

Has ample Blast and great Riddle area.

Is of Australian design and manufacture.

H. V. McKAY, Sunshine Harvester Works, SUNSHINE

THE "Sunlight" Header Harvester

Its Construction and Method of Working

The "Sunlight" Header is a compact, light, but solidly constructed 8-foot steel frame machine, weighing $36\frac{1}{2}$ cwts. One frame forms the body of machine, which does not move when the Comb is raised or lowered. The other frame carries the Comb and Spirals, which move up and down parallel, according to the height required to gather all heads. The machine is designed to cope with all conditions of growth, and to handle Wheat, Oat, and Barley crops perfectly without waste, undue wear, or heavy draught. It is easy to operate, and every moving part can be seen from the operator's seat. The machine contains a very limited number of bearings, which are exceptionally long, giving many years of wear. They are oiled by siphon lubricators, which are recognised as the best.

GEARING.

The main drives consist of one Crown Wheel, two Pinions, one pair of Straight Cogs, two pairs of Bevelled Cogs, one Universal Drive, one set of three intermeshing Wheels for Spiral Drive, three Chains, one Belt. The Crown Wheel is toothed internally and externally to give motions required without reverse or intermediate wheels, at the same time releasing the strain that would otherwise be on one pinion. The Front Pinion drives direct through a large Spur Wheel to the Drum Pinion, also drives Front Elevator through a chain. The Back Pinion drives direct on to the Shaker and Universal Shaft through a pair of bevel wheels. The Shaker Shaft drives Riddle Box. The Universal Shaft drives Knife and Front Spiral through a pair of bevel wheels and chain. From the Front Spiral the Back Spiral is driven by spur gear. The Back Shaft also drives the Grain and Headings Elevators and Screen through a chain. From the opposite side the Walkers are driven by a cross belt from a pulley on top.

EXPLANATION OF PARTS AND THEIR WORKING.

The Comb is adjustable, and can be opened to $1\frac{1}{4}$ inches. The Knife cuts on a hardened Ledger Plate, with back end of Comb Tooth partly covering it to make sure of clean cutting.

In raising or lowering the machine, the Comb is always in a level position, which adds to its efficiency in clean work and reduces Comb trouble. In place of Reel and Canvas Conveyor, as used in other machines, there are two Double-start Spirals, the front one to act as a reel, and between the two they convey the heads to the front Elevator. This does away with complications and a number of wearing parts, besides working in any condition of crop without

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assistance from operator. The Front Elevator is a double chain with steel floats riveted thereto to convey the stuff undershot to the Drum. This elevator is designed to permit great quantities to pass under the floats by means of a spring attachment which permits the floats to rise without slackening the chains.

The Thrashing Drum and Fans are a combination, doing away with extra bearings, saving space that Fans and Fan Case would otherwise take up, at the same time doing all that is required to clean perfectly.

The Fans are bolted to the ends of Thrashing Drum Plates, leaving a division between Fan and Drum for division plate on concave. The thrashed stuff is thrown on to the Walkers by the Beaters, while the air is forced under and through the Riddles by the Fans.

The Thrasher Concave is adjusted by a lever on the offside of Drum Case, which can be moved up and down, increasing or decreasing the space between Beater and Concave, according to the condition of thrashing. The Walkers work directly behind the Drum, which gives them every chance of treating large quantities of stuff with exceedingly little waste. The Slats on Walkers are formed to prevent any more straw than is necessary being passed on to the Riddles. The Grain Tray under the Walkers, which reciprocates, is a great advantage in saving grain, because nothing falls on the Riddles except that which is discharged from the front end of the Grain Tray. This gives the Riddles every chance of dealing with it quickly, because the grain falls at the point of strongest blast, which separates it to a certain extent before reaching the Riddles, which can then pass it through without hesitation or check. The Riddle Box is hung and stayed by springs with link hanger at rear to give a free and return motion. The Shaker Drive is a roller crank, which works very smoothly.

The clean grain and headings are passed from Riddle Box to Elevators by inclined Chutes, avoiding complications of screws and drives for same. They are then elevated by Cup Belts with fluted pulleys, which prevent slipping and obviate the overstraining of belts to keep them tight. The belts can work fairly loose and not slip, elevating nine or ten bags to the acre. Tension bolts are provided on the bottom of both Elevators for tightening belts, also for trueing belts in Elevator Casing. A cam is provided under offside top bearing for trueing belts on top pulleys.

Read Unsolicited Testimonials of Users

"Nothing succeeds like success," and the picture shown on the last page of a "Sunlight" Header practically forcing its way through a heavy growth of thistles, which stood from two to three feet higher than the oat crop, illustrates a marvellous harvesting performance. An oat crop is usually difficult to deal with, but when mixed with big thistles, which practically form a barricade, the

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task of harvesting is rendered extremely difficult, if not impossible. Mr. G. H. Sly, a thoroughly practical farmer, who is pictured driving his "Sunlight" Header at "Glenavon," Henty, N.S.W., was astounded by the way in which the machine did its work. Referring to it on the day the photo was taken, he said : "Before attempting to harvest this crop I felt that it took almost as much courage to do so as it would to face the Hun's bayonet. I have had no trouble, however, and the thistles have not proved a bar to progress. I worked from morning till noon to-day in this crop without having to stop except to unload and oil the machine." A testimonial given by Mr. Sly speaks for itself, and reads as follows :—

"Glenavon,"
Henty, N.S.W.

Mr. H. V. McKay, Melbourne.

Dear Sir,—In reference to the "Sunlight" Header I purchased from you this season, I wish to say I am well pleased with this machine. I have just completed the harvesting of 120 acres of oat crop, which, in addition to being down badly, was thickly infested with thistles, some of which were 6 feet high. This machine went through them without a hitch, which I consider was wonderful.

Six horses pulled her easily, doing up to 18 acres per day. I consider it is the best harvesting machine I have ever driven, and can recommend it to anyone who is thinking of going in for a Header.

Yours faithfully,
(Signed) G. H. SLY.

In the Culcairn district, N.S.W., many crops went down badly. High and heavy ones suffered most damage from wind storms and rain. Many of them, in addition to being lodged, were so badly tangled that harvesting machines were severely tested. Only those thoroughly equipped with appliances capable of raising and separating the tangled masses of crop and the capacity to deal with the enormous amount of straw and, in some instances, foreign growths had any chance of success. The "Sunlight" Header proved equal to the demands made upon it, and it got its full share of the most difficult crops to handle. The ease with which the crop lifter picked up the tangled masses, separated, and guided them to the adjustable comb was surprising, and proved how well it had been designed for the purpose. The spiral conveyors which practically provide a force feed, passed everything along from the comb and knives without fail to the thrasher drum. This is an important feature. The large spiral conveyors seize hold of everything from the crop lifter and comb, and there is a continual stream of heads, straw, and other matter to the drum. Thus the drum is fed evenly, consequently a maximum of thrashing power may be relied upon. This is in marked contrast to the action of a canvas conveyor, on which the heads and other matter, particularly in difficult crops, frequently stop until there is an accumulation of stuff, which then goes through the drum with a bump. Uniform feeding means perfect thrashing, hence the great

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advantage of the large spiral conveyors on the "Sunlight" Header. Read what Mr. P. Schultz, Culcairn, N.S.W., has to say about it :—

Mr. H. V. McKay, Melbourne.

Culcairn, N.S.W.

Dear Sir,—As we anticipated having a heavy crop this season, which would probably lodge, we decided to get a "Sunlight" Header. The crops went down badly ; in fact, worse than last year, when we lost heavily through not being able to deal with the tangled mass.

We had to run over a lot of it last year, but this season we are having no trouble at all, although the crop is much harder to deal with than last season's one. The adjustable comb is perfect, and may be set to suit any crop, and with efficient crop lifters will deal with any crop, no matter how badly tangled and lodged.

The spiral conveyors which take the crop to the drum are really a force feed. They feed evenly, consequently the thrashing is done thoroughly, as the stuff never stops. No lumps accumulate ; there is a regular stream from spirals to drum. It is really marvellous how it deals with tangled and lodged crops ; the thrashing is perfect, and the sample excellent.

The straw walkers will deal with thistles and other green growths, and, taken altogether, the "Sunlight" Header is simple to operate, and does its work thoroughly. It is the best machine I have yet seen for dealing with all kinds of grain crops.

(Signed) P. SCHULTZ.

Many crops in "The Rock" District, N.S.W., were heavy and badly damaged. Mr. Thomas Milne in the following testimonial describes his success with a "Sunlight" Header :—

Clijton,

Mr. H. V. McKay, Melbourne.

The Rock, N.S.W.

Dear Sir,—I had an extremely difficult crop to deal with, so I decided to get a "Sunlight" Header, or, as I call it, the Farmer's Friend. It is dealing with the crop, yielding eleven bags to the acre, which I did not expect to be able to harvest at all.

I tried other machines in it, but had to pull them out, as they failed. The design and general construction of the machine is as near perfection as is possible. The bearings and oil cups could not be better, and the designer evidently was a practical man and knew the farmers' requirements.

The spiral beaters act well and give no trouble, for they are practically a force feed. The cleaning process is perfect, and the sample is always good. The straw walkers will deal with any crop and act perfectly. The draught is light and straight, and six horses work the machine comfortably in a standing crop.

In a heavy, down, and tangled crop the draught is naturally slightly increased. The "Sunlight" Header is so compact and simple that it should last a lifetime. It is the best investment I have ever made in farm machinery.

Yours faithfully,

(Signed) THOMAS MILNE.

H. V. McKAY, Sunshine Harvester Works, SUNSHINE

Campbell's Forest, Victoria.

Mr. H. V. McKay, Sunshine.

Dear Sir,—In reference to the "Sunlight" Reaper-Thrasher, I don't know exactly how to start writing about it, as I never saw a machine like it, and other firms' agents bothering the life out of us to get one of theirs—the compliment they got! We were waiting till McKay started sending them out, if it took five years, and we got this one a long time sooner than expected.

After starting the machine, your expert said, "I would like to go through thistles or tangled crop." That he was very quickly obliged with. The machine went through same, and never stopped. The work it did was something wonderful. At the trial people came for miles, and are still coming every day to see this wonderful machine at work, and everyone goes away quite pleased that such a machine exists.

(Signed) J. & A. LEYS.

Darriwell, N.S.W.

Dear Sir,—Re "Sunlight" Header-Harvester, I am pleased to be able to say that your recommendation has been more than justified. The doing away with two high-speed driven parts, the winnower and peg drum, reduces the draught fully $1\frac{1}{2}$ horse power. The shafts being all parallel, and the crop once received being passed straight out the back, helps this.

So far we have taken off 300 acres last season and 350 this. So far the expense of running has not exceeded 30/-, and it is the driver's first machine to work.

Last season we had a tall crop, and this season we took off crop nine inches high, and never lost a grain.

The frame seems so rigid and side draught nil, that I think it would be wise to make them two feet wider. It would then be light work for six horses, three and three.

I have been on most makes of machines, as you know, and can say that this is the biggest get-away from existing machinery, on account of doing without the winnower and peg drum, that we have yet had. You may be able to improve on it, but not, I think, on the principle or mechanical construction of it.

This is rather a long letter, but you asked me for a full opinion of it, and you can recommend the machine to any novice. They are the means of making wheat growing pay. As you see, the taking off of 650 acres has cost under £2 for duplicates. The other charges are oil and depreciation, and you get every grain of wheat.

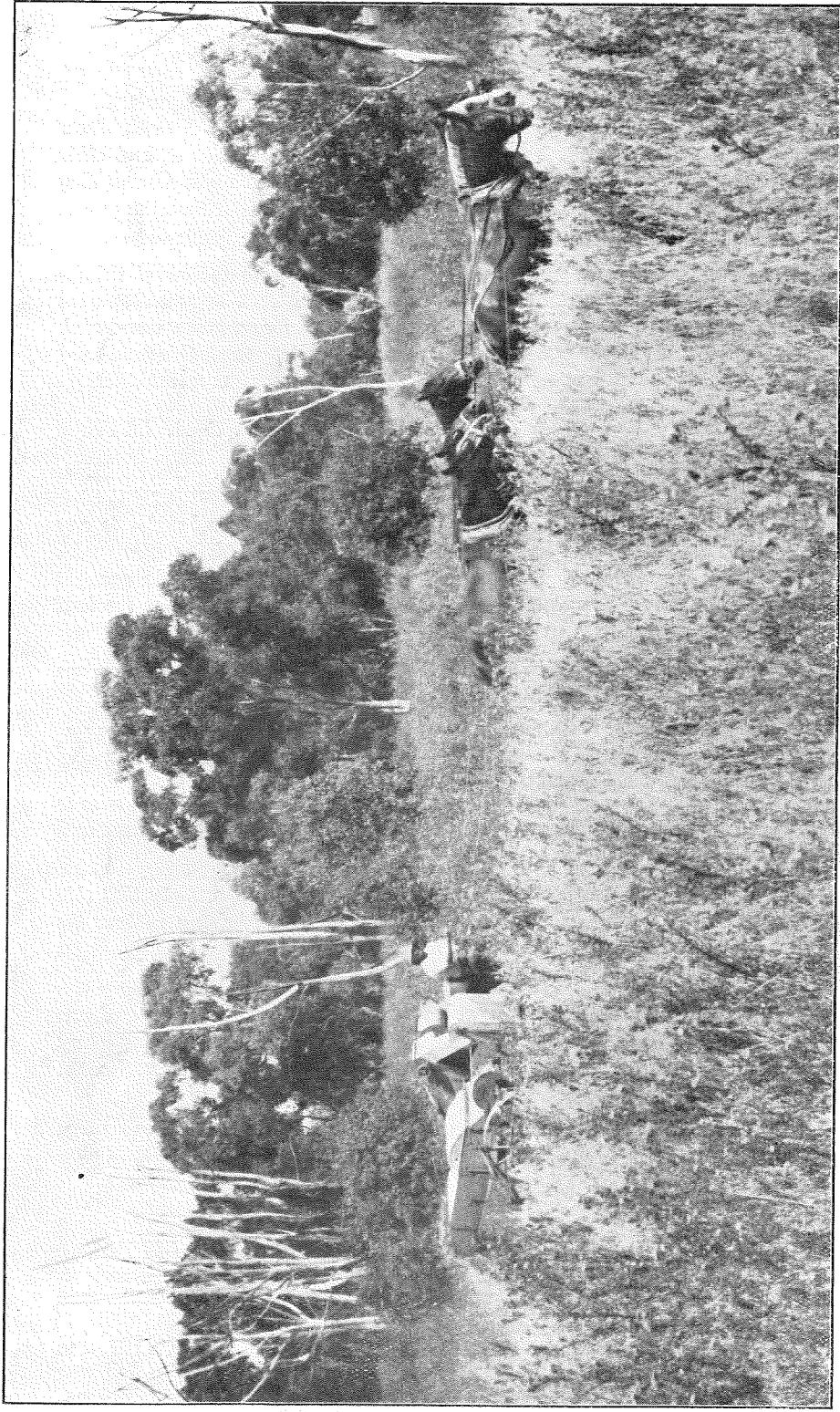
I forgot to mention the knife, being under the fingers, never chops the heads up in a low crop, which is a great thing, as when the head is broken up and the machine low the grain filters down.

Yours sincerely,

(Signed) G. E. LITTLE.

H. V. McKAY, Sunshine Harvester Works, SUNSHINE

The "SUNLIGHT" HEADER



A MARVELLOUS HARVESTING PERFORMANCE

The crop depicted on Mr. G. H. Sly's farm, "Glenavon," Henty, N.S.W., presented a difficult harvesting problem. The "Sunlight" Header, however, solved it as no other header could, and worked all day as freely as if there were no thistles, and produced a good sample. Read on foregoing pages what Mr. Sly and other farmers have to say about the "Sunlight" Header.

H. V. MCKAY, SUNSHINE HARVESTER WORKS, SUNSHINE

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