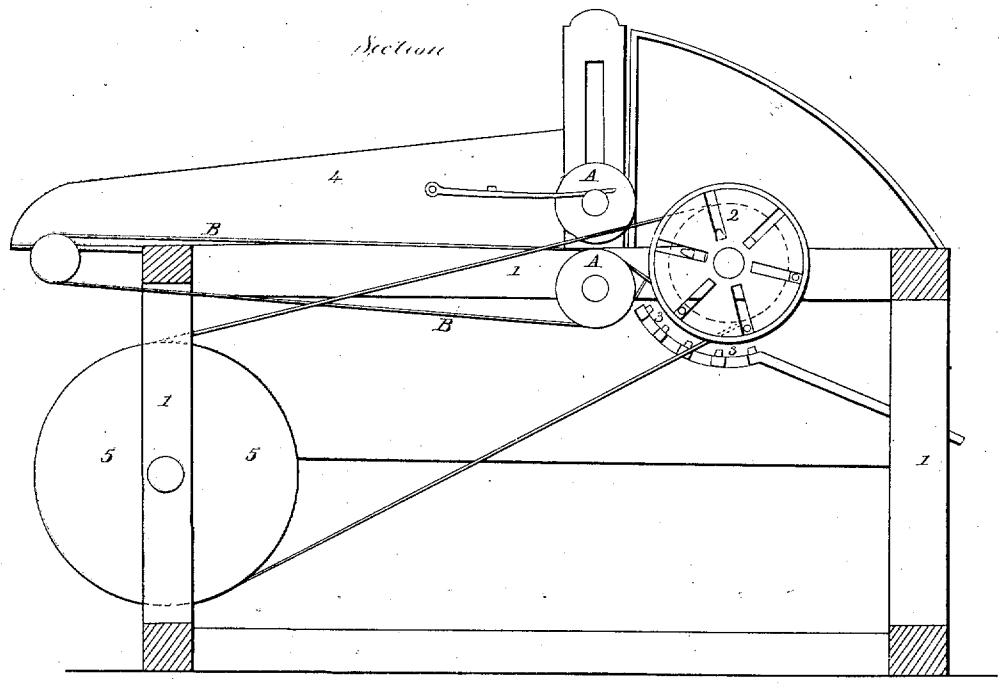
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R. Miller.

Thrashing Mach.

Patented Mar. 15, 1830.



Mar 15 1859

Randolph Miller
Letters Patent

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The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Randolph Miller himself of his improvement on the Thrashing Machine.

Be it known that I Randolph Miller of Marietta Lancaster County, Pennsylvania have invented an improvement in the machine for thrashing grain which is described as follows. This machine consists of 1st the frame. 2nd the cylinder of beaters. 3rd the box 4th the high fan. 5th the rubber cloth. 6th the pulley shafts &c for driving the machine. 1st The frame is three feet six inches in length, the side pieces 12 inches wide & made each side piece is a single piece of gaith tenoned into the end sills. The end posts are 2 feet 6 inches high with four round pieces or gaiths, the two lower ones put in with a tenon & mortize from the bottom & the two upper ones let in with a dove tail from the top. at the head end & at one side, The girths extend beyond the frame 9 inches; the upright pieces made into the upper & lower gaiths so as to admit of a mulitplying or driving wheel to be placed & run therein. 2nd The cylinder of beaters is made to extend across the frame having two circular wooden heads about 1-15 inches in diameter & two inches thick fixed on near each end on an iron shaft made to turn in boxes placed on the frames six inches from the dovetail openings are made on each of these heads to let in the ends of the beaters, which have high dove tail heads made to slide up & down in said openings. Three of these beaters are cast iron, one & a half inch in diameter & three are one inch by one & a half made of wrought or cast iron, the two front ones are to be placed with the four flat heads to about 3 inches of each end, the square heads are set in with a screw down into the dove-tail openings. The rubber cloth is to be [illegible]

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cutting the straw. there are two or four about one fourth of an inch thick & eleven on each of the two circular heads to confine the beaters in their places & the heads with the beaters form a shelled drum or cylinder. The dovetail openings in which the beaters are placed admit of their working up & down in such a way that the lower ones fall to the circumference to strike the grain & straw conveyed on the bed (to be hereafter described) or in case of resistance from any hard substance will be pushed up towards the centre, & admit the substance to pass & not injure the machine. 3d The bed is made to correspond with the cylinder of beaters before described being a section of a circle in which is placed square iron bars having an angle at the end of the beater cut down three eighths of an inch thick to a shoulder and they are so placed in the bed as to cut out the grain, but not to cut the straw when struck by the beaters. There is also a lining of wood made sufficiently strong to support the iron bars, which form the bed & into which the shoulders of the bars are let in by a mortice. 4th The ~~kicker~~ feeding rollers & cloth are made in the usual way and the latter turned by means of straps, cords, & pulleys connected with the driving pulley & cylinder of beaters. There are also two feeding rollers, the lower one is fixed but the upper one raised and falls having a spring over it for that purpose. 5th The Multiplying wheel or driving pulley is about 30 inches in diameter & three inches thick also another pulley about 8 inches diameter placed on the axle with the cylinder of beaters. The first turns on gudgeons as do pinions in boxes in the extended girths of the frame before mentioned. A strap passes from the driving pulley to one fixed on the end of the cylinder of beaters & a cord passes from that to the roller that turns the feeding cloth. Operation The sheaves of grain being put into the hopper descend on the feeding cloth, the driving pulley being turned by a hand or any other power passes for that purpose throws forward the grain on the feeding cloth & the upper feeding roller to the bed, is struck by the cylinders

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of beaters, the grain separated from the straw falls thro' between the bars & the straw is pushed out. What is here claimed as my peculiar invention is the machine as before described, the cylinder of beaters with the mode in which they are made to vibrate & fall on their close tacked spurrings. Also the mode in which the bed is constructed. For a further illustration of my invention I refer to the model and drawing of the same deposited in the Patent Office. In witness whereof I have hereunto subscribed my name at the city of Washington this fifteenth of February 1830

Witnesses
Wm P. Elliot
Robt W. Fenwick

Rudolph Meiller

Exd.
S.S.W.

Recorded. (March 15. 1830.)