

Fig. 1.

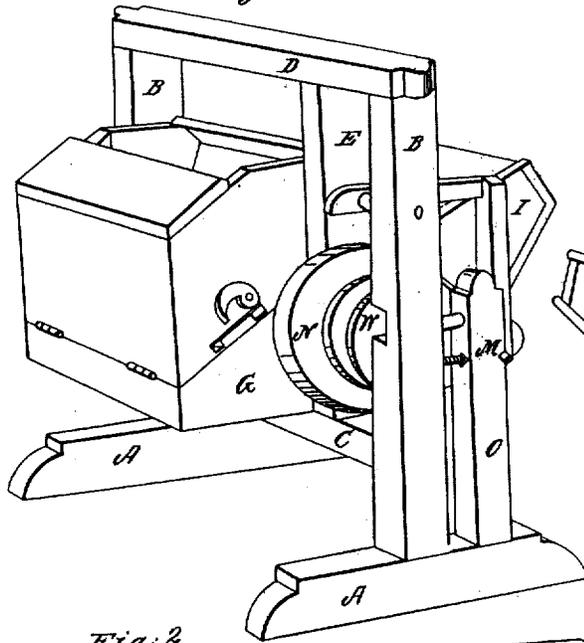


Fig. 3.

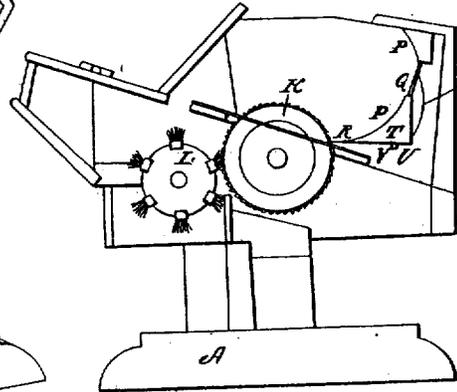


Fig. 2.

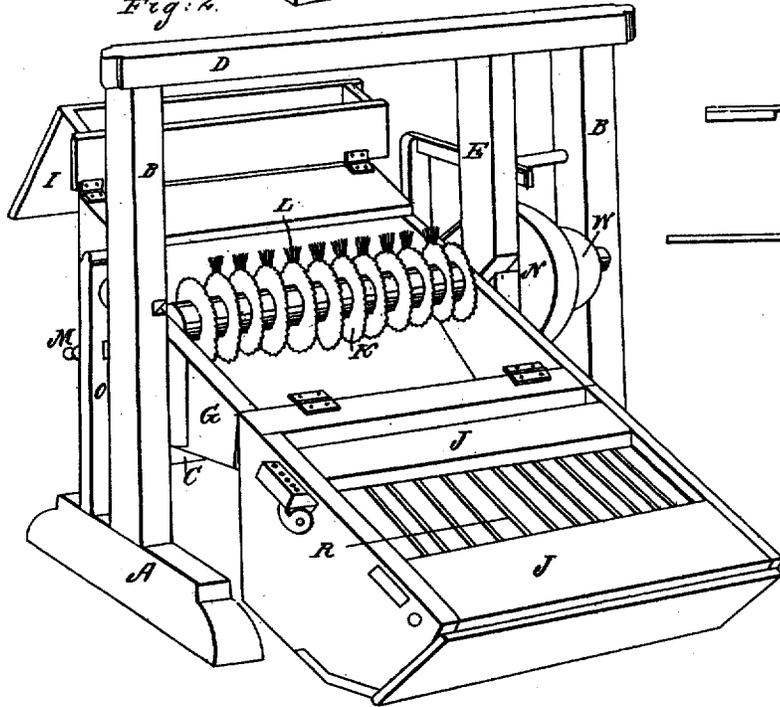
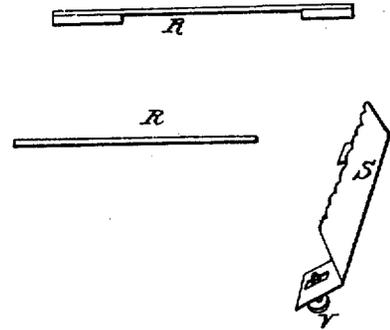


Fig. 4.



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James M^c Wright
Patent

The exhibits referred to in this Spelling Book, and making part of the same, containing a description in the words of the said James M^c Wright, himself of his improvement in the Process of Ginning Cotton

To all whom it may concern

Be it known that I James M^c Wright of the town of Townsend District of Fairfield in the State of South Carolina have invented certain new and useful improvements in the Cotton Saw Ginn called "M^c Wright's Process of Cotton Ginn" which are described as follows, reference being had to the annexed drawings of the same making part of this specification. The frame of the covered gin consists of two sills (marked A in the annexed drawings) 8 feet 9 inches long of scantling 6 inches by 4 placed on their edge with a mortise through the center of each to receive two main posts marked B 3 feet 3 inches long of scantling 6 inches by 4 with a mortise six feet above the top of the sills to receive a cap the length of the frame of scantling 6 inches by 4 marked C. Inserted at the top to receive a cap marked D of scantling 6 inches by 4. The end posts are inserted to receive the mortise marked E. The posts to carry the beam are marked F. and set into the sills at one end two inches in rear of the main post and a screw bolt at the other end. The posts are 2 feet 4 inches above the sills of scantling 4 by 4 inches. The plank at the ends of the beam marked G forms a bay around the beam and for the falling board to rest on. The falling board is composed of two pieces of 1 1/2 inch plank worked out to the segment of a circle the lower edge fitted on the slats the upper edge having a raised rim with it about one inch apart. The narrow piece of the upper board is let down on the sides until it comes within 3 inches of the other piece both being made fast. The comb is made of sheet iron or steel 3 1/2 inches broad with notches of points the wires fastened on a board and standing nearly perpendicular working on an iron pin with a screw below to put the comb to or from the roll at the funnel turning on hinges. A movable board to which the slats are fastened. H. saw. I. beam. M. regulating screw and tops of the beam.

A. The upper board. B. The lower board. C. being to set in the hopper board.
 (E. plate. F. comb). G. board to which the comb is fastened. H. iron pins on
 which the comb turns. I. screw to set the comb. M. driving pulley.
 The frame journal, saws, brush & gears, are made in the usual manner.
 The machine is driven by hand, steam or other power. The improvement
 which I have made and desire to secure by Letters Patent consist principally
 in giving a direction to the rotation of the said cylinder to that of the common
 gear, that is the same turn towards the feed board instead of from it.)
 The advantages derived from this and the other improvements are 1. Equal portion of
 the sower false seed, sand and trash being thus discharged before the picked
 cotton sees her the amount of air about the teeth, the picked cotton consequently
 passes cleaner from the gear, while on the other hand in the common gear a great
 portion of sand, sower, false seeds and trash having to pass directly through the
 current of air when the picked cotton is passing, grips with it and in consequence
 thereof a part of the cotton either sinks down with the trash on the back side and
 passes with the cotton through the journal. 2. The seed are discharged as soon
 as picked, while in the common gear the seed has to pass round to where the seed
 cotton is put in, and some seed is always covered that ought to be discharged, by which
 means the seed is apt to be crushed in an irregular manner. 3. The weight of a large
 roll of cotton lies directly on the saw, which roll cannot be broken by once passing
 or a sudden jerk of the cylindrical while in the common gear the roll being loose
 behind the saw is raised up and falls forward causing it to become hollow
 and once passing or a sudden jerk of the cylindrical breaks and often throws it out.
 4. The picking in this machine being done on the descent of the roller a displaced sub-
 stance finding its way to the saw cannot remain there nor injure the teeth,
 while in the common gear the hard substance separates from the roll and
 lodging against the saw often destroys a number of the teeth and sometimes
 the saws altogether are destroyed. 5. The hopper finger board in the common gear
 is fixed and stationary having a rack and comb behind it which by rubbing against
 the roll when the gear is in motion brings off the seed freely and with great regular-
 ity, while in the common gear the feed board being movable rather lets the seed
 out with too much cotton on it or by retaining the seed too long the cotton is
 slowly given out thus occasioning a lump of cotton or a lump of straw. 6. The sand, false

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False seed, much loss and other little profit with the seed and no
good cotton is lost in any way: while in the common gin much cotton is
waste and lost and appears to be imperfectly cleaned from the seeds & the
stems, which are not entirely removed by the imperfect machinery used
in the cotton gin

Whitings
James Cathcart
W. A. McCreight

Jas. McCreight

Drawing

&c
C. W.

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