(No Model.)

A. W. STRAUGHN.

STRAW STACKER.

No. 377,723. Patented Feb. 7, 1888.

Fig. 1.

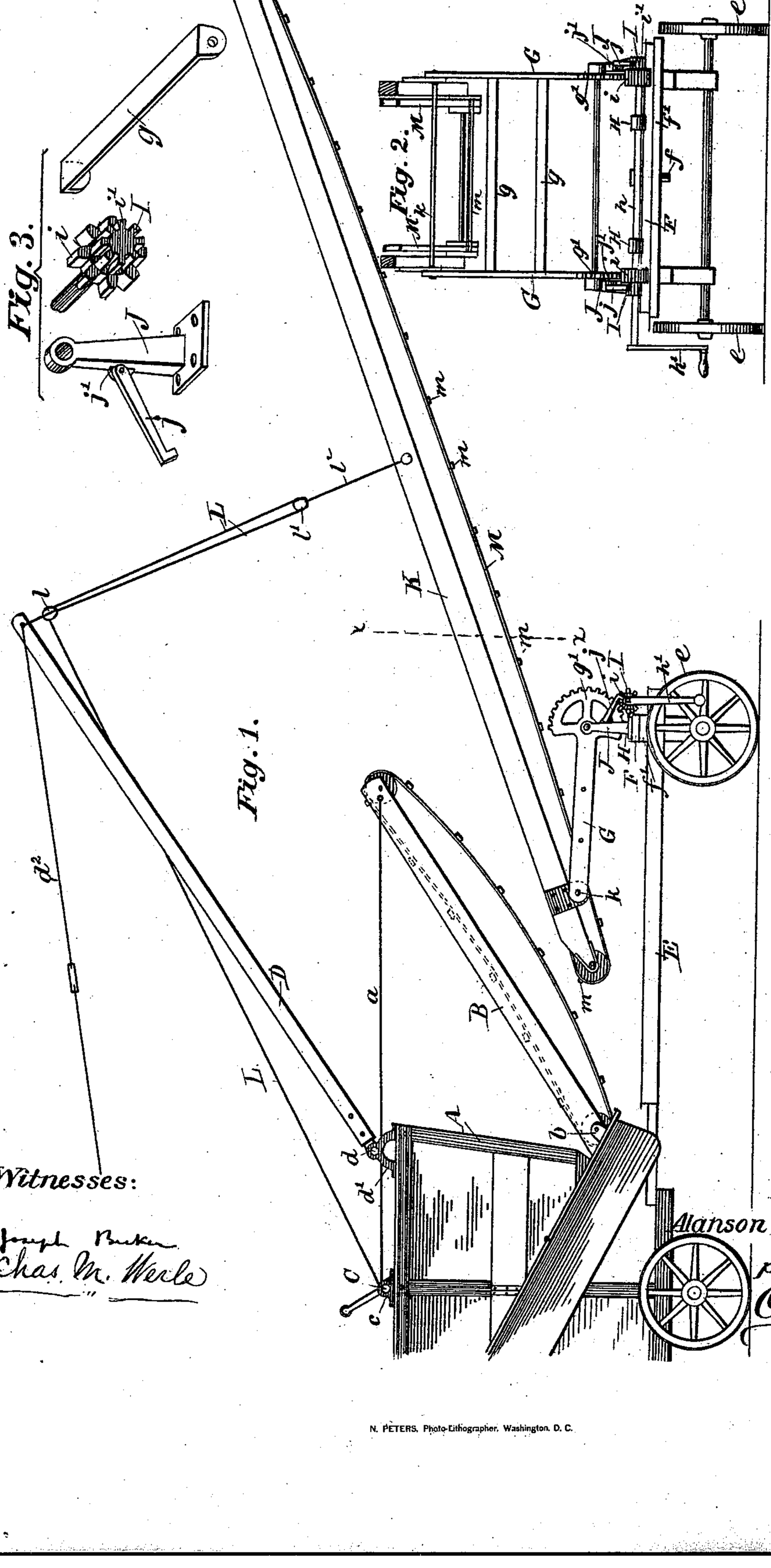

Fig. 2.

Fig. 3.

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STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 377,723, dated February 7, 1888.

Application filed October 20, 1887. Serial No. 252,922. (No model.)

To all whom it may concern:

Be it known that I, ALANSON W. STRAUGHN, of the town of Lincolnville, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Straw-Stackers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The object of my invention is to provide a straw-stacker to convey the straw and chaff from a thrashing-machine to the straw-stack, and which can be so adjusted that its inclination will vary but little during the period of building the stack, and, also, as the straw-stack increases in height and the end of the straw-stacker is correspondingly raised, the stacker can be projected backward from the machine toward the straw-stack, so that the straw will be fed to the middle of the stack during the whole period of building; and my invention consists in providing a straw-stacker which is supported at one end on a frame coupled to the thrashing-machine, and whose other end is supported by means of a derrick mounted on the top of the thrashing-machine, and suitable rope connections; and my invention also consists in providing certain mechanism by means of which the lower end of the straw-stacker can be elevated when necessary, and at the same time the straw-stacker can be projected backward from the thrashing-machine toward the straw-stack, all of which will be fully set forth in the following specification and claims.

In the drawings, Figure 1 is a side view of my invention, the several parts being shown in the position they would occupy when beginning to build a straw-stack. Fig. 2 is a section of the straw-stacker on line *x x*, Fig. 1, showing the operating devices for the rear end of the stacker in a different position from that shown in Fig. 1. Fig. 3 shows a group of detached details.

Similar letters of reference indicate similar parts in the respective figures.

A is a thrashing-machine, and B is the usual straw-carrier, which is pivoted at one end to suitable bearings, *b*, attached to the bed of the thrashing-machine. This carrier B can be elevated or lowered by means of the ropes *a*, which are attached to its projecting or free end and wound on the shaft C, which is mounted in suitable bearings, *c*, secured to the top of the thrashing-machine.

D is a derrick, which is secured at its lower end to a bar, *d*, mounted in suitable bearings, *d'*, which are bolted to the top of the thrashing-machine. This derrick is held in position by means of the guy-rope d^2, one end of which is fastened to the top of the derrick and the other end to any convenient stationary object.

E is a frame supported at one end by the wheels *e* and coupled at the other end to the rear frame of the thrashing-machine.

Supported on the frame E, immediately over the wheels *e*, is the plate F, which may either be rigidly secured to the frame, or it may be centrally pivoted to it by means of the pin *f*, which passes through the plate F, and the cross-piece *f'*, which forms part of the frame E.

J J are standards bolted to the plate F, and in these standards are pivoted the rocking bars G G. The bars G G are braced together by the angle-bars *g g*, and are provided at their lower ends with toothed segments *g' g'*.

H H are bearings rigidly attached to the plate F, in which the shaft *h* is mounted. Near each end of the shaft *h* is a double-toothed wheel, I, rigidly secured thereon, the teeth *i* of which engage with the teeth of the segments *g'*, while pawls *j*, pivoted to lugs *j'* on the standards J, engage with the teeth *i'* on the wheels I. When the pawls are constructed as shown in detail in Fig. 3 and are in engagement with the teeth *i'*, as shown in Fig. 1, they will lock the wheel in both directions. The shaft *h* is squared on one end to receive the crank-handle *h'*.

K is a straw-stacker, which is pivoted at one end to the rocking bars G by means of the rod *k*, and its other end is supported by means of a rope, L, which is secured at one end to the shaft C, and, passing over a pulley, *l*, on the end of the derrick D and under another pulley, *l'*, which is attached to ropes l^2, fastened to the sides of the straw-stacker, is fastened at the other end to the pulley *l*.

M M are belts which move around suitable

pulleys at each end of the straw-stacker and have motion imparted to them in any well-known and suitable manner. *m m* are bars secured at intervals to the belts M.

The operation will be easily understood. As the straw-stack increases in height and it becomes necessary to raise the free end of the straw-stacker, the pivoted end can also be raised, and at the same time the straw-stacker be projected backward from the machine by revolving the shaft which carries the toothed wheels engaging with the toothed segments on the ends of the rocking bars, and by winding up the rope L upon the shaft C and thus raising the stacker bodily in its oblique position when the pivoted end has been sufficiently elevated. Thus the inclination of the straw-stacker need vary but little during the entire operation of building the stack, and, furthermore, by projecting the straw-stacker backward at the same time its free end is raised, the straw can be fed to the middle of the stack throughout the entire operation of building it.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a supporting-frame adapted to be coupled to a thrashing-machine, of rocking bars pivotally mounted upon the supporting-frame, toothed segments upon the rocking bars, a shaft provided with gearing to engage said toothed segments and operate the rocking bars, a straw-stacker pivoted at its rear portion to the free ends of the rocking bars, and a support for the free end of the straw-stacker, substantially as described.

2. The combination, with a supporting-frame adapted to be coupled to a thrashing-machine, of a base-plate secured to said frame, standards secured to said plate, rocking bars pivoted to said standards and provided with toothed segments, a straw-stacker one end of which is pivoted to the free ends of the rocking bars and the other end supported by a derrick and suitable connections, a shaft mounted in suitable bearings on the base-plate, and gear-wheels secured to the shaft and engaging the toothed segments, substantially as described.

3. The combination, with a supporting-frame and a base-plate secured thereto, of standards secured to said plate, rocking bars pivoted to said standards and provided with toothed segments, braces secured to the rocking bars, a straw-stacker pivoted to the rocking bars, a shaft mounted in bearings on the base-plate, double-toothed gear-wheels mounted on said shaft, one set engaging the segments, and locking-pawls pivoted to the standards and engaging the other set of teeth on the gear-wheels, substantially as described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

ALANSON W. STRAUGHN.

Witnesses:
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JOHN H. DICKEN.