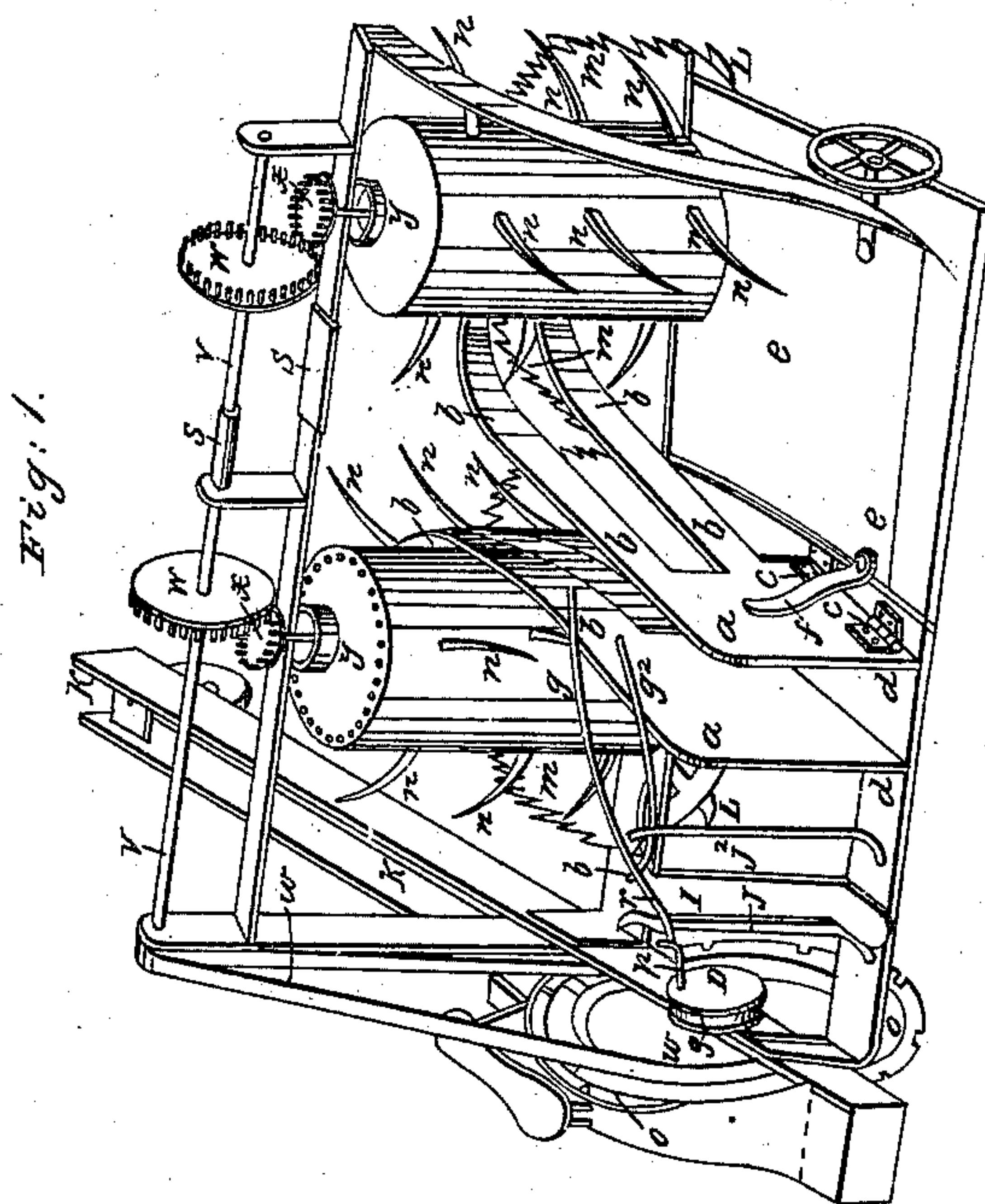
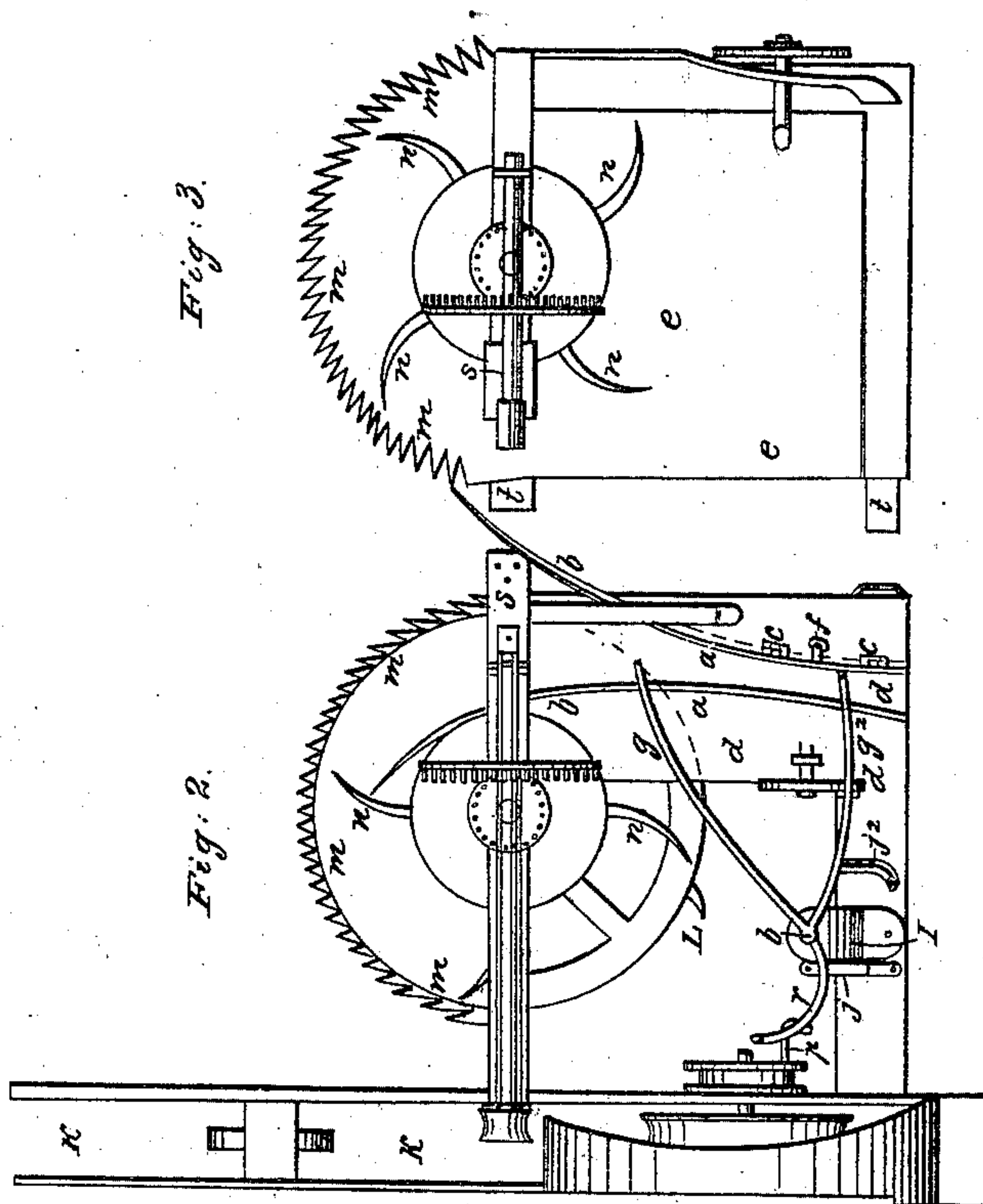


H. KELLOGG.  
Grain Cutting Machine.

No. 17,223.

Patented May 5, 1857.





# UNITED STATES PATENT OFFICE.

HIRAM KELLOGG, OF McHENRY, ILLINOIS.

IMPROVEMENT IN MACHINES FOR CUTTING AND BINDING GRAIN.

Specification forming part of Letters Patent No. 17,223, dated May 5, 1857.

*To all whom it may concern:*

Be it known that I, HIRAM KELLOGG, of McHenry, in the county of McHenry and State of Illinois, have invented and made certain new and useful Improvements in Machines for Facilitating the Cutting and Binding of Grain; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine complete. Fig. 2 is a top view of the main half or sectional machine. Fig. 3 is a top view of the detachable sectional portion of the machine.

The nature of my improvement consists in what I term an "automatic compressor" or "sheaf-holder," formed of the grip-rods  $g g^2$ , attached by an axis or joint,  $h$ , to a vertical standard,  $i$ , and being combined in operation with the rods and vertical springs  $J J^2$ .

The operation of my grain cutting and binding machine is as follows, viz: The motive or moving power is connected or attached at the tongue or draft part  $K K$ , and as the machine advances forward against the grain the sickle blades or knives  $L L L$ , being attached to horizontally-arranged disks or wheels, revolve inwardly toward each other, and cut the stalks of the standing grain as they enter between, and bear up against the stationary teeth or finger-like devices  $m m m m$ , which are attached to the platform of the machine, the standing grain being drawn into the fingers by means of the revolving curved fingers  $n n n n n$ , and as the stalks of grain are severed they are accumulated and drawn in between the fingers  $b b b b$  of the sheaf-boards  $a a$ , where the standing bundle of cut grain is compressed and held by the grip-rods  $g g^2$ , while the binder or person standing on  $e e$  fastens a cord or thong around the bundle while the same is passing out from between the sheaf-boards to be deposited in the rear of the machine. The better, however, to understand the operation of the compressing device, I must state that while the cut grain is passing in between the sheaf-boards  $a a$  the grip-rods  $g g^2$  of the compressor are extended; apart or open, as shown

in Fig. 2, so as to admit the cut stalks of the grain; and at every perfect revolution of the driving or main wheel  $O O$  a bundle is formed, the two grip-rods being brought against the bundle of grain through the intervention of rod or strike device  $P$ , attached to a small disk,  $Q$ , fastened onto the shaft or axle of the driving-wheel  $O$ , Fig. 1. This strike  $P$ , at every revolution of the wheel  $O$ , strikes against the short end  $r$ , or the handle part of the grip-rod  $g$ , which moves up against the bundle of cut grain, and which bundle is also confined in position by the short grip  $g^2$ , when at the proper time, and after the gavel or sheaf has been forced from between the sheaf-boards, the striker lets go its hold against the handle  $r$  of the grip-rod  $g$ , which, after having performed its office of pressing against the standing bundle of grain, is made to fly back into its original position by aid of the vertical spring  $J$ , the shorter grip  $g^2$  also being maintained or brought back to its proper position by aid of the vertical spring  $J^2$ .

The design of having the detachable sectional part, Fig. 3, is to employ it when the grain is light or of thin growth, and when the grain is of heavy growth then the sectional part, Fig. 3, is detached. When the whole machine is required the part Fig. 3 is very readily attached to the main portion of the machine by the coupling devices and connection-strips  $s s t t$ . The whole of the machine is supported on suitable truck and transportation wheels, and motion is communicated to the mechanism by means of the band  $u u$  and shafting and gearing  $v v w w x x y y$ .

Having fully set forth and described the nature and operation of my improvements in devices for facilitating the binding of grain, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The compressor device formed of the grip-rods  $g g^2 h r$ , standard  $i$ , and springs  $J J^2$ , in combination with striker  $P$ , when the same are constructed and operated substantially as described.

HIRAM KELLOGG. [L. S.]

Witnesses:

JOHN S. HOLLINGSHEAD,  
NOBLE D. LARNER.