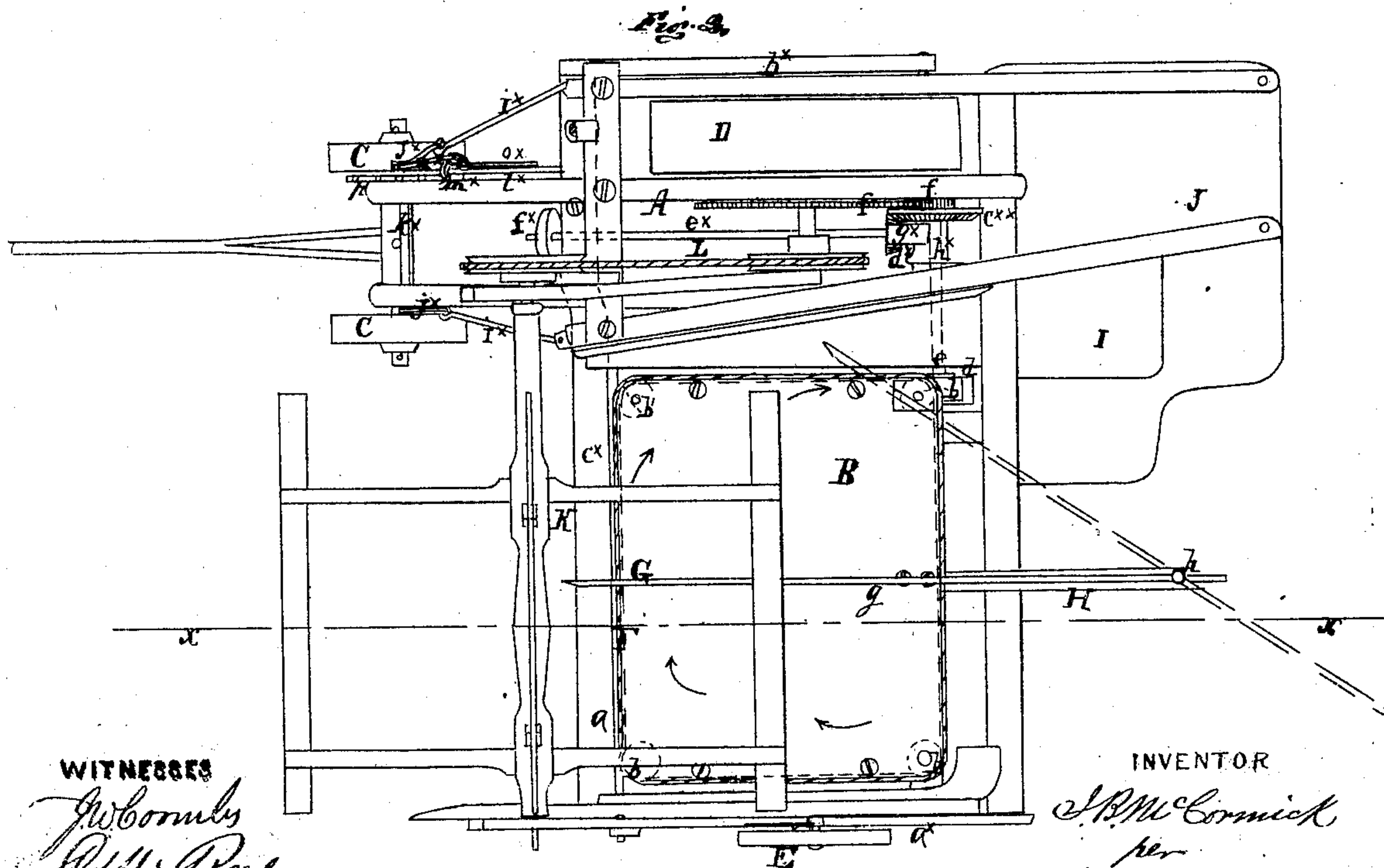
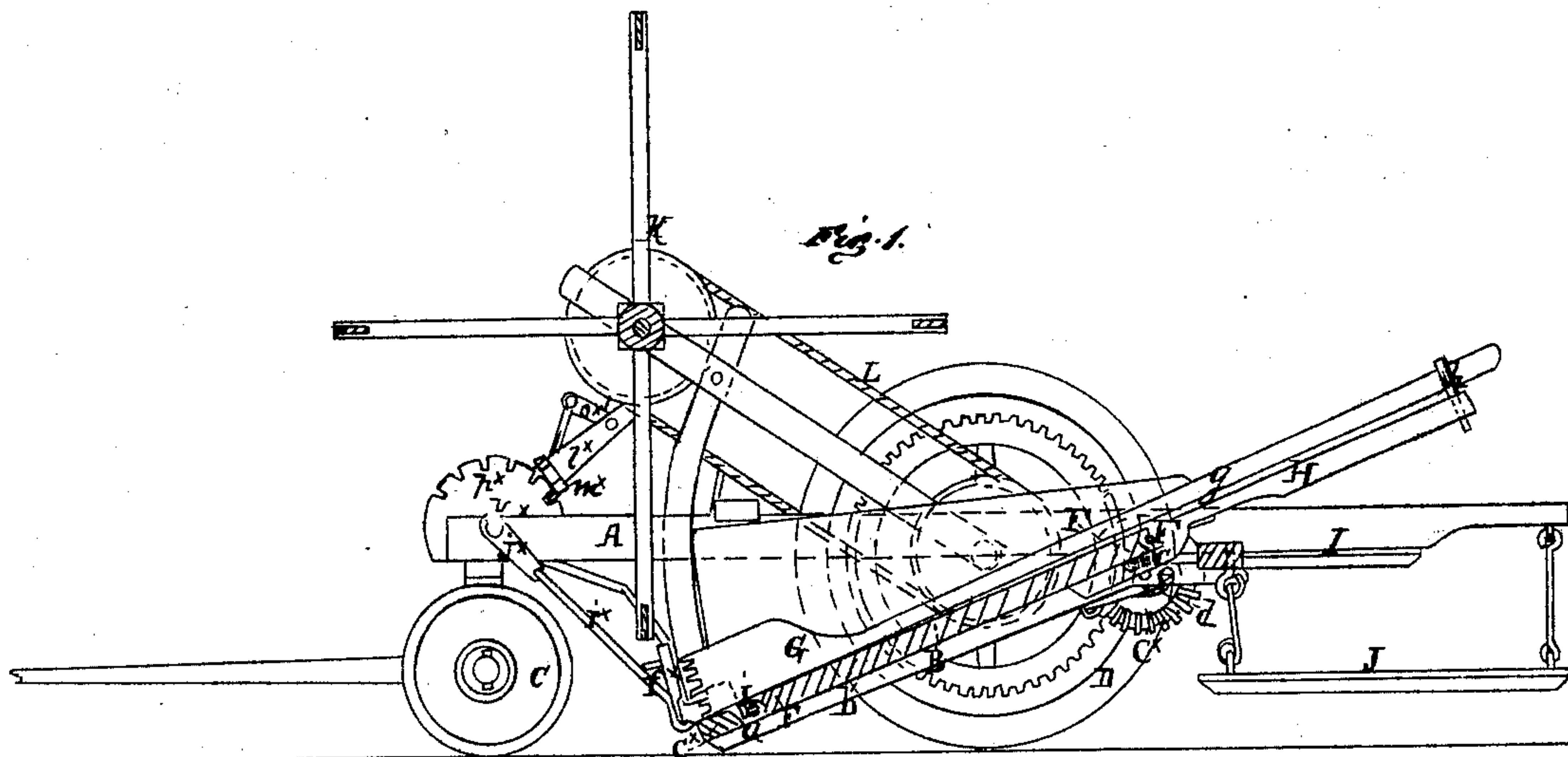


J. B. McCormick, Harvester Reel.

No. 4,383.

Patented Jan. 26. 1864



WITNESSES

J. W. Corbly
C. W. Reed

INVENTOR

J. B. McCormick
per
Munn & Co
Attys

UNITED STATES PATENT OFFICE.

J. B. McCORMICK, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN REAPING-MACHINES.

Specification forming part of Letters Patent No. 41,383, dated January 23, 1864.

To all whom it may concern:

Be it known that I, J. B. McCORMICK, of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and Improved Grain-Discharging Device for Harvesters; 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 side sectional view of my invention, taken in the line $x x$, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of an automatic rake arranged to operate in such a manner as to deliver the grain at one side of the rear of the machine, in combination with a gavel-receiving table and a binders' platform or stand, all arranged as hereinafter fully set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the main frame of a reaper, and B the platform. The front part of the main frame is supported by a pair of truck-wheels, C C, and in said frame there is a driving-wheel, D, which is its chief support, and drives the working or operating parts. The grain end of the platform is supported by a wheel, E, commonly termed the "grain-wheel." This wheel E also supports the corresponding end of the finger-bar and reel, and it is attached to a firm bar, a^x , which is permanently secured at right angles to the back bar of the main frame.

The platform B proper—that is to say, the part on which the grain falls—is so arranged and attached to its framing as to leave a space or groove, a , all around it, and in this space or groove a a cord, F, works, said cord passing around pulleys b at each corner or angle of the platform. One of these pulleys b has a bevel-wheel, c , at its under side, and the wheel c gears into a corresponding wheel, d , on a shaft, e , which receives its motion through the medium of gears f from the axle of the driving-wheel D. The framing to which the platform B is attached is a swinging one, and is composed of a series of bars, b^x , to the front ends of which the finger-bar c^x is attached. The back

ends of the bars b^x are secured to the main frame A by means of pivots, which are in line with the shaft e , the latter having its bearings in the platform-frame. On the shaft e there is placed a bevel-wheel, c^x , which gears into a bevel-pinion, d^x , at the back end of a shaft, e^x , the front end of which has a crank-pulley, f^x , attached to it, from which the sickle is driven by a connecting-rod. The back end of the shaft e^x has its bearing in a box, g^x , which is of loop form, to admit of the bevel-pinion d^x working within it, and this box g^x is attached to a plate or bar, h^x , which is fitted on the shaft e , as shown in Fig. 2. By this arrangement it will be seen that the finger-bar may be raised and lowered without affecting the main frame or interfering in the least with the sickle-driving mechanism. This result is attained by having the pivots which connect the back end of the platform-frame to the main frame in line with the shaft e .

The front part of the front platform-frame has two diagonal rods, $i^x i^x$, attached, which extend forward and upward toward the front part of the main frame A, and directly over the truck-wheels C C. The front ends of the rods $i^x i^x$ are attached to the ends of cranks $j^x j^x$ on a shaft, k^x , to which a lever, l^x , is secured, said lever being provided with a sliding dog, m^x , which is actuated by a spring, n^x , and lever o^x , the spring n^x having a tendency to keep the dog engaged with a toothed segment-plate, p^x , attached to the side of the main frame. By actuating the lever l^x it will be seen that the front part of the platform-frame may be raised and lowered, and retained at any desired point by the dog m^x , the latter being disengaged from the toothed segment-plate o^x when it is desired to adjust the sickle by actuating the lever o^x .

G is a rake, the arm g of which passes loosely through a swivel-pin, h , at the outer end of a bar, H. The rake rests on the platform, and is connected by a pin, i , to the cord F, and as the machine is drawn along works over the platform in the direction indicated by the arrows in Fig. 2, and discharges the grain at one side of the rear of the platform and upon a table, I, which is attached to the framing at the back of the platform.

J represents a binders' stand or platform, which is suspended by rods j from the framing of the machine, and is directly below the table

I. The binders stand on this platform and take the gavel from the table I, bind them, and discharge them upon the ground.

The reel K is driven from the axle of wheel D through the medium of a belt, L.

I do not claim separately the rake G, operated as shown, for that has been previously used; but

I do claim as new and desire to secure by Letters Patent—

The automatic rake G, arranged to operate so as to discharge the grain at one side of the rear of the platform B, in combination with the table I and binders' platform or stand J, all arranged substantially as herein set forth.

J. B. McCORMICK.

Witnesses:

E. S. TRACY,

WM. G. RICH.