

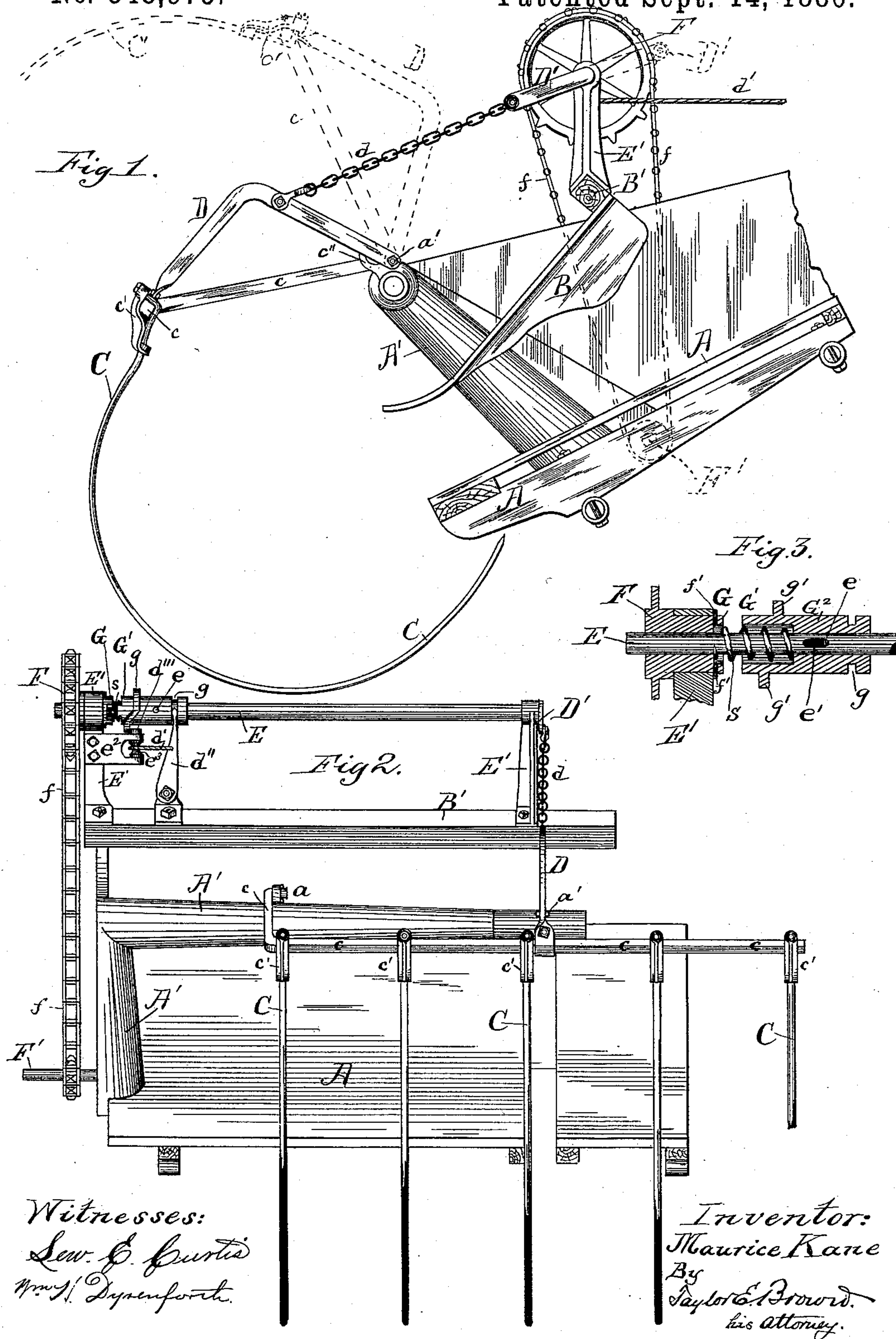
(No Model.)

M. KANE.

## SHEAF CARRIER FOR HARVESTERS.

No. 348,975.

Patented Sept. 14, 1886.





# UNITED STATES PATENT OFFICE.

MAURICE KANE, OF CHICAGO, ILLINOIS.

## SHEAF-CARRIER FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 348,975, dated September 14, 1886.

Application filed June 20, 1885. Serial No. 169,319. (No model.)

*To all whom it may concern:*

Be it known that I, MAURICE KANE, of Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have  
5 invented certain new and useful Improvements in Sheaf-Carriers for Harvesters; and I do hereby declare that the following is such a full, clear, and exact description of the invention as will enable others skilled in the art to which  
10 it appertains to make and use the same, reference being had to the accompanying drawings, forming a part thereof.

The object of my invention has been to provide an attachment adapted to be secured to  
15 any ordinary grain-binding harvester for the purpose of receiving the bound bundles or sheaves as they fall from the binding mechanism, carrying them with the harvester until a sufficient number of bundles has been thus gathered, and then enabling the operator to drop the  
20 bundles from the carriers simultaneously, so that they can be more readily shocked, and which will be simple, light, cheap, durable, and easily operated.

In the accompanying drawings, wherein similar letters of reference indicate like parts, I have shown, in Figure 1, a side view of my improved bundle-carrier secured to an ordinary grain-binding harvester, the binding mechanism being removed, in Fig. 2 a plan view of  
30 the same, and in Fig. 3 a sectional view of the operating-clutch.

In said drawings, the letter A represents the binding table or platform of a harvester; A',  
35 the usual metal standard, and B the breast-plate. A number of downwardly-projecting curved carrying-fingers, C, are secured rigidly at *c'* to the transverse portion of the bent arm *c*. This arm *c* is hinged or pivoted at *a* to the  
40 transverse portion of the standard A', as shown. The bent arm D is secured at one end to the arm *c*, and at its other end is pivoted at *a'* to the standard A'. The shaft E is journaled in bearings on the standards E' from the transverse breast-plate bar B'. At one end this shaft  
45 is provided with a crank-arm, D', and at the other end with a sprocket-wheel, F. A chain, *d*, connects the bent arm D and the crank-arm D'.

F' is the constantly-revolving packer-shaft,  
50 provided with a small sprocket-wheel, as shown, and which drives the wheel F by means of the sprocket-chain *f*. The hub of the wheel F is

long enough to pass through the standard E' and to permit the pins *f'* *f'* to secure it in place, as shown in Fig. 3. The end of the hub 55 is cut away, as shown, to form one-half of a clutch, G, the other half, G', being on the sleeve G<sup>2</sup>, mounted on the shaft E, and prevented from revolving thereon by the pin *e*. A slot, *e'*, in the shaft, through which slot the pin *e* 60 passes, permits the sleeve G<sup>2</sup> to be moved longitudinally on the shaft.

Surrounding the shaft E is the spring *s*, one end whereof presses against the clutch G, and the other against the clutch G', both of which 65 are recessed or hollowed out to permit the placing the springs *s* around the shaft, as shown in Fig. 3, the object being to keep both ends or parts of the clutch apart while the bundles are being gathered. 70

Secured to the standard E', near the sprocket-wheel, is a bracket, *e*<sup>2</sup>, having a pulley, *e*<sup>3</sup>, at its end. A chain or cord, *d'*, passes from near the operator over this pulley *e*<sup>3</sup>, and is secured to an arm, *d'*, hinged at one end to the 75 bar B', and having its other end reduced and shaped so as to enter a groove or annular slot, *g*, on the sleeve G<sup>2</sup>. A cam, *g'*, is formed or secured to the outside of the sleeve G<sup>2</sup>, as shown, and engages with a friction-roller, *d'''*, secured 80 to the stationary bracket *e*<sup>2</sup>.

The operation of my invention is as follows: The parts being in the positions illustrated in full lines in the drawings, as each bundle is bound and released from the breast-plate B it 85 will fall therefrom downwardly and be caught by the fingers C, the fingers being so shaped as to extend slightly beyond the lower edge of the binding-table A, so as to leave no room between the table and the ends of the fingers for 90 a bundle to escape or fall to the ground. When the operator wishes to discharge the bundles from the grasp of the fingers C, he simply pulls on the cord or cable *d'*, thus causing the arm *d'* to move or slide the sleeve G<sup>2</sup> longitudinally 95 on the shaft E against the spring *s*, and bringing the two parts G G' of the clutch into engagement. Through the clutch-sleeve and pin *e* motion is now communicated from the constantly-rotating sprocket-wheel F to the arm 100 D', thus raising the arms D and *c* and the fingers C to the position illustrated in dotted lines in Fig. 1 and releasing the bundles. As soon as the parts of the clutch have engaged,



the operator may release or slacken the cable as the stud or friction-roller  $d'''$  will hold them so until the fingers C are returned to their normal position. The stop  $c''$  on the standard 5 A' arrests the arm D at the proper time and relieves the cam of the weight of the arms, and the spring  $s$  thereupon disengages the parts of the clutch.

What I claim, and desire to secure by Letters Patent, is—

1. In a grain-harvester, the bundle-carrier consisting of the bar  $c$ , having depending fingers rigidly secured thereto, and pivoted or 15 hinged to the binder-standard, in combination with mechanism for operating the same to release the bundles, substantially as specified.

2. In a grain-harvester wherein the bundle-carrier is hinged to the binder-standard, the

stop  $c^2$ , rigidly secured to the said standard to arrest the carrier in its downward movement, 20 substantially as specified.

3. In a grain-harvester, the sheaf or bundle carrier hinged to the binder-standard and mechanism for automatically tripping said carrier to discharge the bundles, consisting of the 25 shaft E, sleeve  $G^2$ , mounted thereon and provided with a cam,  $g'$ , the pin or roller  $d'''$ , to engage said cam, the arm  $d^2$ , sprocket-wheel F, operated from the packer-shaft, the arm D', and chain  $d$  or other connection, arranged and 30 operating substantially as specified.

MAURICE KANE.

Witnesses:

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