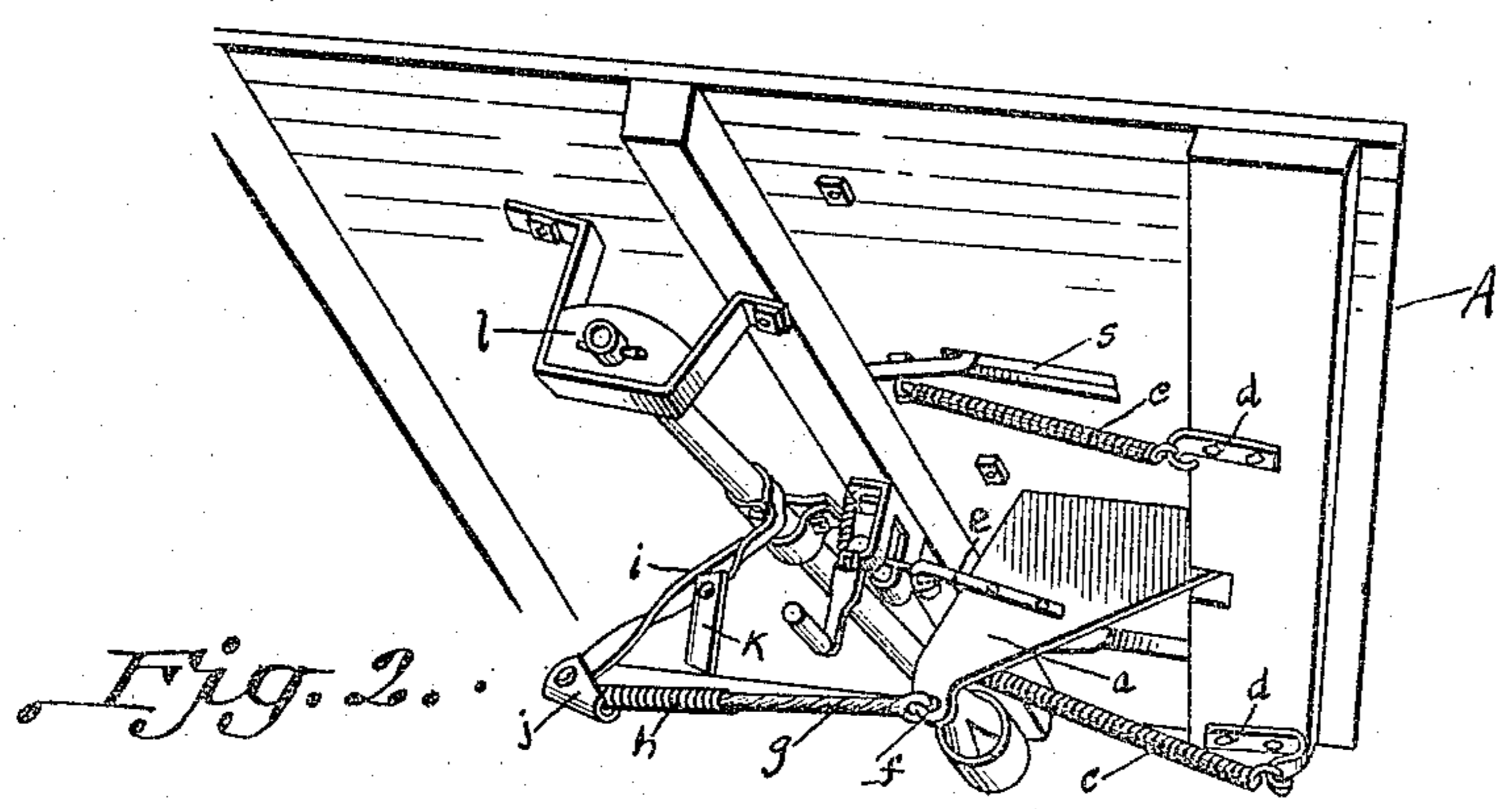
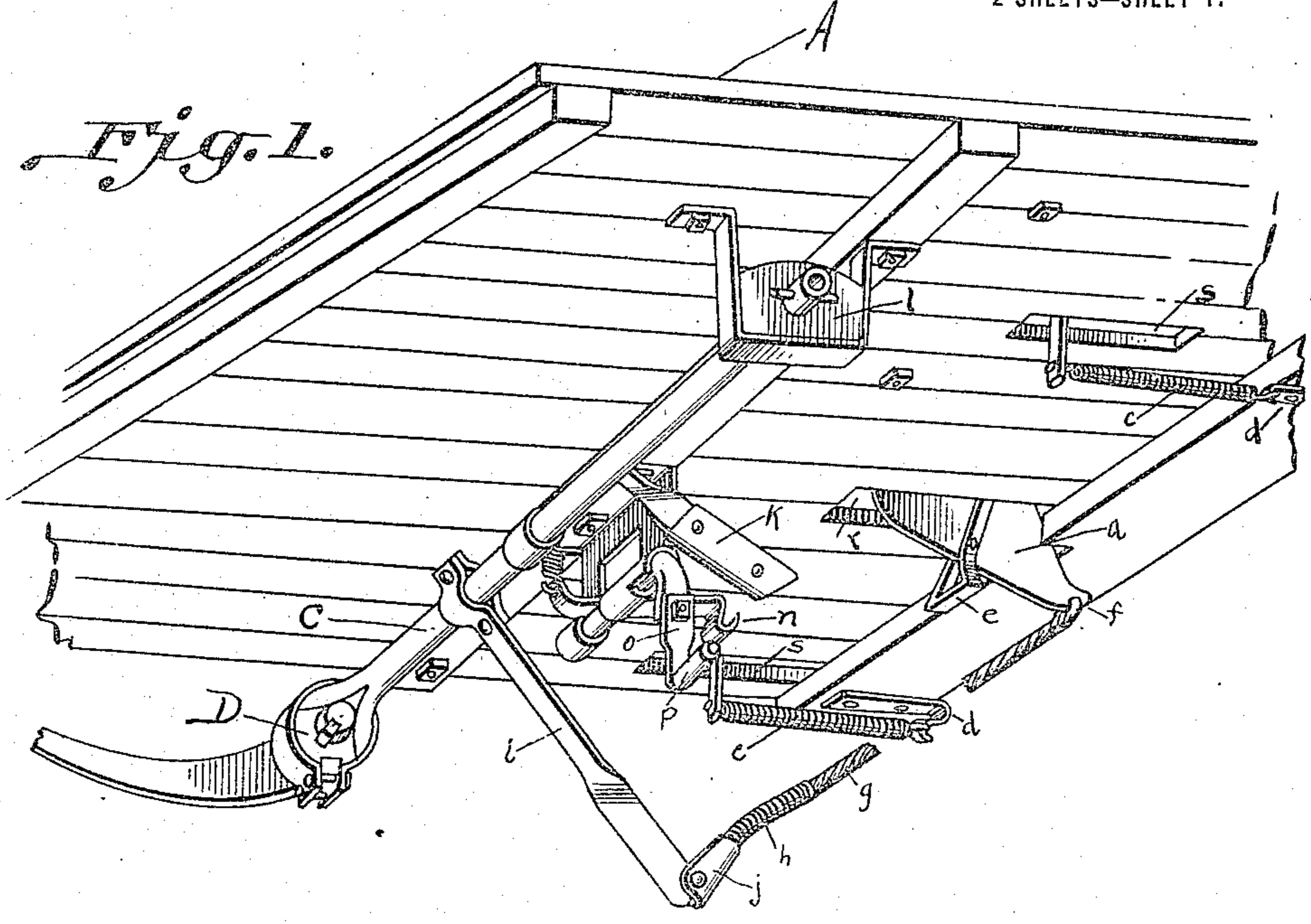


W. ZICKEFOOSE.  
 CORN BINDER.  
 APPLICATION FILED NOV. 6, 1915.

1,195,320.

Patented Aug. 22, 1916.  
 2 SHEETS—SHEET 1.



*William Zickefoose*  
 Inventor:

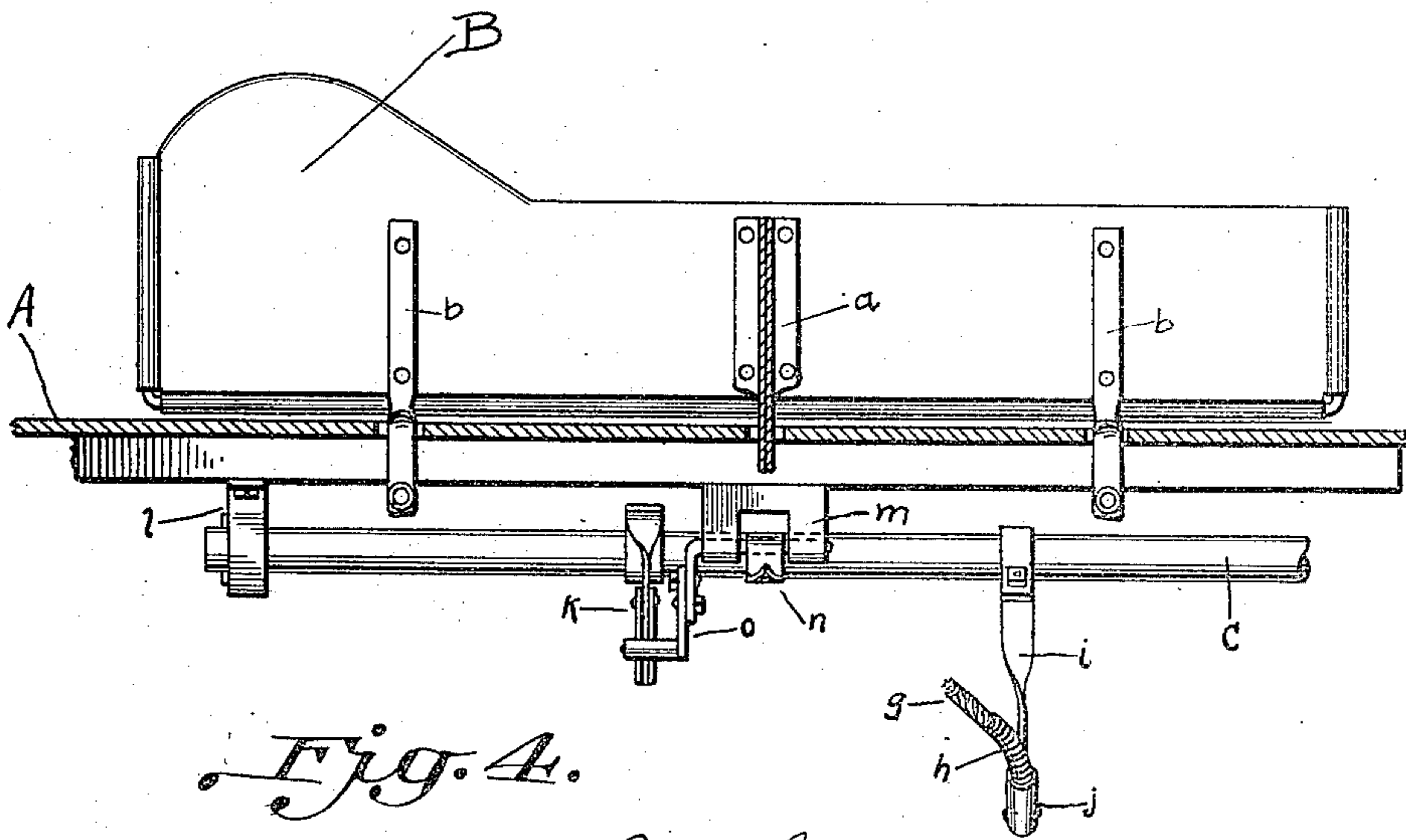
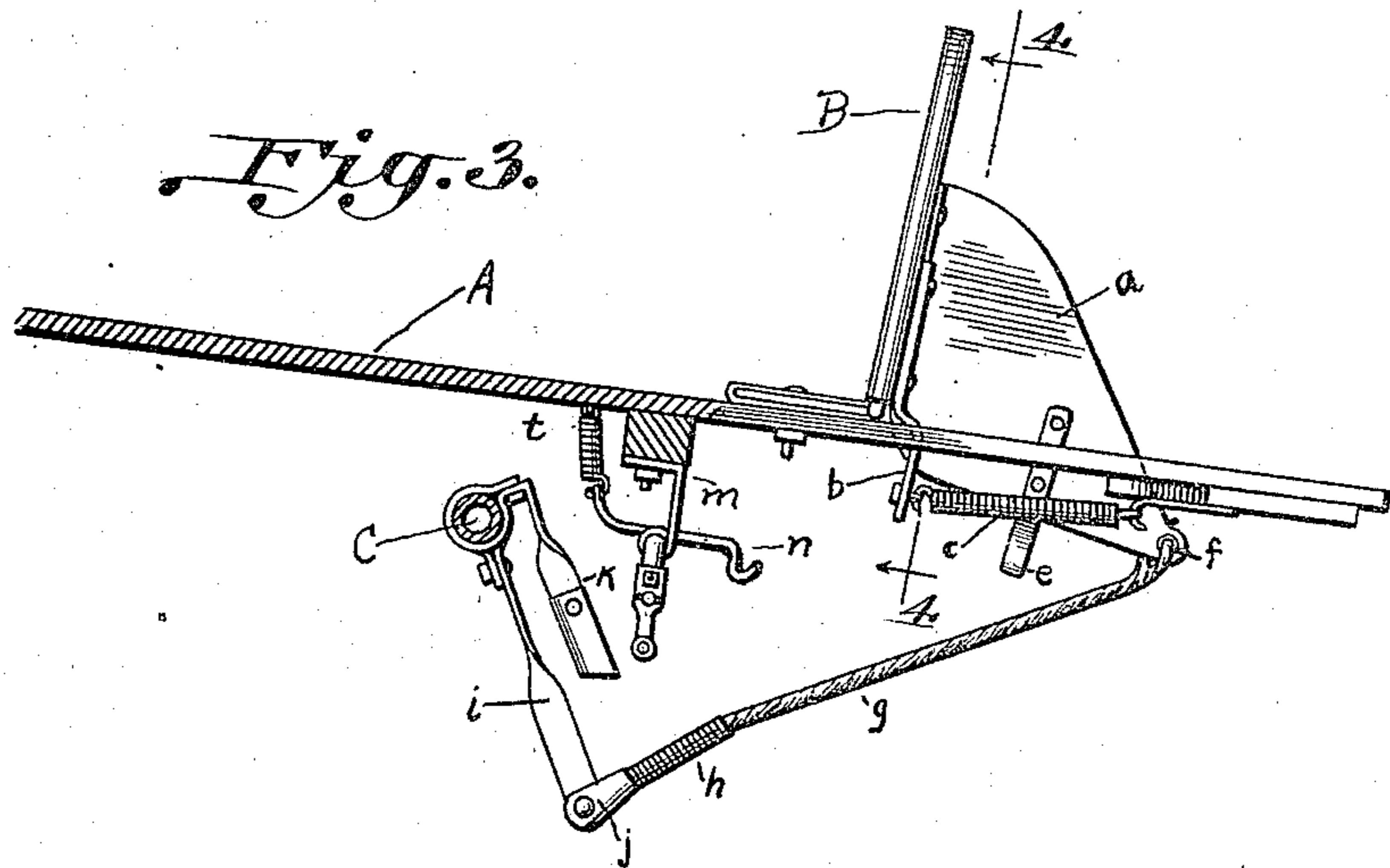
*C. B. Zickefoose*  
*& M. O. Oman*

*by Walter J. Freshour*  
*att'y.*

W. ZICKEFOOSE.  
 CORN BINDER.  
 APPLICATION FILED NOV. 6, 1915.

1,195,320.

Patented Aug. 22, 1916.  
 2 SHEETS—SHEET 2.



*William Zickefoose*  
 Inventor:

*C. B. Zickefoose*

*E. M. Leman*

*Walter J. Gresham*  
 Atty.

# UNITED STATES PATENT OFFICE.

WILLIAM ZICKEFOOSE, OF CLEMENTS, KANSAS.

## CORN-BINDER.

1,195,320.

Specification of Letters Patent. Patented Aug. 22, 1916.

Application filed November 6, 1915. Serial No. 59,940.

*To all whom it may concern:*

Be it known that I, WILLIAM ZICKEFOOSE, a citizen of the United States, residing at Clements, in the county of Chase and State of Kansas, have invented a new and useful Improvement in Corn-Binders, of which the following is a specification.

My invention relates to an improvement in corn binders in which a hinged wing or gate on the bundle platform of the binder operates in conjunction with the movement of the needle shaft of the binder; and the objects of my improvement are, first to provide a gate or wing to control the stalks of the corn bundle; second, to afford facilities for the action of this wing or gate simultaneously with the movement of the needle shaft; and third to provide means for the adjustment and proportioning of the size and shape of the corn bundles upon the platform. I attain these objects by the mechanism illustrated in the accompanying drawings in which:

Figure 1 is a lower rear view of the machine; Fig. 2 is a lower front view of the machine; Fig. 3 is a transverse section of the machine; and Fig. 4 is a vertical section of the machine on the line 4-4 of Fig. 3.

Similar letters refer to similar parts throughout the several views.

The machine works upon the regular bundle platform, A, of the corn binder. On the upper side of platform, A, is a hinged wing or gate, B, fastened to A by a hinge bolted to A. On the back of B midway from each end is a triangular metal flange, *a*, which works through an opening *r*, cut in A. On each side of *a*, and about equidistant between *a* and the ends of B are two metal braces *b b*, extending to the lower side of A, through the openings *s s*. To the lower points of *b b* are attached coiled springs *c c*. The springs *c c* are attached to adjustable hooks *d d*, secured to the lower edge of A. On the lower side of the triangular flange, *a*, is formed a hole, *f*, to which is attached by means of a ring, a rope, *g*, which rope, *g*, is attached at its other end to a coiled spring, *h*, and *h* is attached at its other end to an arm *i*, secured to the main shaft C, and extending downward from C.

D is the needle shaft of the binder and the main shaft C, is attached by means of a clamp securely to this needle shaft D.

Attached to the lower end of arm *i*, is a

metal jacket *j*, to hold the spring *h*, in position. Another arm *k*, also runs downward from the main shaft C, which is a jointed trip arm. The end of the main shaft C, opposite to the end which is secured to the needle shaft D, is supported by brace *l*, which is secured to the lower side of platform A. Between the trip arm *k*, and the metal loop *e*, is attached to the lower side of the platform A, a metal brace *m*, in which works a notched tongue *n*. The end of the notched tongue *n*, is attached to a coiled spring *t*, which coiled spring is attached at its other end to the lower side of platform A. The tongue *n*, is further attached at its side to a trip arm, *o*. The lower part of *o*, is a metal roller, *p*.

The machine is operated entirely by the needle shaft of the binder. The stalks of corn fall upon the platform A, and are held even and compact by the hinge gate B, until the needle shaft is tripped in the usual working of the machine. When the needle shaft turns, it at the same time turns the main shaft C, which in turn operates the arm, I, and which in turn operates the spring and rope *g* and *h* connecting with the flange *a*, and draws the flange downward, which causes the hinge gate B, to lie flat upon the platform A, and allows the bundle to be thrown off the platform. When the gate B, lies flat, the metal loop *e*, is caught by the notch of tongue *n*, which notch holds the gate flat upon the platform. When the needle shaft turns back to its former position after the bundle is thrown off, it turns the main rod C back to its former position and in so doing the trip arm *k*, is brought forward to its original position striking the trip arm *o*, and thereby forcing upward the notch of the tongue *n*, and releasing the loop *e*, and allowing the triangular flange *a*, and gate B, to fly back to their original upright position.

I claim:

1. In a corn binder, a hinged gate on its bundle deck for holding the bundles straight and the contents of the bundles compact while being gathered and arranged for binding, a shaft connected to take motion from the needle shaft of the corn binder, a latch, means by which the said latch is actuated when the needle shaft is moved, shaft actuated mechanism for lowering the hinged gate to allow the bundle to be thrown by the

bundle deck when it is bound and means on the hinged gate engaged by the latch for holding the door.

2. The combination of a hinged gate on 5 the table of a corn binder, a flange depending from the said gate, a shaft taking motion from the shaft of a needle of a corn binder, mechanism connected to the said 10 flange for oscillating the said gate, means for holding the door in one position, and means operated by the needle shaft for actuating the door holding means to release the said door.

3. In a corn binder, the combination of a 15 hinged gate on a bundle table, a shaft connected with a needle shaft of a corn binder, an arm oscillated by the movement of the first mentioned shaft, a connection between the said arm and the said gate whereby the

gate is oscillated from a vertical to a hori- 20 zontal position, means for holding the door in one position, and means operated by the needle shaft for actuating the door holding means to release the said door.

4. In a corn binder, the combination of a 25 hinged gate on a bundle table, a shaft connected with a needle shaft of a corn binder, an arm oscillated by the movement of the first mentioned shaft, a connection between the said arm and the said gate whereby the 30 gate is oscillated from a vertical to a horizontal position, and mechanism for holding the gate in horizontal position and means for tripping the gate holding means.

WILLIAM ZICKEFOOSE.

Witnesses:

C. B. ZICKEFOOSE,  
E. M. OSMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."