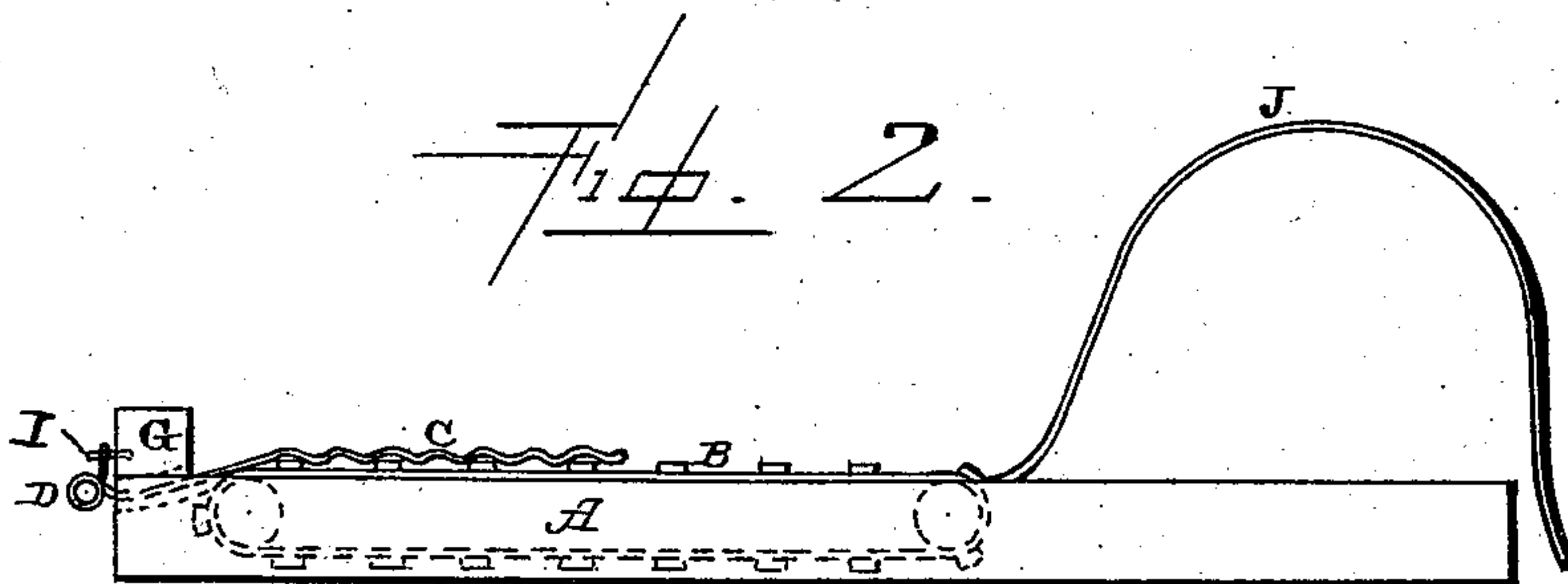
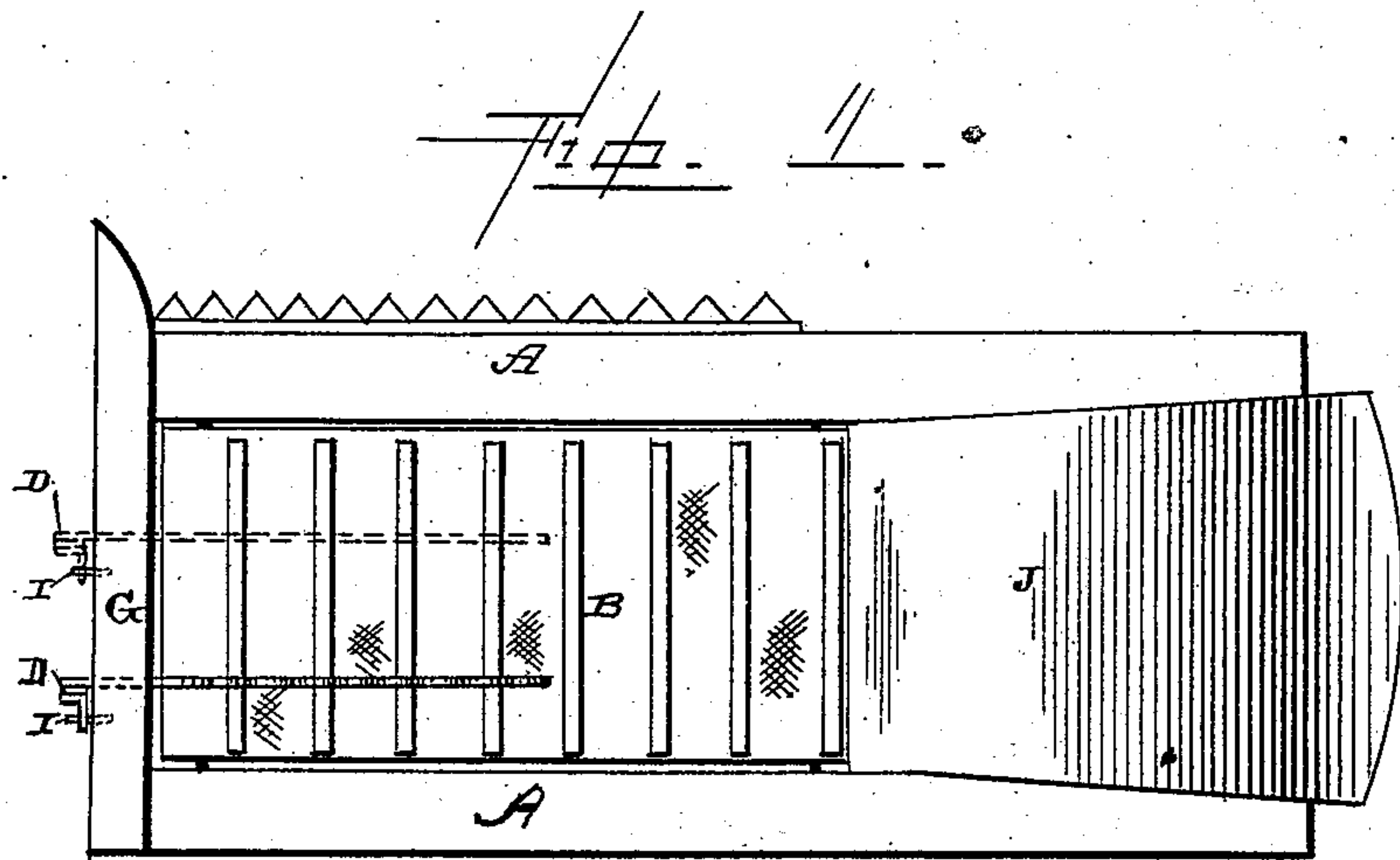


(No Model.)

H. B. FRENCH.  
GRAIN ADJUSTER.

No. 380,198.

Patented Mar. 27, 1888.



Witnesses.  
L. J. Gardner  
Edm. P. Ellis.

Inventor.  
H. B. French.  
per J. A. Lehmann,  
att'y.



# UNITED STATES PATENT OFFICE.

HORATIO BENJAMIN FRENCH, OF WILL'S POINT, TEXAS.

## GRAIN-ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 380,198, dated March 27, 1888.

Application filed August 15, 1887. Serial No. 246,974. (No model.)

*To all whom it may concern:*

Be it known that I, HORATIO BENJAMIN FRENCH, of Will's Point, in the county of Van Zandt and State of Texas, have invented certain new and useful Improvements in Attachments for the Cutter-Frames of Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an attachment for the platform-frames of harvesters; and it consists in the combination, with the platform-frame, of a wire or rod, which is preferably corrugated or bent, and which is fastened to the outer end of the frame and extends inward over the carrier in the rear of the cutter, as will be more fully described hereinafter.

The object of my invention is to apply to the frame of binding-machines a corrugated rod or wire, upon which the heads of the grain will catch, and thus prevent the heads of the cut grain from being moved toward the elevator faster than their butts, whereby the grain is presented evenly and regularly to the elevator to be carried to the binder.

Figure 1 is a plan view of the platform-frame of a harvester to which my invention is applied. Fig. 2 is an edge view of the same.

A represents an ordinary platform-frame, and B the endless carrier, upon which the grain falls, and by which the grain is carried to the elevator J. Attached to the outer side of the grain-board G, or to the grain end of the platform-frame, in any suitable manner is a rod or wire, C, which is provided with a coil, D, near its outer end, so as to give the rod or wire sufficient elasticity to spring back into position after having been moved by the falling grain or the ribs of the carrier, and which rod or wire is corrugated from near the coil to its extreme inner end.

To the outer side of the grain-board are secured a suitable number of pins, nails, or screws, I, over which the end of the wire is made to catch, so as to hold it in an operative position, or one pin may be adjusted back and forth. This rod or wire projects inwardly through the grain-board over the top of the carrier any desired distance, and is made ad-

justable laterally by means of different fastenings over the top of the carrier, so as to be adapted to the height of the grain which is being cut. The opening between the lower edge of the grain-board and the top of the grain end of the platform is sufficiently wide, as shown by dotted lines in Fig. 2, to allow the wire C to vibrate freely up and down. The coil in the rod or wire serves to hold it down on top of the carrier, bringing the corrugations or wrinkles in contact with the ribs or wooden bars that are fastened to the canvas or cloth portion of carrier, thus producing an up-and-down or vibratory motion of the rod as the carrier passes under it, thus giving the grain a uniform movement.

The trouble with all binders is that they fail to uniformly bind all of the grain that is cut, and often in low thin weedy grain the binder is choked until the binder fails to work. This is caused by the grain being carried to the elevator-canvas head foremost, and thence to the binder in the same position, and the packer fails to catch the straw, and hence the trouble. By placing a rod or wire over the top of the carrier, just back of the cutter, so that the heads of the cut grain will fall upon the rod or wire, the grain is caused to move across from the platform-canvas to the elevator-canvas sidewise, and thence to the binder in proper position to be bound in good shape. As the cut grain falls, the heads fall across the rod or wire, and the corrugations or bends in the wire check the heads of grain in their movement, and thus prevent the heads from being carried forward faster than their butts, as would otherwise be the case. Where there is nothing to prevent the heads of the cut grain from falling first upon the carrier they receive a forward motion before their butts begin to move, and where the grain is short it is apt to be turned endwise upon the top of the carrier, and thus carried head first to the elevator-canvas. The rod or wire here shown serves to prevent this movement, and hence the grain is carried in a straight line to the canvas, so as to be elevated in proper form to be bound.

Having thus described my invention, I claim—

1. An attachment for the platform-frame of a harvester, consisting of an elastic corrugated rod or wire fastened at its outer end to the

outer side of the grain-board and resting upon the carrier-belt, whereby it is given a vibrating movement by the slats on the belt striking the corrugations in the rod, substantially as  
5 described.

2. The combination of the platform-frame of a harvester and the endless carrier with a corrugated rod or wire, C, adjustably fastened at its outer end to the grain-board, and which  
10 rests upon the carrier-belt and is provided

with the coil D at its outer end, the rod being made adjustable back and forth in relation to the cutter according to the length of grain being cut, substantially as described.

In testimony whereof I affix my signature in 15 presence of two witnesses.

HORATIO BENJAMIN FRENCH.

Witnesses:

W. L. HAYNES,

W. J. DAVIDSON.