

(No Model.)

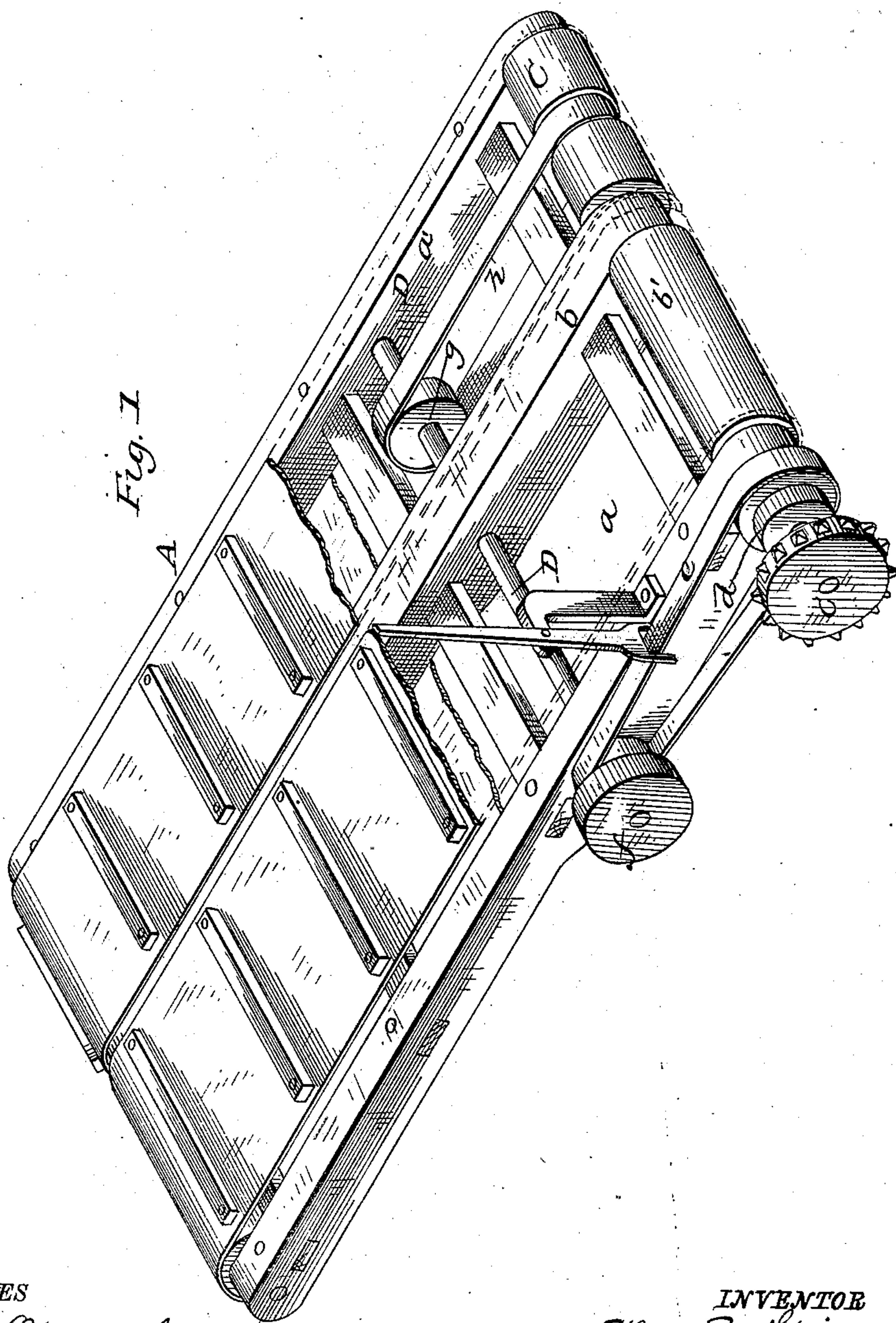
2 Sheets—Sheet 1.

W. R. STEINER.

ENDLESS CARRIER FOR HARVESTERS.

No. 290,715.

Patented Dec. 25, 1883.



WITNESSES

Frederick L. Girard
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INVENTOR

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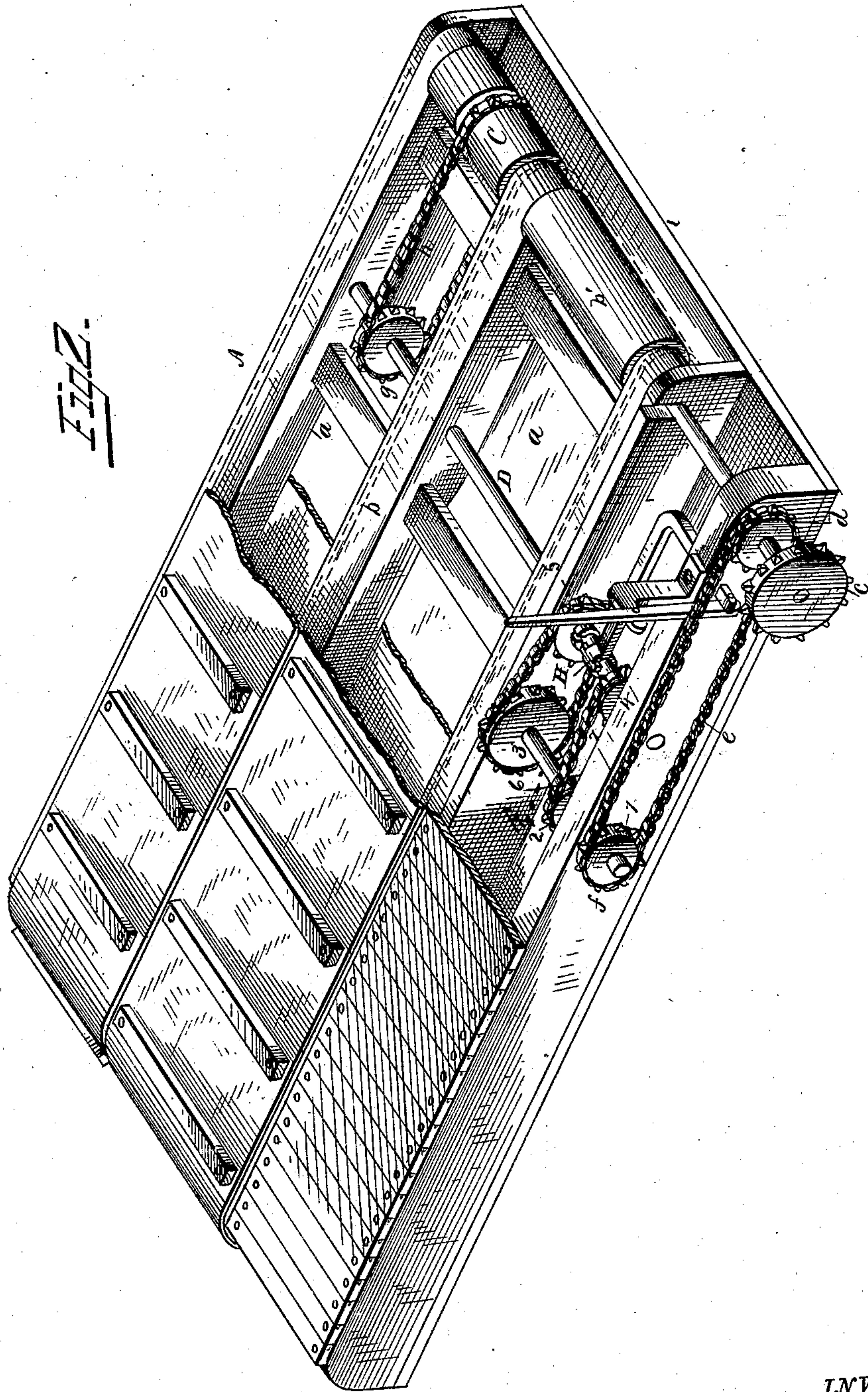
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UNITED STATES PATENT OFFICE.

WILLIAM R. STEINER, OF FREDERICK, MARYLAND.

ENDLESS CARRIER FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 290,715, dated December 25, 1883.

Application filed January 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. STEINER, a citizen of the United States of America, residing at Frederick, in the county of Frederick and State of Maryland, have invented certain new and useful Improvements in Endless Carriers for 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 appertains to make and use the same.

In harvesting certain grain with the ordinary harvesting-machine employing the ordinary endless carriers, the cut grain upon the traveling platform often assumes an oblique position from several causes, principally on account of the butts of the grain striking against the stubble or against the standing grain.

The object of my invention is to correct this difficulty to a great extent; and it therefore consists in sectional endless carriers used either on the grain platform or elevator, or both, of a harvester, in combination with mechanism for operating each section at different rates of speed at the same time, in order to correct the position of the butts of the cut grain, so that both ends thereof will be delivered at the same time. By this improvement the sectional endless carriers may also be operated together at the same speed by shifting the gearing upon the cone-pulleys.

In the annexed drawings, Figure 1 is a perspective view, and Fig. 2 is a similar view, showing the gearing arranged in a section of the platform.

A indicates a frame of suitable construction, composed of the sections *a a'*, having the divisional rail *b* separating the platform into two parts. This divisional rail *b* gives additional strength to the frame, and forms a support for the adjacent edges of the endless aprons, and also acts as a preventative to the aprons sagging or the cut grain from working in between the belts.

In the outer end of each section of the frame are suitably journaled apron-pulleys. In the other end of the frame, in section *a*, is journaled the fast apron-pulley *b'*, secured to its shaft, which shaft extends through section *a'* and receives the loose pulley C, around which the apron of that section moves. The loose pul-

ley C is formed with a central groove to receive a belt or cord extending from the operating-pulley, hereinafter described. This groove may be supplied with sprocket-teeth to receive a chain instead of a cord or belt. On the end of the shaft of these operating-pulleys is fixed a sprocket-wheel, *c*, for the purpose of receiving the chain communicating motion to the gearing, and between this sprocket-wheel and the side rail of the frame is secured a cone-pulley or sprocket-wheels, *d*, about which the band or chain *e* is placed, and from thence extending to the cone-pulley or sprocket-wheel *f* on the shaft D, which extends through the rail of the frame and has fixed on it the band-pulley or sprocket-wheel *g*, about which the band or chain *h* is placed, and from which motion is communicated to the apron of that section.

In Fig. 2 of the drawings I have added an auxiliary or third transverse shaft, F, provided with a plurality of sprocket-wheels, 1 2 3, preference being given to three, as shown. Two of these wheels are arranged on the shaft within the carrier-frame, and the other one on the outside of the frame, thus establishing a communication with the sprocket-wheel *d* through the sprocket-chain *e*. The sprocket-wheels 2 and 3 have communication with sprocket-wheels 4 and 5 on the shaft D, through the medium of sprocket-chains 6 and 7. The sprocket-wheels 4 and 5 are loosely mounted on the shaft D, and are made fast by means of an interposed double-faced clutch, H, moving on a key or feather of the shaft D, so that by shifting the clutch into engagement with the sprocket-wheels 4 and 5 a desired fast or slow speed is communicated to the endless apron nearest the cutter-bar. The diameter of the sprocket-wheels 2 and 3 are different, while the diameter of the sprocket-wheels 4 and 5 are substantially the same, and it is by this difference in the diameter of the wheels 2 and 3 that the variation of speed in the endless aprons is accomplished.

It will be observed that by means of the adjustment of the gearing the speed of the apron on section *a'* may be regulated so that it may be uniform with the motion of the apron on section *a*, or made to move faster, as described.

At any suitable point on the frame or other

position on the machine is secured a shifting-lever or means by which the gearing is adjusted.

5 The frame is arranged and connected to the harvester in the usual manner.

I reserve the right to vary the construction and arrangement of parts within the spirit of my invention.

10 What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a grain-carrier, the combination, with a carrier-frame, and the fast pulley with its endless apron and carrying on its shaft a driving-pulley, of the intermediate shaft journaled in the carrier-frame and carrying a driving-pulley, the loose pulley with its endless apron, and

intermediate driving-belts, substantially as described.

2. The combination, with a grain-carrier frame, of the fast pulley with endless apron 20 and driving-pulley, the intermediate shaft and driving-pulley journaled and arranged in the carrier-frame, suitable shifting means, the loose pulley with its endless apron, and intermediate driving-belt, substantially as de- 25 scribed.

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

WILLIAM R. STEINER.

Witnesses:

D. D. KANE,
J. M. YZNAGA.