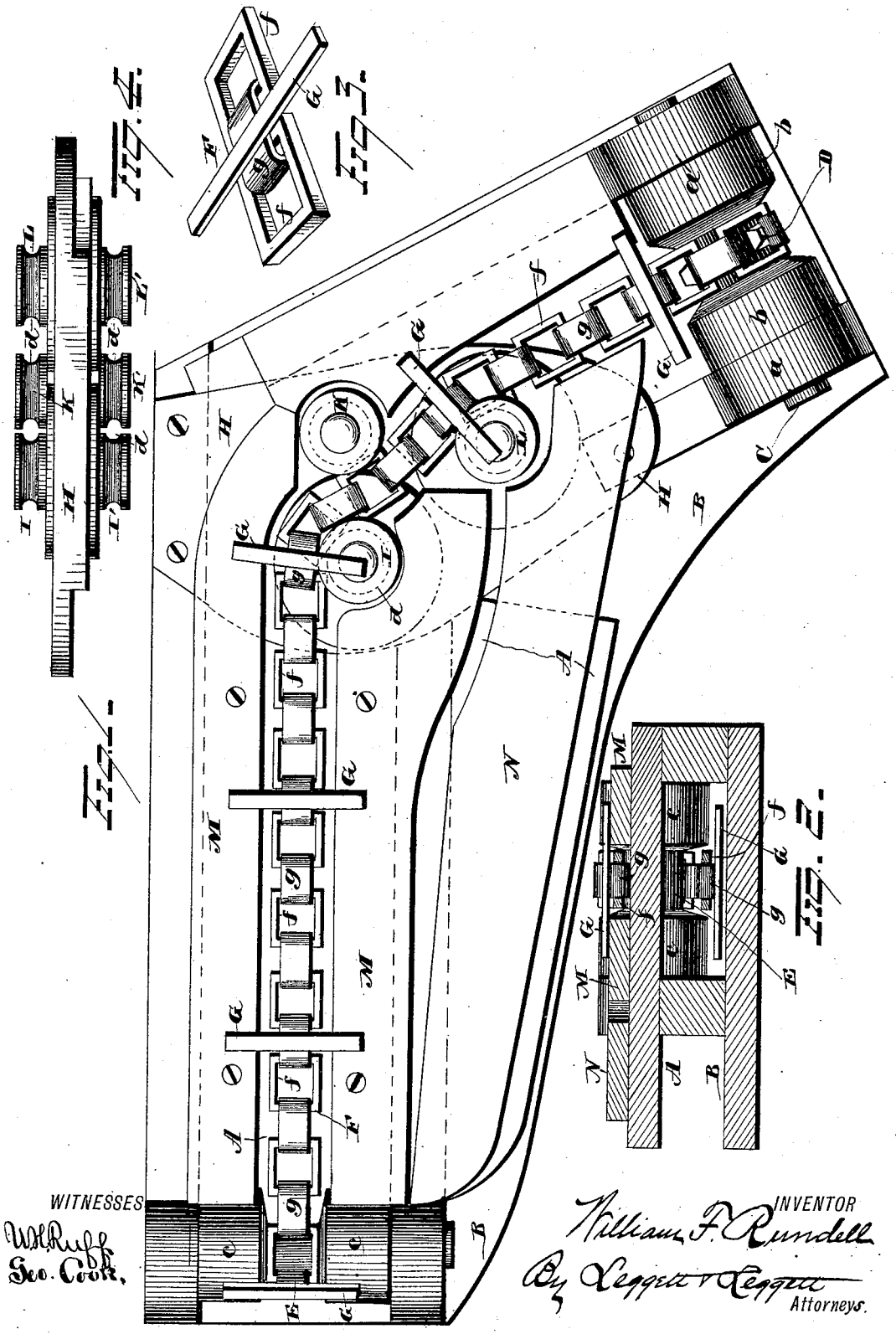
(No Model.)

W. F. RUNDELL.

GRAIN CONVEYER FOR HARVESTERS.

No. 306,961. Patented Oct. 21, 1884.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM F. RUNDELL, OF GENOA, NEW YORK.

GRAIN-CONVEYER FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 306,961, dated October 21, 1884.

Application filed December 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. RUNDELL, of Genoa, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Grain-Conveyers 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.

My invention relates to an improvement in grain-conveyers for harvesters, the object being to provide a device which shall be simple and economical in construction, and at the same time durable and efficient in use; and my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of a grain-conveyer embodying my invention. Fig. 2 is a sectional view thereof. Fig. 3 is a detached view of a portion of the carrier-chain. Fig. 4 is a detached view of the plate and guide-pulleys.

My invention is designed for transferring the cut grain from the cutters to the binding mechanism; and it consists of a platform, A, built in the form shown, and in the present instance built with a lower platform, B, adapted to inclose the carrier-chain below the platform A. At the end nearest the binder is a shaft, C, journaled in bearings *a*, on which shaft is secured a sprocket-wheel, D, provided at each end with rollers *b*, designed for a purpose hereinafter described. At the opposite end of the platform is journaled a roller, E, also provided with rollers *c*, similar to the rollers *b*. Around the sprocket-wheel and roller passes an endless carrier-chain, F, consisting of the solid rectangular links *f*, connected by the widened band-links *g*, which latter are provided on their upper faces with the slats or carriers G. These slats are adapted to rest on the rollers *b* and *c*, and ride around thereon, the motion being imparted to the chain through the sprocket-wheel D. This chain is adapted to pass over the upper platform, A, around the sprocket-wheel D, and between the upper and lower platforms, and then around the roller E, the upper strand or portion of the chain moving toward the binder. At the angle or curve in the platform the upper platform is partially cut away to receive a metallic plate, H, which is provided on its upper surface with the three guide-pulleys I K L, the shafts on which said pulleys turn extending through and below said plate H, where they are provided with three similar pulleys, I′ K′ L′. Each of these pulleys is provided with flanges forming a groove, *d*, which is adapted to receive the edges of the rectangular links *f* of the chain F, said chain on the upper surface of the platform A passing between the pulley L and the pulleys I K, and on the under side of said platform passing between the pulley L′ and pulleys I′ K′. The guide-pulleys with the grooves *d* are adapted to retain the chain in its proper position—that is to say, they compel the chain to flex edgewise when it changes its direction instead of twisting quarter around, as it would tend to do with only a single guide-pulley. When the chain is in motion, the slats G pass directly above the guide-pulleys and around the rollers on the sprocket-wheel and roller, respectively, as before described.

M M represent strips of metal or wood secured to the upper platform, A, which strips are adapted to form supports or ways for the slats G in their travel. N is also a strip of wood secured to the platform A, and adapted to present a level surface on the upper platform, A.

When the machine is in operation, the grain falls from the cutter on the upper platform, and is carried laterally by the single carrier-chain to the binding mechanism.

My invention is simple in construction, is of few parts, and can be manufactured at a small initial cost.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a harvester, the combination, with a platform provided with a sprocket-wheel and a roller, said roller and wheel being placed at an angle with each other, of intervening guide-pulleys and an endless carrier-chain adapted to pass around said wheel and roller and between the guide-pulleys, substantially as set forth.

2. In a harvester, the combination, with a platform provided with a sprocket-wheel and

a roller, of guide-pulleys situated at the point where the chain curves, and an endless carrier-chain adapted to pass around the wheel and roller and between said guide-pulleys, substantially as set forth.

3. The combination, with a platform provided with a sprocket-wheel and roller placed at an angle with each other, of guide-pulleys above and below the platform at the place where the chain curves, and an endless chain provided with carriers or slats and adapted to pass around the sprocket-wheel and roller and between the said guide-pulleys, substantially as set forth.

4. The combination, with a platform provided with a sprocket-wheel and roller placed at an angle with each other, of guide-pulleys secured above and below the platform where the chain curves, and grooved to retain the chain in position, and an endless carrier-chain adapted to pass around the wheel and roller and between said guide-pulleys, substantially as set forth.

5. The combination, with a grooved platform, of a sprocket-wheel, a roller, said wheel and roller being provided on the ends with rollers adapted to support the slats on the carrier-chain, intervening guide-pulleys, and an endless chain provided with slats or carriers, and adapted to pass around the wheel and roller and between the guide-pulleys, substantially as set forth.

6. The combination, with a platform provided with a sprocket-wheel and roller, of guide-pulleys provided with flanges or grooves at their peripheries, and secured to the upper and lower ends of shafts extending above and below the platform, and an endless carrier-chain adapted to pass around the wheel and roller and between said guide-pulleys, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM F. RUNDELL.

Witnesses:

JOHN C. MASTIN,

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