

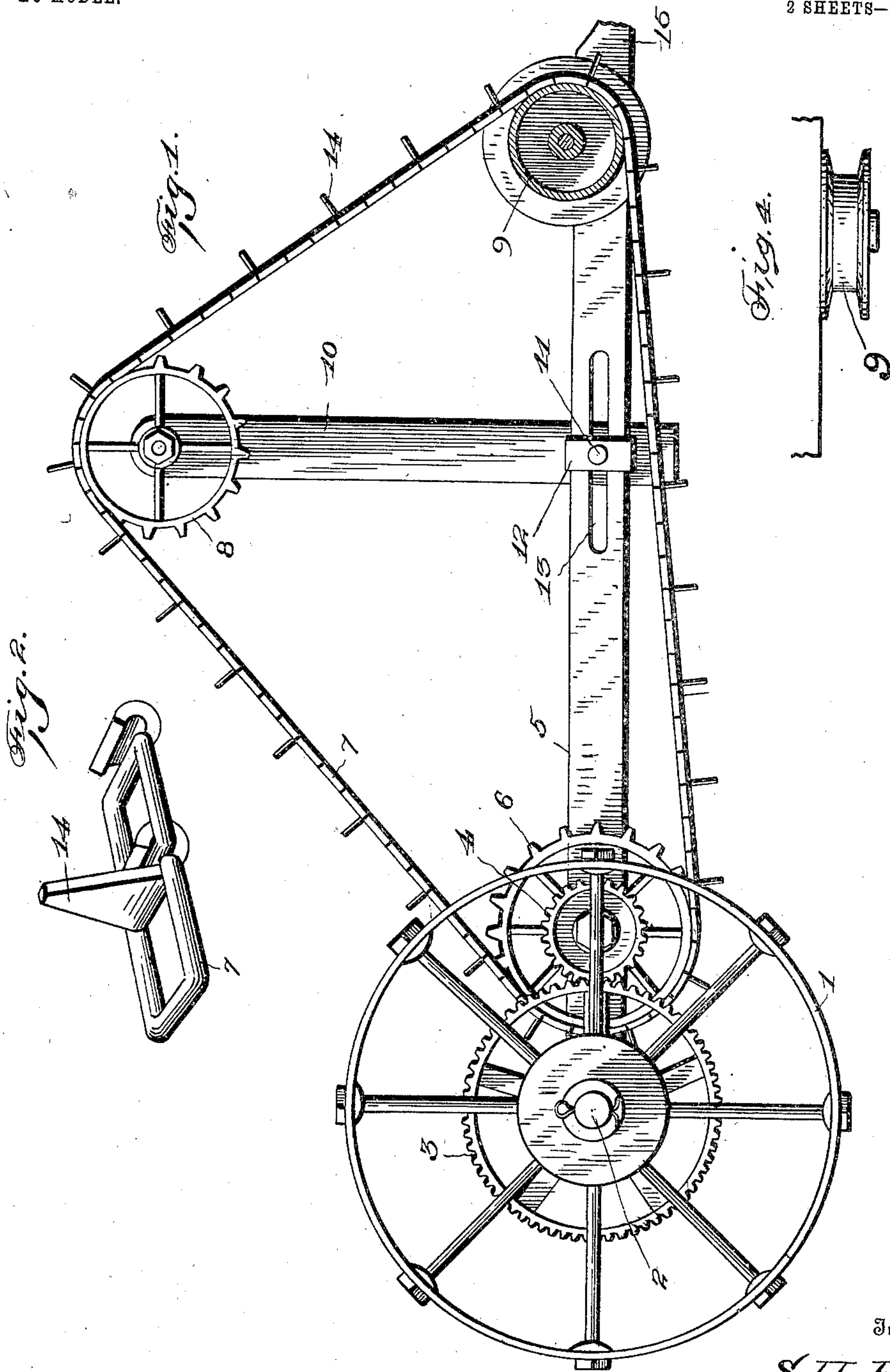
No. 725,023.

PATENTED APR. 14, 1903.

S. H. & J. H. BEILER.
HARVESTING MACHINE.
APPLICATION FILED MAY 16, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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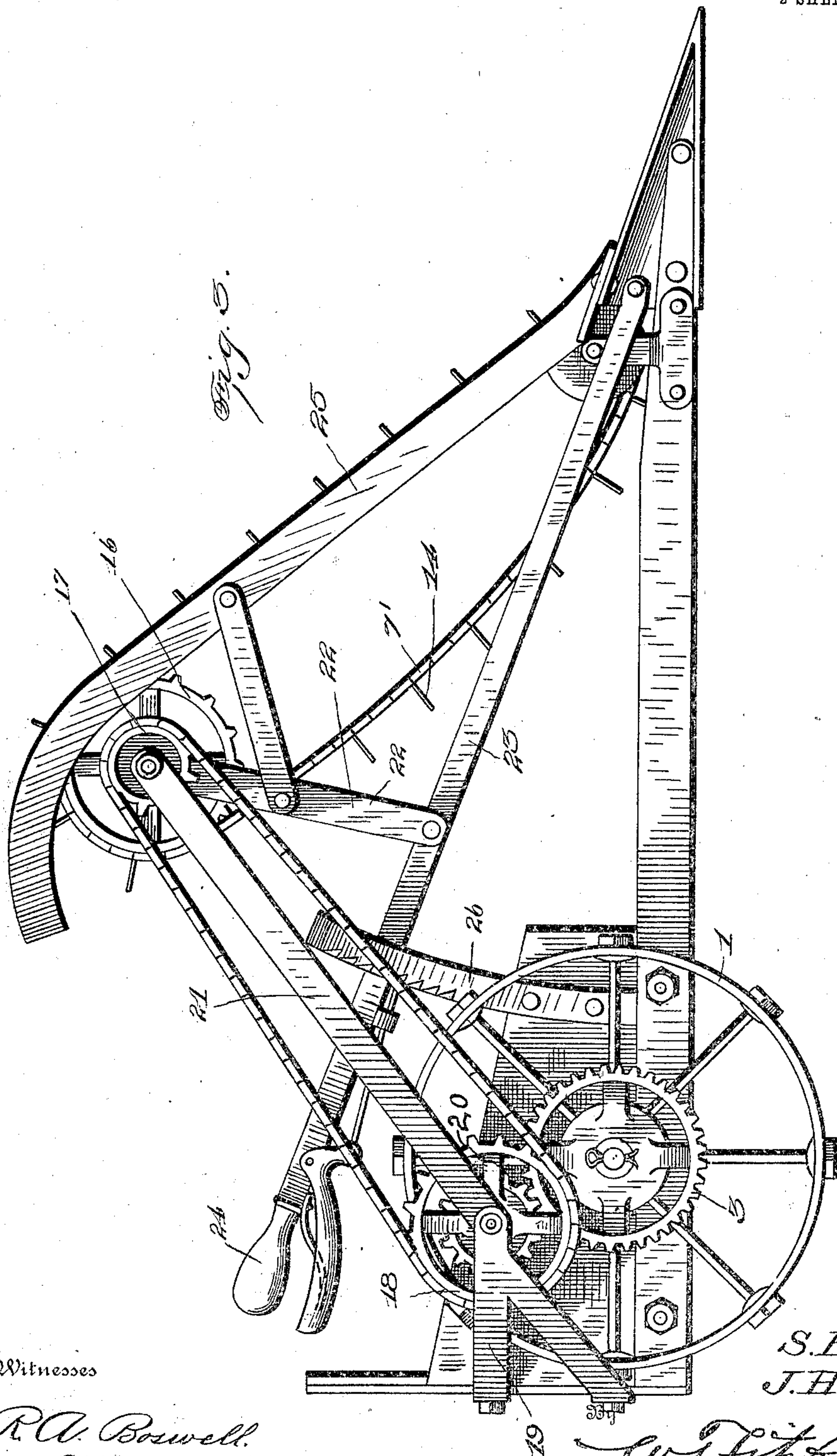
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UNITED STATES PATENT OFFICE.

SAMUEL H. BEILER AND JOEL H. BEILER, OF WITMER, PENNSYLVANIA.

HARVESTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 725,023, dated April 14, 1903.

Application filed May 16, 1902. Serial No. 107,652. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL H. BEILER and JOEL H. BEILER, citizens of the United States, residing at Witmer, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Harvesting-Machines; and we 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.

Our invention has relation to harvesting-machines, and more particularly to an attachment for a reaper, whereby the nose or forward extension of the sickle-carrying frame will be reliably directed through the standing grain even though the same should become more or less lodged or tangled as the result of storm or other causes, the prime object being to straighten out a portion of the grain, whereby that part thereof which becomes severed by the sickle will not remain in entanglement with the portion left standing or untouched by the sickle.

Other objects and advantages will hereinafter be made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 is a side elevation of our invention complete with a portion in section, showing an end view of the platform of an ordinary reaper. Fig. 2 is a detail view showing one form of attachment for the link of a sprocket-chain. Fig. 3 is a view showing another form of our invention from that presented in Fig. 1. Fig. 4 is a top plan view of the idler-pulley employed on the front end of the nose-section of the machine.

The elements and cooperating accessories of our invention will for convenience be designated by numerals, the same numeral referring to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates a carrying-wheel, of the usual or any preferred construction, designed to support the outer end of a platform of a harvesting-machine which is mounted in the usual manner upon a suitable journal 2, as is common, and has attached thereto a gear 3, designed to mesh with the gear 4, which is pro-

vided with suitable bearings in a contiguous portion of the end section 5 of the carrying-frame. The gear 4 is attached to or forms an integral part of the sprocket-wheel 6, designed to cooperate with the sprocket-chain 7, which, as will be observed, also passes around the sprocket-wheel 8 and the grooved wheel 9.

The sprocket-wheel 8 is mounted in suitable bearings in the upper end of the standard 10, which is adjustably secured to the end section 5 by means of the bolt 11 and the clamp 12, said bolt being designed to be moved in the longitudinally-disposed slot 13, formed in a contiguous part of the frame-section 5. The grooved carrying-wheel 9 is also mounted in suitable bearings upon the frame-section 5, and it will be obvious that by a proper adjustment of the standard 10 the said sprocket-chain may be tightened or loosened, as desired.

The sprocket-chain 7 is provided at suitable intervals with a series of outwardly-extending fingers 14, which are so carried by said chain that they will stand rigidly extended and will therefore reach into and comb out the tangled mass of grain and mark out a divisional line between the standing grain and that portion thereof which has been severed by the sickle, thereby enabling said severed portion to readily fall upon the platform of the harvester and not be dragged off of said platform by reason of its adherence to or entanglement with the standing grain, as will be obvious. It will therefore be observed that the carrying-wheel 9 is properly located near the forward end of the nose-section 15, thereby insuring that the plurality of finger-sections 14 will cooperate with said nose and clearly define a division-line between the severed and uncut portion of the grain.

In Fig. 3 it will be seen that we have provided a slightly-varied form of construction to accomplish the adjustment of the sprocket-chain, inasmuch as it will be observed that the sprocket-wheel 16, which corresponds to the sprocket-wheel 8 in Fig. 1, is driven by the auxiliary sprocket 17, which latter is in turn driven by the sprocket 18, mounted in suitable bearings 19 and driven by the gear 20, which meshes with the gear 3 of the car-

rying-wheel 1. The sprocket-wheel 16 is mounted in bearings in the pivoted frame 21, and the upper end of this section is pivotally connected to the link 22, the lower end of which is pivoted to the controlling-lever 23, having a handle 24 whereby said lever may be raised or lowered, and thereby elevate or lower the sprocket-wheel 16 and tighten or loosen the sprocket-chain 7', which in this instance is disposed between the parallel members 25, only one of which is seen in Fig. 3.

Any suitable securing device, as the standard 26, designed to cooperate with the free end of the lever 23, may be provided to hold said lever in an adjusted position. While it will therefore be observed that various means may be provided for tightening and loosening the sprocket-chain 7', which is provided with a plurality of outwardly-disposed rigid fingers, as above set forth, we wish to comprehend such possible variations or substitutes and equivalents of construction and combination of parts as may be considered as falling fairly within the scope of our invention, and we do not wish to be confined strictly to the exact showing herein presented. It will be observed that we have provided a very simple, though reliably efficient, attachment for harvesting-machines, which will enable the machines to be easily driven through a

tangled mass of grain, so that the portion thereof severed by the sickle will be reliably directed upon the platform, and thus completely separated from the portion of the grain left standing.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination with the platform and the end section of the carrying-frame having a longitudinal slot, of a standard, a bolt carried by the standard and working in said slot, a clamp on said bolt, a grooved carrying-wheel mounted in bearings on the outer end of the frame-section near the forward end of the nose thereof, a sprocket-wheel carried by the upper end of said standard, a sprocket-wheel carried on the frame and receiving its motion from the carrying-wheel, and an endless chain passed around said sprocket-wheels and carrying-wheel and having a plurality of fingers cooperating with said nose to define a division between the severed and uncut portions of the grain.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL H. BEILER.

JOEL H. BEILER.

Witnesses:

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HENRY RESSLE.