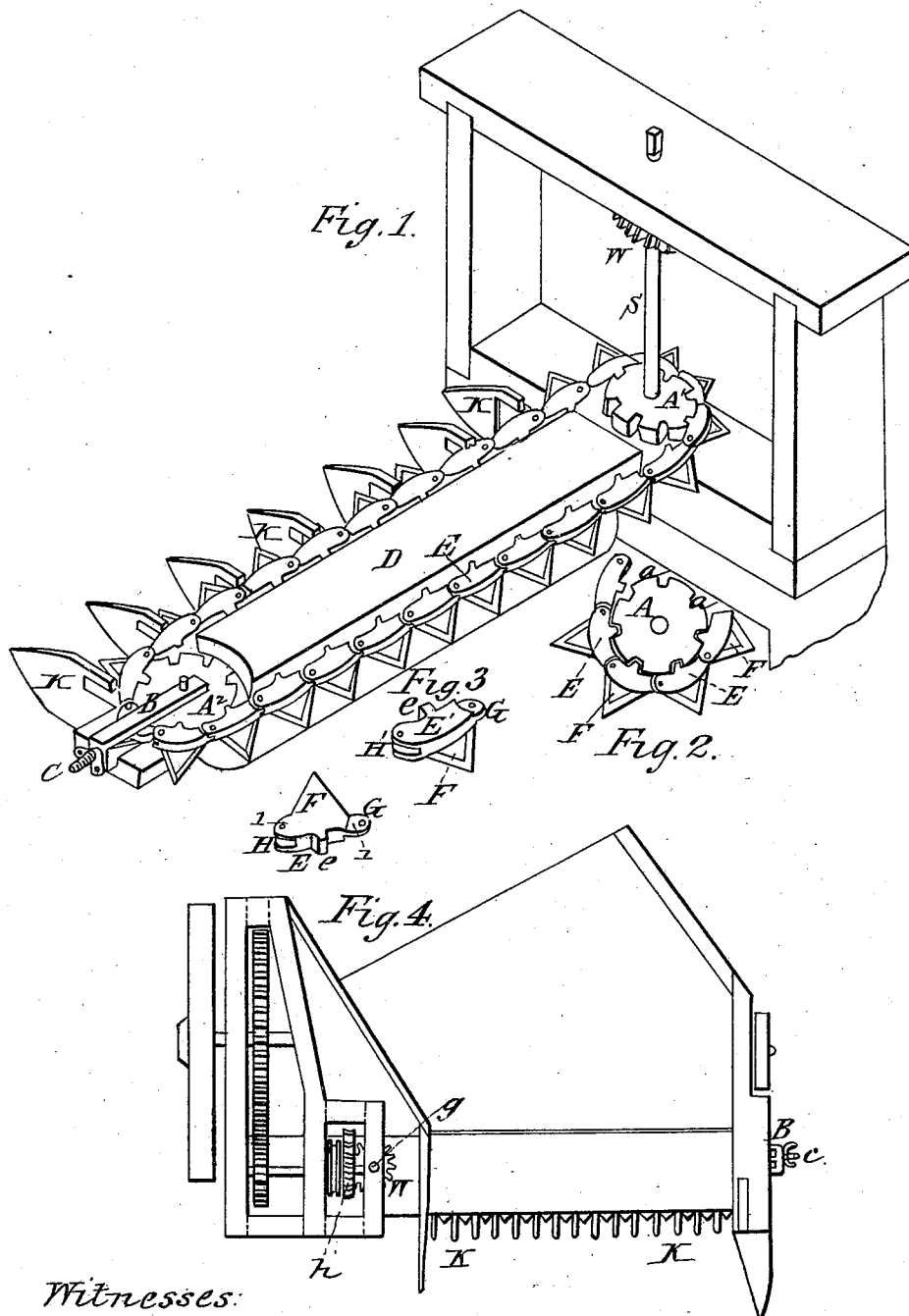


B. HESS.

Harvester.

No. 52,851.

Patented Feb. 27, 1866.



Witnesses:

J. Donnelly
Jacob Hauffer

Inventor:

Benjamin Hess

UNITED STATES PATENT OFFICE.

BENJAMIN HESS, OF MANOR TOWNSHIP, LANCASTER COUNTY, PA.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 52,851, dated February 27, 1866.

To all whom it may concern:

Be it known that I, BENJAMIN HESS, of Manor township, in the county of Lancaster and State of Pennsylvania, have invented a new and useful Improvement on the Cutting Apparatus on Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 shows the endless chain-cutters or sickles, the shaft *s*, with its beveled pinion, and notched pulley *A'*, and similar pulleys *A*², with the cover removed. Fig. 2 shows said pulley *A* and operation of the cogged and combined cutters around said pulleys *A'* *A*² in part. Fig. 3 represents the upper and lower side of the cutter; *E*, the upper raised side of the blade *F*. Fig. 4 shows one mode for applying the gearing and platform to constitute a working machine.

The drawings clearly show the construction, the triangular cutters *F* with a raised and slightly curved back *E*, having two ears, *H*, forming an open slot on one end for the reception of the single ear *G* of the adjoining cutter, which each has at the other end, together with a projecting cog, *e*, centrally in the rear of the blade. The ears *H* *G* are pierced for a pin, which forms a pivot. They being all of uniform size and thickness are united by pivots to form an endless chain, as shown by

Fig. 1. The pulleys *A'* *A*² have a notch at regular intervals for the cogs *e* on the cutter-chain. The pulley *A'* has an upright shaft, *s*, and beveled cog-wheel or other kind of gearing to give said pulley a rotary motion of any desired speed in either direction or with a reversing action, and for arresting the motion by any of the ordinary means in use.

I do not confine myself to any fixed mode for operating my chain-cutters and notched pulleys, nor to the arrangement of the gearing apart from the construction of said cutters and pulleys put in motion substantially in the manner specified.

In order to tighten or slacken the endless chain-cutters I also employ a device, *C* *B*, at one end for that purpose, in which, however, there is no novelty, nor in the cover, gearing, guards, or platform.

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

The construction of the cogged cutters *E'* *F*, substantially as specified, so that they form in themselves the links of an endless chain-cutter, when said cutters are used, in combination with the notched pulleys *A'* *A*², arranged and operating as described.

BENJAMIN HESS.

Witnesses:

P. DONNELLY,
JACOB STAUFFER.