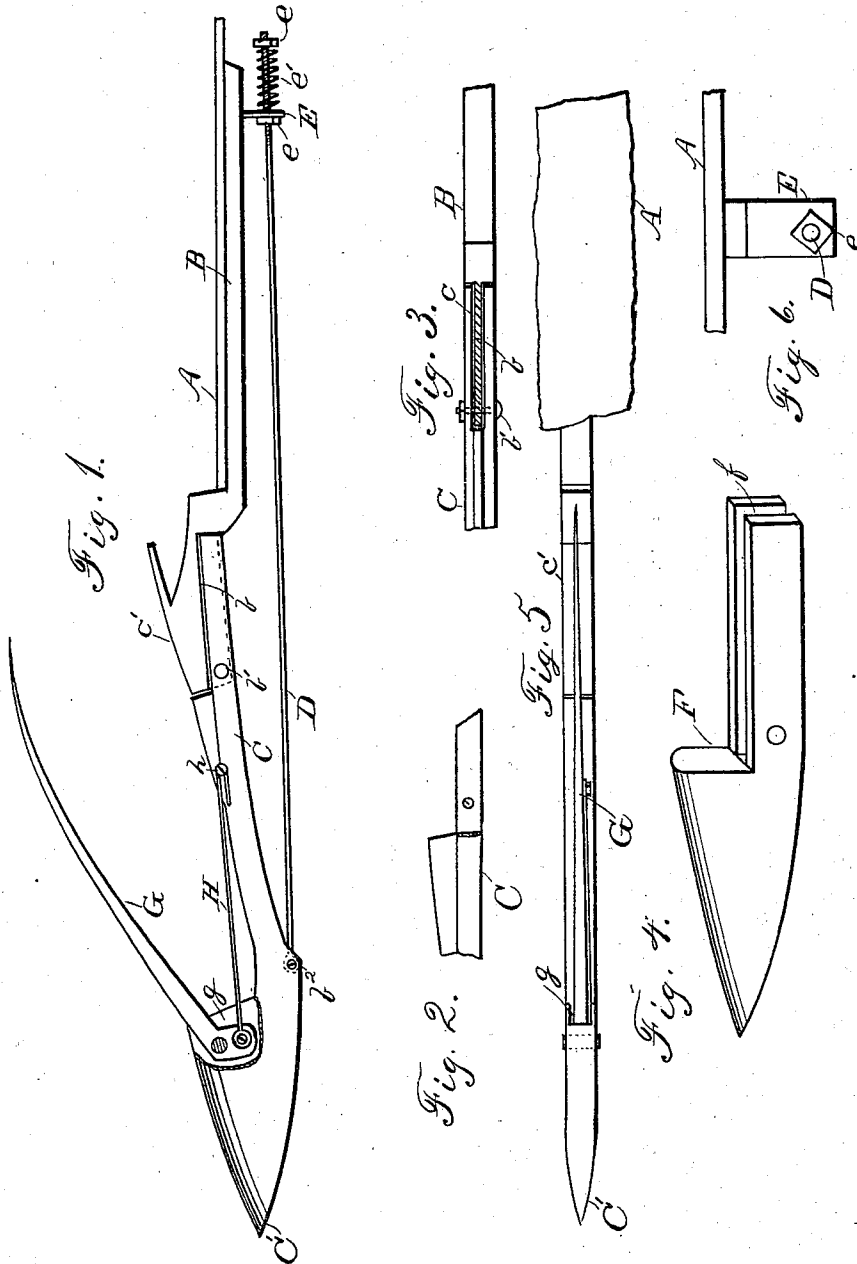


H. E. KOCH.
GRAIN DISLODGER.

APPLICATION FILED AUG. 15, 1902.

NO MODEL.



WITNESSES:

R. D. Beane.
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UNITED STATES PATENT OFFICE.

HENRY E. KOCH, OF HARTINGTON, NEBRASKA.

GRAIN-DISLODGER.

SPECIFICATION forming part of Letters Patent No. 723,880, dated March 31, 1903.

Application filed August 15, 1902. Serial No. 119,746. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. KOCH, a citizen of the United States, residing at Hartington, in the county of Cedar and State of Nebraska, have invented certain new and useful Improvements in Grain-Dislodgers; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to harvesting-machines, and has especial reference to means attached to the reaper for lifting and holding upright the fallen and tangled grain-stalks until they are cut by the sickle.

This invention is an improvement on my grain-dislodger patented January 1, 1901, No. 665,231.

The accompanying drawings illustrate the invention, in which—

Figure 1 is a side elevation of the device attached to a reaper and partly broken away near its point. Fig. 2 is a side elevation of the joint between the divider and the reaper, partly broken away. Fig. 3 is a plan view of the same joint; and Fig. 4 is a perspective of an extra guard-point, enlarged.

Like letters of reference denote corresponding parts in the several views.

The letter A indicates a portion of the front part of a reaper-platform.

B is a strip secured under the platform and has its front end *b* narrowed to loosely fit into a recess *c* in the rear end of the runner C. The sickle-guard *c'* is mounted on and may be made integral with the end *b*. The runner C is removably attached to the end *b* by a pivot *b'*, so that a vertical movement of the point C' of the runner is permitted. A rod D is pivoted to a shoulder *b²* on the under side of the runner and extends backward beneath the reaper through a hanger E, which supports it. Nuts *ee* are provided on this threaded end of the rod, one on each side of the hanger, to limit the movement of the rod, and a coil-spring *e'* is located between the

hanger and the outer nut. This construction permits vertical adjustment of the point C' of the dislodger and allows its forced elevation when any small obstruction is struck, the spring *e'* restoring the runner to its operative position. This upward throw of the point C' lightens the weight of the front part of the reaper and reduces the pressure on the necks of the horses.

When it is desired to use a reaper prepared for my dislodger without the dislodger, the latter is removed and an extra guard F, having the opening *f*, is substituted for the dislodger. I prefer to make the end of the sickle-guard *c'* blunt, as shown. The fender G is pivoted in the recess *g* of the runner and is supplied with a rod H, pivoted thereon and adjustably secured to the runner by a screw *h*, whereby the fender is adjusted vertically, as desired.

I do not limit myself to the rod D and spring E to control the pitch of the point C', as other equivalent means may be employed.

What I claim and desire to secure is—

1. The combination with a reaper of a grain-dislodger consisting of a runner hinged to the reaper, a shoulder on the under side of the runner, a rod pivoted thereto and extending back beneath the reaper, a threaded end on said rod, a hanger to loosely hold said rod, a nuts on the rod to limit its movement, and a spring between the hanger and the terminal nut, for the purposes stated.

2. In a grain-dislodger, a runner having a fender pivoted thereto, a rod secured to the forward end of the fender, a screw to adjustably hold the rear end of said rod to the body of the runner, said runner having a shoulder on its under side, a rod pivoted to said shoulder and extending rearwardly, a threaded end on said rod, a hanger to loosely hold said rod, nuts on the rod to limit its movement, and a spring between the hanger and the terminal nut, substantially as herein set forth.

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

HENRY E. KOCH.

Witnesses:

A. M. GOODING,
W. H. STEPHENSON.