(No Model.)

J. P. ADRIANCE.

Harvester.

No. 241,269. **Patented May 10, 1881.**

Fig. 1.

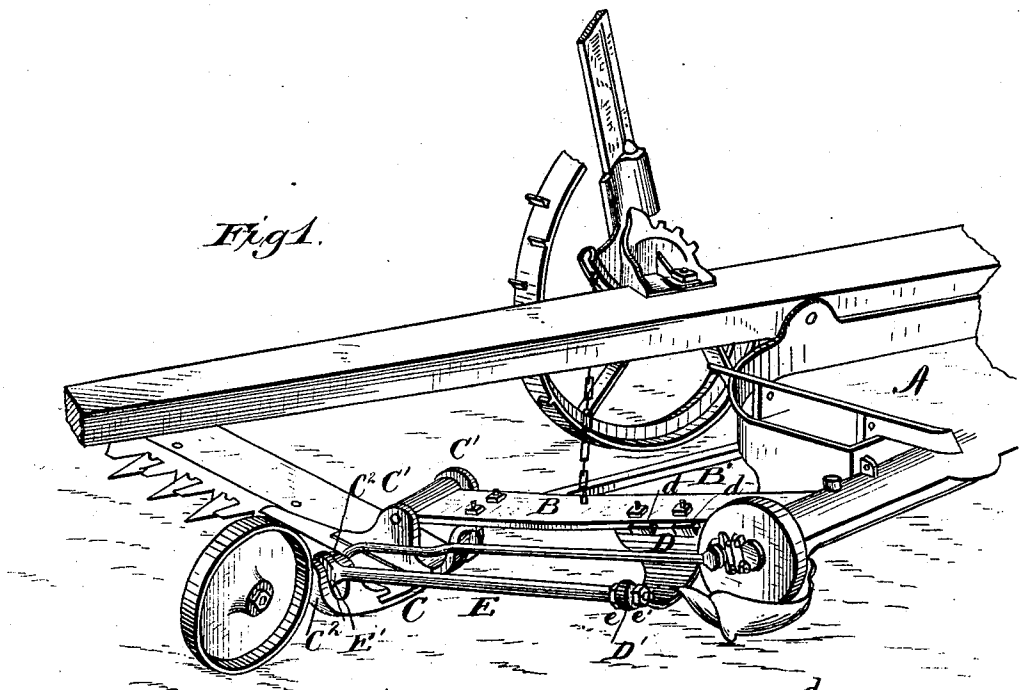


Fig. 3.

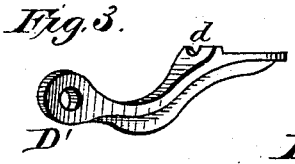


Fig. 2.

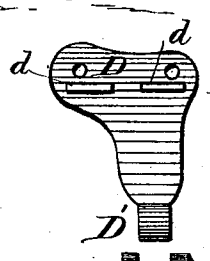
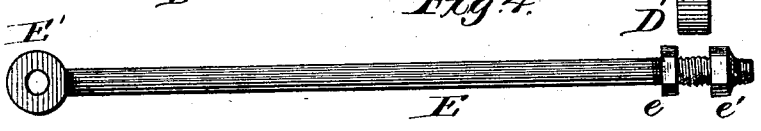


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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HARVESTER.

SPECIFICATION forming part of Letters Patent No. 241,269, dated May 10, 1881.

Application filed February 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. ADRIANCE, of Poughkeepsie, county of Dutchess, State of New York, have invented certain new and useful Improvements in Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of so much of a harvesting-machine as is necessary to show my improvements. Fig. 2 is a plan or top view of the metal bracket or arm forming the support or point of attachment for the inner end of the shoe-brace, hereinafter described. Fig. 3 is a perspective view of said bracket; and Fig. 4 is a front elevation of the shoe brace or rod.

My invention relates to a novel arrangement of the shoe-brace in connection with the hinged coupling-piece which connects the shoe with the main frame, and in relation to the pitman or connecting-rod; and it consists in providing the coupling-piece with a rigid curved arm projecting forward of the pitman and connecting the shoe-brace adjustably therewith, and with the shoe in such relation to the pitman that it shall, throughout its entire length, lie in front of said pitman and parallel, or nearly so, therewith, for protecting the same, while at the same time providing for adjustment to compensate for wear in the joints between the shoe and frame, as hereinafter explained.

The form or type of machine shown in the drawings in illustrating the invention is what is known as the "buckeye;" but it will be apparent that the improvement herein described may be used upon other forms of machine.

A represents the main or gear frame; B B′, the coupling-piece hinged thereto at or near the line of the crank-shaft; and C is the shoe, hinged to the outer swinging end of the transverse bar B of said frame, the arrangement of said parts being similar to that in common use in the class or type of machine referred to. The coupling arm or piece B has a curved arm or bracket, D, rigidly secured to it near its junction with the main or gear frame, said arm extending forward from the bar B in a curved or angular form, (shown in Figs. 1 and 3,) passing down underneath and up in front of the connecting-rod which actuates the knife or sickle bar, as shown in Fig. 1. The bracket D is shown provided with ribs or lugs *d*, which rest against the forward edge of bar B, and are secured to said bar by bolts, as shown, or in other suitable manner. The forward end of the arm or bracket D has an eye, D′, formed in it for the reception of the inner or stubble end of a brace-rod, E, secured therein by nuts *e e′* upon its threaded end on opposite sides of arm D; or it may be secured therein by means of a screw-thread formed in the eye D′, matching the thread on the end of rod E, or in other suitable manner permitting the longitudinal adjustment of said rod or brace.

The outer end of the rod or brace has an eye formed in it at E′, (see Fig. 4,) and fits between perforated lugs or ears C^2 C^2, formed on the forward end of the shoe in advance of the lugs C′ C′, through which said shoe is hinged to the coupling-arm B, and is pivoted to the shoe in line with said hinge through said lugs C′, as shown. By this arrangement the rod or brace is brought in front of the pitman, and into a line about parallel therewith throughout its whole length, as shown, and is thus made to protect the latter from obstructions in its path, while at the same time it serves materially to relieve the joint between the shoe and the coupling-arm of the strain due to the backward thrust upon the cutting apparatus, and being connected at its inner end with the coupling arm or piece through the arm or bracket, and at its outer end to the shoe in line with the hinge between said shoe and the hinged coupling-arm, it conforms perfectly to the movements of said arm.

Through the nuts *e e′*, or other means connecting it adjustably with the bracket D, any slack or wear in the joints between the cutting apparatus and the frame may be compensated for, thus keeping the cutting apparatus in proper working relation to the frame.

Having now described my invention, I claim as new—

The combination, with the hinged coupling-piece which connects the cutting apparatus with the frame, of the adjustable shoe-brace rigidly connected by the forwardly-projecting curved arm D to and vibrating with said coupling-piece, and arranged throughout its entire length in front of and parallel with the pitman for protecting the same, substantially as described.

JOHN P. ADRIANCE.

Witnesses:

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