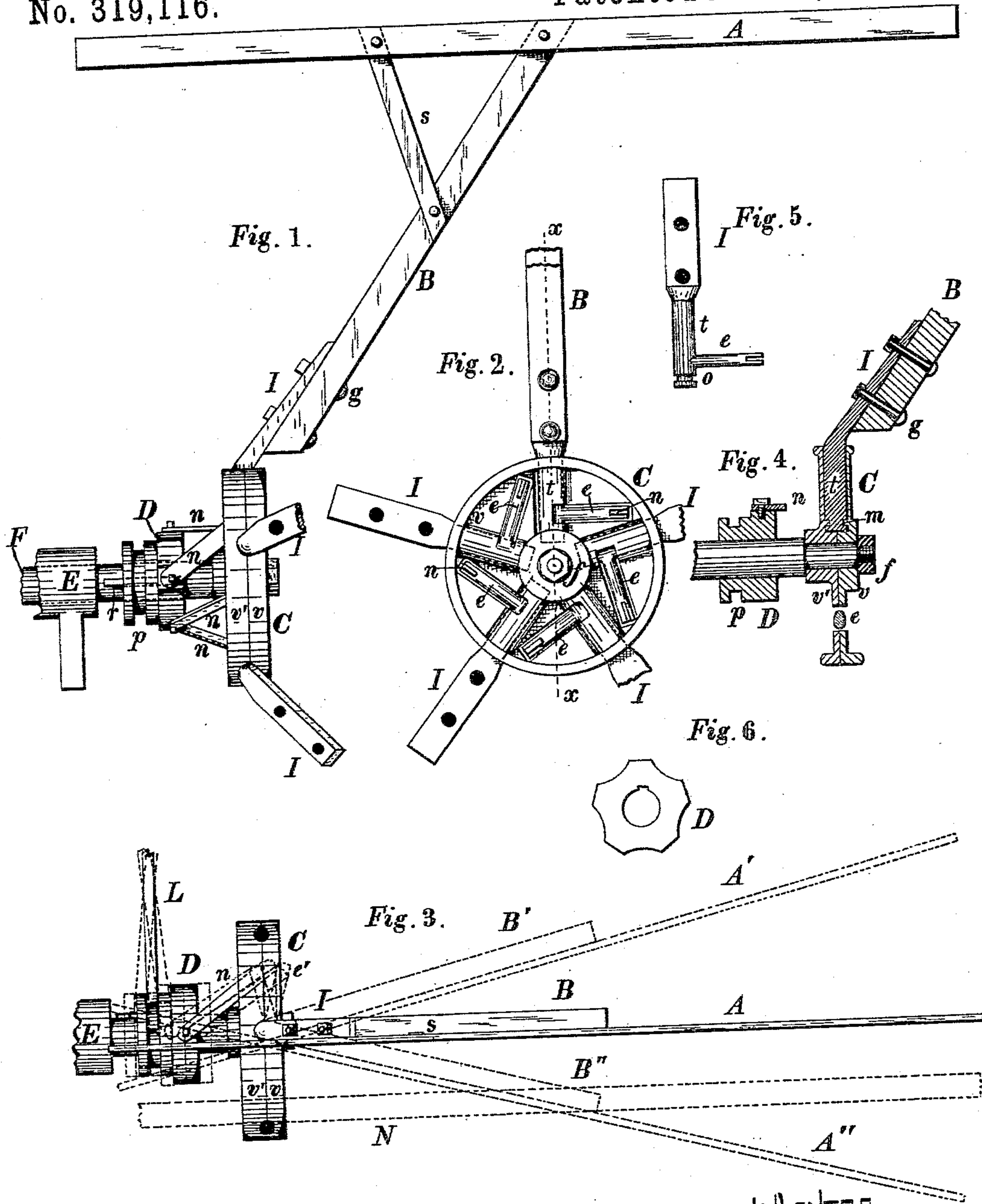


(No Model.)

L. L. OLP.  
HARVESTER REEL.

No. 319,116.

Patented June 2, 1885.



WITNESSES-

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# UNITED STATES PATENT OFFICE.

LAMBERT L. OLP, OF MOUNT MORRIS, NEW YORK.

## HARVESTER-REEL.

SPECIFICATION forming part of Letters Patent No. 319,116, dated June 2, 1885.

Application filed August 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LAMBERT L. OLP, of Mount Morris, in the State of New York, have invented an Improvement in Harvester-Reels, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in harvester-reels, which improvement is fully described in the following specification, and the novel features thereof specified in the claims thereunto annexed.

My improvement in harvester reels is represented in the accompanying drawings, in which Figure 1 is an elevation showing the reel-head with one reel arm and blade. Fig. 2 is a front elevation of the reel-head. Fig. 3 is a plan view of the reel-head, showing a reel-blade arranged parallel with the cutter-bar in full lines and adjusted at angles therewith in dotted lines. Fig. 4 is a vertical section through the reel-head on the line *x x*, Fig. 2. Fig. 5 represents one of the reel-arm pivots detached. Fig. 6 is an end view of the sliding collar.

In the accompanying drawings, A represents one of the reel-blades; B, a reel-arm; C, the reel-head; D, the sliding collar; E, the standard or journal-bearing which supports the reel, and in which the reel-shaft F revolves.

Any preferred number of reel-blades may be employed in my improved harvester-reel; but I have obtained satisfactory results in practical use from a five-bladed reel, of a construction similar to that shown in the drawings. The reel-head C consists of two circular plates, *v v'*, the inner and opposing surfaces of which are provided with radial sockets or journal-bearings for the reception of the cylindrical stems *t* of the reel-arm pivots I. Each of the pivots is connected with the sliding collar D on the reel-shaft by means of the arm *e* and link *n*, so that when the collar is moved lengthwise on the shaft the pivot is caused to turn in its socket. The arms *e*, which project outward from the stems of the pivots, swing in suitable slots formed through the plates of the reel-head. The links *n* are pivoted at one end to the extremities of the arms *e* and at the other end to the collar D. The collar D is caused to revolve with the

reel-shaft F by means of the spline *r*, while at the same time it is allowed to slide lengthwise thereon. The collar D has a circumferential groove, *p*, in which the forked extremity of the shifting lever L is fitted. Outside the reel-head the pivots I are bent at an angle, and the reel-arms B are secured thereto by means of bolts or screws *g*. The reel-arms extend outward at an angle with the axis of revolution, and at their extremities are secured to the reel-blades A, near the centers of their length, one or more braces *s* being employed to strengthen the connection, if desired. The stems of the pivots are secured in their sockets in the reel-head by the grooves and flanges *o m*, Figs. 4 and 5. The plates *v v'* of the reel-head are secured together on the shaft by the nut *f*.

In the practical operation of my improved reel the reel-blades may be used in planes parallel with axis of revolution and the cutter-bar, or the reel-blades may be adjusted by moving the sliding collar D at angles in either direction with the cutter-bar, as indicated by the dotted lines A A' B' B'', Fig. 3, so that grain which leans either away from or toward the machine may be properly gathered and presented to the cutting mechanism.

My improved harvester-reel is designed to be used on any particular type of harvester, and it may be supported thereon, so as to be adjusted up and down or in front or rear of the cutter-bar in any preferred manner. The reel-blades A and the arms B are made of wood, while the pivots I, having the bent outer extremity and the brace *s*, are made of metal, although a wooden brace or braces may be used, if desired. By this construction I am able to secure sufficient lightness with strength, the angular arrangement of the arm on the bent end of the pivot enabling me to attach the arm to the blade near the center of the length of the blade, by which the latter is given sufficient rigidity for its work.

In Fig. 3 of the drawings the position of the cutter-bar is indicated by the dotted lines N.

I claim—

1. The herein-described overhung harvester-reel, provided with a series of adjustable blades, A, attached near the center of length to the angularly-arranged reel-arms B, the inner



ends of which are pivoted in the reel-head C, located at one end of the reel, and provided with suitable mechanism for varying the adjustment of the blades relative to the cutter-bar by turning the pivots in sockets in the reel-head while the machine is in operation, substantially as described.

2. The combination, with the revolving reel-head C, of the pivot I, angularly-arranged reel-arm B, reel-blade A, and brace s, substantially as described.

3. The combination, with the revolving reel-head C, of the adjustable reel-blade A, angularly-arranged reel-arm B, pivot I, provided with arm e, link n, and sliding collar D, substantially as described.

4. The combination, with the adjustable reel-blades A and angularly-arranged reel-arms B, of the divided reel-head C, provided with sockets for the stems t of the pivots I, and slots for the arms e and links n, substantially as described.

5. The combination of the adjustable wooden reel-blade A, angularly-arranged wooden reel-arm B, bent metallic pivot I, and the divided reel-head C, provided with sockets for the pivots, substantially as described.

LAMBERT L. OLP.

Witnesses:

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