A. J. SWEENEY.

Pitman-Attachments for Harvesters.

No. 156,825. Patented Nov. 10, 1874.

Fig 1.

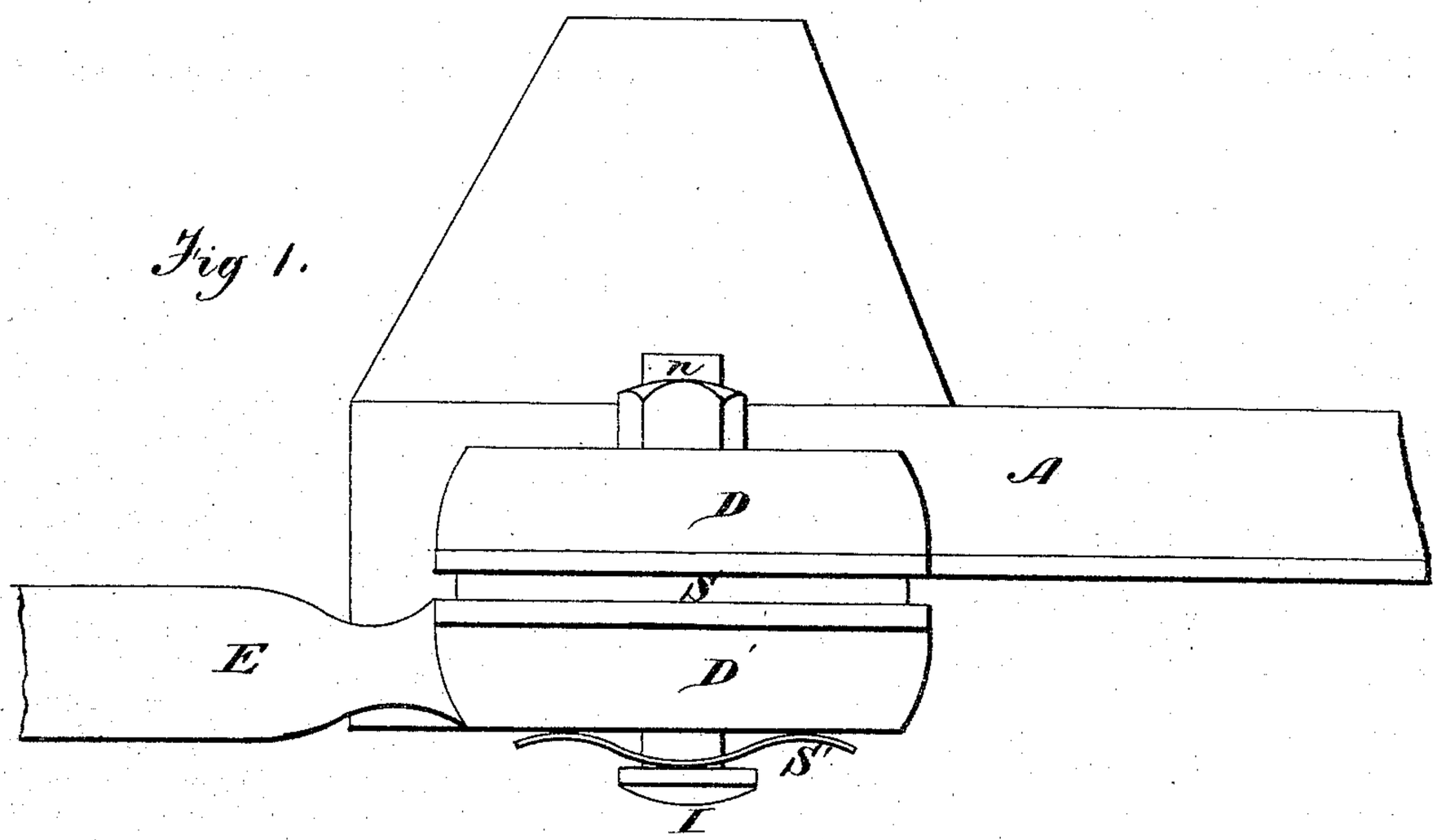
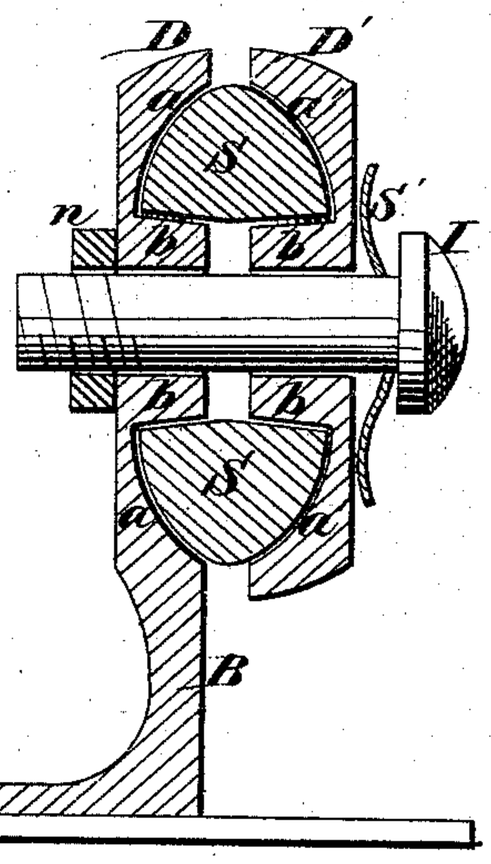


Fig 2.



Witnesses;

Harry C. Clark.

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UNITED STATES PATENT OFFICE.

ANDREW J. SWEENEY, OF WHEELING, WEST VIRGINIA.

IMPROVEMENT IN PITMAN ATTACHMENTS FOR HARVESTERS.

Specification forming part of Letters Patent No. **156,825**, dated November 10, 1874; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, ANDREW J. SWEENEY, of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and Improved Knife-Heel and Pitman Attachment for Harvesters; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of my improved pitman attached to the cutter-bar of a harvester; and Fig. 2 is a cross-section of the same.

Similar letters of reference in the accompanying drawing denote the same parts.

My invention relates to improvements in harvester-pitmen; and it consists in the employment of opposite concentric disks, one attached to the heel of the cutter-bar, and the other to the inner end of the pitman, and having opposite concentric bearings or grooves of equal radiuses, and between them a ring which is a segment of a sphere, the usual bolt passing through orifices in the disks, and the spherical segment or ring being employed, by which construction the end of the pitman which is not attached to the cutter-bar may be moved out of the line of the cutters and cutter-bar without cramping or loosing its hold on the latter.

My invention further consists in the employment of a spiral corrugated or other shaped spring, placed under the head or nut of the bolt which connects the two disks with the interposed ring, so that as the parts wear their bearing is preserved, and all noise and jar are obviated.

In the accompanying drawings, A represents the cutter-bar of a harvester, provided at its inner end with a vertical projection, B, the upper end of which terminates in a disk, D, having its inner face partly beveled or curved spherically, as seen at *a*, Fig. 2, and provided with a central hub of the form of a truncated cone, provided with an orifice for the passage of the ordinary bolt, which connects the inner end of the pitman with the heel of the cutter-bar. The inner end of the pitman E is provided with a disk, D′, formed precisely like the disk D, attached to the cutter-bar, having the spherical curved surface *a′*, of the same radius as the spherical surface *a* in the disk D, and being provided with the similarly-formed truncated cone *b′*, having a central orifice through it. S is a ring, which is a segment of a sphere, having the same or nearly the same radius as the spherical portions *a a′*, situated between the disks D D′, and resting between them. Through the opening or orifice in said ring S the bolt I also passes. By this construction it will be seen that the bite or hold of the inner end of the pitman is constantly preserved, and, at the same time, the end of the pitman not attached to the cutter-bar can be moved out of line of the cutters and cutter-bar without cramping or loosening the hold of the pitman on the latter. S′ is a spring, placed preferably under the head of the bolt I, the functions of which are to preserve the bearings of the parts and prevent noise and jar. The same results also may be attained by placing the spring under the nut *n*. The spring may be flat, spiral, corrugated, or otherwise shaped, as desired.

I claim as my invention—

1. The disks D D′, provided with the spherical surfaces *a a′*, and truncated cones *b b′*, in combination with the spherical segment or ring S, and bolt I, substantially as described, and for the purposes set forth.

2. The disks D D′, constructed as set forth, in combination with the spherical segment S, bolt I, and spring S′, substantially as described, and for the purpose set forth.

A. J. SWEENEY.

Witnesses:

JAMES P. ALLEN,

MORRIS DORSEY.