

A. J. SWEENEY.

Improvement in Mode of Attaching Pitmans.

No. 131,132.

Patented Sep. 3, 1872.

fig. 1.

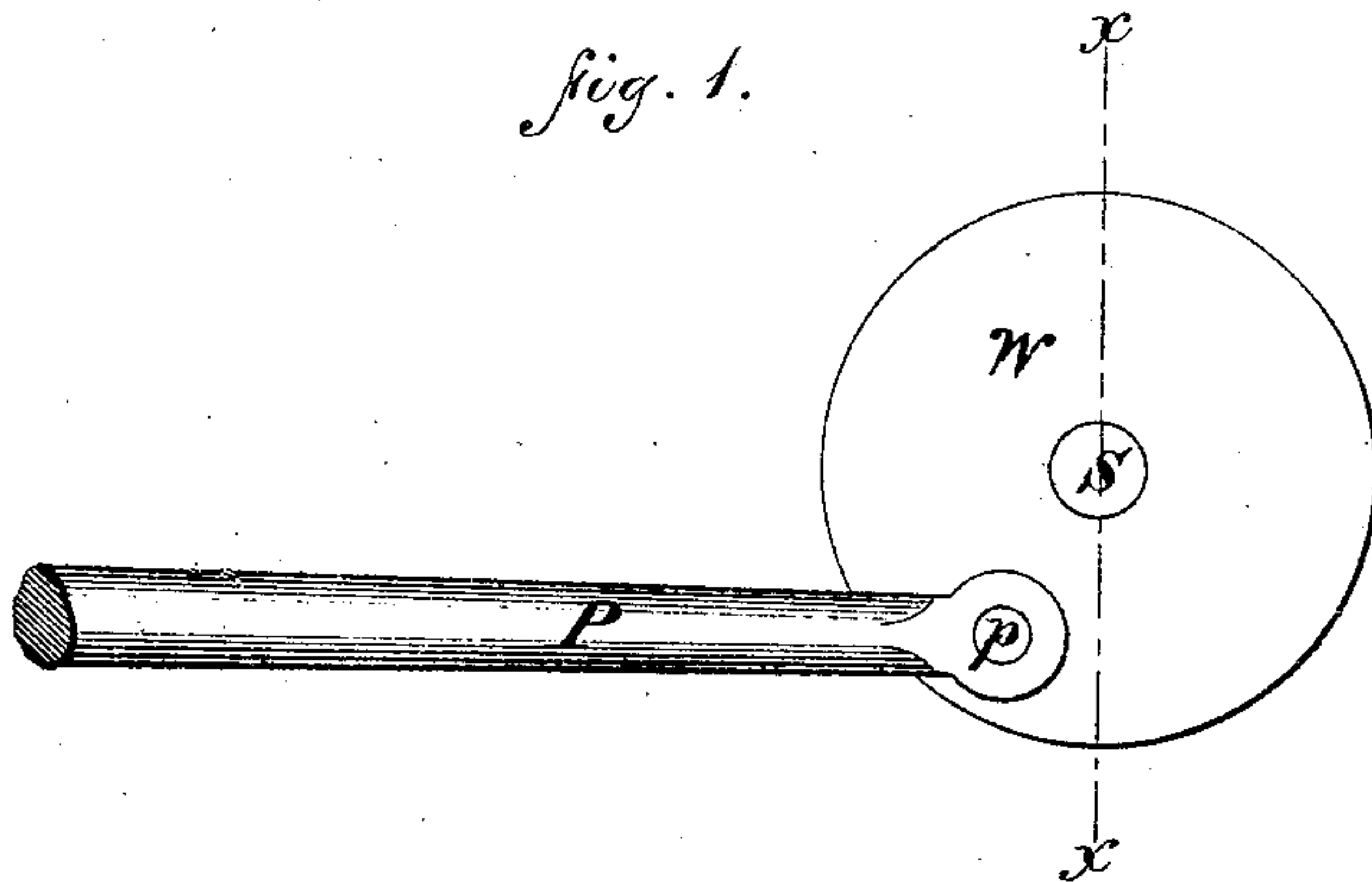
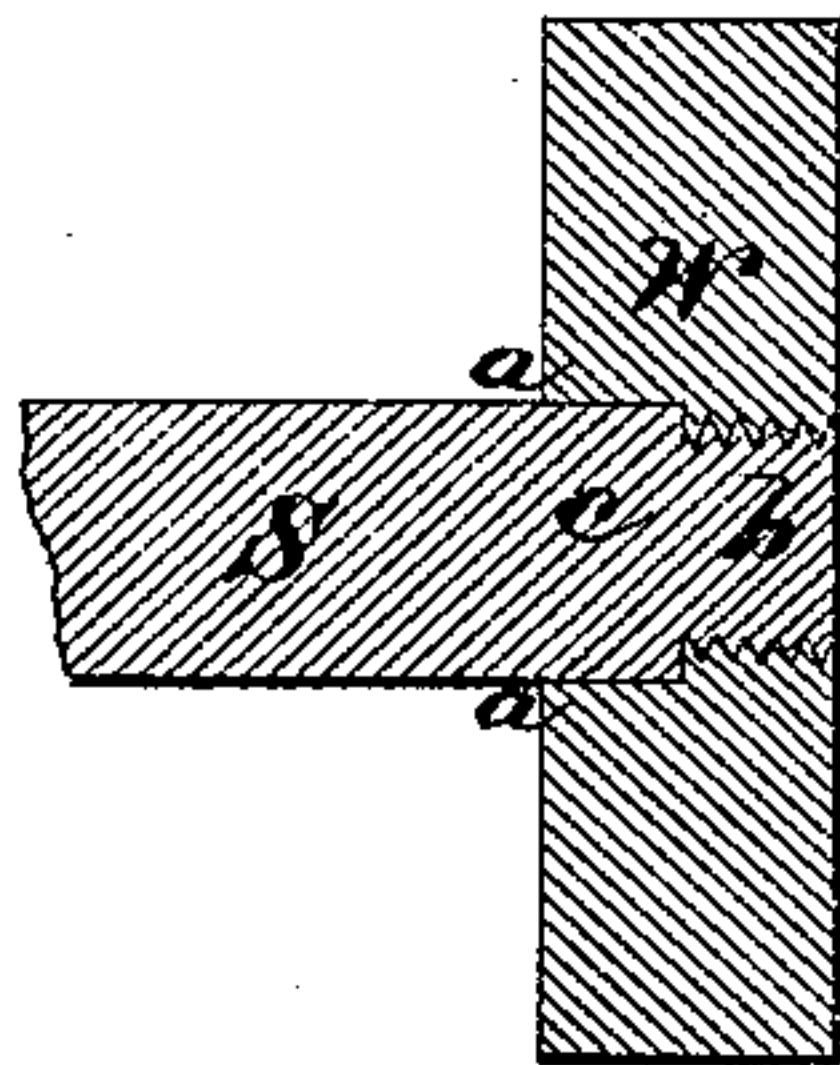


fig. 2.



Witnesses.

C. F. Progn  
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Inventor,

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By his Attys,  
Hill & Ellsworth.

# UNITED STATES PATENT OFFICE.

ANDREW J. SWEENEY, OF WHEELING, WEST VIRGINIA.

## IMPROVEMENT IN MODES OF ATTACHING PITMEN.

Specification forming part of Letters Patent No. 131,132, dated September 3, 1872.

*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 useful Improvement in Harvesters and Mowing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a section in the line *xx* of Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures of the drawing.

In that class of harvesters in which the pitman that works the cutter-bar is reciprocated by means of a wheel and wrist-pin or a crank, the practice has always been, in constructing the machine, to reduce the end of the shaft below the size of the journal by cutting a thread or screw on it equal to the thickness of the crank, and to fit a corresponding screw-thread in the crank-wheel. The thread on the shaft is cut from the face of the journal-box to the end of the shaft, so that the crank-wheel can go no further on the shaft than the thread extends. Sometimes a greater reduction is made by turning down below the size of the journal that portion of the shaft upon which the crank is to be fitted, so as to secure a larger shoulder than the thread alone affords, against which the crank may rest. Partly by the reduction in size and partly because the thread nicks or checks the metal of which the shaft is made, a great diminution of strength exists at a point between the journal and the crank-wheel, and a liability to bend or break the shaft at that point is incurred from any sudden jerk or lateral strain upon the wheel because the shaft, so weakened, cannot resist it.

The object of my invention is to remedy this

defect; and to such end the invention consists in the construction adopted for the purpose which I will now proceed to describe.

In the drawing, W is the wheel; S, the shaft; *p*, the wrist-pin; and P, the pitman. Instead of diminishing the shaft from the point *a*, as heretofore, and cutting a screw-thread along its surface in length equal to the thickness of the crank-wheel, I now diminish the size of the shaft only at its extremity, as shown at *b*, and cut the screw-thread upon the portion thus reduced, which portion is in length equal to about the thickness of the crank-wheel. The eye of the wheel is formed to correspond to the construction of the shaft, as described, one-half of the eye being of large diameter and smooth, to fit the full size of the shaft at *c*; the other half of smaller diameter, and cut into a female screw to fit the reduced portion *b*. The screw-thread suffices to hold the wheel firmly in place; but, being entirely covered by the wheel, does not in the least impair the strength of the shaft at *a*. The large portion *c* of the shaft being perfectly smooth, with its skin unbroken at the edge of the wheel, retains its full power to resist lateral strains, which power is assisted and increased by the internal construction of the wheel and by the shoulders upon the wheel and shaft, which set firmly against each other at the end of the screw-thread.

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

As an improvement in harvesters and mowing-machines, the combination of the wheel W with the shaft S, when constructed and connected in the manner and for the purposes herein set forth.

A. J. SWEENEY.

Witnesses:

WILLIAM REITZ,  
WM. H. DAVIS.