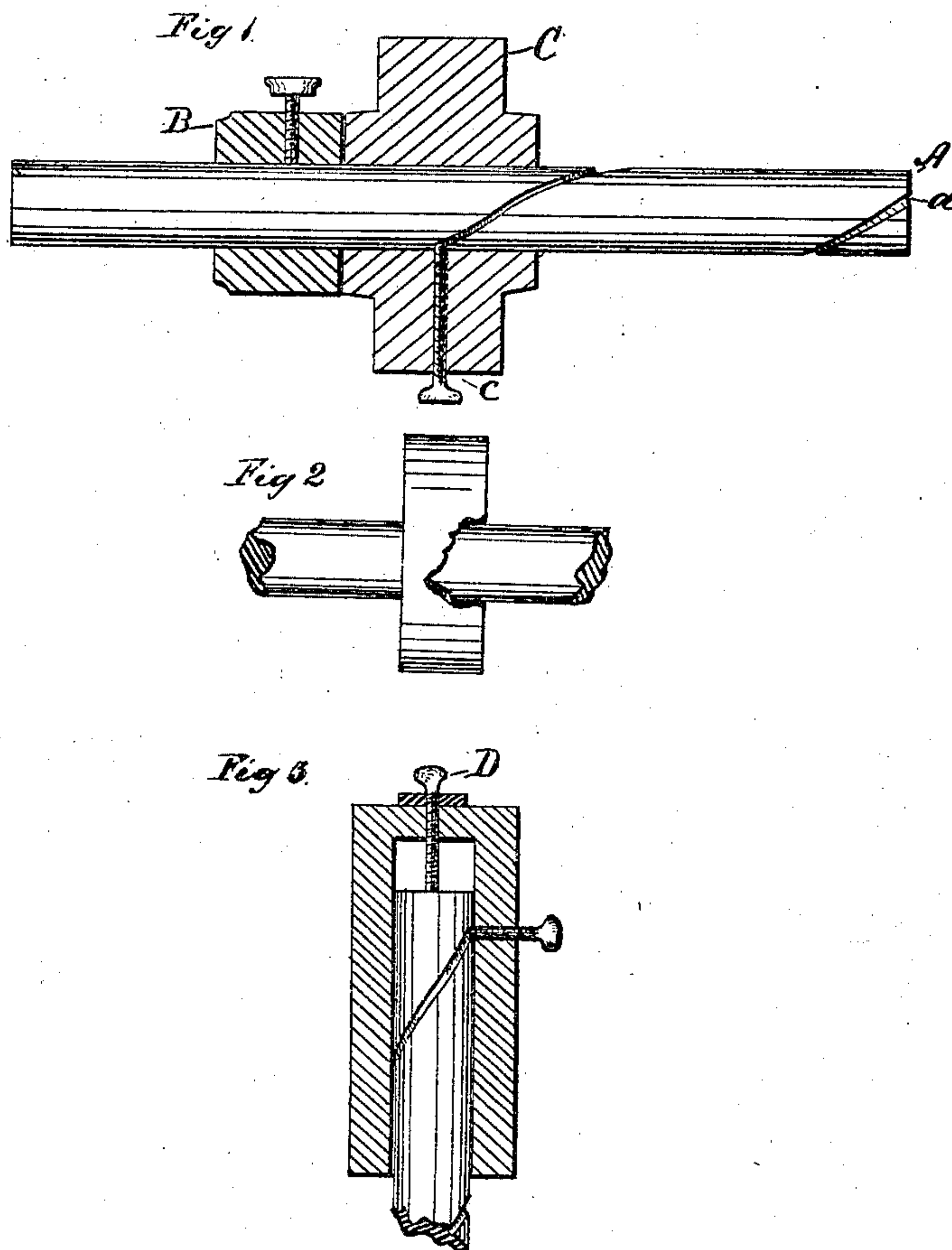


D. K. OVERHISER.

Improvement in Securing Pulleys to Shafts.

No. 133,246.

Patented Nov. 19, 1872.



Witnesses

Harry B. Clark

Columbus Choate

Inventor.

David K. Overhiser

by Dyer, Beadle & Co.

Atty's.

UNITED STATES PATENT OFFICE.

DAVID K. OVERHISER, OF WILLIAMSPORT, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND WILLIAM H. KELLY, OF SAME PLACE.

IMPROVEMENT IN SECURING PULLEYS TO SHAFTS.

Specification forming part of Letters Patent No. **133,246**, dated November 19, 1872.

To all whom it may concern:

Be it known that I, DAVID K. OVERHISER, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and Improved Method of Attaching Pulleys, &c., to Shafts and Spindles; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention consists in providing a shaft or spindle to which it is desired to attach a pulley, cutter-head, or other similar article, with a spiral groove, which groove is used in connection with a pin or set-screw projecting from the inner circumference of the pulley or other article to be attached thereto, by which means the article is quickly and easily attached to and detached from the shaft when it is desired so to do, as will be fully described hereinafter.

In the drawing the figures represent my invention as applied in several different ways.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A, Fig. 1, represents a shaft provided with a spiral groove, *a*, which may be of any proper form and pitch. B represents a collar, which is rigidly secured to the shaft A by means of a set-screw or in any other proper manner. C represents the pulley, saw, cutter-head, emery-wheel, or other article which it is desired to attach to the shaft, which article is provided with a pin, *c*, or set-screw projecting from its inner circumference, the point of which is adapted to rest in the groove *a*.

When thus constructed the pulley or head will be caused to bear against the collar B by turning it in the proper direction. When thus arranged the revolution of the shaft in a contrary direction to that in which the head or pulley was turned when placed in position will cause the latter to bind more tightly against the collar.

A modification of my invention, designed for upright shafts, is shown in Fig. 3, the construction of which is similar to Fig. 1, excepting that the article in this case instead of having bearing against the collar is held and adjusted in place by means of a set-screw, D, as shown.

The described construction possesses decided advantages over the usual method of attaching articles to shafts and spindles; no wrench is required to attach an article in its place or to remove it, and consequently there is no danger of spoiling the shaft by means of the set-screw.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a shaft having a spiral groove with a pulley, head, or similar article having a pin projecting from its inner circumference, substantially as described.

2. The combination of the shaft having the spiral groove, the hub with the projecting pin, and the set-screw, substantially as described.

This specification signed and witnessed this 4th day of October, 1872.

D. K. OVERHISER.

Witnesses:

JOHN HEPBURN,
SAMUEL CALBER.