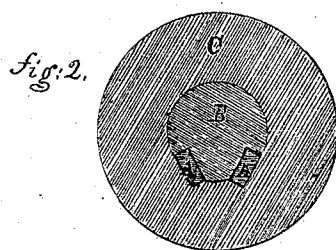
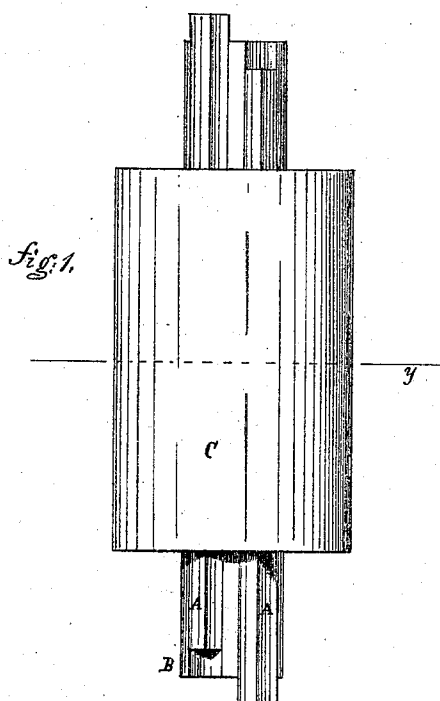


Joseph Ochsner's
Securing Wheels, Cranks, &c.
to their axis.

No. 118,474.

Patented Aug. 29, 1871.



Witnesses.
A. C. Johnston
Jo^{seph} W. Davis

Inventor.
Joseph Ochsner
James Johnston his attorney

UNITED STATES PATENT OFFICE.

JOSEPH OCHSNER, OF NEW BRIGHTON, PENNSYLVANIA.

IMPROVEMENT IN SHAFT-COUPPLINGS.

Specification forming part of Letters Patent No. 118,474, dated August 29, 1871.

To all whom it may concern:

Be it known that I, JOSEPH OCHSNER, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Securing Wheels, Cranks, &c., to their Axis; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in securing wheels, cranks, &c., to their axis by means of keys, having their broad or bearing-surface arranged at an obtuse angle to a line radiating from the axis of the hub of a wheel, crank, and their shaft.

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

In the accompanying drawing which forms part of my specification, Figure 1 represents a cylinder secured on a shaft by means of my improved method of "keying." Fig. 2 is a transverse section of the same at line *y*.

In the accompanying drawing, A represents the keys. B represents the shaft. C represents a cylinder or hub of a wheel or a crank. The recesses for the keys are cut in such a manner that the broad bearings are at an obtuse angle to a line radiating from the axis of the cylinder or hub C and shaft B. This arrangement of the recesses or "key-seats" will cause the broad bearing-surfaces of the keys A to be at an obtuse angle to a line radiating from the axis of the cylin-

der or hub and its shaft. By having the broad bearing-surfaces of the keys arranged with relation to the axis of the cylinder and shaft, as hereinbefore described, a greater power of resistance against the tendency of the cylinder or hub to turn or move on the shaft is avoided, and the several parts are held in a more sure and certain relation to each other.

A sure and certain means for holding cranks, wheels, cams, &c., in a positive position on their shaft or axis has long been wanted in constructing heavy machinery. This want is supplied by arranging the keys and their seats in the position hereinbefore described.

I wish it clearly understood that I do not claim, broadly, arranging the broad face of a key or keys at an obtuse angle to a line radiating from the axis of the shaft; but limit my invention to the peculiar manner, hereinbefore described, of arrangement of the keys with relation to the axis of the shaft B and bore of the hub C.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

The keys A, with their broad bearing-faces arranged at an obtuse angle to a line radiating from the axis of shaft B and hub C, inserted and extending through the entire hub, substantially as herein described, and for the purpose set forth.

JOSEPH OCHSNER.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.