C. S. Sherk,

Tire Shrinker.

No. 109,147. Patented Nov. 8. 1870.

Fig. 1.

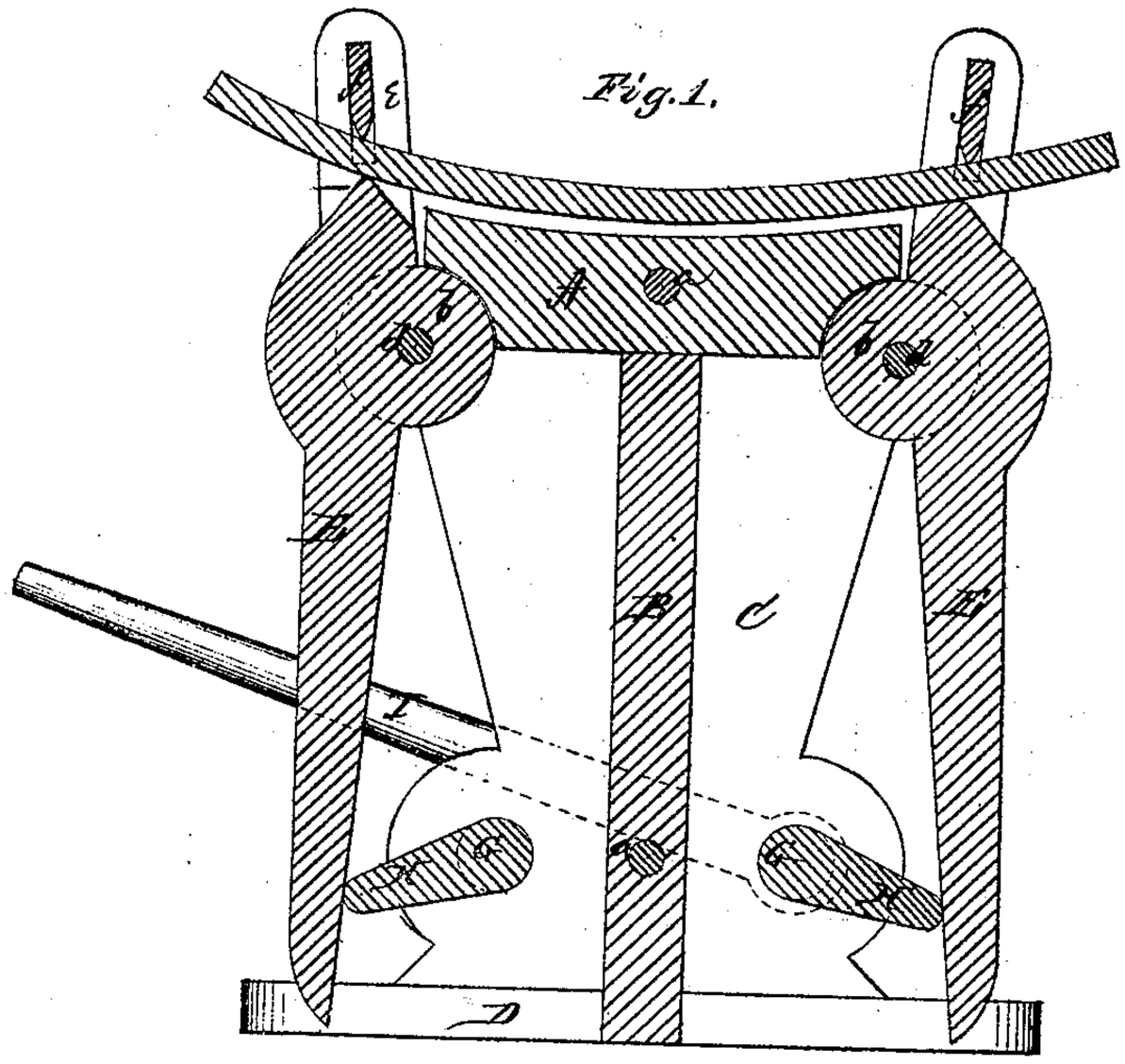
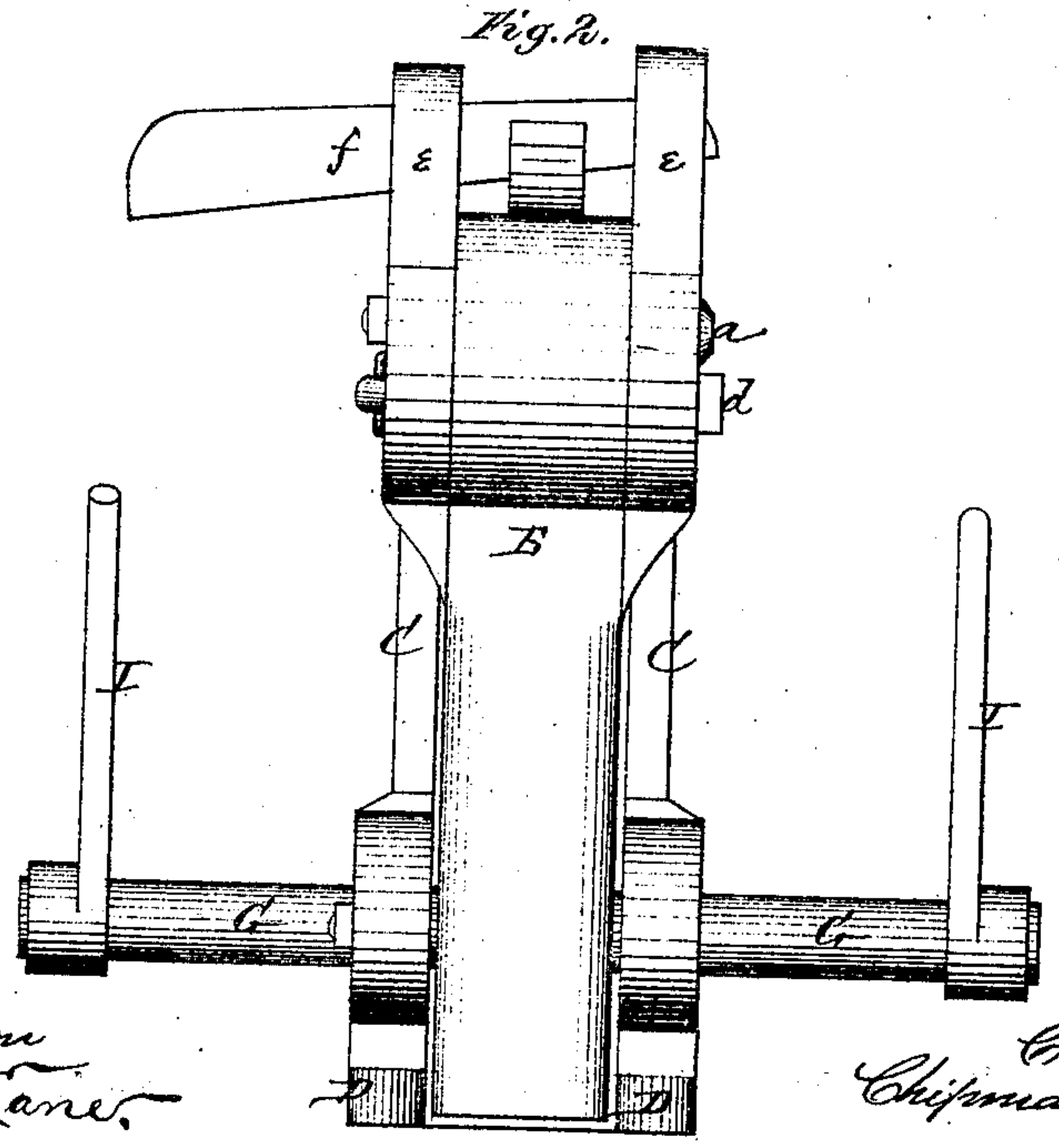


Fig. 2.



Witnesses
Chas. Kenyon
D. D. Kane.

Inventor
C. S. Sherk
Chipman Fosmer & Co
Attys.

United States Patent Office.

CHRISTIAN S. SHERK, OF GRANTVILLE, PENNSYLVANIA.

Letters Patent No. 109,147, dated November 8, 1870.

IMPROVEMENT IN TIRE-SHRINKERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHRISTIAN S. SHERK, of Grantville, in the county of Dauphin and State of Pennsylvania, have invented a new and valuable Improvement in Tire-Shrinkers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my machine in longitudinal vertical section, and

Figure 2 is an end elevation of the same.

The nature of my invention consists in the construction and arrangement of a "tire-shrinker," intended for shrinking or tightening tires without cutting them, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

A represents the bed upon which the tire is laid, said bed being cast in two longitudinal pieces, each with a central upright bar, B, side, C, and bed-piece, D, which halves are fastened together by bolts *a a*, and form the body of my machine.

The body thus formed is to be secured firmly, in any suitable manner, where it is intended to use the same.

Being made in two sections, it is the more readily cast, and the levers can be easily attached thereto.

At each end of the bed A is hung a lever, E, which is, on its inner side, provided with a semicircular projection, *b*.

This projection is inserted between ears formed on the sides of the machine, and through the same is passed a bolt, *d*, which thus pivots the lever to the machine.

At the upper end of each lever E are two upward-projecting arms, *e e*, which are slotted lengthwise, as shown in fig. 1.

The tire laid on the bed A passes between the arms *e e* on the angular bearing-surface or cam *z* of each lever E, and is held down by means of a wedge, *f*, at each end, said wedge being beveled at the lower edge, and inserted through the slots in the arms above the tire.

The upper ends of the levers E, upon which the tire also rests, are also beveled, so that the tire is held at each end between two edges, as shown.

In the lower part of the machine, at each end, is passed a shaft, G, through ears formed upon the side pieces C C.

On the shaft G, at each end of the machine, is formed or placed a tongue, H, which occupies nearly, if not entirely, the spaces between the sides C C, and which, when the machine is not in use, hangs downward.

Upon one end of each shaft G is keyed an upright lever, I.

When this lever is pressed downward toward the opposite end of the machine, the tongue H is raised, forcing the lower end of the lever E outward, which causes the upper end, with the tire, to move upward and inward. This, being done at both ends of the machine at the same time, accomplishes the desired object, namely, the shrinking or tightening of the tire.

Having thus fully described my invention,

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

In combination, the stationary concave bed A, levers I I, with cams H H, levers E E, with slotted arms *e e*, and angular bearing-edges *z z*, and the wedges *f f*, having their lower bearing-edges V-shaped, substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

CHRISTIAN S. SHERK.

Witnesses:

BASSLER BOYER,

ANTHONY S. ELY.