

S. E. & I. Y. CHUBBUCK.

Piston-Packing.

No. 152,335.

Patented June 23, 1874.

Fig. 1.

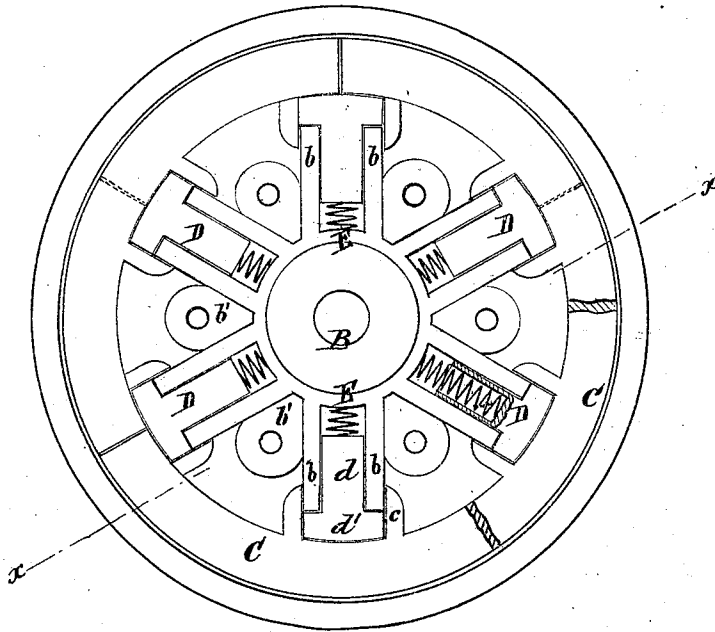


Fig. 2.

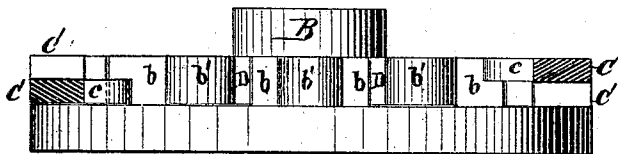
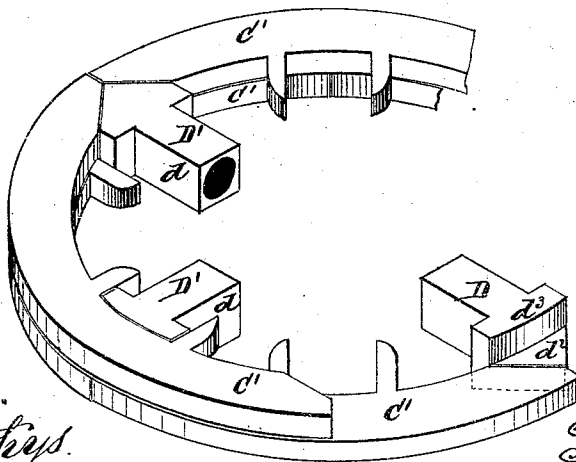


Fig. 3.



WITNESSES.

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STILLMAN E. CHUBBUCK AND ISAAC Y. CHUBBUCK, OF BOSTON, MASS.

IMPROVEMENT IN PISTON-PACKING.

Specification forming part of Letters Patent No. **152,335**, dated June 23, 1874; application filed May 18, 1874.

To all whom it may concern:

Be it known that we, STILLMAN E. CHUBBUCK and ISAAC Y. CHUBBUCK, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Piston-Packing; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a plan; Fig. 2, a side elevation, partly broken away; Fig. 3, a detail view in perspective.

The invention relates to the packing of steam-pistons, will be hereinafter fully described, and will then be clearly pointed out in the claims.

A represents a portion of the cylinder, in which a steam-tight piston is to be reciprocated, and B the hub, having pairs of parallel non-radial arms *b* and spacing-blocks *b'* between each pair. C C represent a pair of cut rings, made in numerous sections, and held out at their joints and in the middle by spring-pressers D. The latter's shanks *d* fit into the grooves formed between arms *b* *b*, and are expressed by the springs E, while their larger heads *d'* are held between the pairs of parallel ring-studs *c* *c*. This effectually prevents the slipping of the ring-sections, so as to tighten one joint at the expense of another; but the effect may be still further insured by causing the studs *c* to overlap the arms *b*. The rings C C have their respective sections arranged to break joint in the usual manner. C' C' are two rings, and D' a series of spring-pressers, that are held by the hub-arms and ring-studs substantially in the same manner as those previously described, but are brought

together so as to make a V-shaped joint at the junction of the sections, while one-half the V is cut off from the presser, and a plain arc-bearing formed to receive the middle portion of ring-section. The angular end part *d'* exercises a lateral as well as an outward pressure upon the adjacent ends of two ring-sections, while the arc part *d'* acts only by an outward pressure upon the middle of the ring-section that breaks joint with them.

We are aware that the sectional rings have been heretofore held out by spring-pressers, and prevented from circular motion by hub-arms fitting between studs on the inside of rings, and it is, therefore, our object to seek protection only on the peculiar manner of combining the pressers with the arms of hub and studs of the rings, instead of having the pressers and detents (as now) placed at different points. We thus obtain a packing stronger and better calculated to resist the separating tendency and effect of the steam.

Having thus described our invention, what we claim as new is—

1. The combination, with spring-pressers D, of non-radial hub-arms *b* *b* and ring-studs *c* *c*, the latter overlapping the former, as and for the purpose described.

2. The combination, with two rings, C' C', having their respective sections breaking joint with each other, of spring-pressers having head with half angular and half arc-shaped working faces *d'* *d'*, as and for the purpose specified.

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Witnesses:

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