

J. M. READ.  
Stove-Pipe Dampers.

No. 144,634.

Patented Nov. 18, 1873.

Fig. 1.

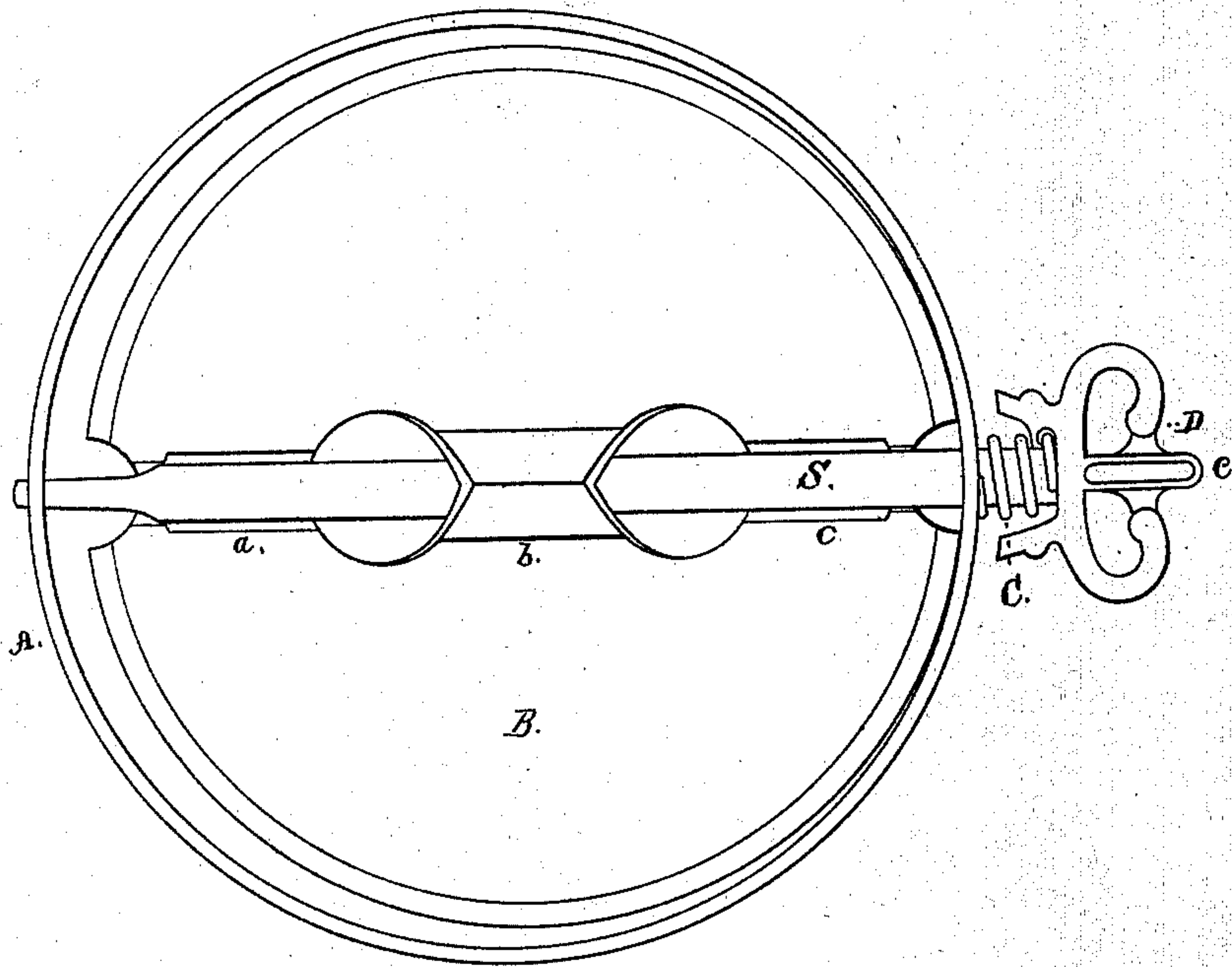
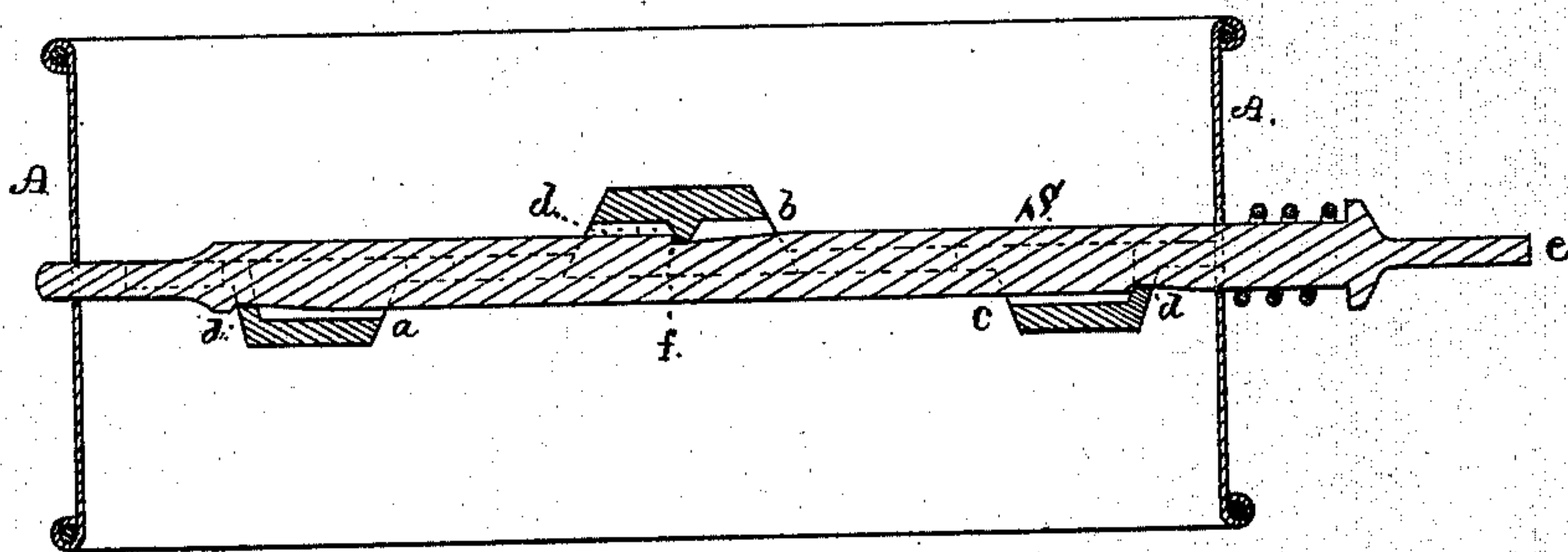


Fig. 2.



Witnesses.

Geo Gray

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN STOVE-PIPE DAMPERS.

Specification forming part of Letters Patent No. 144,634, dated November 18, 1873; application filed July 30, 1873.

*To all whom it may concern:*

Be it known that I, JOSIAH M. READ, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Damper for Stove-Pipes; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, in which—

Figure 1 denotes a top view of a stove-pipe having a damper constructed and applied thereto in accordance with my invention; and Fig. 2 a central and vertical section thereof.

The object of my invention is to remedy sundry defects incident to the construction and operation of rotary dampers, as ordinarily employed.

In the ordinary construction of dampers of this character the disks and their spindles are made of cast-iron, and formed separately. Owing to a want of uniformity in the castings many of the spindles do not fit their receiving-sockets in the disks, the spindles being of necessity formed smaller than the sockets. Great numbers of them are found to be so imperfect as to require to be wedged in order to fasten them securely to the disk. Another disadvantage of a large portion of the ordinary rotary dampers is, that they have no certain means of moving and maintaining them in the desired position to properly regulate the draft.

My invention consists in forming within the spindle-receiving sockets of the disk two or more angular transverse bridges or tension-bars, so disposed as to impinge against an angular edge of the spindle, and cause the latter to be slightly sprung and hold the spindle and damper firmly in place.

In the drawing, A denotes the stove-pipe; B, a flat metallic disk, of a diameter very nearly corresponding with the internal diameter of the pipe, the same being provided with spindle-receiving sockets *a b c*. These sockets are of a V shape, two of them (*a* and *c*) being on one side of the disk, and the other or central one being on the other side thereof. Each of these sockets is provided with a ten-

sion-rib or angular bridge, *d*, extending transversely of the socket, the outer bridges being disposed near the outer extremity of their sockets, while the central one is arranged near the middle of its socket, the object of such arrangement being to give the spindle S the greatest amount of resilient force. This spindle is of a rectangular shape, in cross-section, to fit into the V-shaped sockets, hereinbefore mentioned. The spindle is also provided with a locking-shoulder, *f*, to operate with one of the tension bars or bridges to preserve the normal position of the spindle with respect to the disk; such, however, is only required in the larger size of dampers. C is a spring, which is coiled around the shanks of the spindle, one end passing through a hole in the turn-button D of the spindle, its other end bearing against the outer surface of the pipe, such spring having a force sufficient to preserve the contiguous edge of the disk in such frictional contact with the inner surface of the pipe as to maintain the disk in any position it may be set.

I do not claim forming the damper-disk with angular sockets to receive an angular spindle, whereby the two, when applied together, are prevented from turning, as I am aware that such is not new.

Having described my invention, what I claim is as follows:

1. In a stove-pipe damper, substantially as described, the socketed disk B, formed with two or more bridges or tension-bars to operate with the spindle, in manner and for the purpose set forth.

2. The above-described stove-pipe damper, the same consisting of the disk B, having angular sockets provided with transverse tension-bars *d*, the rectangular spindle S, and the frictional spring C, arranged upon the spindle, as specified, the whole to be applied to a stove-pipe, in the manner and for the purpose stated.

JOSIAH M. READ.

Witnesses:

F. P. HALE,  
F. C. HALE.