

P. KEELEY.

PREVENTING ROLLERS FROM CLOGGING.

No. 194,689.

Patented Aug. 28, 1877.

Fig. 1.

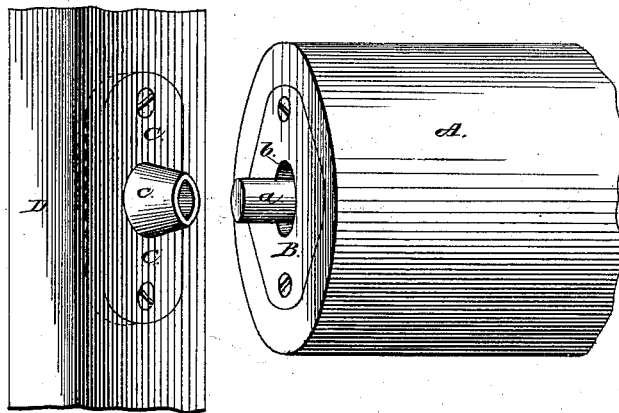
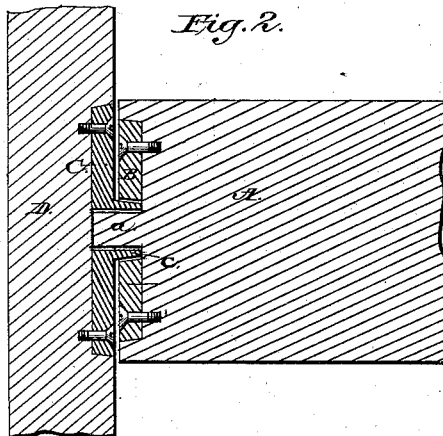


Fig. 2.



Attest:

John Gourin
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UNITED STATES PATENT OFFICE.

PHILIP KEELEY, OF WASECA, MINNESOTA.

IMPROVEMENT IN PREVENTING ROLLERS FROM CLOGGING.

Specification forming part of Letters Patent No. 194,689, dated August 28, 1877; application filed August 31, 1876.

To all whom it may concern:

Be it known that I, PHILIP KEELEY, of Waseca, county of Waseca, and State of Minnesota, have invented a new and useful Improvement in Devices for Hanging Shafting, Rollers, and the like parts of Machinery; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view, showing the parts asunder, but in position to be adapted for use. Fig. 2 is a vertical central section lengthwise of the shaft.

The design of my present invention is to produce a device that shall, in construction and operation, be adapted to effectually prevent shafts, rollers, and the like parts of all sorts of machinery from becoming clogged with dust, dirt, straw, or any foreign substances; and to this end it consists more particularly in two castings or pieces of metal, one of which carries a socket for the spindle of the shaft, and the other a bearing for said boss or socket, and each so made and fitted in their places that the end of the shaft or roller can be brought close to its standard, and the said pieces of metal fit so snugly to each other that only the smallest possible space shall be open for the entrance of any substance that may tend to clog or interrupt the easy operation of said parts, all as I will now more particularly set out.

In the accompanying drawings, A denotes a shaft-reel or any ordinary revolving portion of the machinery. B is a metal plate secured in and upon the end of said shaft, so that it will be flush with the face of said end. Centrally in it is an opening, *b*, through which the spindle *a* of the shaft-reel passes. C is a metal plate secured in and to the face of the standard D, so that it will be flush with it, excepting where the hollow socket or boss *c* projects. This boss or socket is of such shape and size that the spindle *a* is adapted to fit easily into it, and can revolve therein. When

thus adjusted the outer end of said socket passes into the opening in plate B around the spindle *a*, which opening thus forms an easy and secure bearing for the boss or socket *c* to rest and move in.

By this construction the shaft or reel and its standard can be brought very snugly together, the abutting faces of the two metal plates being adapted to fit closely each to the other, while the socket or boss covers the spindle and sets quite near about it, and in this way is almost effectually closed all opportunity or access by which any substance that could clog or interrupt the working of the several parts might enter. This result, as those skilled in such matters well know, is a matter of no small importance.

I am aware that bearings, or parts adapted to act so, having some general features like what is now shown, have been used in carriages on whiffletrees; but the very construction of the device on which my invention is used will at once disclose the dissimilarity in structure over all that is therein required or indicated, as well as the wide difference in construction, adaptation, and use of the parts, all of which changes and improvements go to make up the invention now claimed as new and patentable.

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

The metal plate B, having a central opening, *b*, and secured flush upon the end of shaft or reel A, and over its spindle *a*, in combination with the metal plate C, having the hollow boss or socket *c*, adapted to fit into the opening *b* and around the spindle *a*, and secured in standard D, as described, the several parts constructed and adapted to operate substantially as and for the purposes set forth.

PHILIP KEELEY.

In presence of—
P. MCGOVERN,
OLIVER PETERSON.