

E. S. PIERCE.
DEVICE FOR CONNECTING THE PARTS OF MACHINERY.
No. 88,902. Patented Apr. 13, 1869.

Fig. 1.

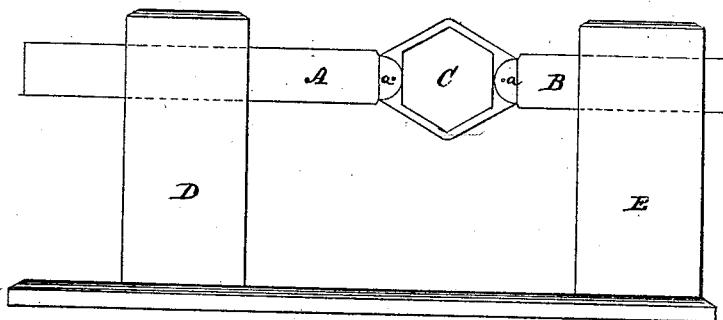
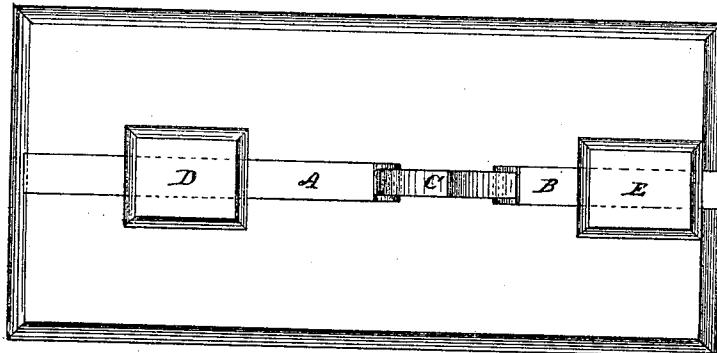


Fig. 2.



Witnesses

G. H. Smith
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Inventor

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ELIJAH S. PIERCE, OF HARTFORD, CONNECTICUT, ASSIGNOR TO
NATIONAL SCREW COMPANY, OF SAME PLACE.

Letters Patent No. 88,902, dated April 13, 1869.

DEVICE FOR CONNECTING THE PARTS OF MACHINERY.

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, ELIJAH S. PIERCE, of Hartford, in the county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Connecting-Parts of Machinery; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

Figure 1 shows a front view or elevation of my improved connection.

Figure 2 shows a top view of the same.

My invention consists in preventing the rupture of any of the working-parts of a machine, when it becomes clogged or suddenly stopped from any cause, by the introduction of a breaking-piece, somewhat weaker than any of the working-parts, of such a form and strength that it is sufficient to carry and transmit all the force necessary to convey motion to the parts with which it is connected, but which will be ruptured by any strain that would damage the machine.

A and B are intended to represent sliding bars, moving through the frame D E, or any similar working-parts of a machine.

C is the breaking connecting-mechanism, which, in the drawings, is simply a hexagonal cast-iron band, which will be broken by a force tending to compress or extend it in the direction of the bars A and B.

This breaking-piece is attached to the bars A and B by pins *a a*, or some simple contrivance that admits of a new piece being easily replaced when one is broken.

I do not limit myself to the peculiar form of breaking-piece shown, as it may be made of a variety of forms that will answer the same purpose, as, for instance, a square, held by its corners, or a straight bar, attached by its ends to the bar A, and by its middle to the bar B, in such a manner that it will be broken across by a strain that would rupture it.

The advantage of my invention is, that, by its use, any undue strain on a machine, from whatever cause, is made to rupture an unimportant part, that can be easily replaced, instead of disabling the machine, as would be the case when the rupture occurs in some important part.

The improved connection serves as a "safety-valve," to enable the force applied to a machine to continue to move certain parts while others are brought suddenly to a stop, and prevents the inertia of the moving parts breaking some important part of the machinery, as is usually the case when machines are suddenly stopped by becoming clogged or disarranged.

Claim.

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

The device, substantially as described, for preventing the breaking of moving or stationary parts of machinery.

ELIJAH S. PIERCE.

Witnesses:

L. HAFELIN,
THEO. G. ELLIS.