

SAMUEL N. GOODALE.

Improvement in Steam or Air Brakes.

No. 123,098.

Patented Jan. 30, 1872.

Fig. 1.

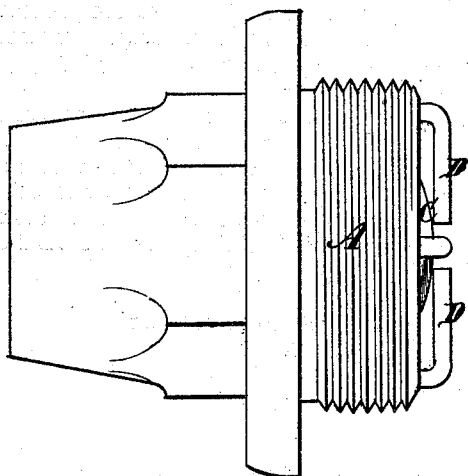


Fig. 3.

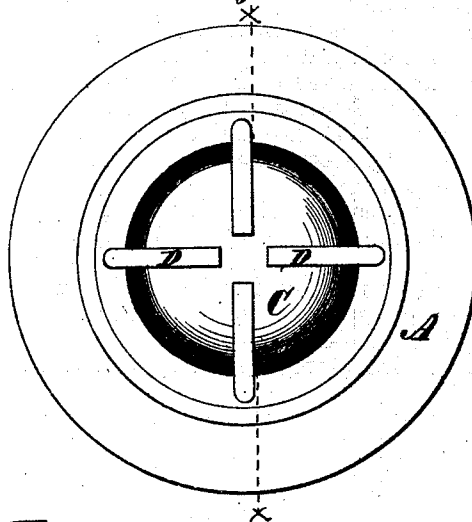
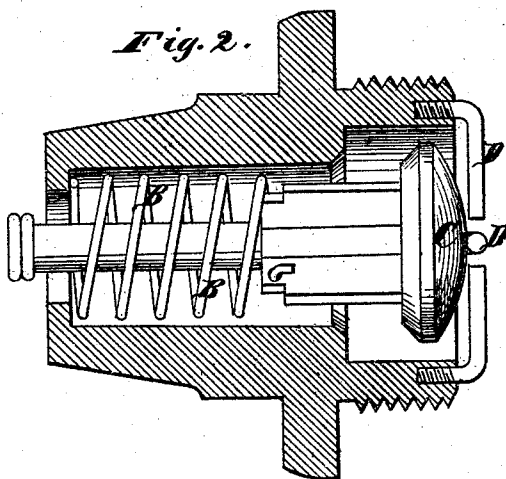


Fig. 2.



WITNESSES.

H. Gardner,
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INVENTOR.

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per Edw. W. Dunn,
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UNITED STATES PATENT OFFICE.

SAMUEL N. GOODALE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN STEAM OR AIR BRAKES.

Specification forming part of Letters Patent No. 123,098, dated January 30, 1872.

Be it known that I, SAMUEL N. GOODALE, of St. Louis, St. Louis county, State of Missouri, have invented a new and useful Improvement for the purpose of Operating Steam or Air Car-Brakes.

The object of this invention is to remove all particles of condensation from the pipes and steam or air-chests, as well as to remove the steam and air pressure from the pipes, pistons, or car-wheels more expeditiously, reference being had to the accompanying drawing for a full description.

Figure 1 represents a side view. Fig. 2 represents a longitudinal section, and Fig. 3 an end view.

A represents the outside of what I term a drop-valve, placed or screwed into the steam or air cylinder under each car, and, when required, into the pipes connecting with such

cylinder; while B shows the coil spring, to hold the valve open when not in use; D being a fastening on the top of the valve to prevent the valve flying up into the pipe or chest. The top C of such valve, having a broad surface, yields more or less readily to the pressure, as may be desired, by increasing or decreasing the size of the spring.

What I claim is—

The valve A, B, C, and D, for the combined purpose of relieving pipes and cylinders of car-brakes, as well as to remove the pressure from the wheels more expeditiously, substantially as and for the purposes hereinbefore set forth.

SAMUEL N. GOODALE.

Witnesses:

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DAVID LEWIS.