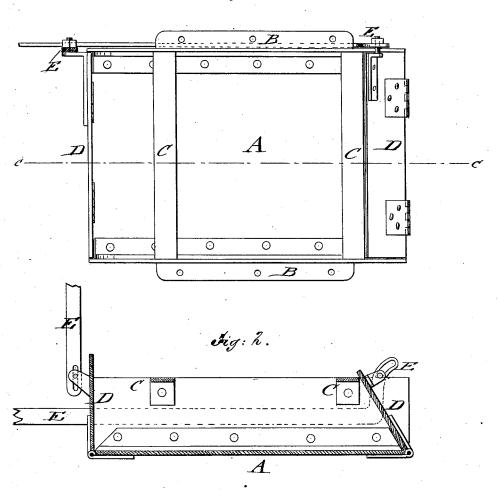
## W. W. BEACH.

## Locomotive Ash-Pan and Damper.

No.162,519.

Patented April 27, 1875.

Fig:1.



WITNESSES:

A. F. Terry

INVENTOR:

V, (

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## UNITED STATES PATENT OFFICE.

WALTER W. BEACH, OF ESCONAWBA, MICHIGAN.

## IMPROVEMENT IN LOCOMOTIVE ASH-PANS AND DAMPERS.

Specification forming part of Letters Patent No. 162,519, dated April 27, 1875; application filed January 18, 1875.

To all whom it may concern:

Be it known that I, WALTER W. BEACH, of Esconawba, Delta County, Michigan, have invented a new and Improved Locomotive Ash-Pan and Damper, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved locomotive ash-pan and damper; and Fig. 2, a vertical longitudinal section of the same on the line c c Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described,

and then pointed out in the claim.

In the drawing, A represents a locomotive ash-pan, which is constructed of plates of suitable strength, and attached, by flauged top pieces B, firmly to the bottom of the fire box.

Lateral brace pieces C extend, at the top of the ash-pan A, near the front and rear ends of the fire-box, and serve for the twofold purpose of stiffening the side plates of the ashpan and preventing the warping of the same, and also for supporting the front and rear damper plates D, which are hinged to the front and rear ends of the bottom of the ashpan A. The dampers D are opened and closed by levers E, the lever of the rear damper passing directly to the engine-cab, while the longer lever E of the front damper slides in side guides of the ash pan, and is operated by a shorter lever, which passes through the floor of the engine-cab, in the same manner as the other lever. The front damper may be opened to a certain extent by its lever for admitting

a sufficient supply of air, excluding snow, rain, &c., and establishing a better and clearer draft thereby. By carrying the damper back on the lateral braces the pan is completely closed, making the same nearly air-tight, and permitting the subduing of the fire without throwing the blazing fuel out of the fire-box. The rear damper is opened and closed by the lever in the same manner, preventing the escape of sparks and cinders, and the occurrence of accidents and destruction of property. The rear damper may also be swung completely back below the bottom for cleaning out the ash-pan. The damper-plates serve also to strengthen the ash-pan as they act in the nature of end braces for the same. The simple, strong, and durable construction of the ash-pan makes the same not only superior to the present kind, but makes it also more effective in use and less expensive. The dampers may be applied to any ash-pan, and both to any locomotive.

Having thus described my invention, I claim as new, and desire to secure by Letters Pat-

The dampers D D, hinged to the bottom ends of ash-pan, longer than fire-box, and folding inwardly between the sides or braces C, thus always preventing escape of fire, while they are allowed to fold under the bottom, and permit the pan to be cleaned without removal.

WALTER W. BEACH.

Witnesses: F. O. Clark, Jas. C. Morrell.