

BALLAST DRESSER.
APPLICATION FILED JUNE 2, 1910.

Patented Dec. 13, 1910.

Diagram illustrating a single angle connected to a gusset plate (labeled A) using four bolts. The angle is labeled 1. A dashed line indicates the plate may be reversed.

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UNITED STATES PATENT OFFICE.

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BALLAST-DRESSER.

978,691.

Specification of Letters Patent.

Patented Dec. 13, 1910.

Application filed June 2, 1910. Serial No. 564,630.

To all whom it may concern:

Be it known that we, THERON S. CAFFERTY and JOHN F. MARKLE, citizens of the United States, residing at Union, New York, and Chanute, Kansas, respectively, have invented certain new and useful Improvements in Ballast-Dressers, of which the following is a specification.

Our invention relates to a ballast dresser, that is for leveling and finishing the surfaces of ballasted railway tracks, and is an improvement upon U. S. Patent 912282 granted to T. S. Cafferty on the 16th of February 1909.

In the accompanying drawing of which Figure 1 is a part vertical section, and Fig. 2 a detail of the machine we show a flat car with the adjusting mechanism combined with a leveling member or dresser bar only slightly different from that shown in the patent aforesaid. The dresser bar is shown at A, and may consist of a straight bar with notches *a*, to allow it to pass over the railway rails, and we may utilize a shoulder dresser B which is removably connected to the bar A substantially as shown and described in the Cafferty patent. The top of the car which supports the mechanism is shown at C. Heavy springs *c* are located between the bar A and the bottom of the car so as to keep the bar pressed downward strongly against the surface of the roadbed when the device is in use. We utilize braces *d* to prevent displacement of the bar in its up and down movement. The bar is supported by vertical uprights *e* passing through openings in the car bottom and these uprights are provided with keys *f* to limit the downward movement of the bar A. A chain or cable *g* extends from the uprights to a piston *h* held within a cylinder *i*, the cable passing over guiding rollers *k*. A connection is made with a train line air

pipe *m* to a cylinder *n*, and from this cylinder a pipe *o* extends to the cylinder *i*. A two-way valve *p* is located in the pipe *o*.

When it is desired to operate the dresser board to lift the same the two-way valve *p* is turned to allow the pressure of air to enter the cylinder *i*, which presses against the piston *h*, forcing it to the rear and lifting the bar A. When it is desired to lower the bar the valve *p* is turned, which exhausts the air from the piston *i* and the weight of the board combined with the pressure of the springs *c* will force the bar against the track, and as the car moves the lock bolt when pressed inward.

In Fig. 2 we show a plate *l* inclined laterally and secured to the dresser bar A. This plate may be removed and reversed in position, and its function is to cause the material to be forced laterally from one side of the track to the other, and it may be set to secure this action in either direction.

What we claim is:

1. In combination with a dresser bar, a laterally inclined plate secured thereto, substantially as described.

2. In combination with a dresser bar, a laterally inclined plate secured thereto, said plate being reversible, substantially as described.

In testimony whereof, we affix our signatures in presence of two witnesses.

THERON SAMUEL CAFFERTY.
JOHN F. MARKLE.

Witnesses as to the signature of Theron Samuel Cafferty:

A. RAY HUMPHREY,
C. W. HUMPHREY.

Witnesses as to the signature of John F. Markle:

IDA MARKLE,
HARRY HEDRICH.