(No Model.)

W. E. DEAN.

AIR CUSHION FOR HEAD BLOCKS.

No. 513,091. Patented Jan. 23, 1894.

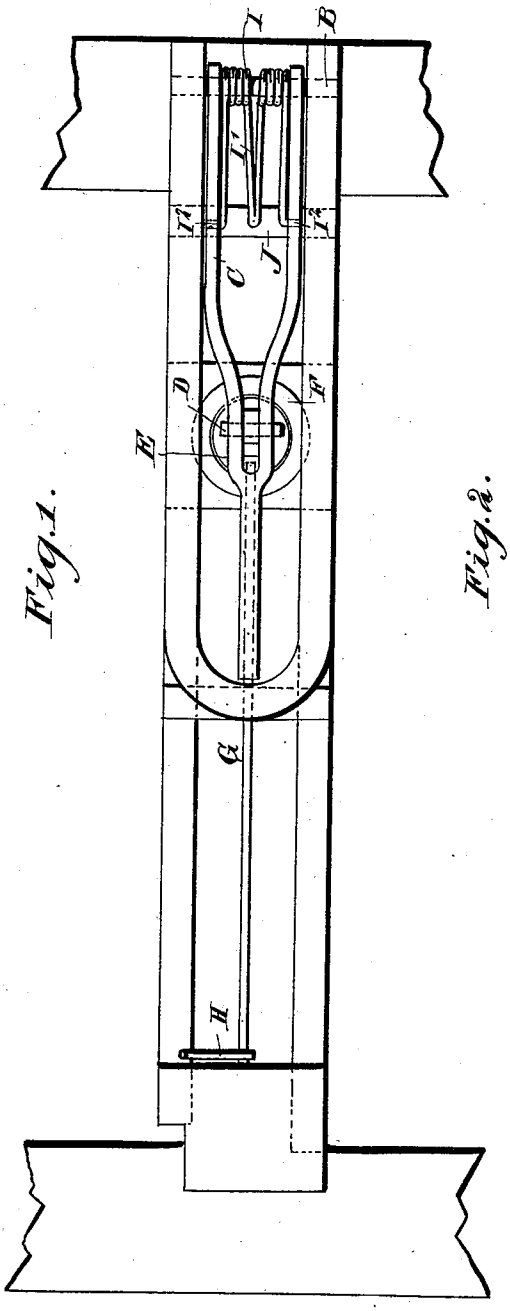

Fig. 1.

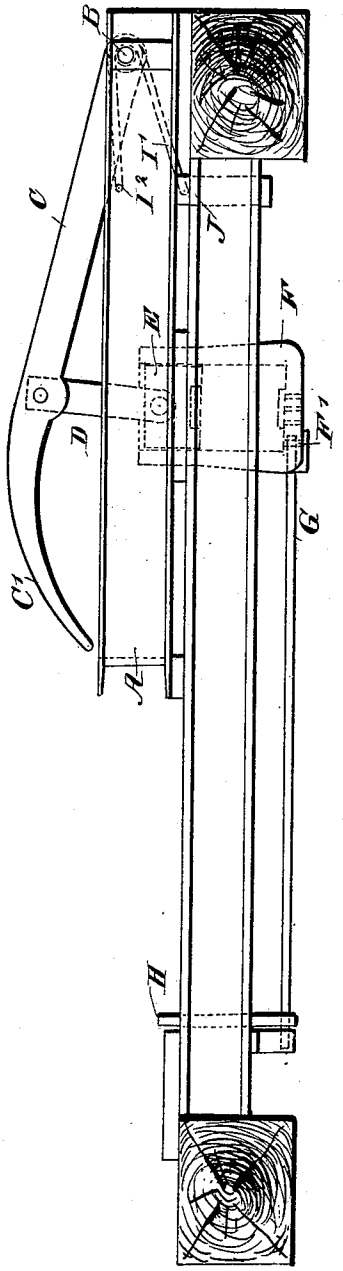

Fig. 2.

WITNESSES:

W. McArdle.

C. Sedgwick

INVENTOR

W. E. Dean

BY Munn & Co

ATTORNEYS.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM E. DEAN, OF RUDDOCK, LOUISIANA.

AIR-CUSHION FOR HEAD-BLOCKS.

SPECIFICATION forming part of Letters Patent No. 513,091, dated January 23, 1894.

Application filed May 3, 1893. Serial No. 472,870. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. DEAN, of Ruddock, in the parish of St. John Baptist and State of Louisiana, have invented a new and Improved Air-Cushion for Head-Blocks, of which the following is a full, clear, and exact description.

The invention relates to sawmills, and its object is to provide a new and improved air cushion for head blocks, which is simple and durable in construction, very effective in operation, and arranged to relieve the head block carriage and other parts of the sawmill from the blows or concussions incidental to the canting of the logs toward the knees.

The invention consists of a lever pivoted to the head block and supported from the piston of a dashpot.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter fully described and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a plan view of the improvement as applied; and Fig. 2 is a side elevation of the same.

The sawmill carriage is provided with the usual head blocks A, on each of which is pivoted at B a lever C, having its free end C′ curved downward, as is plainly illustrated in Fig. 2. The lever C is pivotally connected by a link D, with the piston E of a dashpot F, supported on the sawmill carriage and provided with an outlet aperture F′, for the air in the bottom of the dashpot, the said outlet opening being controlled by a valve G, the stem of which carries a lever H, under the control of the operator. The lever C is held in a normal or uppermost position, as illustrated in Fig. 2, by the action of a spring I, coiled on the pivot B and having its middle part I′ extended and resting on a cross bar J, secured to the head block A. The free ends I^2, of the spring I engage the under side of the lever C, which is preferably made, near its pivoted end, in the shape of a fork, as is plainly indicated in Fig. 1.

The device is used as follows: The pivot B is arranged in the head block A near the end nearest the saw, so that when it is desired to turn down any flat side of a partly sawed log upon the head block A, then the said side falls upon the raised levers C held in an upward, normal position on the head blocks, as above described, by the action of the springs I. The weight of the flat side falling on the levers C causes the latter to swing downward slightly, as the air is displaced in the dashpot F by the downwardly moving piston E, so that the sides are finally landed on the top surface of the head blocks A, to rest thereon, the levers C then having swung with their top edges below the top surfaces of the head blocks. It will be seen that by this arrangement an automatic air cushion is produced, to relieve the head blocks, carriage frame, trucks, truck boxes, track and the saw mill frame, from the constant and often disastrous blows or concussions incidental to the canting of the logs toward the knees.

It is understood that the spring I is sufficiently strong to counterbalance the weight of the levers C, the link D and piston E, to hold the said parts in an uppermost position.

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

1. An air cushion for sawmill head blocks, comprising a lever pivoted on the head block, and a dashpot having its piston pivotally connected with the said lever, substantially as shown and described.

2. An air cushion for head blocks, comprising a spring-pressed lever pivoted on the head block, a link pivotally connected with the said lever, and a dashpot containing a piston pivotally connected with the said link, substantially as shown and described.

3. An air cushion for head blocks, comprising a spring-pressed lever pivoted on the head block, a link pivotally connected with the said lever, a dashpot containing a piston pivotally connected with the said link, and a valve for controlling the air inlet to the said dashpot, substantially as shown and described.

WILLIAM E. DEAN.

Witnesses:
E. T. WHITE,
R. W. LEACH.