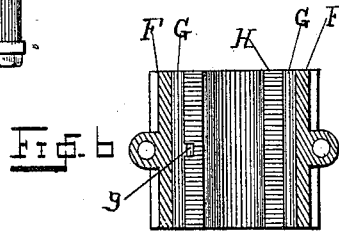
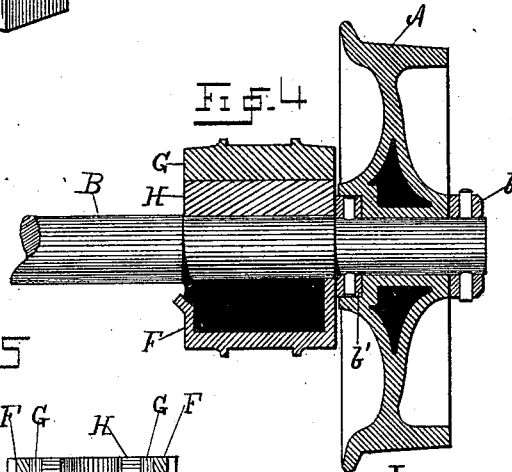
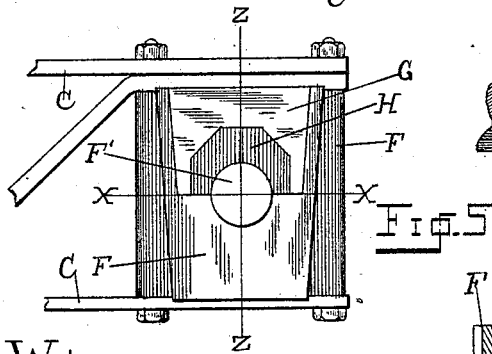
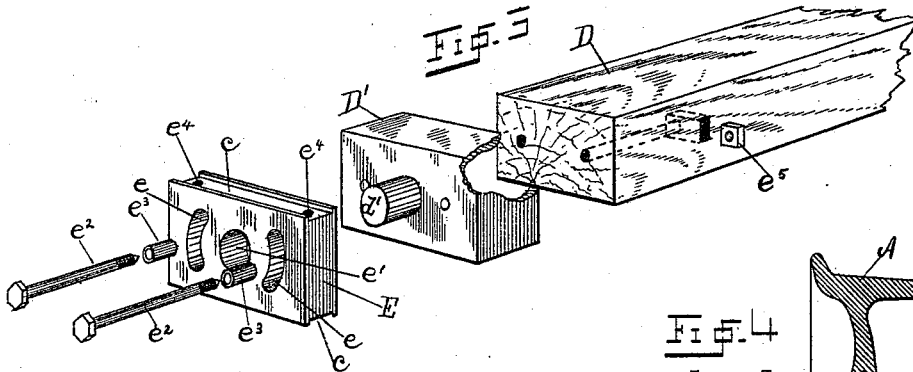
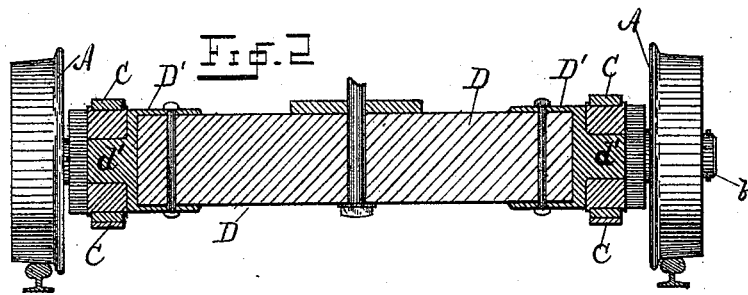
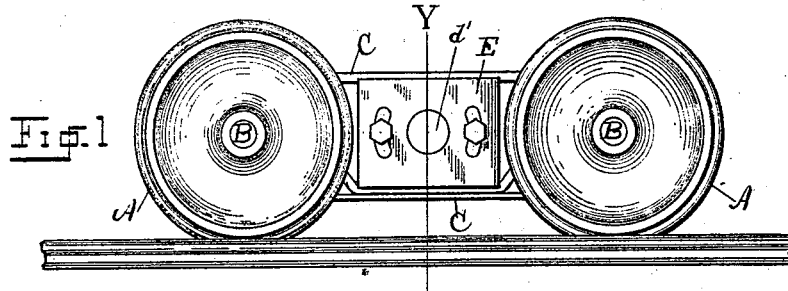


(No Model.)

R. S. BATTLES.
LOGGING CAR TRUCK.

No. 421,893.

Patented Feb. 25, 1890.



Witnesses

S. D. Robbins.

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UNITED STATES PATENT OFFICE.

RUSH S. BATTLES, OF GIRARD, PENNSYLVANIA.

LOGGING-CAR TRUCK.

SPECIFICATION forming part of Letters Patent No. 421,893, dated February 25, 1890.

Application filed October 28, 1889. Serial No. 328,438. (No model.)

To all whom it may concern:

Be it known that I, RUSH S. BATTLES, a citizen of the United States, residing at Girard, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Logging-Car Trucks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to trucks for logging-cars; and it consists in certain improvements in the construction thereof, as will be hereinafter fully set forth, and pointed out in the claim.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved logging-car truck. Fig. 2 is a longitudinal section through the bolster on the line *y y* in Fig. 1. Fig. 3 is a perspective view of the end of the bolster, showing the parts separated and in detail. Fig. 4 is a vertical section through one of the wheels and one of the journal-boxes on the line *z z* in Fig. 5. Fig. 5 is a side elevation of one of the journal-boxes. Fig. 6 is a horizontal section of the journal-box on the line *x x* in Fig. 5.

Like letters indicate corresponding parts in all the figures, as follows:

A marks the wheels; B, the axles; C, the truck-frame; D, the bolster; D', a cap on the end of the bolster; *d'*, a gudgeon on said cap; E, a block at the end of the bolster, which is secured to the truck-frame; F, the lower part of the journal-box; H, the brass bearing-block; G, the cap of the journal-box. Other letters of reference used will be referred to in place in the description.

Logging-cars are used mostly on rough uneven tracks, and in order that the wheels be kept in constant contact with the track it is necessary to make the truck flexible enough so the wheels may have independent vertical action. This I accomplish by making the

truck-frames on each side so they can move pivotally to a limited extent on the bolster. This I effect in the following manner: In the truck-frame C, at the place where the bolster is usually secured, I secure an iron block E. This block has grooves *c* at top and bottom to receive the truck-frame pieces C, and it has vertical holes *e¹* for the passage of the truck-frame bolts. It also has a gudgeon-opening *e'* and stay-bolt slots *e* through it horizontally. On the end of the bolster D there is an iron cap D', from which extends a gudgeon *d'*. Stay-bolts *e²*, having thereon thimbles *e³*, pass through the slots *e* and the cap D', and are held by nuts *e⁵* in mortises on the bolster. When the parts are all in place, as shown and described, the side frames C can have a limited pivotal movement on the bolster and the truck can equalize itself to the unevenness of the track. I make one of the wheels A on each axle loose, while the other is fixed to the axle; but I do not intend the loose wheel to turn on the axle except when cramped on a short curve. The loose wheel is held in place by flanges *b* and *b'*, which are held in place by pins. The journal-boxes I put inside of the wheels, as seen in the drawings. The journal-boxes are composed of the lower box and oiler F, a cap G, and brass bearing-block H. The brass block H has on its outer side a notch, into which fits a spline *g* on the cap, which holds the brass against lateral movement.

What I claim as new is—

In a logging-car truck, the combination of the block E, held by the frame C, and having the gudgeon-opening *e'* and slots *e* through it horizontally, the bolster D, having the cap D', with gudgeon *d'*, and the bolts *e³*, passing through the slots *e* and secured in the bolster D.

In testimony whereof I affix my signature in presence of two witnesses.

RUSH S. BATTLES.

Witnesses:

JNO. K. HALLOCK,
WM. P. HAYES.