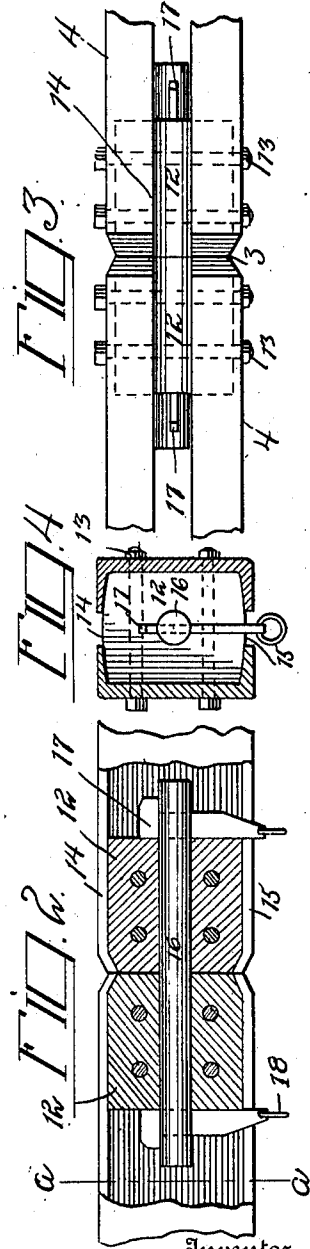
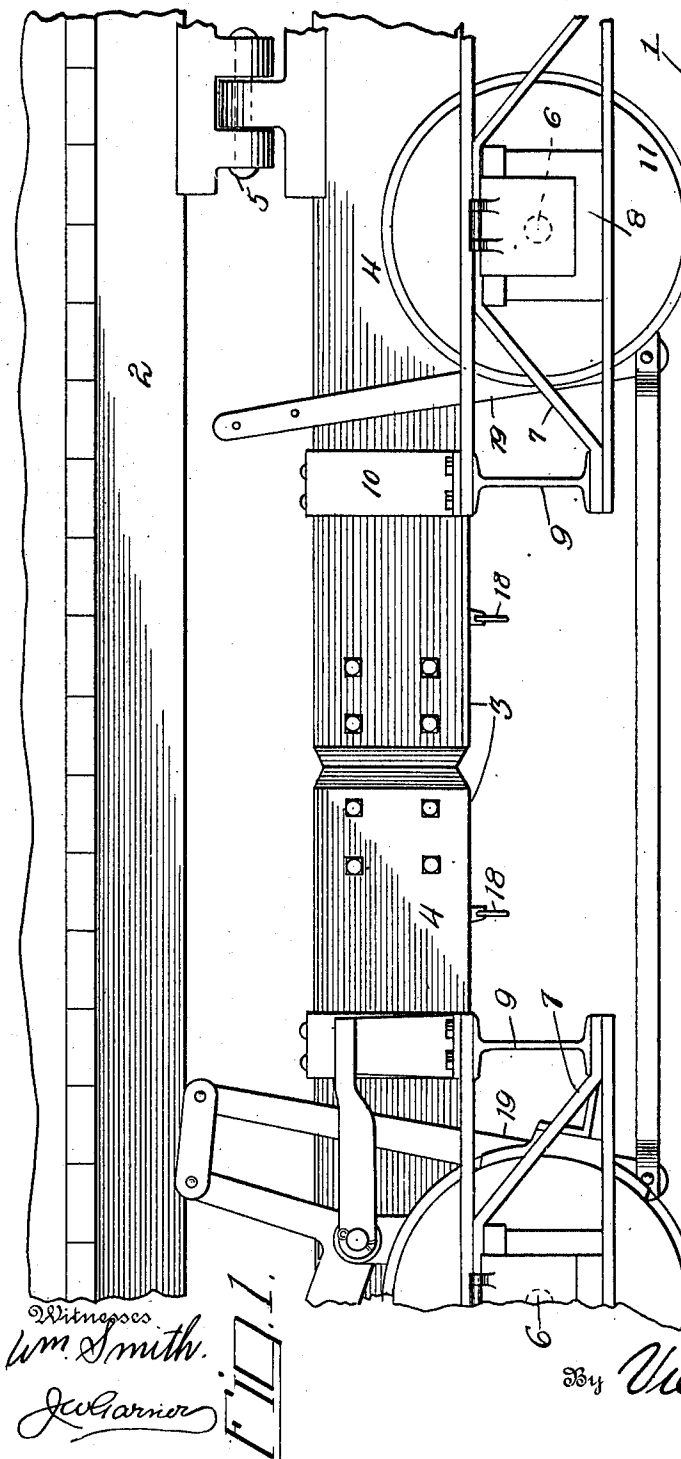


974,569.

Patented Nov. 1, 1910.



Inventor
John James Irvin.

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

JOHN JAMES IRVIN, OF BELLWOOD, PENNSYLVANIA.

DRAFT-SILL.

974,569.

Specification of Letters Patent.

Patented Nov. 1, 1910.

Application filed October 23, 1909. Serial No. 524,203.

To all whom it may concern:

Be it known that I, JOHN JAMES IRVIN, a citizen of the United States, residing at Bellwood, in the county of Blair and State of Pennsylvania, have invented new and useful Improvements in Draft-Sills, of which the following is a specification.

This invention relates to improvements in four-wheel car trucks such as are commonly used on dump cars in which the car body is pivotally mounted on the draft sill for angular movement transversely of the car to enable the load to be dumped from the car body to either side of the car, the object of the invention being to construct a sectional draft sill, the sections of which are connected for relative turning movement about their longitudinal axis, whereby inequalities in the level of the track rails will not produce injurious stresses on the axles.

In the accompanying drawings:—Figure 1 is a side elevation of a portion of a dump car provided with a draft sill constructed in accordance with this invention. Fig. 2 is a detail longitudinal sectional view of the draft sill, showing the means for coupling the sections thereof together for independent lateral angular movement. Fig. 3 is a plan of the same. Fig. 4 is a transverse sectional view of the same on the plane indicated by the line *a—*a** of Fig. 2.

In Fig. 1 of the drawing a track rail is indicated at 1 and the body of the car at 2, the draft sill 3 of the car, in accordance with my invention, consists of a pair of sections 4, one of said sections for each car axle. One of the usual pivotal connections between the car body and the draft sill is shown at 5 said pivotal connections adapting the car body to be disposed in a horizontal position or to be inclined to either side so as to dump the load to either side of the track. Only one of the said pivotal connections is here shown but it will be understood that there are two on each section of the draft sill connecting said draft sill section to the body of the car.

The frames 7 in which the bearing boxes 8 of the car axles are mounted are connected by beams 9 to the respective draft sill sections, the said beams being here shown as secured at their centers under the said draft

sill sections by the straps 10. Hence, each draft sill section is carried by one axle and its wheels 11. The sill sections are disposed in longitudinal alinement end for end and in mutual contact and are hollow at their meeting ends, a block 12 being secured in the hollow end of each draft sill section by means of bolts 13. Said draft sill sections have open slots in their upper and lower sides at their meeting ends as at 14—15. The blocks 12 of the respective draft sill sections are connected together by a coupling bar 16 which is cylindrical in form and extends through correspondingly shaped openings in the centers of said blocks. The said coupling bar forms, together with the blocks 15 a pivotal connection between the draft sill sections, the pivotal axis of which is parallel with that of said draft sill sections so that the axles which are carried by the respective draft sill sections are rendered capable of relative movement without the necessity of employing springs and, hence, the weight of the load is uniformly distributed to the wheels of the axles, irrespective of the condition of the track and injurious stresses are avoided, and, moreover, the liability of the car to run off the track is very greatly lessened by the use of my improved flexible draft sill, as all of the wheels are kept in place on the rails regardless of the condition of the track. The said coupling bar is held in place by means of keys 17 which are at the inner ends of the blocks 12 and pass through openings with which the said coupling bar is provided and the lower ends of which keys extend through the slots 15 in the lower sides of the said draft sill sections and are provided with rings 18 which prevent them from becoming casually dislodged.

Brake mechanism is indicated at 19 in Fig. 1 of the drawings but constitutes no part of my invention.

Having thus described the invention, what is claimed, is:—

A draft sill for dump cars comprising a plurality of sections arranged end to end and each including a pair of spaced side members, blocks secured between and located at the adjacent ends of said members and

provided with axial openings co-incident with the long axes of the sections, a coupling bar loosely fitted in said openings and provided adjacent to its opposite ends with
5 transverse slots, and keys insertible through said slots to bear on the remote ends of said blocks, for the purposes described.

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

JOHN JAMES IRVIN.

Witnesses:

ROBT. D. POTTS,
A. C. GUISTWHITE.