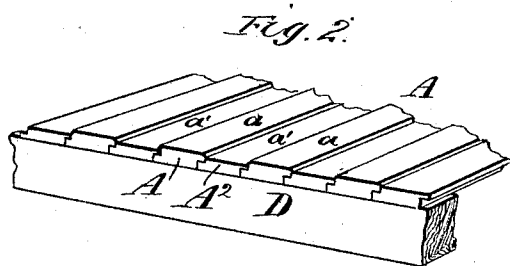
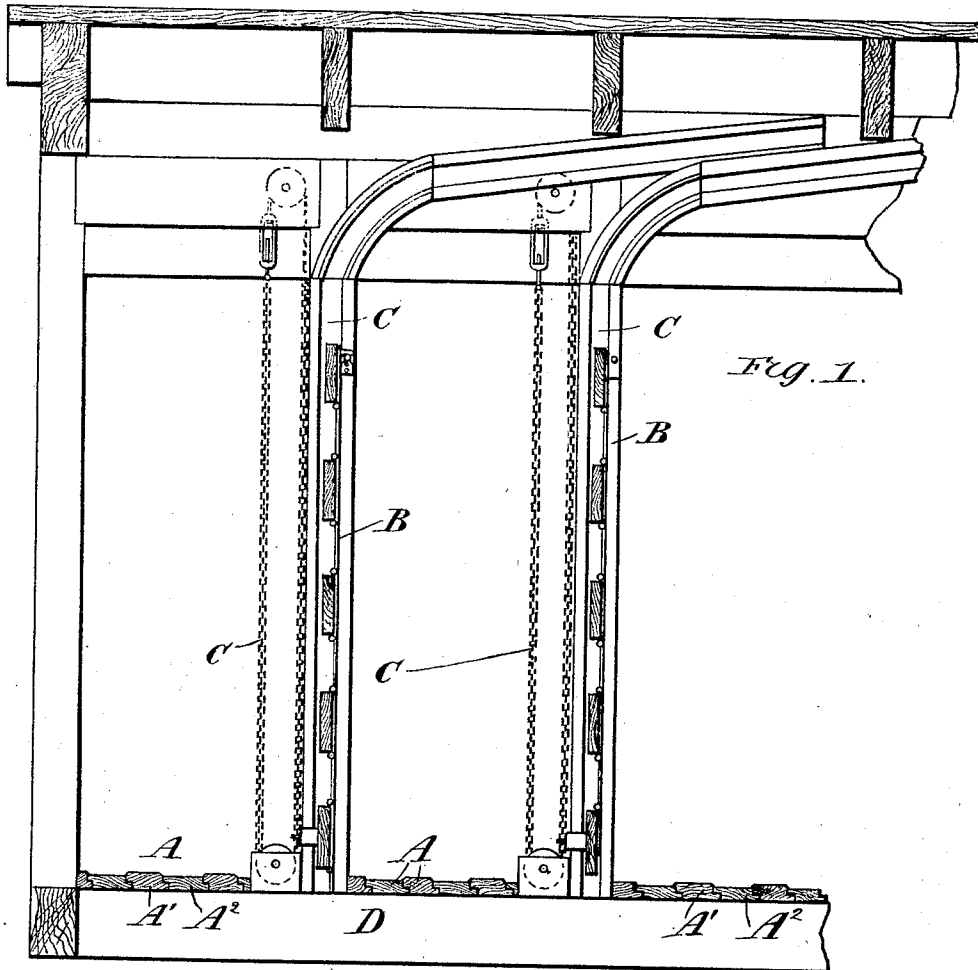


(No Model.)

F. M. CANDA.
FLOOR FOR CATTLE CARS.

No. 465,751.

Patented Dec. 22, 1891.



WITNESSES:
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FERDINAND MORA CANDA, OF NEW YORK, N. Y.

FLOOR FOR CATTLE-CARS.

SPECIFICATION forming part of Letters Patent No. 465,751, dated December 22, 1891.

Application filed March 12, 1891. Serial No. 384,775. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND MORA CANDA, of the city, county, and State of New York, have invented a new and useful Improvement in Floors for Cattle-Cars, of which the following is a full, clear, and exact description.

The object of the invention is to provide a cattle-car the floor whereof will give a proper footing to the cattle and in which the raised surfaces provided in the floor for this purpose will be enabled to withstand the tendency to be broken off by the cattle.

The invention consists in the particular construction and arrangement of parts, as herein-after fully described, and pointed out in the claim.

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 all the figures.

Figure 1 is a longitudinal vertical section of a portion of a car provided with my improved flooring, and Fig. 2 is a perspective view of a portion of such flooring.

The cattle-car shown is provided with suitable gates or partitions B, ways B' therefor, and an operating mechanism C. These features form no part of the present invention, and in practice the car may be otherwise constructed.

The improved flooring A is suitably secured to the sills D of the car, and said floor consists of boards A' A², having the usual tongue-and-groove connection. The boards A' alternate with the boards A² and are thicker than the latter, so that they form regularly-recurring raised surfaces *a*, which alternate with

depressions *a'*, as shown. The alternating raised surfaces and depressions thus formed enable the cattle to get a proper footing, and as the said raised portions are formed integrally with the flooring-boards they will effectually withstand the tendency to be broken off by the cattle. The flooring thus formed is superior to separate cleats secured to the flooring, as the latter are more readily broken off, necessitating frequent repairs.

In practice, as is well known, cattle-cars are employed in one direction for conveying general freight, and this has invariably resulted in mutilating and tearing off the floor-cleats, exposing splinters and nails, which injured the cattle on subsequent trips to an extent that the railroads forbid the employment of cleats. This left the floor without the necessary footing for the cattle, and when standing on wet floors in a moving car the animals, in the absence of the proper footing, are almost as liable to injury as formerly.

My improved floor insures the proper footing and withstands the rough treatment to which it is necessarily subjected by the freight, and will therefore be seen to be an important improvement.

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

A cattle-car having the floor thereof constructed of alternating high and low boards, forming spaced raised parts integral with the flooring-boards, substantially as described.

FERDINAND MORA CANDA.

Witnesses:

C. SEDGWICK,
E. M. CLARK.