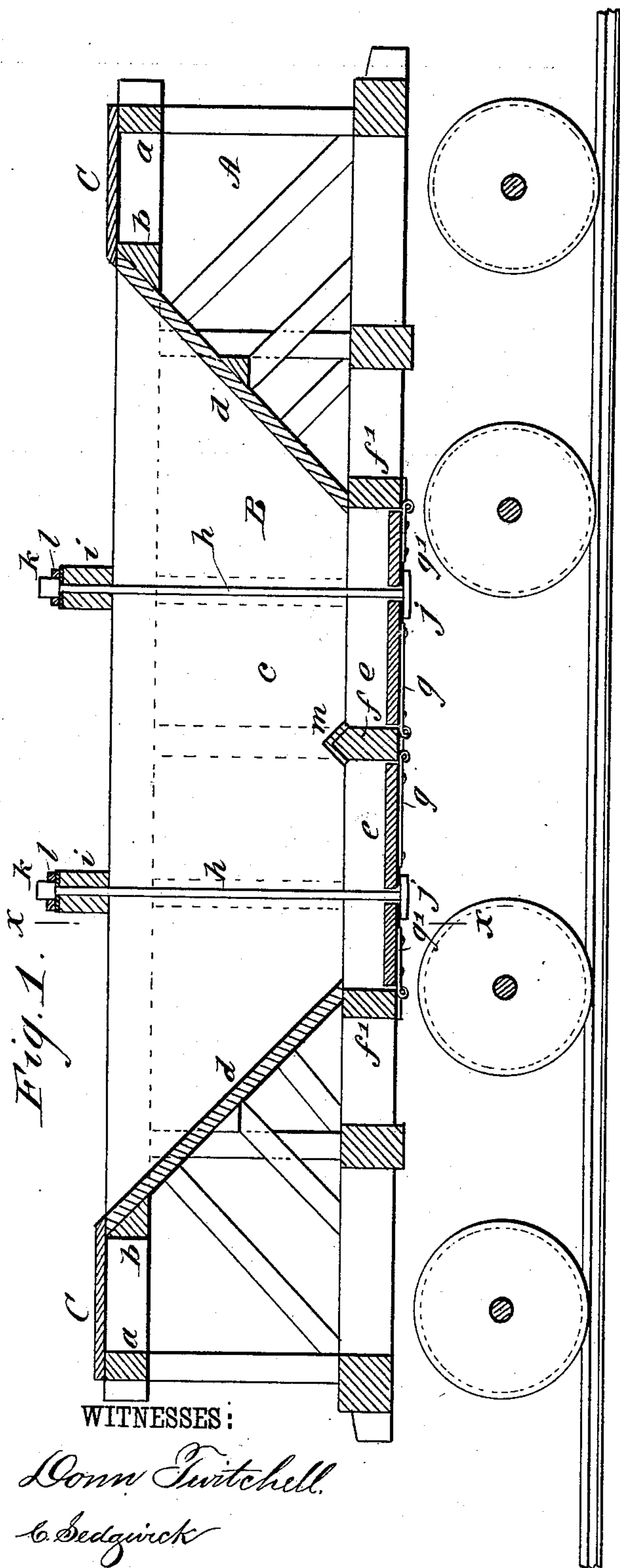


(No Model.)

L. J. BARR.
COAL AND ORE CAR.

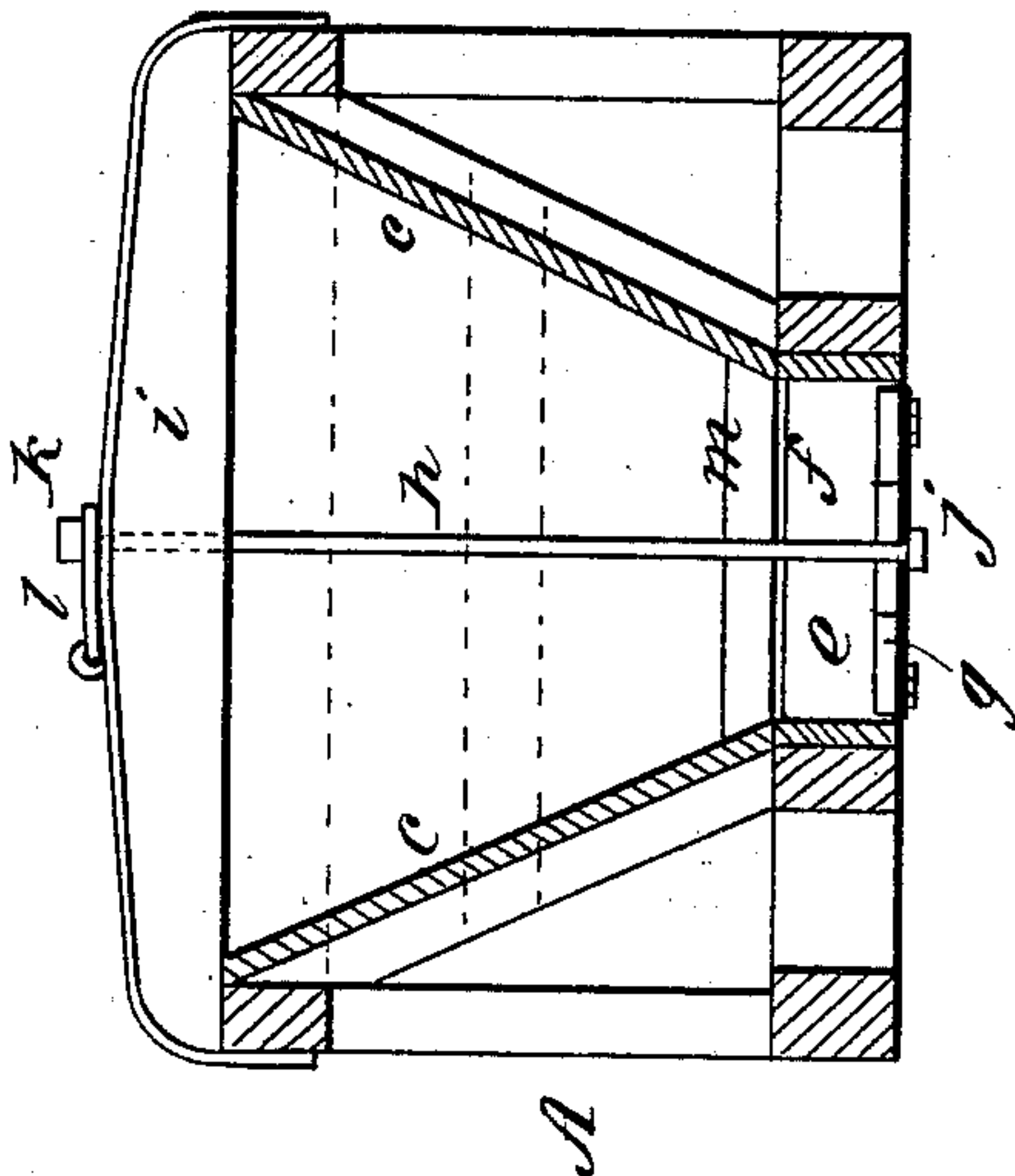
No. 349,134.

Patented Sept. 14, 1886.



WITNESSES:

Donn Twitchell.
C. Sedgwick



INVENTOR:

L. J. Barr
Mumford

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LESTER J. BARR, OF ASHLAND, WISCONSIN.

COAL AND ORE CAR.

SPECIFICATION forming part of Letters Patent No. 349,134, dated September 14, 1886.

Application filed January 16, 1886. Serial No. 189,757. (No model.)

To all whom it may concern:

Be it known that I, LESTER J. BARR, of Ashland, in the county of Ashland and State of Wisconsin, have invented a new and useful Improvement in Coal and Ore Cars, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a central vertical longitudinal section of a car embodying my improvement. Fig. 2 is a transverse section taken on line *x* in Fig. 1.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to increase the capacity of coal and ore cars, so that they will be enabled to carry the maximum load, and at the same time to facilitate the dumping of the car, so that no manual labor will be required in discharging the car of its contents.

My invention consists in a car having a hopper supported by a truss-frame, and provided in the bottom thereof with two sets of dumping-doors, which are sustained in a closed position by rods extending through cross-bars at the top of the car, and provided at their lower ends with T-heads, which may be turned at right angles to the doors to hold them in a closed position, and turned parallel with the edges of the doors to permit them to open.

The frame A of the car is constructed with trussed sides, and with the end cross-bars, *a*, and cross-bars *b*, located near the ends, for sustaining the ends *d* of the hopper B and supporting the platform C for the train-men.

The hopper B is elongated and provided with inclined sides *c* and ends *d*, and has in the bottom thereof two discharge-openings, *e*, separated by a cross-beam, *f*. To the under surface of the cross-beam *f* are hinged two doors, *g*, one belonging to each of the discharge-openings *e*, and to the cross-beams *f'*, at the ends of the lower part of the hopper, and at the outer ends of the discharge-openings *e*, are hinged doors *g'*, which, together with the doors *g*, close the discharge-openings

e when in a horizontal position. Two rods, *h*, are journaled in cross-beams *i*, extending across the top of the frame above the discharge-openings *e*, and the lower ends of the rods *h* are provided with cross-bars *j*, which are capable of engaging the doors and holding them in a horizontal or closed position when the cross-bars are arranged at right angles with the edges of the doors. In the adjoining edges of each pair of doors *g g'* are formed notches, which permit the doors to escape from the cross-bars *j* when the cross-bars are turned parallel with the edges of the doors.

The rods *h* are provided at their upper ends with square heads *k*, for receiving a lever or wrench, by which they may be turned, and to the upper side of the cross-beams *i* are pivoted latches *l*, having rectangular notches cut in their free ends, for engaging the square heads *k* and preventing the rods *h* from turning accidentally.

The cross-beam *f* is provided with an angled iron cap, *m*, which protects it from the wear of the coal or ore, and, by presenting an angled face to the contents of the car lying above the beam *f*, facilitates the discharge of the contents to the car.

The sides and ends of the hopper B have sufficient inclination to cause them to free themselves from the coal or ore when the car is dumped by releasing the doors *g g'* in the manner already described. The increased inclination of the ends required to accomplish this result is secured by providing two discharge-openings, which reduce the distance between the discharging-space of the car and the end of the car, and by providing the horizontal platforms C, which obviate the necessity of continuing the inclined ends of the hopper B to the ends of the frame of the car.

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

The car having an elongated hopper, said hopper having a central transverse beam with its upper surface arranged about on line with the upper surface of the base-frame of the hopper, and the additional transverse beams arranged parallel with the aforesaid trans-

verse beam, in combination with the bottom doors, two of which are hinged to the additional beams and two of which are hinged to the central transverse beam, and the rods or
5 shafts journaled in upper cross-beams of the hopper or car and reaching down through the hinged bottom doors, said rods having

at their lower ends cross-bars or buttons engaging said doors upon their lower sides, substantially as shown and described.

LESTER J. BARR.

Witnesses:

WM. P. HAYES,
JOSEPH JUSTICE.