

(No Model.)

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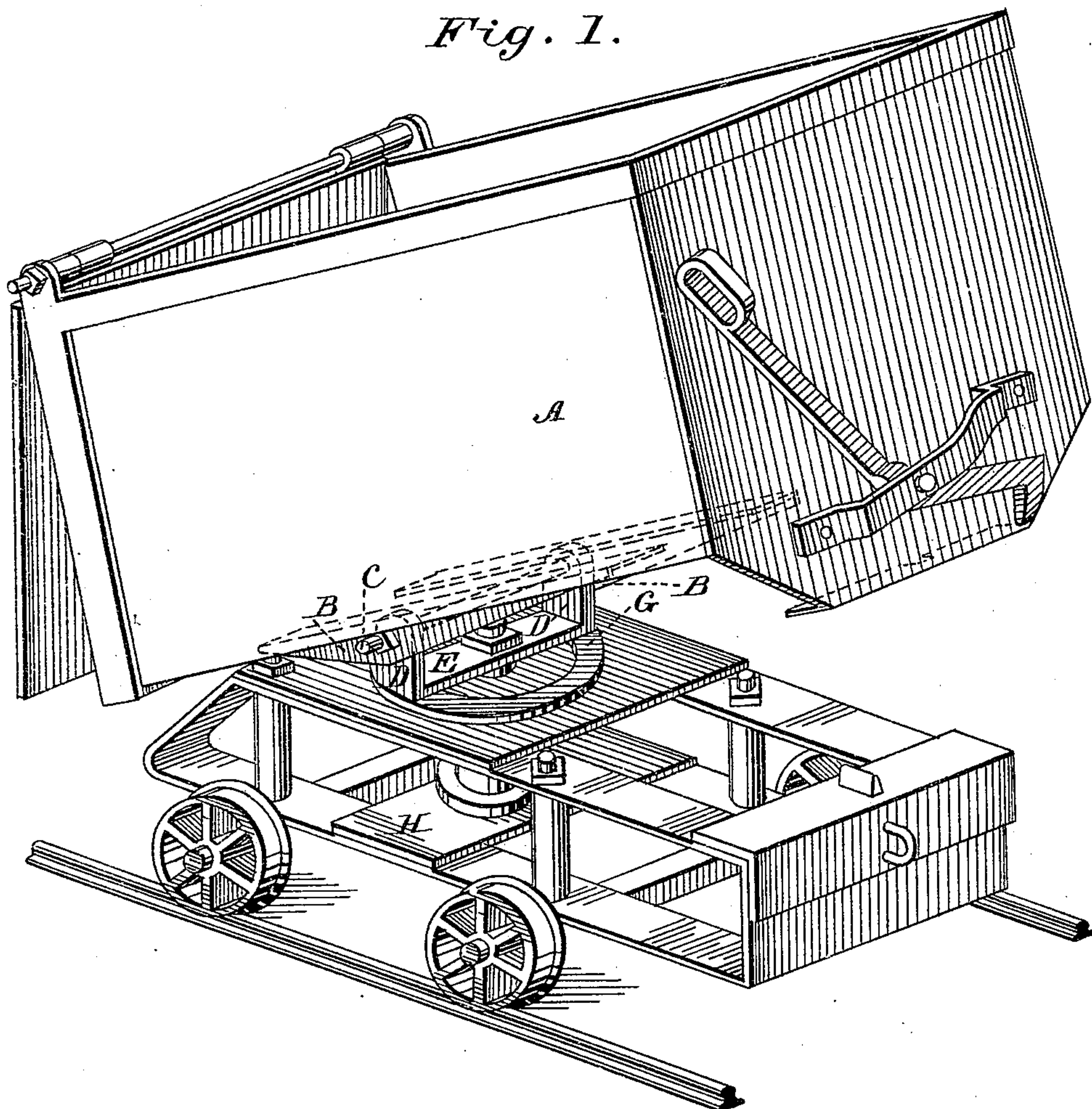
G. OLSEN.

MINING CAR.

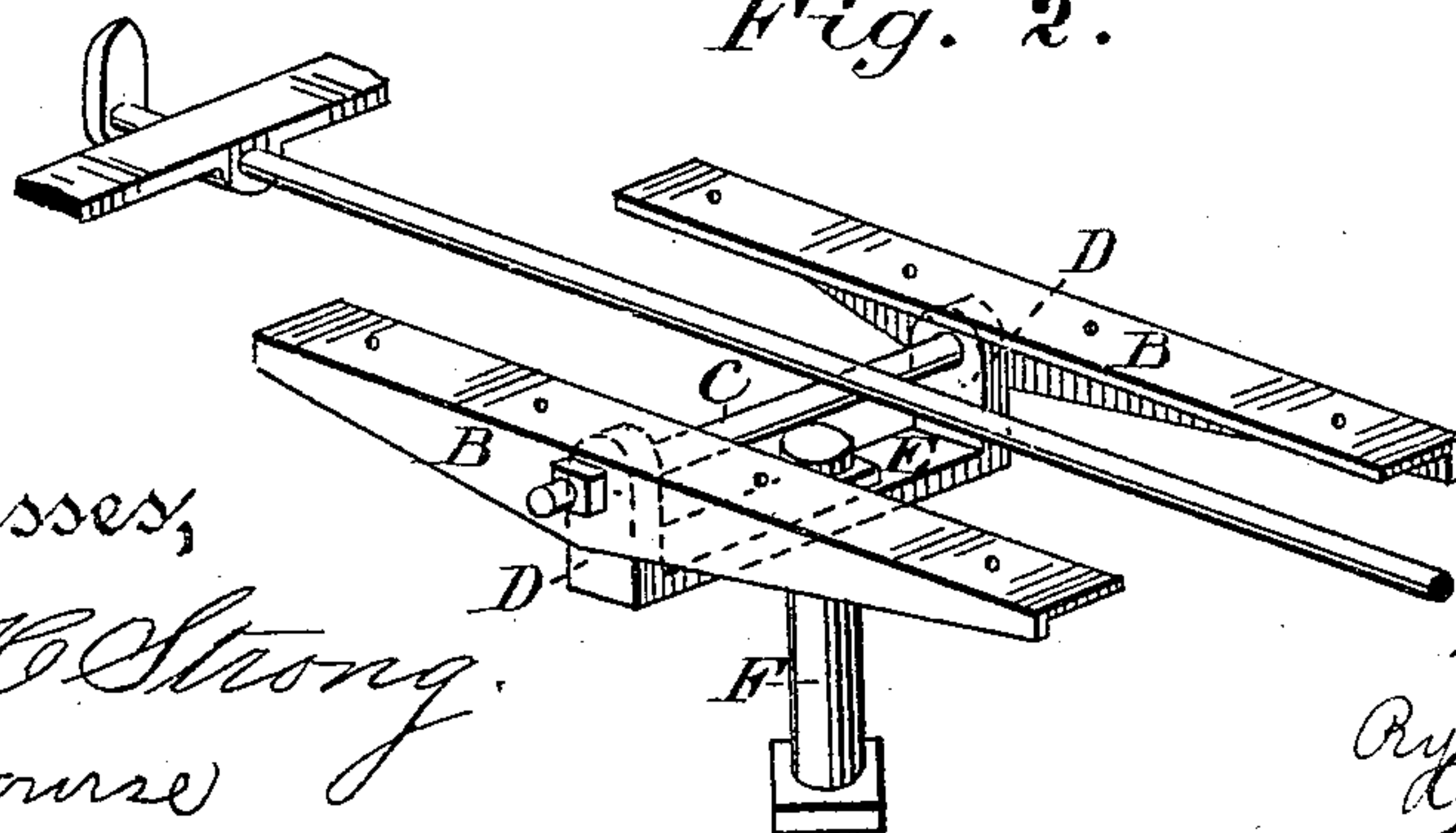
No. 270,689.

Patented Jan. 16, 1883.

*Fig. 1.*



*Fig. 2.*



Witnesses,

*Geo H Strong.*  
*J. H. Mause*

Inventor,

*Gustav Olsen*

*By Dewey & Co*  
*Attorneys*

(No Model.)

2 Sheets—Sheet 2

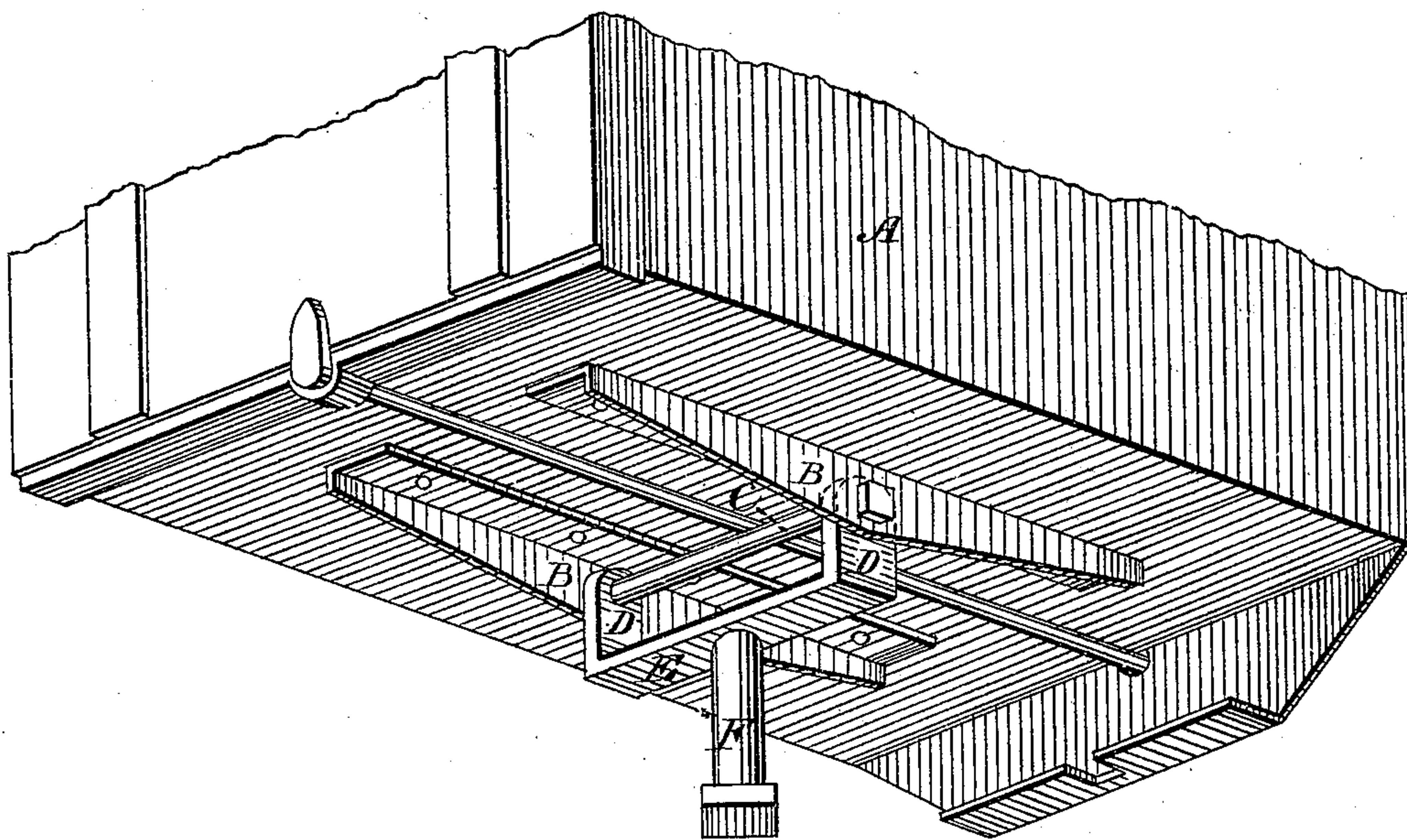
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*Fig. 3.*



Witnesses,  
*Geo. H. Strong.*  
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# UNITED STATES PATENT OFFICE.

GUSTAV OLSEN, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF  
TO EDWARD A. RIX, OF SAME PLACE.

## MINING-CAR.

SPECIFICATION forming part of Letters Patent No. 270,689, dated January 16, 1883.

Application filed October 16, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GUSTAV OLSEN, of the city and county of San Francisco, State of California, have invented an Improved Mining-Car; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in that class of cars which are employed to transport ore in mines; and it consists in a means for mounting the car-body upon the turn-table or track, by which the car, and especially its bottom, is relieved from the strain of the connecting-bolt, and the weight of ore within it will be supported by supplemental bars which are secured beneath the bottom of the car, and through which the pivotal bolt passes, as will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of the car tilted upon the truck. Fig. 2 is a perspective view of angle-iron strips and turn-table. Fig. 3 is a perspective view of bottom of car.

A is the body of the car, which is usually formed of heavy sheet or plate iron riveted together, but may also be made of wood or other material. This body has usually been riveted to a bar which extends across from side to side about the middle of the bottom, having the two ends bent downward, and these ends are perforated to receive pins or bolts, which connect them with the upturned ends of a similar transverse bar secured to the turn-table, so that when the car-body is in the proper position to dump it may turn about these pins, being thus tilted to such an angle that the load will slide out. The objection to this construction is, first, that the rivets by which the cross-bar is secured to the bottom of the car-body will easily tear out, and thus damage the car; and, secondly, that the bolts or rivets about which it is tilted to discharge it are soon cut off. In my invention two strips, B B, of angle-iron, extend longitudinally beneath the

car-body, and thus strengthen it, being bolted at intervals along their whole length, as shown. The vertical flanges of these angle-iron strips are perforated to allow the bolt or shaft C to pass through them, and also through the upturned ends D of a bar which is secured across the turn-table E, as shown. The ends D are rounded, as shown in Fig. 2, having the shaft as a center. The rounded ends come in contact with the horizontal portion of the angle-irons B, so that the latter rests and turns upon them when the car is tilted to be dumped, thus taking all strain off the bottom of the car and relieving the shaft C of the weight of the car, so that it is not liable to be cut or worn off.

The turn-table E turns upon a king-bolt, F, and it is supported upon a circular flange, G, of iron, secured to the running-gear H, so as to relieve it from strain in turning. By this means of connecting the bottom of the car-body with the turn-table and bracing and supporting it upon the angle-iron bars I produce a much stronger car, and one which will resist the strains brought upon it, the bottom not being liable to be torn out or injured.

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

In a mining-car, the angle-iron strips B B, secured to the bottom of the car by their horizontal flanges, and having their vertical flanges perforated to receive a bolt, in combination with the bolt C and the bar E, provided with the upturned and rounded ends D D, through which the bolt C passes, and which furnish bearings on the under side of the horizontal flanges of the angle-iron strips and receive the strain as the car tips in any direction, as herein set forth.

In witness whereof I hereunto set my hand.  
GUSTAV OLSEN.

Witnesses:

WILLIAM WYNN,  
A. G. KITTREDGE.