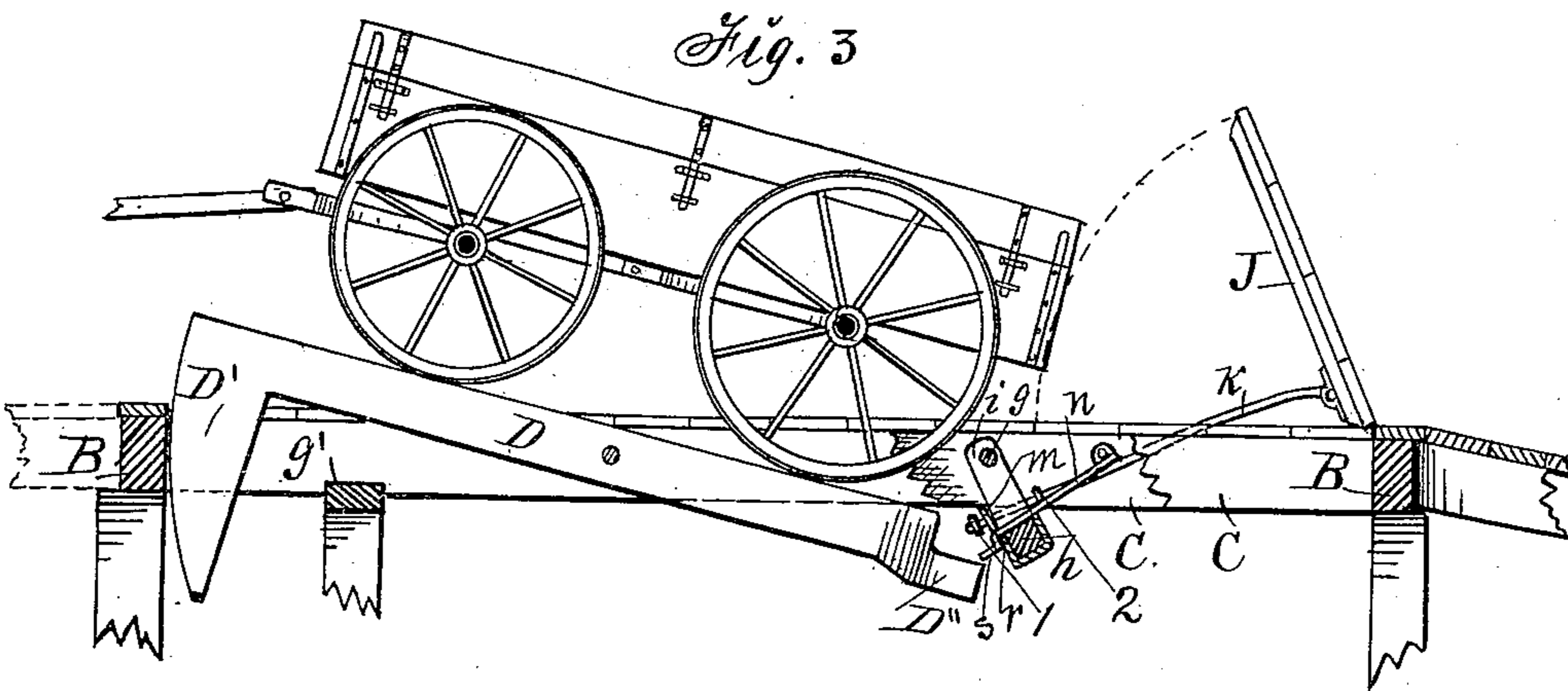
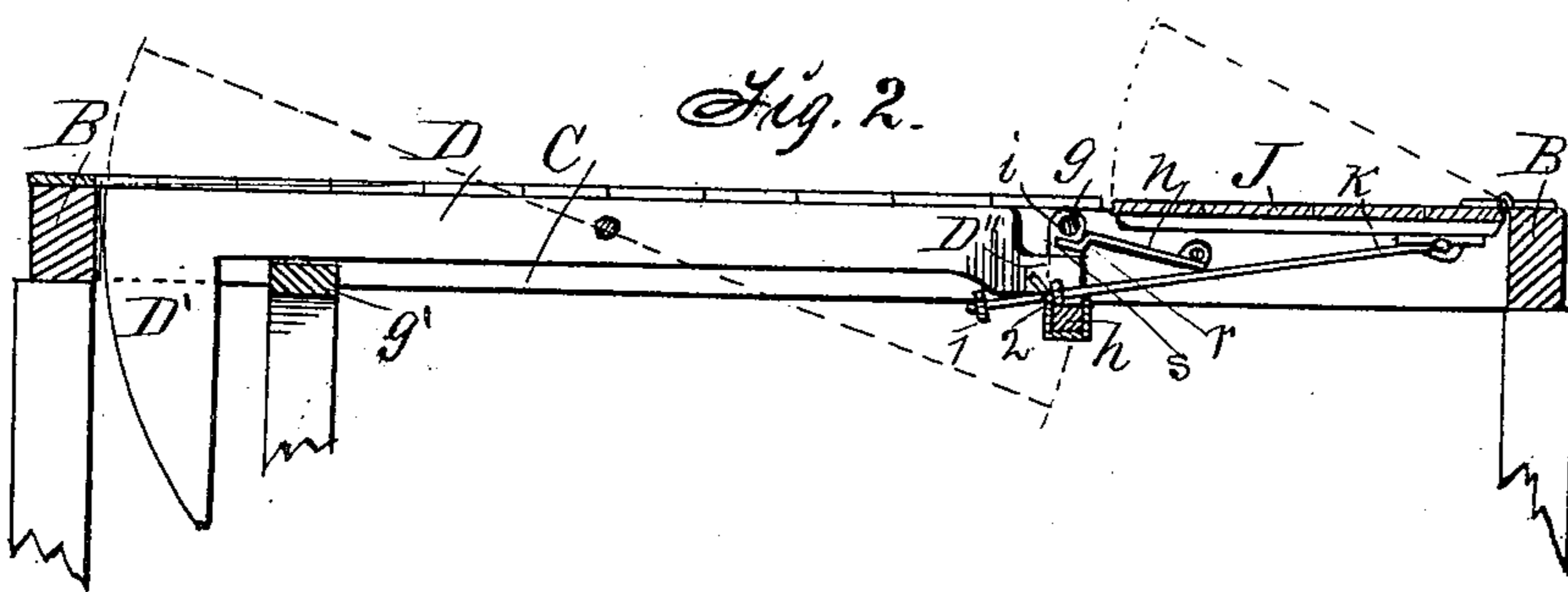
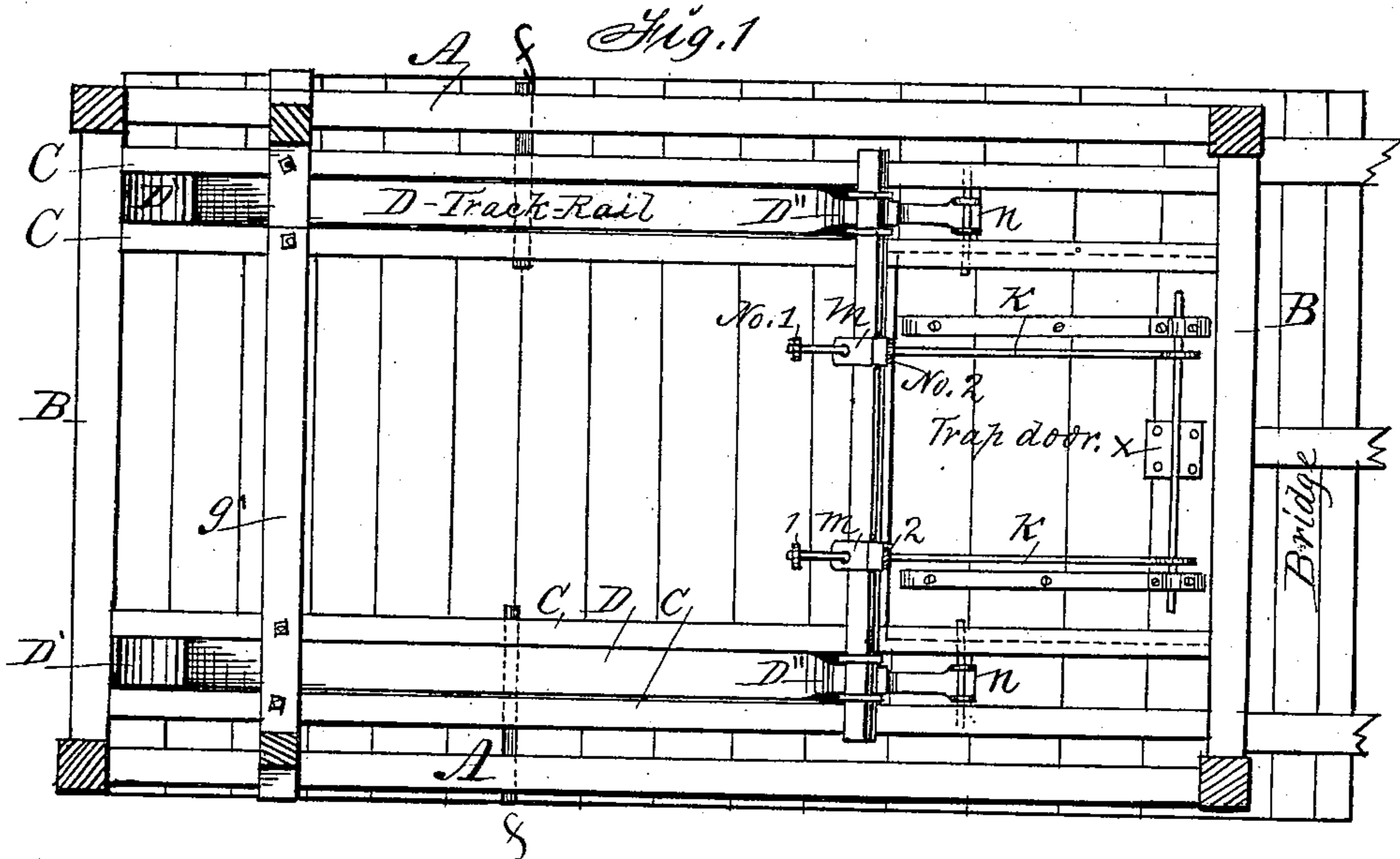


(No Model.)

A. K. ERSLAND.
PLATFORM WAGON DUMP.

No. 265,251.

Patented Oct. 3, 1882.



Witnesses:
Jos. L. Polk
C. Watson

Inventor:
Amos K. Ersland
By *Thomas G. Orwig, Atty.*

UNITED STATES PATENT OFFICE.

AMOS K. ERSLAND, OF SHELD AHL, IOWA.

PLATFORM WAGON-DUMP.

SPECIFICATION forming part of Letters Patent No. 265,251, dated October 3, 1882.

Application filed August 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, AMOS K. ERSLAND, of Sheldahl, in the county of Story and State of Iowa, have invented an Improved Platform Wagon-Dump, of which the following is a specification.

The object of my invention is to provide a strong, durable, and efficient dump upon which wagons and cars loaded with grain, coal, and other commodities in bulk can be readily adjusted so as to allow their contents to slide off into a bin or other suitable receptacle.

It consists, first, in combining a pendent adjustable track-support and a hinged trap-door with the platform and pivoted track-rails in such a manner that the opening and closing of the door will operate the track-support and move it relatively to the track-rails, as required, to facilitate the moving and unloading of a wagon or car on the platform; second, in an automatic device for holding the trap-door upright and stationary while a wagon or car is being dumped, and automatically closing the door as the wagon or car is moving from the track-rails and platform, all as hereinafter fully set forth.

Figure 1 of my accompanying drawings is a view of the under side of my complete dumping-platform. Fig. 2 is a longitudinal section, showing the track-rails, track-support, and trap-door adjusted for the reception of a wagon or car. Fig. 3 is a corresponding sectional view, showing the track-rails, the track-support, and its locking device in position as required in the act of dumping or unloading a wagon or car. Jointly considered, these figures clearly illustrate the construction, operation, and utility of my complete invention.

A A represent the side pieces, and B B the end pieces, of a platform-frame that may vary in size as desired, and that can be permanently fixed in a grain-elevator building over a bin or series of bins, or wherever the platform and dump is to be used.

C C are pairs of joists fixed in the frame to support flooring-planks, and to produce longitudinal openings in the platform, within which to place, pivot, and operate track-rails.

DD are track-rails, preferably metal, pivoted between the pairs of joists C by means of rods or bolts f.

D' are guides formed on or fixed to the rear ends and under sides of the track-rails D. The end faces of these guides are curved and concentric with the center pivots and fulcrums, f. 55

D'' are elbows formed on or fixed to the front ends to adapt them to engage track-supports.

g g are rods or bolts fixed to the platform in such positions relatively to the track-rails that they will engage the elbows D and in connection with cross-pieces g' restrict the upward movements of the front ends of the track-rails, as required to prevent the rear ends from being depressed below the level of the platform. 60

h is a track-support, in the form of a strong straight bar, suspended to the joists C by means of bearers i, that are pivoted to the bolts g, and depend between the joists in such a manner that they can be readily swung to and from the front ends of the track-rails, as required to adjust the track-support h relatively to the elbow-shaped ends D'' of the track-rails. 65

J is a trap-door hinged in a corresponding opening in the floor and front end of the platform in such a manner that it must be turned upward and away from the front ends of the track-rails. 70

k k are rods pivoted to the under side of the trap-door, and flexibly connected with the suspended track-support h by passing their ends through perforated plates m, fixed to the cross-bar and track-support, as clearly shown in Fig. 1. Nos. 1 and 2 represent enlargements, collars, or stops formed on or fixed to the rods k, to restrict the sliding movements of the rods relatively to the track-support h, and to aid in pushing and pulling the track-support to and from the front ends of the track-rails by means of the hinged trap-door. 75

n n are metal plates pivoted between the joists C and in front of the bearers i. They have hooks or elbows r at their free ends to engage the track-support h, as shown in Fig. 3, and terminate in extensions s, that are engaged by the elbow-shaped ends D'' of the track-rails in their upward movements, and thereby disengaged from the track-support h. 80

x represents a weight attached to the under side of the trap-door J to aid in closing it automatically. 85

In the practical operation of my invention a freighted wagon or car is advanced over the 90

platform and closed trap-door, so that the four wheels will engage and rest upon the two pivoted track-rails. By then opening the trap-door it will perform the function of a lever, and
5 by means of the hinged rods *k* pull the pendant track-support *h* from under the ends of the track-rails and allow the rails to tilt and incline the wagon or car, as shown in Fig. 3, and also allow the locking devices *n r s* to drop
10 down to engage the track-support *h* and retain it out of reach of the ends of the track-rails. I then open the end-gate of the wagon or car and allow its contents to slide off through the trap-door opening, and when a vehicle is thus
15 expeditiously unloaded and balanced the track-rails will resume their normal level, and as their front ends ascend they will engage the projections *s* of the locking devices *n r* and elevate them to allow the track-support to resume
20 its normal position under the ends of the track-rails and the trap-door to close by force of gravity, and thus automatically adjust the operative parts to prepare the complete platform and dump for the reception of another freighted
25 carriage.

I claim as my invention—

1. The fixed bolts or bars *g*, the track-support *h*, suspended by means of bearers *i i*, and pivoted track-rails having elbow-shaped ends *D''*, arranged and combined in a dumping-
30 platform, substantially as shown and described, to operate in the manner set forth, for the purposes specified.

2. The locking devices *n r s*, in combination with the suspended track-support *h* and pivoted track-rails and a platform, substantially
35 as set forth for the purposes specified.

3. The wagon and car dumping platform composed of the frame and platform *A B C*, the track-rails *D D' D''*, the track-support *h i*
40 *i*, having perforated plates *m*, the trap-door *J*, having hinged rods *k*, and the locking devices *n r s*, substantially as shown and described, to operate in the manner set forth, for the purposes specified.

AMOS K. ERSLAND.

Witnesses:

OLEY NELSON,

C. B. HENDRIKSON.