

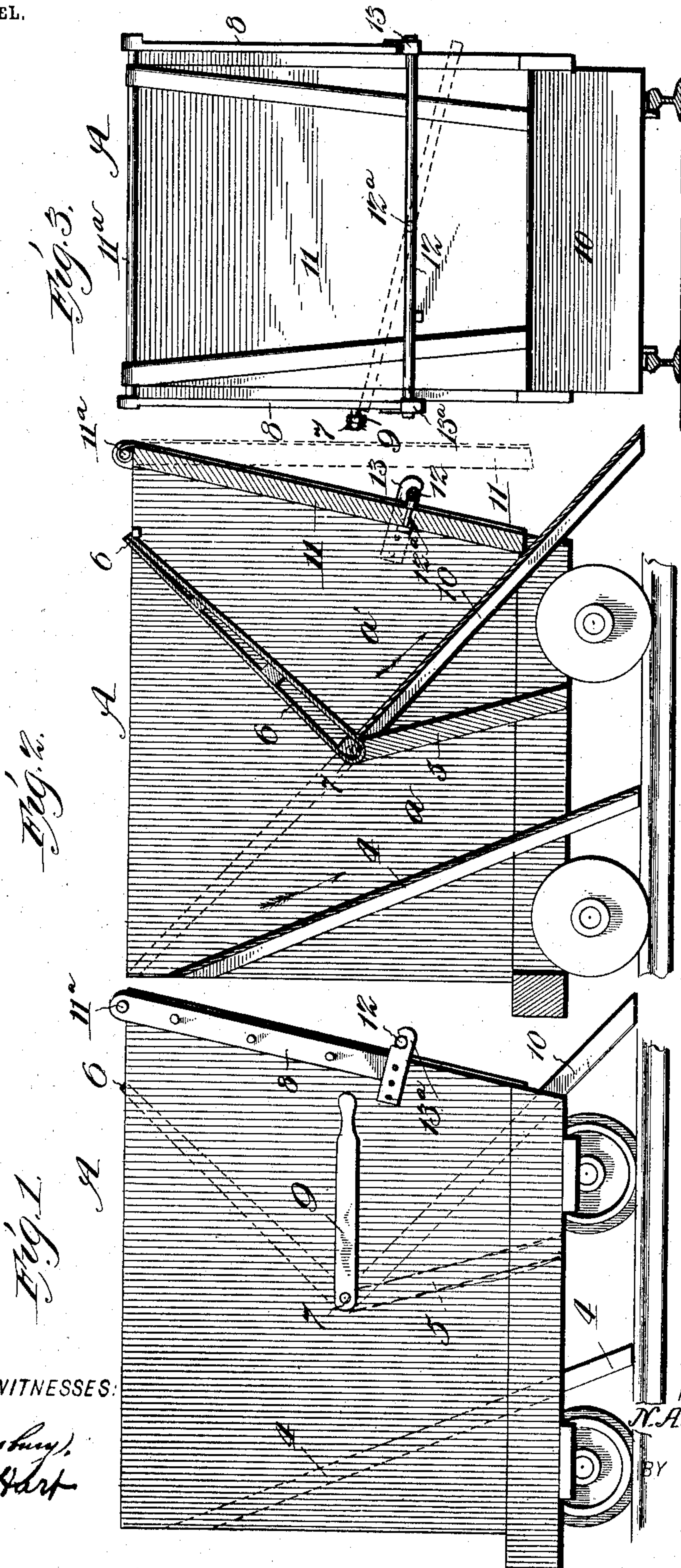
No. 736,882.

PATENTED AUG. 18, 1903.

N. A. H. SALOMONSON.
ORE DUMPING APPARATUS.

APPLICATION FILED JAN. 23, 1903.

NO MODEL.



WITNESSES:

S. P. Kingsbury,
Amos W. Hart

INVENTOR

N. A. H. Salomonson

BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

NELS AUGUST HJALMAR SALOMONSON, OF NORWAY, MICHIGAN.

ORE-DUMPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 736,882, dated August 18, 1903.

Application filed January 23, 1903. Serial No. 140,252. (No model.)

To all whom it may concern:

Be it known that I, NELS AUGUST HJALMAR SALOMONSON, a citizen of the United States, and a resident of Norway, in the county of Dickinson and State of Michigan, have made certain new and useful Improvements in Dumping-Cars, of which the following is a specification.

My invention is an improved car for dumping ore, coal, and other material into chutes and pockets adapted to receive it.

In ore-dumping apparatus as usually constructed the ore hoisted from a shaft is delivered into a car, which is then run out on the trestle to a chute and pocket into which it is to be discharged. It is the object of my invention to discharge the ore directly from the car into the chute and pocket intended for it without requiring that the car shall be run out on the trestle, whereby both time and labor are saved in the dumping operation.

In carrying out my invention I have devised a novel construction of the car with reference to chutes in the trestle, whereby an improved result is obtained.

The details of construction, arrangement, and operation are as hereinafter described, reference being had to accompanying drawings, in which—

Figure 1 is a side elevation of my car. Fig. 2 is an enlarged central longitudinal section of the car. Fig. 3 is an elevation of the front end of the car.

A indicates the body of my improved car, which in practice is placed on rails on a trestle and in such relation to chutes in the latter that without moving the car ore may be discharged into either of the chutes, and thus delivered into either of two pockets or receptacles. As shown best in Fig. 2, the rear end 4 of the car is arranged at an inclination and extended below the sills, so as to form one side of a compartment and passage for ore or other material. Directly opposite such part 4 and practically parallel therewith is arranged a short partition 5, the same extending from the bottom of the car to a point about midway of its height and length. At this point is pivoted or hinged a shiftable partition 6, the same being formed of plate metal or boards firmly attached to a rotatable transverse shaft 7, which has its bearings in

the sides 8 of the car. On one of the ends of such shaft 7, exterior to the car proper, is applied an elongated hand-lever 9, (see Fig. 1 and dotted lines, Fig. 2,) by which the partition 6 may be shifted from one position to the other. From the shaft 7 another partition 10 extends toward the front lower corner of the car and downward beyond the same, as shown in Fig. 2, its inclination being nearly the same as that of the rear end 4 of the car. The front end of the car is formed by means of a swinging door 11, the same being hinged at 11^a—that is to say, at the upper front corner of the car-body. When the door 11 is closed, as shown by full lines, Fig. 2, its lower end is in contact with the inclined partition 10. As a means for fastening the door 11 in this position I employ a swinging bar 12, (see Fig. 3,) the same being pivoted at 12^a at the center of the door, and thus adapted to swing vertically and to engage hooks 13 and 13^a, which are attached to the sides of the car-body. As shown, the hook 13 projects downward and the hook 13^a upward. One of the ends of the locking-bar 12 may be extended to form a handle for convenience in manipulating it to release the door 11. As shown in Fig. 1, the rear incline or end 4 of the car A practically coincides with the upper end of the first chute 2, and the second incline 10 similarly coincides with the second chute 3. It will now be understood that if the shiftable partition 6 be placed in the position indicated by full lines in Fig. 2 and dotted lines in Fig. 1 the ore received into the car will be directed through the first passage *a* of the car. If, on the other hand, the shiftable partition 6 be thrown to the position indicated by dotted lines in Fig. 2, so that it is practically alined with the front partition 10, and the swinging door 11 be also unlocked and allowed to assume the position indicated by dotted lines, then ore received into the car will be discharged through the passage *a'* thus formed. In other words, when the swinging door 11 is opened and the shiftable partition 6 is swung to the left the passage *a* in rear of partition 5 is closed and a front passage *a'* is opened. Thus by shifting the partition 6 either passage *a* or *a'* may be opened or closed at will, and the direction of the ore will be changed accordingly, so that

ore of one quality may be delivered into one receptacle and ore of a different quality into another receptacle. It will be seen that this operation involves no movement of the car itself, but merely the shifting of the partition 6, which is easily and quickly effected.

In case rock or other refuse material is hoisted and requires to be delivered at a dump or into another car, located on rails arranged at a lower point in the trestle, the swinging door 11 of the car is locked in the position indicated by full lines, Figs. 2 and 3, and the shiftable partition being thrown to the left, as shown by dotted lines, Fig. 2, a temporary receptacle or pocket is formed, into which such rock or refuse material may be received and wherein it is retained while the car is run out on the trestle-rails to the point where it may be dumped into a separate car or on a rock-pile. This dumping of refuse may be effected automatically by engagement of a dog or other fixed device with the locking-bar 12. Thus the car is adapted for discharging into separate receivers two grades of ore, coal, or other commodity and also for receiving, transporting, and discharging a third quality of the same or a refuse material.

What I claim is—

1. The improved ore-dumping car having open bottom, front and rear partitions arranged transversely, the front one extending to a point below the top portion of the car, and a shiftable partition hinged at the top of the front partition and adapted to be swung for opening or closing the rear passage between the two partitions, substantially as shown and described.

2. The improved ore-dumping car having an open bottom and fixed rear and front partitions, a swinging partition hinged at the upper end of the front partition and adapted to swing forward or back, to open or close the

space or passage on either side of said partition, and means for temporarily closing the front end of the car and thereby forming a receiving-compartment in front of the front partition, substantially as shown and described.

3. The improved ore-dumping car comprising a body having a fixed rear side, a front partition arranged transversely and extending to a point at or near the center of the car, a movable partition journaled at that point and adapted to be shifted front or rear, a front door which is hinged at its upper end and adapted, when closed, to engage the said partition, and, when released, to hang free so as to allow discharge of material received upon said partition, and means for locking said door, substantially as shown and described.

4. In an ore-dumping car the combination, with the body of the same comprising a rear end portion, a fixed and inclined front partition extending part way to the top and separated from the rear end by an open space, of a shiftable partition hinged and adapted to swing forward and back so as to direct the material received in the car into either the rear or front passage, and the front of the car hinged at its upper end, and means for locking the same, substantially as shown and described.

5. In an ore-dumping car, the combination, with the body of the same, having a rear end portion and front inclined partition and a front end portion, of a shiftable partition which is hinged on a transverse shaft, the latter being extended through the side of the car and provided with an elongated handle-ver for adjusting the partition, substantially as shown and described.

NELS AUGUST HJALMAR SALOMONSON.

Witnesses:

JAMES C. KNIGHT,
WILLIAM R. BOLITHO.