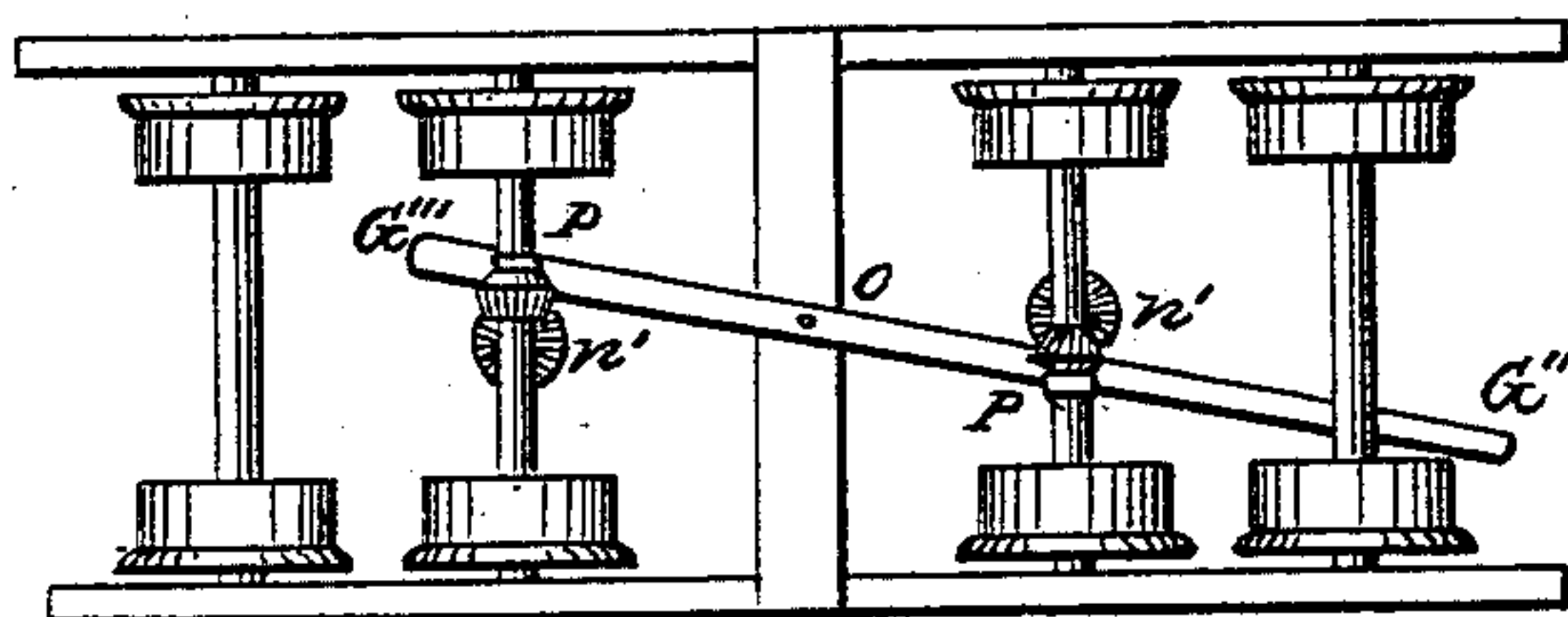
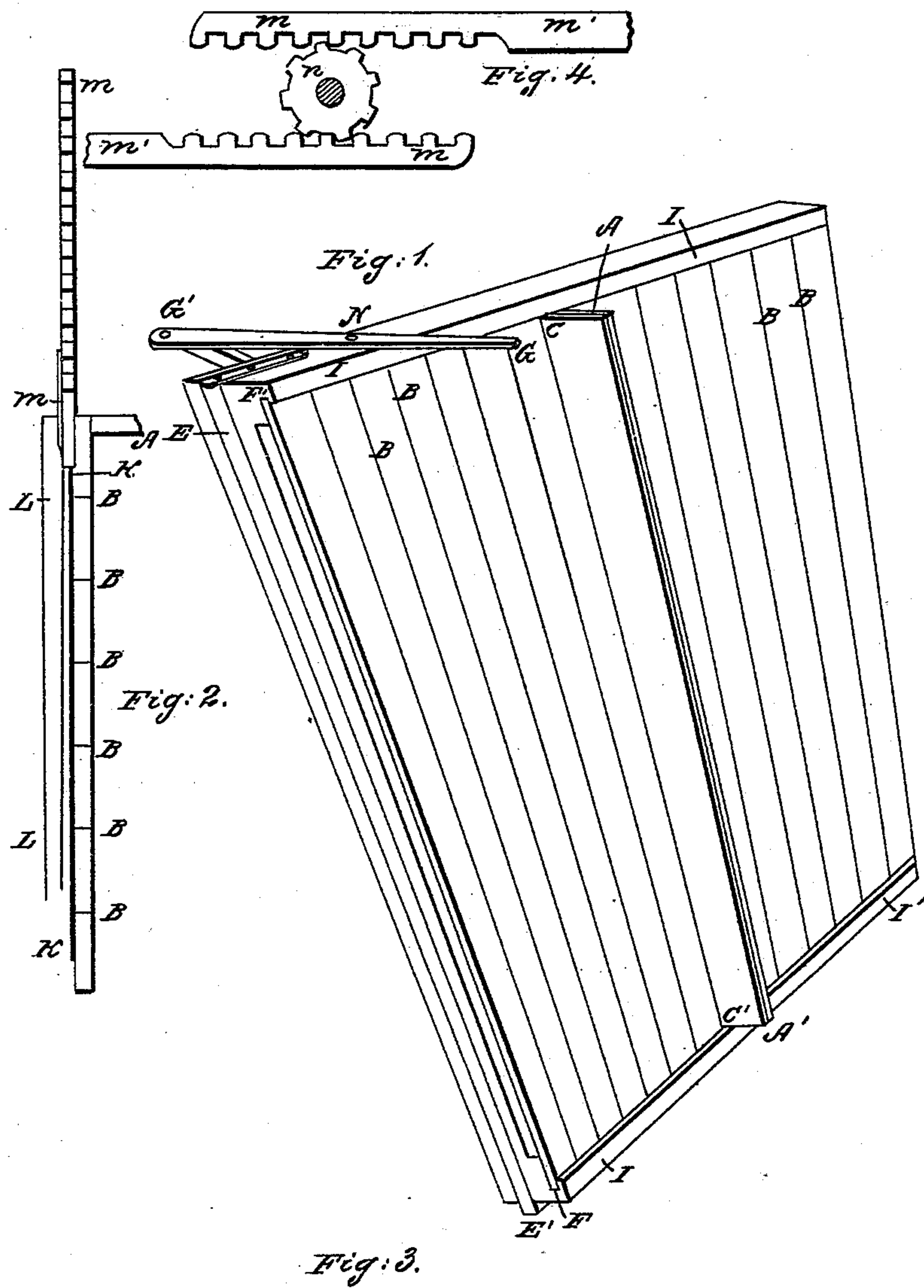


C. GATES.
Dumping Car.

No. 93,872.

Patented Aug. 17, 1869.



R. B. Joseph. } Witnesses.
Chas. Webb. }

Inventor:
Charles Gates.
By G. McDonald, Attorney.

United States Patent Office.

CHARLES GATES, OF BURLINGTON, INDIANA, ASSIGNOR TO GEORGE BURKHARDT, JOSEPH SHIFFER, AND JAMES W. GREEN.

Letters Patent No. 93,872, dated August 17, 1869.

IMPROVEMENT IN DUMPING-CARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES GATES, of Burlington, in the county of Rush, and in the State of Indiana, have invented an Improved Automatic Car-Platform; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon.

The nature of the invention consists in the construction and use of the automatic car-platform, hereinafter described, and the construction and use of the devices, hereinafter described, for operating the same, said device to be made of wood, iron, and leather, or any other suitable and convenient materials.

To enable others skilled in the art to make and use my said invention, I proceed to describe it more fully, as follows:

Figure No. 1, of the accompanying drawing, is a perspective view of said platform.

Figure 2, a transverse section of the same.

Figure 3, a plan of the running-gears of the car on which the platform is to be used.

Figure 4, detailed plan of the rack and pinion used for operating said platform.

On the axles of the car, at P of fig. 3, are bevel-gear wheels, which, being free to slip a little, are operated by the lever G' G'', which is itself moved by the lever G G' of fig. 1, being attached to it, at G'.

These wheels P and P gear into two corresponding bevel-wheels, represented by N'.

The axles of N and N' are vertical, and pass up through the timbers, into the pinion N of fig. 4, which, with the racks M M', lies directly under the cover of the platform, one at each end.

This cover is jointed at B, B, B, and B of figs. 1 and 2, and parts at the line A A'.

The two uprights A A', C C' are hinged, at C C', so that they can be, if it be desired, laid down, and the car-top left clear.

Underneath the platform are two (2) strips of leather or other suitable materials, one at each end, represented by K K' of said fig. 2. To this are attached the segments, which make up the platform, as represented by B, B, B, and B, and K K, of said fig. 2.

The rack M M' is attached, at M', to the platform A, B, B, and B, as represented by the appropriate letters in said fig. 2.

To use my said invention as a sand-car, or for any other similar purpose, the uprights A A', C C' are raised, as represented in said fig. 1, and the car loaded in the usual way.

When the car has reached its destination, and it is desired to unload it, just before it stops, the lever G' G'' is oscillated by means of handle G G', so that it will throw the bevel-wheels P and P and N and N' in gear. This will revolve the pinion, and move the rack M M', which, being attached to the platform, will push it out from the middle of the car. As it moves out, it will bend down over the roller E E', at the joints B, B, and B, and so deliver its load on each side of the car.

When the platform has been pushed out far enough to unload the car, the rack and the pinion will be out of gear, and the car will be free to move on.

A convenient spring is placed, so that when the car is backed, and the motion of the pinion is reversed, it will again throw the rack into gear. Its motion will also be reversed, and the sides A A', C C' brought together in the middle of the car again. The wheels P and P may then be thrown out of gear by means of the lever G G' and G' G'', when the car will be ready to reload.

What I claim, and desire to secure by Letters Patent, is—

The dumping-car herein described, when the same is constructed, in its said several parts, as aforesaid, with the jointed platform B B, the levers G G' and G' G'', the rack M M', and the pinion N, and the bevel-wheels N' and P, and used for the purpose and in the way substantially as herein set forth.

In testimony that I claim the foregoing specification, I have hereunto set my hand, this 2d day of February, 1869.

CHARLES GATES.

Witnesses:

CHARLES WERBE,
GEO. W. JOSEPH.