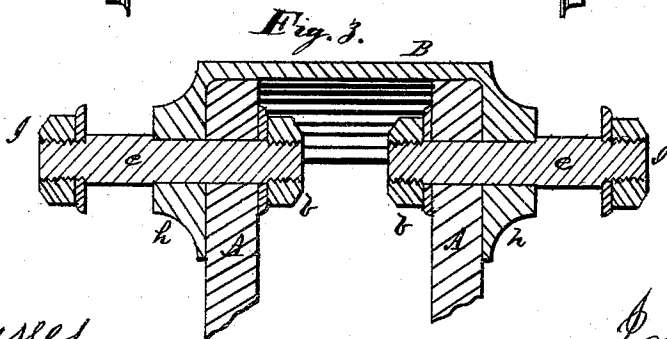
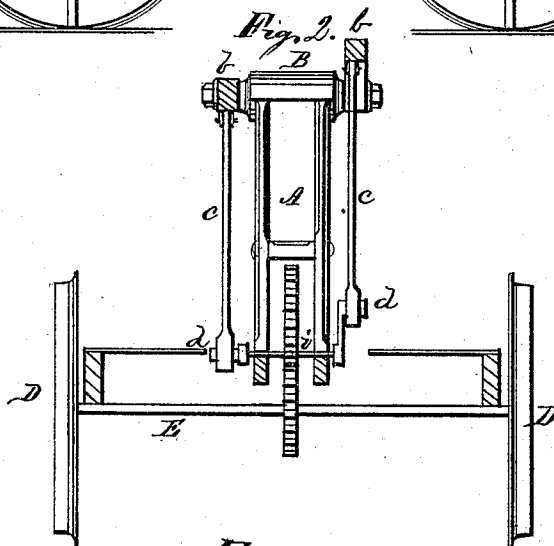
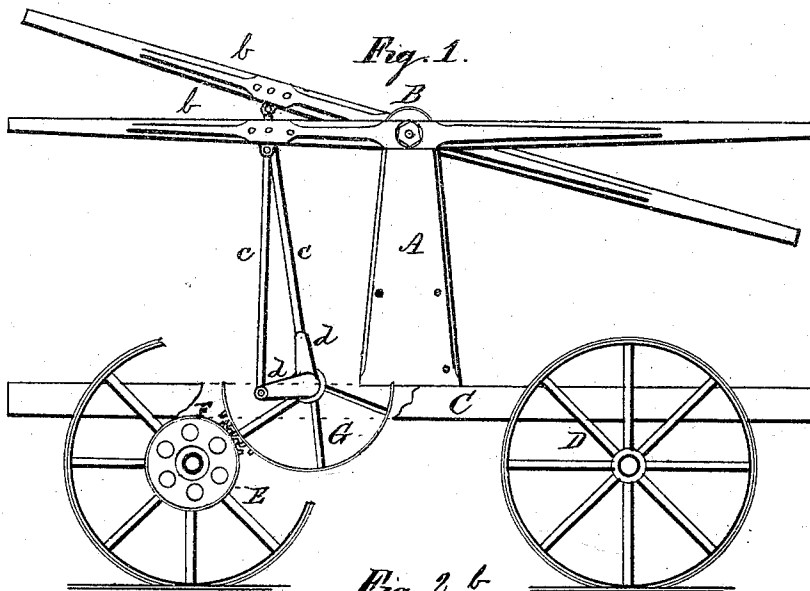


L. H. KENYON.
Hand-Cars.

No. 143,513.

Patented Oct. 7, 1873.



Witnesses
Thomas H. Kelley
Samuel D. Johnson

Inventor
Lorrell H. Kenyon

UNITED STATES PATENT OFFICE.

LOWELL H. KENYON, OF EAST GREENWICH, RHODE ISLAND.

IMPROVEMENT IN HAND-CARS.

Specification forming part of Letters Patent No. **143,513**, dated October 7, 1873; application filed August 2, 1873.

To all whom it may concern:

Be it known that I, LOWELL H. KENYON, of East Greenwich, in the county of Kent and State of Rhode Island, have invented certain new and useful Improvements in Hand-Cars; 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 of reference marked thereon, which form a part of this specification.

My invention relates to hand-cars, having for its object to furnish an improved car which is simple in construction, convenient in operation, and durable in use, furnishing a means by which a greater power can be applied and greater speed obtained than by the cars heretofore in use; and it consists in an improved cap, and the combination and arrangement of parts, as hereinafter more fully described and pointed out in the claims.

In order to enable others skilled in the art to construct and use the same I will now proceed to describe its construction, referring to the annexed drawing, in which—

Figure 1 is a side elevation, partially in section, of a machine embodying my invention. Fig. 2 is a transverse vertical section; and Fig. 3 is a section of the standards and cap, showing the attachment of the levers.

A represents the standards, firmly attached to the body or bed C, and provided at the top with a circular metal cap, B. This cap covers the tops of the standards, and the ends are provided with flanges *h*, which extend over and protect the sides of the standards, and also form an inside bearing for the levers, and form a simple and substantial fastening to the standard. The bolts *ee* pass through the flanges of the cap B and standards A, and are provided with journals on their outer ends for the reception of the levers *bb*. D represents the wheels, of any ordinary or suitable construction, and securely attached to axles E, which have suitable bearings attached to the bed of the car. One of said axles is provided with a pinion, F, which connects with the gear or cog-wheel G, which is secured to the shaft *i*, said shaft be-

ing provided on each end with a crank, *d*, having journals for the attachment of the pitmen *cc*, the other ends of said pitmen being connected to the levers *bb*. The pitmen may be connected permanently to the levers, or they may be adjustably connected, in order that the stroke of the levers may be shortened or lengthened to give more or less leverage, as desired, or to allow the car to be run with more or less power. The cranks *dd* are set at, or nearly at, right angles with each other, in order that one of the cranks is always in position to have the power applied by its lever and pitman—that is, both cranks and their respective pitmen cannot be on a line with each other at the same time.

By this arrangement of cranks, pitmen, and levers, the cranks are in such position as to always have one-fourth of a turn of said cranks to receive full benefit of the power whatever position the levers may occupy.

The levers *bb* are pivoted nearly in the center to the journals *ee*, and extend longitudinally nearly the entire length of the car, and those operating the car stand at the sides of the levers, by which arrangement all the persons on the car can take part in operating the same, which cannot be done by the arrangement of parts heretofore in use.

In use, the wheel G may be covered with a casing.

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

1. The cap B, having flanges *h*, in combination with standards A and bolts *ee*, substantially as and for the purpose specified.

2. The longitudinal levers *bb*, in combination with the cap B having flanges *h*, standards A, and bolts *ee*, all constructed and arranged as and for the purpose specified.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

LOWELL H. KENYON.

Witnesses:

DAVID C. POTTER,
E. R. POTTER.