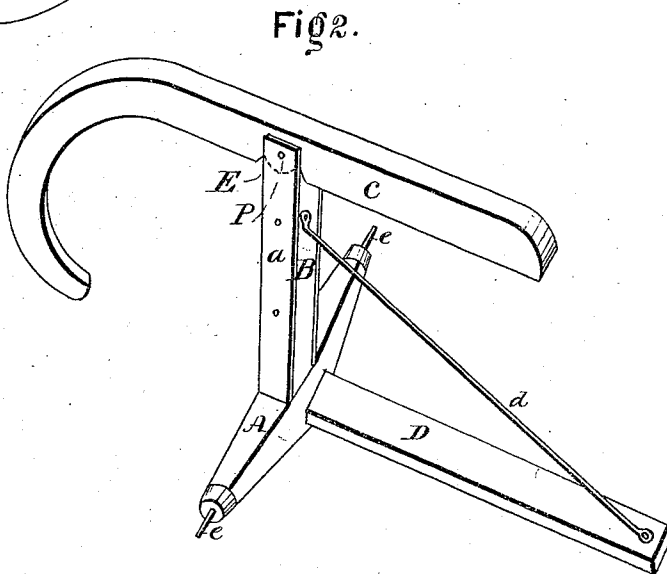
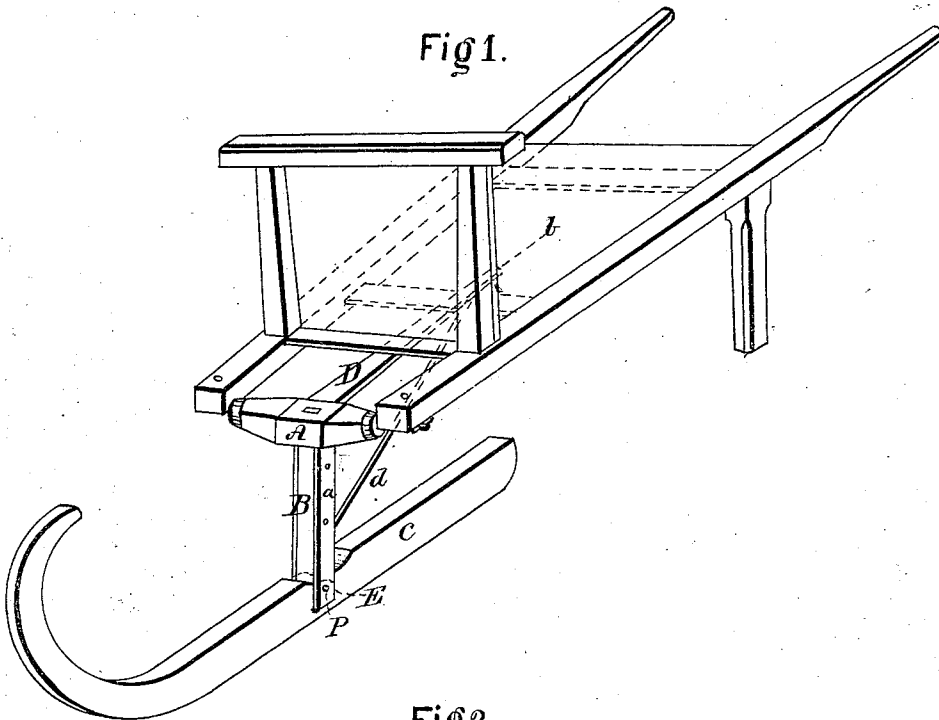


S. BINGHAM.
Wheelbarrows.

No. 153,149.

Patented July 21, 1874.



Witnesses:

J. S. Barker
C. B. Ressegine

Inventor:

S. Bingham

UNITED STATES PATENT OFFICE.

SOLON BINGHAM, OF CONKLINGVILLE, NEW YORK.

IMPROVEMENT IN WHEELBARROWS.

Specification forming part of Letters Patent No. **153,149**, dated July 21, 1874; application filed January 13, 1874.

To all whom it may concern:

Be it known that I, SOLON BINGHAM, of Conklingville, in the county of Saratoga and State of New York, have invented an Improvement in Barrows.

The following is a clear, full, and exact description of my invention, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in barrows; and consists in constructing the same with a runner part so made as to be susceptible of substitution for the wheel of an ordinary wheelbarrow, in order to adapt the same for use in conveying goods, wares, and merchandise from place to place with greater ease and facility when the ground is covered with snow than is practicable in the use of the ordinary wheelbarrow, the construction being substantially as hereinafter set forth.

Figure 1 is a perspective view of the barrow with my invention attached. Fig. 2 is a similar view of the runner part of the barrow inverted, so as to show the construction of the same more clearly than it could otherwise be shown.

The before-mentioned runner part consists of a roller, A, Fig. 1, made of wood or other suitable material, having metallic bands upon each end, and supports *e e*, Fig. 2, corresponding to the journals of the wheel of an ordinary wheelbarrow. These supports remain fixed in relation to other parts of the barrow when the same is in use. The knee B, Fig. 1, is a square or other suitably-shaped piece of wood or metal rigidly attached to the roller A, Fig. 1, by means of a tenon and mortise, or other means, projecting from its lower or under side perpendicular to the same, and upon its lower end, at E, Fig. 1, is formed, when the same is engaged with the runner C, Fig. 1, a geniculated or other suitable joint, in order to allow the runner to adjust itself to the inequalities of the road over which it runs. C, Fig. 1, is a runner made of wood or other suitable material, turned upward at either end, in order to allow it to run over the usual obstructions and inequalities to be overcome in an ordinary snow path, whether driven backward or forward. This runner may be shod with metal, if not constructed

wholly of that material. At the proper distance from the end, as at E, Fig. 1, are constructed the proper parts of a joint to engage with the parts made upon the lower end of the part B, with which they engage at E, and are secured thereto by means of metallic plates *a a*, Figs. 1 and 2, upon the right and left hand sides of the knee B, which plates are fastened thereto by means of rivets or other suitable fastenings, the plates extending downward nearly to the bottom of the runner, in order to receive the pin *p*, Fig. 2, which holds together the parts of the joint. D, Fig. 2, is an arm or lever, one end of which is rigidly attached to the roller A by tenon and mortise, or other suitable means, and the other end to the under side of the body of the barrow, preferably at the intersection of said arm with the transverse pieces, which form a part of the main frame of the barrow, as at *b*, Fig. 1. In the same manner the arm D and the brace *d*, Figs. 1 and 2, are for the purpose of holding the roller A and the knee B stationary in relation to the main body of the barrow.

To make use of this invention, having constructed the runner part, substantially as herein described, of the proper proportions as to size to adapt it to the case in hand, remove the wheel of the ordinary wheelbarrow, and supply its place with the runner part herein described, by placing the supports *e e*, Fig. 2, in the bearings or boxes from which the journals of the wheel have been removed, and, having secured the same properly in place, fasten the disengaged end of the arm D firmly to the main body of the barrow upon the under side thereof, substantially as hereinbefore set forth.

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

The runner part consisting of the roller A, the knee B, the runner C, and the arm D, in combination with the body of an ordinary wheelbarrow, all constructed to operate substantially as and for the purpose set forth.

SOLON BINGHAM.

Witnesses:

SAMUEL W. BUCH,
JAMES N. CRAIG.