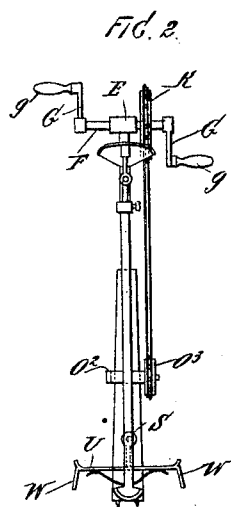
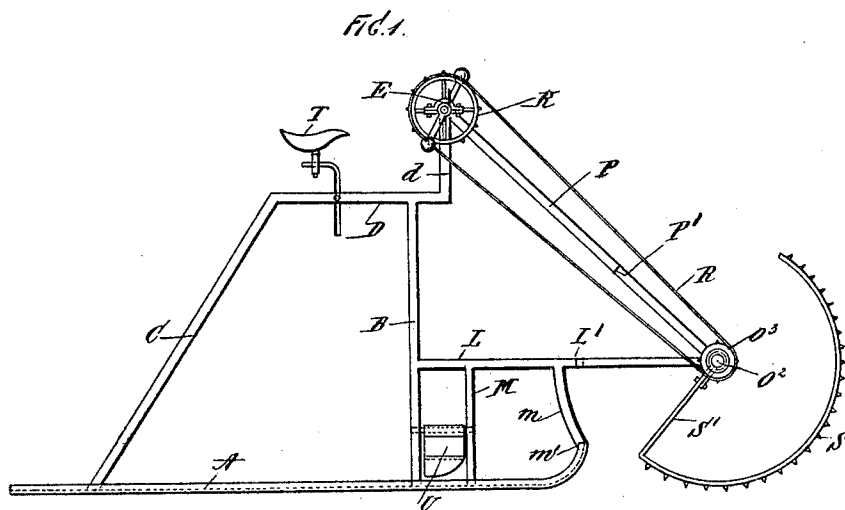


(No Model.)

S. RABINOWITZ.
MANUSKATE.

No. 581,563.

Patented Apr. 27, 1897.



WITNESSES:

John Buckler,
C. Gersh.

INVENTOR

Samuel Rabinowitz,
BY Edgar Tate & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL RABINOWITZ, OF HOUTZDALE, PENNSYLVANIA.

MANUSKATE.

SPECIFICATION forming part of Letters Patent No. 581,563, dated April 27, 1897.

Application filed November 27, 1895. Serial No. 570,271. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL RABINOWITZ, a citizen of the United States, and a resident of Houtzdale, in the county of Clearfield and State of Pennsylvania, have invented certain new and useful Improvements in Manuskates, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to skating and sleighing devices; and the object thereof is to provide an article which combines the qualities of both and which I call a "manuskate," a further object being to provide a device of this class which is simple in construction and operation and comparatively inexpensive and which is adapted for use principally upon ice or frozen snow.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of my improvement, and Fig. 2 a rear end view.

In the practice of my invention I provide a frame comprising a skate or runner A, a forward vertical standard B, and a rear upwardly and forwardly directed brace C, and the standard B and the brace C are united by a bar D, which extends parallel with the skate or runner and which extends forward of the standard B and is provided with an upwardly-directed arm or extension *d*, at the top of which is a cross-head E, in which is mounted a handle-bar or shaft F, each end of which is provided with a crank G, to which is secured a handle *g*, and mounted on the handle-bar or shaft F is a sprocket-wheel K.

Projecting forwardly and in line with the skate or runner A is a bar L, the rear end of which is secured to the standard B at the predetermined distance before the skate or runner A, and extending downwardly from said bar L is a brace M, the lower end of which is secured to the skate or runner, and said bar is also provided with a similar brace *m*, which is secured to the forward end of the skate or runner, which is upwardly curved at this point, as shown at *m'*.

The forward end of the bar L is divided or forked at L', and mounted in the forward end

of said fork is an axle O, on which is mounted a tubular head or hub O², provided with a sprocket-wheel O³, and extending from the cross-head E, in which the handle-bar or shaft F is mounted, is a rod or bar P, which is divided or forked at P', and the lower end of said fork also connects with the shaft O, and an ordinary drive-chain R is mounted on the sprocket-wheels K and O³, and secured to the hub or tubular head O² is a segmental or semicircular steel band S, which is connected with said hub or head by a radial arm S'.

I also provide an ordinary seat T, which is preferably similar to that employed on bicycles, and mounted transversely of the standard B and the brace M is a pivotally-supported cross-bar U, the ends of which are preferably provided with depending portions W, and said cross-bar U is adapted to serve as a support for the feet and also to assist in supporting the device when in operation and in maintaining the same in a vertical position.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings.

The segmental or semicircular band S is provided with teeth or projections on its outer surface and is adapted to be revolved on the shaft or axle O by means of the drive-chain R and the handle-bar or shaft F, the latter of which is adapted to be operated by hand, as will be readily understood.

In practice the party operating the device is seated upon the seat T, and placing his feet upon the cross-bar U, which is pivotally supported, as hereinbefore described, operates the shaft F by means of the cranks G and handles *g*, so as to revolve or turn the segmental or semicircular plate S. In the revolution of this plate it comes in contact with the ice or frozen surface and pulls the machine forward, as will be readily understood, and in this operation said segmental plate revolves between the forked ends of the bars or rods L and P.

By depressing the pivoted cross-bar U, by which the feet are supported on either side, the skate can be turned in either direction, as will be readily understood by those familiar with the operation of this class of devices. When the depending portion W is brought in

contact with the ice on one side, the skate will be turned in that direction, and when brought in contact with the ice on the opposite side the skate will be similarly turned, and it will
 5 be also understood that this device may be used to support the skate and hold it in a vertical or substantially vertical position simply by pressing the same in contact with the ice on one side.

10 The bottom of the runner A is preferably convex in cross-section, and the segmental or circular plate S may be formed into a complete wheel, if desired, though a semicircular toothed band or plate is to be preferred in
 15 this machine as a propeller for the reason that when it encounters an obstruction it will bend and pass it without raising the front end of the machine, as a circular propeller would do, and for the further reason that such
 20 a propeller will allow the machine to run by reason of its momentum after the propeller has been operated by simply holding the latter in an upward position, an operation which would be impossible with any other form of
 25 propeller.

It is evident that other changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its
 30 advantages, and, if preferred, I may provide two runners A and thus form a safer and more staple machine.

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

1. In a skating device, the combination of a runner, a vertical frame connected therewith and supported thereby, and provided with a forwardly-directed fork, a sprocket-
 40 wheel mounted thereon, a segmental or semicircular plate connected with said sprocket-wheel and provided with teeth or projections on its outer surface, a sprocket-wheel supported on the upper part of the frame, a
 45 drive-chain connecting said sprocket-wheels and means for operating the same, substantially as shown and described.

2. In a skating device, the combination with a runner, of a vertical frame connected therewith, and supported thereby, a sprocket-
 50 wheel mounted in the forward portion of the runner-frame, a transverse shaft mounted in the upper part of said frame, cranks secured to the ends of said transverse shaft, and pro-
 55 vided with handles, a semicircular or segmental plate mounted on the shaft in the forward portion of the runner-frame, a sprocket-chain

connected with the sprocket-wheel of the transverse shaft, and the sprocket-wheel of the shaft mounted on the forward portion of
 60 the frame, said segmental plate being provided with teeth or projections whereby the sprocket-wheel on the transverse shaft may be operated by the cranks, and handles secured to the ends of said shaft to rotate the
 65 sprocket-wheel on the shaft mounted in the forward part of the frame, substantially as described.

3. In a skating device, the combination of a runner, a vertical frame connected therewith and supported thereby, and provided with a forwardly-directed fork, a sprocket-
 70 wheel mounted thereon, a segmental or semicircular plate connected with said sprocket-wheel and provided with teeth or projections
 75 on its outer surface, a sprocket-wheel supported on the upper part of the frame, a drive-chain connecting said sprocket-wheel and means for operating the same, consisting of a handle-bar or shaft on which the upper
 80 sprocket-wheel is mounted, and crank-shafts connected therewith, said frame being also provided with a seat and with a cross-bar near the bottom thereof, which is pivotally
 85 supported, and serves as a support for the feet, substantially as shown and described.

4. In a skating device, the combination of a runner, a vertical frame connected therewith and supported thereby, and provided with a forwardly-directed fork, a sprocket-
 90 wheel mounted thereon, a segmental or semicircular plate connected with said sprocket-wheel and provided with teeth or projections on its outer surface, a sprocket-wheel supported on the upper part of the frame, a drive-
 95 chain connecting said sprocket-wheel and means for operating the same, consisting of a handle-bar or shaft on which the upper sprocket-wheel is mounted, and crank-shafts connected therewith, said frame being also
 100 provided with a seat and with a cross-bar near the bottom thereof, which is pivotally supported, and serves as a support for the feet, said cross-bar being provided at its ends with downwardly-directed portions, substan-
 105 tially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 20th day of November, 1895.

SAMUEL RABINOWITZ.

Witnesses:

GRIER FLYNN,
 J. A. GLEASON.