

S. N. STEWART.
Sleds.

No. 148,257.

Patented March 3, 1874.

Fig. 1.

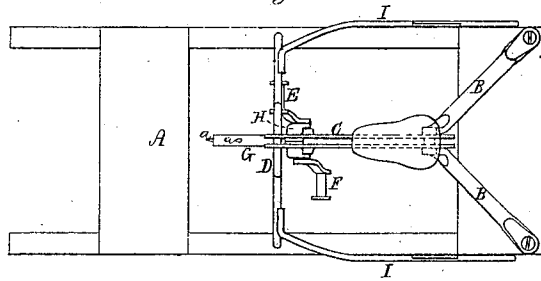


Fig. 2.

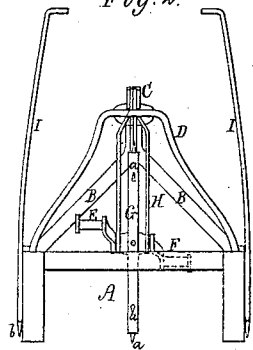
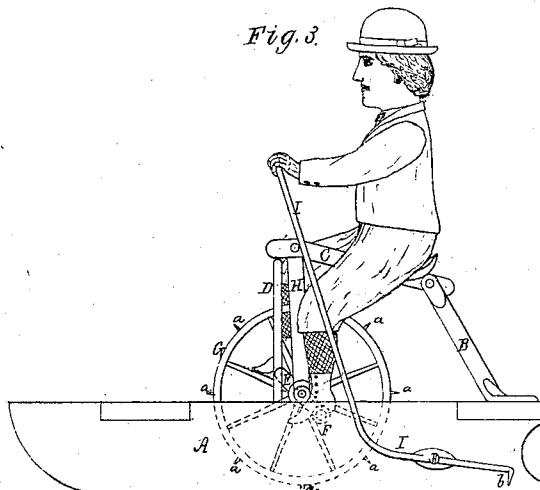


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

SYLVESTER N. STEWART, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN SLEDS.

Specification forming part of Letters Patent No. **148,257**, dated March 3, 1874; application filed August 20, 1873.

To all whom it may concern:

Be it known that I, SYLVESTER N. STEWART, of Minneapolis, of the county of Hennepin, of the State of Minnesota, have invented what I term a "Traineaupepe," or combination of a sled or sledge and mechanism for propelling and steering it by the hands and feet of a person; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a front elevation, and Fig. 3 a side elevation, of it, an operative or person being shown in the latter figure as seated upon the saddle-arm, with his feet upon the operative cranks, and his hands hold of the guide or steering levers, to be hereinafter described.

In such drawings, A denotes a sled, sledge, or set of runners, provided with the inclined standards B B, erected upon such at its rear part, and arranged as shown. There is pivoted to such standards at their upper parts, so as to be capable of being turned up or down vertically, a saddle-bar, C, which, near its front end, rests on the crown of an arched bar, D, erected on the sledge. The bar C may be provided with a saddle or seat for a person to sit upon astraddle of the bar, in which case his feet are to rest on two cranks, E F, of the shaft of a propelling-wheel, G. The shaft of such wheel is supported within a fork, H, which straddles the wheel and extends down from the saddle-bar. From the periphery of the wheel a series of teeth or spurs, *a a*, are projected, as shown. These teeth or spurs, when the wheel is put in revolution by the rider, are to take into the surface of the ice or snow, in order to enable the sledge to be propelled forward thereon. Two steering or guide levers, I I, shaped as shown, are pivoted to opposite runners of the sledge, and at their upper parts are provided with handles to be grasped by the hands of the rider. Each of such levers has a tooth, *b*, extended down from its rear end, in manner as shown in Fig. 3. By means of such toothed levers the traineaupepe may be checked in velocity, or stopped, or have its course changed, as may be desirable.

Should the wheel meet an obstruction, the

saddle-bar will be raised off the arched bar without causing a corresponding elevation of the sledge.

In practice, the periphery of the wheel is not to touch the ice, the spurs of such periphery only being in contact with it.

The wheel, like that of a velocipede, is provided with cranks, whereby it may be revolved by the rider.

I do not claim a sled provided with devices as represented in either of the United States Patents 65,633, 139,621.

In my traineaupepe the propelling-wheel is provided with mechanism by which it can be revolved by the legs of the rider, while his hands are applied to the steering and stopping levers. Therefore, my propelling apparatus differs essentially from any shown in said Patent 65,633. Furthermore, instead of a hooked lever arranged in the middle of the sled, I use two hooked levers applied to its opposite sides, whereby such levers can be made to perform the functions of steering, as well as stopping or arresting the sled while in motion. Furthermore, the saddle-bar C is pivoted to its back standard B B, and simply rests on the top of the arch D, whereby the propelling mechanism can move up and down independently of the sled, and for the purpose hereinbefore stated.

I would further remark that I do not claim any thing or combination of parts shown or described in either of the United States Patents Nos. 98,474, 98,657, or 123,571.

In my traineaupepe the person, by sitting upon the saddle-bar, causes his weight to operate to press the driving-wheel into contact with the ground, whereas such is not the case in either of the sleds shown in the Patents 98,474, 98,657. Although in Patent 123,571 the driving-wheels of the velocipede are forced down upon the ground by the weight of the driver, and such is so with most velocipedes, yet there is no sled in connection with the driving-wheels and the saddle-bar, as in my combination of parts; nor is there any supporting arch or device like the arch D, as used in my combination with the movable seat-bar.

There is not only in the sleds of the afore-said patents no movable saddle-bar connected with the sled and driving-wheel, as in my

traineaupede, but no toothed guide-levers arranged with the parts as, and to operate as such do, in my sled.

What I claim as my invention is as follows, viz:

1. The driving-wheel G, cranks E F, and seat or saddle-bar C, combined with the sled A, all substantially as specified.
2. The stationary standards B B, the sad-

dle-bar C pivoted thereto, the supporting-arch D, the driving-wheel G, cranks E F, and the sled A, combined to operate substantially as specified.

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Witnesses:

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