

C. W. STENGEL & E. T. WITCHEL.

ICE BRAKE FOR SLEDS.

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1,035,650.

Patented Aug. 13, 1912.

Fig. 1.

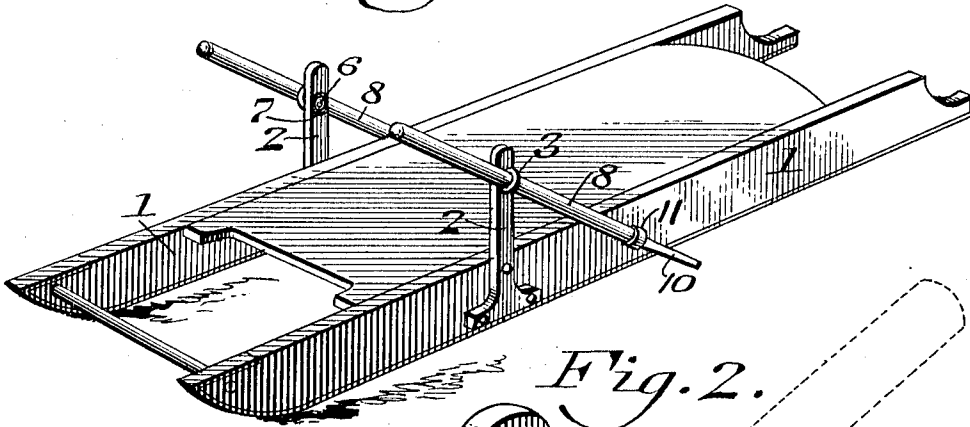


Fig. 2.

Fig. 3.

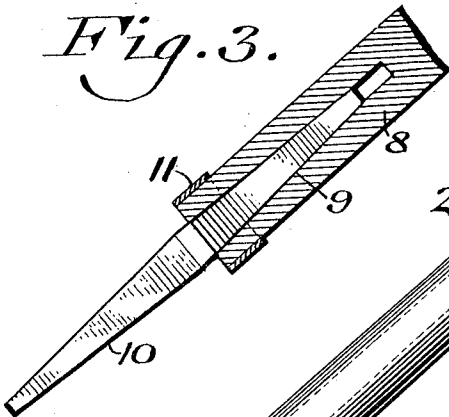
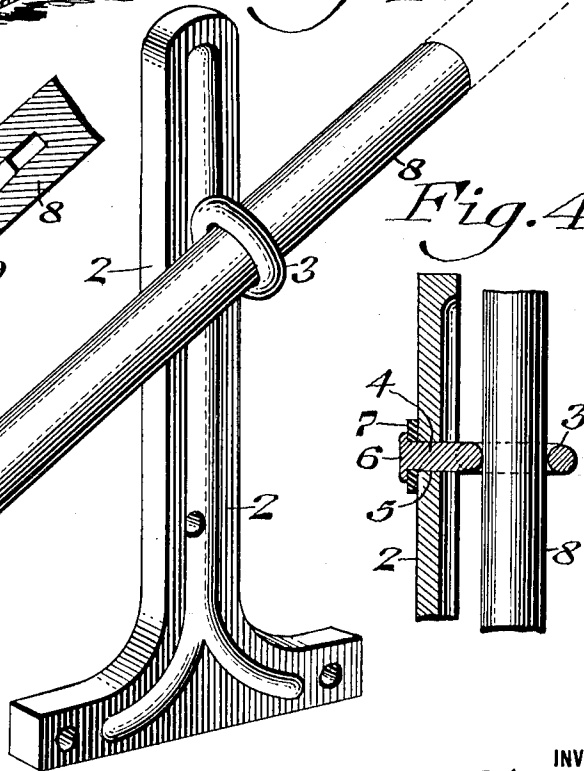


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES W. STENGEL AND EVAN T. WITCHEL, OF PHILADELPHIA, PENNSYLVANIA.

ICE-BRAKE FOR SLEDS.

1,035,650.

Specification of Letters Patent.

Patented Aug. 13, 1912.

Application filed March 19, 1912. Serial No. 684,677.

To all whom it may concern:

Be it known that we, CHARLES W. STENGEL and EVAN T. WITCHEL, both citizens of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Ice-Brake for Sleds, of which the following is a specification.

Our invention consists of a sled-brake which may be attached to any sled of ordinary construction and be employed for checking the speed of a sled in coasting or otherwise sliding freely, for stopping the sled, steering the same, and for starting and propelling the sled.

It further consists in providing a swiveled support for the brake staffs.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a perspective view of an ordinary coaster sled provided with our improved brake. Fig. 2 represents a perspective view of the bracket, swiveled ring and brake-staff. Fig. 3 represents a section of the brake-staff. Fig. 4 represents a section of the bracket, illustrating the manner of supporting the swiveled ring for the brake-staff.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, the reference numerals 1 indicate the runners of a sled of the usual coaster-type. T-shaped brackets, 2, are vertically secured to the outsides of said runners, and rings, 3, having shanks, 4, are swiveled upon said shanks in holes, 5, in the brackets, the ends of said shanks being upset to form heads, 6, bearing against washers, 7. Staffs, 8, fit to slide in said rings, and have tapering bores 9, in their ends. A double-pointed spur, 10, of double pyramidal shape, or otherwise tapering to-

ward both ends, has one tapering portion fitted into the tapering bore of each staff, and a ferrule, 11, fits on the end of the staff. It will be noted that the brackets are rigidly secured to the sled to extend above the seat thereof, and that the rings are swiveled in the brackets at a fixed point above and with respect to the seat of the sled, in order to provide that the fulcrum of the staff is at a fixed ratio with respect to said seat. The points or spurs may be brought to bear against the ice or snow while the sled is traveling, and the sled may thus be checked or stopped, or one of the staffs may be applied at one side of the sled to check the same on one side and thus turn the same toward that side. Besides braking and steering the sled, the staffs may also be used for propelling the sled by pushing upon the staffs or by oscillating the same—the longitudinal play of the staffs in the rings and the swing of the staffs in a vertical plane, owing to the shanks of the rings rocking on a horizontal axis, allowing said staffs to be pushed rearward in vertical planes to push the sled forward.

When the points of the spurs become worn, the spurs may be removed and reversed, and the worn ends inserted into the bores, wedging in the same, when the spurs will be held in place and present new and sharp points.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent, is:—

A sled-braking, propelling and steering device, comprising an upright bracket adapted to be rigidly secured to the side of a sled to extend above its seat, a ring having a shank horizontally swiveled in such bracket and above the seat of the sled, and a staff provided with a spur at one end and having longitudinal play in said ring, whereby the staff is movable in a vertical plane longitudinal to the sled.

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Witnesses:

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