Mar. 27, 1923. 1,449,916

N. SCRIPA

HAND SLED PROPELLER

Filed July 26, 1921

Fig. 1.

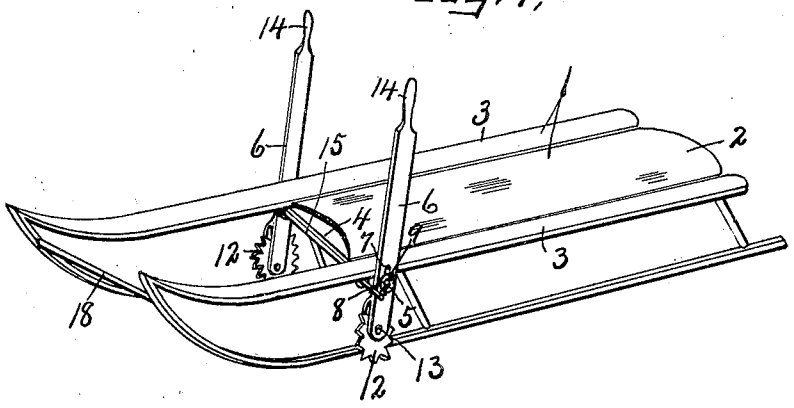



Fig. 2.

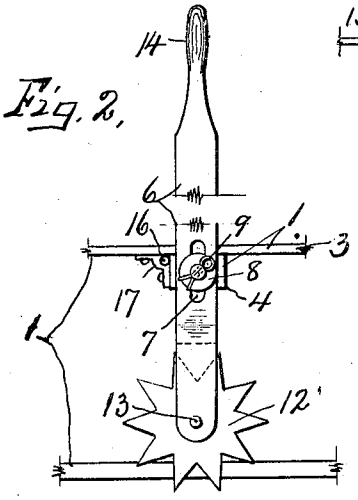
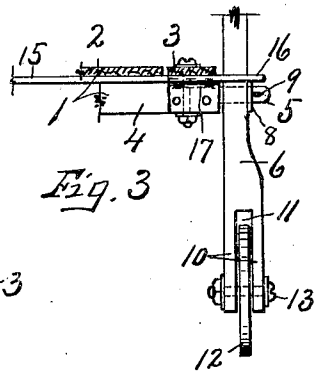



Fig. 3




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# UNITED STATES PATENT OFFICE.

NICHOLAS SCRIPA, OF SYRACUSE, NEW YORK.

## HAND-SLED PROPELLER.

Application filed July 26, 1921. Serial No. 487,597.

*To all whom it may concern:*

Be it known that I, NICHOLAS SCRIPA, a subject of the King of Italy, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Hand-Sled Propellers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to hand-sled propellers involving the use of a pair of levers pivoted to opposite ends of a cross-bar near the front end of the seat of the sled with a vertical lost motion and provided at its lower end with star wheels for engagement along the surface to which the sled is adapted to be moved as the levers are operated by hand for propelling and steering the sled.

The main object is to enable either of the levers to be operated independently of the other or both simultaneously for steering, propelling and braking purposes so that the user may have entire control of all movements of the sled without leaving the seat.

Another object is to enable the snow or ice engaging members to rotate freely upon the levers and to be brought into engagement with said surface with the rolling contact, the pressure of which may be varied at will by the operator through the medium of the independent vertical movement of the levers on their respective bearings.

Another object is to provide stops for limiting the forward movement on the upper ends of the levers and against which said levers may rest when coasting ready for use at any time when it is necessary to operate the levers as brakes, the rolling motion of the star wheels serving to prevent undue strains on the teeth or levers.

Other objects and uses relating to specific parts of the device will be brought out in the following description:

In the drawings:

Fig. 1 is a perspective view of a hand-sled and my improved impelling guide and braking device thereon.

Fig. 2 is an enlarged side elevation of one of the propelling devices and adjacent portions of the frame of the sled.

Fig. 3 is a front face view of a portion of the device shown in Fig. 1.

The hand-sled as —1— may be of any desired construction having the usual seat —2— and side rails —3—. A cross-bar —4— is rigidly secured to the side rails —3— directly under the front end of the seat —2— and is provided at its ends with cylindrical bearing-members or dowels —5— and projecting some distance beyond the outer edges of the side rails —3— for receiving and supporting a pair of hand-levers —6—.

The hand-levers are substantially identical and interchangeable and are provided intermediate their ends with vertically elongated slots —7— for receiving the dowels —5—, said levers being held in place by washers —8— and cotter pins —9—. The lower end of each lever is forked at —10— to form a slot —11— in which is rotatably mounted a star wheel —12—, the latter being centrally journaled upon the lower ends of the opposite arms of the fork by means of a pivotal bolt or bearing —13— which is passed through both arms and also through an opening in the center of the wheel —12—.

The upper end of the lever —6— projects some distance above the level of the seat —1— and side rails —3— and terminates in handles —14— by which the levers may be manipulated forwardly and rearwardly about the horizontal axes of the dowels —5— which are parallel with the bearing pins —13— for the wheels —12—.

A stop-bar —15— is rigidly secured by brackets —16— to the under side of the side rails —3— directly in front of the levers —6— and in a horizontal plane slightly above the studs —5— for limiting the forward movement of the upper ends of the levers or the rearward movement of the lower ends of said levers and their star wheels —12—, thus permitting said wheel to trail along the snow or ice surface when the sled is coasting with the handles gripped by the user ready to be drawn rearwardly to thrust the star wheels against the snow or ice for braking purposes when necessary.

The levers may be operated simultaneously to propel the vehicle forwardly or backwardly or either lever may be operated independently of the other or both simultaneously in reverse directions for steering or driving purposes or either lever may be pressed downwardly and the other raised also for steering purposes so that the levers have a wide range of uses in affecting any movement of the sled that may be desired while the operator may sit firmly on the seat with the feet resting against a front cross-bar —16— clear from the surface over which the sled is traveling.

What I claim is:

In combination with a hand-sled having a seat and opposite lengthwise side rails, a cross-bar secured to the under side of the side rails near the front end of the seat and having its opposite ends provided with journaled bearings projecting beyond the outer edges of the side rails, hand levers fulcrumed intermediate their ends upon said bearings and having their upper ends provided with handles some distance above the seat, star wheels journaled on the lower ends of the levers for engaging the surface over which the sled is adapted to travel, and stops secured to the frame of the sled and projecting into the path of movement of the upper ends of the levers above the bearing therefor to limit the forward movement of the upper ends of said levers.

In witness whereof I have hereunto set my hand this 21st day of July 1921.

NICHOLAS SCRIPA.

Witnesses:
H. E. CHASE,
M. R. COOKE.