March 7, 1933. J. E. VALIQUETTE 1,900,315

MOTOR SLED

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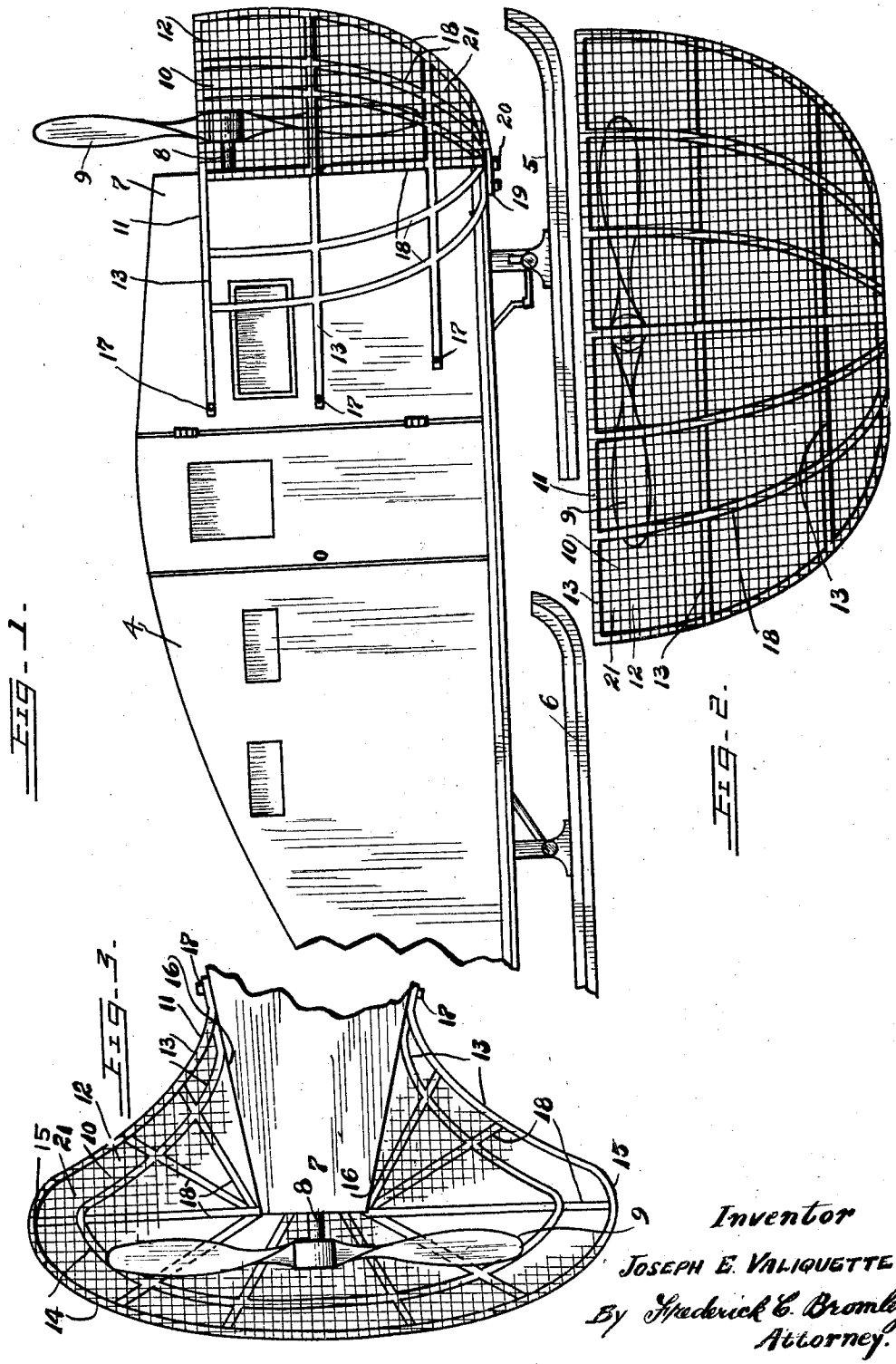


Fig. 1.

Fig. 2.

Fig. 3.

Inventor
JOSEPH E. VALIQUETTE
By Frederick C. Bromley
Attorney.

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UNITED STATES PATENT OFFICE

JOSEPH E. VALIQUETTE, OF WEBBWOOD, ONTARIO, CANADA

MOTOR SLED

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The invention relates to improvements in motor sleds as described in the present specification and shown in the accompanying drawing which forms part of the same.

The invention appertains to the class of motor sled in which the propulsion means consists of a motor driven propeller, and the primary object of the invention is to produce a highly practical and efficient guard or shield for the propeller in order not only to protect it against damage but more essentially to preclude its striking anyone whilst in motion.

Referring to the drawing, Figure 1 is a side elevation of a motor sled embodying the present invention.

Figure 2 is a front view of the guard or shield and the propeller.

Figure 3 is a plan view illustrating the manner in which the guard or shield surrounds the propeller and the nose of the sled body.

Like numerals of reference indicate corresponding parts in each of the figures throughout the drawing.

In the drawing, the reference numeral 4 generally denotes the sled body, which is carried upon the sleighs 5 and 6, the front sleigh of which is dirigible in well known manner. The body 4 may be of any particular shape or design and that shown in the drawing is intended for passenger service, the interior being equipped for this purpose.

The frontal end is preferably fashioned into a tapered nose 7 that houses the motor, from which the shaft 8 forwardly extends. The propeller 9 is secured upon the projecting terminus of the said shaft in order to pull the vehicle over snow or ice.

The guard or shield 10 is composed of a substantial skeleton frame 11 covered by a reticulate surface 12 so as to present but little air resistance.

Said frame is constructed of metal bars preferably of steel tubing suitably secured at the junctures by rivets, welding or the like; the bars being attached to the body by bolts or analogous fastening means.

The horizontal bars 13, three in number, are bellied in front of the propeller, as at 14, so as to curve laterally beyond the same to the bights 15, from which they curve inwardly and rearwardly to meet the sides 16, 16, of the nose 7. They are there secured by the bolts 17. These horizontal bars are spaced one above another and increase in length between the bights 15 one over the other from the bottom of the guard upwards, the uppermost bar being located above the propeller axis.

The horizontal bars are joined to a series of upwardly directed bars 18 that radiate from the bottom of the nose 7. These latter arcuate bars curve outwardly and upwardly from their lowest termini 19 where they are secured by the fastening elements 20 to the bottom of the sled body.

This framework is covered as at 21 with a wire screening preferably of a very coarse mesh, which screening is attached in conventional manner to the bars.

The reticulate surface need not necessarily extend over the rear portion of the framework.

It will be seen that the guard curves upwardly not only directly in front of the propeller but also laterally of it and extends to and above its axis, thus protecting the propeller at the front and sides; the encompassing guard is sturdy in construction and light in weight.

What I claim is:—

1. A guard or shield for a propeller of a motor sled having a nose of a substantially lesser width than the length of the propeller, said guard or shield consisting of a series of horizontal bars bellied in front of the propeller so as to curve laterally beyond the same to bights from which the bars are curved inwardly and rearwardly to meet the sides of the aforesaid nose of the sled body, a plurality of upwardly directed bars radiating outwardly and upwardly from the bottom of the said nose and joined to the said horizontal bars at the intersecting points, and a reticulate member covering the framework of the bars.

2. A guard or shield for a propeller of a motor sled having a nose of a substantially lesser width than the length of the propeller,

said guard or shield consisting of a series of horizontal bars bellied in front of the propeller so as to curve laterally beyond the same to bights from which the bars are curved inwardly and rearwardly to meet the sides of the aforesaid nose of the sled body, said horizontal bars being spaced one above another and increased in length between the aforesaid bights, one over the other from the bottom of the guard upwards, a plurality of upwardly directed bars radiating outwardly and upwardly from the bottom of the said nose and joined to the said horizontal bars at the intersecting points, and a reticulate member covering the framework of bars.

Signed at Sault Ste. Marie, Ontario, at Canada, this 12th of March, 1932.

JOSEPH E. VALIQUETTE.