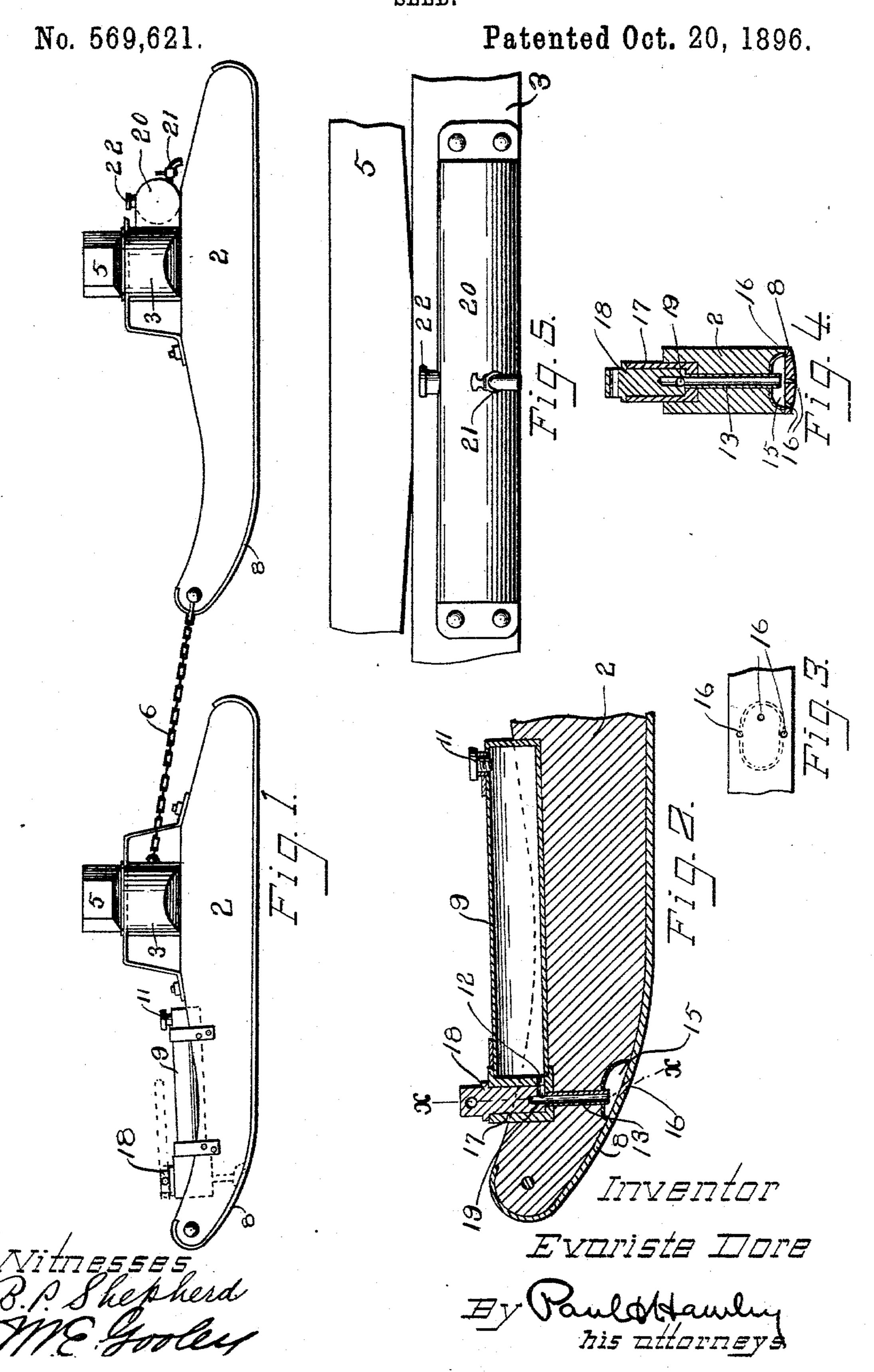
E. DORE.
SLED.



## United States Patent Office.

EVARISTE DORE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO ANTHONY CHOUINARD, OF SAME PLACE.

SPECIFICATION forming part of Letters Patent No. 569,621, dated October 20, 1896.

Application filed May 13, 1896. Serial No. 591,448. (No model.)

To all whom it may concern:

Be it known that I, EVARISTE DORE, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and 5 useful Improvements in Sleds, of which the

following is a specification.

This invention relates to improvements in sleds designed especially for use as loggingsleds, though applicable also to sleds designed 10 for other purposes; and the object I have in view is to provide a sled with means for applying oil to the shoes for the purpose of reducing friction; and the invention consists generally in the constructions and combina-15 tions hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a sled embodying my invention. 20 Fig. 2 is a vertical section of a front part of one of the runners, showing the oil-applying device connected therewith. Fig. 3 is an under side view of a portion of the shoe. Fig. 4 is a transverse section on line x x of Fig. 2. 25 Fig. 5 is a rear view of one of the cross-bars, showing the manner of applying the oil-res-

ervoir thereto.

In the drawings, 2 represents the runner of an ordinary logging-sled, 3 the cross-bar, and 30 5 the pivoted rocker thereon. The sled here shown consists of the two short sleds connected together by suitable chains 6. For the purpose of applying oil to the shoe 8 I arrange upon the top of the runner 2, and preferably 35 partially depressed therein, an oil tank or receptacle 9, which is preferably arranged so as to tip or be inclined toward the forward end of the sled when the sled is on a level surface. The receptacle is preferably pro-40 vided with the filling-orifice having the plug 11. At the forward end the receptacle is provided with a small hole 12, located at the bottom thereof, which communicates with a vertical pipe 13, extending into the top of a cup 45 or small receptacle 15, arranged just over the shoe 8. Inclined holes 16 are formed in the shoe beneath the cup 15. There are preferably three of these holes, one arranged at the center and one near each side of the shoe, 50 and the holes are preferably rearwardly inclined, so as to prevent them from becoming

filled up as the sled is drawn along over the snow. In front of the receptacle 9 is arranged a circular chamber 17, in which is arranged the plug or valve 18. This plug is provided 55 with a right-angled opening which communicates with the opening 12 and also with the tube 13. By turning the plug this opening 19 may be turned so as not to communicate with the opening 12, or it may be made to 60 partially communicate therewith, according to the position in which the plug is turned. If preferred, the tube 13 may be made a part of the plug and may be made to turn therewith. The plug 18 may be turned by apply- 65 ing a wrench thereto, as indicated by dotted lines in Fig. 1, or by applying a wire or nail

to the opening in the top of said plug.

For the purpose of carrying a supply of oil I prefer to arrange a reservoir 20, which is 70 secured upon the rear of the cross-bar 3 and is provided with a suitable faucet 21 and with a plug 22, so that by removing the plug the reservoir may be filled with oil, which may be drawn out as needed through the faucet 75 21 for the purpose of filling the receptacle 9. The top of the reservoir 20 is below the top of the cross-bar 3, so that the pivoted rocker 5 may turn freely without striking said reservoir. This reservoir may be arranged upon 80 either sled, but upon a logging-sled it would preferably be arranged at the rear of the rear sled. The oiling device may be applied to the rear sled as well as to the forward sled.

The shape of the receptacle and the means 85 for controlling the flow of oil therefrom may be varied without departing from my invention.

I claim as my invention—

1. The combination, with a sled-runner, of 90 an oil-receptacle applied thereto, and means for delivering the oil from said receptacle onto the under surface of the forward end of the runner.

2. The combination, with a sled-runner, 95 having an upturned forward end, of an oilreceptacle applied to said runner, and means for delivering the oil from said receptacle onto the under surface of the upturned forward end of the runner.

3. The combination, with a sled-runner, of an oil-receptacle arranged thereon, means for

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guiding the oil from said receptacle onto the under surface of the forward end of the runner, and means for regulating the flow of oil from said receptacle.

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5 4. The combination, with a sled-runner, provided with a shoe 8, of a cup 15 arranged above said shoe, a series of openings 16 extending from said cup to said shoe, an oilreceptacle carried from said shoe, and means 10 for delivering the oil from said receptacle into said cup, for the purpose specified.

5. The combination, with the sled-runner,

provided with the shoe 8 having the opening 16, the cup 15 arranged above said shoe, the reservoir 9 arranged upon said shoe, and com- 15 municating with said cup, and the regulating plug or valve 18.

In testimony whereof I have hereunto set my hand this 24th day of April, A. D. 1896.

 $ext{EVARISTE} \overset{ ext{mis}}{ imes} ext{DORE}.$ 

In presence of— A. C. PAUL,
RICHARD PAUL.