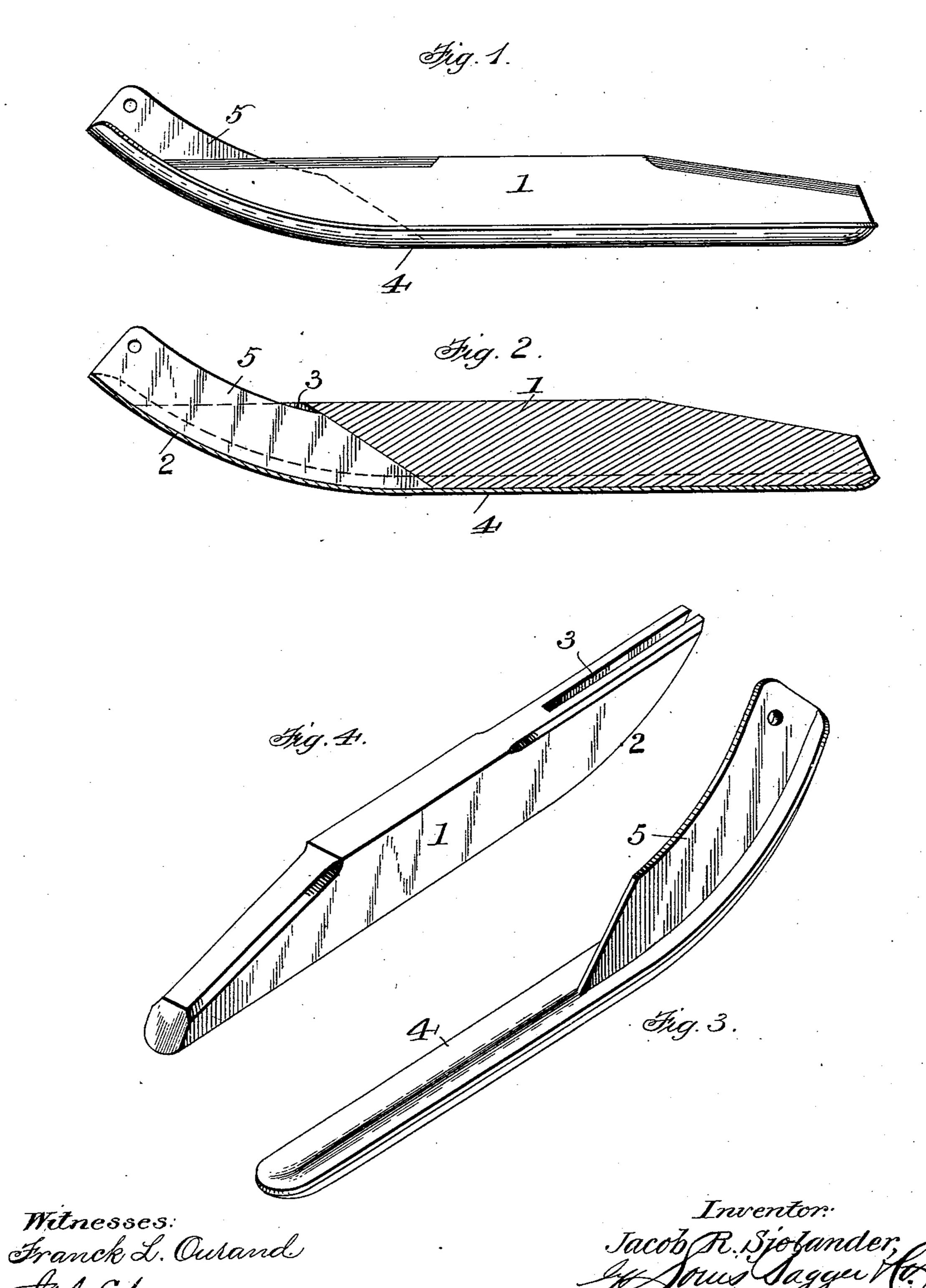
(No Model.)

J. R. SJOLANDER. SLEIGH RUNNER.

No. 569,011.

Patented Oct. 6, 1896.



United States Patent Office.

JACOB R. SJOLANDER, OF IRONWOOD, MICHIGAN.

SLEIGH-RUNNER.

SPECIFICATION forming part of Letters Patent No. 569,011, dated October 6, 1896.

Application filed April 27, 1896. Serial No. 589,277. (No model.)

To all whom it may concern:

Be it known that I, JACOB R. SJOLANDER, a citizen of the United States, and a resident of Ironwood, in the county of Gogebic and 5 State of Michigan, have invented certain new and useful Improvements in Sleighs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 10 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to sleighs, and its ob-15 ject is to provide an improved runner and shoe therefor in which the usual upwardly turned or bent end of the runner is dispensed with, thereby effecting a great saving in the cost of construction and producing a runner 20 and shoe which will be more efficient in use.

The invention consists in the novel construction and combination of parts herein-

after fully described and claimed.

In the accompanying drawings, Figure 1 is 25 a side elevation of a sleigh-runner constructed in accordance with my invention. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a detail perspective view of the shoe detached from the runner. Fig. 4 is a simi-30 lar view of the runner.

In the said drawings the reference-numeral 1 designates the sleigh-runner, the under side of which is made slightly convex and the upper edge flat. The runner at its front end on 35 the under side is rounded, as shown at 2, and is formed with a central rearwardly-extend-

ing slot 3.

The numeral 4 designates the shoe, made of metal and concavo-convex in cross-section, 40 the concave side corresponding with the con-

vex edge of the runner, which fits therein. The front end of the shoe is bent or curved upward, and extends up above the front end of the runner. The shoe is formed with a central rib 5, which engages with the slot in 45 the runner and prevents lateral displacement of the shoe.

A runner and shoe for a sleigh constructed as above will be found to possess important advantages in use. Owing to the runner not 50 being turned upward or bent at the front end it can be manufactured more economically, and will be more efficient than the ordinary runners. The rib at the front of the shoe, while preventing lateral displacement of the 55 shoe, also serves to brace and strengthen it and give the necessary rigidity to the portion of the shoe projecting up above the front end of the runner.

Having thus fully described my invention, 60

what I claim is—

In a sleigh, the combination with the runner the upper side of which extends in a straight horizontal line from the front to near the rear and the under side at the front end 65 curved or rounded and said front end formed with a rearwardly-extending horizontal slot, of the metal shoe having the front end curved upwardly, and formed with a central rib engaging with said slot, and said end and rib 70 projecting up above the front end of the runner, substantially as described.

In testimony that I claim the foregoing as own I have hereunto affixed my signature in

presence of two witnesses.

JACOB R. SJOLANDER.

Witnesses:

OLOF G. ANDERSON, C. A. Olson.