J. C. HAEFER.

SNOW SHOE.

APPLICATION FILED APR. 20, 1910.

982,053. Patented Jan. 17, 1911.

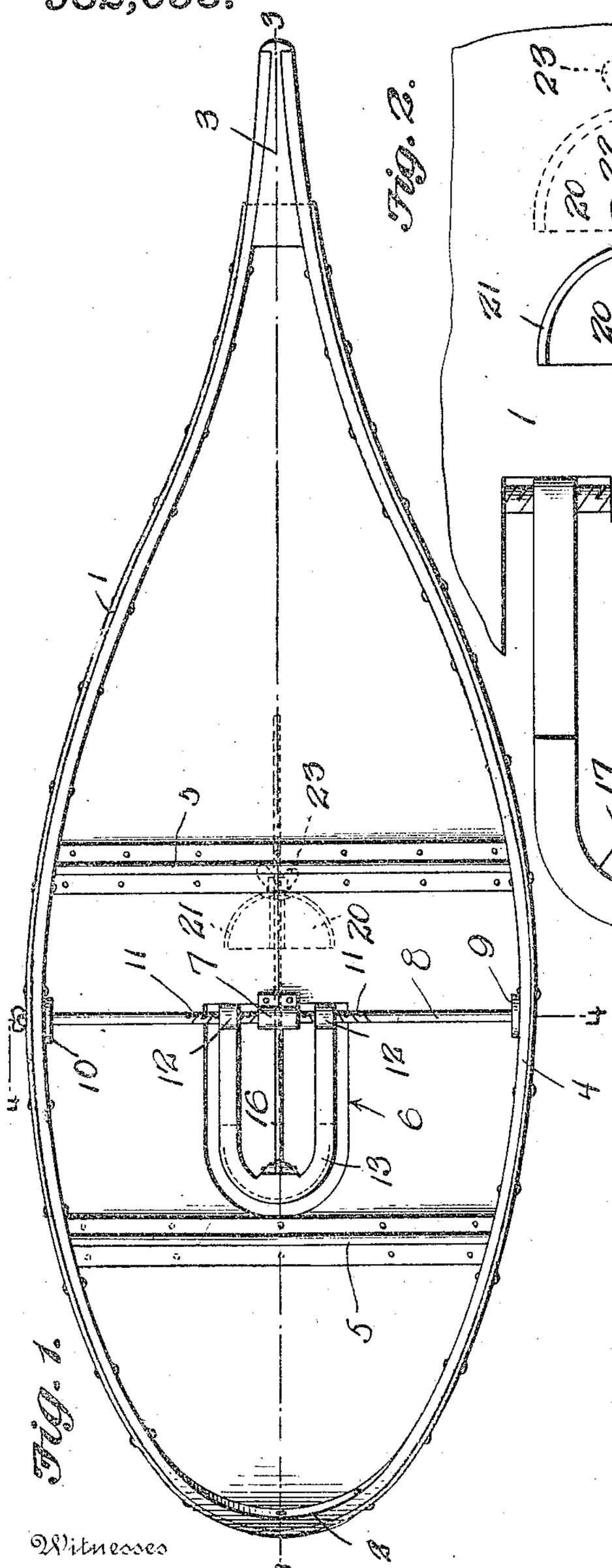

Fig. 1.

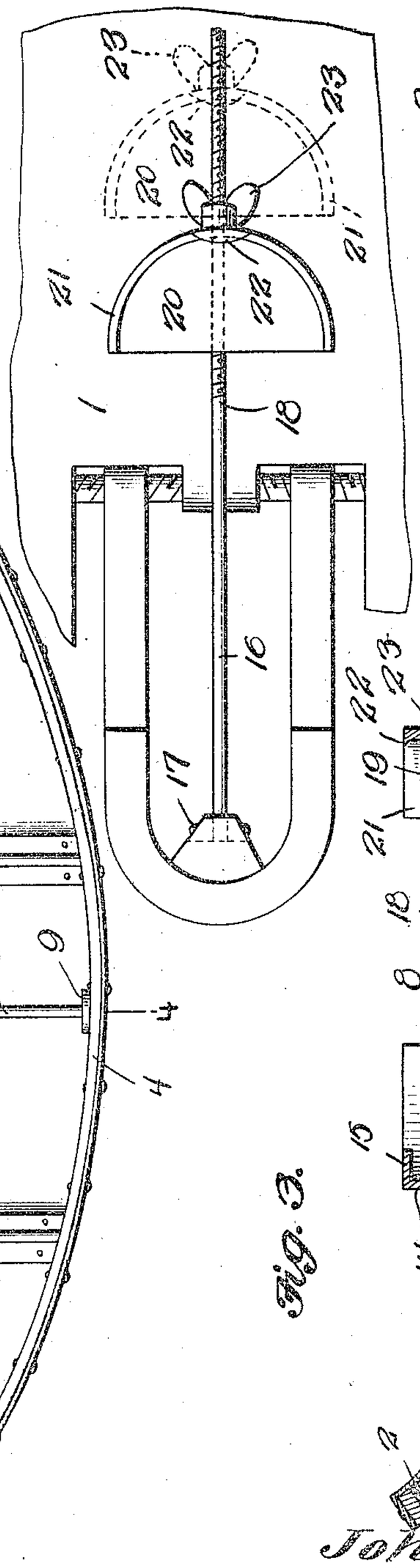

Fig. 2.

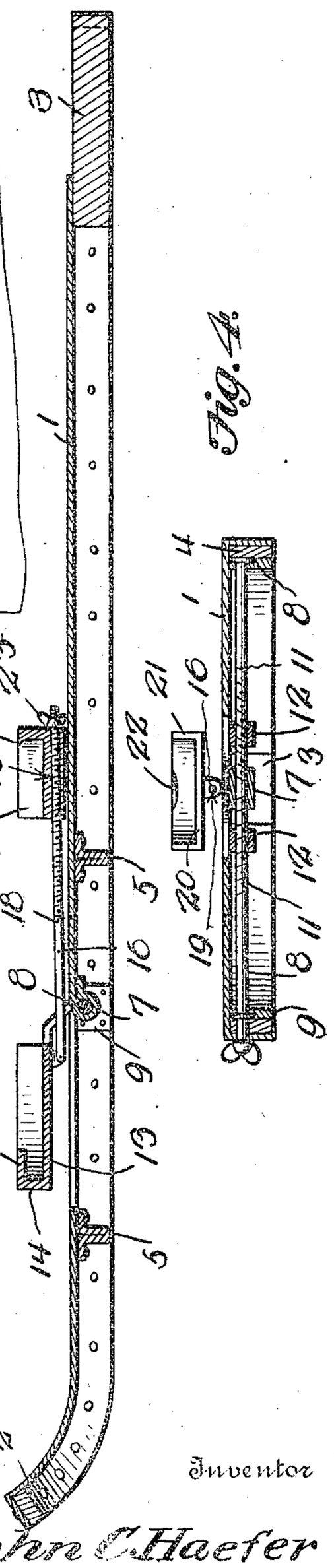

Fig. 3.

Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JOHN C. HAEFER, OF COVE, OREGON.

SNOW-SHOE.

982,053. Specification of Letters Patent. Patented Jan. 17, 1911.

Application filed April 20, 1910. Serial No. 556,644.

To all whom it may concern:

Be it known that I, JOHN C. HAEFER, a citizen of the United States, residing at Cove, in the county of Union and State of Oregon, have invented new and useful Improvements in Snow-Shoes, of which the following is a specification.

This invention relates to improvements in snow shoes and has for its object to provide a snow shoe constructed of some light material, such as aluminum which is not susceptible to changes of climate, and which obviates the necessity of subjecting the shoe to the drying process after the same has been used, as is the case in the ordinary rawhide snow shoe.

Another object of the invention is to provide a snow shoe of this character with a simple means for retaining the said shoe upon the boot of the wearer, the said means being adjustable so as to accommodate the various sizes of boots.

With the above, and other objects in view, which will appear as the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of a snow shoe constructed in accordance with the present invention. Fig. 2 is a partial top plan view of the boot securing device. Fig. 3 is a longitudinal sectional view upon the line 3—3 of Fig. 1. Fig. 4 is a transverse sectional view taken upon the line 4—4 of Fig. 1.

In the accompanying drawings the numeral 1 designates the improved shoe. This shoe is constructed in the form of any ordinary snow shoe, having the curved sides extending from the upturned portion 2 and terminating in the reduced heel 3. The shoe 1, may if desired be constructed entirely of aluminum or some other suitable material which is not susceptible to penetration by water or cold, but in the device illustrated in the drawings the sides of the aluminum top of the device are bent downwardly as clearly illustrated by Figs. 1, 3 and 4 of the drawings. This bent portion may be provided, if desired, with a reinforcement of some suitable wood as designated by the numeral 4, and the spaces between this reinforcement are provided with a plurality of transversely extending bracing members 5. The members 5, are preferably constructed of a single piece of metal bent upon itself to provide the vertically arranged longitudinal member and having its free ends bent in opposite directions to provide offsets having suitable openings adapted for the reception of retaining elements whereby the said braces are effectively connected with the body 1 of the shoe. The body 1 of the snow shoe is provided intermediate the said braces 5 with a central opening designated by the numeral 6. The front wall provided by the opening 6 is preferably curved as illustrated in Fig. 1 of the drawings, while its directly opposite wall is arranged in a parallel plane with the brace members 5. Secured to the under face of the shoe 1 directly central of the opening 6 and projecting thereover, is a collar member 7. This member 7 is adapted to provide a central bearing for a transversely arranged shaft 8. This shaft 8 is mounted within suitable bearings 9 and 10 upon the opposite sides of the reinforcement 4, and if desired the shaft may extend a suitable distance beyond one of the offset sides of the member 1. The central portion of this shaft 8 extended upon either side of the collar 7 is preferably provided with oppositely inclined threads 11 and the said threads are adapted to engage similar threaded eyes 12 provided by a resilient substantially U-shaped toe engaging member 13. This member 13 is provided with a vertical outer wall 14 and an overlying wall 15, so as to provide a suitable pocket which is adapted for the reception of the toe portion of the sole of the boot of the person using the snow shoe.

The numeral 16 designates a centrally arranged longitudinally extending rod which is pivotally connected with the U-shaped member 13 as at 17. This rod 16 has its outer or free end threaded for a suitable distance as at 18, and the said threaded portion is adapted to engage within a threaded bore 19 provided upon the base of the boot heel engaging member 20. This member 20 comprises a flattened base portion, having a semi-circular vertical wall and the central upper portion of the said wall 21 is preferably provided with an inturned lip 22, the latter being adapted to engage the rear portion of the heel of the boot.

The numeral 23 designates a thumb nut which is adapted to engage with the threads 18 of the rods 16 whereby the heel engaging member 20 may be adjusted longitudi-

nally upon the rod 16, and it will be noted that when the heel engaging member 20 is brought toward the boot toe engaging member 13 the lip 22 will indent itself within the heel of the said boot and the wearer will be retained readily upon the snow shoe 1.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided an extremely simple and thoroughly effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope of the following claims may be resorted to if desired, as for instance, the shaft 8 need not of necessity be threaded, nor need the eyes 12 of the member 13, as the said member is constructed of a yieldable material which might readily adapt itself to the toe of a boot without having its arms forced toward or away from each other by the rotation of the shaft 8.

Having thus fully described the invention, what I claim as new is:—

1. In a snow shoe of the class set forth comprising a shoe proper constructed of a single sheet of suitable material, a transverse shaft secured to the shoe, a resilient boot toe engaging element mounted upon the shaft, a heel engaging member pivotally connected with the toe engaging member, and means for longitudinally adjusting the heel engaging member.

2. In a device of the class described, a metallic body member having its sides downwardly offset, a reinforcement for these downwardly extending offsets, transverse reinforcements for the offsets, the body of the member being provided with an opening, a transversely arranged shaft mounted in bearings and underlying the opening, said shaft being centrally provided with oppositely pitched threads a U shaped member having eyes provided with oppositely arranged threads engaging the threads of the shaft, said U-shaped member having its face formed with a pocket, a longitudinally extending rod pivotally connected with the U-shaped member, a semi-cylindrical member slidably mounted upon the rod, said semi-cylindrical member having its curved edge provided with an upstanding wall, a forwardly projecting lip arranged centrally of said wall, and means for adjusting the member longitudinally upon the rod.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN C. HAEFER.

Witnesses:
GEO. O. SCIBIRD,
F. C. ROMAINE.