F. L. GOULD.

TENT.

APPLICATION FILED DEC. 9, 1912. RENEWED SEPT. 12, 1913.

1,079,757.

Patented Nov. 25, 1913.

Fig. 1.

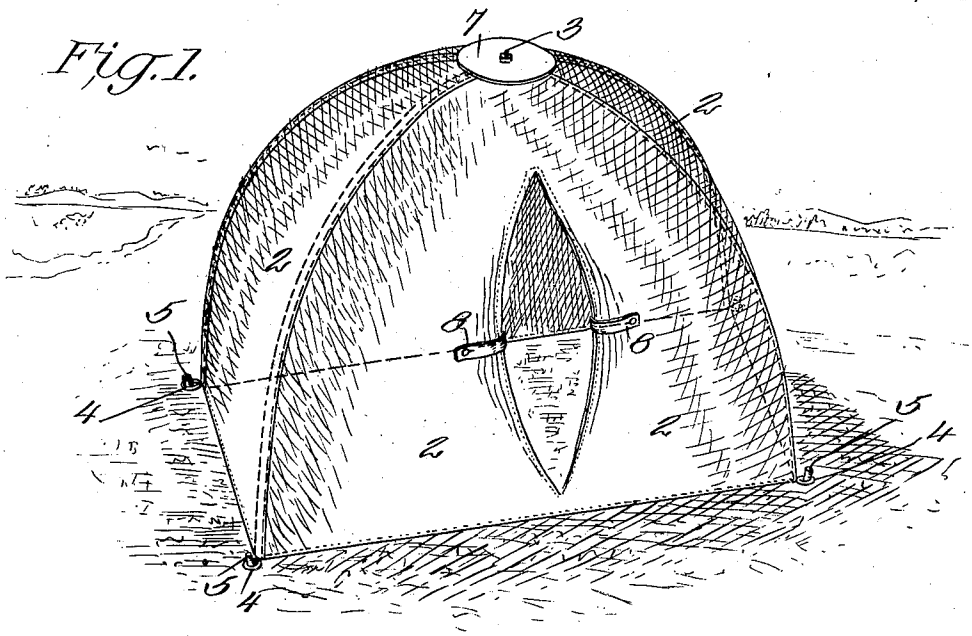

Fig. 2.

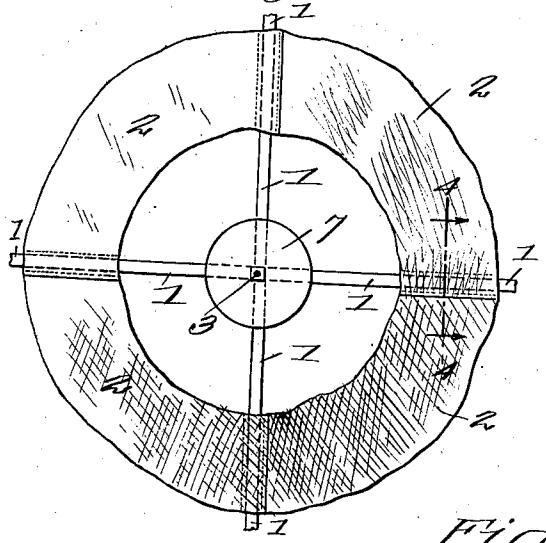

Fig. 3.

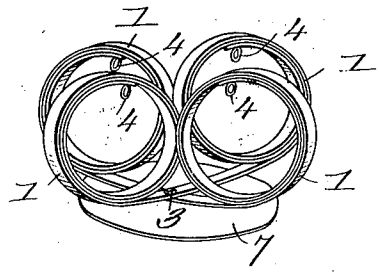

Fig. 4.

WITNESSES

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FRED L. GOULD, OF RENO, NEVADA, ASSIGNOR OF ONE-HALF TO W. I. THOMAS, ONE-TENTH TO CLARA M. KNOX, AND ONE-TENTH TO ROSS PETERSEN, ALL OF RENO, NEVADA.

TENT.

1,079,757. Specification of Letters Patent. Patented Nov. 25, 1913.

Application filed December 9, 1912, Serial No. 735,652. Renewed September 12, 1913. Serial No. 789,541.

To all whom it may concern:

Be it known that I, FRED L. GOULD, a citizen of the United States, and a resident of Reno, in the county of Washoe and State of Nevada, have invented an Improvement in Tents, of which the following is a specification.

My invention is an improvement in that type of tents which are composed of a foldable frame consisting of a series of curved metal ribs and a canvas or other flexible covering secured thereto.

My tent is provided with a frame composed of spring ribs which are self-coiling, and, when extended and set up for use, the ribs form the only support for the canvas covering. In setting up the tent, the outer ends of the ribs are secured to the ground by pins and the ribs then assume the form and rigidity required for supporting the canvas distended in the desired manner; and when the pins are removed, the ribs instantly coil upon themselves and the canvas is rolled up with them, so that the whole occupies small space and is convenient for storage and transportation.

The details of construction and the manner of setting up the tent are as hereinafter described, and illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of the tent set up. Fig. 2 is a plan view of a portion of the tent, the central part of the canvas covering being cut away to show the arrangement and connection of the spring ribs at the top. Fig. 3 is a perspective view of the frame or spring ribs coiled upon themselves as when the tent is not required for use. Fig. 4 is a detail section on the line 4—4 of Fig. 2, showing the arrangement of a spring rib in a pocket formed at the lap of sections of the canvas covering.

In the several figures, 1 indicates the spring ribs constituting the collapsible frame, and 2 indicates the canvas or other flexible covering or canopy which is attached to the ribs as hereinafter described. The ribs are preferably formed of narrow flat steel strips and are secured together by a bolt 3 at their intersection which is at the middle of their length. The free or terminal portions of the ribs normally coil upon themselves, as indicated in Fig. 3, the inner sides of the several coils abutting or converging to a common center, and in the position thus assumed occupy comparatively small space. The ends of the springs are provided with rings 4 through which pins 5 are inserted and driven into the ground for securing the ribs to the latter when uncoiled and distended so as to stretch the covering or canopy 2, as shown in Fig. 1. The latter is formed of four sections whose side edges are overlapped and secured together, as indicated in Fig. 4, a long pocket 6 being formed between them to receive one of the ribs 1.

In further explanation of the invention, it may be stated that when the tent is set up, each rib is approximately in the form of a half circle, and, if four ribs only are employed, the base of the tent is necessarily square; but, of course, with the use of a greater number of ribs, the form of the base of the tent would be changed correspondingly.

The covering or canopy 2 is so constructed that when the ribs are uncoiled or distended and their extremities fastened to the ground at the extreme limits allowed by the covering, the latter is drawn taut at every point and will hold the ribs to the half-circle shape, so that the tent is a comparatively rigid structure and adapted to withstand a good degree of wind pressure.

The tent may be quickly erected, and it is obvious that, upon withdrawing the pins 5, the springs collapse or coil automatically and thus roll up the covering at the same time. The springs and covering together in the collapsed form occupy comparatively small space so that the tent may be conveniently stored or transported.

A sheet metal disk 7 may be applied at the apex of the tent as a guard or protector at that point.

The tent may have an opening in one or more sides, and loops 8 may be employed for holding the tent distended at the sides of the opening.

What I claim is:—

1. A spring frame for a collapsible tent formed of a series of springs radiating from a point where they are secured together centrally, and forming normally, or in their collapsed condition, circular coils whose inner sides converge to a common center, as described.

2. A collapsible tent formed of a series of spring ribs secured together at the middle of their length, their free portions tending to coil inward upon themselves and provided at their extremities with rings for the reception of pins for securing them to the ground and holding the frame distended, and a canvas covering secured to the ribs at equidistant points, as described.

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Witnesses:
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