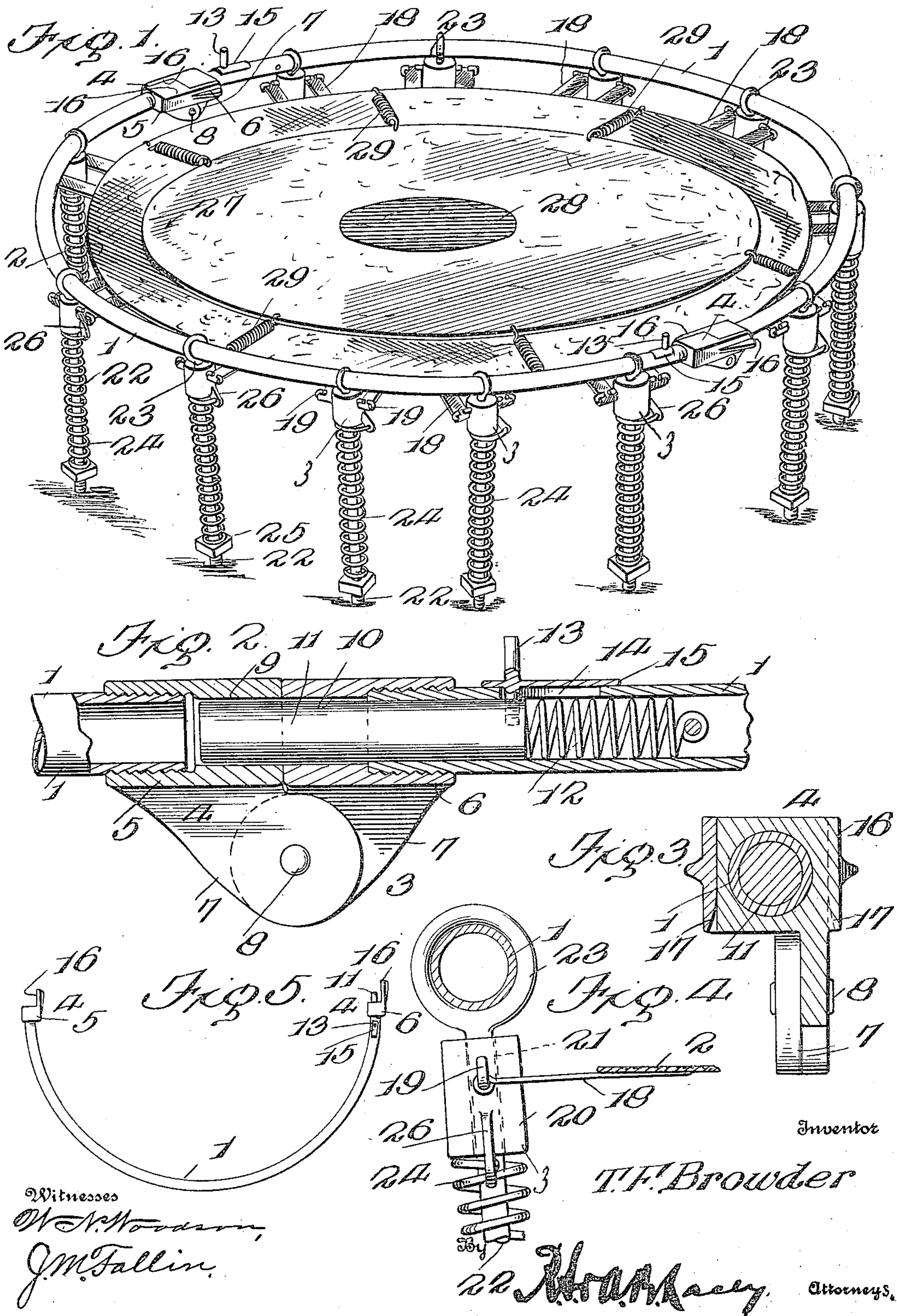


T. F. BROWDER.
LIFE SAVING MACHINE.
APPLICATION FILED APR. 5, 1909.

952,871.

Patented Mar. 22, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS F. BROWDER, OF GREENFIELD, OHIO.

LIFE-SAVING MACHINE.

952,871.

Specification of Letters Patent. Patented Mar. 22, 1910.

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To all whom it may concern:

Be it known that I, THOMAS F. BROWDER, citizen of the United States, residing at Greenfield, in the county of Highland and State of Ohio, have invented certain new and useful Improvements in Life-Saving Machines, of which the following is a specification.

The object of this invention is a simple, durable and efficient construction of life saving machine designed to provide an escape for persons from a burning building by jumping from the windows or other exits when no other safe means of escape presents itself, and relates particularly to an improved construction of frame for a device or apparatus of this character which will insure a rigidity of the parts when the framework is extended, while when not in use the apparatus may be folded into a compact condition and stored away without taking up much room.

The invention also aims to provide an apparatus of this character which will be strong and yet light.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a perspective view of a life saving machine constructed in accordance with my invention; Fig. 2 is a longitudinal sectional view on an enlarged scale of a portion of the framework at the joint; Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2; Fig. 4 is a sectional view through another portion of the frame; and, Fig. 5 is a detail view of one of the frame sections on a reduced scale.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

In its general construction, my improved life saving machine comprises a frame 1, a blanket 2 and hangers 3 forming a yielding connection between the blanket and frame.

While the frame 1 may be formed in any desired number of sections, I have, in the present instance, shown it as consisting of

two semi-circular sections preferably constructed of relatively light and strong steel tubing the ends of which are joined together. The hinges 4 for the two joints comprise members 5 and 6 each of which is formed with an ear 7, a pintle or pivot pin 8 passing through each pair of ears. The main or body portions of the members 5 and 6 are cored to receive the adjacent ends of the sections of the frame 1 which are secured therein in any desired way. One section 5 of each hinge is formed with a socket 9 and the other section is formed with a chamber 10 in which and the adjacent end of the tubing a spring pressed plunger 11 works, the outer end of the plunger being preferably rounded as clearly illustrated in the drawings, and designed to enter the socket 9 to hold the two members of the hinge rigidly connected together with the frame sections in extended relation to each other. A spring 12 engages the plunger 11 and forces it outwardly into operative relation to the socket 9. Each plunger is provided with a finger piece or pin 13 designed to extend out through a slot 14 in the corresponding frame section for engagement by the hand of the operator to draw the plunger back and permit the sections to break joint so that one may be folded upon the other. Preferably each plunger is formed with a guard plate 15 which extends over the slot 14 so as to prevent as far as possible snow, rain or the like from entering the chamber 10 and corroding the parts. In order to strengthen the joint, particularly against strains at right angles to the pivotal movement, and also to protect the pivot pin 8, each hinge member is formed at one side with an extension 16, preferably beveled on one edge as indicated at 17, the said extensions contacting with the sides of the opposing hinge members as shown.

The blanket may be formed of canvas, duck, or any stout material, and at its outer edge is provided at intervals with straps 18 designed to engage open hooks 19 that are formed in the opposite sides of eyes 20. These eyes 20 are formed with openings through which the rods 22 of the hangers 3 extend, the upper ends of said rods being swung upon the frame sections by loops 23. Each of the rods 22 is encircled below its corresponding eye 20 by an expansion spring 24 the lower end of which presses upon a nut 25 secured to the lower end of the rod

and the upper end of which preferably takes into an opening formed in an apertured tongue 26 which projects downwardly from the eye 20. By this means, it is evident that
5 the springs 24 will be kept in working order and not have any binding effect upon the parts. It is evident also that by the exact construction of parts just described, the blanket 2 may be disconnected at any point
10 from the corresponding hanger by merely detaching the straps 18 from the hooks 19.

Preferably the blanket 2 is provided with a pad 27 which may be quilted or cushioned in any desired way and which is preferably
15 provided with a central disk-like portion 28 of contrasting color upon which a person's eyes may be fixed preparatory to jumping into the life saving apparatus. The pad 27 is of relatively smaller diameter than the
20 blanket 2 and is connected thereto at the edges by means of springs 29 whereby the pad will be at all times kept in taut or spread-out condition in readiness for properly receiving a person jumping therein.

25 In the practical operation of my improved apparatus, it will be manifest from the foregoing description in connection with the accompanying drawings, that the firemen or life-savers may grasp the frame 1 and support the same preferably just off the ground,
30 the springs 24 yielding when the person strikes the blanket and absorbing the shock of the fall efficiently without tossing the person out of the blanket on the rebound,
35 which would obviously tend toward accidents. When not in use, by merely retract-

ing the plungers 11, the frame may be broken at the joints and one section folded over upon the other, and the entire device, blanket and pad included, easily carried
40 from place to place, and stored away without taking up much room, it being noted that the swivel or pivotal connection of the hanger rods with the framework assists in this folding operation.

45 Having thus described the invention, what is claimed as new is:

An apparatus of the character described, comprising a framework, a blanket secured to said framework, the framework being
50 constructed in sections and hinged members connecting said sections together, one of said members being formed with a socket and the other hinged member being formed with a chamber which opens into the adjacent
55 frame section to which it is secured, the frame section being tubular, as shown, and the chamber being designed to register with said socket, a spring pressed plunger mounted in said chamber and in the adjacent tube,
60 a spring secured in said tube end and bearing against said plunger to project the same, the said tube end being formed with a slot, and a pin or handle connected to said plunger and working in said slot.

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

THOMAS F. BROWDER. [L. S.]

Witnesses:

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