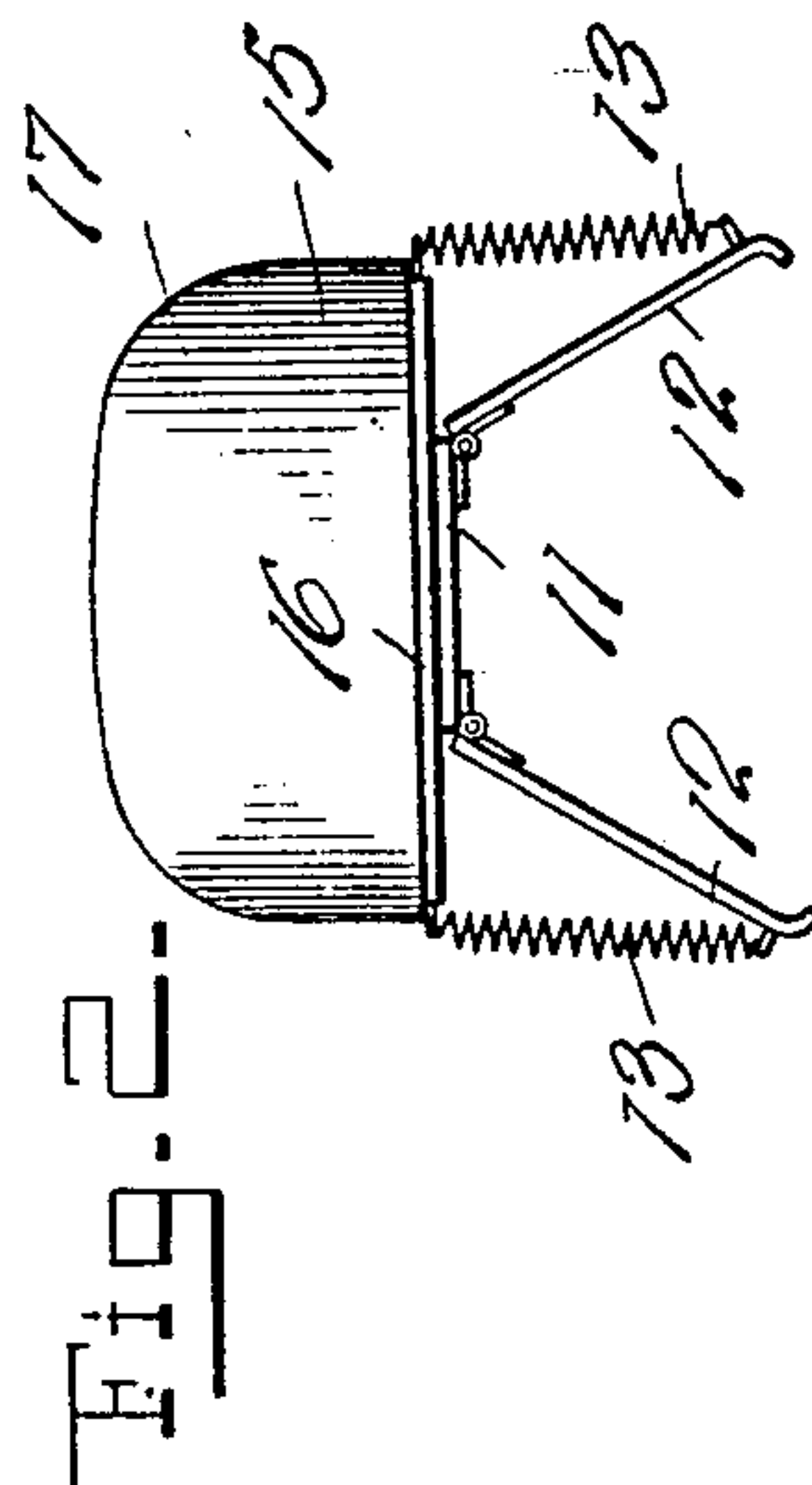
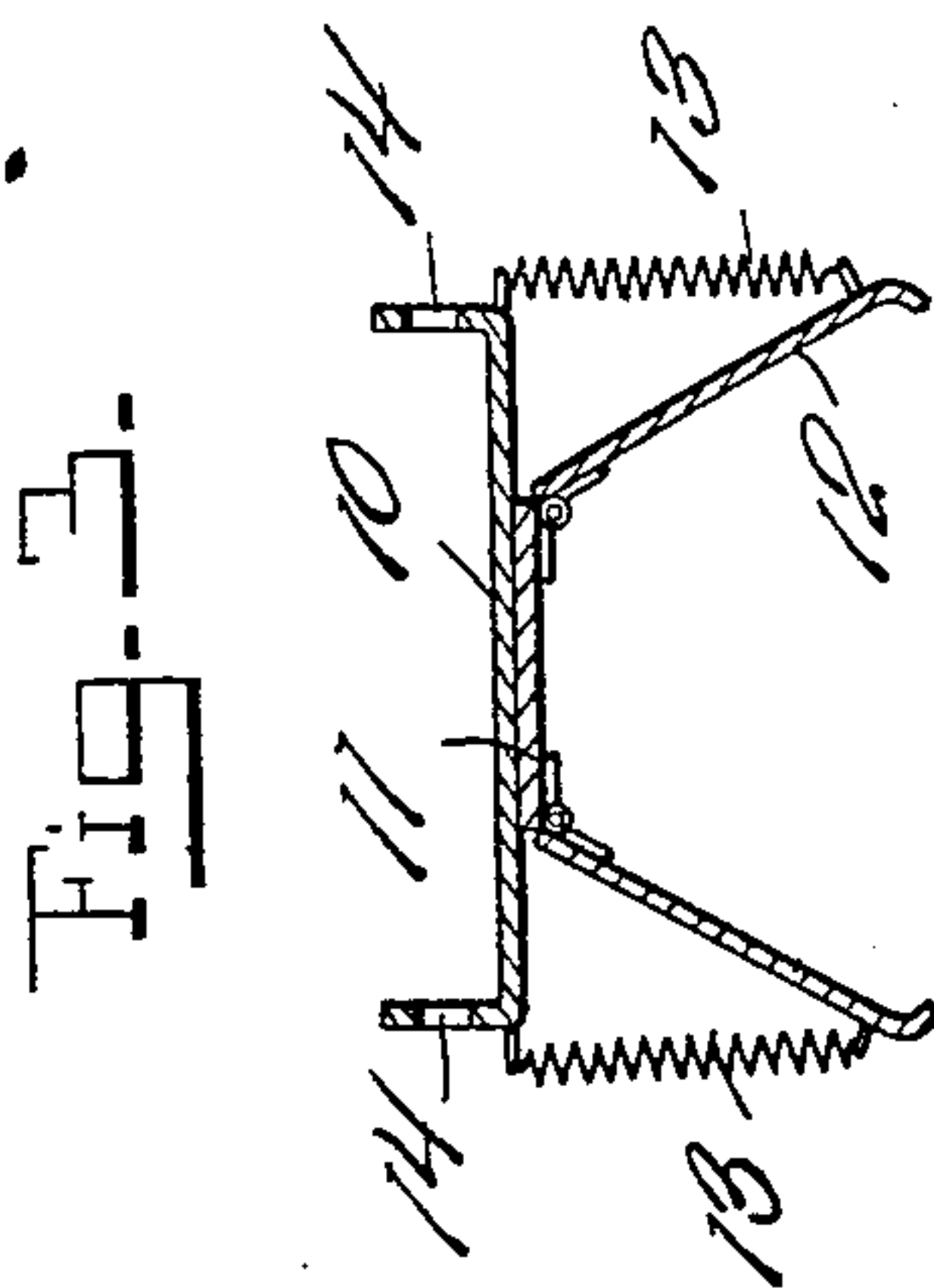
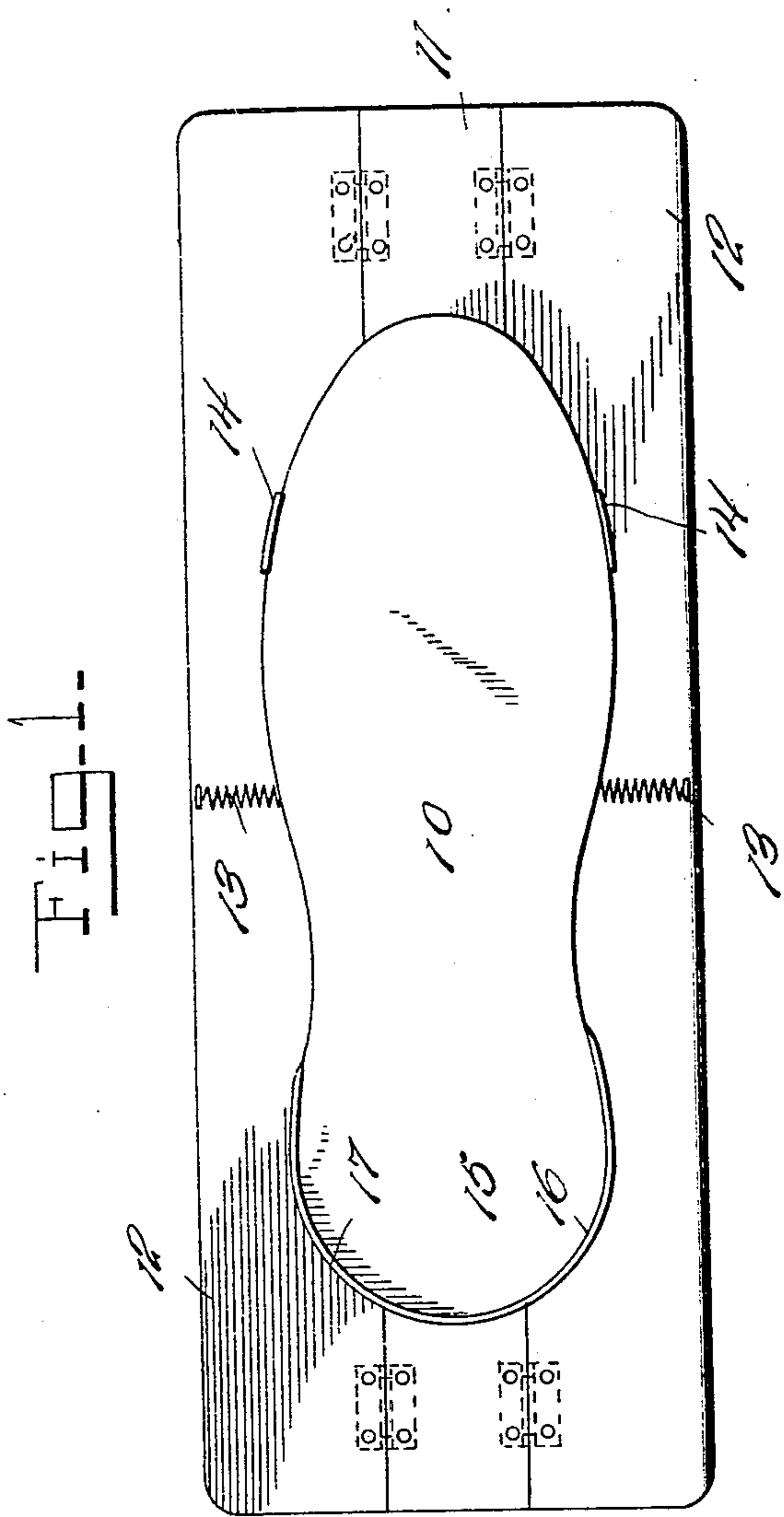


9-804

No. 855,377.

PATENTED MAY 28, 1907.

R. G. AYERS.
SWIMMING SHOE.
APPLICATION FILED AUG. 3, 1906.



Witnesses
G. R. Thomas
F. B. MacKib

Inventor
R. G. Ayers
By *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

ROBERT G. AYERS, OF ORION, ILLINOIS.

SWIMMING-SHOE.

No. 855,377.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed August 3, 1906. Serial No. 329,090.

To all whom it may concern:

Be it known that I, ROBERT G. AYERS, a citizen of the United States, residing at Orion, in the county of Henry, State of Illinois, have invented certain new and useful Improvements in Swimming-Shoes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It is the object of this invention to provide various improvements in swimming shoes that will render them more serviceable and comfortable to the wearer than heretofore.

The nature of my improvements embodies, *inter alia*, a structure comprising a sole and base strip below the same to the sides of which are hinged leaves or fins that fold downward as the foot is drawn forward and are spread out when a stroke backward is made by the foot of the swimmer; light spiral springs are provided to keep the lateral fins normally spread; and handy and efficient means are constructed for keeping the shoe in place on the foot of the wearer when in the act of swimming, all as is clearly shown in the drawings, forming a part of this specification.

The invention will first be disclosed in a detailed description of its construction and mode of operation, and then be pointed out with distinctness and particularity in the subjoined claims.

Of the said drawings: Figure 1 is a plan view of the invention. Fig. 2 is an end view showing the lateral wings or fins as folded down. Fig. 3 is a cross section of Fig. 1 on the line of the springs and provision for fastening the ends of the toe strap.

Similar figures of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings, 10 designates the sole of the shoe which may be composed of any suitable material, such, for instance, as steel or other sheet metal, which sole is secured in any suitable manner to a base strip 11 that may also be composed of steel. To the sides

of the base-strip 11 are hingedly secured fins or wings 12, the inner margins of which are covered by the outer margins of the sole 10, so that the latter act in a measure as stops against the fins being folded up beyond a horizontal line with the sole.

13 designates light helical springs secured at one end to the edge of the sole and at the other to the outer edge of the fins or wings to normally hold the wings up or spread when the swimmer is walking about in or out of the water.

At the sides of the sole opposite the ball of the foot tongues of metal 14, integral with the sole, are turned up and perforated to form means for the attachment of the ends of the toe-strap to the sole: and at the heel the steel sole has a cut 16 made around the margin, and the severed portion 17 is turned up so as to constitute a back-stop for the heel of the foot somewhat like a strap on the heel of a skate, the ends of the severed part being integrally connected with the sole.

The outer edges of the fins or wings 12 are turned down so as to give the same a better "hold" on the water when the swimmer makes a stroke with his feet to force himself ahead in the water and also for the purpose of stiffening the structure.

The straps for securing the shoe in place will be made of rubber or elastic webbing so as not to hurt the feet or harden after they become water-soaked.

What is claimed as the invention, is:—

A sole for a swimming shoe embodying in its construction perforated ears extending upward and inward from the edges at the broadened portion of the toe part, and a strap severed from the margin of the heel turned up and integrally connected at its ends with the heel portion of the sole to form a back-stop for the heel of the swimmer.

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

ROBERT G. AYERS.

Witnesses:

GEORGE F. WILSON,
S. E. NAUGLE.