

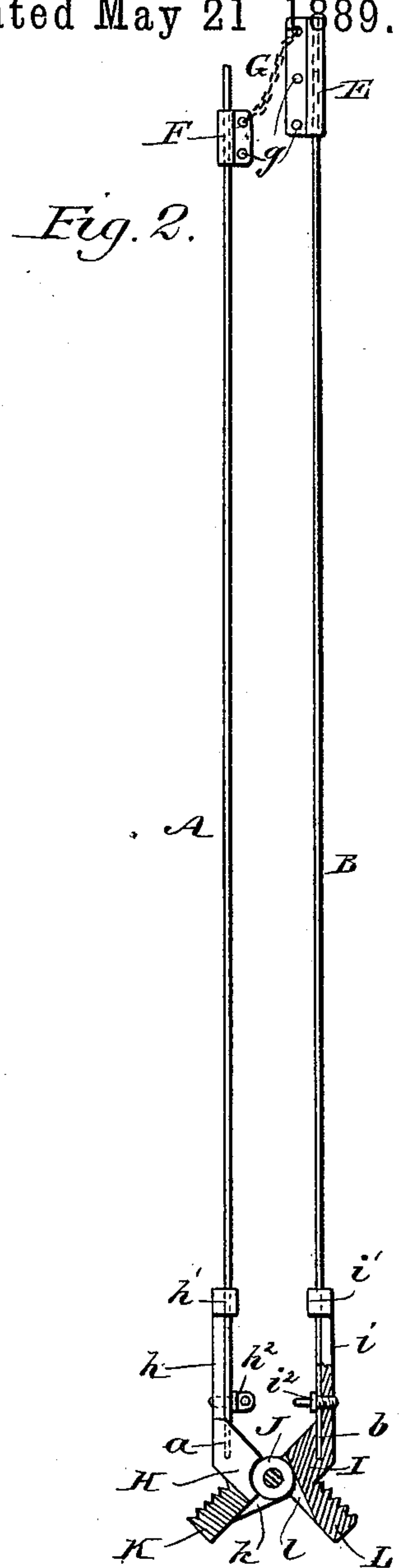
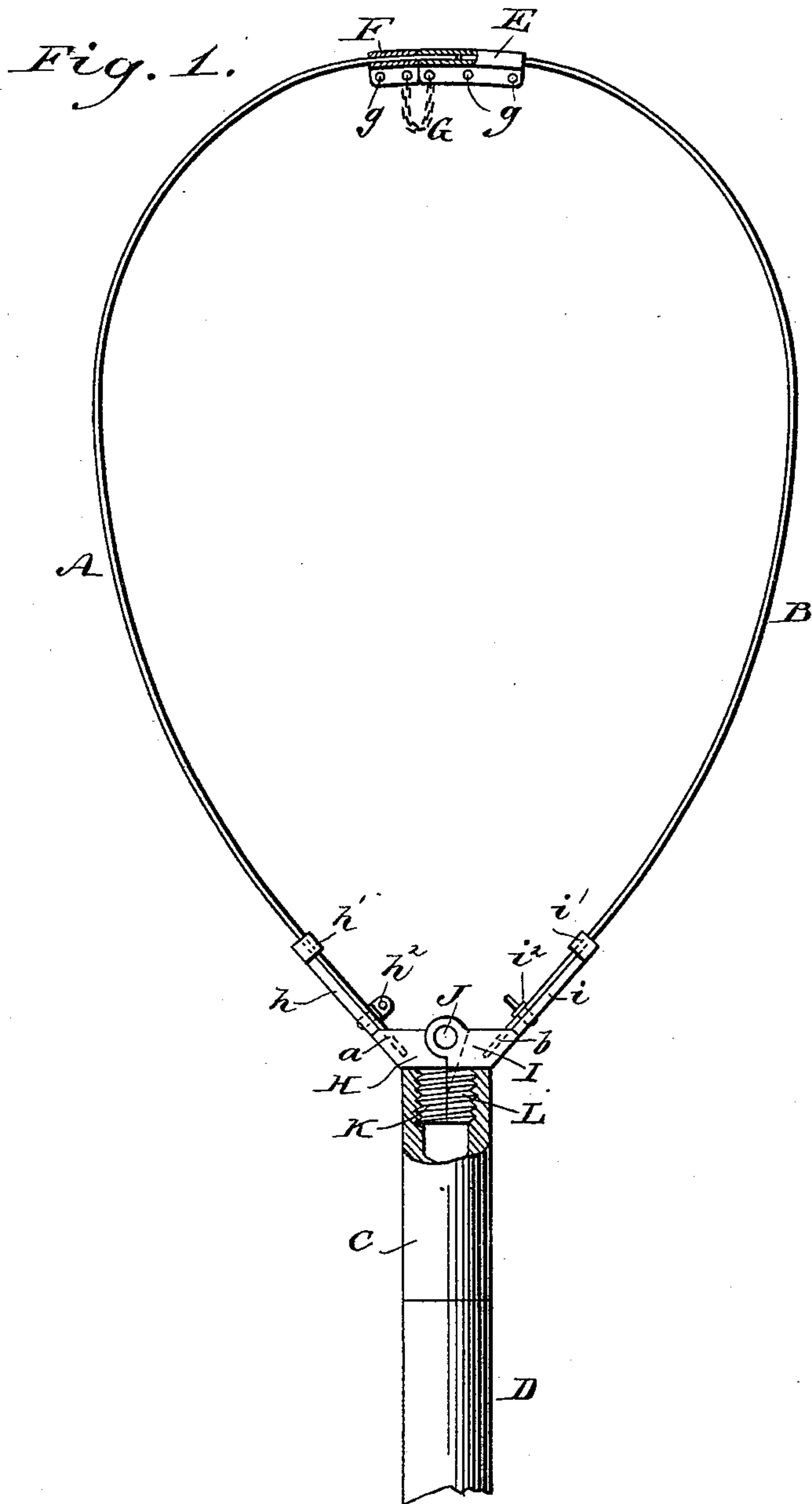
(No Model.)

J. G. LANDMAN.

HINGE SCREW COUPLING FOR FISHING NET FRAMES.

No. 403,680.

Patented May 21 1889.



WITNESSES:
John H. Deemer
W. Sedgwick

INVENTOR,
J. G. Landman
BY *Munn & Co.*
ATTORNEYS,

UNITED STATES PATENT OFFICE.

JOHN G. LANDMAN, OF BROOKLYN, NEW YORK.

HINGE-SCREW COUPLING FOR FISHING-NET FRAMES.

SPECIFICATION forming part of Letters Patent No. 403,680, dated May 21, 1889.

Application filed February 8, 1889. Serial No. 299,151. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. LANDMAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Hinge-Screw Coupling for Scalp-Net Frames or other Articles, of which the following is a full, clear, and exact description.

My invention relates to a hinge-screw coupling adapted more particularly for securing a collapsible scalp-net frame to a handle—preferably by a ferrule—and in distended condition for use, but applicable also to couple and hold firmly other collapsible structures.

The invention has for its object to provide a simple, inexpensive, and efficient coupling of this character; and it consists in certain novel features of construction of the coupling device and in its particular combinations with a scalp-net frame, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan view of a scalp-net frame and portion of the net-handle, the netting fabric being removed from the frame, which is in extended condition as when the net is to be used, the outer slip-joint and ferrule of the frame being partly broken away and in section, and Fig. 2 is a plan view of the net-frame in knockdown or collapsed condition as when out of use, parts being broken away.

Scalp-net frames have heretofore been made with opposite elastic metal side bars, A B, preferably of thin steel and about three-eighths of an inch wide and held in some manner to a metal ferrule, C, to which the usual long handle, D, is attached. One of the side bars of the frame has also been provided with a metal socket-piece, E, which is adapted to receive the extremity of the other side bar which projects beyond a stop piece or plate, F, held thereto. A chain, G, connected at opposite ends to the parts E F, serves as a tie or link which prevents too wide separation of the parts E F when they are pulled apart, and thus prevents tearing of the net, which is attached by tying it to holes g, made in the two parts of the coupling. The

chain also prevents wide separation of the outer ends of the side bars, A B, when the frame is in knockdown or collapsed condition, as when the net is out of use and as shown in Fig. 2 of the drawings, and thus facilitates the winding of the net around the side bars, so that the frame and netting may then be packed away in small space or may be easily carried in a trunk, hand-bag, or basket by excursionists or fishermen. It will therefore be understood that the present invention consists in the peculiar construction of the hinge screw coupling by which the inner or back ends of the elastic side bars of the frame are held to the net ferrule and handle, and as I will now particularly describe, as follows:

This hinge-screw coupling consists, mainly, of two parts, H I, which are hinged together, preferably, by a knuckle or rule joint working on a transverse pin, J, as a center of motion, and provided, respectively, with outwardly-projecting arms *h i*, having flange-clips *h' i'*, respectively, at their extremities, between or within which the inner ends of the elastic frame side bars, A B, are passed prior to passing the inner extremities of the bars into slots *a b*, made in the main body portions of the parts H I, respectively, of the hinge-coupling. After the frame-bars are so adjusted screws or screw-studs *h² i²* are passed through holes in the frame-bars and are turned into threaded holes in the arms *h i*, thereby preventing withdrawal of the frame-bars from the coupling in a simple, substantial, and efficient manner, it being obvious that the entrance of the frame-bars A B into the sockets *a b* of the coupling absolutely prevents springing of the bars from the faces of the arms, the bars thus serving as constant re-enforcing-plates to the arms for their entire length and preventing overstrain or breaking of them when the net is in use. The clips *h' i'* may be loops extending clear across the inner faces of the frame-bars, or they may be angular flanges crossing the edges of the bars and lapping or hooking slightly over their inner faces, as may be preferred.

To the parts H I of the hinge-coupling are respectively connected semicircular projec-

tions K L, and when the net-frame side bars, A B, are distended and are coupled at E F, at their outer ends, the inner or joint faces of the projections K L will come in contact, so that both together form a round stud, which has an exterior screw-thread onto which the handle-ferrule C is screwed until its extremity bears hard against the back ends of the main body portions H L of the hinge-joint coupling and as shown in Fig. 1 of the drawings. Along its inner or joint face the part H and its projection or half-stud K are provided with a central tongue, *k*, which, when the net-frame is distended for use, enters a correspondingly-shaped groove or recess, *l*, formed along the center of the other parts, I L, of the coupling and assures exact correspondence or continuity of the exterior screw-threads on the stud K L, to allow the ferrule C to be easily entered and screwed home upon the stud, and this interlocking at *k l* of the two parts of the hinge-coupling also greatly strengthens the hinge proper at J by preventing a lateral overstrain or racking of the hinge-joint, however roughly the net-frame may be knocked-about against rocks, boats, or other objects when the net is in use.

To fold or roll up the net it is only necessary to unscrew the ferrule C from the hinge-coupling and disconnect the outer coupling at E F, whereupon the net-frame bars and their couplings will assume relative positions shown in Fig. 2 of the drawings.

I am not limited to using the hinge-screw coupling herein described on scalp-net frames, as it may be used to advantage on other collapsible structures, as will readily be understood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A hinge-screw coupling consisting of two parts hinged together and provided each with a projection, both of which projections when closed together having exterior continuous screw-threads to receive a screw ferrule or handle, and the two parts of the coupling independently of the hinge provided, respectively, with a tongue or projection and a groove or recess which interlock to strengthen the hinge-coupling against lateral strains, substantially as herein set forth.

2. In a hinge-screw coupling for scalp-net frames, the combination of two parts, H I, hinged together at J, and provided, respectively, with arms for connection of the opposite side bars of the net-frame, said parts H I provided, respectively, with threaded projections K L, forming a screw-stud, and said parts also having interlocking tongue and groove *k l*, resisting lateral strains on the coupling, substantially as herein set forth.

3. In a hinge-coupling for scalp-net frames, the combination, with two parts hinged together and provided with arms, as *h i*, and sockets *a b* at the bases of said arms, of the scalp-net frame-bars A B, held to the arms and entering the sockets *a b*, substantially as herein set forth.

4. In a hinge-coupling for scalp-net frames, the combination, with two parts hinged together and provided with arms *h i*, having clips *h' i'*, and sockets *a b*, of the frame-bars A B, entering the clips and sockets, and screws holding the bars in the sockets and to the arms, substantially as herein set forth.

JOHN G. LANDMAN.

Witnesses:

JOHN J. O'BRIEN,
GEORGE LEWIS MARSH.