

(No Model.)

J. W. McFARLAND.
REEFING STRAP FOR FISHING SEINES.

No. 587,268.

Patented July 27, 1897.

FIG. 1.

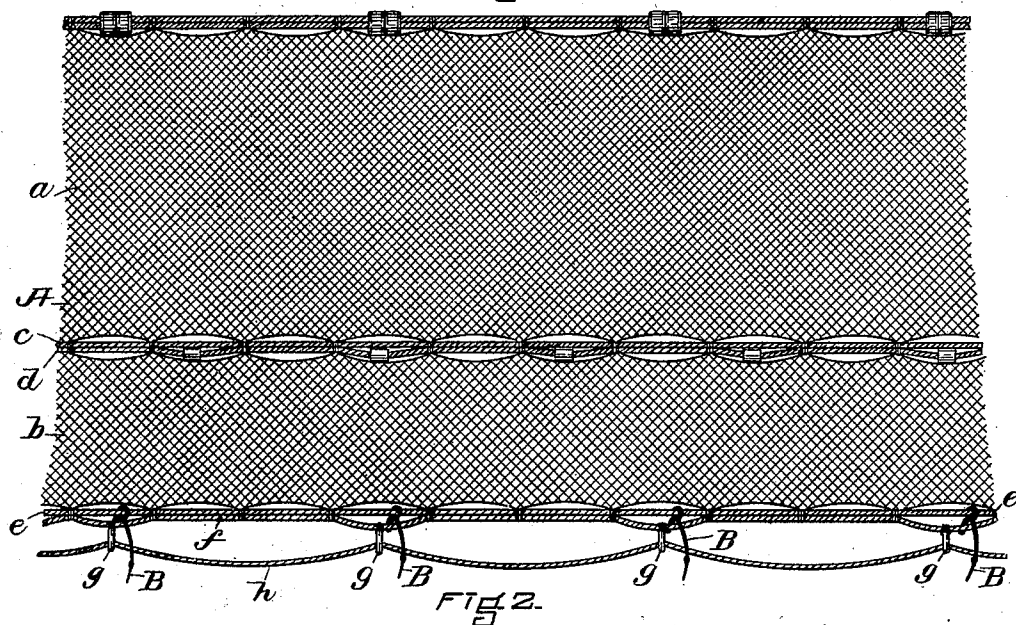


FIG. 2.

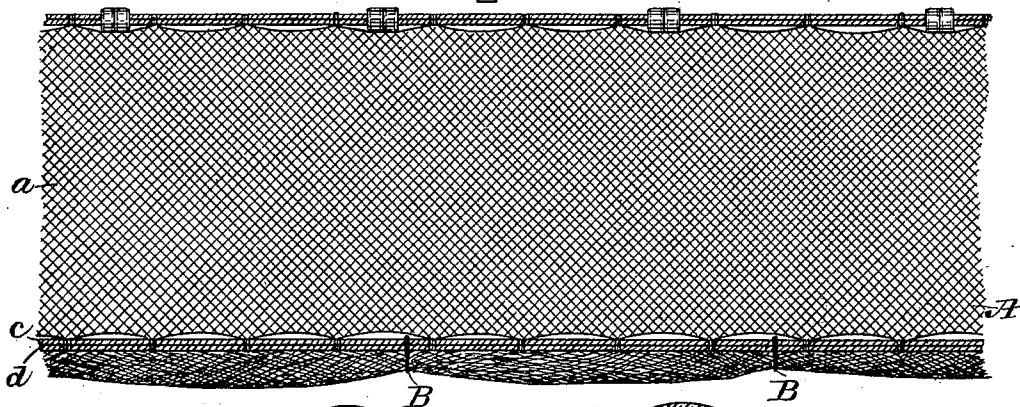
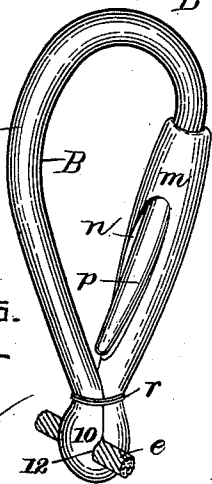


FIG. 3.

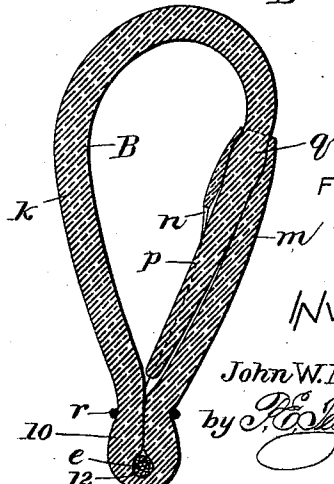


WITNESSES.

A. D. Smith.

B. L. Marden.

FIG. 4.



INVENTOR.

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Atty.

UNITED STATES PATENT OFFICE.

JOHN W. MCFARLAND, OF GLOUCESTER, MASSACHUSETTS.

REEFING-STRAP FOR FISHING-SEINES.

SPECIFICATION forming part of Letters Patent No. 587,268, dated July 27, 1897.

Application filed April 15, 1897. Serial No. 632,327. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. MCFARLAND, a citizen of the United States, residing at Gloucester, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Reefing-Straps for the Pursing-Aprons of Fishing-Seines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation of a portion or section of a fishing-seine provided with a pursing-apron and having my improved reefing-straps applied thereto. Fig. 2 is an elevation of the same with the pursing-apron gathered up to the lower edge of the main portion of the seine and secured in place by my improved reefing-straps. Fig. 3 is an enlarged perspective view of one of my improved reefing-straps closed up. Fig. 4 is a central vertical section of the same.

My invention has for its object to provide a fishing-seine with a simple, convenient, and reliable reefing device for holding up the pursing-apron in such manner that it can be easily and quickly released by the strain exerted in hauling in the pursing-line; and to this end my invention consists in a reefing-strap for this purpose provided with an elastic tubular socket at one end for the reception of the opposite end of the strap properly shaped to fit therein, the said two ends being detachably held together by the friction of one within the other, as hereinafter more fully set forth; and my invention also consists in certain novel features and details of construction, as hereinafter described, and specifically pointed out in the claims.

In the said drawings, A represents a piece or section of a fishing-seine composed of a main or upper portion *a* and a lower portion or pursing-apron *b*, secured to the upper portion by fastening the edge lines *c d* together at suitable distances apart in the customary manner. The bottom of the apron *b* is provided, as usual, with an edge line *e*, to which is secured at suitable intervals the looped bridle-line *f*, which carries the rings *g*, through which passes the pursing-line *h*, by hauling in which the pursing-apron *b* is drawn in to

form the bottom of the seine and thereby inclose a school of fishes, in the usual manner.

Before setting the seine the apron *b*, together with the pursing-line *h*, is gathered or reefed up, as shown in Fig. 2, in which position it is held until it is required to be released after the school of fishes has been inclosed by means of the reefing-straps B, the construction of which forms the subject of my present invention, and will now be described.

The strap B, which is preferably composed of rubber, consists of a main or central portion *k* of sufficient length to pass around the apron *b* when gathered up, and at one end is formed integral therewith an elastic tubular socket *m*, made thin at the mouth or outer end to increase its elasticity at this point, and having at its rear end on the inner side an opening *n*, said socket being adapted to receive the tapering or pointed opposite end *p* of the strap, which when thrust into the socket *m* projects out through the opening *n*, which enables it to be grasped between the thumb and finger and drawn more or less into the tubular socket, the friction between the tapering end *p* and the socket *m* being made sufficient to hold the required weight and still admit of the two ends of the strap being readily pulled apart or separated from each other by the strain produced by hauling in the pursing-line, which thus causes the apron to be instantly released to enable it to be quickly pursed or drawn in toward the center to form the bottom of the seine and inclose the fishes therein.

The quick release of the apron by the straps B enables it to be drawn toward the center by the pursing-line before it has had time to drop to any considerable extent, and consequently the fish in attempting to escape by diving will be more readily caught by the apron, which is at once inclined inward at an angle toward the center when the pursing-line first begins to be hauled in.

The amount of friction between the two ends of the reefing-strap is regulated by drawing the tapering end *p* more or less within the tubular portion, the parts working to the best advantage when wet, and the tapering end *p* is preferably provided with an en-

largement *q*, which tends to spread the mouth of the socket *m*, whereby the portion *p* is held firmly in place without the necessity of drawing it in too far within the socket.

5 My improved reefing-strap is preferably made of three qualities of rubber, the main or central portion *k* being comparatively stiff, which prevents it from stretching to any appreciable degree, while the tubular portion
10 *m* is softer or more elastic, and the tapering or pointed end *p* with its bulb or enlargement still softer or more elastic, so as to be easily compressed when drawn into the tubular socket.

15 Rubber is especially adapted as a material from which to make my improved reefing-strap, as it is soft and pliable at all times, is not injuriously affected by salt water, and affords no obstructions or corners to foul the
20 lines or meshes of the seine, while it is strong, durable, and effective in its action.

In applying the reefing-strap to the seine it is opened and placed over the edge line *e* of the apron at a point opposite to a ring *g*
25 and secured in place by seizing *r*, as shown in Figs. 3 and 4, the inside of the doubled portion 10 of the strap being properly grooved at this point, as shown at 12, to enable it to fit around the edge line *e*, and when the strap
30 is to be used to hold up the gathered or reefed apron *b*, as shown in Fig. 2, it is passed around the latter and over the edge lines *c d* and then closed by thrusting the end *p* into the socket *m*, as before described.

35 If preferred, the reefing-strap B may be attached to the edge line *c* of the main portion of the seine instead of to the bottom of the pursing-apron, as first described.

What I claim as my invention, and desire
40 to secure by Letters Patent, is—

1. A reefing-strap for the pursing-aprons

of fishing-seines, provided with an elastic tubular socket at one end for the reception of the opposite end properly shaped to fit therein, the two ends of the strap being detachably held together by the friction of one within the other, substantially as described. 45

2. The herein-described rubber reefing-strap having a tubular socket at one end, and having its opposite end tapered to fit within
50 said socket, the two ends of the strap being detachably held together by the friction of one within the other, substantially as described.

3. A rubber reefing-strap, having at one
55 end a tubular socket provided with an opening at its rear end, and having its opposite end tapered to fit within said socket and project through the opening at the rear end thereof, whereby it may be grasped to pull
60 it more or less within said socket, the two ends of the strap being detachably held together by the friction of one within the other, substantially as set forth.

4. A rubber reefing-strap having at one
65 end a tubular socket provided with an opening at its rear end, and having its opposite end tapered to fit within said socket and project through the opening at the rear end thereof, whereby it may be grasped to pull
70 it more or less within said socket, said tapering end being provided with an enlargement to increase the friction, and the two ends of the strap being detachably held together by the friction of one within the other, substantially
75 as described.

Witness my hand this 13th day of April, A. D. 1897.

JOHN W. MCFARLAND.

In presence of—

P. E. TESCHEMACHER,
B. L. MARDEN.