liable to be thrown on their beam ends, and, not being able to right beeause of their shallowness, fill and sink. In a single gale, that of December 9 and 10, 1876, no less than five Gloucester schooners were knocked down and barely escaped sinking. Three of them were dismasted, two of which were abandoned, one went into Liverpool, Nova Scotia, under a jury-rig, while the others were not so badly damaged. The inference is that other vessels which foundered in the same gale, and those that have been lost at sea on other occasions, were knocked down in a similar manner, and, failing to right again, soon sunk. Of course, with a deeper body to the vessels, and the ballast placed lower, there would be far less probability of such a mishap occurring, and even should it happen the chances would be a hundred to one that the vessel would right again.

It is, therefore, altogether probable that the introduction of deeper fishing vessels in New England would save for Gloucester alone somewhere about \$30,000 to \$50,000 per year, besides a large number of lives.

As an instance showing how terrible the loss is sometimes, I will say that from the 29th of August to the last of December, 1883, 16 vessels from Gloucester foundered at sea, carrying down with them 205 men, while the loss of property was little less than \$100,000.

GLOUCESTER, MASS., February 21, 1884.

94.-LOSS OF LIFE AND PROPERTY IN THE FISHEBIES.

By R. B. FORBES.

I have perused with great interest the statements on the subject of the loss of life among the fishermen of Gloncester. The loss of 447 vessels and 2,600 lives in fifty-four years ending in 1884 is fearful to contem-In 22 years ending this year the number of men lost was 2,140. plate. There must be some cause for this large increase. It may be presumed that the increase of the number of vessels in the business accounts for the increased loss of lives in a great degree. Another cause must be the fact that the vessels are more crowded. Another prominent cause must be the fact that trawl-fishing in dories necessarily exposes the men to greater danger than hand-fishing. I have before me a long list of men who have been separated from their vessels; many of these have been lost, while some have been rescued in a starving condition. No regular rule has been established for furnishing dories with condensed food and means for cooking. This should be done. Mr. D. W. Low, of Gloucester, has contrived means not only to feed persons, but to evable them to right their dories and to cling to them when capsized. If the owners of fishing craft do not feel interest enough to encourage the use of these means, there should be a law to compel them to do so; and if a

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law cannot be passed to compel attention to the safety of the men, public opinion must be invoked to organize relief associations for the mitigation of the existing evils. It would, perhaps, be considered out of place for me, who have had no experience in bank fishing, to give an opinion adverse to what is said by one brought up in the business (Capt. J. W. Collins), who attributes the loss of many of the vessels to capsizing, owing in a great degree to the long masts and shallow hulls. A shallow craft is certainly more liable to be capsized than a deep one. but the spars of a schooner cannot contribute largely toward capsizing. Captain Collins is said to be in favor of putting out a drag rather than riding at anchor in stormy weather. No small craft should be without one, but I doubt if it would conduce to prevent collisions in the event of a fleet of vessels trying to keep head to the wind by it. The canvas bag drag is an excellent thing to ride by in the open sea, where a single craft or a few craft may be exposed, and where there is plenty of room to drift; but in a crowd it would not tend to prevent vessels fouling with each other, as compared to riding at anchor with a long The drag is an excellent thing to assist in changing scope of cable. position, by reversing it with the tripping line and catching hold again.

There are more fishing vessels run down by steamers than we hear of. The remedy for this class of losses lies in steam lines adopting regular courses (or lanes, as Maury called them), whereby the fishing-grounds most frequented should be avoided by the steamers, and the steamroutes where they cross banks should be avoided by the fishermen. Fog-horns should be made to work by compressed air power on board of fishermen, and every boat leaving the vessel should carry a good foghorn as well as some means to show a powerful light. As to the compass, I should class that as a luxury which might be dispensed with much better than a supply of food; any intelligent seaman can tell near enough how he is heading by night or in a fog, but none can exist long without food and drink. As to comparing the safety of the yacht-like craft with the old-style fishing craft, I would make use of the same argument as I have used for steamers in fogs, namely, "go ahead in fogs and shorten the time at sea." The old banker may be a safer model in a gale; but she is so long in making her trips that she encounters more dangers in the aggregate than the sharp modern craft. The subject of oil to smooth the rough water is one that should be studied by fishermen. I feel sure that it would in many cases be found useful, especially when cast over from a vessel drifting fast. but its utility to vessels at anchor may be doubted; still if a crowd of vessels should all spread oil on the rough seas, those to leeward might possibly be benefited. I submit these remarks in the hope of calling more attention to the risks incurred by fishermen; and I close with the single remark that if more native boys of Gloucester should be used and fewer foreigners, we should hear much less of loss of life and something more in regard to preventing it than we now do.

BOSTON, MASS., May 29, 1884.