

*Baker Street Elementary  
& The Victorian Web*

Presents  
"The Life and Times in Victorian London"



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& The Victorian Web*

*The Life and Times in Victorian London  
# 104 - A Lion's Sting - 09/04/2020*



*Welcome to topic number 104... Sidney and I  
will be looking at the Lion's Mane, as described  
in the canonical story...*



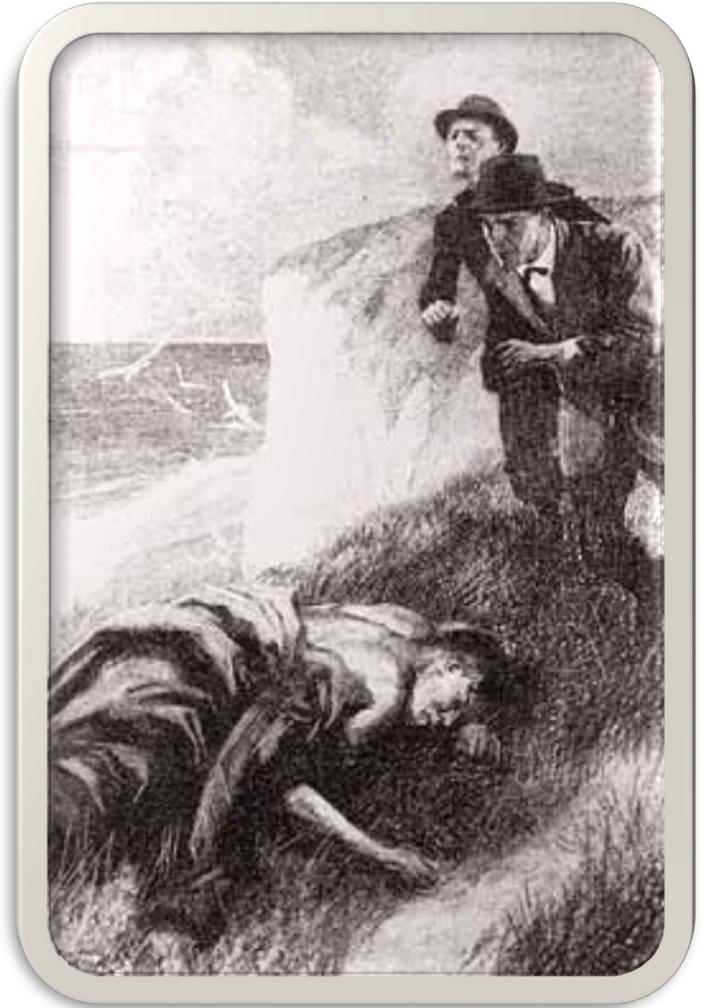
*Correct Stamford... In "The Adventure of the Lion's Mane," a dying man will name his killer, but it will take two more victims before Holmes clearly identifies the culprit.*



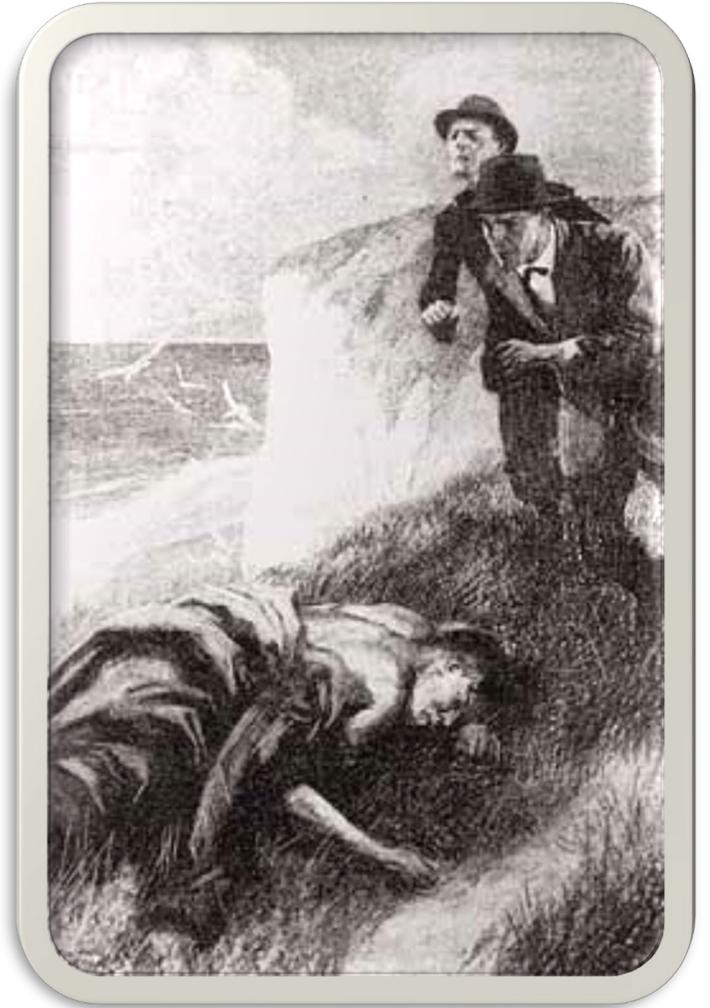
*"Lion's Mane" is the common name for one of the largest and most venomous jellyfish in the world. While its sting is quite painful, it is usually not deadly, and new research has identified treatments that have been found effective for those without underlying conditions.*



*When Fitzroy McPherson dies in front of Holmes, the detective will observe the man's back is covered in red lesions resembling those of a flogging. He will also report the man in great agony and spasming before expiring.*



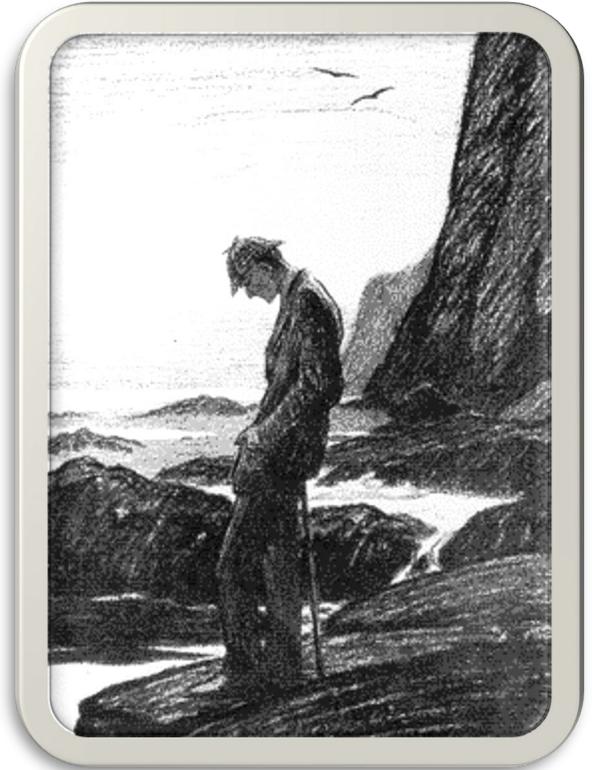
*A week later, closer examination of the wounds will indicate dots of "extravasated blood"—blood forced out of the blood vessels into the surrounding tissue.*



*After a review of his "mind attic" and his retirement home's actual attic, he will uncover a book Out of Doors by Rev. J. G. Wood who will describe his encounter with a Lion's Mane jellyfish—or medusa—while swimming off the Margate coast, and the excruciating pain of its sting.*



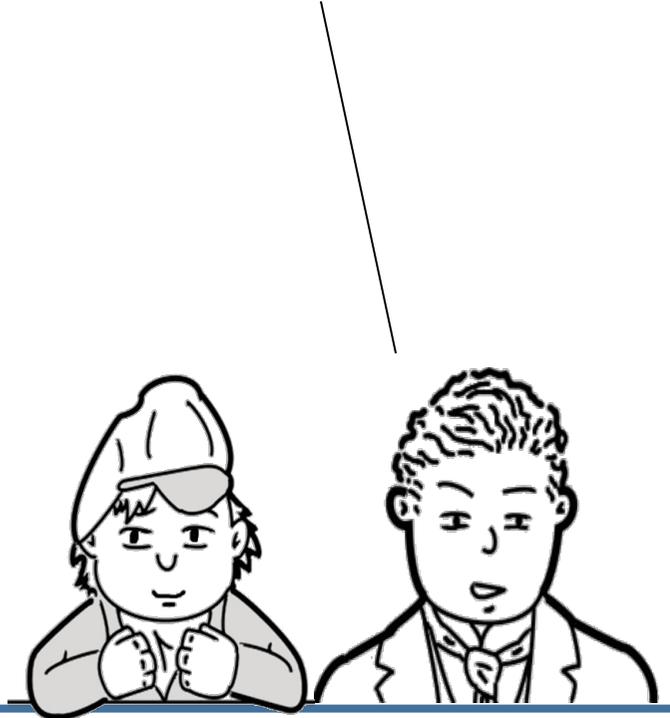
*When Holmes returns to the "scene of the crime," he will point out a specimen of the sea creature to Stackhurst, McPherson's former employer, who will proceed to kill it with a boulder.*



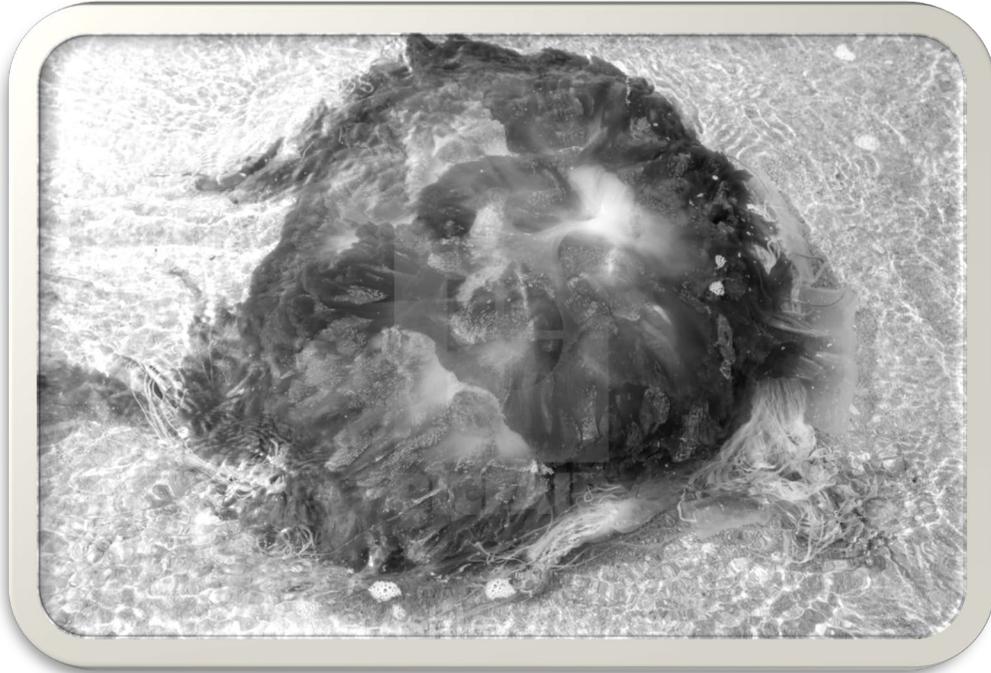
*The Lion's Mane, or *Cyanea capillata*, is considered the world's largest jellyfish. With tentacles that can reach up to 120 feet, a mature Lion's Mane is larger than a blue whale.*



*While usually solitary creatures, they have been reported to gather in clusters along the shorelines—particularly along the coasts in the UK and the Northwest US.*



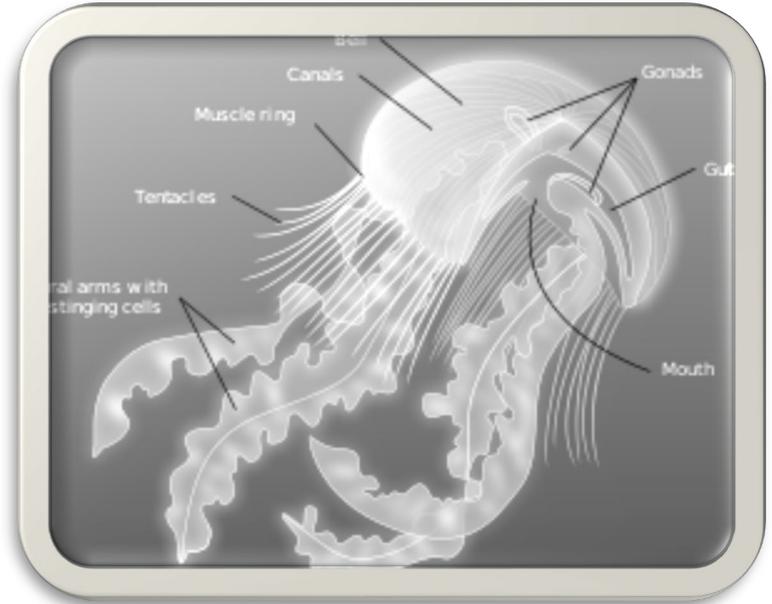
*They prefer the colder waters of the Arctic and North Pacific Oceans, living on small fish and other sea creatures.*



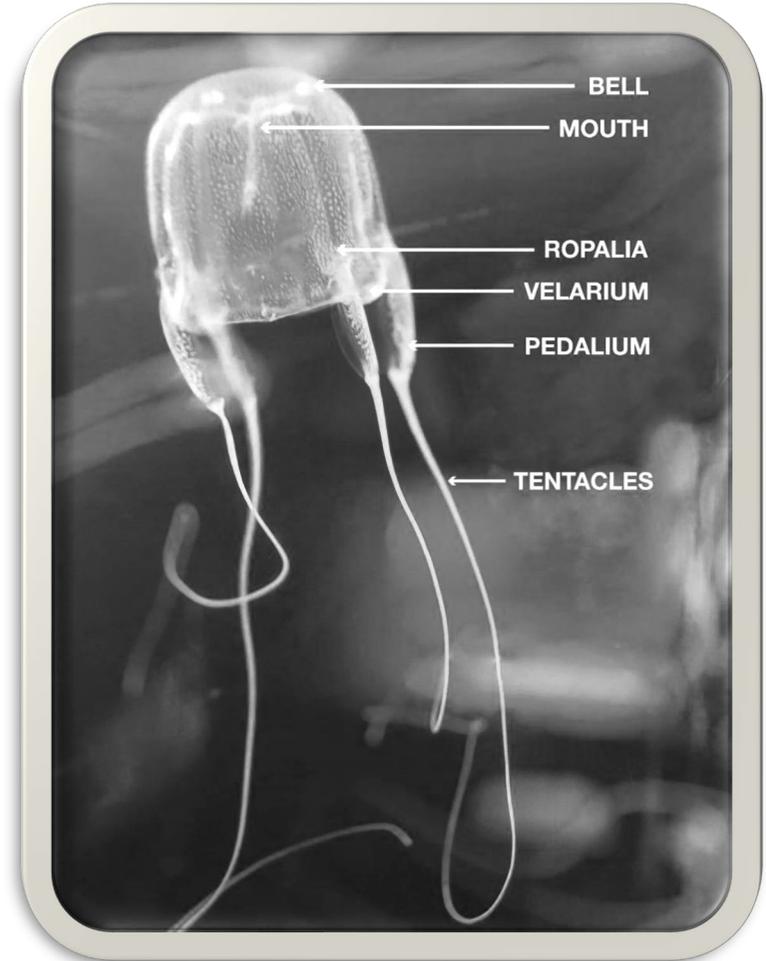
*While how a jellyfish administers poison to its victims is known, the venom's actual mechanism for causing death will be under debate for decades.*



*Knowing the process becomes important for knowing how to treat the sting. Jellyfish tentacles are imbedded with cnidocytes that each hold a nematocyte (capsule) which holds the venom and a tubule.*



*When stimulated, the cnidocyte allows water to enter, opening the nematocyte and pushing out the tubule under the victim's skin.*



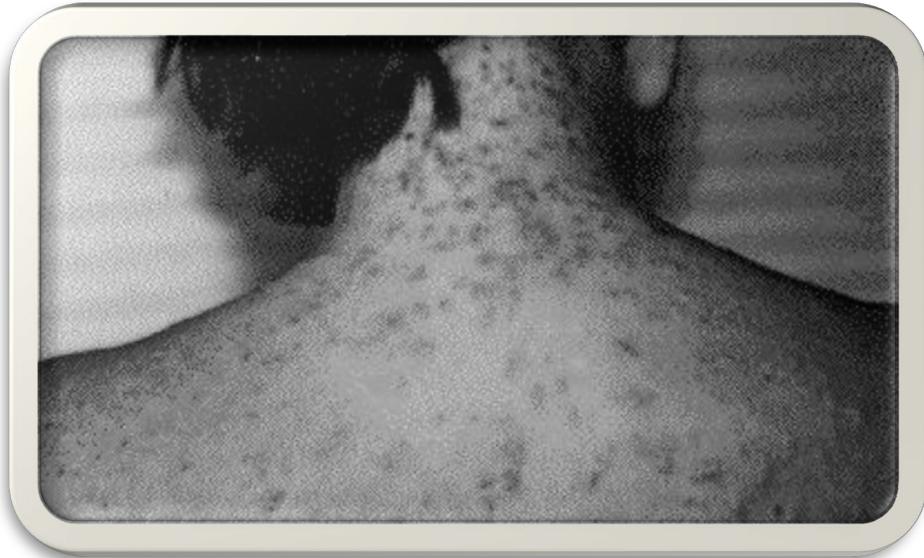
*The tubule turns inside out and releases the venom. Hundreds of thousands of such injections create the red welts observed on human victims.*



*For the Lion's Mane jellyfish, a sting is rarely fatal, but within twenty minutes can result in "back pain, nausea, abdominal cramps, sweating and hypertension."*



*Someone with an underlying condition could die from anaphylactic shock, and during the 21<sup>st</sup> century, several swimmers will be hospitalized in the UK from encounters with the creatures.*

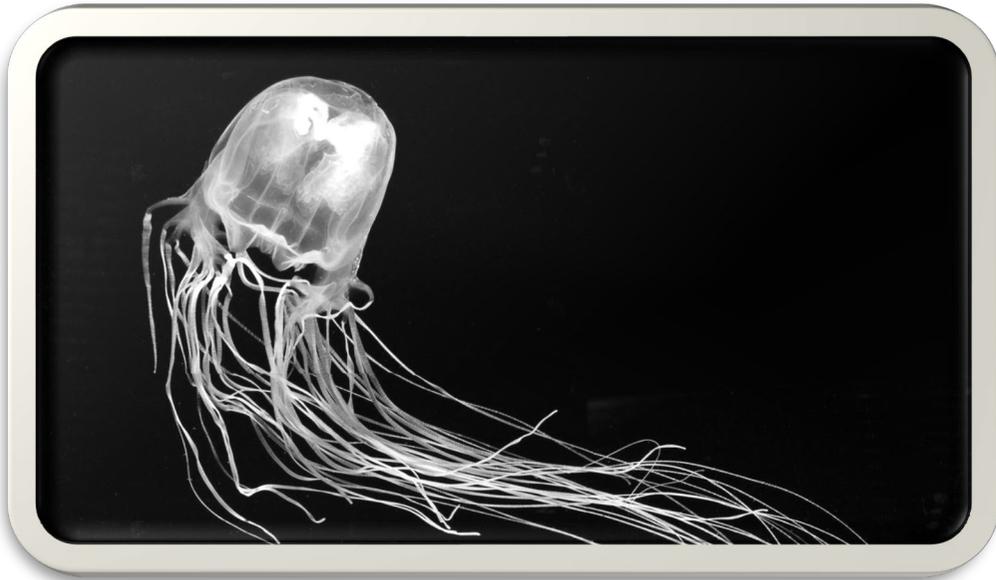




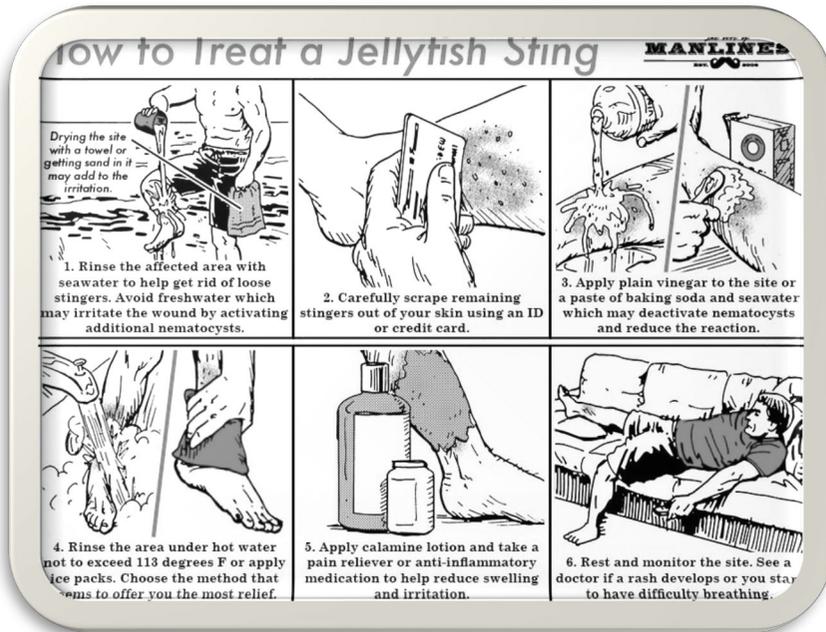
*Another jellyfish, however, offers a much more deadly sting. The box jellyfish—found in waters off of Australia, Malaysia, Thailand, and the Philippines—kills dozens each year in these countries.*



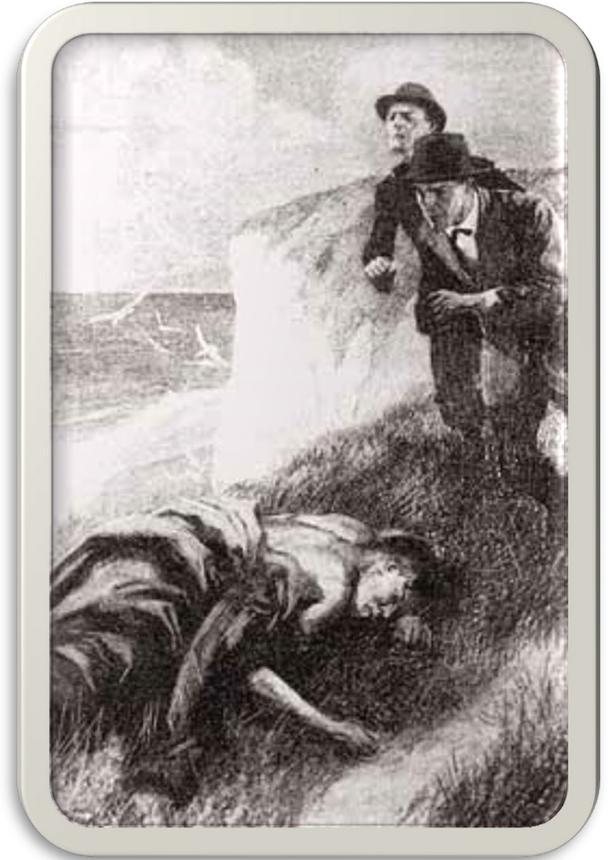
*Some debate exists about how the box jellyfish's poison actually affects a victim's organs, but regardless of which system is affected first, all conclude with cardiac arrest and death.*



*Most experts will recommend rinsing the affected area with vinegar to remove any remains of the tentacles, applying heat to the area, and using a copper gluconate cream to inhibit the venom.*



*Fitzroy McPherson's underlying heart condition from a bout of rheumatic fever at a young age will prove a fatal blow in his encounter with the medusa.*



*Holmes and Stackhurt's ministrations and his research, however, will be able to serve Murdoch, McPherson's colleague. Not only will they successfully treat the second man's contact with the jellyfish, but also keep him from a murder charge. And, finally, eliminate at least one source of the Lion's sting.*



*So we have completed topic 104  
in our series...*

*Yes, but we'll be back  
with another topic  
soon...*



## Original Source Material for this topic:

- 1) <https://www.thesun.ie/news/2718688/jellyfish-galway-lethal-giant-swimmers/>
- 2) <https://medical-dictionary.thefreedictionary.com/extravasated>
- 3) J.G. Wood, *Out of Doors*, London: Longmans, Green, and Co., 1874, page 140
- 4) <https://oceana.org/marine-life/corals-and-other-invertebrates/lions-mane-jellyfish>
- 5) <https://www.sciencemag.org/news/2018/11/jellyfish-almost-killed-scientist-ow-she-wants-save-others-their-fatal-venom>
- 6) <https://www.thesun.ie/news/2828609/jellyfish-experts-tips-lions-mane-jellyfish-stings-irish-coastlines/>
- 7) <https://www.thesun.ie/news/2767198/swimmers-are-being-warned-about-huge-jellyfish-with-a-lethal-sting-being-found-in-irish-waters-with-several-people-already-hospitalised/>
- 8) <https://www.sciencemag.org/news/2018/11/jellyfish-almost-killed-scientist-now-she-wants-save-others-their-fatal-venom>



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IS CREATED THROUGH THE INGENUITY & HARD WORK OF:

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*WE ARE EXTREMELY*

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*OF THIS PROJECT...*

