

DERELICTS AT SEA

When Low in the Water They Are a Great Peril.

OFTEN 160 AFLOAT

Valuable Cargo in Some of Them—The Dunmore Is An Habitual Derelict—The Salvage to the Rescue—Runs Up Into Thousands Sometimes—Case Of the Loch Marce.

The romance of the sea is never dead. But of all its strange harvests perhaps the most uncanny is that of the derelict and abandoned ships that rock on its restless bosom, silent and water-logged, yet it may be containing cargoes and treasure worth hundreds of thousands of dollars. The ordinary ship's passenger never realizes that the seas are fairly dotted, especially in winter, with masterless craft of every size and condition. And when very low in the water they are notoriously a grave peril to shipping; so much so that the maritime governments of the world take steps to report these derelicts and post notices of them in the various chambers where shipping men most congregate. Wireless telegraphy is commonly used by shipmasters to warn one another of these sinister terrors of the sea. Indeed, a regular derelict hunting enterprise has already been inaugurated, by hospitalists, and their search will extend along the New England coast and up into those waters beyond Newfoundland that are dotted with colossal icebergs sent down from arctic glaciers.

One derelict, the tramp steamer Dunmore, was rolling helplessly in mid-ocean for nearly four months and eventually either went to the bottom or drifted out of the path of navigation. A typical ship that never makes port is this same Dunmore. She carried 3,000 tons of the best coal, and altogether ship and cargo represented an investment of \$80,000. But blizzard after blizzard struck her; she broke her shaft and became a helpless derelict. The crew abandoned her 650 miles north of Cape Cod, where they were taken off by a passing vessel and landed at Baltimore.

And yet the stanch vessel did not sink as soon as was expected. Alone and deserted she battled with the mighty seas. She was sighted by no fewer than twenty-five steamers, was actually towed by three, boarded by boats from five, and set on fire by two, whose masters had narrow escapes from destruction by running into the helpless vessel. Then the wretched Dunmore disappeared altogether, although several British warships from Bermuda, to whose commanders complaint had been made by shipping, went in search for her.

Will it be believed that according to government reports there are often 160 helpless deserted ships galloping and toiling in the trough of the north Atlantic, many of them unseaworthy wooden hulks laden with lumber. Some of them, indeed, remain afloat for years, and drift into little known seas, where they are looked upon as terrifying visitors from another world by superstitious natives. Now and then it happens that one of these mariner unfortunates is picked up by a steamer and taken into port. This may well prove a very rich haul, for exactly one-half the entire value of hull and cargo is made over to the salvage crew. A case in point is the steamer Loch Marce. She left Norfolk, Va., with a cargo of cotton for Dundee, Scotland. But off the north coast of Ireland a furious storm struck her, throwing her on her side. Over the unfortunate ship rolled monstrous black waves fifty feet high, tipped with hissing foam and spume. She ran short of coal and drifted helplessly toward the wild Hebrides group of islands. Not knowing what their fate might be, the crew deserted her, having signalled a passing ship in that lonely sea. And so the abandoned Loch Marce drifted this way and that without a soul on board, and eventually began to travel south once more. At last the wrecking tug William Gollife deliberately put off in search of her, towed her into Belfast, and earned \$39,800. Of course the task of taking a derelict in tow is extremely dangerous. It is all very well to suppose that all a captain has to do on sighting her is to pass a rope from one craft to another, fasten it to the bollards, and steam ahead. But in a heavy sea the tow ropes may part and the helpless derelict come crashing into the sailor. Another case was the big freighter Karmon, which drifted helplessly about the Grand Banks of Newfoundland for many weeks. She was taken in tow at last by the Hibbard, whose captain saw in the helpless ship the seeds of a nice fortune. But next morning he was astounded to see so Karmon heeled him. She had torn loose altogether and was now out of sight, crashing helplessly into the vast ocean for a destiny unknown.

These islands, which are 400 miles long and 100 miles wide, are the most densely populated in the United States. There are only seven other islands with more than 100 to the square mile. These islands are the only ones in the world that have a permanent population, but

CONCRETE HOUSES NOW.

Edison, the Inventor, Says They Will Revolutionize Our Cities.

"The poor man need no longer live in a box for a house," said Thomas A. Edison recently in his laboratory in Orange, N. J. "He can own a palace."

"Before long I will build a three-story indestructible concrete house that a laboring man earning \$1.50 a day can buy and run. It will be as artistic and comfortable as any Fifth Avenue mansion, and will be built in half a day. Come up and see it."

"There it is," he said brightly, though with a bit of pride brightening his clear gray eyes.

The model was a three-story Queen Anne house with a high-peaked tiled roof, and a bay front very



THOMAS A. EDISON

suggestive of the houses on Riverside Drive, New York. The eleven rooms were high studded and well lighted. The walls within and without were frescoed simply.

"You hardly think we can put that up in half a day?" the inventor questioned, in his shrill, high-pitched voice. "Well, we can, and for less than \$1,000, too. This is how we'll do it."

"Over in that factory you just looked at we are moulding cast-iron forms. The inside facings of these forms are nickel-plated and are fashioned exactly like the outside of the model. When these are done, we are ready to build any number of houses."

"At 6 in the morning we take the moveable steel castings to a vacant lot. These are clamped together with bolts, and you have before you a house of iron, with hollow walls. Meantime, we are mixing our concrete—one part cement, three parts sand, and three parts quarter-inch crushed stones. The machinery to raise this soft concrete to the top of this iron framework, a big mould, you understand, is already on the spot."

"By 6 o'clock at night there is your house inside your iron work. Everything, except the doors and windows, is in place. In six days the iron frame is unbolted and removed. In another eight days the concrete is completely hardened and the house ready to live in. Fifteen days from start to finish."

"The only wood used is the strips around the edges of the floors on which to tack down a carpet and those around the wall for the picture moulding. All this is put in place in the ironwork before the concrete has been poured in. The tiling around the fireplaces and in the chimneys, the gas and water pipes, are also stuck in the same way in the concrete walls. The furnaces, the heating pipes, the bathtubs, water closets, are all cast with the walls."

"There will be no plumbing bills; there is no plumbing to be done. There is no insurance; there's nothing to burn. Rome wasn't built in a day, they said, but New York can be."

"I've done this for the workman who is doing his best to bring up a family. I won't make a cent on it. One day I went through the east side. You know it. Nothing but a mass of brick boxes. I got the idea of this house at the time."

"In a few years all this will be changed. You will go outside of Manhattan and see rows of beautiful, beautiful concrete houses, one for each family. The expense of making them will be less than that of the dirtiest tenement on Rivington street."

"These houses won't be all alike. I am leaving the patent open to every one. Competing companies will spring up, each making a different style of house."

"No, the architecture will not be monotonous. In fact, the architects never had their chance till now. Before they've had to rush out something cheap, never anything beautiful. Now they won't have to worry about expense. The most artistic house is as cheap as the crudest. Why, its going to mean a revival in architecture."

"Turner's Rome will not be in it with New York ten years from now. Of course, I have patented the house. It's necessary. I shall give any one the rights for nothing provided he uses the right kind of concrete, enforces it properly with twisted iron rods, and makes an artistic product. The laboring man is going to get a square deal on this improvement."

CHASING THE FIRE BUG

He And The Firemen Are Sworn Enemies.

HATED INTENSELY

Not Because of the Added Work He Makes for the Fire Fighters, But Because the Fires He Builds Usually Mean a Bad Explosion—Several Species of Them.

The firebug and the fireman are sworn enemies. This is not so much because the firebug makes extra work for the fireman, but because these fires usually mean a bad explosion. And this is likely to catch the fireman, as he is the first person to enter the building after the firebug has done his work.

Firemen are always on the lookout for suspicious fires, and at the first sign of a "joker," that is, the contrivance used to start a fire, they take pains to preserve it and send for the Fire Marshal. The Fire Marshal and his assistants keep in touch with the fire company nearest their homes and at any hour of the day or night can be notified of a "touch off," which is what the firemen call an incendiary or prepared fire.

The firebug or incendiary starts fires for several reasons. The more harmless firebugs are pyromaniacs, persons whose insanity shows itself in connection with fire. The Fire Marshal has caught boys and men who set fires just to see the horses and apparatus respond, or to see the firemen at work, or simply to see the fire burn. One young man, who started a dozen fires in tenement houses, said he had a message from God to burn up the houses.

Fires are also set for malice or revenge, and in one well known case the Fire Marshal had warning of a prepared fire in an Italian tenement. The police were called in to assist, but the presence of heavy looking citizens with big shoes, large watch chains and thick mustaches, gave warning to the firebugs and the job was given up.

Most incendiary fires and the more dangerous ones are "touched off" to get the insurance. This is the incentive with ignorant and dishonest householders and with business men in trouble who are not averse to "beating" the insurance companies.

Overinsurance in the tenements is a regular practice and each year the Fire Marshal in his annual report, calls attention to the evil. It is a regular thing to find one set of rooms where the tenant has a policy and every one of six to twelve boarders has also a policy, in amount from \$100 to \$500. The total insurance will amount to several thousand dollars, while the real value of all the property is not more than a few hundred dollars.

This invitation to make fires for profit is also extended to small shopkeepers, who, for instance, can get \$2,000 worth of insurance on a stock that is valued at \$500. This is especially dangerous, because if the shopkeeper burns his store the fire is likely to extend through the tenement and endanger the sleeping occupants. A recent fire in Chrysler street, where twenty persons were burned to death, is a typical instance of this danger.

Beating the insurance companies is more or less a practice at all times, but from 1885 to 1895 it assumed a system and organization that caused a sensation when the facts were laid bare by a New York paper at the time. Fire making was then such a regular business and a man named William Ettinger was regularly paid by many insurance companies for informing them in advance of where fires would occur. This information enabled them to cancel policies on the risks.

Ettinger could supply this information because he knew the workings of the various bands that made dishonest fires a regular business. For instance, there were the "digan gang," the "shoe gang" and the "furniture gang." The operation of the "shoe gang" will show how the game was worked.

A man named Isaacs kept a shoe store on the east side and his place was not only the headquarters for crooked shoe fires, but also the gathering place of the mechanics, or artistic firemakers, the men who prepared and set off the fires. Isaacs and his band would open a shoe store, put in a big stock of new shoes and get insurance equaling or exceeding the value of the stock. Then they would replace the new shoes with old shoes and burned shoes that had already been used in other fires.

"When the stock had been changed the 'mechanic' or firemaker would come around and 'touch off' the place; after the fire a public adjuster, in league with the band, would settle the loss with the insurance companies, the burned shoes would be removed to their storage place and preparations made for another fire."

Young Isaacs was finally caught by a fire marshal in peculiar circumstances. A marriage had been contracted for young Isaacs and his father was to furnish a wedding dowry. He did this by setting up the young couple in business with a stock of shoes. A few weeks after the store was opened the fireman was called one Sunday afternoon and caught the fire in time.

HOUSEHOLD OF THE POPE.

Not a Single Woman is Included in the Large Population.

Every one knows the Vatican contains the greatest treasures of antiquity that have come down to this modern world. The palace has one remarkable peculiarity, however. Its population, which must run into thousands, does not include a single woman!

The pope's own private suite of rooms is on the third floor, overlooking the immense plaza of St. Peter. These saloons are simply, yet handsomely, furnished. One is struck by the absence of all luxury, after the overwhelming grandeur of the rest of the Vatican, says W. G. Fitzgerald in Harper's Weekly. Just above are the apartments formerly occupied by the cardinal secretary of state, who in the papal court is premier, minister for foreign affairs and chief privy councillor all in one.

The present holder of this great office is Cardinal Merry del Val. He prefers to reside in the magnificent series of saloons decorated by Pinturicchio, and bearing the ill-omened name of Alexander Borgia, their original occupant. The central figure of this most stately and impressive court is a kindly, gentle, old peasant priest—the first pope in two centuries of plebeian birth.

He is of middle height, thickest in figure, with dark eyes and bushy



POPE PIUS X.

gray hair. For a year or two after his accession the poor man was far from being at ease in his lofty dignity. He wandered like one distraught through the vast echoing corridors of the ancient palace, which has seen some of the mightiest events in the world's history for a thousand years. Could it be possible that he, Giuseppe Sarto, of humblest peasant parentage, with near relatives who are village tailors and innkeepers at this moment, could have been elected spiritual lord of two hundred million souls throughout the nations of the earth?

With time, however, Pius X. conquered his nervousness, and grew reconciled to parting from his aged sisters, who were even more distressed over the dramatic change it had pleased Providence to bring about. The peasant pope has introduced many changes in the rigid etiquette of the papal court that have somewhat discomfited the older and more conservative officials. He has also cut down expenses on all sides so as to meet the heavy drain on his resources caused by the recent action of the French government.

There is nothing the spiritual king detests more than pomp and state, for which reason he avoids both whenever possible. Moreover, as his previous life has been most active, he finds the role of "Prisoner of the Vatican" most irksome. Had he followed his own wishes the pope would long ago have visited Castel Gondolfo, if not even more distant parts of Italy; and it was only the most earnest and pressing remonstrances from his elder advisers that prevented him from following the King to the assistance of the sufferers from the eruption of Vesuvius last year.

Roman society greatly regrets that such counsels were successful, for had pope and King worked side by side for the common good in that time of terror, the breach between church and state would have been better repaired than could be hoped for from long years of diplomacy and statecraft.

Smoking Before Maturity Bad.

Physicians, chemists and physiologists (many of them smokers themselves) agree that smoking before maturity is reached always leads to a waste of nerve power and brain force, and thus squanders life by weakening the very center of strength.

One of the greatest markets in the world for musical instruments is in South Africa, which spends on an average \$1,000,000 a year, about \$50,000 of which goes into pianos.

MOTHER CAREY'S CHICKENS.

Queer Notions About the Stormy Petrel Among Sailors.

The stormy petrel, alias Mother Carey's chicken (Porcellaria pelagica) or (Oceanites oceanicus), according as we have reference to the species of the eastern or western Atlantic, has not got the epithet of "stormy" for nothing, says Forest and Stream. As already stated, the bird appears to revel in a tumult of the winds and waves and actually does so for a good and sufficient reason. This is that its food supply is very much more abundant when the ocean is agitated than when it is at rest. Then, the petrel has a decided habit of following ships, which has really nothing to do with impending storm. No, it seeks the ship, not because it is afraid or lonely, but simply because the ship agitates the waters. Very likely as it follows a storm may spring up and then, seeing the bird so obviously delighted, poor superstitious Jack not unnaturally thought there was some connection between them. From this to a belief in a companionship in evil was only a step.

The queer notions about the stormy petrel did not end here. It was believed (and the naïveté of this belief is decidedly racy of poor Jack) that American education that attracted attention throughout the United Kingdom hatched them on the water. It was also believed that it could appear at will in the neighborhood of a ship at any time and place. All this has been decided to give the pupils a certainly pointed to necromantic or half-holiday every Fourth of July uncantry power, and it is not to be wondered at that the bird became hereafter to commemorate the event, such an object of fear and aversion to the poor man before the mast. The poet Coleridge has left us a fine picture of the terrifying influence of the albatross on the Ancient Mariner, but no poet seems to have awakened the possibilities of the stormy petrel as a theme. However, we read the inventor claims, will revolutionize much about it off and on in old chronicles not only naval warfare, but the tales of the sea in one of navigation of the whole world. In one of these tales it is recorded that the sailors, the invention is the fruit of much seeing the herald of storm join the ingenuity, labor, and expenditure on ship too near land as they supposed, the part of F. Maltman, of Redburn Street, Chelsea, who has devoted to it years of study and experiment. At first sight the engine resembles a turbine, but closer inspection reveals important differences. Steam from any type of boiler is brought to bear upon a shaft fitted with twelve chambers, divided into two sets of six each. Shaft and chambers are all of steel, cast in one piece, and of great strength. Exactly what the arrangement of these chambers is the inventor deems it imprudent at present to disclose, but it is such that the admission of steam through the orifices at their ends causes that shaft to revolve at a tremendous speed.

So great is the power of the new form of engine, indeed, that the inventor considers it useless to apply it to the ordinary screw propeller. The terrific pace should result in the formation of a complete or partial vacuum in which the screw would "race" without exerting its propulsive force. He has accordingly devised a modification of the screw propeller which will make a return in speed for all the power that can be applied to it.

The screw has three blades, each of the shape already familiar, but instead of being attached to one small hub, they are fixed at intervals of a couple of feet from one another to a long shaft. The result of course, is that each blade works in its own water, instead of in that through which its fellow has cut but a moment before. The shaft is fitted with three of these dissected screws, each of them with a larger orbit than the one immediately in front of it, so that when set slowly in motion it presents to the eye the effect of a huge corkscrew worming its way forward.

The shaft bearing the three screws is fixed immediately beneath the keel of the boat, and runs parallel with it and with the driving shaft and its twelve chambers. This occupies so little space that practically the only machinery in the body of the boat will be the furnace and boiler, and the inventor, therefore, believes that in the case of cargo vessels the device will have the advantage of adding to the carrying capacity as well as of increasing the speed. It is, however, in naval warfare that he expects for the invention the greatest immediate utility. Up to now, the new system has been tried only on models upon the Serpentine and the Thames, but the speeds attained in the largest of these lead Mr. Maltman to believe that on a vessel with the size and steam power of a present-day torpedo boat it would yield a velocity of 100 miles an hour.

A Historic Spot. "Now, please show me the spot where the horse bit George Washington," was the astonishing request made by a country visitor of his host a downtown publisher. The latter had escorted him about and shown him the State House, the Liberty Bell, Carpenters' Hall, old Christ Church, the grave of Benjamin Franklin and the site of the house in which Jefferson wrote the declaration of Independence. The publisher had never heard of the spot where the horse bit the Father of His Country, but equal to the emergency he took his guest to Washington Square and said that it was in one of the corners of that space (which one he did not know) that the horse bit the biting, in commemoration of which event the square was named.

JUST KICKED A CAT.

Cure for Rheumatism Discovered by a Jersey Freight Clerk.

A clerk in the Pennsylvania Railroad freight office in Jersey City, suffered from spasmodic twinges in his right leg, which he attributed to rheumatism. He consulted a physician and spent a good deal for medicine, but continued to grow worse.

One morning recently the office tomcat in a spirit of friendliness arched his back and rubbed against the afflicted calf. The clerk gave a vicious kick with his bad leg and a gray streak shot through the air. He hobbled to a chair and sat down with a few stirring remarks about cats and rheumatism.

A few minutes later he gritted his teeth hard and arose. He shook his leg and feebly smiled. Then he walked like a drum major across the floor and boisterously shook hands with himself. The sharp twinges had disappeared and there has been no recurrence of pain.

The clerk's doctor corrected his diagnosis when asked for an explanation of the sudden cure and said that what he mistook for rheumatism was probably caused by a twisted ligament. The kick at the cat straightened out the twist and removed the cause of the trouble.

What Gum Arabic Really Is.

Gum arabic, which forms one of the more important minor exports of Egypt, is really the sap from a special kind of tree which grows from three to five yards in height, whose forests of which are found in the Kordofan Province, and also near Gedda, in the White Nile Province. The natives are free to collect the gum. The season during which the trees yield their sap runs from December to May. Prior to gathering the crop the natives prepare the trees by slightly cutting the bark in numerous places. The sap then exudes, solidifies in the shape of large and small lumps and is afterward gathered by hand, such gathering being done before the rainy season commences. There are two main classes of gum—amber-like and bleached. In the latter the gum is merely exposed to the strong action of the sun—generally in Omdurman—while in the former instance it is allowed to retain its natural amber color. The confectionery trade is perhaps the principal purchaser of gum arabic, though a very large number of other industries—chemical works, printing and dyeing mills, letterpress printers and so on—are interested in this product of the Sudan.

Dead Bacteria Dangerous.

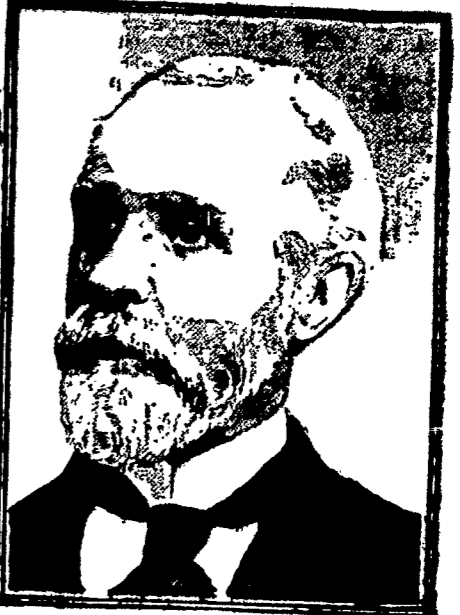
One result of bacteriological research is the distinction between infective and intoxicative diseases. In the former the general multiplication of micro-organisms in the body of the patient is the salient feature, while in the latter poisoning is the cause of the malady.

Thus, states a well-known authority, the dead bodies of typhoid bacilli, although destitute of all infective properties, are yet toxic when introduced into animals in virtue of the intracellular poisons they contain. Accordingly, in the case of many diseases formerly regarded as purely infective, it has now become apparent that, in addition to the infective, the poisonous properties of the invading bacterial cells must be taken into account.

RECOGNITION INDEPENDENCE DAY

The Visit of Ambassador Reid Is Commemorated in England.

A visit to Wales by the American ambassador to England, Whitelaw Reid, has had a rather remarkable sequel. Mr. Reid was present, at the opening of the John Bright Memorial School at Llandudno, and made a speech on John Bright and



WHITELAW REID.

His American education that attracted attention throughout the United Kingdom also believed that it could appear at will in the neighborhood of a ship at any time and place. All this has been decided to give the pupils a certainly pointed to necromantic or half-holiday every Fourth of July uncantry power, and it is not to be wondered at that the bird became hereafter to commemorate the event, such an object of fear and aversion to the poor man before the mast. The poet Coleridge has left us a fine picture of the terrifying influence of the albatross on the Ancient Mariner, but no poet seems to have awakened the possibilities of the stormy petrel as a theme. However, we read the inventor claims, will revolutionize much about it off and on in old chronicles not only naval warfare, but the tales of the sea in one of navigation of the whole world. In one of these tales it is recorded that the sailors, the invention is the fruit of much seeing the herald of storm join the ingenuity, labor, and expenditure on ship too near land as they supposed, the part of F. Maltman, of Redburn Street, Chelsea, who has devoted to it years of study and experiment. At first sight the engine resembles a turbine, but closer inspection reveals important differences. Steam from any type of boiler is brought to bear upon a shaft fitted with twelve chambers, divided into two sets of six each. Shaft and chambers are all of steel, cast in one piece, and of great strength. Exactly what the arrangement of these chambers is the inventor deems it imprudent at present to disclose, but it is such that the admission of steam through the orifices at their ends causes that shaft to revolve at a tremendous speed.

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