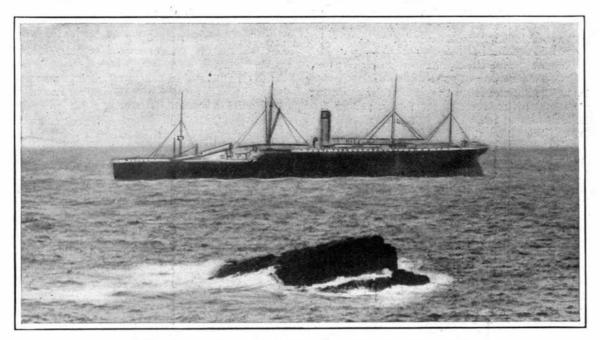
It is not an uncommon occurrence for human life to be saved by amputation; but it is safe to say that the recent salvage of the White Star liner "Suevic," herewith illustrated, is the first instance in which this Star Company rushed down to the Scilly Islands from Liverpool a strong force of engineers, divers, tugs, and a wrecking outfit; but the joint efforts of the tugs and the ship's own engines failed to budge her. Then it was that a consultation of the doctors was held. in



The "Suevic" Immediately After She Had Been Cut in Two.

surgical operation was used in saving a ship. There is this important difference, however, that whereas the dismembered portion of the human body can be replaced by what is at best but a doubtful counterfeit, the portion of the White Star ship that was left behind on the rocks of the Scilly Islands, which in this case happened to be her head, will, in the course of a few months under the skillful hands of Harland & Wolff, be so perfectly reproduced and joined to the original ship, that no one will be able to tell, by looking at her, that such a drastic work of naval surgery was ever done on her.

On the evening of Sunday, March 17, the good ship "Suevic," 12,500 tons register, flying the flag of the White Star Company, was approaching the Scilly Islands at the close of a day in which she had been bowling along before a full southwesterly gale. The weather was thick, but the captain was sure of his reckoning, and confident that he had yet a few miles to go before reaching the vicinity of those greatly-dreaded rocks. Just as he was about to heave the lead, however, the "Suevic" ran full speed upon a ledge known as Maentare Rock, which lies immediately below the lofty point which is crowned by the lighthouse.

The "Suevic" is a big ship and weighty, measuring 550 feet in length by 63 feet in beam and 40 feet in molded depth. Her dead weight when she struck was probably about 20,000 tons. Consequently, before her momentum was arrested, she had driven about onethird of her whole length firmly upon the rocks. Very quickly, her three foremost holds filled with water; but, fortunately, the bulkheads of the after two-thirds of the ship held; and, by means of the ship's boats, and other craft which put out from shore, all of the passengers were safely landed.

Immediately on learning of the disaster, the White

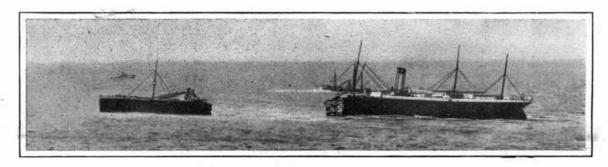
which it was decided that nothing short of severing the head from the body could save the ship; and the operation was carried out as follows:

First, a stout bulkhead of heavy timbers was built

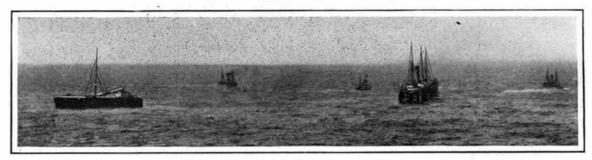
2,000 tons being left on board to keep the vessel in trim. Then, at the point of amputation, the wooden decks were cut through, exposing the steel decks underneath. A continuous line of dynamite cartridges was laid across each deck and carried entirely around the hull of the vessel. Electric wires were led to a distant point, and, when all was ready, the lines of cartridges were detonated. The intense local action of the dynamite was sufficient to cut cleanly through the whole of the plated structure of the ship, and immediately the after two-thirds of the vessel floated away intact, leaving the other third hung upon the rocks in the position shown in one of the accompanying illustrations. Several tugs then made fast to the floating portion of the vessel; the ship's engines, which were in perfect order, were started in the reverse direction; and the "Suevic," or rather 66 2/3 per cent of her, commenced the journey to the hospital in Southampton. It was a curious procession; and certainly, if it be true, as the poets would have us believe, that a ship is a thing of life, the "Suevic" must have been filled with amazement at her strange going.

Liquid Carbonic Anhydride as a Solvent,

In all chemical literature there is but little information at hand as to the solubility of various solids in liquid carbon dioxide. According to reports and statements quoted in the Zeitschrift für Physikalische Chemie and in the Chemiker Zeitung (Repertory), C. H. Büchner has now, on the basis of experiments, supplied this lacking information. According to these experiments, inorganic substances, particularly carbonates, such as $CaCO_3$, Na_2CO_3 , and the halogen salts, are insoluble in liquid carbon dioxide. Boracic acid, PCl_5 , $AsBr_3$, J, P, Br, are slightly soluble; organic substances, as benzol, are mixable under all conditions.

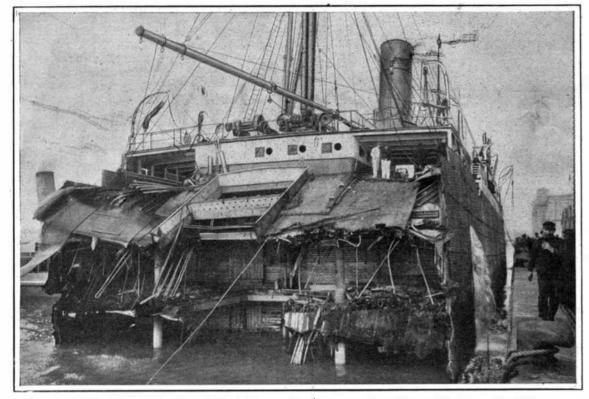


The "Suevic" Backing Away from Her Bow.



The "Suevic" Starting Under Tow for Southampton, Leaving Her Bow on the Rocks.

transversely across the hull of the ship, back of the last point of rupture by the underlying rocks. While this was being done, the greater part of the cargo in the after portion of the ship was discharged, only



Naphthalin is at most soluble in carbon dioxide to but $1\frac{1}{2}$ per r nt. Between -60 deg. C. and +200 deg. C. ethyl alcohol showed no decomposition in carbon dioxide. Of the acids, succinic acid and phthalic acid were insoluble. Of the ethers, ethyl ether is under all conditions soluble. Fixed or but slightly volatile substances are in general insoluble. The author remarks that liquid carbon dioxide is sharply differentiated from other condensed gases such as sulphurous acid and ammonia, which easily resolve inorganic salts, and from the chlorides, bromides, iodides, and sulphides of hydrogen, in which many organic bodies are soluble.

Another Fiala Polar Trip.

Anthony Fiala, who headed the Baldwin-Ziegler expedition in search of the North Pole, has decided to fit out an expedition of his own, and is already beginning to equip it at a cost of \$200,000. The commander and navigator George Comer, of East Haddam, who has acted as master of numerous whaling vessels that have made successful trips to northern waters, is now superintending the fitting out of the "Gifford" for the trip. As a preliminary to the expedition, Mr. Fiala purposes personally to conduct a party of Americans next June to within the Arctic Circle, and probably land on the coast of Greenland. This excursion will establish a base of supplies for the expedition proper, which, it is expected, will be in readiness for the following summer.

After Arrival at Southampton. View Showing the Jagged Edges Where the Dynamite Cartridges Cut Through the Hull and Decks.

SAVING A SHIP BY AMPUTATION.

It has been decided to increase the distance and reduce the area of the target for the firing tests in the British navy with the 6-inch and 9.2-inch and 12-inch guns. The abnormally high scores made last year are responsible for the change, the opinion being held that the gunlayers can do well with a much smaller target at a longer range.