

### OPENING OF THE LARGE DRYDOCK AT LEAGUE ISLAND.

The handsome drydock at League Island, after much delay, has been opened to the nation's warships. So large is this new dock, that although the "Kearsarge," the first warship to be towed into the dock, is 368 feet long, with a beam slightly in excess of 72 feet, she looked far less than her size when the huge basin was empty of water.

The length of the dock over all from the outer groove to the head of the dock is 750 feet; the length of the bottom is 698 feet; and the width amidships is 134 feet. The width at the bottom, amidships, is 80 feet. At the entrance to the basin the width is 102 feet at the top and 80 feet at the bottom. At mean tide the water over the sill is 30 feet deep, a sufficient depth to accommodate the largest battleship afloat.

The basin is built in courses of stone and concrete, narrowing as the bottom is approached. It represents four years of most arduous toil, and the mastering of engineering difficulties that were well nigh baffling. Two or three of the sub-contractors engaged upon the work were forced to suspend, unexpected physical problems arising which made the cost of excavating and building the elementary portions of the basin far more expensive than the government's appropriation would warrant. In constructing this expensive work, quicksand proved to be the most serious difficulty. This necessitated the driving of 4,000 piles to provide a foundation strong enough to prevent the massive superstructure and its loads from serious settlement. With this quicksand in mind, the engineers watched closely the docking of the "Kearsarge"; but even with the weight of the battleship added, the dock stood the test with every evidence of stability.

The walls of the new basin have an unusually steep pitch. This improvement makes possible the floating and docking of the largest war vessels in the basin with less water than would be required by a much smaller structure.

The drydock was authorized by Congress in 1898, at the close of the war with Spain. It is the design of the Navy Department that each of the divisions of the Atlantic squadron shall have its particular drydock; and to League Island have been permanently assigned the "Kearsarge," "Kansas," "Georgia," "Maine," "Brooklyn," "Columbia," "Minneapolis," "Montgomery," "Dixie," "Prairie," "Yankee," and "Panther." The old drydock at the navy yard is large enough to accommodate all except the largest of the battleships.

#### MAGICAL CURES.

BY RANDOLPH I. GEAR.

From time immemorial people in almost all countries have believed in the curative properties of certain natural objects prepared by special methods, as well as in the supernatural power of images, idols, and fetiches of all kinds. Stones of different qualities have been supposed to possess divine attributes. Elias Ashmole, who

styled himself "Mercuriophilus Anglicus," writing in London in praise of alchemy during the middle of the seventeenth century, described several of these stones under the head of "mineral" stone, "vegetable" stone, "magical" or "perspective" stone, "angelical" stone, etc. The first, he declared, had the power of changing any imperfect earthy matter into gold and

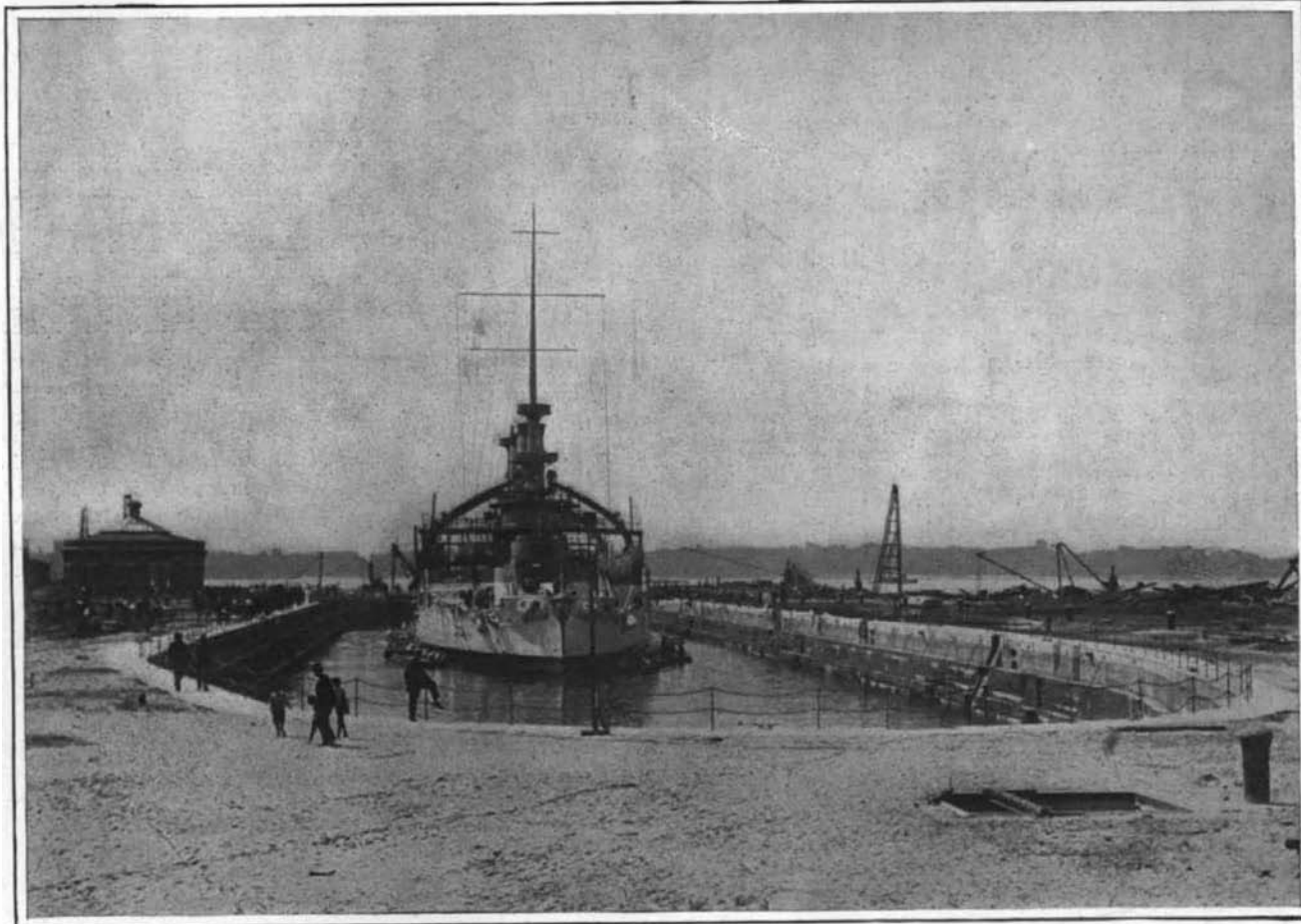
thing else to prolong life, poisoned at present by the oxyds of copper, lead, and iron, which we daily swallow with our food." Perhaps his contention on this point was correct. Who knows?

But fascinating as a glimpse of early beliefs in chemistry and medicine might be, the purport of this article is rather to mention a few of the charms, amulets, or talismans, in the efficacy of which even now millions of the inhabitants of many lands firmly believe. Perhaps there is not one among these groups of objects more curious than the so-called Scythian lamb—or in China the "golden-haired dog" (*Kouchi*)—which is after all nothing more than a woolly root, but was actually esteemed as a drug of marvelous properties by the pharmacists of Europe during the sixteenth and seventeenth centuries, and was believed by reputable physicians to be half plant and half animal. In China it is regarded even now as a supernatural means of renewing youth.

Where magical powers are bestowed through the medium of animals, the former are believed to be increased in proportion as there is mystery in their modes of life. Toads and other batrachians come under this category, and hence lizards which have been dried and neatly stretched upon bamboo splinters, are greatly in demand in China and other countries where the primitive medical man still holds sway. In Japan merely the skin of a snake is still supposed to be a sovereign cure for abdominal pains. Turtles, too, are regarded with great awe in China, and so are tigers' bones and carbonized monkeys' skulls, which are prepared by putting them into clay vessels exposed to heat until the crania are thoroughly calcined. Birds are also carbonized for medicinal purposes, and the nests of certain swallows, made out of the gelatinous substance of seaweeds partly digested and disgorged, are believed in that country to be most invigorating as medicine for the sick.

The Indian medicine-man does not by any means rely wholly on magic for his cures; he makes people well by producing uncanny noises, which are believed to frighten away the spirits of disease. For this purpose a wooden rattle covered with buck-skin, and made up in the shape of a turtle, is often employed, while for similar purposes of exorcism the Tibetan lama wields a whip with a handle of human bone and lashes of human skin, while he beats upon a drum formed out of the upper parts of two human skulls.

Charms and incantations were common among the Druids for the cure of diseases, and often the former consisted of nothing more than rags, old clothes, pins, or needles. In Persia there is a superstition that a patient has only to deposit a rag on certain bushes to obtain a cure. Pieces of garments that have touched the "pilgrim camel" are preserved with great veneration, and when persons are dangerously ill, they lay these things on their bodies as infallible



Length over all, 750 feet. Width, 134 feet. Depth over sill, 30 feet.

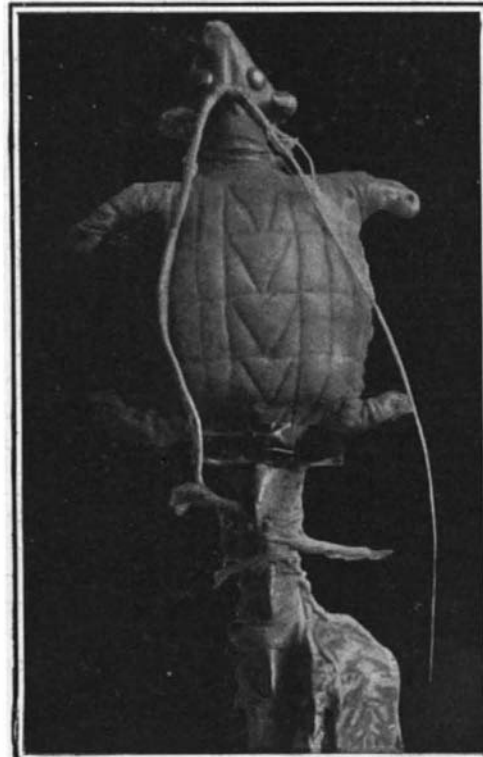
This View Represents the Docking of the Double-Deck-Turret Battleship "Kearsarge."

### OPENING OF THE LARGE MASONRY DRYDOCK AT LEAGUE ISLAND.

silver, flints into rubies, diamonds, sapphires, etc. By means of vegetable stones, men, beasts, birds, fishes, and plants could be made to grow and bear fruit. The magical stone enabled one to discover any person in any part of the world, as well as to understand the language of birds and beasts, while the "angelical" stone endowed its possessor with divine gifts, causing angels to become manifested, besides conveying the power of conversing with them through dreams and revelations. Even such men as Lord Bacon and Sir Isaac Newton speculated on the so-called philosopher's stone, so that those of our day who visit mediums and believe in rappings and slate writings are no whit more credulous than they. Dr. Christopher Girtanner, a famous professor of Göttingen, prophesied as late as the last century that before it had passed the transmutation of gold would be generally known and practised. "Every chemist and artist," said he, "will make gold; kitchen utensils will be of silver and even gold, which will contribute more than any-



Sorcerer's Image (Korea) of Stuffed Buckskin.



Indian Medicine Man's Rattle.

MAGICAL CURES.

remedies. Among the Indians and Norwegians, and other northern nations, the hoof of the elk is regarded as a sovereign cure for epilepsy, if applied to the heart of the sufferer and then to his ear. In the Hawaiian Islands a fetich consisting of a human thigh-bone and a braid of human hair is regarded as a panacea to ward off misfortune; while a straw image thrown out of a Korean's house on the last day of the year, is believed in that country to carry with it the

left. Before her was a band of the executors of her vengeance, two of them with red grinning masks, black shields, and naked scimitars. White lines, like rays, issued from the bodies of the others, to indicate infection. On the right was a group of men with spotted bodies inflicted with the malady; bells were hung at their cinctures, and a few of them waved black feathers. These were preceded by musicians with drums, who supplicated the pity of the furious

having peculiar power over some special form of disease. Thus, the Zuñi Indian makes a clay image to represent a mountain lion, and the spirit of that animal, which is the guardian of the Northwest and the master of the gods of the hunt, comes to dwell in that object, protecting the owner from injury by accident and helping him to success in the chase. A Korean sorcerer's image, stuffed and covered with buckskin, and often represented as riding on horseback, is used



**Idol at Korean Crossroads, Used to Frighten Away Spirits, Which are Much Dreaded in the East.**



**The Famous Scythian Lamb—a Woolly Rootstock of a Plant Alleged in Myth to be a Young Sheep. The Plant is Grown in China for Medicinal Purposes.**

sins of the household, as well as to obliterate all traces of bad luck.

In old England the women were no doubt as anxious to appear charming as here in modern times, but their efforts to do so were far more simple and less expensive than now. For instance, if they were disfigured by warts, they merely had to steal a piece of beef from a butcher's shop, rub the warts with it, bury it, and (presto!) they disappeared; or, did their complexions need to be more pink, all they had to do was to eat some kind of plant, seeds and all; roses took the place of sallow skin. In Algeria, too, women follow this practice, using a plant called fenugreek for the purpose. The wonder of it all is how, after failure must have proved the inefficiency of the remedies in a large majority of cases, they went on believing (and in many countries still believe) in these absurd remedies; but had it not been so, human nature would have had to be different from what it is, has been, and probably will be, and there would then be no truth in the saying that every one likes to be fooled part of the time.

It would not do to omit mention of the powerful aid rendered by the various gods and goddesses in China, India, Java, Korea, and other countries, in exorcizing disease. The Hindoo goddess who had a superintending power over smallpox, for example, was approached with solemn ceremonies and presents to propitiate her. She was represented as standing with two up-lifted fingers, threatening to strike on the right and

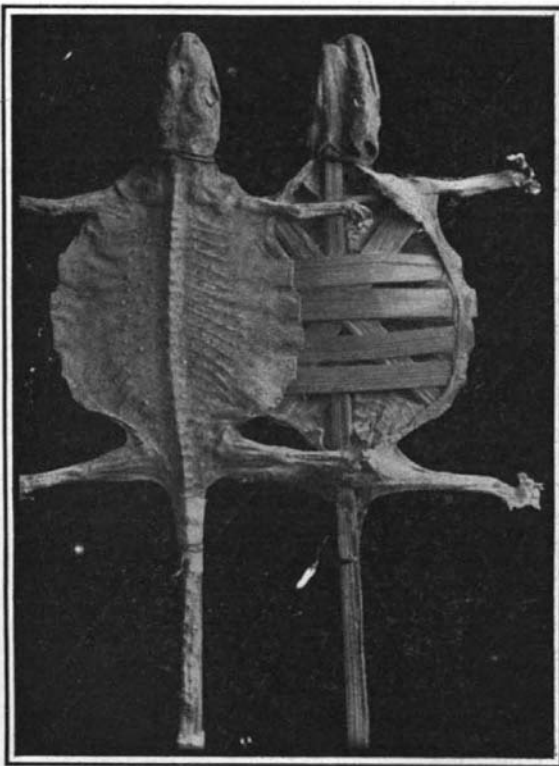
deity. From behind her advanced a bevy of smiling young women, gracefully carrying on their heads baskets with thanksgiving offerings, in gratitude for their lives and beauty having been spared. A little boy with a bell at his girdle conveyed something emblematic of inoculation from the arm of the goddess. By such means and humble intercession the benign goddess gradually stayed her fury, and the diseased were thus made whole, or were at least supposed to be cured, which appears to have answered just as well. In Java some idols are provided with bells for calling the attention of the god and goddess to the need of their exercising sacred powers in behalf of the sick and unfortunate.

Akin to this blind faith is the credulity of some classes of Japanese, whose doctors know very little more of anatomy and physiology than the patients themselves, and for purposes of diagnosis they rely mainly on the pulse. Three pulses are found to be in each wrist, they explain, viz., the heart, controlling the right upper pulse; the lungs, the left upper pulse; the stomach, the right middle pulse; the liver, the left middle pulse; the right kidney, the right lower pulse; and the left kidney, the left lower pulse. Thus, by a careful examination of the six pulses, he at once discovers what is the matter with the patient, and proceeds in his own way to effect a cure, or to instill into the patient's mind that he is already made whole. In Korea and among the North American Indians images are made out of various materials, each kind

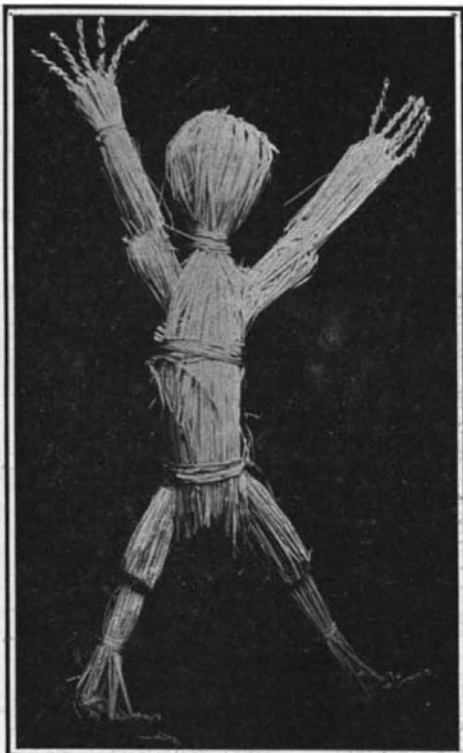
in like manner, and is believed by the natives to be all-powerful in averting calamity and death.

An interesting announcement of which we shall look for confirmation with interest, comes from the School of Medicine at Rochefort (France) regarding a new radio-active substance discovered by a young student named Luncien. It is said that the substance is uranyl-molybdate, and as its constituents uranium and molybdenum are fairly abundant elements there should be no undue trouble in providing the materials, nor would there be in preparing the substance. The molybdate is formed by adding ammonium molybdate to uranyl nitrate, when a white amorphous powder separates. This is dried in the dark and apparently must be kept there, as it is unstable. It is said to give radio-active effects practically as intense as those given by radium. Though costly—about \$110 per ounce—the price is slight compared to radium, which has reached many thousands of dollars per ounce.

Commander Peary's attempt to reach the Pole has been postponed for twelve months. In a statement which he has issued, Mr. Peary says that the delay has been caused by the failure of the contractors who were installing new boilers to keep their agreement. The work was to be completed on June 1, but was two months late. The "Roosevelt" will, it is hoped, be able to visit Etah, Greenland, this year, where it will deposit a supply of coal for its use next year.



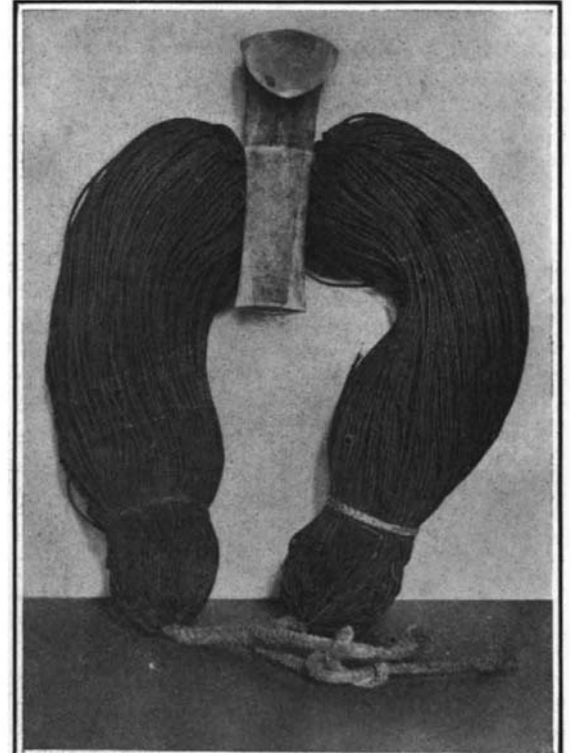
**Dried Lizards Stretched on Splints of Bamboo. Used in China as a Medicine. Reptiles are Widely Used as Fetiches.**



**Straw Image (Korea) Thrown Out of the House on the Last Day of the Year to Carry Sins and Bad Luck with It.**



**Javanese Idol with Bell to Call the God.**



**Hawaiian Fetich of Human Thigh-Bone and Braided Human Hair. A Supposed Means of Warding Off Misfortune.**

The unscientific mind usually attributes sickness or misfortune to some malign external influence which must be appeased. In the supplication or propitiation an object of human origin, or one modeled into human form, is frequently used.