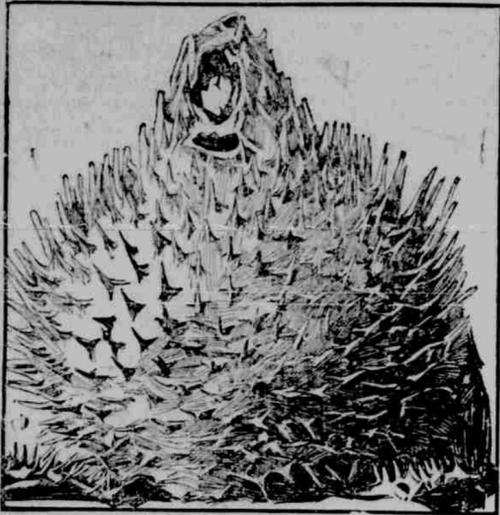


HELMET MADE OF FISH SKIN.



To the savages of the South Sea islands, from whose viewpoint nearly all of the world seems to be made up of ocean, everything that has to do with the sea appears to possess a peculiar potency.

The sea god is the greatest of all divinities, they consider, and the fishes and other animals that dwell in the briny deep are more or less powerful, in a supernatural sense, in one way or another.

Hence it follows that a spear barbed with the ivory "stines" of the stingray is particularly prized. It is a formidable weapon enough in reality, inasmuch as it cannot be withdrawn from a

wound except by cutting it out. But these savages imagine that its potency is mainly due to the influence of the divinity which in some manner is represented by the fish. It is the same way with the sword that is made out of the nose of a sawfish, with its row of sharp teeth on either side.

They used also a very curious helmet, one of which, shown here, was formerly worn in war by a South Sea islander. It is made of the skin of an armor-clad fish called the "sea porcupine," which is covered with sharp spines. This kind of helmet, when placed on a man's head, is proof against any ordinary weapon, even an ax.

ANCIENT MANUSCRIPT DISCOVERED.

Dr. Seybold, professor of oriental languages at the University of Tübingen, has discovered among the Arabic manuscripts of Dr. J. G. Wetstein, formerly German Consul at Damascus, a hitherto unknown story which forms a part of the celebrated work known as "The Thousand and One Nights."

The manuscript, which is supposed to be the oldest of the kind in existence, is now being translated by Prof. Seybold, who will publish both the translation and the original text as soon as his work is completed.

Prof. Seybold has also found among Dr. Wetstein's manuscripts a hitherto unknown book, which purports to contain a full account of the extraordinary religious practices of the Druses, who have so long lived in Lebanon.

As, however, it contains merely a series of cabalistic figures, the book would be of little value if it were not for the fact that Prof. Seybold luckily found, at Munich, a short time ago, another manuscript, in which was given the full meaning of each of these figures.

WHERE EDITORS ARE POLITE.

Polite as American and European editors are when dealing with persons whose manuscripts they are unable to accept, they nevertheless do not soothe the disappointed ones in the graceful manner that Chinese editors do.

Here, for example, is a letter which was recently sent by the editor of a Peking newspaper to a gentleman who had offered an unavailable article:

"Glorious brother of the sun and the moon." It runs, "Behold thy son, who throws himself at thy feet and begs for thy favor. We were intoxicated with joy when we read your beautiful manuscript. We swear by the ashes of our ancestors that we never read anything equal to it."

"The result is that if we had published the emperor would have issued an edict prohibiting us from publishing in future any article which might be in the slightest degree inferior to your sublime composition. This would mean that we might have to wait ten years before we could bring out another issue of our paper."

"That is why I return your article with 10,000 apologies. Behold my hand, which trembles as I write."

"Your very humble slave,"

"LI TO TSCHIE."

11. Beethoven's ninth symphony.
12. The second part of "Faust."
13. The convention at Geneva.
14. The primary school and compulsory education.
15. The movement in favor of woman's rights.
16. The exploration of Africa by Europeans.

TRICK WITH A COIN.

Place a piece of money on a shallow plate, pour some water over it and then ask someone to take away the coin without wetting his fingers. As the coin is covered with water he naturally replies that he cannot do so.



To show him that it can be done, take a large glass, hold it upside down and burn a lighted strip of paper inside of it. The instant the paper is burned, place the glass, still upside down, on the plate. As a result the water will at once disappear and the cause thereof will be the warm air in the glass.

The plate will then be dry and the coin can be removed without wetting the fingers.

Halsitta Micoa, a full-blood Indian, has been elected chief of the Seminole tribe in the Indian Territory, defeating John F. Brown, a half-breed. The election may hasten the dissolution of the Seminole tribal government.

The purity of Japanese copper obtains for it a market all over the world, it having the highest known electrical conductivity of any specimens of this metal procurable. The value of the copper exported in 1900 was \$6,499,525.

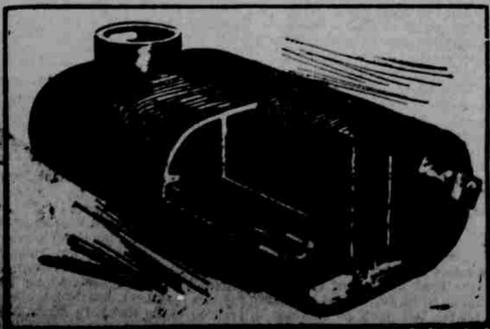
TO MAKE DRY STEAM.

Separating vapor or steam from water is the object of a new apparatus. It consists of several sieves, or sifters, of fine gauze wire, through which the moist vapor passes on its way from the boiler to the machine in which it is to be utilized. The sifting of the moist vapor produces a friction of the molecules of vapor and of the fine particles of water with which it is charged against the threads or wires of the gauze.

The result is an elevation of temperature and a slight lowering of pressure,

and these conditions bring about the vaporization of the water, since they act in the same manner as a surplus of heat would.

A practical apparatus of this kind has as a foundation a steam pipe, containing a section of fine gauze wire, which are separated from each other and held in place by frames of suitable form. These frames and sections of gauze wire are connected with each other and with the pipes by means of long pins. A separator of this kind is generally placed in the steam compartment of the boiler.



THE VILLAGE DOCTOR.

Along the village streets where maples lean
Together like old friends about the way,
A faithful pair oft and anon were seen—
He and his nag, both growing old and gray.

What secrets lurked within that old soul's breast?
Of mother-love, of throb of pain and ill,
All safely kept beneath that buttoned vest,
Receipts of powders and of pills,
Thrice happy he when some fond mother's eyes
Grew moist with love unpeaked to find
Snuggled to her breast her baby whose
Pulse throbbed in his arms and whose
Within her soul and bosom were entwined,
How oft he held the wrist to mark the slow
Pulsations of the feebly fluttering heart
While his kind words, soft-murmuring
and low,
Sought to calm the mourner's pain and smart.

He was to all a father, brother, friend,
Their joys were his, their sorrows were his own.
His sleeps in peace where yonder willows bend
Above the violets that kiss the stones.
—Horace Seymour Keller, New York Sun.

Finding a New Star.

BY ELIZABETH CHERRY WALTZ.

(Copyright, 1901, by Authors' Syndicate.)

HE fondled with love and care the great new telescope which had just been set up and which three cloudy nights had prevented him from using to explore the heavens.

"You will know, after 10 years' more study, just how I feel towards this beauty," he said to Kittage, his student and assistant.

Kittage, who was woefully near-sighted, actually trembled with pleasure.

"We might look over the flats a little," mused the professor, working at screws and table busily. "It is not possible to understand these adjustments too well, by friend."

Kittage, who never saw much only through the wonderful eyes near him, could not speak for joy. His red, sparse hair bristled about his forehead and his long, sharp nose was very near.

"Stand back a trifle," said the professor, "and I will first observe yonder hill across the stream. Ah! What a focus! Would you like to see a cabin in the woods? There, see even the dweller sitting on a stone in front of his door. It must be miles away."

After Kittage had seen his long fill, the professor adjusted the instrument again.

"Now for the flats. Ah, how the pebbles shine along the lake! It is beautiful. A boat far, far out. Fishermen, a steamer. You shall see the sight in a moment. Kittage, I shall first diminish the focus. There—O my soul! Why, what's this?"

He hastily made a new adjustment and looked again.

"It's true, 'tis true! A man, nay, here is another, carrying a woman from a carriage to a boat on the shore. Her yellow hair hangs. She is young, she is finely dressed. A crime, a crime! And we are miles away."

Kittage forgot his reverence.

"Let me see, let me see, sir."

"Yes, my good Kittage, see that you also have the story. And I will run to the telephone and have the police go. Keep your eye there and move not, move not, my very good Kittage."

The professor ran down the ladder to the rooms below, his voice dying away.

"And she is young—her hair is yellow."

Christopher Kittage looked and trembled. Far away, miles across the flats in a singularly isolated and dreary spot, a carriage stood and still further away a sailboat waited on the lake shore. The man half dragged, half carried the woman. Kittage reached his hand gropingly for a lead pencil and made unscrambling notes on a bit of paper on the stand. Astronomers are used to doing that.

Up came the professor in long jumps.

"How far to the boat, Kittage?"

"A quarter of a mile, sir."

"Headquarters will reach them by telephone and the mounted police can make it. You can watch until I get my breath. Is she conscious, think you?"

"No, sir; her hands hang limp."

"Is the carriage there?"

"It goes toward the bridge. Ah, sir, I see a galloping policeman beyond the bridge. He comes fast. His helmet shines in the sun. The men have now stopped to take breath. They cannot see the policeman. He gallops like mad, sir."

"I will take the telescope now," said the professor, "and tell you the story. Ah, the police! There are four there. They stop the carriage. They go on. Are they lost? Ah, Kittage, they go in the wrong direction and the men are frightened. They're running with the woman, dragging her cruelly. She is certainly drugged. Kittage, run you down and telephone again that the police are in the wrong direction—but, now, now they are right—now they advance! They see the men far away. Ah, the men drop the girl and they flee!"

"This is a crime, a crime that this telescope has thwarted."

Kittage stood beside the table, his face working.

"Have they found her yet?"

"They see her prone on the sand. They gallop towards her—they are there—one jumps off, and another. They lift her!"

"Is she dead?"

"Ah, no, no!"

"Lift her to the man on the horse—they go toward the carriage. Come, Kittage, we shall go, you and I, to the headquarters. Aye, and the other policemen now have the men. One with a beard, one bare of face. Come, Kittage, we are needed."

An hour later a strange group was gathered in the room of the chief of police. The professor and Kittage, a portly man of evident wealth, several pale women and two Greeks, one old and one young.

"It is somewhat of a family affair, you see," said the portly man, coolly, "and done with Demari's own ideas of revenge on me. I stole his daughter in Crete 20 years ago. She became my wife, and now he seeks revenge by kidnapping my daughter. Demari, if you and your son, Carl, will leave America at once, I will try to arrange this matter. If not, you can take your deserts. You shall have money and must promise not to return. If you do, I will prosecute you."

A growling and whispering consultation took place between the prisoners.

"We go," announced Demari, "we go for \$5,000 to take to Crete."

"Two thousand and so hang yourselves," retorted the millionaire, "that's all. I know how to treat you beggars. And my daughter shall now know all, and be able to defend and guard herself always."

Another growling consultation and the terms were accepted by the uncle and nephew.

"And now, professor," said the father, even more coolly, "we owe you and your telescope a great deal more than we can ever repay. Will you and your friend here do me the honor to dine with us tomorrow, and let my daughter Stella thank you in person?"

The professor bowed and smiled awkwardly. He was thinking.

"Stella," he muttered to himself, "Stella? A new star."

THE WEDDING RING.

Milwaukee Sentinel: Is the wedding ring doomed? Will brides of the future plight their vows without the aid of the golden circle that has signified wedlock for centuries? These are the questions that are agitating the minds—or, more fittingly, the hearts—of thousands of American young women who are contemplating matrimony as a new or recent possibility.

The cause of all this heart-burning and mental distress is the recent utterance of Prof. Frederick Starr, of the University of Chicago. He shattered the ideals of several pretty "coeds" in the anthropology class by cold-bloodedly declaring that the wedding ring is a relic of barbarism, and that it represents the nose-ring or manacle, by which, in past ages, the old slave was led away from the mart by his new master.

The origin of the wedding ring is shrouded in mystery. The primitive marriages were those by capture, in which the bride was forcibly taken away from her friends by the bridegroom, and invariably there was connected with the ceremony some token of the wife's total submission to her lord and master. Tradition has it that in many instances this token of submission was a ring or fetter placed upon the finger of the bride as a token that hereafter she was the absolute property of her husband.

The same symbol, expressing the same idea, was used when marriage by purchase and marriage by dowry succeeded marriage by capture. The Romans, the Greeks, the Babylonians, the Assyrians, the Parthians and many other peoples sold their women, the price paid being fixed according to the beauty of the woman. When the marriage ceremony was performed, a ring was put upon the bride's finger as a token that the purchase money had been paid.

Although there is no people more tenacious of the marriage ring than the Jews, yet there is no record of the early Hebrews using them at all. Neither the Bible nor the Talmud speaks of the ring, although both describe marriage ceremonies in detail. It was not until betrothal and wedding rings came to have a sentimental significance as an earnest of lasting affection that they lost the fetter-like symbolism. Monkish legends relate that Joseph and Mary had a brilliant betrothal ring or onyx or amethyst, which, when discovered centuries afterward, worked many wonderful miracles.

Pliny is authority for the statement that the prospective Roman husband gave his betrothed bride an iron ring without any stone in it, a proceeding which, while it was probably appreciated by the Roman girls, would hardly be looked upon with favor by the up-to-date damsels of to-day. At her wedding the Roman girl received another ring bearing the figure of a key upon it, betokening that her future home was in her charge.

In the early days of the Christian church the ring was put upon the bride's right hand. There is in the Salisbury manual an account of a quaint old ring ceremonial used at marriage. According to this, the bridegroom was to receive the ring from the priest with the three principal fingers of his right hand, and then, holding the right hand of the bride with his own left hand, he was to say, "With this ring I thee wed." He was then to place the ring on her right-hand thumb and say, "In the name of the Father," then on the second finger, and say, "and Son," then on the third finger and say, "and Holy Ghost," and finally on the fourth finger, where it was to remain, and say, "Amen."

Among the classical ancients, however, the betrothal and the wedding rings were worn as they are today—upon the third finger of the left hand. The reason for this was an old idea that some particular nerve, vein or artery leads directly from that finger to the heart, the seat of life, and also of the affections, according to the old-time view. Other reasons given for this preference of finger and hand were the facts that the left hand is less used than the right and that the third finger is more protected than any other of inferiority or subjugation, and as in the ancient times a wife was distinctly the inferior partner in wedlock the left hand was used. During the time of the Georges in England the wedding ring, although placed upon the third finger of the left hand, was afterward worn upon the thumb, a fad which is still affected by actresses and ultra-fashionable women.

According to many religious beliefs it is absolutely necessary that a marriage ceremony be performed with a ring. This custom is referred to in many stories of English life where the persecuted heroine applies for shelter at the door of some inn or private home and is turned away because there is no wedding ring upon her third finger. The wedding ring required by the church of England may be of any material or of any size. Weddings have been solemnized in England with rings of brass, with curtain rings, with the church key and even with rings made of leather.

Jewelers say that there is a gradual change in the character of the modern wedding ring. The plain gold band is being gradually modified into a delicately chased affair enamelled with the birth stones of the bride and the groom or with other sentimental devices.

The Persian government has agreed to the construction of an overhead wire from India to Teheran in order to relieve the Jask cable and serve as a feeder for the Indo-European line.

HISTORIC TREE DESTROYED.

One of the most famous trees in Europe was recently destroyed by a storm. It was a poplar, and had stood for centuries near Wittstock, in Germany.

Of great size, it was also remarkable for the historical events with which it was connected, as well as for the fact that in course of time some of its branches had assumed grotesque forms of animals. The branches were so interlaced and twisted that at one point they presented the appearance of a monkey preparing to climb to the top.

This tree was popularly known as the "Swedish tree," because it was a

witness of the battle of September 24, 1636, in which the Swedes fought against the Germans. It was also known as the "Banner poplar," because Generals Baner and Torstenson knelt beneath it and thanked God for giving them the victory.

Though the old tree is dead, an offshoot, which grew beside it, was uninjured by the storm, and with the object of preserving it more effectually an iron railing is to be placed around it, and beside it is to be erected a monument, on which will be inscribed the history of the famous poplar.



HAMMOCKS THAT WEAR.

In Ecuador curious hammocks have long been in use, and Perry M. de Leon, United States consul general at Guayaquil, thinks so highly of them that he wants to see them used in this country. Their special merits, he says, are the strength, delicacy and elasticity of the fiber of which they are composed, and he expresses confidence that if they were imported "in quantity by some enterprising merchant the results would be gratifying."

The raw material is derived from the leaves and shoots of a palm which is found in some of the coast provinces of Ecuador and which is known as the "mocoora." It attains a height of 18 to 24 feet and is very thorny. At 8 or 10 years of age it matures, and if the shoots are properly cut it will live for an indefinite period.

Hammocks of this kind are known as "manavi" hammocks, and, so far as known, were first manufactured in the district of Pajan, Manavi.

"The favorite sizes," says Consul General de Leon, "are nine to 12 feet in length by three to six feet in width, and the fiber is of a whitish yellow color, like wheat straw, and is generally stained red in narrow stripes. The fiber is made into stout cords, which are intertwined every half inch with spiral cross strands, the color scheme is quaint without being gaudy, and from 12 to 24 manila cords are strung into the ends and bound together with the suspending rope."

"A good article, if not treated roughly, will endure ten years of constant use. In Ecuador the hammock is an indispensable household adjunct, being used as a hammock by day and as a bed at night."

BEEHIVE TOMB.

Miss Harriet A. Boyd, assistant professor of Greek in Smith college, Massachusetts, secured the \$1,000 stipend from a fellowship established at the American school at Athens for original archaeological research. She has recently concluded excavations at Kavoussi, in the island of Crete, where she has



made a series of brilliant discoveries which throw a new light upon ancient Cretan civilization.

Miss Boyd unearthed a great structure, evidently a palace, containing 12 rooms located upon a high, rocky acropolis, which is supposed to have been the home of one of the Hesperic kings. What was thought to be the crowning find of all was a large beehive tomb on the side of the mountain. In this had been placed all the valuable objects in the shape of pottery, vases, etc., that belonged to the owner who lived in the great structure above.

OUT AS WELL AS IN.

Washington Post: Senator Depew, who left yesterday for Europe, told a good story before he departed. According to Mr. Depew, there was a stuttering citizen of New York, who announced his intention of entering the ministry.

"How can you expect to be a successful preacher with that affliction?" was asked by a friend.

"The Lord will," said the man, "and I will have to see somebody to pull them out."

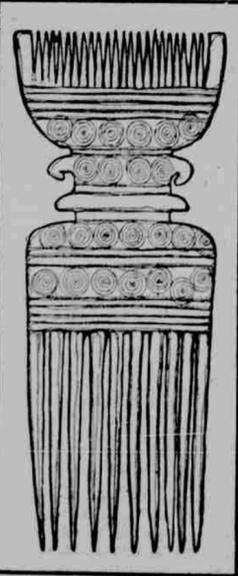
NEGRO AND CIRCLE.

Why the native African's eye and hand run to circular rather than rectangular and concentric rather than eccentric lines is a problem for the psychologist to solve. It is a fact that the peculiarity exists.

"Give a Zulu boy a plot in your garden to work," says a lady who has long lived in Rhodesia and Natal, "and go presently to see what he has done. You will find that he has laid everything out in circles, has sowed your seed in circles or dropped your plants in circles—circles within circles being his favorite design in garden work, as in almost everything else."

"He will use no rule or plummet, nothing to measure with or by, yet he will give graceful, accurate circles."

The comb in the picture furnishes an illustration in point. It is adorned with free circles, made by a black savage of



the Congo with a crude knife. Itself the product of native blacksmithing. He used no artificial measurement; his eye was his only guide. The comb is a curious looking affair. It is of an exceedingly black, fine grained wood, is nine inches long by four wide and very heavy.

It is difficult to see how any jungle belle ever managed to carry such a burden in her locks, close, kinky and retentive though such lock may be. The comb belonged at one time to the Commissioner of Gazaland, who gave it to an American lady living in Rhodesia. He got it from a native carver in the interior.

Does the American negro preserve the Africa's gift for making circles? Does the tendency to make curves rather than straight lines indicate a corresponding peculiarity of character? From what you know of the negro, does he do things in straight lines or curves? Does he go directly or indirectly for what he wants? Those who know him best here will say that he keeps to his curved lines.

Senator Hoar's house in Worcester was purchased by him some 40 years ago, when property was cheap, and is, therefore, a very large plot of ground almost in the center of the city. It used to belong to John Hancock, of revolutionary fame. The house is a roomy but unpretentious building, and is chiefly remarkable for its enormous library. Thousands of volumes are piled ceiling high in this great room, and Mr. Hoar spends hours and hours among his books.