THE LAMP'S EVOLUTION.

EXCAVATIONS OF ANCIENT CITIES SHOW IT OVER SIX THOUSAND YEARS OLD.

Originally was a Conch Shell and a Twist of Cotton—Western Ingenuity Devised the Brass Burner and Regulator.

By EDGAR JAMES BANKS, Ph. D.

The Oriental lamp is the same now as it always has been—a simple dish of clay, stone, bronze or glass, filled with oil; its wick is a rag or a twist of cotton, one end of which is immersed in oil and the other rests over the edge of the dish to be lighted. This was the lamp not only of ancient Babylonia and Egypt, but also of the Hebrews, Greeks, Romans, and all other early peoples. Even to this day it is the common lamp of Mesopotamia. In Saint Sophia, the great mosque of Constantinople, there is no other method of illumination.

The first artificial light with which primitive man brightened the darkness of night was the camp fire, the same fire with which he slightly roasted his meat and warmed his naked body. At just what age the idea of lighting by other means first occurred to him is no longer known, but the excavations at the Babylonian mound, Bismya, the ruin of the oldest known city in the world, have shown that it was in the very long ago, perhaps thousands of years before 4500 B. C.

During the excavations far beneath a temple which was constructed at that remote date, among the ruins of earlier ages, there was found a large conch shell about 8 inches in length. Its exterior had been worn smooth by constant handling, and a section at its opening and half o. its elongated valve had been cut away so that it formed a deep dish terminating in a long snout. In its interior were slight traces of a thin, black deposit. At first the use for which this dish was intended was puzzling; it was weeks later when it suddenly occurred to me that this sea-shell was the primitive lamp, the ancestor of the great family of lamps.

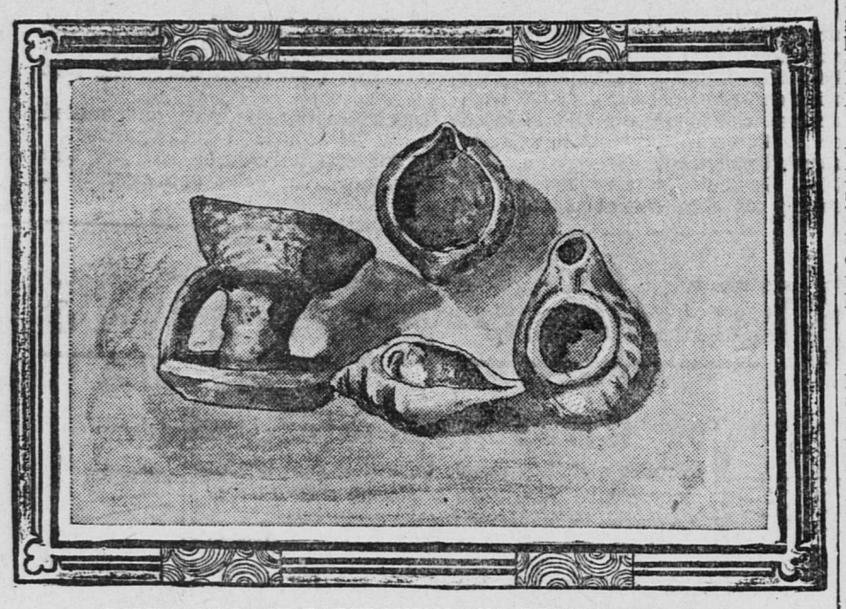
Some time later, while excavating at a higher level in the temple refuse heap, where the priests of 4500 B. C. threw the broken and discarded utensils of the temp' service, there appeared among the dozens of baskets full of polished and cut stone several triangular objects which resembled the conch shell in shape. One of alabaster was entire; others were fragmentary, yet their original forms could be restored. They were the lamps which came into vogue after the conch had passed away, or when it became so scarce that it was no longer employed, and stone was substituted in its place. Although the conch was discarded, its triangular form remained, even to the natural snout for the support of the wick, which was reproduced in the stone.

To the early Babylonian, the pure, almost transparent alabaster lamp was perfect in shape; the next step in the evolution was in its decoration. Instead of the plain exterior, it was engraved with reticulated or curved lines; but a more important step in its decoration was when the lamp-maker conceived the idea of supporting the wick in a hole at the sharp corner. One such example from the Bismya temple refuse heap terminated in a ram's head, the lighted end of the wick projecting from its mouth. After the discovery of the hole for the wick, it was an easy step to cover the entire lamp, with the exception of an opening in the center to receive the oil. Thus the lamp of classical times originated. Another interesting example from Bismya is an extremely large marble lamp, oval in shape and with vertical walls. The snout for its wick is a deep groove extending out about 2 inches, and with its support from beneath it resembles the handle of a modern dish. This lamp held about two quarts of oil, and, as it was found in the ruins of the temple, its unusual size suggests that in the Babylonian temple, as in the synagogues of a later era, and in some churches, even to the present day, a light was kept perpetually burning.

Previous to 4000 B. C. the lamps, as well as most dishes and household effects, were of stone; after that time objects of burned clay began to appear. Before that date lamps were found only in the ruins of the temple; later clay lamps were found in the dwelling houses of the people. Of the latter a variety of shapes have appeared. Some are triangular, the shape suggested by the conch; one is a miniature boat; others of a later period are identical in shape and size with those of Rome and Greece. The lamp of these nations was undoubtedly borrowed from the older civilization of Babylonia. The common clay lamp of Persia and of the time of Haroun er Raschid assumed a round form with a dent in its rim for the wick, resembling in every respect a miniature frying pan, from which the handle is missing. The lamp of modern Bagdad differs from it only in being set upon a pedestal and provided with a handle.

It remained for the lamp-maker of the civilized West, who would no longer rest the wick upon the edge of the receptacle for the oil, to pass it through the brass arrangement which he called the burner, and to provide it with a screw in order that it might be raised or lowered, and the essentials of the modern oil lamp were assembled.

While we have the sea-shell, the lamp of primitive man of over 6,000 years ago, it would be interesting to know what kind of oil was burned. The olive tree produces the illuminating oil of the mode: Orient, and although in other parts of the world the fat of animals was used, the unchanging customs of the East lead us to infer that olive oil was also then employed. The wick was doubtless a twist of the cotton which grows wild along the shores of the Tigris and the Euphrates.—Engineering News.



LAMPS OF LATE BABYLONIAN AND PERSIAN PERIODS.

Old Methods Succeed.

It has been claimed that old methods of doing business cannot succeed in this twentieth century of ours, but a striking example of where old manners have been and are yet successful may be found in the busiest city of the world—New York. Right in the heart of the wholesale district may be found a restaurant that is feeding more people every day of the year than any other house in New York City, and doing it along the line of "old methods."

It is claimed for this famous eating house that every pound of food used is paid for in cash upon the day it is purchased and that the proprietors have never yet given a check in payment for supplies, nor owed one dollar at the close of the day, and they keep no books.

Each morning the dealers supplying this remarkable establishment deliver the necessary goods at the receiving department and then form in a line leading to the cashier's desk where each one in turn receives his money in good hard coin.

When evening comes whatever is left in the cash drawer is profit, less charges such as taxes, light, fuel &c.

A further boast of the owner of this restaurant is that its doors have never been locked since first opened, way back in "wartime," and that no one knows where the key now is.

An idea of the number of people fed may be gained from the fact that table salt, used exclusively by the patrons at the tables and not including any used for cooking, is purchased every four months in ten barrel lots, each barrel containing three hundred pounds.

Wanted All the Goodies.

Teddy was about to be ten years old. In view of this interesting event Teddy's mother had ordered some ice-cream and cakes ond other dainties, and Teddy was told to invite his little friends to a birthday party. The evening of the celebration came around, and all the goodies were waiting to be enjoyed. Teddy and his mother were also waiting.

Suddenly the youngster said: "Mother, don't you think it's time to eat the ice-cream and cake now?"

"No, indeed, my son," she replied, "we must wait until your friends are here."

"Well, to tell you the truth, mother," began Teddy, "I just thought that for once in my life I'd like to have enough goodies, so I guess we better begin now, 'cause I didn't invite anyone."

NOW THE WATCH TRUST.

Representative Vreeland the Victim of a Joke During Watch Monopoly Controversy.

When Representative Rainey of Illinois, a few days ago, made a speech in Congress on the alleged watch trust, he opened up a subject that has been of decided interest in Congressional circles ever since. He had a collection of watches on his desk which he showed as exhibits.

Representative Vreeland of New York found another phase of the watch question which he wanted to talk about, and proceeded to stock up with sample watches and watch cases, He had the assortment nicely displayed on his desk, when, by a prearrangement, he was called out into the corridor.

As soon as he was gone a joker in a neighboring seat produced three memorandum spindles, two short and one tall. He set them in a row on Vreeland's desk. Then he produced three oranges and carefully stuck one on the point of each spindle, producing the perfect effect of the three golden balls of the pawn shop sign.

"Well, by gosh!" exclaimed Vreeland, when he came back. The laugh scared his intended speech out of him.

Mrs. Ferguson.—George, dear, how do you like my new hat?

Mr. Ferguson.—Do you want my real opinion of it, Laura?

Mrs. Ferguson.—No, I don't, you mean thing!

"Do you think a man's importance is measured by his pocketbook?"

"Certainly not," answered Senator Sorghum. "A pocketbook couldn't hold enough to amount to anything. It's the bank book that counts."—Washington Star.

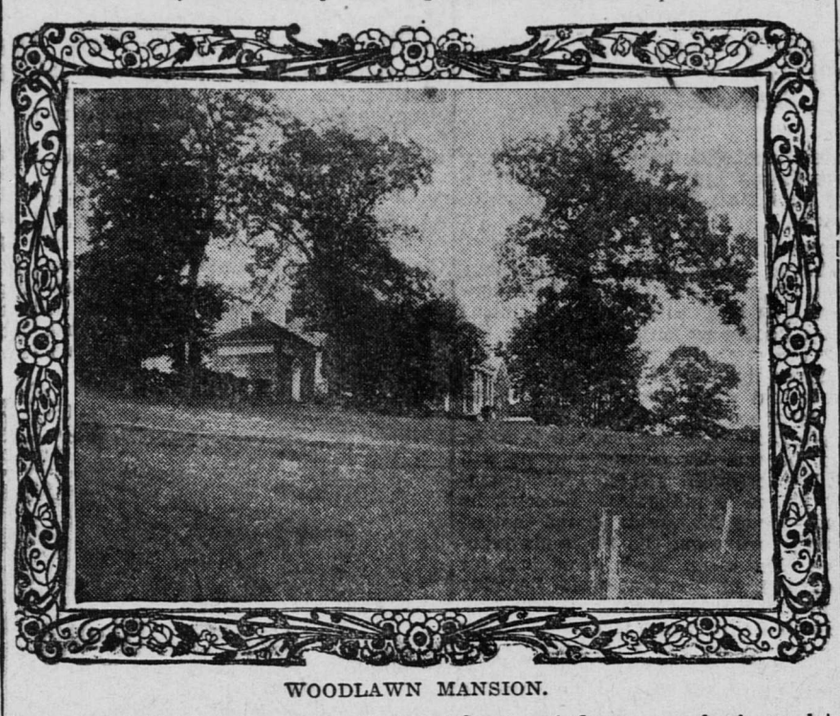
FAMOUS VIRGINIA HOME.

WOODLAWN MANSION, PART OF WASHINGTON'S ESTATE, NOW CHANGES HANDS.

A Gift from the First President to His Adopted Daughter—Playwright Paul Kester Disposes of Manor to Princeton Woman.

Another change of owners has come to Woodlawn Mansion, that historic property having been bought by Miss Elizabeth M. Sharp, of Princeton, N. J., from Paul Kester, who dramatized "When Knighthood Was in Flower," and other plays.

Woodlawn Mansion was the home of Lawrence Lewis, son of Betty Washington and Fielding Lewis, of Fredericksburg, and nephew of the great George Washington. The wife of Lawrence Lewis was Nellie Custis, granddaughter of Mrs. Martha Washington and the adopted daughter of George Washington.



WOODLAWN MANSION.

The marriage of Nellie Custis and young Lewis was the social event of the year 1799. The marriage took place in the mansion house at Mount Vernon on the birthday of Washington, and in the year of his death. Washington gave to the couple a tract of forest land covering a range of hills on the Mount Vernon property two miles southwest of the mansion house. Lewis personally saw that a part of the woods were cleared away, and in the clearing he had erected the great house which he called Woodlawn. The place passed to Lorenzo Lewis at the death of his mother, Nellie Custis Lewis, and by him was sold in 1848 to two Quakers from New Jersey, Chalkley Gillingham and Jacob M. Troth. The sons of these men live near the estate to-day, Jacob M. Troth, the younger, living on an adjoining farm and on land that was a part of the original Woodlawn. The house passed through many hands and in 1900 was bought by Paul Kester, who now sells it to Miss Sharp.

HOUSE FOR FREE SEEDS.

(Continued from preceding page.)

Currier, of New Hampshire, where it is commonly understood one of the chief industries is that of raising rocks, granite, and marble, protested against his assertion that the farmers were not in sympathy with the free-seed business. They declared the farmers of their State demanded them anyhow.

Mr. Cocks read letters from the editors of practically every agricultural paper in the country, denouncing free seeds, and when he frankly admitted he had written these editors asking their opinion of the proposed action of the committees he was attacked by the advocates of free seeds as if he had committed some crime.

ALL ABOUT SEED "ADS."

Mr. Bartlett wanted to know if these papers carried advertisements of the seed dealers, to which Mr. Cocks affirmed that he had no doubt of it, as the business of selling seeds was a legitimate one. Mr. Fordney did not believe the answers represented an honest opinion, as the replies had been sought.

Mr. Cocks endeavored to proceed with his argument, re-enforcing it with citations from a stack of letters, but he spoke amid a confusion that marked the day as the most unruly of the entire session. Mr. Gains shouted himself hoarse—and that is a difficult thing, even for Mr. Gaines to do; Mr. Mann scolded, as he often does when he fails to approve; Mr. Fordney, Mr. French, Mr. Sims, Mr. Chandler, and others asked questions simultaneously, and the chairman of the committee all but broke his gavel in a vain endeavor to maintain order. At one time it looked as if the mace, that symbol of the dignity and power of the House, would have to be taken from its perch and waved over the heads of refractory and angry free-seed mutineers who refused to take their seats when so ordered.

After threatening to call members by name if they did not obey, the band of agriculturists, shouting and yelling for the free-seeds "loot" quieted down, and Mr. Cooks was enabled to proceed.

SEEDS VERSUS BATTLESHIPS.

Free seeds found another doughty champion in South Trimble, of Kentucky. Mr. Trimble asserted that the seed dealers of the country were instigating the newspapers to fight free seeds. Real farmers wanted these seeds, but kid-glove farmers who run the granges did not need them and did not want them. If this was graft, he said, it was the only kind of which every one of the 70,000,000 people of the country got a piece.

Advocating economy in other directions, Mr. Trimble suggested less expenditure on battle ships. "If we stay at home, mind our own business, let other people alone, we shan't need a battle ship any more than a burglar needs a jimmy and a dark lantern," shouted Mr. Trimble. This sentiment, notwithstanding the speaker was a trifle mixed in his metaphor, met with prolonged applause from the gallant band of free-seeders.

Mr. Lilley, of Connecticut, read letters from his consituents, some asking for Shropshire sheep, Durham bulls, postage stamps, and cash, instead of the seeds he has been sending out since he came to Congress. The reading of these letters again plunged the House in disorder and confusion.

PITY THE POOR FARMER.

Mr. Gaines, of Tennessee, endeavored to be heard above the noise and confusion. As he sat down, by command of the Chair, he managed to say that the bill was loaded with all kinds of appropriations to take care of and suppress the "mouth and foot disease, hollow horn, and hollow tail," but took away from the farmer the few seeds that he every year looked forward to receiving.

This new outburst of eloquence on the part of Mr. Gaines threw the House into convulsive laughter. When the members had partially recovered their composure Mr. Gaines rushed down the aisle, carrying a mass of manuscript in both hands, holding it aloft, shouting that he had hundreds of letters from farmers favoring free seeds.

As chairman Wadsworth reached out his hand for them, Mr. Gaines laid them on a desk and began pulling from the bunch various documents. It developed that among these "hundreds" of letters there were an unusually large portion of bills of various sorts and other "pub. docs." that had no relevancy to the seed question.

Again the members shrieked and gathered in the aisle, forcing the chairman to resort to every parliamentary expedient to secure order.

When the bill came up for a vote the free seeds were continued by a vote of 153 to 82. A fight for the abolishment of the free seed practice will continue, for it is believed that the sending out of the packages are of no practical benefit to the farming classes of the country, and it is safe to say that next year's bill will find the appropriation for these seeds omitted when it comes from the committee and the probabilities are that by that time a majority of the members of the House will support the committee.

Magistrate: What's your name?

Prisoner (named Simpson; and a stammerer): Ss-ss-ss-ss-ss—

Magistrate: Constable, what's the prisoner charged with?

Constable: Sounds like seltzer water, yer Worship.

Since 1896 the world's annual production of gold has doubled.

There are now one million pensioners on the pension rolls of the United States.

The number of cameras made in the United States last year was 300,000, worth about $20,000,000. A generation ago a camera was an unusual object.

FARMER IMMIGRANTS.

Some of Our Citizens Make Good Farmers—But Poor City Dwellers.

Many of our Italian immigrants are good farmers, after their fashion of laborious intensive cultivation. They are wretchedly poor, but they are children of the soil and where they occasionally do get into the same congenial occupation in this country they make good farmers and eventually good citizens.

The greater part of the immigrants, in fact, now pouring into the country are better qualified for agricultural and horticultural pursuits than for any others. These pursuits were theirs in their European homes, and but for certain difficulties they would naturally resort to them here. The trouble is, there is nobody ready, as a general thing, to offer them employment, in groups, on the land; and transportation to the land is more or less expensive. On the other hand, there are always contractors ready to engage them for railroad, mining and similar employments in the seaboard States, and sometimes in other States; more often they simply settle down in the big and already congested cities. They take what they can get; and, more especially, what will be most likely to enable them to enjoy the continued companionship of their fellow immigrants. The newcomer dreads the isolation which will usually be his lot if he accepts employment on a farm.

Under the far-sighted plan of the men who are colonizing some Western areas, particularly in California and New Mexico, all these difficulties are avoided. Groups of agriculturists of the same nationality are brought together, and invited to become owners of small tracts, sold to them on easy terms. Ten acres of good land, so obtainable—and the price of which he can usually pay in labor for others—is a very attractive proposition to the average immigrant, especially when, in his new home, he may be surrounded by others of his own race. The plan has been already demonstrated to be very profitable to the promoters also.

The highest mountain in Colorado is Massive, 14,424, and the next is Elbert, 14,421. Pike's Peak is 14,108 feet high and there are twenty mountains in Colorado higher than this.

The most expensive fish in the fish markets of the United States is the English sole which retails for about sixty cents per pound.

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