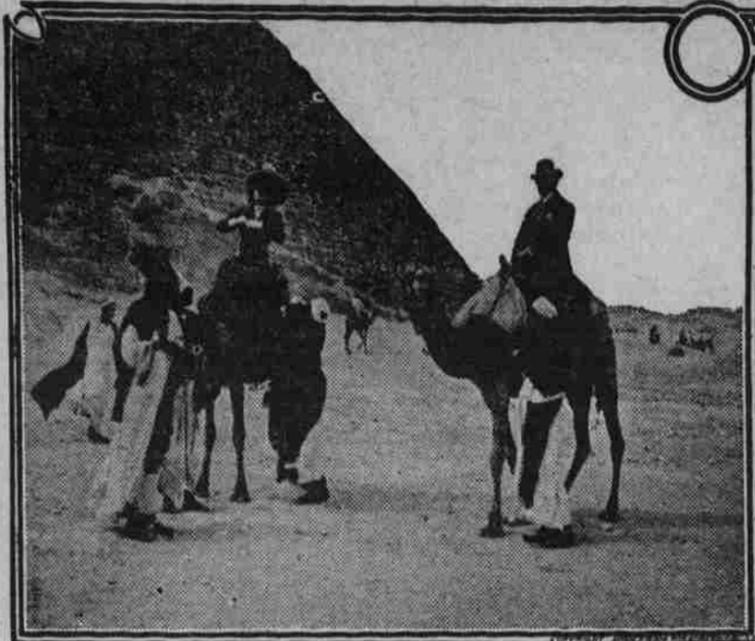


# SOLVE MYSTERY OF THE PYRAMIDS



AMERICAN TRAVELERS AT THE PYRAMIDS

It slumbered for 37 centuries before the coming of Christ—the Great Pyramid of Cheops, or Khufu. It still stands there, eight miles from Cairo, defying time, the elements and the vandals, all working together, barely able to stretch its skin. Egyptologists worked at it; Napoleon fought one of his splendid battles in its shadow. And an American, Dow Covington, has brought out the latest word from its mysterious depths; he has almost solved its secret.

Mr. Covington has cleared every passage that can be found. He has made it possible for visitors to reach the mysterious subterranean chamber within its shaft, which goes as far down as the level of the Nile in 2170 B. C.

Best of all, he has cleared the single remaining course just above the sands of the desert and revealed to the world that its outer sheath was of pure white limestone, which nobody knew before, because the great mass of stone had been used as a common quarry for thousands of years. The limestone sheathing makes a mosque in Egypt today. When the tomb of Cheops was first reared it was as white as a marble mansion of our times. But it is not so now.

Few of us can realize what thirty-seven centuries before Christ really means. That is 5,611 years ago. The technical work of those days was marvelous. The masonry is absolutely unrivaled—there is nothing better in all the world today. Monuments and palaces have come and have gone a hundred times since the great pyramid was built. They have perished; it remains.

For twenty years 100,000 men toiled at the stones. They built their great pile facing exactly north and south. They chose a base of nearly a seventh of a mile, 761 feet, to be exact. This was a plot covering nearly 13 acres. There were 210 perfect courses of stone, almost invisibly joined, of Mokattam limestone blocks. At an angle of a little more than fifty-one degrees its four sides swept up, tapering to the pointed apex, 431 feet above the ground.

In it were 85,000,000 cubic feet of stone, put up by people who had no modern machinery. There are about 2,300,000 individual blocks. Treated for centuries as a public quarry, all its outer stones and facings have been taken to Cairo and elsewhere, chiefly for mosque construction. The antiquaries never knew about this outside sheath until Mr. Covington of America came there with permission from the British government to make his explorations.

Mr. Covington began his work nine

years ago, making his camp in the shadow of the great pyramid. He started where the Caliph Mamoun left off in 818 A. D., nearly 1,100 years ago. It was Mamoun who forced the first passage into the stern depths of the monster of stone, but after he found it nothing more was done for centuries. Whole generations came and went before anything was learned of the mystery.

First of all the American searcher cleared away all the debris. Then he started at the descending or entrance passage, just below its granite plugs, and found the mysterious chamber below the ground—burrowed out of the living rock beneath the mighty pile above—"The stones of darkness and the shadow of death." What this chamber was for is not yet known. The passage leading to it may now be used by cautious visitors. It is 350 feet long and through the natural rock slopes down not half an inch out of plumb. You must go on your hands and knees because it is but four feet high and a little more than three feet wide.

When he got to the bottom of this chamber Mr. Covington realized that there was more to do. He found a well shaft, 192 feet long, piled up with twenty feet of debris. When this was cleared away there started a current of strong, fresh air. It swept down the entrance passage, up the well shaft, thence down the descending passage out by the forced passage made by Mr. Mamoun. Immediately the temperature dropped 2 degrees. When Mr. Covington cleared the debris from the lower end of the king's chamber south air channel, 174 feet long, he reduced the temperature again.

The ordinary man may but visit the great pyramid—or any of the others, for that matter. Unless he have authority from the British government, which has Sir Gaston Maspero as its director general of antiquities, no man is allowed to touch a single pebble, much less explore. But Mr. Covington did such good work at the beginning that he has been authorized to clear away the sixty-nine feet of debris which obstructs the upper and outer end of the channel which leads to the great chamber of the king—the great Cheops, or Khufu, himself. Then for the first time in history the interior of this wonder of the world will be free from all obstructions.

Beneath the great King's chamber, in the heart of the pyramid, is the queen's chamber. Mr. Covington is now at work trying to find the interior ends of the 300-foot air channels. The inner extremities of these were discovered by an Englishman, Weyman Dixon, in 1872.

Masons today build no more beautifully than did those ancient men

who toiled 5,600 years ago. They have left their own monument in the queen's chamber, which, apparently, was never used. It is superbly finished and jointed; yet, oddly enough, the entrance to this superb tomb was covered and concealed. Possibly it was intended for Martitefe, Khufu's queen, but she survived him and married his brother Chephren, who built the second pyramid in the great group which stands today as a perpetual monument just outside Cairo.

The great king's chamber, 35 feet by 17 by 19, is wrought in polished granite. Just one hundred perfect blocks in five courses compose its walls. Nine granite slabs form its ceiling and the floor of the low granite chamber above. The second chamber's ceiling forms the floor of a third chamber, and so on up to the fifth, which is the topmost, each one rising over the great one intended for the dead king. Like the queen's chamber, this top one is roofed with an arch of heavy limestone slabs. On one of those slabs there still stays in living paint Khufu's quarry mark, or official seal—two birds and a snake, surmounted by a round dot.

Of the mysteries he has found Mr. Covington has just spoken, and especially above the grand gallery, 155 feet long and 28 feet high, by which the king's chamber was reached.

"I consider this the most mysterious part of this mighty miracle in stone," said he, "because if the pyramid were intended only as a tomb there was practically no use for this elaborate grand gallery, with its strange and remarkable features, except perhaps to temporarily accommodate the granite plugs which still close the lower end of the ascending passage, but which I find fit too tightly to have been slid into position. At an angle of about twenty-six degrees eight minutes it slopes up for 155 feet, its height 28 feet, and its width above the ramps nearly seven feet. Its great sides are clearly marked by seven overlapping layers of stone, while it is roofed by thirty-six slabs. Bordering the third overlapping layer is a finely finished narrow groove extending right round the gallery; it is but one of several remarkable and inexplicable features which distinguish this part of the structure.

"A twenty-inch ramp borders each side of the gallery, extending right up to the great step, which is just one yard high. Each ramp contains twenty-eight rampholes, over nearly all of which, for some strange and as yet unknown reason, shallow holes have been chiseled out, and a neat close-fitting stone let in.

"As most pyramidists are much perplexed by this feature and have advanced theories I must venture mine. It is just possible that the places chiseled out originally contained inscriptions, which the king for some reason desired to obliterate. It became necessary then to remove—to chisel out—the disfigured parts caused by the obliteration and replace them by a close-fitting let-in stone.

"In 1905 I discovered on the twenty-sixth course of the south flank a similar let-in stone, to the reverse side of which still adhered buff-colored cement. It had doubtless become detached from the face of a falling casing stone. Clearly incised in the dressed surface was the full tenth part of an 18-inch diameter circle. It was the only known inscribed stone ever found on the great pyramid. I would judge it had been let into a south flank casing stone at a place from which another inscription had been for some reason chiseled out."

Such is the newest story of the pyramids which have been standing amid the sands of Gizeh these thousands of years told by an American.

## Pens of Olden Times.

Confucius used a hair brush for a pen, and his ancestors for centuries before his time. The reed came into use for writing in the marshy countries of the Orient. It was hollow and cut in short lengths with sharpened ends, and was some improvement on the hair pen.

## ECONOMY IN LAUNDRY

LITTLE WAYS BY WHICH TO REDUCE EXPENDITURES.

Buying Soap by the Box Is a Good Method—Stationary Wringer Attached to the Tub Is a Necessity.

Soft water, for use in laundry work, saves soap, clothing, time, energy and money.

Buying soap by the box is more economical than buying it by the quarter's worth.

Removing the soap from the box, and piling it in such a way that it will dry, causes it to wash away less rapidly, and therefore it lasts longer, than if not dried.

Having a firm, substantial wash-bench, of a height suited to the worker, so constructed as to hold the tubs securely in position, saves time and energy.

A good stationary wringer, or one which is so made as to be clamped securely to the tub, is a necessity. When through using the wringer, loosen the screws to relieve the pressure on the rubber rollers; wash clean, wipe dry and put it away where it will keep clean until needed. Occasionally cleaning the wringer with kerosene, and then washing with soap-suds, rinsing and drying, tends to keep it in good condition.

The ironing-table should be of a height suited to the ironer; not low enough to cause the worker to stand in a stooped position, nor so high as to necessitate the lifting of the shoulders while ironing.

The ironing-pad and sheet should be perfectly smooth, and securely fastened to the table, if rapid, efficient work is to be done.

Irons should be of medium weight, smooth and clean. When through using the irons, remove them from the stove and set them on end in a dry place to cool. When they are cool, see that they are clean before putting them away. Irons that are left on the stove day after day are liable to be rough, dirty and unfit for use.

A slip for the ironing holder, made of some coarse white material, is convenient and desirable, because it can be so easily laundered.

Rub the iron, each time it is taken from the stove, on a piece of clean paper or cloth, before using, to prevent the possibility of soiling or scorching the article to be ironed.

A clothes-pin bag, which can be tied about the waist when hanging out or taking in the wash, saves many steps and keeps the clothespins clean.

A rope clothes-line should be taken down when not in use, and kept in the clothes-pin bag, where it will be protected from dust and be handy when wanted.—Mary L. Bull, Extension Division Minnesota Agricultural College.

## Stuffed Cold Roast Beef.

This is delicious for supper. Butter a long French bread tin, put in a layer of thin sliced roast beef. Over this spread a thick layer of stuffing, then add another layer of sliced beef, and turn over this layer about a teacup of roast beef made gravy, add a very little hot water, just sufficient to keep from burning. Cover with another tin of same size and bake three-quarters of an hour in a quick oven. I make stuffing of crackers broken up and moistened with hot water, a small piece of butter, salt, pepper and poultry seasoning, and a beaten egg, when eggs are cheap, but egg can be omitted.—Exchange.

## Drawers for Pantry.

When we built our house we had, in the pantry, two good-sized drawers lined with zinc. These had covers hinged about half-way from front to back. They are the most satisfactory receptacles for bread and cake I have ever had. The cake drawer has a lock as a safeguard against predatory boys.