

COCONUTS in the AMERICAS

BY CHARLES MELVILLE BROWN

It has been commonly remarked that the uses of the coconut palm (cocos nucifera) are numerous as the days of the year. Found nearly everywhere within the tropics, almost the sole dependence for food of the palmivorous inhabitants of many countries, this king of low tropical countries furnishes man with food, drink, medicines, domestic utensils, materials for boat and house building, oil for cooking, lighting, and lubricating, and innumerable other purposes, and is all the palmaceae the one that yields the greatest variety of products. Tennant has truly said that of the coconut palm a ship can be built and laden, too.

De Candolle, in "Origin of Cultivated Plants," does not consider the coconut palm a native of the western hemisphere, but places its original habitat in the Eastern archipelago, somewhere in the neighborhood of Sumatra and Java, and surmises that nuts floated thence both east and west; eastward to the islands of the Pacific and the coast of Central America, and westward to Ceylon and the east coast of Africa. He places its introduction into Brazil, Venezuela and the West Indies by missionaries about three centuries ago. De Martius says that the Portuguese introduced it on the coast of Guiana about the same time. The navigators Dampier and Vancouver found it at the beginning of the seventeenth century in groves on the islands of Panama bay, as well as on Cocos Island, 300 miles off the Pacific coast of Costa Rica. At that time these islands were uninhabited. Later the coconut palm is reported on the west coast from Mexico to Ecuador, and Seaman reported having seen the palm both wild and cultivated on the Isthmus of Panama. In 1526 Oviedo wrote that the coconut palm was abundant on the Pacific coast in the province of the Cacique Chiman, now Darien, Panama.



COCONUT PALMS IN GUATEMALA



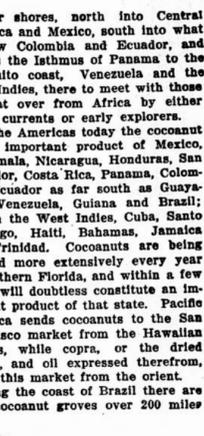
COCONUTS IN THE EARLY STAGES



CROSS SECTION COCONUT SHELL AND NUT



COCONUT GROVE ON BEACH



OPENING COCONUTS



COCONUTS ON BEACH



COCONUTS IN THE PHILIPPINES



COCONUTS IN THE PHILIPPINES

Argument in favor of an American origin, as stated by De Candolle, is as follows: The trade winds of the Pacific, to the south and yet more to the north of the equator, drive floating bodies from America to Asia, a direction contrary to that of the general currents. It is known, moreover, from the unexpected arrival of bottles containing papers on different coasts, that chance has much to do with these transports.

His arguments contrary to an American origin of the coconut palm and in favor of an Asiatic are as follows:

First.—A current between the third and fifth parallel, north latitude, flows from the islands of the Indian archipelago to the Gulf of Panama. To the north and south of this are currents which take the opposite direction, but they originate in regions too cold for the coconut, and do not touch Central America, where it is supposed to have been long indigenous.

Second.—The inhabitants of Asiatic islands were far bolder navigators than the American Indians. It is very possible that canoes from the Asiatic islands, containing provisions of coconuts, were carried by storms or false maneuvers to the islands of the west coast of America; the contrary is highly improbable.

Third.—The area for three centuries has been much vaster in Asia than in America, and the difference was yet more considerable before that epoch, for it is known that the coconut has not long existed in the east of tropical America.

Fourth.—The inhabitants of the islands of Asia possess an immense number of varieties of the palm, which indicates a very ancient cultivation. Blume enumerates eighteen varieties in Java and adjacent islands, and thirty-nine in the Philippines. Nothing of a similar nature has been observed in the Americas.

Fifth.—The uses of the coconut are more varied and more habitual in Asia.

Sixth.—It is not probable that the ancient Mexicans and inhabitants of Central America would have neglected to spread the coconut in several directions had it existed among them from a very remote epoch. The little breadth of the Isthmus of Panama would have facilitated its transportation from one coast to the other and the species would soon have been established in the West Indies, as it has since become naturalized there since the discovery of America.

Seventh.—If the coconut in America dated from a geological epoch anterior to the Pliocene or even Eocene deposits in Europe, it would

probably have been found on both coasts and the eastern and western islands of tropical America equally.

Eighth.—No ancient data of the existence of the coconut in America have been found, but its presence in Asia three or four thousand years ago is proven by several Sanskrit names.

From these facts the most ancient habitation in Asia would be in the archipelago and in America in the islands west of Panama. Its introduction into Ceylon, India and China, De Candolle states, does not date further back than three thousand years, but the transport by sea to the coasts of America and Africa took place perhaps in a more remote epoch, although posterior to those epochs when the geographical and physical conditions were different from those of our day.

In early botanical works coconuts are mentioned, being derived from an East Indian word, coc or cocifer, used to indicate the fruit of the cocos nucifera, or coconut of a fancied resemblance of the three circular depressions to the face of a monkey, whose conversational powers are limited to uttering a sound like "coco."

At the present day, on the islands of the Bay of Panama, such as Cobia, Cobita, Jearon, Montosa, Ladrones, and along the southwestern coast of Chiriqui in Panama, and Punta Burica and Golfo Dulce in Costa Rica, are found dense groves of wild cocconut palms, the fallen nuts piled up around their base, in many instances to a depth of two and three feet, washed back and forth by the swirl of the great tides of these coasts until hurled against some jagged rock the protruding husk is torn away and the tender kernel becomes the prey of the myriads of soldier crabs patrolling these great sandy stretches at low tide. Others are carried by swift currents to nearby coasts, where, thrown high on the beach at flood tide, they may germinate and take root; others come as floating manna and becalmed, drifting hulk is torn away and the tender kernel becomes the prey of the myriads of soldier crabs patrolling these great sandy stretches at low tide. Others are carried by swift currents to nearby coasts, where, thrown high on the beach at flood tide, they may germinate and take root; others come as floating manna and becalmed, drifting hulk is torn away and the tender kernel becomes the prey of the myriads of soldier crabs patrolling these great sandy stretches at low tide. Others are carried by swift currents to nearby coasts, where, thrown high on the beach at flood tide, they may germinate and take root; others come as floating manna and becalmed, drifting hulk is torn away and the tender kernel becomes the prey of the myriads of soldier crabs patrolling these great sandy stretches at low tide.

long, and millions of nuts are shipped annually from this country to the United States and Europe. Mexico produces much of its product to oil and ships to the United States in this form, although a good trade in raw nuts is maintained. Of those exported from Cuba, Honduras, Nicaragua, Panama and Jamaica, the greater part is in the raw state.

Trinidad reduces much of its product to copra, for Europe, and oil, principally for the local consumption of its large East Indian population. In 1908 the approximate estimate of area under cultivation in the coconut palm in all parts of the world was 3,140,000 acres.

Of this vast area there are probably 220,000,000 palms bearing fully 7,000,000,000 nuts annually, the majority of which are consumed for food purposes where produced.

The coconut palm flourishes near the equator and as far north as 80 degrees, especially along the low coasts, although many are found in India at an elevation of 3,000 feet, and cases are known where the palm does well at an elevation of 4,500 feet above the sea.

As a rule a coconut tree throws out a spathe and a leaf every month, each flowering spike yielding from 10 to 25 ripened nuts. The product of a healthy tree properly tended may be from 50 to 120 and even 250 nuts annually.

The principal products of the coconut palm are raw nuts, from which the desiccated meat is made; copra, or the dried kernel, from which in turn oil is expressed; ponac, or the residue after extracting the oil, and coir.

The uses of these products, as well as of every portion of the palm itself, are almost innumerable. Twenty-eight per cent. of all the coconuts raised in the world are grown in the Americas, where, however, they are scattered over a much greater area for each palm than is the case in the orient, thereby making the work of collecting and shipping more difficult and expensive. Due principally to this fact, the vast stretches of cocconut groves of Brazil, Venezuela, Mexico and the western coast of Central America have never been extensively exploited for coconuts. Increasing demand, higher prices than in former years, and the approaching completion of the Panama canal, which means new markets brought about by improved transportation facilities, are rapidly bringing these fields within the radius of profitable exploitation, in addition to stimulating the scientific culture of this palm throughout tropical America.

Is watermelon a Fruit?

When you eat an apple you know that you are eating fruit, and when you partake of cabbage you are certain that you are doing away with a vegetable; but what are you eating when you sink your face in a nice, big, juicy watermelon? The fact of the matter is that if you confined your diet to fruit, and nothing else, you could not indulge in the ravishing of this most luscious product of the

southern field, which is at once a joy to the northern millinaire and at the same time affords full and serene satisfaction to "Uncle Sambo" and his brood of pickaninies.

And again, if you believed in a strictly vegetable existence, you would still be barred from the watermelon patch, because a watermelon, according to the opinion in Massey's History of Columbus, 70 Southeastern Re-

porter, 263, is both a fruit and a vegetable.—From the Docket.

Language of the Ring in 1830. The "language of the ring" had its peculiarities and the sporting reporter invented modes of expressions that were eminently in keeping with the demoralizing and depraving exhibitions they described.

I quote a few illustrations from the newspaper reports of the period: "A nasty crack on the left jaw rattled the Crispin's ivorys and knocked

his head on one side with a chop heard all over the ring." "A shower of blows on his already damaged nob." "His brain seemed addled from the incessant hammering of Barley's mawleys upon his scence."—Hall-Retrospect of a Long Life.

As our present moral activity relaxes, the things done in the past rush in and assault us; and now to him who leaves the door of his heart open to the past to enter and dominate him.

NATIONAL CAPITAL AFFAIRS

Lawmakers Are Besieged by Women



WASHINGTON.—That a member of congress spends his days in working for or against such momentous projects as tariff reduction, Canadian reciprocity, appropriations for this or that and other kindred subjects, is, to the popular mind, precisely what he is sent there to do. But that he also consumes a goodly portion of his working day in receiving or avoiding women, will be, perhaps, a more or less surprising statement to the average voter.

And yet—don't censure the congressman for doing so. Nine out of ten times he's more eager to dodge his feminine callers than to see them. This business of basking in feminine smiles and being sought after by Milady Fair may be all right in story books, but it doesn't go in congress. If he could do so the average member would turn over the job of representing Phyllis and Cousin Mary from the country and Mrs. Home State to any one who wants it—in a jiffy!

They can be found either in the reception room of the house of representatives or in the marble room of the senate, chiefly, however, on the house side. From the opening day of

a session until its close they—these "women in waiting," as one congressman facetiously calls them—are to be seen. Some of them are there for a short while only or, maybe, a single visit, but the majority are as firmly entrenched as the Rock of Gibraltar. A few are so new and diffident that the pages who take in their cards to the congressmen have to tell them what to write and where to wait. They come for a million reasons, real and imaginary, and every shading of human pathos and comedy is exhibited in their self-imposed, though none the less arduous, task of waiting.

There are young girls, slender and fair, who come in groups, properly chaperoned, from boarding schools just to say "good-day" to the member from their home state. They are frankly curious and vastly excited over the novel experience.

There are women with the battle-scarred faces of the unhappy aged. Some of them are in rusty black and make no attempt to conceal the poverty that drives them to this lost hope of winning the sympathy of a man who can get them a government position or aid the passage of a certain bill. They are "on duty" each day, from noon to adjournment, in the stifling little room on the house side, which is merely a columned niche to the left of statutory hall. From it an inclined railed walk, not unlike a gang-plank, leads up to a short hall directly opposite the central door of the house.

New Statesmen Are Economical

IN this new house of representatives there are a number of members who have come here with a full realization of the fact that they are one-termers. They know that according to all human probabilities they will not be returned, and so they propose to make all they can out of two years in office. No expensive hotels for them; on the contrary, they are figuring how they can live on their mileage and clerk hire, and save their salaries.



The result is that the superintendent of the house office building has had hard work to keep members from putting cots in their offices for sleeping there. It is said to be a fact that some of these "close" congressmen have insisted that they be given the right to move their trunks into the house office building and sleep there, though they have not yet proposed doing light housekeeping.

Speaking of committee rooms, the shift caused by the change in the political complexion of the house has resulted in embarrassment to some of the members who have been in the habit of taking their naps regularly during the day.

"Gosh, but I'm dry, and tired, and need a drink," remarked a statesman as he stood in the corridor the other day. "But blamed if I know where to get it. Last session I had lots of friends who kept bottles in their committee rooms, and I suppose there are just as many now, or more, but I don't know where to locate them."

There seems to be no reason to doubt that the bottles are just as plenty in this congress as they ever

were, but having changed their habit it is difficult for a man with a thirst to spy them out. Some years ago congress prohibited by law the sale of liquor in the capitol building. Up to that time both the senate and house restaurants sold liquor, which by some was considered a convenience, and by others a curse. The trouble was the young clerks got into the habit of drinking at these places and it was not uncommon to see drunken men in the corridors of the capitol. When it was cut out entirely everybody agreed that it was a good move.

Certain senators and members maintained bottles in their committee rooms for use in emergency, either to themselves or their friends, and it became noticeable that these emergencies arose with startling regularity. Every bottle soon attracted a line of regular patrons who could be depended upon to drop in at about the same hour daily. One senator, not long ago, found it necessary to have a beautiful oaken chest built, equipped with a Yale lock, and made proof against his own visitors. And one of these visitors, a man now out of congress, is popularly supposed to be a teetotaler and a model of all the manly virtues.

Can't Fathom Fight on Mormons



SENATOR REED SMOOT of Utah, who is an apostle of the Mormon church, in spite of all the attacks he has weathered since his advent into public life, cannot get used to the campaign waged against his religion. The protest against placing the likeness of Brigham Young upon the silver service that is to be presented to the battleship Utah by the citizens of the state caused Senator Smoot to make a call upon the secretary of the navy recently and explain to him the facts in the case.

The proposition is to have engraved upon the silver service a likeness of the pioneer monument that stands at the head of Main street, Salt Lake City. This monument was erected at the very spot where the pioneers of that state, 142 in number, camped when they went into that wilderness to carve out a new empire. All of them were Mormons and Brigham

Young, the prophet, was their leader, so that in addition to having the names of all of them carved upon the stone a statue of Young stands, life size, at the top of the monument. There is no religious significance to the statue or to the proposition to engrave the likeness upon the silver service, Senator Smoot explained to Secretary Meyer, although it happens that the pioneers were Mormons.

The senator also stated that the committee having in charge the selection of the silver for the battleship, and the designation of the design, is composed of Mormons and non-Mormons and they are unanimously in favor of engraving a picture of the monument upon the service. The result of the senator's talk was that Secretary Meyer will stand pat and not interfere. To all who protest he says that the silver service is a voluntary gift from the people of Utah and the department has no right to stipulate as to the design. The same attitude was assumed by the department when the people of Mississippi presented to the battleship of that name a silver service with the likeness of Jefferson Davis, president of the Confederacy, engraved upon it.

\$300,000 In Gold Awaits Claimants

STACKED in one corner of the steel-ribbed vault of the United States treasury, \$300,000 of gold coin is going begging. The government cannot give it away; yet none of the rightful owners can be induced to take it. It represents unclaimed interest on the public debt.



Somewhere in nooks and crannies and out of the way places are the government's interest checks for the money, which never have been cashed. Some of them never will be presented, others may be brought around in time, and some are being held by cautious investors.

From time to time the treasury attempts to call in the checks and the vagaries of human nature are shown. One citizen has more than \$60,000 waiting for him and holds the checks for it. He was recently invited to cash in and made a trip to Washington to tell treasury officials the checks were his property, he would cash them when he pleased, or burn them up if he wished. If he does the latter, his money will be held in the vaults until congress, perhaps, might dispose of

FIRST TO PHOTOGRAPH HUMAN FACE



Professor William Draper

IN the old building of the New York university on Washington square, the birthplace of the telegraph of Morse, there was taken in 1839 the first photograph of the human face. The photograph was that of Miss Dorothy Catherine Draper, the man who took it was her brother, Dr. John William Draper, professor of chemistry in the university. He had gone a step beyond Daguerre and by this photograph he established himself as one of the great inventors of the nineteenth century.



Miss Dorothy C. Draper

Not long ago occurred the hundredth anniversary of Doctor Draper's birth and it was celebrated in the auditorium of the university at Aqueduct avenue and One Hundred and Eighty-first street.

It was on the roof of the old building on Washington place that there was set up, in 1840, the first photograph gallery in the world. To this gallery there came to be amazed and delighted all the notables of the day, including Theodore Frelinghuysen, the candidate for vice-president on the Henry Clay ticket.

Professor Draper took the pictures. His camera was a cigar box and his lens the glass from a pair of spectacles. Doctor Draper's assistant in this gallery, the man who posed the sitters and attended to the artistic details, was Prof. S. F. B. Morse, who only five years before and in the same building had operated the first telegraph line.

The pictures taken in this gallery were developed by Professor Draper, for it was his experiments in regard to the chemical action of light that had enabled him to improve the process of Daguerre almost as soon as the latter's discovery was made known. It was in 1839 that Daguerre gave his process to the world, but it was not then adaptable to landscapes or portraits. In the same year Professor Draper announced that he had found the way to photograph the human face and to overcome those obstacles which made the Frenchman's process imperfect and impractical.

In these kodak days the directions which Doctor Draper gave at this time for taking a photograph are interesting. At first, he had tried dusting the face of a sister with white powder, but he later found that this was unnecessary. On a bright day and with a sensitive plate, he announced, portraits could be obtained in the course of five or seven minutes.

"The hands of the sitter," he said in these directions to the camera fiends of that day, "should never rest upon the chest, for the motion of respiration disturbs them so much as to make them of a thick and clumsy appearance, destroying also the representation of the veins on the back, which, if they are held motionless, are copied with surprising beauty."

"A person dressed in a black coat and open waistcoat of the same color must put on a temporary smile that drab or flesh color or by the tint of his face and the fine shadows of his woolen clothing are evolved his shirt will be solarized and will be blue and black with a white halo around it.

"Owing to the circumstances that yellow and yellowish browns require a long time to impress the substance of the daguerrotype, persons whose faces are freckled all over give rise to the most ludicrous results, a white portrait mottled with just as many black dots as the sitter has yellow ones."

On March 22, 1840, Doctor Draper took from the roof of the building the photograph ever taken of the moon. His plate was exposed 20 minutes and the image was about an inch in diameter. The photograph was presented to what was then the Lyceum of Natural History. It created a great sensation at the time, not only here but abroad. Daguerre's name was given to the photographic process for many years after this.

The man whom New York university is about to honor as the first photographer and a great chemist was born an Englishman. He came to this country at the age of twenty-two, graduated from the University of Pennsylvania in 1836 and was appointed professor of natural philosophy, chemistry and physiology at Hampden-Sydney college in Virginia. It was from there that he was called in 1839 to be professor of chemistry at New York university, and he signaled his change of residence by announcing almost immediately thereafter his photographic process. He was am-

nected with the university until his death in 1882.

Doctor Draper has frequently been described as a pioneer in the science of prismatic analysis. His discoveries in this field covered a wide range. He even anticipated the incandescent light of Edison when he suggested as a standard for photometry for white light a piece of platinum foil of given area and thickness heated to incandescence by an electric current of specified strength.

Capillary attraction was the subject of his first researches and from them arose his discovery as to how the blood is purified, a mystery which had baffled the scientists up to that time. It was in 1847 that he explained the circulation and purification of the blood in a work that attracted wide attention.

Doctor Draper is still remembered at New York university as one of the most prodigious workers ever known. Besides his extensive research work he found time to publish more than a hundred books, monographs and addresses. He wrote a history of the Civil war in three volumes, and his "History of the Intellectual Development of Europe" was translated into every civilized tongue.

CHEAP CLOTHES OF LONDON

Man's First Impression Was that He Had Hold of Long End of Bargain.

A man who apparently had just returned from Europe was bragging to some friends at the Waldorf in New York recently about some remarkable cheap clothes he had got in London.

"It's all rot to say they don't turn out clothes over there as well as they do in New York," he said, "and you can get three or four suits for what you have to pay a fashionable tailor here for one. Now take this suit I have on. Isn't this as good a fit as a New York tailor could give me?"

His friends agreed that it was. One of the men glanced closely at the sleeves and smiled. "That suit was not made in London," he remarked.

"I'll bet you anything it was," the other said, "but let me show you something. Look at these buttons. There is no real opening in the sleeve, and these are only false buttonholes. A tailor in London would insist on slitting the sleeves and making real buttonholes 'ere the buttons."

The expression of the finder of bargain clothes changed. He bent over and looked at the cloth and said: "Well, if this isn't one of last spring's suits! And I particularly told—come on, boys, I guess this is on me." And a merry party headed for the oasis down the corridor.

A Lazy Man's Job.

Tip, since his early wanderings on the plains, has always said that the softest lazy man's job on earth was raising sheep. Sheep are bush feeders. They will thrive on eating anything from dead sage-brush to railroad snow fences. They will tunnel their muzzles through snow to get a stick underneath for food. Of course they eat the snow when they get thirsty. Now Tip learns from an official government report that "an island off the coast of Nova Scotia has been a great success. Not an attendant with food, not a copper cent of cost to the owners, and through two bitterly cold, hard winters those sheep have fattened and flourished to splendid form and fleece.—New York Press.

The Latest Theory. James was attending his first Christ mass service. After listening to the children's pieces about Jesus he saw Santa come out with his pack of gifts. He sat very quiet for some time and then, turning to his mother, who perched "Mother, does Santa Claus live in Jesus' back yard?"