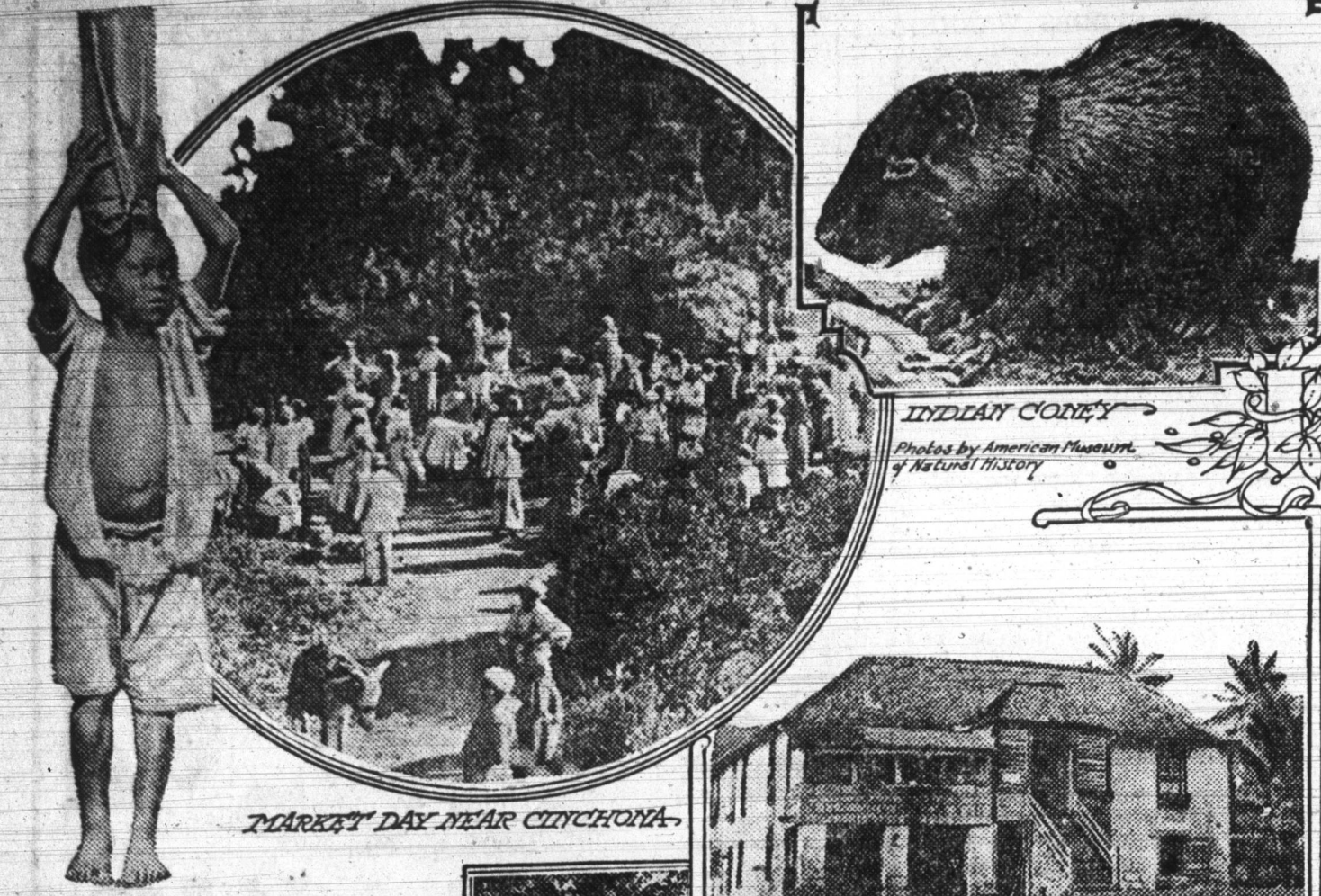


Was There Once an Antillean Continent?



MARKET DAY NEAR CINCINNA

CAPTAIN H. E. ANTHONY, associate curator of the department of mammals of the American Museum of Natural History, has just returned from a four-month's exploration trip through the West Indies. The museum has been carrying on active work in the West Indies for several years, having been especially energetic since 1916, when the discovery of fossil mammals of Porto Rico disclosed the possibilities awaiting West Indian research. Naturalists have always been attracted not so much by the intrinsic interest of the forms of animal life to be found in the Antilles, as by the more absorbing problem: "How did life arrive on the islands?" It was to seek further light on this question in particular that Captain Anthony was sent to continue the investigations which he had already begun in this region. He returns with a great accumulation of material and data bearing on the problem. Questioned concerning the various theories of the arrival of life on the islands, Captain Anthony said:

"It was at first assumed that the islands, lying outside the limits of the continental shelf, were of oceanic origin and were built up by coral growth or elevated by volcanic or seismic activity. But if this were true, the islands would be devoid of all forms which might arrive on oceanic islands in the natural course of events and those lower forms of life whose disposal is subject to such fortuitous agencies of distribution as hurricanes, water spouts, etc., which transport the eggs from place to place. But the fact is that other forms of life than these are to be found on the islands. The mammals are the most poorly represented group of the higher animals of the West Indies, yet include varieties which might be expected to encounter great difficulty in crossing the long stretches of sea which it would be necessary for them to traverse before they could establish themselves on the newly-created islands. For this very reason the mammalian fauna of the West Indies in its relation to the continental fauna furnishes one of the best points for an attack on the problem.

"Throughout the thousands of islands in the Antillean group there are only a few mammals, aside from bats, to be encountered. The remarkable poverty of this fauna has been the cause of much comment among naturalists. That the condition of the fauna today does not truly represent the mammalian history of the islands has been suspected for some time, and the efforts of the museum have been especially directed toward ascertaining the complete history of the West Indian mammals from earliest times. Assemblages of fossil mammals have been discovered in Porto Rico and Cuba, indicating the possibility that at one time the West Indies had a much larger mammal inhabitation than today.

"These fossils, which are of ancient types and strange ancestry, strongly suggest, if not the existence of some mainland connection far back in the geological age, at least the union at some time of most of the Greater Antilles into a large Antillean continent. This continent, if it existed, must have lain in the Gulf of Mexico and the Caribbean sea, with the longer axis east and west, and must have been an important land mass with large rivers and mighty mountain ranges



FOSSIL CAVE IN JAMAICA

rising, perhaps as high as 20,000 feet or more above sea level.

"This theory of the mountains and rivers rests on Spencer's studies and charts of the ocean floor of the region. Spencer concluded from the conformation of the sea bottom that in tertiary times there must have been an elevation of this surface of somewhere between 1½ and 2½ miles. As the ridges of the sea bottom seem to follow out the general direction of the mountain ranges at present existing on the islands, he derived the theory that the under-sea ridges and the island ranges were originally parts of the same system. As the island ranges have an altitude of from 7,000 to 8,000 feet, the mountains of the now disappeared continent would have been something like 20,000 feet high. The channels in the under-sea surface, running at right angles to the ridges seem to have been cut by great rivers flowing down the mountain sides.

"To the eastward this continent took in the recently acquired Danish West Indies, while to the westward its limits must have taken in part of what is now Central America. Because of the strategic position of Jamaica in its relation to the Central American mainland and to such a hypothetical Antillean continent, it was highly important that the fossil fauna of Jamaica be explored."

"He was successful in conducting such an exploration, and was able to verify in a most satisfactory manner his belief that the island would be found to have a fossil fauna. He secured several fossil mammals new to science, which, found in Pleistocene formations, must date back approximately 100,000 years. Most of the materials were secured in exploring the limestone caves, and the mammal remains were found cemented in a very hard limestone breccia from which they could be extracted only after laborious quarrying. The greater part of the collection was brought back to the museum on large blocks of limestone and much time and work will be necessary before the material can be satisfactorily identified and conclusions drawn.

Enough has been exposed, however, to show that Jamaica was formerly the home of one or two gigantic rodents, larger than any living today—animals of a heavy-bodied, slow-moving type, whose closest ancestors lived away back on the Santa Cruz formation of Patagonia. Fossil terrapins,

EXPEDITION HEADQUARTERS

tortoises and crocodiles were also found.

A surprising feature of the exploration conducted by the expedition was the failure to find any mammals closely related to those found either on Cuba or on Porto Rico. This suggests the possibility that Jamaica may not have formed part of the old Antillean continent, but may have existed as an eastern peninsula jutting out from Honduras. A second theory (but one which has few adherents among recent day zoologists) is that Jamaica was isolated from all other land and received its mammal denizens as waifs on life rafts, floating masses of vegetation swept down the large continental rivers.

In addition to its success in collecting the fossil fauna, the expedition obtained a large collection of the living animal forms. Only one land mammal is living on Jamaica today—the Indian Coney (*Geocapromys brownii*)—and even that had been thought to be practically extinct. For the introduction of the Mongoose on the island, late in the last century, in an attempt to exterminate the rats, has resulted in the extinction of many of the native animals.

Captain Anthony, in describing the method of hunting the Indian Coney, said: "In order to get this animal, which is a rat-like creature the size of a cat, the collectors went up into the high mountains and lived with the natives, hunting the coney in the primitive fashion with small dogs. The dogs tracked the mammal to its hole in the rocks under some large tree, and there, amidst great excitement, the quarry was dug out. If the hole is a fairly large one, the dog can enter at once and come to grips with its prey, but more often a man has to pull away rocks and enlarge the hole. The natives get as thoroughly aroused as the dogs, and the scene at the finish is one worthy of larger game. When the dog finally gets close enough to the coney a fight ensues—for the animal is plucky. When the hunters decide that the dog has secured his grip they draw him out by his tail or a hind leg and take the coney away from him."

Captain Anthony brought back with him more than seven hundred specimens of bats, as well as collections of reptiles and birds. This material, when properly worked up, will undoubtedly throw much light on West Indian natural history, and the results will help to direct the course of future investigations in that region. As the prophecies concerning Jamaica have borne such gratifying fruit, natural history exploration on the islands will receive a great stimulus.

The expedition encountered a very interested co-operation on the part of the people of Jamaica, everywhere meeting with ready assistance and unflinching courtesy. All the important areas of the island were visited with the idea of making the collection as complete as possible.

Captain Anthony reported that the tourist travel to Jamaica had been unusually heavy this winter, overtaking the steamship service and the island's hotel accommodations. One of the burning topics of the day, there—and by no means a one-sided question—is "How do the Americans regard the possible acquisition of Jamaica by the United States?"

and to my surprise out fell the fish, but that was not all. When I stooped to pick them up they jumped all over the floor, not being entirely dead. When I finally caught them I can assure you I did not put them back into my hat.—Chicago Tribune.

"Holy Men" of India. In India there are no less than 5,000,000 sadhus or holy men, usually ash besmeared and almost naked. Frequently these have chelas or disciples—boys who accompany them,

DIAMOND NOTES

Wonder if they've insured Babe Ruth against setting the league on fire?

Harold Elliott, otherwise known as Rowdy, is going great for the Dodgers.

If anybody wants to let loose of a million and a half he can buy the Boston Red Sox.

John McGraw is another manager who says he's in favor of cutting out the spring tours.

Counting the White Sox out of the pennant race is a popular pastime with the experts.

Miller Huggins is still being criticized because he has not made Frank O'Doud an outfielder.

Jack Coombs expects to make a real pitcher out of Jim Roberts, the big rookie from New Orleans.

King Lear no longer is a Cub. Manager McGraw having claimed him when the Cubs requested waivers.

New Orleans fans are elated at the good work Ray Neusel has been doing in the outfield for Johnny Dobbbs.

Pitcher George Gaw, of Newark, N. J., has been bought by the Cubs. Gaw is a six-foot right hander, aged 25.

Harold Emerich, the outfielder transferred to Indianapolis by the Phillies, is a product of the Detroit lots.

Ted Waring, manager of the End team in the Western Association, announces that his team is about rounded out.

There are four former American League players on the St. Louis Cardinals—Lavan, Shotton, Fournier and Janvrin.

The list of managers in the West Texas League was completed when the Abilene team signed Robert Young of Fort Worth.

Gene Suggs, who expects to make a place for himself on the Atlanta outfield, is a brother of John Suggs, the Atlanta pitcher.

Pitcher George Upp, Columbus player, who played with Cincinnati and Cleveland, is now employed at a theater in Sandusky.

Rabbit Maranville has recovered from the spike wound on his right hand and is again playing good ball for the Boston Braves.

George Daus, Berney Boland, Howard Ehmke and Hub Leonard will be Detroit's regular flinging quartet for the coming season.

Manager Mack of the Athletics has released Charley High and Red Wingo, outfielders, and Frank Brazil, infielder, to the Atlanta club.

Now is the time to bear in mind that in a pennant race the games won in the first of the season count just as much as those at the finish.

Ferd Schupp looks so good with the Cardinals that Rickey believes he will show the form that he displayed several years ago with the Giants.

Dick Loftus, the youngster who has been trying for the Reds' outfield, will play with Evansville, near enough to Cincinnati for Moran to keep track of him.

Manager Mitchell did not pick up as many young bloods out of his material as was first expected, but he believes he has found a star in Clarence Twombly.

With Zeb Terry sold to the Chicago Cubs and Walter Barbare suffering a broken jaw, the Buccos will now have to rely on Buster Caton as the regular shortstop.

Portland, Oregon, must be a great place to develop shortstops. Ward Bancroft, Hollacher and Peckinpaw all came from that team, and all made good in fast company.

The Detroit club had promised Pitcher John Glasier to Dan Howley of Hartford, but Jack Coombs has about changed his mind and may keep the youngster for awhile.

Bill Hinchman says his brother, Harry, once a star in the American league and later in the American association, is now the proprietor of a bowling alley in Toledo, O., and doing a good business.

BALD BASEBALLERS

Glance at the slick domes of some of the world's champions and know thy fate, baseball, oh, recruit! Here's the list of those whose bald heads might cause Pat Moran to remark: "Even the very hairs of your head are numbered"—Helmie Groh, Morris Rath, Larry Kopf, Greasy Neale, Slim Sallee and Goldie Rapp.

"BONEHEAD" PLAY PULLED OFF BY DAVE ALTIZER IS RECALLED BY GABBY STREET

Gabby Street was interested in the report that Dave Altizer would manage a minor league team this year. "I hope," said Street, "he doesn't let any of his players pull off any plays like that one he made when he and I were with Washington. I suppose you have heard of it, but here it is again:



Dave Altizer.

"But the ball whizzed out of Hack Spencer's mitt and bounded against the grandstand and kept on bounding when the slow-moving Spencer chased after it. The runners from third and second came racing over the plate, and what was Altizer doing?"

"I'll tell you. He was standing there at the plate arguing with Sheridan that it ought to have been the fourth ball instead of a strike, and while he stood and argued Spencer finally got the ball and fired it to first base. It made the last out of the game and Dave's failure to run cost us those two runs and a game.

"And then they talk about Merkle," added Street, with grimace.

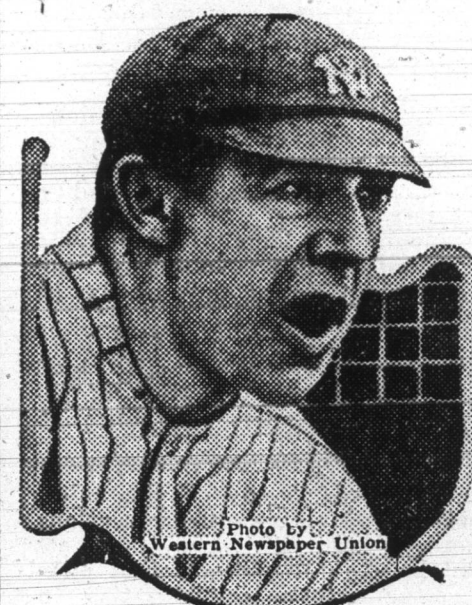
HUGGINS PICKS REDS TO COME BACK AGAIN

Yankee Chief Says Champions Should Win Another Flag.

Manager Moran Has Well-Balanced Pitching Staff, Most Important Factor on Ball Team—Can Wait Out Opposition.

Manager Miller Huggins, of the New York Americans, believes that the Reds are going to repeat their success of last season and win another pennant.

Hug's team played the Reds a series of games in southern Florida, and, at the conclusion of the engagement, the clever leader of Colonel Ruppert's team did not hesitate to say that the champions should come back again this year. This is pretty good dope, coming from Huggins, who is naturally of a reticent disposition and seldom expresses himself strongly in the way of making predictions. After looking over Manager Moran's men Hug declared himself as follows: "Pat has a fine pitching staff, and we all know



Manager Miller Huggins.

that that is the most important thing on a ball club. In fact, it is absolutely essential to success through a long season.

"I have seen enough of three pitchers to feel sure that they will deliver the goods, just as they did last year. Moran has a well-balanced staff, with a goodly number of right-handers and southpaws of class, and he has shown that he knows how to handle pitchers as well as any manager in the business. The excellence of his pitching staff enables him to use the best and most scientific methods at the bat. With weak pitching a manager must depend on slugging and getting over as many runs as possible. But the Red pitching is good enough to allow the use of the waiting game and the one-run game. I noticed that Pat has taught his men to wait out opposing pitchers, and I have no doubt he profits largely by their ability to do so."

JACK COOMBS' SOUND ADVICE

Tiger Coach Urges Young Pitchers to Ignore Batter and Throw at Anatomy of Catcher.

If the Detroit Tigers are to have this year what they have lacked for many seasons, it is up to Jack Coombs to do it to them. When Jack lectures the young pitchers this is what he tells 'em:

"Ignore the batter. Pitch to the anatomy of your catcher. "The catcher is your target. You must work with him and study his style of receiving. If he is a good catcher, he will remain stationary after you have begun your wind up. And, in that event, all you have to do is pitch to his body.

"For instance, if you want to peg a low ball inside, pick out his right shoulder. To groove one, merely throw at his stomach. If you keep those things in mind, your control should be improved considerably.

"But the most important thing is you will learn to ignore your batter. It will make no difference whether you are pitching against a .300 hitter or a second-string pitcher. They will all look alike to you because your mind will be on your catcher altogether."

FRENCH RUNNER WINS

Marcel Guillemot, the French long-distance runner, recently confirmed his right to represent France in the Olympic games by winning the French national run of about ten miles, making the distance in 1 hour, 1 minute and 41 seconds. By his victory Guillemot now becomes the cross country champion both of France and Great Britain.

LITTLE PICK-UPS OF SPORT

The Royal Montreal Golf club is the oldest golf club in America.

George Bothner thinks the toe hold should be barred from wrestling.

Since lockers have been abolished, golf is no longer a rich man's game.

Stanislaus Zbyszko is having great success in his matches in this country.

A new chess club has been formed at Waltham, Mass., known as the Waltham Chess Club.

England, India and America are working out a set of rules to govern the game of polo.

Fred McLeod won the open golf championship of the North and South at Pinehurst, N. C.

S. W. Armstrong '21 has been elected captain of the Oregon Agricultural college wrestling team.

John J. Burns, guard on this season's Wabash basketball team, was chosen captain of the 1921 team.

Frank Walker has been engaged to officiate as starting judge during the Grand circuit meeting at Readville.

Lew Edwards, the lightweight champion of Australia, does not think very highly of America, and has left these shores for England.

The Pocatello (Idaho) Country club golf links, completed a year or so ago, just off the National highway to Yellowstone park, plans to build a \$25,000 clubhouse this season.

Even the four-round game isn't fast enough for the fight fans on the Pacific coast. They are asking that boxers enter the ring with their gloves on and ready to start the dance.

"Back to the mines," means nothing in the life of Jimmy Wilde. The little boxer made \$12 a week working in the mines. Now he makes more than that a minute working in the ring.

MACK DEAN OF LEADERS

Cornelius McGilcuddy, better known as Connie Mack, is the oldest manager in the major leagues.

Connie was born on December 23, 1862.

There are several magnates in the majors who are Connie's seniors, but there are no managers. He is 11 years the senior of John McGraw, leader of the giants, and Miller Huggins at thirty-nine is a mere youth. Why, Connie was playing ball before "Hug" was born.

Mack is one of the most remarkable figures in American sport. Connie has been identified with baseball for the past 35 years, and during that time he has seen the game in its most interesting phases.

Philadelphia fans claim that Mack has been one of the city's best advertisements.



Out Fell the Fish

Although I experienced my most embarrassing moment almost a year ago, I have not forgotten it yet. After fishing for almost half a day all I caught was two small fish, which of course I did not wish to display, so I wrapped them in a small piece of paper and put them in my hat. While sitting in the car homeward bound, who should enter but my fiancée. I tipped my hat as she came forward