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THE CALAKMUL EXPEDITION[1]

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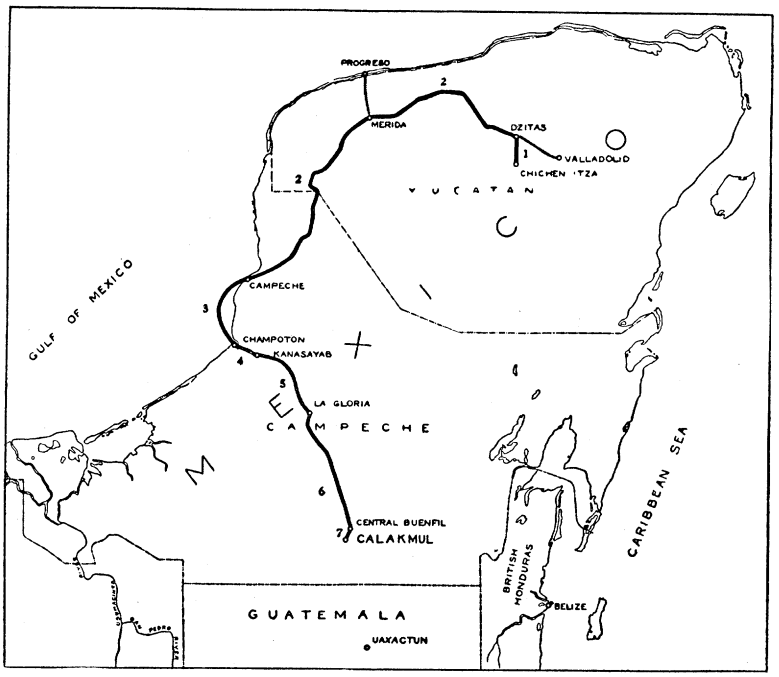
THE expedition reached Campeche on April 5, where Mr. J. C. Brydon, manager of the Mexican Exploitation Company, met the party. The equipment and supplies had been forwarded to San Dimas, a station on the tram-line between Kanasayab and La Gloria, several days in advance. Mr. Brydon had also engaged two automobiles to take the party the next lap of the journey to the hacienda of San Dimas, 55 miles distant. After an eight-hour drive, the latter part over an all but impassable wood road through the forest, the expedition reached San Dimas at eleven o'clock the same night, where it was most hospitably received by Mr. Sanchez, local manager of the Montana Company, and quartered at the hacienda house.

The next lap of the journey was made over a Deceauville tram on small platform cars, ten feet long, drawn by two mules tandem without reins, the mules being attached to the platform by a single pair of traces. At four o'clock on the afternoon of April 6, the expedition reached La Gloria, the chicle station of Don Francisco Buenfil.

Don Francisco Buenfil, of Merida and Campeche, is the largest private chicle operator in the state of Campeche. He had visited Chichen Itzá earlier in the 1932 season and when he learned of the Institution's contemplated expedition to Calakmul had generously placed the facilities of his organization at its service. Occasion should be taken here to state that the success of the Calakmul expedition was due in large measure to the generous assistance received from

[1] Dr. Sylvanus G. Morley, archeologist in charge of the field work in Yucatan for Carnegie Institution of Washington, headed an expedition, which was sent into an uninhabited part of southern Campeche for the purpose of examining the ruins of an ancient Maya city, discovered a few months before by Mr. C. L. Lundell, an employee of a chicle company operating in the region. When on a scouting trip for his company, Lundell, on December 29, 1931, came upon jungle-covered ruins to which he gave the name "Calakmul," which means, in the Maya tongue, "two adjoining mounds," a name having significance, as Lundell thought, because the two highest pyramids, each about 150 feet in height, stood close together. Lundell took photographs and made a sketch map of the site. A little later, these came into the hands of Dr. Morley, who identified the ruins as being those of an Old Empire City which had been built to the north of the known limits of the Old Empire region. Because of its location so far north, Morley believed the ruins to be of sufficient scientific importance to justify the organization of an expedition to visit it and to make a thorough study of its principal features. Obtaining approval of his plan from the Mexican government and from Carnegie Institution, the expedition left field headquarters at Chichen Itzá, Yucatan, Mexico, on April 3, 1932. Its personnel consisted of Dr. Morley, director, Karl Ruppert, archeologist, J. S. Bolles, architect and surveyor, Gustav Stromsvik, engineer, Mrs. Morley, in charge of the commissary, and two camp assistants. Dr. Morley here gives an account of the journey and of the results obtained.



MAP OF YUCATAN

SHOWING LOCATION OF NEWLY DISCOVERED CITY OF CALAKMUL, SOUTHERN CAMPECHE, MEXICO. HEAVY BLACK LINE INDICATES ROUTE FOLLOWED BY CARNEGIE INSTITUTION OF WASHINGTON EXPEDITION FROM CHICHEN ITZÁ TO CALAKMUL.

the members of Mr. Buenfil's efficient organization at all stopping places from Campeche to Calakmul.

The journey beyond La Gloria was made in a five-ton truck over chicle trails that are utterly impassable for motor transport during the rainy season, and not much better during the dry season. The stretch from La Gloria to Central Buenfil, a distance of 70 miles, was covered in 27 consecutive hours, including eight hours out for sleep in the midst of the forest.

The expedition left La Gloria at 3:15 on the afternoon of April 7 and reached Central Buenfil at 6:15 the following afternoon, after a nerve-racking, muscle-beating journey. The truck-pass over the hills was narrow, the truck scraping the bushes and trees on either side and breaking off the lower branches as it lumbered along.

In the *akalches,* or swamps, the lower bush is cleared to a width of about 100 feet so that the sun may reach these marshy places. Although these marshes were nearly dry at the time the expedition passed through them, several bogs were traversed which necessitated chaining short logs to the rear wheels to provide sufficient traction in the bottomless mud.

The expedition was cordially received at Central Buenfil by Don Manuel Osorno, the general manager, and arrangements were made with him for mules to transport the party and outfit the remaining seven miles south to the ruins of Calakmul.

Thirty mules, including pack animals, were required to transport the personnel and outfit from Central Buenfil to Calakmul. Fifteen laborers were employed during the fifteen days' stay at

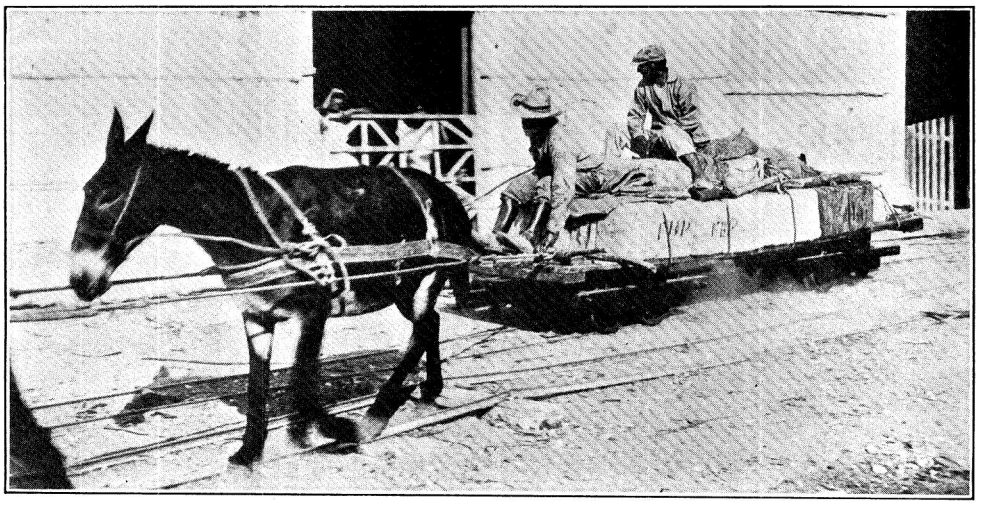
the site (April 9–24) and two camp cooks.

The first afternoon (April 9) was devoted to making camp, putting up tent covers for sleeping quarters and mess hall, building a kitchen stove and table, and arranging the outfit, supplies, saddles, tools, etc.

The following day was one of the most remarkable in the writer's twenty-five years of tropical exploration. With the Lundell sketch map as a guide, the institution party set out to explore the area covered by the map. Lundell had enumerated 64 stelae, or sculptured hieroglyphic monuments, of which the expedition was able to find all but two. One of the missing two was the unsculptured rectangular altar on the summit of the substructure supporting the middle building of Structure D, which Lundell had mistaken for a sculptured stela; the other was not found in the position indicated on his sketch map and it appears probable that he must have confused it with some other stela already accounted for elsewhere. This reduced the total of stelae found by Lundell to 62.

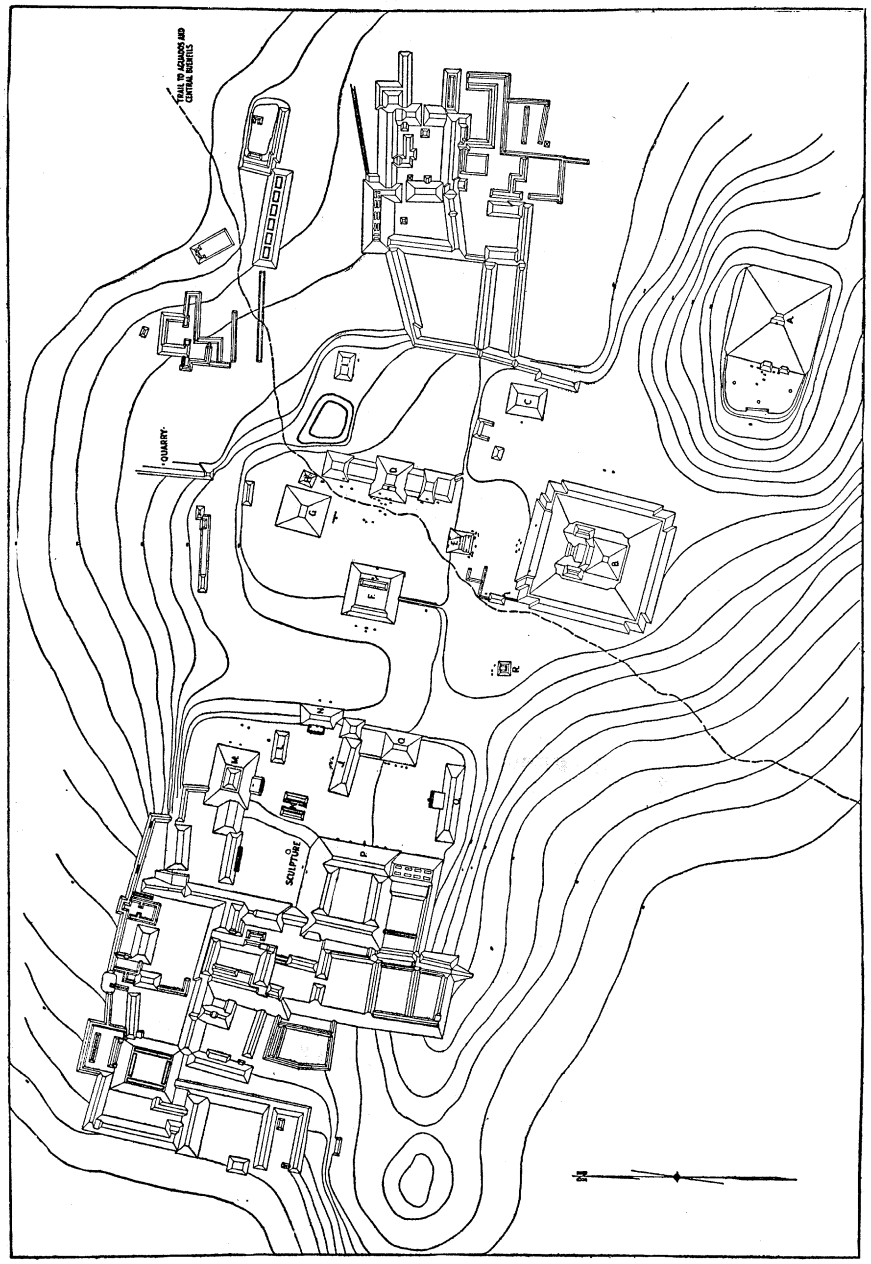
The Carnegie Institution's Calakmul expedition, during the 15 days it was at the site, discovered 41 additional stelae, bringing the total of known stelae at this site to 103, the largest number by 27 per cent. yet reported from any other city of the Maya civilization. The nearest competitor to Calakmul in this respect is Tikal in northern Guatemala, which contains a total of 75 stelae, of which, however, only 18 (*i.e.*, less than 25 per cent.) are sculptured. The Old Empire site having the largest number of sculptured stelae previously reported is Piedras Negras in northeastern Guatemala with a total of 45.

Calakmul, on the other hand, has at least 74 surely sculptured stelae, and of the remaining 29 it is practically certain that another half dozen originally had been sculptured, although their carving has entirely disappeared owing to the softness of the limestone which was used and the excessive weathering to which the stelae have been subjected. It is therefore hardly an exaggeration to say that originally Calakmul probably had almost twice as many sculptured



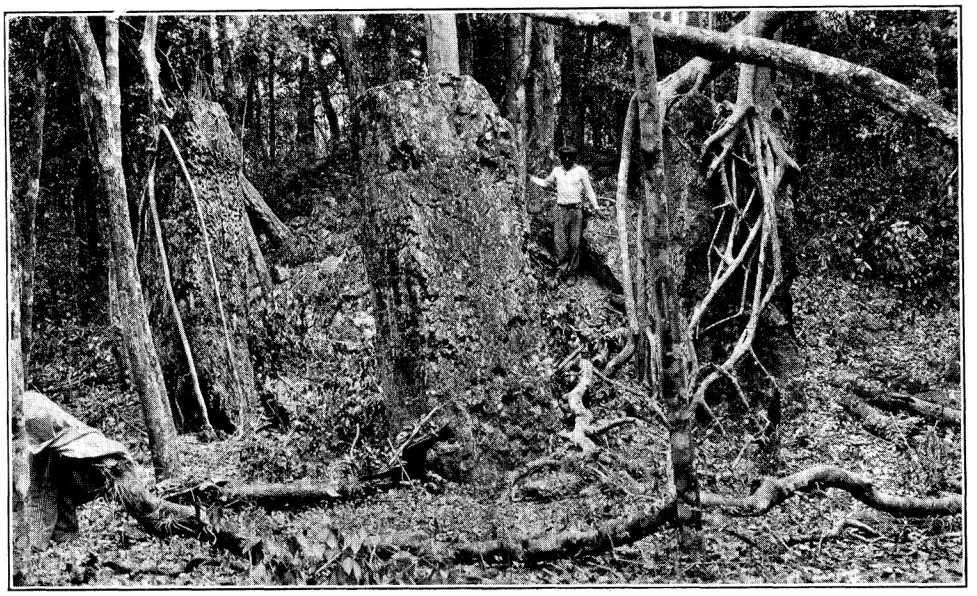
PLATFORM CAR DRAWN BY TWO MULES, TANDEM

USED IN HAULING OUT BLOCKS OF CHICLE (CRUDE CHEWING GUM) FROM THE INTERIOR. THE CALAKMUL EXPEDITION PERSONNEL AND BAGGAGE TRAVELED FOR FIFTY MILES ON THESE PLATFORM CARS.



MAP OF THE CIVIC AND RELIGIOUS CENTER OF CALAKMUL

SURVEYED AND DRAWN BY MR. J. S. BOLLES. THE PRINCIPAL STRUCTURES ARE DESIGNATED BY LETTERS; THE MONUMENTS ARE REPRESENTED BY SMALL BLACK RECTANGLES. NOTE THAT THE AREA BOUNDED BY STRUCTURES D, E, F, G, CONSTITUTES THE MAIN PLAZA OF THE CITY. IT WAS HERE THAT THE STAFF CAMP WAS ESTABLISHED.



THREE SCULPTURED STELAE

AT SOUTHWESTERN CORNER OF STRUCTURE E. THE MONUMENT AT THE RIGHT HAS A WILD FIG TREE GROWING ON TOP OF IT, THE ROOTS COVERING THE FRONT.

stelae as any other Maya site yet discovered.

The work of the expedition was divided as follows: The writer devoted his time to the epigraphy, assisted by Mr. Stromsvik who took entire charge of turning the heavy fallen monoliths, some weighing as much as five or six tons, many laying with their sculptured faces downward. Mrs. Morley took charge of the photography; Mr. Ruppert made a study of the architecture, though only one building, Structure C, was sufficiently preserved to allow a detailed ground-plan to be made of it without excavation. Mr. Bolles made a surveyed map of the center of the site, covering an area about three fifths of a mile long by about half a mile wide, and located the positions of all mounds and monuments thereupon. Bolles also determined the latitude of Calakmul as 18° 2′ N. and the longitude as about 89° 52′ W. Finally, in addition to his work in turning the fallen stelae, Mr. Stromsvik made a number of minor excavations looking for stratified deposits of potsherds; he also made a study of the small stone artifacts which were found, such as *metates*,[2] grinders, etc.

One of the most important results of the expedition was the discovery of no less than 51 Initial Series, the largest number of these amazingly accurate time-counts or dates ever found at any other Old Empire city except Copan in Honduras. Of this number it was possible to decipher the dates of 42, surely; of two more, probably; and of nine, more doubtfully. In addition to these 51 Initial Series, four Period-Ending dates were identified. In all, the dates of about half of the 103 stelae found at Calakmul may be said to have been correctly deciphered.

The dates of the Calakmul stelae, in so far as they have been deciphered, ar-

[2] The name generally applied to the stone slabs or blocks upon which the American Indian grinds his corn.

LIST OF DATES DECIPHERED AT CALAKMUL

Monument	Date in Maya Chronology[1]	Date in Christian Chronology[2]	Kind of Date
Stela 43	9. 4. 0. 0. 0	254 A.D.	Initial Series
" 28	9. 9.10. 0. 0	364 "	" "
" 29	9. 9.10. 0. 0	364 "	" "
" 1	9.10. 0. ?. 5	373 "	" "
" 9	9.10.16.16.19	390 "	" "
" 32	9.11. 5. 0. 0(??)	398 "	" "
" 33	9.11. 5. 0. 0(?)	398 "	" "
" 35	9.11. 8.10. 8	402 "	" "
" 35[3]	9.11.10. 0. 0	403 "	" "
" 36	9.11.10. 0. 0	403 "	" "
" 9	9.11.10. 0. 0	403 "	" "
" 9[4]	9.12. 0. 0. 0	412 "	Period-Ending
" 13	9.12. 0. 0. 0	412 "	Initial Series
" 74	9.12. 0. 0. 0(??)	412 "	" "
" 75	9.12. 0. 0. 0	412 "	" "
" 86	9.12. 0. 0. 0	412 "	" "
" 76	9.12. 5. 0. 0	418 "	" "
" 70	9.12. 8. 9. 9	421 "	" "
" 77	9.12.10. 0. 0(?)	423 "	" "
" 93	9.12.10. 0. 0	423 "	" "
" 94	9.12.10. 0. 0	423 "	" "
" 79	9.13. 0. 0. 0(??)	432 "	" "
" 23	9.13.10. 0. 0	442 "	" "
" 24	9.13.10. 0. 0	442 "	" "
" 38	9.13.10. 0. 0(??)	442 "	" "
" 40	9.13.10. 0. 0	442 "	" "
" 41	9.13.10. 0. 0(??)	442 "	" "
" 71	9.14. 0. 0. 0	452 "	" "
" 72	9.14. 0. 0. 0	452 "	" "
" 73	9.14. 0. 0. 0	452 "	" "
" 8	9.14.10. 0. 0	462 "	" "
" 46	9.14. ?. ?. ?	462 " / 471 "	" " / " "
" 51	9.14.19. 5. 0	471 "	" "
" 52	9.15. 0. 0. 0	471 "	" "
" 53	9.15. 0. 0. 0	471 "	Period-Ending
" 54	9.15. 0. 0. 0	471 "	Initial Series
" 55	9.15. 0. 0. 0	471 "	" "
" 48	9.15. 0. 0. 0	471 "	" "
" 89	9.15. 0. 0.14	471 "	" "
" 26	9.15. 5. 0. 0	477 "	" "
" 25	9.15.10. 0. 0	482 "	" "
" 27	9.15.10. 0. 0	482 "	" "
" 59	9.15.10. 0. 0	482 "	" "
" 60	9.15.10. 0. 0(??)	482 "	" "
" 62	9.16. 0. 0. 0	491 "	Period-Ending
" 57	9.17. 0. 0. 0	511 "	Initial Series
" 58	9.17. 0. 0. 0	511 "	" "
" 80	9.18. 0. 0. 0	530 "	" "
" 67	9.18.10. 0. 0	541 "	" "
" 69	9.18.10. 0. 0	541 "	" "
" 15	9.19. 0. 0. 0	550 "	Period-Ending
" 16	9.19. 0. 0. 0	550 "	Initial Series
" 64	9.19. 0. 0. 0(??)	550 "	" "
" 39	9. ?. ?. ?. ?	..... "	" "
" 45	9. ?.10. 0. 0	..... "	" "

STELAE 28 AND 29, THE TWO OLDEST MONUMENTS AT CALAKMUL
THEY STAND ON THE NORTH SIDE OF STRUCTURE E AND WERE BOTH ERECTED ON THE SAME DAY, 9.9.10.0.0 IN THE MAYA CHRONOLOGY, WHICH CORRESPONDS TO 364 A.D. IN THE CHRISTIAN CHRONOLOGY, ACCORDING TO THE MORLEY-SPINDEN CORRELATION.

ranged in their chronological order, are given in the accompanying table; the name of the monument appears in the first column; the corresponding date in Maya chronology, in the second column; the corresponding equivalent in Christian chronology, according to the Morley-Spinden correlation, in the third column;[3] and the kind of date, *i.e.*, whether an Initial Series or a Period-Ending, in the fourth column. The corresponding terminal dates of these Initial Series and Period-Ending dates have been omitted for convenience in comparison. Doubtfully deciphered dates are marked with a single interrogation point and very doubtfully deciphered dates with two interrogation points.

In the light of its sculptured monuments Calakmul stands revealed to us as a large, somewhat provincial city of Class 2, which reached the point of erecting sculptured stone monuments at the close of the Early Period (9.9.10.0.0) (see accompanying photograph) and continued the practise until toward the close of the Great Period (9.19.0.0.0) at which time this site seems to have been abandoned, or at least a stage in its social, governmental and economic disorganization had been reached when it

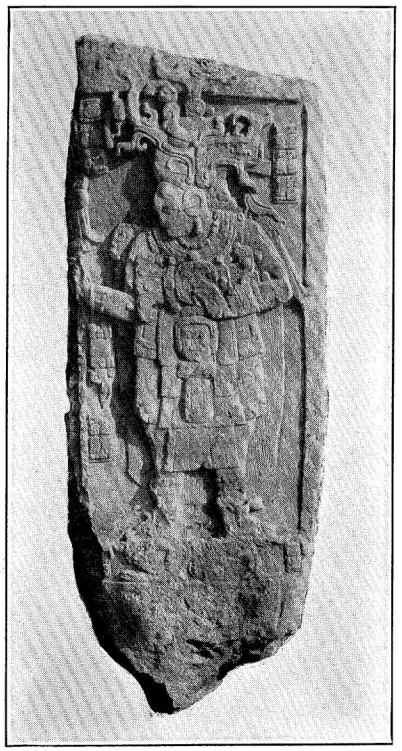
[3] According to the Goodman-Martinez-Thompson correlation of Maya and Christian chronology the dates in the third column are 259 years later.

[1] As noted in the text, 9.4.0.0.0 probably is not the contemporaneous date of Stela 43 but a date perhaps as much as two centuries later.

[2] Morley-Spinden Correlation.

[3] Stela 35 has two Initial Series, though only the second, 9.11.10.0.0, records the contemporaneous date of this monument.

[4] Although Stela 9 has two Initial Series, the contemporaneous date of this monument is recorded by a Period-Ending date, 9.12.0.0.0.



THE MOST BEAUTIFUL MONUMENT AT CALAKMUL

IT IS LOCATED IN FRONT OF THE PYRAMID SUPPORTING STRUCTURE A. THIS STELA (STELA 51) BEARS A DATE WHICH CORRESPONDS TO 471 A.D., ACCORDING TO THE MORLEY-SPINDEN CORRELATION. WHEN DISCOVERED IT WAS LYING WITH ITS SCULPTURED FACE TO THE GROUND WHICH ACCOUNTS FOR ITS EXCELLENT STATE OF PRESERVATION.

was no longer able to erect stone monuments of any kind, either sculptured or unsculptured.

The dates on the Calakmul stelae indicate that the inhabitants of this ancient city marked the ends of the successive five-year periods of the Long Count —the *hotuns*—not only by the erection of a single sculptured monument, as was usually the case, but occasionally, particularly on the *lahuntun* and *katun*-endings (*i.e.*, the ends of the 10- and 20-year periods successively) by the erection of two, three, four and in one case (9.15.0.0.0) even seven different monuments, one of which, Stela 51, is shown.

No other city of the Old Empire displayed such consistent prodigality in the erection of its period markers as did Calakmul. Occasionally, at other cities, two monuments or even more were erected on the same period-ending, but at Calakmul it is safe to say that practically every *lahuntun* and *katun*-ending between 9.9.10.0.0 and 9.19.10.0.0 was commemorated by the erection of more than one monument.

While the sequence of the *hotun,* or 5-year period markers, is by no means as complete at Calakmul as it is either at Piedras Negras or at Quirigua, the number of stelae found at Calakmul (because several rather than one were regularly erected at the *lahuntun* and *katun* endings) is actually nearly two and a half times as large as the number of stelae found at Piedras Negras and nearly nine times as large as the number found at Quirigua. Provincial as the city seems to have been, judging from the art of its sculptured monuments, when it came to mass production, Calakmul may fairly be said to have surpassed every other city of the Maya civilization now known.

The Initial Series of Stela 43 surely reads 9.4.0.0.0, more than a century earlier than the next earliest date, 9.9.10.0.0, recorded on two different monuments—Stelae 28 and 29. However, the stylistic characteristics of Stela 43 are such as to indicate strongly that it had been executed at a much later date than 9.4.0.0.0, possibly as much as two centuries later. Further, the other dated monuments associated with Structure B, in front of which Stela 43 is located, all date from 9.13.10.0.0 (Stelae 38, 40 and 41), nearly two centuries later than 9.4.0.0.0. Finally, there are a number of Calendar Round dates in the inscription on Stela 43, which, although apparently without connecting

Secondary Series numbers, may be much later than 9.4.0.0.0—perhaps as late as 9.13.10.0.0—any one of which may record the dedicatory date of this monument.

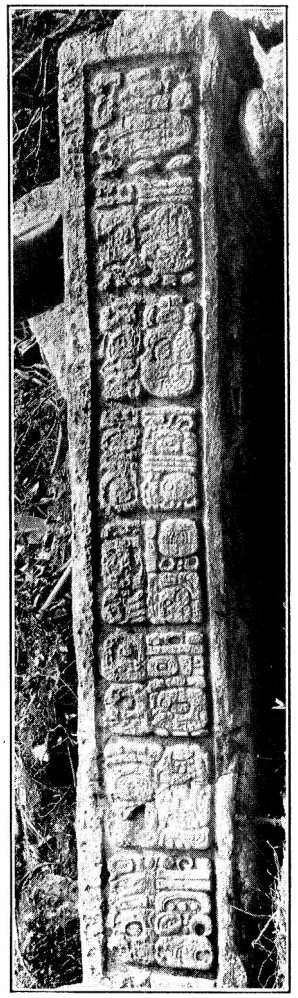
Mr. Bolles found that the two principal mounds, Structures A and B (see map of the city), are about the same height, approximately 150 feet. However, since Structure A is built on somewhat higher ground than Structure B, the latter is in reality the higher as well as very much the larger, covering an area 425 feet square, compared to an area, roughly 250 feet square, covered by Structure A. Structure B also, judging from the dates of the monuments associated with it, is 30 years older than Structure A, having been dedicated in 9.13.10.0.0, whereas the seven stelae associated with Structure A were clearly dedicated on the *katun*-ending, 9.15.0.0.0.

The only building sufficiently preserved to permit the reconstruction of its ground plan is Structure C, of which Mr. Ruppert made a close architectural study and measured ground plan (see accompanying plan). This building is composed of two wings at right angles to the main middle section and it had originally twelve chambers and probably a roof comb.[4]

As Bolles was scouting through the forest with his gang of bush cutters opening the main lines of sight for the base map, he discovered many new monuments not found by Lundell. In fact, most of the 41 new stelae reported by the Calakmul expedition were found by Bolles in his exploration of the site incident to making the survey for the base map.

An interesting discovery was that of a large sculptured outcrop of limestone near the middle of a small plaza just west of the Ball Court. By chance, one of the lines of sight for the survey crossed this outcrop, which was completely covered with fallen leaves and humus soil save for a small section, perhaps three feet in diameter, lying directly in the line of clearing.

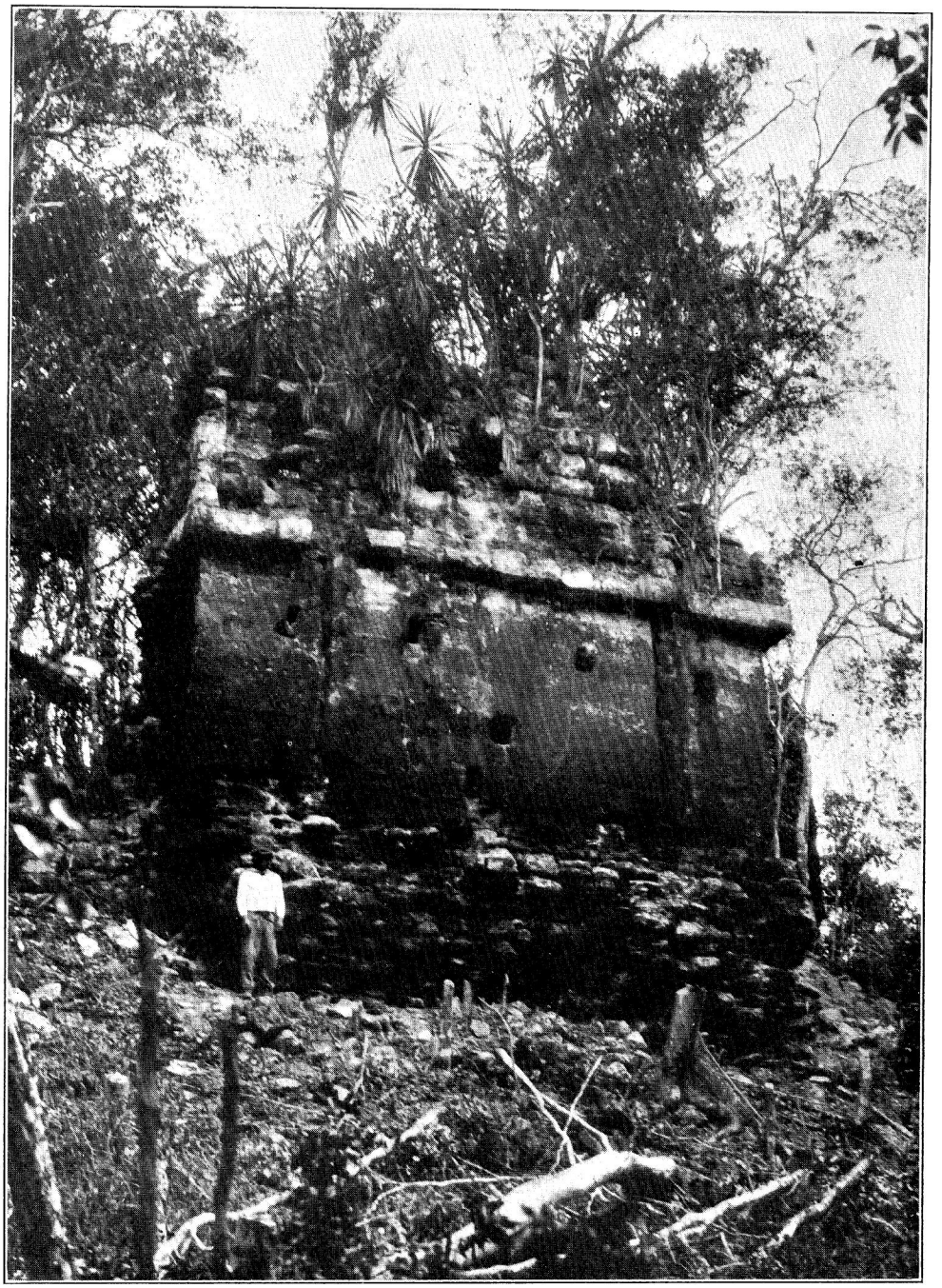
One of the workmen happened to notice that a human head of heroic size was carved in profile in deep relief—six inches—on the exposed upper face of



DATE GLYPHS ON STELA 89

A BEAUTIFULLY CARVED MONUMENT, FOUND ON THE SUMMIT OF STRUCTURE A, WHICH BEARS GLYPHS CORRESPONDING TO 471 A.D. OF OUR CHRONOLOGY.

[4] The roof-comb in Maya architecture, as its name implies, is a superstructure built on the roof of Maya buildings for decorative purposes.



STRUCTURE C, LOOKING NORTH

THIS IS THE ONLY STRUCTURE AT CALAKMUL SUFFICIENTLY PRESERVED TO PERMIT THE RECONSTRUCTION OF ITS GROUND PLAN. ORIGINALLY IT CONSISTED OF TWELVE CHAMBERS ARRANGED IN TWO WINGS AT RIGHT ANGLES TO THE MAIN MIDDLE SECTIONS (SEE GROUND PLAN).

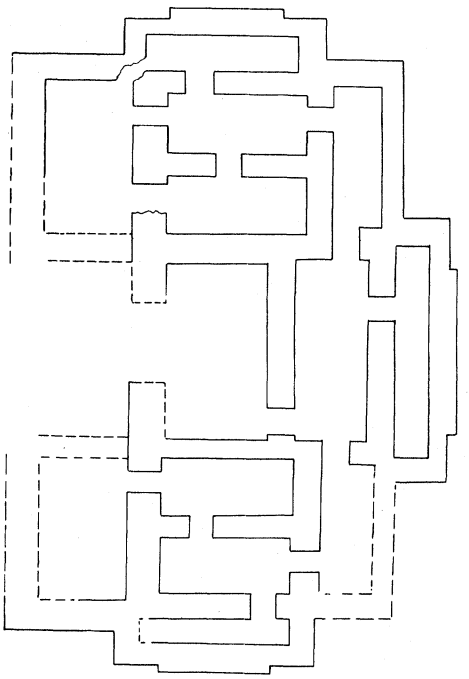
this rock (see illustration). When this outcrop was finally cleared it was found to be an irregular oval, the long axis measuring 21 feet, the short axis, 17 feet.

The entire top of the outcrop was sculptured with six or seven nude human figures, the tallest being nine feet in height; all these had their arms bound behind their backs, the cords showing clearly. There are several glyph-panels scattered over the outcrop but, due to the fact that these had been exposed to a maximum of weathering as well as to the fact that their relief was much lower than that of the captive figures, the interior details of the signs had entirely disappeared.

Other carving on outcrops of living rock in the Maya area of similar character are: the sculptured toad on a projecting ledge of the native andesite on the south side of the Copan Valley in Honduras;[5] the so-called Sacrificial Rock at Piedras Negras, Guatemala;[6] and the stalking jaguar, sculptured on a flat outcrop of limestone at Chichen Itzá, Yucatan, Mexico.[7] Mr. Stromsvik built a platform 17 feet above this sculptured rock at Calakmul, from which the design was photographed by flashlight at night.

Another find, possibly more significant scientifically, was Bolles' discovery of an ancient quarry a short distance north of the Main Plaza. Here two large blocks of stone, which, judging by their size and shape, probably had been intended for use as door lintels, are only partially quarried, one end and one narrow edge of each still remaining fast to the bed of limestone from which they were being worked. While by no means unique, definitely identified quarries at Maya sites are sufficiently rare to merit comment, and the one found this season at Calakmul is perhaps as good an example of this kind yet reported from any Old Empire site.

After turning the fallen monuments, Stromsvik devoted the remainder of his time to minor excavations, chiefly trenching in front of some of the standing stelae, in search of potsherds, of which a surprisingly large number were brought to light. In fact, five ten-gallon gasoline boxes of fragments were brought back to Chichen Itzá, probably the largest collection of potsherds ever obtained from any Old Empire site. In addition to this work, Stromsvik was able to collect parts (sometimes the entire piece) of at least 15 different *metates*.



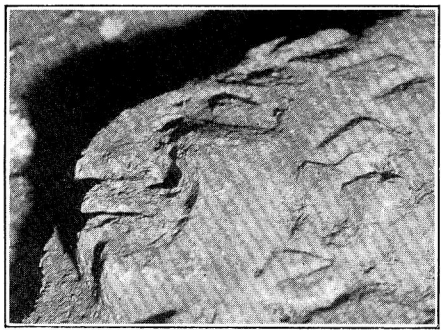
GROUND PLAN OF STRUCTURE C.

One of Ruppert's laborers reported having seen, two years before, a group of ruins some 15 to 18 miles by trail

[5] "The Inscriptions at Copan," Carnegie Institution of Washington, Pub. No. 219, by Sylvanus G. Morley, pp. 377, 378.

[6] "Researches in the Central Part of the Usumatsintla Valley," Memoirs Peabody Museum, Harvard University, Vol. II, No. 1, by Theobert Maler, p. 42, and plate VII, No. 1.

[7] Carnegie Institution of Washington Year Book, 1923, p. 216.



SCULPTURED OUTCROP OF NATIVE LIMESTONE

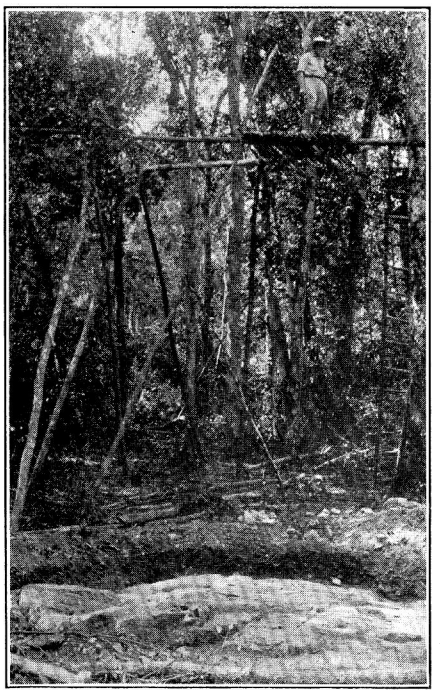
SHOWING THE HEAD OF THE PRINCIPAL FIGURE. AN AREA 17 FEET BY 21 FEET IS COVERED WITH SEVEN CAPTIVE FIGURES REPRESENTED WITH ARMS BOUND BEHIND THEIR BACKS. THE LONGEST OF THESE MEASURES NINE FEET.

northeast of Central Buenfil near the former chicle camp of La Muneca. In addition to the usual mounds, pyramids and fallen structures, now overgrown by the forest, he stated that there were three carved stones like those at Calakmul, two standing and one fallen, with "letters" on them, "letters" being the general designation for hieroglyphics among *chicleros* throughout the Old Empire region. It was obvious that this informant was describing a site where there were at least three sculptured stone monuments.

Messrs. Ruppert and Bolles, having completed their work at Calakmul a day before the other members of the expedition were ready to leave, decided to pay a brief visit to the newly reported site near La Muneca. They left Calakmul on the morning of April 23, reaching Central Buenfil in time for an early lunch, then pushed on to the new site the same afternoon. In the dry season the nearest water to this site is four or five miles away and it was necessary for the party to make a dry camp.

That same afternoon Ruppert, while making a preliminary examination of the ruins, was stricken with his first attack of fever and obliged to take to his hammock. The next morning, with great courage and fortitude, although still suffering from fever, he dragged himself about the ruins until ten o'clock, when he collapsed.

In spite of the very limited time available and Ruppert's serious illness an incredible amount of work was accomplished. In place of the three sculptured monuments reported by the *chiclero,* 23 monuments were found. The site, Bolles reports, is located on two large terraced platforms on either side of a small ravine. He had time to make a sketch map of only the western platform where the 23 stelae are located. A hasty exploration of the eastern platform, however, failed to bring to light any other monuments, though such may nevertheless be there, he believes.



OUTCROP OF NATIVE LIMESTONE

TWENTY-ONE FEET LONG AND 15 FEET WIDE, ON WHICH APPEAR THE SCULPTURED FIGURES OF SIX PRISONERS. A PLATFORM WAS BUILT 17 FEET ABOVE THIS OUTCROP IN ORDER TO PHOTOGRAPH THE FIGURES.

Although neither member of the party is an epigrapher, they were both able to identify, in their very cursory examination of the monuments, at least four Initial Series, of which they deciphered the dates of three:

Stela	4	9.18. 0. 0. 0	530 A.D.
"	3	9.19. 0. 0. 0	550 A.D.
"	16	10. 2. 0. 0. 0	610 A.D.
"	17	?	

The first records the same *katun*-ending as Stela 80 at Calakmul, and the second the same *katun*-ending as Stelae 15, 16 and 64 at Calakmul. Stela 16 at the new site records the date 10.2.0.0.0. This date is (1) 60 years later than the latest date at Calakmul; (2) 10 years earlier than the only surely deciphered date at Chichen Itzá; (3) 20 years earlier than the latest dated monument in the Old Empire region; and (4) 40 years later than the latest dated object from the Old Empire region.[8]

[8] This is a tubular jade bead found by Dr. Thomas Gann on the Rio Hondo in British Honduras in 1931. It records the date 10.4.0.0.12 *Ahau* 340 as Period-Ending.

The discovery of this late date on Stela 16 is perhaps the most important single contribution from this new site. It is another link in the ever-strengthening cultural chain binding the northern half of the Yucatan Peninsula to the southern half and indicates that the Old Empire came to its close, or at least to the close of monument building activities, some time during the first quarter of *Baktun* 10. Messrs. Ruppert and Bolles rejoined the rest of the expedition at Central Buenfil on the evening of April 24.

Early next morning a start was made by truck for La Gloria. A broken steering knuckle delayed the expedition 24 hours. Finally, at four o'clock on the afternoon of April 27, the expedition left La Gloria on two tram-cars for the fifty-mile ride to Kanasayab on the Champoton River, the head of navigation for motor-boats during the dry season, reaching there at four o'clock the next morning, where a motor-boat was waiting to carry the expedition and its outfit

AN ANCIENT QUARRY ON THE NORTHERN OUTSKIRTS OF THE CITY
TWO BLOCKS OF STONE ARE HERE SHOWN IN COURSE OF BEING QUARRIED FROM AN OUTCROP OF THE NATIVE LIMESTONE OF THE REGION.

LA GLORIA, CAMPECHE

ON THE ROUTE TRAVERSED BY THE CALAKMUL EXPEDITION. AT THIS POINT CHANGE WAS MADE FROM PLATFORM CARS DRAWN BY MULES TO A FIVE-TON MOTOR TRUCK WHICH CARRIED THE PARTY THROUGH THE HEART OF THE RAIN FOREST TO WITHIN A FEW MILES OF CALAKMUL.

to Champoton at the mouth of the river of the same name.

Here the expedition changed to a small schooner with auxiliary engine and proceeded by sea to Campeche. The Institution party, again most hospitably entertained by Mr. and Mrs. Brydon, left Campeche for Merida the next day. Messrs. Ruppert, Bolles and Stromsvik returned to Chichen Itzá, April 30, the writer and Mrs. Morley the next day, May 1, having been absent from Chichen Itzá just four weeks to the day.

Perhaps the greatest scientific contribution of the Calakmul expedition is the discovery of such a large and definitely Old Empire city having such a wealth of sculptured monuments so far north as the southern part of the state of Campeche. Previous expeditions, also working from the north, had found in central Campeche sites more characteristic of the New Empire cities of the north than of the Old Empire cities of the south. The discovery of Calakmul, with a definite Old Empire flavor, both in its architecture as well as in its sculptured monuments, at the very heart of the Yucatan Peninsula, midway between the earlier cities of northern Guatemala (the Old Maya Empire) and the later cities of northern Yucatan (the New Maya Empire), fills a geographic blind spot in our picture of Maya civilization and satisfactorily bridges the gap between the two regions.

A number of other archeological sites described as having sculptured monuments, located in the same general region as Calakmul, not only in southern Campeche but also across the line in the northern part of the Department of Peten, Guatemala, hitherto unvisited by scientific expeditions, were reported to the writer and it is planned to send another expedition into this new archeological sub-province during the next field season (1933). Indeed, perhaps the most important immediate result of the Calakmul expedition may be said to be the opening up, the first general notice, so to speak, of this scientifically significant region, the no-man's-land between the Old and New Maya Empires.