the débris below and replaced. There can be no doubt about the correctness of this restoration. After this a portion of the step is missing, but a smaller portion than at first seemed to be the case. It was not until after the plate was made and I had begun to examine the glyphs in detail and it was too late to make a correction, that an error in the arrangement of the latter part of step D became apparent. This portion of the step consists of two blocks, the first of which is broken in two in the middle of D 11. The smaller portion of this block was found at the bottom of the slope. The other piece of the block was found farther to the left than shown in the plate, leaving a space between it and the next block which occupied about the same position, relative to the extreme right, as in the plate. But as it was evident from the sculpture that the two blocks had occupied adjacent positions, they were brought together in the position seen in the photograph, making the joint which appears in D 13. It is evident now, as will appear later, that this portion of the step is placed too far to the right, and the glyph which appears as D 10 is really D 8, and nothing is missing in the middle of the step except the latter half of D 7 and the first part of D 8, while two glyphs besides the one of which a portion remains are missing at the end to the right.

Step E. This step is complete with the exception of a small fragment of the last glyph. It consists of four blocks, not counting the space in the middle occupied by an independent sculpture. The first joint falls on the fourth glyph. The joint between the other two blocks falls between E 13 and E 14. The last block is broken in two, and the last half of this block is the only part of the step not found in position. Measurement will show that the central sculpture occupies the space of just three of the average glyphs on the step. The same is true of the next step, F. On the left of the figure are six glyphs of regular size, and one that occupies only about half the space of the others; we may say seven glyphs. On the right also are seven glyphs. This makes the whole length of the step equal to seventeen glyphs, which is the number it would contain if they were continuous from one end to the other. This is also true of step F. Returning now to step D, measurements will show that the prone figure following the third glyph occupies exactly the space of three of the average glyphs on the same step. Taking this in connection with what has been observed of steps E and F, we may conclude that there were seventeen glyphs on this step also, or rather fourteen glyphs besides the prone figure, which is equal to three. Of these fourteen only twelve remain (three of these twelve are represented by portions only). The two missing glyphs are D 16–17, which ought to be shown in blank on the plate, as will appear presently.

Date V.

On Plate XII, E is seen a figure very much like the one in step D. It is followed by a glyph which in its composition resembles very closely a Great Cycle glyph, or the beginning glyph of an initial series. It differs from the known Great Cycle glyphs in the nature of the central superfix of the Pax sign. This element, usually a head, is here a form of the Kin sign.

Date VI.

Comparing this glyph with that which immediately follows the prone figure on step D, it will be seen that the remaining portions of the one are almost identical with the corresponding portions of the other. Unluckily, the glyph on step D is broken away almost in the middle, and the small portion of the central superfix that remains

is not clear enough to show whether or not it is the same as that in the glyph to which reference has been made. An examination of the cast leads to the conclusion that it is probably not the same, but that it is in this case a head. This is not certain, however. An examination of the fragment of a glyph that appears in D 10 shows it to be a head with a hand on the lower jaw, the mark of the Cycle sign. I will therefore call this glyph D 8, and those following it will be referred to as 9, 10, 11, 12, etc., instead of 11, 12, 13, 14, etc. In D 9 *a* the symbol can no longer be recognized, but the position shows it to be the Katun. In 9 *b* is a head which, though not very clear, is seen to resemble the Tun head in a number of inscriptions. In 10 *a* is seen the curve of the Uinal head, and the Kin head in 10 *b* resembles especially the head representing the same period in Quirigua, Stela A, Initial Series; Stela C, east side, Initial Series; Stela E, east side, Initial Series, and Piedras Negras, Stela 1, Initial Series.

Returning to the numbers of the periods, we are obliged to pass over the numeration of the Great Cycle and Cycle as unknown. Coming to the Katun number, although the numeral is somewhat injured, it seems quite plain that there are three bars above, and the number is 15. The Tun number is not less than 10 nor greater than 15. Nothing more definite than this can be determined by an inspection of the numeral. The Uinal number is 10, and the Kin number is 10.

In 11 *a* is a day sign which looks like Oc. It is clear that it must be Oc, since there are 10 odd Kins in the count. The day number is 11.

In 11 *b* and 12 nothing like a month sign appears. In 13 *b* is a sign that looks something like the last of the supplementary series, but no numeral appears with it. If 11 *b* counts as two, and 12 counts as two, and 13 counts as two, then we have a series of six glyphs, followed in 14 by one that looks like the sign for the month Cumhu, having in front of it what might be taken for the numeral 3. I feel confident, however, that this is not the month glyph. Keeping in mind that two glyphs are wanting at the end of the step, it seems plausible at least that the supplementary series in this case extended from 11 *b* to 17 *b* inclusive. My reason for regarding 17 *b* as the last of the supplementary series is that on step E 1 is what I believe to be the month glyph corresponding to the initial series on step D.

The value of the face numeral in E 1 *a* is not at first sight apparent.

The day Oc requires that it be either 3, 8, 13, or 18. The skeleton jaw shows that it is not below 10, and 13 and 18 are left to choose between. Except in the matter of the jaw the face resembles the 3 face most closely. The resemblance to the face in the Temple of the Sun A 6 is very marked. The band about the head in the two cases is strikingly similar. The frontal in E 1 *a* is too much injured to admit of comparison, but the resemblance of the two heads is so strong that I feel justified in the inference that the face in E 1 represents 13, being the 3 face increased in value by 10. This is in keeping with the methods of the Mayas, as may be seen by comparing the 6 face with the 16 face, for example.

The results of our inspection of this initial series are then as follows: —

Great Cycle (number unknown).
Cycle (number unknown).
Katun 15.
Tun 11, 12, 13, 14, or 15.
Uinal 10.
Kin 10.
11 Oc 13 Pop.

Counting backwards from 11 Oc 13 Pop 210 days brings us to 3 Ahau 8 Chen, the beginning day of a Tun which we know to be the 11th, 12th, 13th, 14th, or 15th Tun of the 15th Katun of some Cycle of some Great Cycle. Going to the 9th Cycle of the 54th Great Cycle to make the first trial, we find that no Tun of the 15th Katun begins with this date. In fact, no Tun within the above-mentioned limits in the 15th Katun of any cycle of the 54th Great Cycle begins with this date. If I am right in regard to the period numbers, this date does not fall within the Great Cycle beginning with 4 Ahau 8 Cumhu. Where does it fall?

If the date reads —

15.15.10.10 . . . . . 11 Oc 13 Pop.

it can come only in the 9th Cycle of the Great Cycle beginning with a day 4 Ahau 13 Uo, which is the 62d in Goodman's scale of numeration.

If the Tun number is 14, the date is in the beginning cycle of Great Cycle 72, and giving the Tun number all values from 11 to 15, we get the following dates: —

72. 0.15.14.10.10 . . . . . 11 Oc 13 Pop.
62. 9.15.15.10.10 . . . . . " "
26.12.15.11.10.10 . . . . . " "
17. 8.15.12.10.10 . . . . . " "
8. 4.15.13.10.10 . . . . . " "

All of these look absurdly remote from what we would expect.

Following the month glyph in E 1 come a number of glyphs all of which look familiar enough, though their meanings are not known. In E 12 appears a distance number made up apparently of 5 Kins, ? Uinals, and 6 Tuns, — assuming that the bar placed before the Uinal sign stands for the Kin number. The upper corner of the step is somewhat worn, and the Uinal numeral, if placed above, has entirely disappeared. It would seem, however, as if the Uinal numeral had been placed at the right of the sign for that period for lack of space above. This numeral looks like 1, and the number may be read: —

6.1.5.

E 13 *a* is a head of unknown meaning; compare with F 1 *b* and Plate VI, K 5 *a* as to form and position. 13 *b* is a day sign and 14 *b* is the month Pop. The subfix of Pop looks the same as in E 1. 14 *a* is a head surmounted by a sign, which may also be a head, but which is not at all clear. The month numeral must be expressed in 14 *a*, for there is no space above for a numeral. The face in 14 *a* may stand for 8. It looks very much like 8, although the 8 and 1 faces look so much alike that it is often difficult to distinguish between them.

The numeral over the day sign in 13 *b* is not clear, but it is a high number, surely above 10.

If the distance number is 6. 1. 5 = 2185, and the date is forward from 11 Oc 13 Pop, it is 12 Men 8 Pop, which corresponds very well with the date in E 13–14.

Of course it may be argued that the Kin count is given in E 12 *a*, and not in the bar at the left of the Uinal sign. Compare the text in this place with that on B 10–11, where the number is clearly 11. 9. 9.

The face above the supposed Kin sign in E 12 *a* is not very clear, but it looks very much like a 10 face. A row of teeth is distinctly seen, as well as the skeleton jaw.

Compare face in Fig. 20, 9th glyph, where we have the familiar date 6 Caban, 10 Mol. Now, if we adopt this reading, we get a curious result: —

6 . 5 . 10 = 2270.

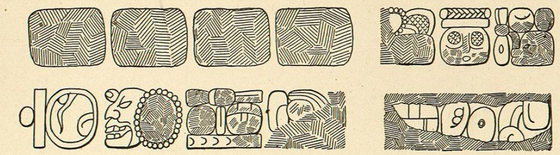

Fig. 20. — Inscription on the Four Sides of a Small Stone Table from Copan.

Counting forward this number from 11 Oc 13 Pop, we come to 6 Ahau 13 Tzec, a date that is not found on step E. But in F 2 is found a date, an inspection of which, even in its mutilated condition, will show it to be 6 or 8 Ahau 13 Tzec. It would seem, therefore, as if there were two collateral numbers in E 12 (Fig. 22), each of which is to be added to the initial series on step D.

Initial date + 6.1. 5 . . . . . is 12 Men 8 Pop (Date VI *a*).
Initial date + 6.5.10 . . . . . is 6 Ahau 13 Tzec (Date VI *b*).

If the text will bear this construction, we have double assurance that the preceding date is 11 Oc 13 Pop, and I can see no reason why this should not be the construction intended.

In this connection it may be interesting to compare a date on the hieroglyphic bands at the base of Stela N (Fig. 23), which may be 11 Oc 13 Pop.

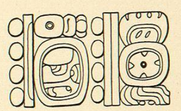

Fig. 21. — Date on Top of Table having the Inscription shown in Fig. 20, on the Edges.

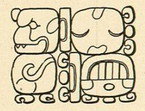

Fig. 22. — E 12 Plate V, slightly restored.

Step G has one and a half glyphs missing from the left end, and nearly three from the right; otherwise it is complete. Compare G 2 with E 4, G 3 with E 5, G 5 with E 11 *a*, G 11 *a* with E 11 *b* and with Plate VI, K 3 *a*.

In G 11 *b*–12 is another distance number. The Kin number in 11 *b* is 0, but the numerals with the other period glyphs are not legible. Compare G 13 *a* with E 13 *a*, F 1 *b* and Plate VI, K 5 *a*. G 13 *b* is a day sign, and G 14 is the month Tzec, having in front of it two curves and the number 8 or else 13. It may be that the two curves form part of the month numeral.

On step J 12–13–14 appears a figure similar to that on D 4–5–6. The attitude as regards the hands and head especially, in this figure suggests a person swimming, but it is doubtful whether this is the idea that it is intended to express.

The numbering on the top of the plate applies down to and includes step K. After that the glyphs are closer together, and the last two steps on the plate have twenty glyphs on each, the same as those on Plate VI.

On Plate XII are shown a number of disconnected blocks reproduced from photo-

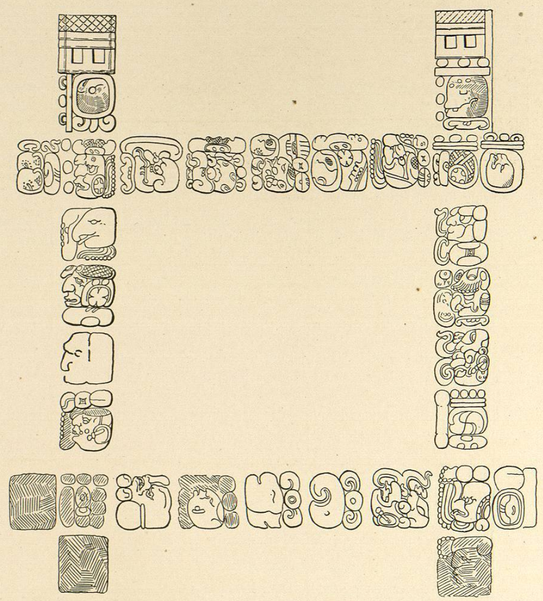

Fig. 23. — Hieroglyphic Bands at the Base of Stela N.

graphs of the originals. These blocks contain a number of glyphs in varying degrees of preservation, and each of these fragments fills a gap somewhere in the inscription, but there are much longer gaps which cannot be filled. It will be seen that in several places two or more blocks are photographed together, giving a sequence of several glyphs.

In E 1st fragment, there are three blocks forming a sequence. The first contains just two complete glyphs. The second contains a prone figure, and the third, the beginning glyph already mentioned. It is very doubtful whether the first of these blocks bears the relation to the next one that is indicated in the photograph. The joint falls on a plain surface, and there is nothing to indicate such a relationship. The other joint falls on the sculpture, and there is no question about it. The last

block was found resting on the slope higher up than the highest step shown on Plate V, showing that the initial date of which E 4 was the beginning glyph preceded the date on step D, Plate V in position. E 1 is recognized as the beginning or left end of a step by the character of the sculpture.

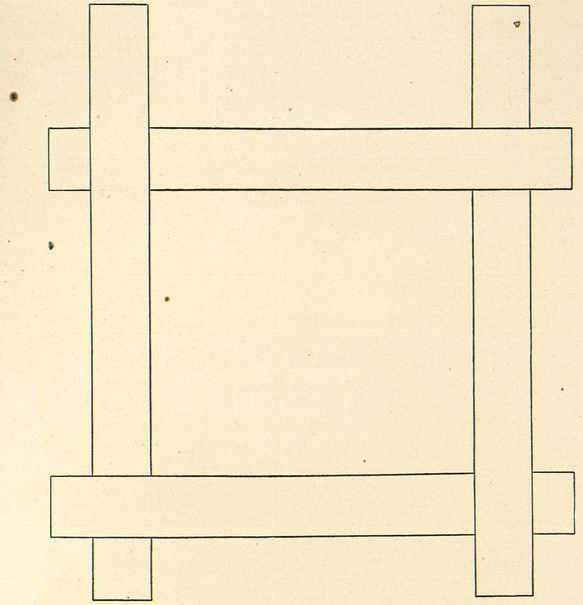

Fig. 24. — Plan of Hieroglyphic Bands at the Base of Stela N.

E 1 is evidently 3 Yaxkin. A day glyph must have been on the preceding step near or at the right end, and was probably preceded by either a distance number or an initial series.

F 1 is also recognized as the beginning of a step. Compare F 1 *a* with Plate V, E 11 *b*, and G 11 *a*, also with Plate VI, K 3 *a*. F 1 *b*–2 is a distance number made up of 6 Kins, 14 Uinals, and 11 Tuns. F 3 *b* is 11 or 13 Ahau, F 4 *b* is 8 Cimi (?), and F 5 may prove to be 14 Tzec. On the third block in the same line appears another number consisting of 19 Kins and 1 Uinal.

In H there is a joint between the second and third glyphs, and another in the middle of the fourth glyph. The restoration is probably correct in both instances.