

THE CENSUS OF THE ISRAELITES.

THE numbers of the Israelites stated in Exodus are evidently based on the more detailed statements of the census in Numbers (chaps. i.-iii.) before the wandering; and with this must be also taken the census after the wandering at the end of Numbers (chap. xxvi.). These statements have long been felt to be impossible as they stand, and forty years ago an arbitrary reduction to a tenth of the numbers was proposed by an orthodox traveller—Sandie. Later writers have very carefully eschewed the whole question, and not a hint on the treatment of the statements is to be found in either of the recent Bible Encyclopaedias.

While in Sinai last winter the question of the ancient conditions was carefully considered, and the general impression is that no considerable change has taken place in climate or productiveness within historic times.

The main factors are that only 4,000 to 7,000 persons can live in Sinai now, according to different estimates; that the Israelites were not more numerous than the ancient inhabitants, as in the Amalekite battle they were nearly matched (I owe this point to my friend, Mr. Currelly); and that only a few thousand people could have occupied Goshen, whereas any number, such as is given in Exodus, would imply depopulating most of the delta, and of this we find no trace at the time. In short, not more than a few thousand people could be got out of Goshen or into Sinai.

Let us look at the numbers of the tribal census more closely. I have rearranged the order to make the argument more clear.

NUMBERS i.-iii.		NUMBERS xxvi.	
Manasseh	32,200	Simeon	22,200
Simeon	59,300	Issachar	64,300
Benjamin	35,400	Naphtali	45,400
Naphtali	53,400	Asher	53,400
Issachar	54,400	Dan	64,400
Zebulun	57,400	Ephraim	32,500
Ephraim	40,500	Gad	40,500
Asher	41,500	Zebulun	60,500
Reuben	46,500	Judah	76,500
Judah	74,600	Benjamin	45,600
Gad	45,650	Manasseh	52,700
Dan	62,700	Reuben	43,730

On reviewing these numbers a strange feature appears : there is no case of an exact thousand, or 100, nor of 800 or 900, and more than half the hundreds fall on 400 or 500. This is a strange distribution of the hundreds, when fourteen out of twenty-four fall on only two of the ten digits. The chances against this being casual are more than a thousand to one ; and there is evidently some strong selective influence on the hundreds apart from the thousands. Compare these with a chance set of digits. Against this third place of the figures I will take the third place of figures of the National Debt, as certainly a chance set of figures, in three successive periods of 24 years.

Digits.	Two Censuses.	National Debt.		
0	0	4	1	4
1	0	1	0	3
2	2	3	5	1
3	2	1	6	2
4	7	2	3	2
5	7	1	4	0
6	3	4	1	3
7	3	3	1	3
8	0	4	1	4
9	0	1	2	2

Here we see an even chance distribution in the National Debt, never more than 4 of one digit, and only one digit

missing in two of the three sets of figures; while the census hundreds are concentrated on the middle of the digits, and entirely desert the higher and lower numbers.

The only conclusion from this is that *the hundreds of the census lists have an independent origin, apart from the thousands.*

What then are the thousands? *Alaf* has two or three meanings, and "a family" is as good a rendering as "a thousand." What if the "thousands" were "families" in the original census? We should then have a double census, the exact number of families or tents, and the round number of hundreds of persons in each tribe. This would completely explain the fact that the hundreds are independent numbers.

But how will this work out regarding the number of persons in a family? The poorest tribe in the first census has five to a family, the least that can keep it up; the richest has 14 to a family, which is quite possible if there were many children, beside herdsmen and hangers-on of the "mixed multitude." In the second census the families are from 5 to 17 persons. The average is 9 in both census lists.

Now all this is quite reasonable; and the variation in the size of family from least to greatest, as 1 to 3, is much less than the possible variation of the digits 0 to 9. These results are not the product of chance numbers, but of numbers that agree together in a rational result.

The conclusion then is that the total of the Israelites before the wandering was 598 tents—5,550 persons; and after the wandering 596 tents—5,730 persons. The original census lists, giving tents and persons, were later misunderstood, and the tents were read as thousands, and prefixed to the hundreds of the true census. Such a form of census in double column would be in the manner of account keeping of the period, as seen in Egyptian accounts. The

total of persons in the original form of the census would be well in accord with the possibilities of Goshen and of Sinai.

If this view of the original document be accepted, there is an instrument in our hands for dividing clearly between original and later statements of the Israelite history in the Pentateuch. On one hand we see that (1) the twelve tribes were existing at the Exodus, and are not due to accretion in the desert, or to a Solomonic system. Their fixation may well be due to a monthly *corvée* of forced labour in Egypt.

(2) The account of the plague is intelligible; 14 whole families were extinguished in a total mortality of 700 persons. And there is nothing impossible in the 70 elders.

But, on the other hand, we see that—

(1) The numbers of the first-born males, 22,273, are quite as impossible as they are in the existing text. They imply a total population of 100,000 to 200,000, which does not fit the total of 2 or 3 millions required by the present text, or the 5 or 6 thousand which we have now reached. Moreover the numbers given for the tribe of Levi cannot be reduced like those of the other tribes, and they must have been introduced from some much later census in Palestine. There is then no trace of Levi at the Exodus, and Levi was a caste selected from the twelve tribes which were in existence at the Exodus.

(2) The whole statement of the half shekel tax must also be a later introduction, as it is linked to the later misunderstanding of the census.

Various other conclusions will follow from these. But I have said enough to show how much reconstruction of historical views must follow from the understanding of these census lists, and what a basis for a strict criticism they form for us.

Probably any one accustomed to deal with figures will feel the force of this, as it seems impossible otherwise to account for the hundreds of these lists falling generally on 4 or 5, and entirely omitting the higher and lower digits.

W. M. FLINDERS PETRIE.