A few remarks may be added on the more important of these places: Iskar.—It is clear from the Chronicle that two places of somewhat similar name existed in Samaria; one being called Iskar, in the plain between the two mountains towards the east. In the Arabic translation it is written 'Askar, and is evidently the modern village of that name. The other is called 'Askûr, and was near another site called Kuryet ha Mishfeh. This seems to be the ruin of 'Askûr west of Gerizim. The chief interest of the former name lies in the fact that 'Askar is generally thought to be the Sychar of the New Testament, and that in the Samaritan text we find the word in a transition form without the initial 'Ain which has taken the place of the Yod. This fact considerably increases the probability of the identification.

Ophrah.—The value of the variations in the Arabic translation of the Chronicle is here again evident. It serves to identify the modern Fer'ata, or later Jewish Pirathon, with an ancient Ophrah, and the one which suggests itself as most probably identical is Ophrah of the Abiezrite, a town of Manasseh, the home of Gideon (Judges vi. 11). If this be the case the identification has a direct bearing on the question of the north boundary of Ephraim at Asher-ham-Michmethah (Josh. xvii. 7), and would fix this place at 'Asireh, as proposed by myself, agreeing with the identification of the River Kanah as Wâdy Kanah, and making Gerizim the outpost of Ephraim, whereas the ordinary identification of Asher with Teiasir, or Mr. Drake's proposed site at 'Asirah, quite destroys the identification of the River Kanah and includes Ebal in Ephraim, leaving only a very narrow strip of country for Manasseh.

The only other point of great interest is the fact recorded that the Samaritans inhabiting Gaza and Gerar were Benjamites. It shows that the Samaritans claimed to represent all Israel except Judah, and not merely the tribes of Ephraim and Manasseh.

This paper has already been prolonged to such an extent that there is no room for the discussion of minor points of interest, such as the identification of the plain of Moreh with the plain of the Mukhnah or "camping-place." It is sufficiently evident that the Samaritan literature allows us to fill up a portion of Palestine which is almost a blank as regards Biblical towns.

CLAUDE R. CONDER, Lieut. R.E.

NOTES ON MASONRY.

THE following is an abstract of observations with regard to styles and dressing of masonry in Palestine, extending over three years, and embracing the results of visits to many hundreds of ruins. The prominently distinct styles in the principal buildings are seven in number.

1st. Megalithic ashlar; stones averaging 3 ft. 6 in. in height, generally great length, some reaching 30 to 40 feet. No attention was paid to quarry bed, as shown by various weathering; a draft from 1\frac{3}{4} to 3\frac{1}{2} inches broad, \frac{1}{4} to \frac{1}{2} inch in depth. The tooling is fine and regular, done with a flat instrument with teeth, used in two directions at right angles to

one another. The same tooling on the edges of the central projecting face in a border, one inch wide. The rest of the face finished with a blunt instrument worked at right angles to the stone (a kind of cold chisel). The stones of the Haram at Jerusalem, and the voussoirs of Robinson's arch, are thus dressed; perhaps not earlier than Herodian times. It would be interesting to know whether the dressing of the foundation stones with Phoenician letters is the same.

2nd. Masonry of square proportions; height of course 2 to 3 ft., without any draft, smoothly dressed, with an instrument having many fine teeth. Attention has been paid to quarry bed, and the joints are well laid. Mortar and cement of very hard character used; arches and cradle vaults semicircular, the keystones very narrow, and the haunch stones broad. The Twin Pools, the Double and Triple Passages, are examples. It appears to be Roman work, dating later than the destruction of Jerusalem by Titus.

3rd. Masonry of stones, 3 to 5 ft. in length, and 2 to 21 ft. in height. A broad and very irregular draft, differing in breadth on various sides of the stone; the boss is often not rectangular, the draft from 2 to 6 inches in breadth, and from 1 to 3 inches in depth. The boss is hammerdressed, the draft dressed with a toothed instrument, but more coarsely than in the preceding styles. The joints are laid rather open, the mortar is soft, the length of the stone differs. In one instance two stones, one 11 ft., the other 5 ft. long, occurred next one another. The height of the course differs greatly, and low courses occur near the foundation. The quality of the stone is generally inferior to the two former, which are taken from the Melaki beds. Round arches are invariably found with this style; the doorways often have lintels with low relieving arches above. Barbarous Greek inscriptions, Byzantine capitals and ornamentation of early character accompany this style. It is found in the outer walls of convents, basilicas, and similar buildings of the early Christian period, such as Justinian's Church on Gerizim, dating 533 A.D.

4th. Stones, well cut, of very square proportions, a deep draft more carefully cut than in the former style, 2 to 6 inches broad. The boss is rustic, projecting from 6 inches to 1 ft. or even 18 in. The draft is hammer-dressed. These stones occur in the outer walls of Crusading towns and castles, and in some cases the pointed arch of a gate or postern is built of such stones, of size equal to those in the wall. It is supposed that the irregular surface offered better resistance to the ram in a siege. It is evident these stones were quarried by the Crusaders, and they are found in exclusively Crusading sites such as Kaukab el Hawa (Belvoir), and 'Athlit (Castellum Peregrinorum).

5th. Small masonry, hard, well-picked stones, mezzeh or Sta. Croce marble. The proportions moderate, height of the courses 1 ft. to 1½ ft., but not always equal. Numerous masons' marks on the better-dressed stones; joints very fine and close; tooling with a very sharp-pointed instrument very close; the lines continuous or broken, vertical, diagonal, horizontal, and in the less careful specimens curved or crossed. Both round and pointed arches occur in this style. Vaults groined or barrel

with a parabolic section, of small masonry of rag-work or of rubble. The core of the wall often of rubble in hard shell mortar. The style of architecture accompanying this system is Italian Gothic, modified by local influences. The twelfth century churches of Palestine are specimens of this Crusading style.

6th. Roughly dressed stones, laid with broad joints, many of those in exteriors drafted with a narrow draft; hammer-dressed, with the bosses sometimes hardly dressed at all; proportions similar to the preceding style. Masons' marks observable on the better-dressed specimens; the corner stones are the best and largest; the arches accompanying this system are generally pointed. The Church of St. Jeremiah at Abu Ghosh and the convent of Khirbet Ikbala are examples. It is an inferior Crusading style of the twelfth century.

7th. Resembles No. 5, but the masonry is inferior in finish and material. The proportions less, the joints not so well laid. No masons' marks occur. The tooling is similar, but the lines deeper, further apart, and less regular. On many stones a toothed instrument has been used irregularly, giving a patchy appearance. The arches are all pointed; the vaults groined, of rubble with ashlar ribs; the corner stones are often drafted with an irregular shallow draft; the boss hammer-dressed or coarsely tooled. A peculiar hard red cement, full of pottery, occurs with this style, which is observable in *khans* and Saracenic buildings of the fifteenth century and later.

The above remarks show that the finishing with a toothed instrument still in use is a method observable in all styles except the Crusading, but that there is a possibility of confusion between Crusading and the better Saracenic work, which styles are only distinguishable by aid of the masons' marks on the former.

It shows also that the distinctive character of the Jewish drafted masonry, compared with the later drafted styles, is to be recognised by three tests:—

1st. The length of the stones compared to their height.

2nd. The shallowness of the draft.

3rd. The cross chiselling with a toothed instrument.

It is very easy to distinguish these styles after a little practice. There are occasional difficulties when transitional or exceptional instances occur, but nothing is easier than to separate the early Christian and Crusading work from the Jewish.

There is, so far, no evidence that drafted masonry was used by the Romans in Palestine. In the Herodian buildings at Jebel Fureidis none of the masonry is drafted, nor in the Roman work at Beisán.

C. R. C.

NOTE.

Lieut. Conder has further proposed to write papers on a new site for Megiddo, on Saul's journey to Zuph, on Gibeah of Saul, on the Moslem Mukams, and on some twenty new minor discoveries, with a list of the Lepidoptera collected by him for the Fund.