EGYPT 1: 30,000

Note on Canals in the Wady Tumilat.

The lowest point of the neck of the Wady at Aabasah is only 20 Feet above Sea Level, while at Seba Byar 30 Miles distant it is still 10 Feet. The average slope is therefore 4 Inches to 1 Statute Mile, or about 1 in 15,000, which would produce a velocity of half a mile an hour in a small channel. Effective Drainage is therefore practicable. The Ismailia Canal has an ample command over the Wady for Irrigation. A Drainage Outfall Canal is the chief requirement for the reclamation of large tracts which are now waste. In prehistoric times, the water of the Nile, certainly when the river was high and probably when it was low, flowed through the Wady. Canals are mentioned in the records of Seti. The original Wady Canal was made under Pharaoh Necho (600 B.C.) from the Tanitic Branch at Bubastis (i.e. the modern Bahr Moez at Zagazig). It was repeatedly re-excavated under Egyption, Persian, Macedonian, Roman and Arab rulers; with variations in trace, but substantially the same. The first accurate survey appears to be that of Linant Pasha in 1855-6, for a projected canal. At that time. there were two canals in existance, i.e:– one on the north side of the Wady, described as the Canal of Ptolemy, re-excavated in 1820, ending as Kassassin; and another along the southern side of the Wady, stated to be the Canal of Trajan. The former still exists, but no longer derives its supply from the Tanitic Branch, being fed by a weir on the Ismailia Canal between the 76th and 77th Kilometre Stones. The latter, which derived its supply from the Zafaranieh Canal, and which seems to have served the purpose of a drainage canal, has almost disappeared, its site having been covered by the gradual encroachment of sand. Traces of it can however be seen along the southern escarpment which is evidently extending to the N. from the movement of wind-blown sand. This escarpment consist of a series of parallel ridges in a direction E.S.E. and W.N.W., cutting the general line obliquely. It attains a height of 100 Feet opposite Mahsamah. The original Sweet Water Canal, which was commenced in 1860, to supply water to the workmen on the Maritime Canal, begins at Kassassin, and follows a line not before employed. It came into operation on the 1st Feb. 1862 as far as Lake Timsah, and on 29 Dec. 1863, to Suez. The portion from Kassassin to Nefishah, having been superseded by the Ismaïlia Canal, which intersects it at the 121st and 127th Kilometres, now only serves for local irrigation, being fed by sluices at Mahsamah and Magfar. The Mahsamah sluice is of Masonry with two pairs of sliding gates, each 3′ wide. The Wady Canal was 2′6″ below the Ismailia Canal on 22.11.83. The narrow foot-bridge over sluice will not admit vehicles.

The Ismailia Canal was commenced between Cairo and Siriakus in Jan. 1865 by military labour, and continued in 1866 to Kil. 70, Kawarnah by corvée. On 11 July 1867, water was admitted as far as the Raiah of Zawamel. In 1870 a contract was made with M. Brocard for extending it to Kassassin, which was done in 1874; when another contract was made with M. Papanot for completing it to Ismailia, which was accomplished in July 1877. High Nile at the Shubra intake is 65 Feet, and Low Nile 42 Feet, above L.W. Mediterranean. The levels of the Canal below the different locks are, at High Nile approximately:– Shubra 53′, Siriakus 37′, Belbeis 29′, Kassassin 22′, and Ismailia 7 Feet. The height of the Ismailia Canal above the Wady, leads to extensive infiltration, which nothing but a deep outfall Canal can remedy. This Canal should not be near the southern escarpment for the reasons given above.

Surveyed Dec. 1883 by Lt. Col. Ardagh, Maj. Spaight & Lt. Burton. R.E.

Intelligence Branch No. 436.

Lithographed at the Intelligence Branch, War Office
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