## NEW DISCOVERIES IN ARABIC PAPYRI. AN ARABIC TAX-ACCOUNT BOOK

(INV. NO. 1400)

## FOUND IN UMM EL-BUREIGÂT (TEBTYNIS) IN 1916 (1)

BY

## PROF. DR. ADOLF GROHMANN.

To the memory of Pierre Jouguer the great historian and papyrologist.

In 1916 a wooden box, containing numerous fragments of Arabic papyri found in Umm el-Bureigât (Tebtynis) in the same year, came into the possession of the Egyptian Museum. This place, situated in the South of the Fayyûm, south of the Baḥr Ġaraq and east of Talît, is well known for the discovery there of crocodile-mummies with papyruscartonnage, and of crocodiles wrapped in sheets of papyrus. A roll

The abbreviations used are:

APEL - Arabic Papyri in the Egyptian Library ed. by A. Grohmann, Cairo 1934-39.

APPM = Arabic Documents on papyrus, parchiment and paper in the University Museum, University of Pennsylvania by G. L. Della Vida.

APRL = Catalogue of Arabic Papyri in the John Rylands Library Manchester ed. by D. S. Margoliouth, Manchester 1933.

P. Cair. B.É. = Papyri in the collection of the Egyptian Library Cairo.

PER = Collection of the Papyrus Erzherzog Rainer, Vienna.

PERF = Papyrus Erzherzog Rainer. Führer durch die Ausstellung, Wien 1894.

P. Heid. = Veröffentlichungen aus der Heidelberger Papyrus-Sammlung III, Papyri Schott-Reinhardt I, ed. by C. H. Becker, Heidelberg 1906.

P. Lond. IV = Greek Papyri in the British Museum, Catalogue with texts, vol. IV, the Aphrodito papyri, ed. H. I. Bell and W. E. Crum, London 1910.

Z. D. M. G. = Zeitschrift der Deutschen Morgenländischen Gesellschaft.

<sup>(1)</sup> Communication présentée en séance du 20 mai 1950.

or two was inserted in the throat or other cavities of these animals during the mummifying process, and in this way valuable Greek texts especially of the Ptolemaic period came to light, which now fill three large volumes edited by the ever memorable English papyrologists Grenfell, Hunt and Smygly. Although Tebtynis was one of the earliest settlements in the Fayyûm—the earliest tombs found go back to the XIIth dynasty, and the town-ruins are Ptolemaic or later—it was hitherto believed that the settlement did not survive very far into the Arab period, as Tebtynis was not known as a provenance of Arabic papyri; also the Arabic name of the town is completely unknown.

Now we know that the town existed at least until 308 H. (920-921 p. C.), and four large fragments of letters and documents, contained in the box I have mentioned, show, that people there were active in writing and administrating from the first half of the 1st Century of the Higra until 289 H. (902 p. C.). A. very interesting official letter (Inv. 1401), the reverse of which bears a Coptic text of the vinth Century p. C., a private letter (Inv. 1402), a letter in which Tutûn (situated close by north-east of Tebtynis) is mentioned (Inv. 1403), and a contract for the lease of land (Inv. 1404) dated Gumâdâ II, 289 H. (May-June 902 p. C.) are the surviving witnesses of the activity of Arab and Coptic inhabitants there.

But the most interesting part of this new and unexpected find is formed by the fragments of leaves or rather quires of a tax-ledger.

Unfortunately the contents of the box which was transferred from the Egyptian Museum to the Dâr el-Kutub el Maṣriya in spring 1939, were in a most lamentable condition: the big leaves or quires which formely belonged to the ledger, were folded up like a pipe-lighter, many were torn to pieces, and fragments of all sizes and shapes were scattered through the box.

The biggest piece (B), still forming a quire of the original book and folded in the middle, measures o m.  $471 \times 0$  m. 30, the next in size (A) o m.  $385 \times 0$  m. 294; the small fragments are between o m.  $162 \times 0$  m. 122 and o m.  $03 \times 0$  m. 031. Some fragments were still pasted together, so that we may presume that they belonged to two successive quires which originally lay one over the other (e. g.  $h_1 + h_2$ ,  $a_1 + a_2$ ,

 $l_1 + l_2$ ,  $k_1 + k_2$  etc.). I first of all carefully unfolded the spill-like leaves and classified them as large fragments labelled with capitals A till O, making 16 large fragments; the small ones with minuscles a till z, making 31 fragments. These fragments—owing to the comprehensive help of

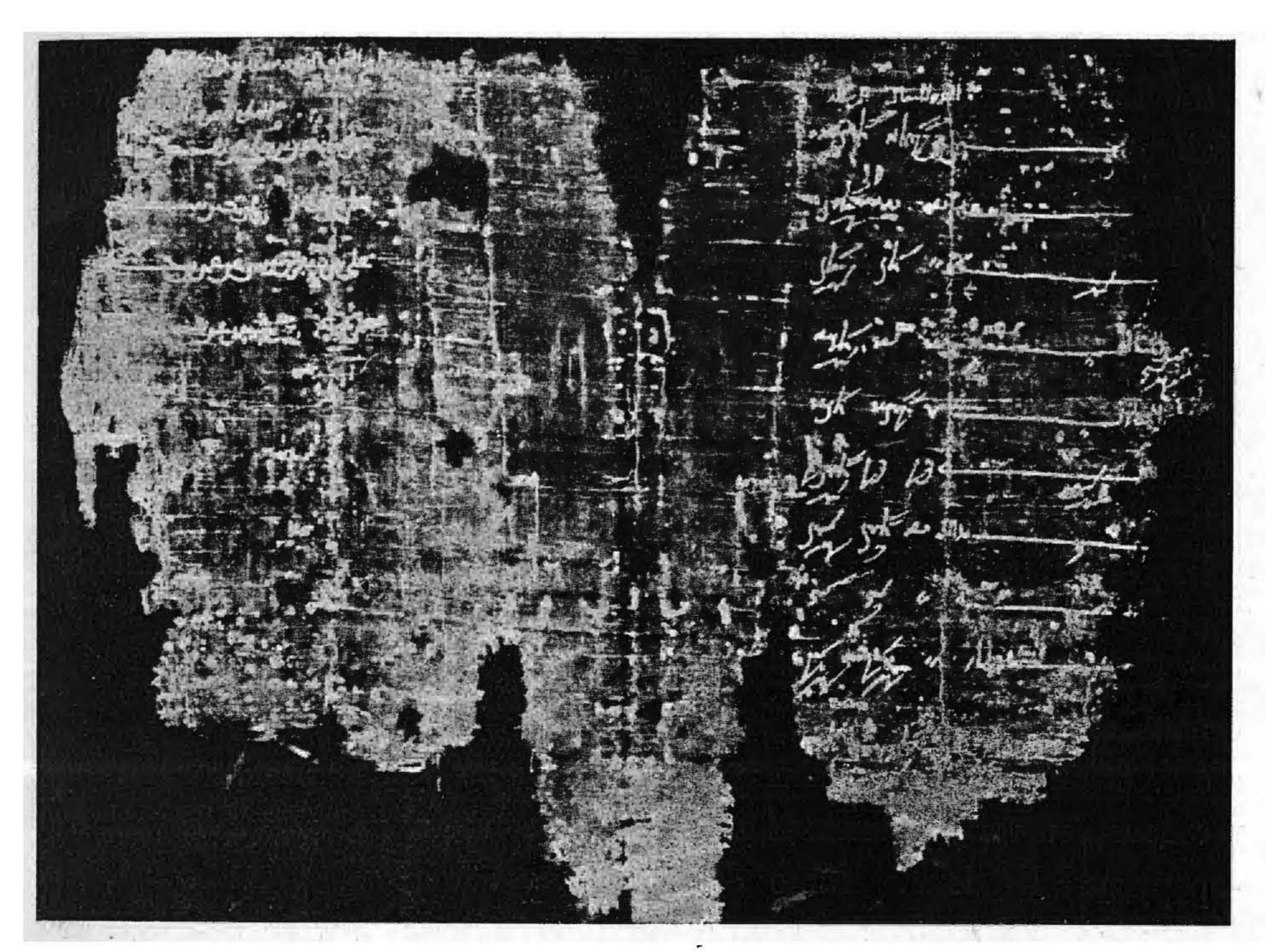


Fig. 1. — (Leaf A recto).

H. E. Director General Amin Mursi Qandil-Bey—who showed much appreciation and interest in my work—were put between big glass plates and so carefully preserved in accordance with the value of this unique find. Deciphering of the texts made good progress, and now the whole text is quite obvious.

Now let me give you some details about the external appearance of these fragments. The script is a very clear and neat Nashî. Of course the entries are in different hands; the text is arranged in large columns containing the name of the tax-payer, followed by various columns of Greek figures, provided with headings in Arabic, of which unfortunately

only a part has survived. These columns run on recto parallel to the horizontal fibres, on verso at right-angles to the vertical fibres. The quires were folded in the middle, the last column on the right side ending at a distance of about o m. o7 — o m. o42 from the middle fold, and the first column upon the left side of the quire beginning at a distance of o m. o95 — o m. o38 from the middle fold. The original size of the book, consisting of at least 47 quires folded in the middle, was about o m. 32 × o m. 33. This comes very near to the size of the biggest Greek tax-book from Aphrodito in the British Museum (1) containing 33 leaves with 1436 lines, dating after 716 p. C., but differs in size from the sole literary Arabic papyrus-book in the Egyptian Library, which measures o m. 23 × o m. 23. Further a leaf of a taxaccount book in the same Collection (2) measures o m.  $31 \times 0$  m. 296, meanwhile the papyrus PER Inv. Ar. Pap. 5999 in the Rainer-Collection, o m. 593 × o m. 30, shows an exceptionally large size, a sort of large-folio, which is unparalleled. We already possess a considerable number of tax-account books in Greek, especially those belonging to the famous find of Aphrodito (3) and the tax-rolls from Karanis, but nothing similar in Arabic had been brought to light. It is true, that a great number of preliminary notes, made by tax-officials and concerning census, survey, assessment and registration are preserved in various papyrus-collections. These detached leaves were of great value, as they initiated us in the complicated machinery of taxation in the Arab period. But leaves, coming from a real cadaster or register, were very rare, and, as far as they had survived, we had only to do with single leaves, not with consecutive pages or quires of a book. There was only one exception: I remember having seen, at the shop of a dealer in antiquities, some leaves belonging to one and the same quire of a book; but I am unaware of the provenance and future of these papyri. Now we possess in the fragments of a ledger from Tebtynis, a sample of a real accountbook, in which the payments of the tax-payers were entered by the

<sup>(1)</sup> P. Lond., IV, no. 1419.

<sup>(2)</sup> P. Cair. B. É. Inv. no. 237, dated 278 A. H.

<sup>(3)</sup> P. Lond., IV, no. 1412-1414, 1419-1421, 1430, 1432, 1433.

tax-officials. Obviously the fragments P. Cair. B. É. Inv. no. 1400 do not belong to one book only.

I' The biggest leaf (A) is, according to the heading, a day-book of the well known Estate of Šadmúh for the impost of the year 308 H., and to this journal probably belong most of the fragments. But there is another big fragment (I) showing that a similar day-book referred to the village of Miqrân.

II° The big fragment B is arranged according to days entered on the margin, viz. Tuesday to Friday, and on another fragment (d) the entry (Friday) is still preserved.

IIIº There are two other large fragments (K, L) which have a quite different arrangement and apparently deal with payments in money but show no headings at all.

So we have to do with three groups of fragments, belonging probably to three fascicles, of which at the least two are apparently official.

In his edition of the Papyri Schott-Reinhardt (1) C. H. Becker regrets the fact, that we do not possess a complete "tax-book" (Steuerbuch), a تَعَنَّمُ . Now, the expression mukallafa is not chosen properly; for a mukallafa does not mean generally a tax-book or register, but particularly a "register of landed property" a kind of "Doomsday-Book". This results clearly from the passages quoted by Becker (2). The mukallafa was drawn up by the surveyor (مراح) and arranged according to the different villages. Our book should be better named a "cûzî (rûznâmaġ) a "day-book", containing the items of daily revenue, which were entered by the paymaster or ğahbad (مراح).

As a matter of fact, leaf Ar left side begins with: "Day-book of the estate, known under the name of Šadmůh, for the impost of the year 308" (موزنامج الضيعة المعروفة بشدموه لحراج سنة العطع). Under the headings الصرف الوضائع

<sup>(1)</sup> P. Heid., III, p. 10.

<sup>(2)</sup> Cf. al-Qalqašandî, Subh al-A'šá', III, p. 458, al-Maqrîzî, Hitat I, p. 86, 88, Ibn Mammâtî, Kitâb Qawânîn ad Dawâwîn, éd. 'Azîz Suryâl Atîya, p. 3056.

on the verso by entering of payments under at least eight rubrics, of which only five are provided with the respective headings العدد الثقال المرسلة. The missing headings probably were equally الخراج البقايا

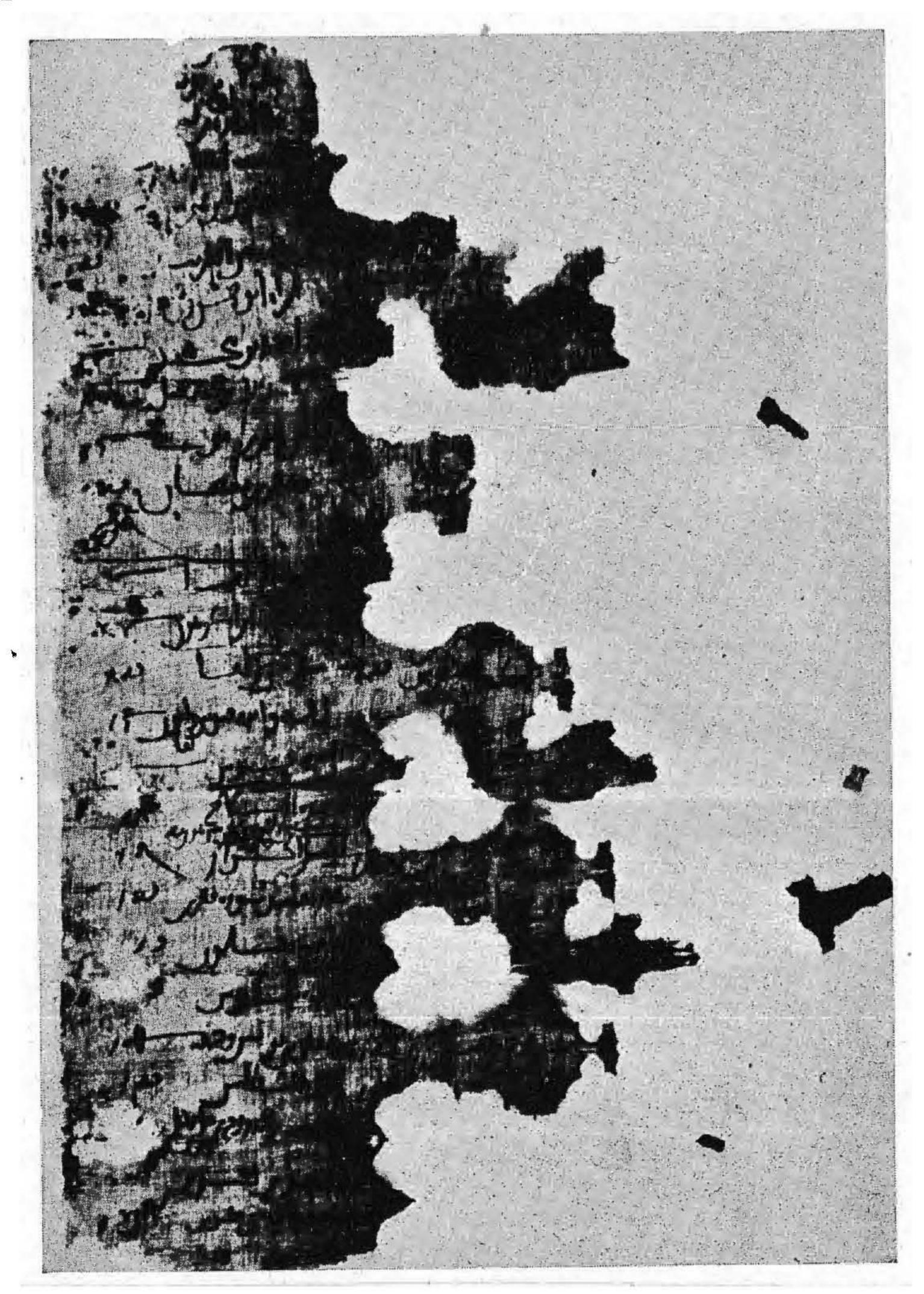


Fig. 2. — (Leaf K recto).

الوضائع. As leaf I shows the title الفضائع "further Miqrân", we may presume, that a similar "day-book" to that for Šadmûh dealt with Miqrân, but unfortunately is lost; only one leaf of a continuation of this day-book referring to Miqrân is preserved. Perhaps a third

one, dealing with the village of Samadûn, originally existed, as this village is mentioned on fragment j' recto left side together with Šadmûh, and perhaps Miqrân, if the lacuna in line 1 is to be supplemented with this place-name. Šadmûh (Šadmawah) and Miqrân were situated south-south-west of Medînat el-Fayyûm 3 hours distant on horseback from the capital, in the irrigation-district of the Dalya-Canal, north or north-west of Tebtynis. The name of Šadmûh still exists, Miqrân, to-day Miqrânî, possibly corresponds to Xwplov Máxpwvos in the Greek papyri (1); the position of Samadûn is unknown, but it must have been situated close to the other villages named.

العدد المثقا[ل المرسل الخرا]ج الابواب المصادرة on verso and [...ا...ا...ا...االه]على العدد المثقال المرسل العدد المثقال المرسل الد. الد. الد. الد. المعانع العدد المثقال المرسل الد. الد. الد. الد. الد. الد. العدد المثقال المرسل العدد المثقال العدد العدد المثقال العدد المثقال العدد العدد المثقال العدد المثقال العدد العدد العدد المثقال العدد المثقال العدد العد

العدد المثقال المرسل الخراج القسمة leaf 
$$F$$
 [ ]عة  $G^{r,v}$ ,  $H^{r}$   $G^{r,v}$ ,  $G^{r,v}$ ,

Some of them call for a special comment:

"number of pieces"—also used for the number of pieces of cattle in PER P III/2—means the solidi or dînârs reckoned at their face value, corresponding to ἀρίθμια "numbered, reckoned" in the Greek papyri. is obvious; it means the dînâr of the standard-weight.

ثرنسل "that which has been sent" (2) exactly corresponds to the heading

<sup>(1)</sup> Cf. Wessely, Topographie des Faijûm, p. 104.

<sup>(2)</sup> As to the signification "en gros" communis mensura see R. Dozy, Supplement, I, p. 526 at-Tabari, Gloss., p. 262.

"the income" in PER Inv. Ar. Pap. 3373° and P. Michaélidès no. 4 or to "revenue" in PERF no. 642 ° and signifies the money or tax-amount which actually was paid in or transferred by money-order or cheque to the tax-office. The expression حَاخِلُهُ or حَاخِلُهُ frequently occurs in tax-receipts (1). The expression مَرَاخِلُهُ follows the amount of dînârs in the tax-receipt PERF no. 8667 (287 A), and المرسول is the corresponding form in P. Cair. B. É. Inv. no. 9446, placed opposite by "the cheques". It is interesting that, according to the papyrus just mentioned, such small sums as 1/12 dînâr were sent in, and as little as 1/24 dînâr (or one carat) transferred by cheque.

means "part, portion" and recurs in PER P I/2". But the real meaning here is not yet clear; probably it is some kind of revenue or tax (cf. leaf C, parallel to عن الجالية and عن الطاحونة).

are "the categories, classes, various items", and this sense is obviously to be suggested in APRL XII no. 11. But in other papyri this meaning is not applicable, e. g. in P. Cair. B. É. Inv. no. 9595, where the small sum of 2 1/48 dînâr is understood. Perhaps a special kind of tax is thereby designated.

is well known, the "confiscated money" (2).

is Pl. of غَنَّة; it means the crop, a cultivated field or garden, but especially also "contribution pour les maisons et les boutiques bâties sur le terrain de l'État" (R. Dozy, Supplément, II, p. 219). It is questionable whether this meaning fits here, and as in P. Michaélidès no. 4 cocurs beneath similar headings, which means "des grains que l'on fournit aux laboureurs pour leur nourriture avant la moisson, et qu'on se fait rendre après cette époque" i. e. delivery of corn granted as an advance (3), here, a ἀπαργυρισμός, a redemption in money of such a corn loan is what might be intended by

<sup>(1)</sup> PERF no. 7244 (223 A. H.), PER P III/I 1.5 (279 A. H.), Corpus H. APEL III no. 196. ecc.

<sup>(2)</sup> Z. D. M. G., LXIII, p. 85 f., LXV, p. 481-484, "confiscation au profit du trésor particulier du prince", "Vermögenskonfiscation".

<sup>(3)</sup> R. Dozy, Supplement, II, p. 429, cf. C. H. Becker, P S R, III, p. 44.

ונגלן are the "arrears" so well known from tax-registers, the λοιπόμενα of the Greek papyri.

But the most interesting and also most difficult expressions are the three following, always occurring on the left of the recto: القبطع الصرف الوضائع.

means "a piece of money" (une pièce de monnaie R. Dozy, loc. cit., II, p. 371) and specifically a deteriorated piece of money ("des pièces de monnaie au-dessus du titre, du poids") but also a "billet". The expression recurs in P. Cair. B. É. Inv. no. 2375. Here perhaps it means pieces of coins, cut off from the entire coin and used as "small change"—a procedure, which was sometimes forbidden or at any rate refused by the lawyers (2). If this supposition is right, we may parallel فيطع with منافع "fractions", occurring sometimes in the papyri.

It seems that also here a kind of duty is understood.

(cf. PERF no. 640). I have myself—still in APEL III, p. 156—taken sarf as "discount", and translated the formula (ibid. no. 189) المرق المرق "without any discount or compensation", synonymously المرق أجره أجره أبره in PERF no. 905 "without any discount, deduction or compensation" and in P. Strassby. Arabe I36, PERF no. 888 أو "without any discount or deduction" المرف ولا بخسر المناف ولا بخسر ال

<sup>(1)</sup> Also occurring in P. Cair. B. É. Inv. no. 2375, 3578.

<sup>(2)</sup> Mr. M. Jungfleisch kindly informes me that besides these chippings of coins also gold-dust, handed over by weight, served for the payment of small fractions of a dînâr.

<sup>(5)</sup> Cf. Mélanges Maspero, III, 1934, p. 10 f., Probleme der arabischen Papyrusforschung, II, Arch. Or. VI (1934), p. 390 f.

<sup>(4)</sup> A. v. Kremer, Das Einnahmebudget des Abbasiden-Reiches, p. 8, 32, cf. Al-Magrîzî, Hitat, I, p. 272.

of silver coinage in relation to the gold currency, or from changes of the rate of exchange. This agio (sarf) is added to the payment fallen due, and, of course, it follows the value of the dirham compared to that of the dînâr'' (1).

But there are several severe objections to this point of view:

I All coins of the gold standard were taken over by the paymaster only according to their real weight after being carefully weighed. There are many proofs for this procedure, and there can hardly be any doubt about it. It was simply the duty of the duty of the freek ζυγοσλάτης, a kind of "mint-warden" (cf. PERF no. 640). Therefore, there could arise no question of any loss of money on the part of the Treasury.

IIº If the payment was made in *silver*, the paymaster obviously calculated the ration of exchange according to the quotation of the day, and there was no reason at all to put any *agio* to the debit of the tax-payer. This would be justified only for payments of tax-arrears, if the exchange rate between gold and silver had changed in the course of time.

III° one (sarf) in PER Inv. Ar. Pap. 5999 is reckoned at different rates for various kinds of taxes: 9% for land-tax, 27% for tax on meadows, and 31% for pasture-tax. Furthermore, in various tax-accounts and-lists, the amount of sarf oscillates between 1/12 (2 carat), 1/16 (1 1/2 carat) 1/24 (1 carat) and 1/28 of a dînâr. To make the differences existing quite clear, I add, that in P. Cair. B.É. Inv. 785 a total amount of 419 dînârs corresponds to 13½ dînârs of sarf; in APEL IV no. 283 a total amount of 78 1/3 dînâr corresponds to almost the same amount: 12 1/6 + 1/48 dînârs (or approximately a sixth); in APRL XII no. 11 line 14 a total amount of 901/3 + 1/8 dînârs corresponds to a sarf of only 1/3 + 1/12 + 1/48 dînâr.

It is therefore quite impossible that sarf in all these cases has anything to do with an agio. The simple fact, already emphasized by Prof. C. Leyerer—whose collaboration as an expert economist was of great

<sup>(1)</sup> He refers to Miskawaihi, Tağârib al-Umam, I, p. 165 ff., al-Qalqašandî, Şubh, III, p. 4426 ff., Qudâma, Kitâb al-Harâğ, fol. 24, Sîrat Umar, p. 166 pu.

help for me—that the ratio between gold and silver was 1:22 or 1:23, that is 4.8-5% whereas the *sarf* oscillated between 9% and 10%, more or less, militates against any identification of *sarf* and *agio*.

Leyerer offered a very attractive solution of the problem: as the tax-farmer or banker  $(\dot{g}ahbad)$ —in many cases surely one and the same person—was responsible to the Treasury for the income of taxes at a certain time, and had to stand guarantee for the full amount with his own means, he got an allowance which was reckoned a) according to the category of the tax concerned, and b) according to the amount of guarantee taken over by the  $\dot{g}ahbad$ .

The last heading (sq. "the deductions" (Sg. ") or perhaps better "the forfeiture, loss", is not yet quite clear. In the papyrus PER Inv. Ar. Pap. 5999 it is a fixed rate of 1/24 + 1/48 dînâr (viz.  $1\frac{1}{2}$  carat). But in our ledger  $\frac{1}{2}$  carat sarf corresponds to a forfeiture of 1/6 carat, 2/3 carat sarf corresponds to a forfeiture of 1/6 carat,  $1\frac{1}{2}$  dînâr sarf corresponds to a forfeiture of 1/8 carat and finally  $2\frac{1}{2}$  carat sarf corresponds to a forfeiture of 1/8 carat. So this item was reckoned at very different rates.

The taxation-system, i. e. the assessment of taxes shown in the registers of the m/wth Century of the Higra differs considerably from that revealed by the literary sources and the registers of previous times. Land-tax and poll-tax were formerly assessed according to a fixed rate of 1-4 dînârs per faddan or 2 dînars per head, the pasture-tax according to the total head of cattle (1 carat each). Now a quite different system is followed. In PER Inv. Ar. Pap. 6008 e. g. the poll-tax consists of the sum of the pasture-tax and the tax on meadows, or is equal to the pasture-tax, if the tax on meadows shows no entry. In APPM no. 20 poll-tax, land-tax and pasture-tax show the same issue of money, that is all taxes were comprehended in a fixed lump-sum and then distributed equally under the different items. This system was already somewhat complicated, but it reached its highest degree of complication in PER Inv. Ar. Pap. 5999: here the items under the heading الوضاري "deductions" amount to a 1/12 of the item wariq ("total of all taxes"), the sarf is 5/48 of this wariq, the bard'a 1/96 of the item wariq ecc. The

inventor of this new system is unknown; perhaps it was the well known director of finance Aḥmad ibn Muḥammad ibn Mudabbir.

The importance of P. 1400 lies, according to Prof. Dr. C. Leyerer, to whom I communicated the text, in the fact that it allows for the first time an insight into the internal management of tax-money and the book-keeping, concerned therewith, of a higher finance-office administrating the money paid in by local tax-offices or tax-collectors. To this higher finance-office, situated in Tebtynis, the villages of Miqrân, Sadmûh and Samadûn were clearly subordinated; possibly the administrative unit, of which Tebtynis was the chief place in the Arab period, corresponded in extent approximately to the division of Polemon in the Greek epoch.

The fragments represent various kinds of book-keeping: e.g. a weekly report on tax-money collected from various places is fragment j, a closing of cash-accounts fragment u, a leaf of a cash-book N. The majority of fragments and leaves shows that the finance-administration distinguishes between incomings and outgoings, entering the former on the left side of the quire or leaf, the latter on the right side. Various problems, offered by this papyrus, are not yet solved, but it is hoped that nevertheless the publication is possible in a short span of time. The Fayyûm again and again furnishes huge and valuable materials to papyrology, and therewith fulfills hopes which had been expressed by earlier explorers and excavators. So this contribution to the history of the Arab administration of this country may be dedicated to the memory of one of the most successful excavators in the southern part of the Fayyûm, Pierre Jouquet, to whom I feel deeply obliged for his kind help and the benefit of his vast scholarship.